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CTRC

2014

CATÁLOGO TÉCNICO RESUMIDO
COMPACT TECHNICAL CATALOG



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CTRC 2014-0

TABELA DE PREÇOS "TPC" [EUROS]

CATÁLOGO TÉCNICO RESUMIDO E TABELA DE PREÇOS "TPC"

"TPC" PRICE LIST [EUROS]

COMPACT TECHNICAL CATALOG AND PRICE LIST "TPC"

NOMENCLATURA
NOMENCLATURE
TPC - TABELA DE PREÇOS CENTAURO
CENTAURO PRICE LIST

NOTAS

- Todos os dados são reportados a R404A, exceptuando os evaporadores estáticos que estão baseados em R134a;
- As capacidades frigoríficas das tabelas na gama SAHE estão referidas a R717 (Amoníaco) sistema bombado (3 recirculações);
- Todos os preços apresentados nesta lista, não têm o valor do IVA incluído, e são considerados à porta de Fábrica (ex-works Castelo Branco);
- Todos os fornecimentos, entregas e outros serviços prestados pela Centauro serão exclusivamente de acordo com as "CONDIÇÕES E TERMOS GERAIS DE FORNECIMENTO" constantes nesta tabela.

NOTES

- All data is reported to R404A, except for the gravity coils which are reported to R134a;
- All SAHE range capacities are based on R717 (Ammonia) pumped system (3 recirculations);
- All prices presented on this list, do not include VAT, and are considered ex-works Castelo Branco;
- All supplies, deliveries and other services offered by Centauro are solely according to the "GENERAL TERM AND CONDITIONS OF SUPPLY" presented in this catalog.

A "CENTAURO" reserva-se o direito de alterar, sem aviso prévio, as características técnicas ou dimensionais dos seus produtos.
"CENTAURO" reserves the right to make changes in specifications or design at any time without obligation to customers or users of previously sold equipment.

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REFRIGERANTES COM GLYDE

EVAPORADORES: as capacidades deverão ser registadas em "middle point" e não em "dew point".
CONDENSADORES: as capacidades deverão ser registadas em "dew point".
Para obter factores de correcção por favor contactar a Direcção Técnica da Centauro.

GLYDE REFRIGERANTS

AIR COOLERS: Capacities must be registered in middle point, not dew point.
CONDENSERS: Capacities must be registered in dew point.
For correction factors please contact Centauro's Technical Department.



CENTAURO em 1978 CENTAURO in 1978

HISTÓRICO

O projecto Centauro nasceu a 19 de Junho de 1978 com a constituição e registo da Empresa Castanheira, Henriques & C.^a L.da. A produção teve início em 1980. Em 1983 a Empresa exportou os primeiros produtos para o Reino Unido.

Apostando sempre na opção estratégica que deu suporte à sua fundação a Castanheira Henriques especializou-se no fabrico de componentes para a indústria de refrigeração e ar condicionado, granjeando progressivamente a confiança dos grandes fabricantes nacionais de móveis frigoríficos e das empresas especializadas no projecto de construção de instalações frigoríficas (matadouros, câmaras frigoríficas, hipermercados, túneis de congelação entre outros).

Em 1988 a Castanheira Henriques comemorou em Castelo Branco os 10 anos de existência apresentando aos mais de 700 convidados nacionais e estrangeiros uma fábrica renovada com 6500m² de área coberta e uma gama completa, moderna e certificada de produtos para Refrigeração e AVAC.

A necessidade de expansão e especialização a nível de produção levou à formação em 1992 da Centauro Portugal S.G.P.S., S.A. que juntou à casa mãe Castanheira Henriques (frio comercial) a Centauro Internacional (frio industrial) e a Brisa Nova (comercialização de produtos Centauro). As novas instalações da Centauro Internacional são inauguradas em 4 de Julho de 1992 com a presença de mais de 1200 convidados nacionais e estrangeiros.

A Centauro Portugal S.G.P.S., S.A. é um grupo de empresas sediado em Castelo Branco, vocacionado para a concepção, desenvolvimento, fabrico e comercialização de permutadores de calor e de equipamentos destinados à indústria de refrigeração, climatização e ar condicionado.

O desenvolvimento industrial foi suportado pela certificação do Sistema de Garantia da Qualidade ISO 9002 em 1993. Actualmente o Sistema de Gestão da Qualidade ISO 9001-2008 está certificada pela APCER e é uma das ferramentas ao serviço do desenvolvimento sustentado das actividades da Empresa.

A inovação, a qualidade e a fiabilidade dos seus produtos, o eficiente e exigente apoio após venda são lado a lado com uma gestão financeira rigorosa, uma produção bem equipada, em termos técnicos e humanos, e flexível, um serviço de Engenharia de aplicações atento e com formação contínua.

Para o grupo Centauro a exportação para os mercados do centro / norte da Europa sempre funcionou como motor de desenvolvimento, seja no encontrar de novos mercados e novas aplicações dos seus produtos, seja na área de I&D.T que resulta da necessidade de acompanhar, em termos técnicos e tecnológicos, o que de melhor se faz nesses mercados. Hoje em dia exporta regularmente para Espanha, Holanda, Bélgica, Reino Unido, Irlanda, Noruega e Alemanha.

Em 2003 a Centauro entra definitivamente para o "grupo restrito" de fabricantes europeus de equipamento para instalações com amoníaco, com a apresentação da família de produtos SAHE.

O desenvolvimento técnico e tecnológico da Centauro é sustentado pelo desenvolvimento de parcerias vencedoras com fornecedores e clientes e, quando necessário, com centros de competência nacionais e estrangeiros. Esta forma de "trabalhar em equipa" permite à Empresa estar presente e activa em diversas frentes, com soluções técnicas das mais evoluídas e inovadoras a nível do sector de Refrigeração e AVAC.



CENTAURO em 2010 CENTAURO in 2010

HISTORY

CENTAURO's project started on 19th of June 1978 with the constitution and registration of Castanheira, Henriques & C.^a Lda. Production started in 1980. In 1983 began product exportation to the United Kingdom.

Always maintaining the strategic goals that supported its foundation, Castanheira Henriques specialized itself on manufacturing components for the Refrigeration and HVAC industry, progressively increasing the thrust of major Portuguese companies of reach-in cabinets, display cases, refrigeration project building (slaughterhouses, chambers, supermarkets, freezing tunnels, etc.), amongst other projects.

In 1988 Castanheira Henriques celebrated in Castelo Branco its 10 years of existence presenting to over 700 national and international guests a renewed factory with 6500m² of covered area and a complete, modern and certified range of products for the Refrigeration and HVAC industry.

The need to expand and specialize itself, led to the foundation, in 1992, of Centauro Portugal S.G.P.S., S.A., that together with Castanheira Henriques (Commercial Refrigeration), created Centauro International (Industrial Refrigeration) and Brisa Nova (Commercialization of CENTAURO's products).

The new Centauro International facilities are inaugurated on the 4th of July 1992 with the presence of over 1200 national and international guests.

Centauro Portugal S.G.P.S., S.A. is a group of companies based in Castelo Branco, mainly oriented in designing, developing, manufacturing and selling heat exchangers, components and equipment for the Refrigeration and HVAC Industry.

Industrial development and specialization was supported by the certification of an ISO 9002 Quality Management System in 1993. At this date the ISO 9001-2008 Quality Management System is certified by APCER and remains one of the main tools in the solid and progressive development of the Company.

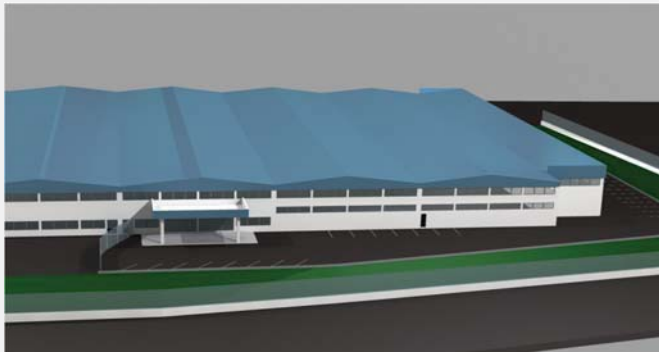
Innovation, quality and reliability of its products and the efficient and demanding after-sales support, together with a strict financial management, well teamed and flexible production, human and machinery wise and a watchful and in constant learning applications Engineering department.

For the Centauro group, exporting to new markets in central/northern Europe as always been a development factor, either on finding new markets and applications for its products, either on R&D, resulting in the need to continue to develop and follow, in technical and technological terms, what is best done in these markets. Today it regularly exports to Spain, Holland, Belgium, United Kingdom, Ireland, Norway and Germany.

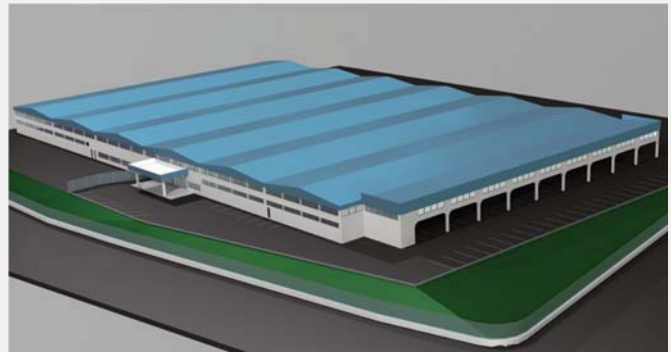
In 2003 Centauro definitely enters the "restrict club" of ammonia equipment manufacturers, with the presentation of its SAHE product range.

Centauro's technical and technological development is supported by successful partnerships with suppliers and customers, and when needed, with national and international competence centers.

This "team work" allows the company to be active in several aspects regarding innovative and evolved technical solutions in Refrigeration and HVAC industry.



CENTAURO INTERNACIONAL 1992 CENTAURO INTERNACIONAL 1992



CENTAURO INTERNACIONAL 1992 CENTAURO INTERNACIONAL 1992

MARCOS

- 1978 - Fundação.
- 1980 - Fim da 1.ª fase - reconstrução da velha cerâmica. Início da produção.
- 1981 - Primeira presença num certame internacional "Interclima 81" – Paris.
- 1982 - Inauguração oficial da Castanheira, Henriques & C.ª, Lda.
- 1983 - Início de exportação para o Reino Unido.
- 1988 - Comemoração dos 10 anos de existência:
 - Inauguração da ampliação final da Castanheira, Henriques & C.ª, Lda.
 - EXPO 88 que reúne 750 profissionais do ramo juntamente com os seus familiares.
- 1990 - É tomada a decisão de arriscar a construção de uma nova unidade fabril
 - Nasce o projecto Centauro Internacional. Modelo conforme para produtos CENTAURO.
- 1991 - Começa a construção da Centauro Internacional e nasce a ideia de construir a Centauro (Portugal) S.G.P.S., S.A.
- 1992 - A 10 de Abril é constituída a Centauro (Portugal) S.G.P.S., S.A.
 - A 4 de Julho é inaugurada a Centauro Internacional que reúne mais de 1.200 profissionais do ramo e seus familiares.
- 1993 - Marca produto certificado (<np>) para os produtos CENTAURO
 - ISO 9002 – Sistema de Garantia da Qualidade.
- 1995 - Marcação CE.
- 1997 - Certificação Eurovent.
- 1998 - ISO 9001/1995 – Sistema Garantia da Qualidade.
- 2003 - ISO 9001/2000 – Sistema de Gestão da Qualidade.
 - Apresentação na Climatização Madrid da Gama SAHE (Inox – NH3).
 - Exportação dos primeiros equipamentos para amoníaco.
- 2004 - Centauro 25 Anos – "Ventos de Mudança" – 25º Aniversário, em que reuniu mais de 1000 profissionais do ramo e seus familiares.
- 2006 - Inauguração da nova linha de pintura e ampliação das Instalações (30.000m2 área coberta).
- 2007 - Apresentação na Feira Climatización Madrid da nova linha de condensadores ACP e evaporadores com motores EC.
- 2008 - Certificação ISO 9001-2008.
- 2009 - Enceramento das comemorações do 30º Aniversário da fundação da CENTAURO na Climatización 2009 - Madrid.
- 2010 - Comemoração dos 30 Anos do lançamento do primeiro catálogo de produtos CENTAURO.
 - Sinerclima 2010 - Batalha.
 - Apresentação no mercado da nova gama Quiron by CENTAURO.
- 2013 - Climatización Madrid

LANDMARKS

- 1978 - Foundation.
- 1980 - End of 1st. phase - reconstruction of the old ceramics. Start of production.
- 1981 - First international participation: "Interclima 81" – Paris.
- 1982 - Official Inauguration of Castanheira, Henriques & C.ª, Lda.
- 1983 - Start of exportations to the United kingdom.
- 1988 - Commemoration of 10 years existence:
 - Inauguration of final expansion of Castanheira, Henriques & C.ª, Lda. branch.
 - EXPO 88 - 750 professionals and family members of the branch meet together.
- 1990 - Is taken the decision to risk the construction of a new manufactory unit.
 - Centauro Internacional project is born.
 - Agreement model for CENTAURO products.
- 1991 - Centauro Internacional construction has started born of the idea to build Centauro (Portugal) S.G.P.S., S.A.
- 1992 - On April 10th Centauro (Portugal) S.G.P.S., S.A. is constituted.
 - On July 4th Centauro Internacional inauguration congregates more than 1,200 professionals of the branch and its familiar ones.
- 1993 - Certified product label (<np>) for all CENTAURO products.
 - ISO 9002 - warranty of quality.
- 1995 - C.E. Label.
- 1997 - Eurovent certification.
- 1998 - ISO 9001/1995 – Quality system Warranty
- 2003 - ISO 9001/2000 – Quality System Management
 - Presentation of SAHE (Inox – NH3) range at "Climatización Madrid".
 - First exports of ammonium equipments
- 2004 - Centauro 25 Years – "Ventos de Mudança" – 25º Anniversary.
- 2006 - New painting line inauguration and facilities expansion (30.000m² covered area).
- 2007 - New ACP condensers and coolers with EC fans presented in "Climatización Madrid" exhibition.
- 2008 - ISO 9001-2008 certification.
- 2009 - Comemorations closure of the 30th Aniversary of CENTAURO's foundation on "Climatización Madrid" exhibition.
- 2010 - Comemorations of the 30th Aniversary of CENTAURO's first product catalog launch.
 - Sinerclima 2010 - Batalha.
 - Market presentation of the new range Quiron by CENTAURO.
- 2013 - Climatización Madrid

A nova geração de produtos *QUIRON* da Centauro representa o resultado de uma contínua aposta da empresa na melhoria dos seus produtos e no disponibilizar aos seus clientes soluções fiáveis e com boa aptidão ao uso, com integração das mais recentes tecnologias úteis testadas e comprovadas, no mercado em termos de concepção e fabricação de permutadores de calor.

A nova geração *QUIRON* nasceu na área da Refrigeração, aposta na melhoria da eficiência energética e na redução do impacto ambiental e mantém a tradicional robustez, fiabilidade, flexibilidade e boa aptidão ao uso que caracteriza os produtos Centauro.

Com efeito a melhoria da eficiência energética e a redução do impacto ambiental são de facto os vectores de força da geração *QUIRON* e estão presentes de uma forma ou de outra em todos os novos produtos. O "fio condutor" de toda esta renovação é a experiência adquirida ao longo de 32 anos de presença da Centauro no mercado da Refrigeração enquanto fabricante e parceiro de todos os seus clientes, seja no exigente serviço após venda que é disponibilizado, seja na parceria pró-activa com eles construída em termos de concepção e fabrico de soluções especiais sob medida na área da Refrigeração em geral e na de permutadores de calor em particular. É este "saber como fazer" que funciona como "mola real" de uma permanente aposta em I,D&Q suportada pela experiência. A geração *QUIRON* é pois inovadora e totalmente desenvolvida na Centauro...SE HÁ ALGO QUE NÃO SE PODE COPIAR ISSO É A EXPERIÊNCIA!

A indústria ligada à Refrigeração e AVAC desenvolveu muitas soluções para o fabrico de permutadores de calor, nem todas adaptáveis com sucesso e fiabilidade à Refrigeração em condições reais de funcionamento no terreno (pó, gelo, elevada humidade, descongelações) mas atractivas em termos de preço final do permutador que em laboratório sem pó, sem gelo, sem descongelações e sem humidade até apresenta valores interessantes de capacidade. A Centauro em 1984 seguiu esse caminho mas rapidamente percebeu que conceber, calcular e fabricar equipamento fiável e adaptado às condições reais de funcionamento, muitas vezes com exigências especiais decorrentes da aplicação ou de especificações do cliente, exigia mais do que o acima referido...exigia da Centauro uma evolução permanente, "cabeça fria face às novidades", conservadorismo na avaliação das mesmas, I,D&Q pró-activo e actuante, investimento em novos meios de produção e uma aposta estratégica de proximidade ao produto nas condições reais de funcionamento seja no seu laboratório de aplicações, seja em laboratórios externos que testem os seus produtos de acordo com as especificações Centauro, seja numa presença forte e exigente no após venda no terreno. Para a empresa o melhor laboratório técnico para um fabricante que pretenda apresentar produtos modernos mas simultaneamente fiáveis e em linha com os requisitos especiais da sua movimentação, instalação, controle e exploração.

Fiel ao acima referido a Centauro levou bastante tempo mas o necessário para avaliar, testar, fornecer e acompanhar no terreno e no seu laboratório de aplicações importantes inovações e melhorias disponíveis no mercado, adoptando para a geração *QUIRON* as que vão de encontro aos requisitos e forma de estar da Centauro enquanto fabricante de permutadores e componentes para a indústria de refrigeração.

Por outro lado o desenvolvimento de tecnologias e produtos amigos do ambiente, requisito básico para qualquer indústria moderna e responsável, faz parte do "código genético" da Centauro e dos seus produtos e está presente nas suas opções técnicas e estratégicas desde a sua fundação. Com efeito:

- o uso de alumínio em detrimento de chapa de ferro ou chapa galvanizada permite reduzir as emissões indirectas devido à capacidade de reciclagem "ad aeternum" deste metal, da sua durabilidade (ciclo de vida). Com efeito produzir alumínio a partir de sucata significa reduzir 95% de energia relativamente à sua produção a partir de bauxite;
- o uso exclusivo de tubos e colectores de cobre, para além de melhorar a fiabilidade da "construção brazada" dos permutadores de calor, reduz o potencial de risco em termos de fuga e aumenta a percentagem de produto facilmente reciclável;
- a opção estratégica por motoventiladores com carcaça em alumínio enquadra-se na estratégia acima referida;
- a utilização de permutadores para R 717(NH₃) com tubos inox e alhetas em alumínio (SAHE), em detrimento de permutadores com tubo e alhetas de aço galvanizado, permite melhorar a eficiência de permuta de calor, reduzir a dimensão do permutador e a potência absorvida pelos moto ventiladores. Simultaneamente permite evitar a galvanização a quente por imersão, processo "sujo e poluente" com elevados consumos de energia e elevadas emissões indirectas de CO₂. Estão também disponíveis permutadores tubo e alhetas de alumínio (FAHE);
- a obtenção de permutadores mais compactos reduz o consumo de matérias primas contribuindo assim para a melhoria do TEWI do equipamento Centauro;
- a aposta na aquisição de modernos meios de fabrico e produção, energeticamente eficientes produzidos por fabricantes de renome internacional como por exemplo a Tridan, Trumpf ou ITW-Gema, GBS, sujeitos a uma cuidadosa manutenção preventiva e curativa, permite aumentar o ciclo de vida dos mesmos e reduzir a pegada de CO₂ dos produtos Centauro;
- o recurso a fornecedores fiáveis, com provas dadas no sector e com forte aposta em I,D&T suportada por parcerias efectivas com os seus clientes permite à Centauro ser "um entre pares" no que respeita a "desafiar o futuro" de um forma energeticamente eficiente e ambientalmente sustentada;

Foi este "caldo de opções estratégicas em termos técnicos, tecnológicos e ambientalmente sustentáveis" que esteve na base do lançamento da geração *QUIRON* de produtos Centauro cujas linhas mestras fundamentais apontam para:

- utilização de matérias primas de primeira qualidade, com longo ciclo de vida e com um elevado potencial de reciclagem;
- utilização de motoventiladores energeticamente eficientes para garantir a circulação forçada de ar nos permutadores (rotor externo corrente AC com alternativas técnicas fiáveis e testadas no terreno em termos de tecnologia EC);
- utilização de ventiladores com elevada eficiência aerodinâmica que se traduz em termos de redução dos níveis de ruído e de potência mecânica requerida no veio, tais como HY BLADE, OWLET, SILENCIS ou perfil "aerofoil";
- utilização de tubo de cobre sem costura em detrimento de tubo soldado, com superfície interna majorada e reduzido rácio superfície secundária/primária;
- recurso a novos índices de "corrugação" das alhetas em detrimento da utilização de alhetas "rasgadas" (slittered ou loovered) no entender da Centauro incompatíveis em termos de fiabilidade e bom desempenho em condições reais de funcionamento - gelo e descongelações em evaporadores ou pó e cotão em condensadores;
- utilização de diferentes geometrias de tubo/alheta em função da aplicação e gamas e capacidade;
- opção pelo cálculo de permutadores com baixa perda de carga no circuito primário (refrigerante);
- utilização de permutadores alhetados menos profundos para cada capacidade/caudal de ar, reduzindo assim a potência absorvida pelos ventiladores relativamente à capacidade e permuta (melhor COP/EER/eficiência energética);
- utilização de tecnologia de brazagem testada, actualizada e certificada, lado a lado com uma cuidada e criteriosa avaliação das espessuras dos tubos em função da pressão de serviço e em conformidade com as normas, directivas e regulamentos aplicáveis (marcação CE), reduzindo assim o potencial de risco de fugas de refrigerante para o ambiente.

Neste contexto a nova geração *QUIRON* apresenta as seguintes características principais:

- construção compacta compatível com os requisitos da aplicação;
- redução do rácio dm³/kW (redução do volume interno e da carga de refrigerante);
- disponibilização de equipamentos com eficiência de permuta de calor optimizada em função da aplicação, mantendo superfícies de permuta "conservadoras" em evaporadores nos quais e em condições reais de funcionamento é necessária superfície para deposição de gelo com minimização do efeito do mesmo na transferência de calor;
- melhoria do COP/EER/eficiência energética do equipamento (redução do rácio W absorvidos/capacidade de transferência em W), tendo como expoente máximo as versões com recurso a motoventiladores com tecnologia EC;
- redução do consumo de matéria-primas e aumento do índice de reciclagem (redução de emissões);
- redução do potencial de risco de fugas no circuito de refrigerante;
- redução dos níveis de ruído;
- redução do consumo de material de embalagem e optimização do espaço necessário para transporte, permitindo transportar mais equipamento no mesmo espaço, reduzindo assim as emissões de CO₂, entre outros;
- capacidade técnica e experiência no terreno na concepção e fabrico de permutadores para refrigerantes naturais tais como R717 (NH₃), R744 (CO₂), sub-crítico e trans-crítico, R718 (H₂O) simples ou glicolada, em evaporadores, condensadores, frigidifusores, arrefecedores secos e "subarrefecedores".

Em resumo a geração *QUIRON* apresenta novas soluções que resultam da evolução do mercado e da tecnologia no sector da Refrigeração, recuperando soluções e conceitos de design técnico temporariamente descontinuados, garantindo todos os requisitos que ao longo dos anos fizeram dos produtos Centauro equipamentos eficientes, fiáveis e "honestos" no seu desempenho e assegurando a continuidade da reconhecida flexibilidade e disponibilidade da Centauro em disponibilizar "concepção e fabrico sob medida" (CRS - Customized Refrigeration Solutions).

MUITO IMPORTANTE

As Directivas EuP, ErP e a aposta na poupança de energia estão consideradas na geração *QUIRON* de produtos Centauro. Motores PM, vulgo EC estão disponíveis para todas as gamas de produtos.

New generation *QUIRON* by Centauro reflects the natural evolution of its main core business – heat exchangers.

The new *QUIRON* generation is born in the Refrigeration field, branded with the most up to date, useful and efficient technologies and as former ones, engineered to last.

Efficiency and environment impacts are indeed the driving forces of the *QUIRON* generation and therefore are present in all new products. The main guide line is the feed back of 32 years of experience in the Refrigeration field as O.E.M. that enabled Centauro to develop its own know-how and technology in the area of Refrigeration applications, namely in terms of heat exchangers.

Technology evolution brought new solutions in terms of heat exchangers for Refrigeration, some really useful, others not so clear in terms of real benefits for product reliability in real field operation conditions but "good" in terms of price. Centauro is from its beginning a conservative company focused in product reliability and global performance in real operating conditions, reason why it took quite a while to investigate, test and evaluate these new solutions according to Centauro's standards.

Environment impact became more and more an issue and, as such, obliged committed companies to a "green" approach to their products design. Centauro from its very first beginning made important choices that became a part of the "genetic code" of its products, such as:

- using as much as possible aluminum instead of steel or galvanized steel. Aluminum is recyclable "ad eternum" and allows to save 95% of energy when produced from scrap instead of bauxite;
- using copper in coil piping and collectors (no steel collectors);
- using as much as possible fan motors with aluminum casing;
- using for R717 (NH₃) stainless steel pipes and aluminum fins for coils (SAHE), instead of galvanized tube and fins solution. Aluminum/aluminum coils (FAHE) are also available. These options reduce quite a lot the amount of raw materials necessary to produce coils, enabling at the same time to optimize the efficiency of heat transfer in the coils that became smaller, not so deep, allowing to use smaller fan motors that have lower electrical consumption;
- using modern and efficient means of production from reliable manufacturers such as Tridan, Trumpf, ITW-Gema, GBS;
- choosing reliable and dynamic suppliers committed with R,D&Q, believing in common development through out long lasting partnership and for sure full involved in efficient design and environment protection.

That's the "melting pot" of technological and environment new approaches and reliable performance in real field conditions that allowed Centauro to step in *QUIRON* generation. This new generation of products meets the following targets:

- usage of first quality raw materials with a long life cycle and recyclable as much as possible;
- usage of high efficient and reliable fan motors to drive the air through the coil (external rotor AC motors with alternatives tested and used with EC external motors);
- usage of high performance fans with optimized aerodynamics behavior, reduce noise emissions and reduced required shaft power (HY BLADE, OWLET, SILENCIS or aerofoil for example);
- usage of inner grooved seamless copper tube, not welded, with enhanced internal surface and therefore reduced secondary/primary surface ratio;
- usage of optimized corrugated fins, not slittered or louvered, either for air coolers or air cooled condensers;
- usage of different tube geometries and diameters according to applications and ranges of capacity;
- usage of low pressure drop coil design in terms of circuiting of primary surface;
- usage of low air pressure finned packs whenever possible in order to minimize air pressure drop and required fan power;
- usage of proved and certified brazing techniques together with careful evaluation of tube thickness according relevant standards and directives (reduced leak potential).

As a result products of the *QUIRON* generation has the following main common features in terms of better TEWI and reduced CO₂ footprint:

- compact design in line with application requirements;
- reduced ratio dm³/kW (low internal volume, low refrigerant);
- high performance but still conservative coil design allowing enough surface for ice in refrigeration applications;
- reduced ratio (Wabs / W of duty) in air coolers and in air cooled condensers-increased COP/EER/Better efficiency that gives space to optimal values when EC technology for fan motors is used;
- reduced quantity of required raw materials to build up the equipments (compact design as much as possible and advisable in terms of application);
- reduced emissions;
- reduced potential risk of leaks by means of safe tube gauges and certified brazing techniques;
- reduced noise emissions;
- reduced packing material and reduced space for transport with reduced indirect CO₂ emissions;
- availability and experience in design and construction of heat exchangers using natural refrigerants as primary fluid such as R717 (NH₃), R744 (CO₂) subcritical and transcritical, R718 (H₂O) pure or as glycol brine in between others (air coolers, air cooled condensers, fluid air coolers, dry coolers, desuperheaters);
- availability of coils design for low GWP refrigerants with special focus on R134a as a good reliable and efficient compromise for next future together with compressors specially designed for this refrigerant such as ECOLINE from Bitzer.

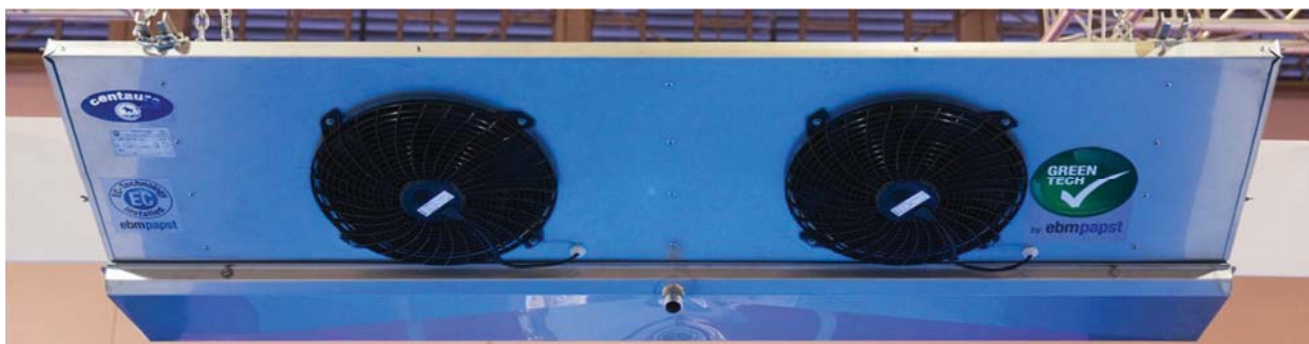
Last but not least the *QUIRON* generation presents new standard products as result of market demands either in coolers or condensers and recovers old concepts that, by means of market evolution, became up to date again side by side with the well known full availability and flexibility to offer "Customized Refrigeration Solutions - CRS".

VERY IMPORTANT

EuP, ErP Directives and energy saving are under the survey and adoption on Centauro. All ranges from *QUIRON* generation may use PM motors, so called EC motors.

EVAPORADORES

COOLERS



Evaporador RWK com blindagem em aço inox
RWK cooler with stainless steel casing



Evaporador ERK
ERK cooler



Evaporador com pleno de aspiração e adaptador de condutas
Cooler with suction plenum and air sock adapter



Evaporador CB
CB cooler



Evaporador DD com painel de ventilação basculante e blindagem em inox
DD cooler with hinged motorfan panel and stainless steel casing



Evaporador DD com painel de ventilação basculante e blindagem em inox
DD cooler with hinged motorfan panel and stainless steel casing



Evaporadores MTB com streamer
MTB coolers with streamer



Evaporador DXL especial para água glicolada
Special glycol DXL cooler

AP - APL



Evaporadores de parede Wall-type Unit Coolers

Espaçamento Fin Spacing

4,2 - 6,3 mm

Ø Ventiladores Fan Ø

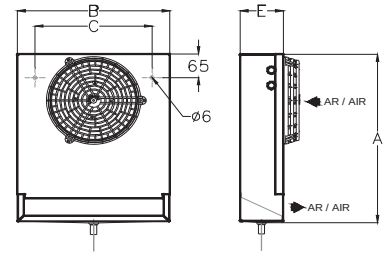
200 - 230 mm

Modelo Type	Capacidade QSm Capacity QSm (TC=+2°C / DTm=8K)	Capacidade Q0m Capacity Q0m (TC=-18°C / DTm=6K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans								
					Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	
AP 204/431	0.31		1.24	0.27	1	200	200	2.0	1320	35	0.21	230/1/50	
AP 204/439	0.39		1.66	0.36	1	200	240	2.0	1320	35	0.21	230/1/50	
AP 234/463	0.63		2.31	0.47	1	230	360	2.0	1300	38	0.23	230/1/50	
APL 204/626	0.26	0.16	0.86	0.27	1	200	220	2.5	1320	35	0.21	230/1/50	
APL 204/629	0.29	0.18	1.15	0.36	1	200	260	2.5	1320	35	0.21	230/1/50	
APL 234/645	0.45	0.27	1.60	0.47	1	230	390	2.5	1300	38	0.23	230/1/50	

Modelo Type	Preço sem resistências Price without heaters	Preço com resistências Price with heaters	Opções Options										
			/GM	/GE	/GT	/W	AR	BL	BI	TI	BR	RG	AS
			Desc. gás quente GM hot gas defrost	Desc. gás quente GE hot gas defrost	Desc. gás quente GT hot gas defrost	Descongelamento água Water defrost	Alhélas revestidas Coated fins	Lacado branco White painted	Chaparia Inox Stainless steel casing	Tab. esgoto isol. Insul. drain pan	Bateria resistências Heater coil	Resistências gola Fan heaters	Adaptador Conduas Air Sock Adapter
			EUR										
AP 204/431	•	•	-	-	-	-	•	•	•	-	-	-	
AP 204/439	•	•	-	-	-	-	•	•	•	-	-	-	
AP 234/463	•	•	-	-	-	-	•	•	•	-	-	-	
APL 204/626	•	•	-	-	-	-	•	•	•	-	-	-	
APL 204/629	•	•	-	-	-	-	•	•	•	-	-	-	
API 234/645	•	•	-	-	-	-	•	•	•	-	-	-	

S Standard SP Sob pedido
S Standard SP Under request

centauro



	Resistências do evaporador Cooler heaters			Ligações standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type	
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain								
	kW	A	V / F / Hz		in		A	B	C	E				
							mm				kg	m³		
	0.30	1.3	230/1/50	3/8	3/8	3/4	465	390	300	110	5.0	0.04	AP	204/431
	0.30	1.3	230/1/50	3/8	3/8	3/4	565	390	300	140	6.0	0.05	AP	204/439
	0.30	1.3	230/1/50	3/8	3/8	3/4	565	490	400	140	6.5	0.06	AP	234/463
	0.30	1.3	230/1/50	3/8	3/8	3/4	465	390	300	110	5.0	0.04	APL	204/626
	0.30	1.3	230/1/50	3/8	3/8	3/4	565	390	300	140	6.0	0.05	APL	204/629
	0.30	1.3	230/1/50	3/8	3/8	3/4	565	490	400	140	6.5	0.06	APL	234/645

Seleção e Factores Selection and Factors

RCm AP		DTm [K]						
TC [°C]	+5	1.298	1.168	1.039	0.909	0.781	0.679	0.564
	+2	1.200	1.080	1.000	0.857	0.741	0.638	0.517
	0	1.140	1.026	0.912	0.797	0.682	0.585	0.470
	-2	1.111	1.001	0.909	0.794	0.680	0.582	0.466

RCm APL		DTm [K]						
TC [°C]	+5	1.352	1.217	1.082	0.947	0.813	0.707	0.588
	+2	1.250	1.125	1.000	0.893	0.772	0.665	0.539
	0	1.188	1.069	0.950	0.830	0.710	0.609	0.490
	-15	1.018	0.918	0.830	0.730	0.640	0.539	0.434
	-20	0.963	0.867	0.770	0.660	0.583	0.490	0.393
	-25	0.950	0.854	0.764	0.649	0.567	0.476	0.385
	-34					0.561	0.471	0.381

FC1		TE [°C]						
R404A / R507	+5	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	0	1.02	1.00	0.98	0.95			
	-15		0.98	1.00	1.00	1.02	1.04	1.06
	-20		1.02	1.02	1.02	1.04	1.06	1.08

FC2		Aluminio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor		1.00	0.97	1.03

Nomenclatura	Nomenclature
TC	Temperatura de câmara Room temperature
TE	Temperatura de evaporação Evaporating temperature
Q _{Sm}	Capacidade para selecção em DTm Selection capacity in TDm
Q _{0m}	Capacidade corrigida em DTm Corrected capacity in TDm
FC1	Factor de correcção do refrigerante Refrigerant correction factor
FC2	Factor de correcção do material das alhetas Fin material correction factor
RCm	Factor de correcção para dados em DTm Correction factors for data in TDm

Capacidade corrigida	Corrected capacity
AP 204/431 TC=0°C DTm=6K R134a Alumínio / Aluminium	$Q_{0m} = Q_{Sm} \times RCm \times FC1 \times FC2 \quad [kW]$ $Q_{0m} = 0,31 \text{ kW} \times 0,682 \times 0,97 \times 1 = 0,21 \text{ kW}$

APD



Evaporadores de parede Wall-type Unit Coolers

Espaçamento Fin Spacing

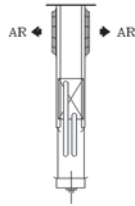
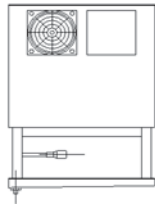
4,2 mm

Ø Ventiladores Fan Ø

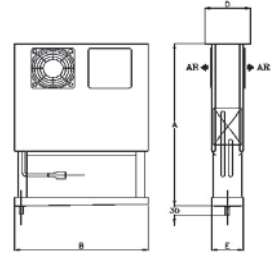
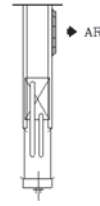
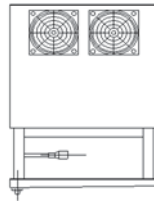
113 - 121 mm

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STANDARD STANDARD



VARIANTE VARIANT



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain	A	B	D	E	kg	m³	
	kW	A	V / F / Hz	3/8	3/8	5/8	mm						
				3/8	3/8	5/8	500	380	130	89	3.9	0.07	APD 111/23
				3/8	3/8	5/8	500	380	130	89	4.1	0.07	APD 111/30
				3/8	3/8	5/8	550	380	130	89	5.5	0.07	APD 211/42
				3/8	3/8	5/8	550	380	130	89	5.8	0.07	APD 211/46
				3/8	3/8	5/8	500	420	145	117	4.8	0.07	APD 211/25
				3/8	3/8	5/8	500	420	145	117	5.1	0.07	APD 211/36
				3/8	3/8	5/8	500	420	145	117	5.5	0.07	APD 211/49
				3/8	3/8	5/8	550	420	145	117	6.2	0.07	APD 211/58
				3/8	3/8	5/8	550	420	145	117	6.5	0.07	APD 211/68
				3/8	3/8	5/8	680	420	145	117	8.5	0.07	APD 212/91
				3/8	3/8	5/8	680	420	145	117	9.1	0.07	APD 212/97

Seleção e Factores Selection and Factors

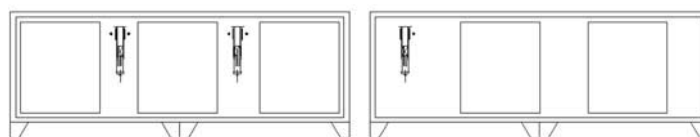
RCm		DTm [K]						
		10	9	8	7	6	5	4
TC [°C]	+5	1.298	1.168	1.039	0.909	0.781	0.679	0.564
	+2	1.200	1.080	1.000	0.857	0.741	0.638	0.517
	0	1.140	1.026	0.912	0.797	0.682	0.585	0.470
	-2	1.111	1.001	0.909	0.794	0.680	0.582	0.466

FC1		TE [°C]			
		+5	0	-5	-10
R404A / R507		1.00	1.00	1.00	1.00
R134a		1.02	1.00	0.98	0.95
R22 (DT1≤8K)			0.98	1.00	1.00
R22 (DT1>8K)			1.02	1.02	1.02

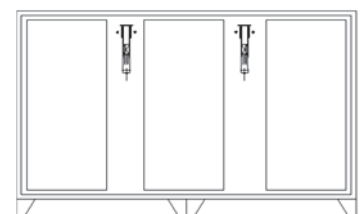
FC2		Aluminio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor		1.00	0.97	1.03

Capacidade corrigida Corrected capacity

APD 211/42 TC=0°C DTm=6K R134a Alumínio / Aluminium	$Q_{0m} = Q_{Sm} \times RCm \times FC1 \times FC2 \text{ [kW]}$ $Q_{0m} = 0,42 \text{ kW} \times 0,682 \times 0,97 \times 1 = 0,28 \text{ kW}$
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Bancadas frigoríficas
Under counters



Armário frigorífico
Reach-in Cabinet

Nomenclatura Nomenclature	
TC	Temperatura de câmara Room temperature
TE	Temperatura de evaporação Evaporating temperature
Q _{Sm}	Capacidade para selecção em DTm Selection capacity in TDm
Q _{0m}	Capacidade corrigida em DTm Corrected capacity in TDm
FC1	Factor de correcção do refrigerante Refrigerant correction factor
FC2	Factor de correcção do material das alhetas Fin material correction factor
RCm	Factor de correcção para dados em DTm Correction factors for data in TDm

DF

Evaporadores Duplo Fluxo Double Flow Coolers

Espaçamento Fin Spacing

4,2 mm

Ø Ventiladores Fan Ø

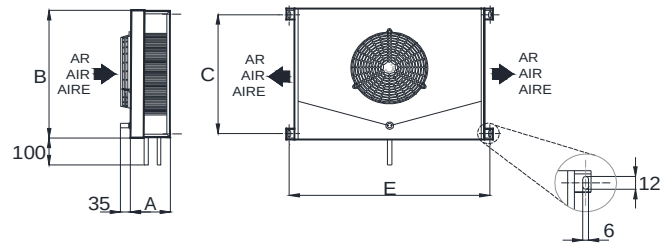
200 - 230 - 254 mm



Modelo Type	Capacidade QSm Capacity QSm (TC=+2°C / DTm=8K)	Capacidade Q0m Capacity Q0m (TC=-18°C / DTm=6K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans								
					Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	
						mm	m³/h	m	rpm	W	A	V / F / Hz	
DF 400	0.44		2.20	0.53	1	200	320	2.5	1320	35	0.21	230/1/50	
DF 402	0.61		2.90	0.71	1	200	300	2.5	1320	35	0.21	230/1/50	
DF 404	0.70		3.70	0.90	1	200	280	2.5	1320	35	0.21	230/1/50	
DF 460	0.88		3.90	0.90	1	230	430	3.0	1320	38	0.23	230/1/50	
DF 462	1.06		4.90	1.10	1	230	400	3.0	1320	38	0.23	230/1/50	
DF 500	1.24		5.10	1.10	1	254	650	4.0	1300	70	0.48	230/1/50	
DF 502	1.48		6.80	1.50	1	254	600	4.0	1300	70	0.48	230/1/50	
DF 504	1.72		8.50	1.83	1	254	580	4.0	1300	70	0.48	230/1/50	
DF 506	2.71		10.20	1.94	2	254	1300	4.0	1300	140	0.96	230/1/50	
DF 508	2.97		13.60	2.60	2	254	1200	4.0	1300	140	0.96	230/1/50	
DF 5010	3.50		17.00	3.23	2	254	1160	4.0	1300	140	0.96	230/1/50	
DF 5012	4.67		20.40	3.70	3	254	1800	4.0	1300	210	1.44	230/1/50	
DF 5014	5.31		25.50	4.63	3	254	1740	4.0	1300	210	1.44	230/1/50	

Modelo Type		Preço sem resistências Price without heaters	Preço com resistências Price with heaters	Opções Options										
				/GM	/GE	/GT	/W	AR	BL	BI	TI	BR	RG	AS
				Desc. gás quente GM GM hot gas defrost	Desc. gás quente GE GE hot gas defrost	Desc. gás quente GT GT hot gas defrost	Descongelação água Water defrost	Alhetas revestidas Coated fins	Lacado branco White painted	Chaparia inox Stainless steel casing	Tab. esgoto isol. Insul. drain pan	Bateria resistências Heater coil	Resistências gola Fan heaters	Adaptador Conduas Air Sock Adapter
				EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR	EUR
DF 400	•	•	•	•	•	•	•	•	•	•	•	•	•	
DF 402	•	•	•	•	•	•	•	•	•	•	•	•	•	
DF 404	•	•	•	•	•	•	•	•	•	•	•	•	•	
DF 460	•	•	•	•	•	•	•	•	•	•	•	•	•	
DF 462	•	•	•	•	•	•	•	•	•	•	•	•	•	
DF 500	•	•	•	•	•	•	•	•	•	•	•	•	•	
DF 502	•	•	•	•	•	•	•	•	•	•	•	•	•	
DF 504	•	•	•	•	•	•	•	•	•	•	•	•	•	
DF 506	•	•	•	•	•	•	•	•	•	•	•	•	•	
DF 508	•	•	•	•	•	•	•	•	•	•	•	•	•	
DF 5010	•	•	•	•	•	•	•	•	•	•	•	•	•	
DF 5012	•	•	•	•	•	•	•	•	•	•	•	•	•	
DF 5014	•	•	•	•	•	•	•	•	•	•	•	•	•	

S Standard SP Sob pedido
S Standard SP Under request



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain							
	kW	A	V/F/Hz		in		A	B	C	E	kg	m³	
	0.32	1.39	230/1/50	3/8	3/8	3/4	137	393	361	656	6.9	0.10	DF 400
	0.32	1.39	230/1/50	3/8	3/8	3/4	137	393	361	656	7.5	0.10	DF 402
	0.48	2.09	230/1/50	3/8	3/8	3/4	137	393	361	656	8.0	0.10	DF 404
	0.40	1.74	230/1/50	3/8	3/8	3/4	137	468	436	688	8.5	0.12	DF 460
	0.60	2.61	230/1/50	1/2	5/8	3/4	137	468	436	688	9.5	0.12	DF 462
	0.64	2.78	230/1/50	1/2	5/8	3/4	192	518	486	720	12.0	0.16	DF 500
	0.88	3.83	230/1/50	1/2	5/8	3/4	192	518	486	720	13.0	0.16	DF 502
	1.28	5.57	230/1/50	1/2	5/8	3/4	192	518	486	720	14.4	0.16	DF 504
	1.68	7.3	230/1/50	1/2	5/8	3/4	192	868	836	720	20.0	0.24	DF 506
	1.68	7.3	230/1/50	1/2	5/8	3/4	192	868	836	720	22.0	0.24	DF 508
	2.00	8.7	230/1/50	1/2	5/8	3/4	192	868	836	720	24.0	0.24	DF 5010
	2.40	10.43	230/1/50	1/2	7/8	3/4	202	1218	1186	720	33.4	0.32	DF 5012
	3.20	13.91	230/1/50	1/2	7/8	3/4	202	1218	1186	720	36.0	0.32	DF 5014

Seleção e Factores Selection and Factors

RCm		DTm [K]						
		10	9	8	7	6	5	4
TC [°C]	+5	1.298	1.168	1.039	0.909	0.781	0.679	0.564
	+2	1.200	1.080	1.000	0.857	0.741	0.638	0.517
	0	1.140	1.026	0.912	0.797	0.682	0.585	0.470
	-2	1.111	1.001	0.909	0.794	0.680	0.582	0.466

FC1		TE [°C]			
		+5	0	-5	-10
R404A / R507		1.00	1.00	1.00	1.00
R134a		1.02	1.00	0.98	0.95
R22 (DT1≤8K)			0.98	1.00	1.00
R22 (DT1>8K)			1.02	1.02	1.02

FC2		Alumínio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor		1.00	0.97	1.03

Capacidade corrigida	Corrected capacity
DF/E 5010 TC=0°C DTm=6K R134a Alumínio / Aluminium	$Q_{0m} = Q_{Sm} \times RCm \times FC1 \times FC2 \text{ [kW]}$ $Q_{0m} = 3,50 \text{ kW} \times 0,682 \times 0,97 \times 1 = 2,32 \text{ kW}$

Nomenclatura	Nomenclature
TC	Temperatura de câmara Room temperature
TE	Temperatura de evaporação Evaporating temperature
Q _{Sm}	Capacidade para selecção em DTm Selection capacity in TDm
Q _{0m}	Capacidade corrigida em DTm Corrected capacity in TDm
FC1	Factor de correcção do refrigerante Refrigerant correction factor
FC2	Factor de correcção do material das alhetas Fin material correction factor
RCm	Factor de correcção para dados em DTm Correction factors for data in DTm

Dados de cálculo	Selection data
Isolamento - Câmara de refrigerados Insulation - Chilling room	80mm PU
Isolamento - Câmara de congelados Insulation - Freezing room	100mm PU
Temperatura exterior Exterior temperature	+32°C
Entrada diária (% capacidade da câmara) Daily rotation (room capacity's %)	10%
Tempo de arrefecimento Cooling time	18h
Tipo de uso Usage	Normal

Armário frigorífico Reach-in cooler (TC=+2°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	kW	
0,25 - 0,29	260	400
0,5 - 0,58	400	402
0,8 - 0,9	520	404
1,0 - 1,5	680	460
1,2 - 1,7	850	500
2,0 - 2,3	910	502
2,5 - 2,9	1080	502
3,0 - 3,5	1250	504
3,9 - 4,5	1750	506

Câmara frigorífica de hotelaria Walk-in cooler (TC=+1°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	W	
2,5 - 2,9	520	404
3,2 - 3,7	680	460
3,7 - 4,5	760	462
4,5 - 5,4	850	500
5,5 - 6,3	910	500
7,5 - 8,6	1100	502
9,5 - 10,9	1250	504
13,0 - 15,0	1900	506
19,0 - 25,0	2400	5010
32,0 - 37,0	3300	5012
39,0 - 45,0	3700	5014

DFL

Evaporadores Duplo Fluxo Double Flow Coolers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

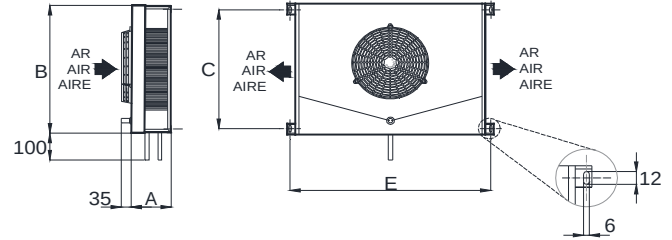
6,3 mm
200 - 230 - 254 mm



Modelo Type	Capacidade QSm Capacity QSm (TC=+2°C / DTm=8K)	Capacidade Q0m Capacity Q0m (TC=-18°C / DTm=6K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans								
					Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	
						mm	m³/h	m	rpm	W	A	V / F / Hz	
DFL 401	0.33	0.20	1.50	0.53	1	200	340	3.0	1320	35	0.21	230/1/50	
DFL 403	0.43	0.26	2.00	0.71	1	200	320	3.0	1320	35	0.21	230/1/50	
DFL 405	0.51	0.31	2.50	0.90	1	200	300	3.0	1320	35	0.21	230/1/50	
DFL 461	0.62	0.38	2.70	0.90	1	230	450	3.5	1320	38	0.23	230/1/50	
DFL 463	0.77	0.47	3.40	1.10	1	230	440	3.5	1320	38	0.23	230/1/50	
DFL 501	0.96	0.58	3.50	1.10	1	254	700	4.5	1300	70	0.48	230/1/50	
DFL 503	1.13	0.68	4.70	1.50	1	254	650	4.5	1300	70	0.48	230/1/50	
DFL 505	1.42	0.86	5.90	1.83	1	254	620	4.5	1300	70	0.48	230/1/50	
DFL 507	1.97	1.19	7.10	1.94	2	254	1400	4.5	1300	140	0.96	230/1/50	
DFL 509	2.26	1.37	9.40	2.60	2	254	1300	4.5	1300	140	0.96	230/1/50	
DFL 5011	2.87	1.74	11.80	3.23	2	254	1240	4.5	1300	140	0.96	230/1/50	
DFL 5013	3.71	2.25	14.10	3.70	3	254	1950	4.5	1300	210	1.44	230/1/50	
DFL 5015	4.23	2.56	17.70	4.63	3	254	1860	4.5	1300	210	1.44	230/1/50	

Modelo Type		Preço sem resistências Price without heaters	Preço com resistências Price with heaters	Opções Options										
				/GM	/GE	/GT	/W	AR	BL	BI	TI	BR	RG	AS
				Desc. gás quente GM hot gas defrost	Desc. gás quente GE hot gas defrost	Desc. gás quente GT hot gas defrost	Descongelação água Water defrost	Alhetas revestidas Coated fins	Lacado branco White painted	Chaparia Inox Stainless steel casing	Tab. esgoto isol. Insul. drain pan	Bateria resistências Heater coil	Resistências gola Fan heaters	Adaptador Conduitas Air Sock Adapter
				EUR	EUR									
DFL 401	•	•	-	-	-	-	•	•	•	-	•	-	-	
DFL 403	•	•	-	-	-	-	•	•	•	-	•	-	-	
DFL 405	•	•	-	-	-	-	•	•	•	-	•	-	-	
DFL 461	•	•	-	-	-	-	•	•	•	-	•	-	-	
DFL 463	•	•	-	-	-	-	•	•	•	-	•	-	-	
DFL 501	•	•	-	-	-	-	-	•	•	-	•	-	-	
DFL 503	•	•	-	-	-	-	-	•	•	-	•	-	-	
DFL 505	•	•	-	-	-	-	-	•	•	-	•	-	-	
DFL 507	•	•	-	-	-	-	-	•	•	-	•	-	-	
DFL 509	•	•	-	-	-	-	-	•	•	-	•	-	-	
DFL 5011	•	•	-	-	-	-	-	•	•	-	•	-	-	
DFL 5013	•	•	-	-	-	-	-	•	•	-	•	-	-	
DFL 5015	•	•	-	-	-	-	-	•	•	-	•	-	-	

S Standard SP Sob pedido
S Standard SP Under request



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain							
	kW	A	V / F / Hz		in		A	B	C	E	kg	m³	
	0.32	1.39	230/1/50	3/8	3/8	3/4	137	393	361	656	6.9	0.10	DFL 401
	0.32	1.39	230/1/50	3/8	3/8	3/4	137	393	361	656	7.5	0.10	DFL 403
	0.48	2.09	230/1/50	3/8	3/8	3/4	137	393	361	656	8.0	0.10	DFL 405
	0.40	1.74	230/1/50	3/8	3/8	3/4	137	468	436	688	8.5	0.12	DFL 461
	0.60	2.61	230/1/50	1/2	5/8	3/4	137	468	436	688	9.5	0.12	DFL 463
	0.64	2.78	230/1/50	1/2	5/8	3/4	192	518	486	720	12.0	0.16	DFL 501
	0.88	3.83	230/1/50	1/2	5/8	3/4	192	518	486	720	13.0	0.16	DFL 503
	1.28	5.57	230/1/50	1/2	5/8	3/4	192	518	486	720	14.4	0.16	DFL 505
	1.68	7.3	230/1/50	1/2	5/8	3/4	192	868	836	720	20.0	0.24	DFL 507
	1.68	7.3	230/1/50	1/2	5/8	3/4	192	868	836	720	22.0	0.24	DFL 509
	2.00	8.7	230/1/50	1/2	5/8	3/4	192	868	836	720	24.0	0.24	DFL 5011
	2.40	10.43	230/1/50	1/2	7/8	3/4	202	1218	1186	720	33.4	0.32	DFL 5013
	3.20	13.91	230/1/50	1/2	7/8	3/4	202	1218	1186	720	36.0	0.32	DFL 5015

Seleção e Factores Selection and Factors

RCm		DTm [K]						
		10	9	8	7	6	5	4
TC [°C]	+5	1.352	1.217	1.082	0.947	0.813	0.707	0.588
	+2	1.250	1.125	1.000	0.893	0.772	0.665	0.539
	0	1.188	1.069	0.950	0.830	0.710	0.609	0.490
	-15	1.018	0.918	0.830	0.730	0.640	0.539	0.434
	-20	0.963	0.867	0.770	0.660	0.583	0.490	0.393
	-25	0.950	0.854	0.764	0.649	0.567	0.476	0.385
	-34					0.561	0.471	0.381

FC1		TE [°C]						
		+5	0	-5	-10	-25	-35	-40
R404A / R507		1.00	1.00	1.00	1.00	1.00	1.00	1.00
R134a		1.02	1.00	0.98	0.95			
R22 (DT1≤8K)			0.98	1.00	1.00	1.02	1.04	1.06
R22 (DT1>8K)			1.02	1.02	1.02	1.04	1.06	1.08

FC2	Alumínio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor	1.00	0.97	1.03

Capacidade corrigida	Corrected capacity
DFL/E 507 AR TC=-20°C DTm=5K R404A Al. rev. / Coated al.	$Q_{om} = Q_{Sm} \times RCm \times FC1 \times FC2 \text{ [kW]}$ $Q_{om} = 1,97 \text{ kW} \times 0,490 \times 1 \times 0,97 = 0,94 \text{ kW}$

Nomenclatura	Nomenclature
TC	Temperatura de câmara Room temperature
TE	Temperatura de evaporação Evaporating temperature
Q _{Sm}	Capacidade para selecção em DTm Selection capacity in Tdm
Q _{om}	Capacidade corrigida em DTm Corrected capacity in Tdm
FC1	Factor de correcção do refrigerante Refrigerant correction factor
FC2	Factor de correcção do material das alhetas Fin material correction factor
RCm	Factor de correcção para dados em DTm Correction factors for data in Tdm

Dados de cálculo	Selection data
Isolamento - Câmara de refrigerados Insulation - Chilling room	80mm PU
Isolamento - Câmara de congelados Insulation - Freezing room	100mm PU
Temperatura exterior Exterior temperature	+32°C
Entrada diária (% capacidade da câmara) Daily rotation (room capacity's %)	10%
Tempo de arrefecimento Cooling time	18h
Tipo de uso Usage	Normal

Câmara frigorífica Walk in cooler (TC=-20°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	W	
2,0 - 2,3	490	463
3,8 - 4,4	730	503
5,0 - 6,0	860	505
8,0 - 9,0	1050	507
9,0 - 12,0	1300	509
16,0 - 18,0	1700	5011

Armário frigorífico Reach-in cooler (TC=-15°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	W	
0,20 - 0,23	200	401
0,30 - 0,35	260	403
0,50 - 0,56	310	405
0,60 - 0,70	440	461
0,80 - 0,90	630	501
0,96 - 1,10	790	503
1,10 - 1,30	790	505
1,50 - 1,70	1160	507

Armário frigorífico Reach-in cooler (TC=-20°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	W	
0,30 - 0,35	200	401
0,50 - 0,56	290	405
0,60 - 0,70	400	461
0,80 - 1,00	490	463
1,00 - 1,15	730	503
1,28 - 1,50	760	505
1,40 - 1,60	1000	507

TA

Evaporadores de Baixo Perfil Low Profile Coolers

Espaçamento Fin Spacing

4,2 mm

Ø Ventiladores Fan Ø

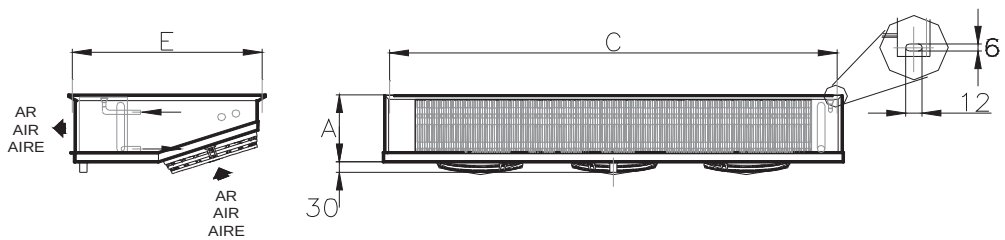
172 - 200 - 230 mm



Modelo Type	Capacidade QSm Capacity QSm (TC=+2°C / DTm=8K)	Capacidade Q0m Capacity Q0m (TC=-18°C / DTm=6K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans							
					Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS
		KW	m²	dm³		mm	m³/h	m	rpm	W	A	V / F / Hz
TA 170	0.31		1.50	0.33	1	172	170	2.0	1300	32	0.20	230/1/50
TA 172	0.41		2.20	0.50	1	172	145	2.0	1300	32	0.20	230/1/50
TA 174	0.92		4.40	0.85	2	172	290	2.0	1300	64	0.40	230/1/50
TA 176	1.30		6.60	1.21	3	172	430	2.0	1300	96	0.60	230/1/50
TA 178	1.81		8.80	1.60	4	172	570	2.0	1300	128	0.80	230/1/50
TA 200	0.42		1.70	0.37	1	200	300	3.0	1320	35	0.21	230/1/50
TA 202	0.54		2.30	0.49	1	200	270	3.0	1320	35	0.21	230/1/50
TA 204	0.59		2.80	0.61	1	200	250	3.0	1320	35	0.21	230/1/50
TA 206	1.24		5.70	1.10	2	200	500	3.0	1320	70	0.42	230/1/50
TA 208	1.40		6.80	1.30	2	200	480	3.0	1320	70	0.42	230/1/50
TA 2010	1.97		8.50	1.54	3	200	750	3.0	1320	105	0.63	230/1/50
TA 230	0.70		2.60	0.55	1	230	480	3.5	1300	38	0.23	230/1/50
TA 232	0.88		3.40	0.73	1	230	460	3.5	1300	38	0.23	230/1/50
TA 234	1.09		4.30	0.92	1	230	430	3.5	1300	38	0.23	230/1/50
TA 236	1.14		5.10	1.10	1	230	390	3.5	1300	38	0.23	230/1/50
TA 238	1.68		5.10	1.00	2	230	960	3.5	1300	76	0.46	230/1/50
TA 2310	1.79		6.80	1.30	2	230	920	3.5	1300	76	0.46	230/1/50
TA 2312	2.24		8.50	1.62	2	230	860	3.5	1300	76	0.46	230/1/50
TA 2314	2.86		10.20	1.90	3	230	1380	3.5	1300	114	0.69	230/1/50
TA 2316	3.39		12.80	2.32	3	230	1290	3.5	1300	114	0.69	230/1/50

Modelo Type		Preço sem resistências Price without heaters	Preço com resistências Price with heaters	Opções Options																					
				Desc. gás quente GM GM hot gas defrost	Desc. gás quente GE GE hot gas defrost	Desc. gás quente GT GT hot gas defrost	Descongelação água Water defrost	Alhetas revestidas Coated fins	Lacado branco White painted	Chaparia Inox Stainless steel casing	Tab. esgoto isol. Insul. drain pan	Bateria resistências Heater coil	Resistências gola Fan heaters	Adaptador Conduas Air Sock Adapter											
															/GM	/GE	/GT	NW	AR	BL	BI	TI	BR	RG	AS
		EUR																							
TA 170		SP	SP	-	-	-	-	SP	SP	SP	-	SP	-	-											
TA 172		SP	SP	-	-	-	-	SP	SP	SP	-	SP	-	-											
TA 174		SP	SP	-	-	-	-	SP	SP	SP	-	SP	-	-											
TA 176		SP	SP	-	-	-	-	SP	SP	SP	-	SP	-	-											
TA 178		SP	SP	-	-	-	-	SP	SP	SP	-	SP	-	-											
TA 200		•	•	-	-	-	-	•	•	•	-	•	-	-											
TA 202		•	•	-	-	-	-	•	•	•	-	•	-	-											
TA 204		•	•	-	-	-	-	•	•	•	-	•	-	-											
TA 206		•	•	-	-	-	-	•	•	•	-	•	-	-											
TA 208		•	•	-	-	-	-	•	•	•	-	•	-	-											
TA 2010		•	•	-	-	-	-	•	•	•	-	•	-	-											
TA 230		•	•	-	-	-	-	•	•	•	-	•	-	-											
TA 232		•	•	-	-	-	-	•	•	•	-	•	-	-											
TA 234		•	•	-	-	-	-	•	•	•	-	•	-	-											
TA 236		•	•	-	-	-	-	•	•	•	-	•	-	-											
TA 238		•	•	-	-	-	-	•	•	•	-	•	-	-											
TA 2310		•	•	-	-	-	-	•	•	•	-	•	-	-											
TA 2312		•	•	-	-	-	-	•	•	•	-	•	-	-											
TA 2314		•	•	-	-	-	-	•	•	•	-	•	-	-											
TA 2316		•	•	-	-	-	-	•	•	•	-	•	-	-											

S Standard
S StandardSP Sob pedido
SP Under request



	Resistências do evaporador Cooler heaters			Ligações standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain							
	kW	A	V / F / Hz	in			A	B	C	E			
	0.20	0.87	230/1/50	3/8	3/8	3/4	mm				kg	m³	TA 170
	0.40	1.74	230/1/50	3/8	3/8	3/4	107	468	436	453	4.8	0.06	TA 172
	0.64	2.78	230/1/50	3/8	3/8	3/4	107	468	436	453	5.3	0.06	TA 174
	0.96	4.17	230/1/50	1/2	5/8	3/4	107	768	736	453	9.5	0.07	TA 176
	1.28	5.57	230/1/50	1/2	5/8	3/4	107	1068	1036	453	13.5	0.09	TA 178
	1.28	5.57	230/1/50	1/2	5/8	3/4	107	1368	1336	453	17.5	0.12	TA 178
	0.32	1.39	230/1/50	3/8	3/8	3/4	135	518	486	483	6.0	0.06	TA 200
	0.32	1.39	230/1/50	3/8	3/8	3/4	135	518	486	483	6.4	0.06	TA 202
	0.64	2.78	230/1/50	3/8	3/8	3/4	135	518	486	483	6.8	0.06	TA 204
	1.00	4.35	230/1/50	1/2	5/8	3/4	135	868	836	483	12.5	0.11	TA 206
	1.00	4.35	230/1/50	1/2	5/8	3/4	135	868	836	483	13.0	0.11	TA 208
	1.60	6.96	230/1/50	1/2	5/8	3/4	135	1218	1186	483	18.0	0.17	TA 2010
	0.32	1.39	230/1/50	3/8	3/8	3/4	190	518	486	503	7.0	0.06	TA 230
	0.44	1.91	230/1/50	3/8	3/8	3/4	190	518	486	503	7.6	0.06	TA 232
	0.64	2.78	230/1/50	1/2	5/8	3/4	190	518	486	503	8.2	0.06	TA 234
	0.64	2.78	230/1/50	1/2	5/8	3/4	190	518	486	503	8.7	0.06	TA 236
	0.84	3.65	230/1/50	1/2	5/8	3/4	190	868	836	503	12.5	0.11	TA 238
	0.84	3.65	230/1/50	1/2	5/8	3/4	190	868	836	503	13.8	0.11	TA 2310
	1.00	4.35	230/1/50	1/2	5/8	3/4	190	868	836	503	14.8	0.11	TA 2312
	1.20	5.22	230/1/50	1/2	5/8	3/4	190	1218	1186	503	19.5	0.17	TA 2314
	1.60	6.96	230/1/50	1/2	5/8	3/4	190	1218	1186	503	21.0	0.17	TA 2316

Seleção e Factores Selection and Factors

RCm		DTm [K]						
		10	9	8	7	6	5	4
TC [°C]	+5	1.298	1.168	1.039	0.909	0.781	0.679	0.564
	+2	1.200	1.080	1.000	0.857	0.741	0.638	0.517
	0	1.140	1.026	0.912	0.797	0.682	0.585	0.470
	-2	1.111	1.001	0.909	0.794	0.680	0.582	0.466

FC1		TE [°C]			
		+5	0	-5	-10
R404A / R507		1.00	1.00	1.00	1.00
R134a		1.02	1.00	0.98	0.95
R22 (DT1≤8K)			0.98	1.00	1.00
R22 (DT1>8K)			1.02	1.02	1.02

FC2		Alumínio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor		1.00	0.97	1.03

Capacidade corrigida Corrected capacity	
TA 232 TC=0°C DTm=6K R134a Alumínio / Aluminium	$Q_{0m} = Q_{Sm} \times RCm \times FC1 \times FC2 \text{ [kW]}$ $Q_{0m} = 0,88 \text{ kW} \times 0,682 \times 0,97 \times 1 = 0,58 \text{ kW}$

Nomenclatura	Nomenclature
TC	Temperatura de câmara Room temperature
TE	Temperatura de evaporação Evaporating temperature
Q _{Sm}	Capacidade para selecção em DTm Selection capacity in TDm
Q _{0m}	Capacidade corrigida em DTm Corrected capacity in TDm
FC1	Factor de correcção do refrigerante Refrigerant correction factor
FC2	Factor de correcção do material das alhetas Fin material correction factor
RCm	Factor de correcção para dados em DTm Correction factors for data in DTm

Dados de cálculo Selection data	
Isolamento - Câmara de refrigerados Insulation - Chilling room	80mm PU
Isolamento - Câmara de congelados Insulation - Freezing room	100mm PU
Temperatura exterior Exterior temperature	+32°C
Entrada diária (% capacidade da câmara) Daily rotation (room capacity's %)	10%
Tempo de arrefecimento Cooling time	18h
Tipo de uso Usage	Normal

Armário frigorífico Reach-in cooler (TC=0°C)			
Volume Volume	Capacidade Capacity	Modelo Type	
m³	W		
0,15 - 0,17	180	170	
0,25 - 0,29	260	172	200
0,5 - 0,58	400	202	204
0,8 - 0,9	520	230	
1,0 - 1,5	680	174	
1,2 - 1,7	850	206	
2,0 - 2,3	910	176	
2,5 - 2,9	1080	238	
3,0 - 3,5	1250	2310	178
3,9 - 4,5	1750	2314	2312

Câmara frigorífica Walk-in cooler (TC=0°C)			
Volume Volume	Capacidade Capacity	Modelo Type	
m³	W		
1,7 - 2,0	370	202	
2,0 - 2,3	420	204	
2,2 - 2,5	440	204	
2,4 - 2,8	480	230	
2,6 - 3,0	500	230	
2,9 - 3,3	550	232	
3,2 - 3,7	570	232	
3,6 - 4,1	620	174	
4,1 - 4,7	690	234	
4,7 - 5,4	770	236	
6,4 - 7,4	880	176	206
9,9 - 11,4	1200	238	2310
11,0 - 13,0	1500	2010	2312
13,0 - 15,0	1900	2314	
19,0 - 25,0	2400	2316	

TAL

Evaporadores de Baixo Perfil Low Profile Coolers

Espaçamento Fin Spacing

6,3 mm

Ø Ventiladores Fan Ø

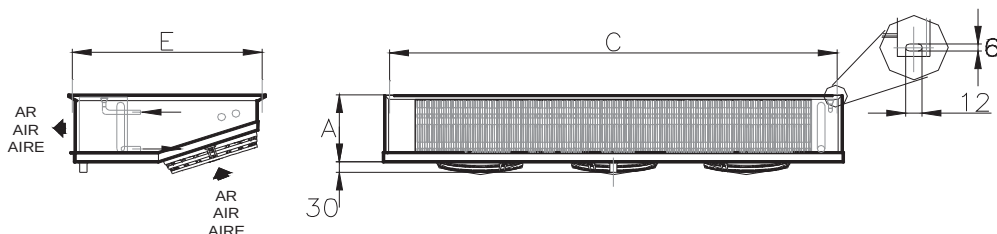
172 - 200 - 230 mm



Modelo Type	Capacidade QSm Capacity QSm (TC=+2°C / DTm=8K)	Capacidade Q0m Capacity Q0m (TC=-18°C / DTm=6K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans							
					Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS
TAL 171	0.29	0.18	1.00	0.33	1	172	200	2.5	1300	32	0.20	230/1/50
TAL 173	0.34	0.21	1.50	0.50	1	172	170	2.5	1300	32	0.20	230/1/50
TAL 175	0.81	0.49	3.00	0.85	2	172	340	2.5	1300	64	0.40	230/1/50
TAL 177	1.10	0.67	4.60	1.21	3	172	540	2.5	1300	96	0.60	230/1/50
TAL 179	1.48	0.90	6.10	1.60	4	172	680	2.5	1300	128	0.80	230/1/50
TAL 201	0.34	0.21	1.20	0.37	1	200	320	3.5	1320	35	0.21	230/1/50
TAL 203	0.41	0.25	1.60	0.49	1	200	300	3.5	1320	35	0.21	230/1/50
TAL 205	0.48	0.29	2.00	0.61	1	200	280	3.5	1320	35	0.21	230/1/50
TAL 207	1.02	0.62	3.90	1.10	2	200	560	3.5	1320	70	0.42	230/1/50
TAL 209	1.10	0.67	4.70	1.30	2	200	540	3.5	1320	70	0.42	230/1/50
TAL 2011	1.55	0.94	5.90	1.54	3	200	840	3.5	1320	105	0.63	230/1/50
TAL 231	0.52	0.32	1.80	0.55	1	230	500	4.0	1300	38	0.23	230/1/50
TAL 233	0.66	0.40	2.40	0.73	1	230	480	4.0	1300	38	0.23	230/1/50
TAL 235	0.84	0.51	3.00	0.92	1	230	440	4.0	1300	38	0.23	230/1/50
TAL 237	0.95	0.58	3.50	1.10	1	230	420	4.0	1300	38	0.23	230/1/50
TAL 239	1.10	0.67	3.50	1.00	2	230	1000	4.0	1300	76	0.46	230/1/50
TAL 2311	1.35	0.82	4.70	1.30	2	230	960	4.0	1300	76	0.46	230/1/50
TAL 2313	1.77	1.07	5.90	1.62	2	230	880	4.0	1300	76	0.46	230/1/50
TAL 2315	2.25	1.36	7.10	1.90	3	230	1440	4.0	1300	114	0.69	230/1/50
TAL 2317	2.61	1.58	8.80	2.32	3	230	1320	4.0	1300	114	0.69	230/1/50

Modelo Type		Preço sem resistências Price without heaters	Preço com resistências Price with heaters	Opções Options										
				Desc. gás quente GM GM hot gas defrost	Desc. gás quente GE GE hot gas defrost	Desc. gás quente GT GT hot gas defrost	Desc. água Water defrost	Alhetas revestidas Coated fins	Lacado branco White painted	Chaparia Inox Stainless steel casing	Tab. esgoto isol. Insul. drain pan	Bateria resistências Heater coil	Resistências gola Fan heaters	Adaptador Conduas Air Sock Adapter
EUR														
TAL 171	SP	SP	-	-	-	-	SP	SP	SP	-	SP	-	-	
TAL 173	SP	SP	-	-	-	-	SP	SP	SP	-	SP	-	-	
TAL 175	SP	SP	-	-	-	-	SP	SP	SP	-	SP	-	-	
TAL 177	SP	SP	-	-	-	-	SP	SP	SP	-	SP	-	-	
TAL 179	SP	SP	-	-	-	-	SP	SP	SP	-	SP	-	-	
TAL 201	•	•	-	-	-	-	•	•	•	-	•	-	-	
TAL 203	•	•	-	-	-	-	•	•	•	-	•	-	-	
TAL 205	•	•	-	-	-	-	•	•	•	-	•	-	-	
TAL 207	•	•	-	-	-	-	•	•	•	-	•	-	-	
TAL 209	•	•	-	-	-	-	•	•	•	-	•	-	-	
TAL 2011	•	•	-	-	-	-	•	•	•	-	•	-	-	
TAL 231	•	•	-	-	-	-	•	•	•	-	•	-	-	
TAL 233	•	•	-	-	-	-	•	•	•	-	•	-	-	
TAL 235	•	•	-	-	-	-	•	•	•	-	•	-	-	
TAL 237	•	•	-	-	-	-	•	•	•	-	•	-	-	
TAL 239	•	•	-	-	-	-	•	•	•	-	•	-	-	
TAL 2311	•	•	-	-	-	-	•	•	•	-	•	-	-	
TAL 2313	•	•	-	-	-	-	•	•	•	-	•	-	-	
TAL 2315	•	•	-	-	-	-	•	•	•	-	•	-	-	
TAL 2317	•	•	-	-	-	-	•	•	•	-	•	-	-	

S Standard SP Sob pedido
S Standard SP Under request



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain							
	kW	A	V / F / Hz		in		A	B	C	E	kg	m³	
	0.20	0.87	230/1/50	3/8	3/8	3/4	107	468	436	453	4.8	0.06	TAL 171
	0.40	1.74	230/1/50	3/8	3/8	3/4	107	468	436	453	5.3	0.06	TAL 173
	0.64	2.78	230/1/50	3/8	3/8	3/4	107	768	736	453	9.5	0.07	TAL 175
	0.96	4.17	230/1/50	1/2	5/8	3/4	107	1068	1036	453	13.5	0.09	TAL 177
	1.28	5.57	230/1/50	1/2	5/8	3/4	107	1368	1336	453	17.5	0.12	TAL 179
	0.32	1.39	230/1/50	3/8	3/8	3/4	135	518	486	483	6.0	0.06	TAL 201
	0.32	1.39	230/1/50	3/8	3/8	3/4	135	518	486	483	6.4	0.06	TAL 203
	0.64	2.78	230/1/50	3/8	3/8	3/4	135	518	486	483	6.8	0.06	TAL 205
	1.00	4.35	230/1/50	1/2	5/8	3/4	135	868	836	483	12.5	0.11	TAL 207
	1.00	4.35	230/1/50	1/2	5/8	3/4	135	868	836	483	13.0	0.11	TAL 209
	1.60	6.96	230/1/50	1/2	5/8	3/4	135	1218	1186	483	18.0	0.17	TAL 2011
	0.32	1.39	230/1/50	3/8	3/8	3/4	190	518	486	503	7.0	0.06	TAL 231
	0.44	1.91	230/1/50	3/8	3/8	3/4	190	518	486	503	7.6	0.06	TAL 233
	0.64	2.78	230/1/50	1/2	5/8	3/4	190	518	486	503	8.2	0.06	TAL 235
	0.64	2.78	230/1/50	1/2	5/8	3/4	190	518	486	503	8.7	0.06	TAL 237
	0.84	3.65	230/1/50	1/2	5/8	3/4	190	868	836	503	12.5	0.11	TAL 239
	0.84	3.65	230/1/50	1/2	5/8	3/4	190	868	836	503	13.8	0.11	TAL 2311
	1.00	4.35	230/1/50	1/2	5/8	3/4	190	868	836	503	14.8	0.11	TAL 2313
	1.20	5.22	230/1/50	1/2	5/8	3/4	190	1218	1186	503	19.5	0.17	TAL 2315
	1.60	6.96	230/1/50	1/2	5/8	3/4	190	1218	1186	503	21.0	0.17	TAL 2317

Seleção e Factores Selection and Factors

RCm		DTm [K]					
		10	9	8	7	6	5
TC [°C]	+5	1.352	1.217	1.082	0.947	0.813	0.707
	+2	1.250	1.125	1.000	0.893	0.772	0.665
	0	1.188	1.069	0.950	0.830	0.710	0.609
	-15	1.018	0.918	0.830	0.730	0.640	0.539
	-20	0.963	0.867	0.770	0.660	0.583	0.490
	-25	0.950	0.854	0.764	0.649	0.567	0.476
	-34					0.561	0.471

FC1		TE [°C]					
		+5	0	-5	-10	-25	-35
R404A / R507		1.00	1.00	1.00	1.00	1.00	1.00
R134a		1.02	1.00	0.98	0.95		
R22 (DT1≤8K)			0.98	1.00	1.00	1.02	1.04
R22 (DT1>8K)			1.02	1.02	1.02	1.04	1.06

FC2		Alumínio Aluminium	Al. revestido Coated aluminium	Cobre Copper
		Factor	1.00	0.97
				1.03

Capacidade corrigida Corrected capacity	
TAL 2313 AR TC=-20°C DTm=5K R404A Al. rev. / Coated al.	$Q_{0m} = Q_{Sm} \times RCm \times FC1 \times FC2 \text{ [kW]}$ $Q_{0m} = 1,77 \text{ kW} \times 0,490 \times 1 \times 0,97 = 0,84 \text{ kW}$

Nomenclatura Nomenclature			
TC	Temperatura de câmara Room temperature	FC1	Factor de correcção do refrigerante Refrigerant correction factor
TE	Temperatura de evaporação Evaporating temperature	FC2	Factor de correcção do material das alhetas Fin material correction factor
Q _{Sm}	Capacidade para selecção em DTm Selection capacity in Tdm	RCm	Factor de correcção para dados em DTm Correction factors for data in DTm
Q _{0m}	Capacidade corrigida em DTm Corrected capacity in Tdm		

Dados de cálculo Selection data

Isolamento - Refrigerados Insulation - Chilling room	80mm PU
Isolamento - Congelados Insulation - Freezing room	100mm PU
Temperatura exterior Exterior temperature	+32°C
Entrada diária (% capacidade da câmara) Daily rotation (room capacity's %)	10%
Tempo de arrefecimento Cooling time	18h
Tipo de uso Usage	Normal

Armário frigorífico Reach-in cooler (TC=-20°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	W	
0,16 - 0,18	160	171
0,30 - 0,35	200	173
0,50 - 0,58	290	205
0,60 - 0,70	400	233
0,80 - 1,00	490	175
1,00 - 1,15	730	177
1,28 - 1,47	760	2311
1,40 - 1,61	1000	2313

Câmara frigorífica Walk-in cooler (TC=+2°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	W	
1,7 - 2,0	370	205
2,0 - 2,3	420	231
2,4 - 2,8	480	233
2,6 - 3,0	500	233
3,2 - 3,7	570	175
3,6 - 4,1	620	175
4,1 - 4,7	690	237
4,7 - 5,4	770	209
6,4 - 7,4	880	239
9,9 - 11,4	1200	2011

Câmara frigorífica Walk-in cooler (TC=-20°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	W	
2,0 - 2,3	490	175
3,8 - 4,4	730	177
5,0 - 6,0	860	2311
8,0 - 9,0	1050	2313
9,0 - 12,0	1300	2315
12,0 - 15,0	1500	2317



Evaporadores Redondos Round Coolers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

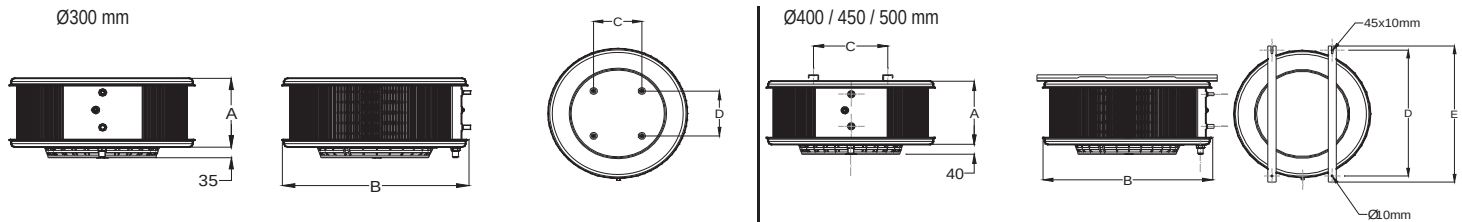
3,2 - 4,2 mm
300 - 400 - 450 - 500 mm

Modelo Type	Capacidade Qs1 Capacity Qs1 (Tse=+12°C / DT1=11K)	Capacidade 1,35 x SC1 Capacity 1.35 x SC1 (Tse=+10°C / DT1=10K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans										
	kW	m ²			dm ³	Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS		Ruído (1) Noise level (1)
ERK 304/413	1.42	1.29	3.74	0.67	1	300	1200	5.0	1300	90	0.62	230/1/50	49		
ERK 304/420	2.25	2.04	5.62	1.01	1	300	1400	5.0	1300	90	0.62	230/1/50	49		
ERK 304/331	3.39	3.08	9.79	1.35	1	300	1500	5.0	1300	90	0.62	230/1/50	49		
ERK 406/437	4.11	3.73	9.77	1.72	1	400	2400	6.0	935	205	0.96	230/1/50	50		
ERK 406/346	5.10	4.63	12.77	1.72	1	400	2400	6.0	935	205	0.96	230/1/50	50		
ERK 406/359	6.45	5.85	19.98	2.68	1	400	2300	6.0	935	205	0.96	230/1/50	50		
ERK 456/367	7.33	6.65	19.98	2.68	1	450	2800	8.0	935	205	0.96	230/1/50	52		
ERK 456/384	9.25	8.39	29.94	4.03	1	450	3200	8.0	935	205	0.96	230/1/50	52		
ERK 506/4109	12.02	10.91	33.87	5.87	1	500	5000	8.0	935	205	0.96	230/1/50	54		
ERK 506/3128	14.09	12.79	44.28	5.87	1	500	5000	8.0	935	205	0.96	230/1/50	54		
ERK 506/3155	17.04	15.46	64.97	8.57	1	500	4700	8.0	935	205	0.96	230/1/50	54		

(1) Pressão sonora a 3m, em campo livre sem reflexões Sound pressure level at 3m, in free field conditions, without reflections

Modelo Type	Preço sem resistências Price without heaters	Preço com bateria de resistências BR Price with heater coil BR	Opções Options									
			/GM	/GE	/GT	/W	AR	BL	BI	TI	RG	AS
			Desc. gás quente GM hot gas defrost	Desc. gás quente GE hot gas defrost	Desc. gás quente GT hot gas defrost	Descongelação água Water defrost	Alhetas revestidas Coated fins	Lacado branco White painted	Chaparia Inox Stainless steel casing	Tab. esgoto isol. Insul. drain pan	Resistências gola Fan heaters	Adaptador Conduas Air Sock Adapter
	EUR											
ERK 304/413	•	•	•	•	•	•	•	S	•	•	•	•
ERK 304/420	•	•	•	•	•	•	•	S	•	•	•	•
ERK 304/331	•	•	•	•	•	•	•	S	•	•	•	•
ERK 406/437	•	•	•	•	•	•	•	S	•	•	•	•
ERK 406/346	•	•	•	•	•	•	•	S	•	•	•	•
ERK 406/359	•	•	•	•	•	•	•	S	•	•	•	•
ERK 456/367	•	•	•	•	•	•	•	S	•	•	•	•
ERK 456/384	•	•	•	•	•	•	•	S	•	•	•	•
ERK 506/4109	•	•	•	•	•	•	•	S	•	•	•	•
ERK 506/3128	•	•	•	•	•	•	•	S	•	•	•	•
ERK 506/3155	•	•	•	•	•	•	•	S	•	•	•	•

S Standard SP Sob pedido
S Standard SP Under request



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain							
	kW	A	V / F / Hz		in		A	B	C	D	kg	m ³	
				3/8	3/8	G 3/8	152	515	177	157	6.3	0.10	ERK 304/413
				3/8	1/2	G 3/8	216	515	177	157	7.2	0.10	ERK 304/420
				1/2	5/8	G 3/8	280	515	177	157	7.2	0.10	ERK 304/331
				1/2	5/8	G 3/4	302	775	315	735	32.5	0.27	ERK 406/437
				1/2	7/8	G 3/4	302	775	315	735	29.5	0.27	ERK 406/346
				1/2	7/8	G 3/4	302	775	315	735	32.5	0.27	ERK 406/359
				1/2	7/8	G 3/4	302	775	345	735	32.5	0.27	ERK 456/367
				1/2	7/8	G 3/4	423	775	315	735	38.1	0.35	ERK 456/384
				5/8	1 1/8	G 3/4	487	975	450	920	49.8	0.54	ERK 506/4109
				5/8	1 1/8	G 3/4	487	975	450	920	52.3	0.54	ERK 506/3128
				5/8	1 3/8	G 3/4	487	975	450	920	58.9	0.54	ERK 506/3155

Seleção e Factores Selection and Factors

RC1		DT1 [K]												
		16	15	14	13	12	11	10	9	8	7	6	5	4
Tse [°C]	+16	1.762	1.652	1.469	1.322	1.220	1.119	1.018	0.916	0.805	0.703	0.604	0.499	0.402
	+14	1.750	1.640	1.458	1.458	1.211	1.111	1.010	0.909	0.800	0.698	0.600	0.496	0.399
	+12	1.737	1.628	1.447	1.447	1.203	1.102	1.003	0.902	0.794	0.694	0.595	0.493	0.397
	+10	1.723	1.616	1.436	1.436	1.193	1.094	1.000	0.895	0.788	0.689	0.591	0.490	0.394
	+8	1.713	1.606	1.427	1.427	1.186	1.087	0.979	0.881	0.782	0.684	0.587	0.487	0.391
	+6	1.700	1.594	1.417	1.417	1.177	1.078	0.971	0.874	0.776	0.679	0.582	0.485	0.387
	+4	1.685	1.580	1.405	1.405	1.167	1.070	0.963	0.867	0.771	0.674	0.578	0.482	0.385

FC1		TE [°C]			
		+5	0	-5	-10
R404A / R507		1.00	1.00	1.00	1.00
R134a		1.02	1.00	0.98	0.95
R22 (DT1≤8K)			0.98	1.00	1.00
R22 (DT1>8K)			1.02	1.02	1.02

FC2	Alumínio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor	1.00	0.97	1.03

Capacidade corrigida Corrected capacity

ERK 304/413 Tse=+14°C DT1=10K R134a Alumínio / Aluminium	$Q_{01} = Q_{S1} \times RC1 \times FC1 \times FC2 \text{ [kW]}$ $Q_{01} = 1,29 \text{ kW} \times 1,010 \times 1,01 \times 1 = 1,26 \text{ kW}$
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Nomenclatura	Nomenclature
TC	Temperatura de câmara Room temperature
TE	Temperatura de evaporação Evaporating temperature
Tse	Temperatura seca de entrada de ar BS Air on DB
Q _{S1}	Capacidade para selecção em DT1 Selection capacity in TD1
Q ₀₁	Capacidade corrigida em DT1 Corrected capacity in TD1
FC1	Factor de correcção do refrigerante Refrigerant correction factor
FC2	Factor de correcção do material das alhetas Fin material correction factor
RC1	Factor de correcção para dados em DT1 Correction factors for data in DT1

Dados de cálculo	Selection data
Altura da sala Room height	3,2m
Temperatura exterior Exterior temperature	+32°C
Máquinas Machinery	nenhuma none
Ocupação (pessoas/m2) Occupation (persons/m2)	1P/4m ²
Iluminação Lighting	25W/m ²

Sala climatizada com isolamento Processing room with insulation (TC=+12°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m ³	kW	
33 - 37	1.2	304/413
58 - 66	2.1	304/420
83 - 95	3.0	304/331
108 - 124	3.9	406/437
137 - 157	4.8	406/346
171 - 196	6.0	406/359
197 - 226	6.9	456/367
238 - 273	8.1	456/384
309 - 355	10.5	506/4109
388 - 446	13.2	506/3128
447 - 514	15.2	506/3155

Sala climatizada sem isolamento Processing room without insulation (TC=+12°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m ³	kW	
25 - 28	1.2	304/413
44 - 50	2.1	304/420
63 - 72	3.0	304/331
81 - 93	3.9	406/437
102 - 117	4.8	406/346
128 - 147	6.0	406/359
147 - 169	6.9	456/367
176 - 202	8.1	456/384
228 - 262	10.5	506/4109
287 - 330	13.2	506/3128
330 - 379	15.2	506/3155

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Evaporadores Redondos Round Coolers

Espaçamento Fin Spacing

4,2 - 6,3 mm

Ø Ventiladores Fan Ø

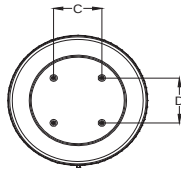
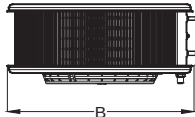
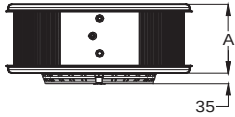
200 - 230 - 300 - 400 mm

Modelo Type	Capacidade QSm Capacity QSm (TC=+2°C / DTm=8K)	Capacidade Q0m Capacity Q0m (TC=-18°C / DTm=6K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans								
	kW		m ²	dm ⁴	Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current		Alimentação MPS
						mm	m ³ /h	m	rpm	W	A		V / F / Hz
ERN 204/402	0.18		1.01	0.19	1	200	430	3.0	1320	32	0.20	230/1/50	
ERN 204/403	0.29		1.68	0.31	1	200	500	3.0	1320	35	0.20	230/1/50	
ERN 234/405	0.45		2.18	0.40	1	230	470	4.0	1320	35	0.21	230/1/50	
ERN 234/406	0.63		2.90	0.54	1	230	540	4.0	1320	35	0.21	230/1/50	
ERN 304/412	1.21		4.68	0.84	1	300	1050	5.0	1300	90	0.62	230/1/50	
ERN 304/414	1.43		5.62	1.01	1	300	1100	5.0	1300	90	0.62	230/1/50	
ERN 406/636	3.69		10.58	2.68	1	400	3600	7.0	1380	320	0.63	400/3/50	
ERN 406/640	3.96		13.23	3.35	1	400	3800	7.0	1380	320	0.63	400/3/50	
ERN 404/449	4.86		15.28	2.68	1	400	3400	7.0	1380	320	0.63	400/3/50	
ERN 404/456	5.62		19.10	3.35	1	400	3600	7.0	1380	320	0.63	400/3/50	

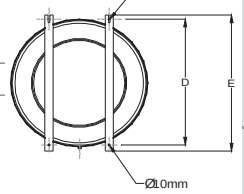
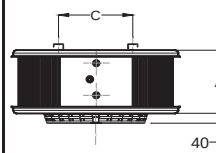
Modelo Type	Preço sem resistências Price without heaters	Preço com resistências Price with heaters	Opções Options										
			/GM	/GE	/GT	/W	AR	BL	BI	TI	BR	RG	AS
			Desc. gás quente GM GM hot gas defrost	Desc. gás quente GE GE hot gas defrost	Desc. gás quente GT GT hot gas defrost	Descongelação água Water defrost	Alheias revestidas Coated fins	Lacado branco White painted	Chaparia inox Stainless steel casing	Tab. esgoto isol. Insul. drain pan	Bateria resistências Heater coil	Resistências gola Fan heaters	Adaptador Conduas Air Sock Adapter
	EUR		EUR										
ERN 204/402	•	-	-	-	-	-	•	S	-	-	-	-	-
ERN 204/403	•	-	-	-	-	-	•	S	-	-	-	-	-
ERN 234/405	•	-	-	-	-	-	•	S	-	-	-	-	-
ERN 234/406	•	-	-	-	-	-	•	S	-	-	-	-	-
ERN 304/412	•	-	-	-	-	-	•	S	-	-	-	-	-
ERN 304/414	•	-	-	-	-	-	•	S	-	-	-	-	-
ERN 406/636	•	-	-	-	-	-	•	S	-	-	-	-	-
ERN 406/640	•	-	-	-	-	-	•	S	-	-	-	-	-
ERN 404/449	•	-	-	-	-	-	•	S	-	-	-	-	-
ERN 404/456	•	-	-	-	-	-	•	S	-	-	-	-	-

S Standard
S StandardSP Sob pedido
SP Under request

Ø200 / 230 / 300 mm



Ø400 mm



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain							
	kW	A	V / F / Hz	in	in	in	A	B	C	D	kg	m³	
				3/8	1/2	G 3/8	120	376	120	100	3.3	0.07	ERN 204/402
				3/8	1/2	G 3/8	184	376	120	100	3.6	0.07	ERN 204/403
				3/8	1/2	G 3/8	120	455	130	110	4.6	0.07	ERN 234/405
				3/8	1/2	G 3/8	152	455	130	110	5.0	0.07	ERN 234/406
				3/8	1/2	G 3/8	184	515	177	157	6.4	0.10	ERN 304/412
				1/2	3/4	G 3/8	216	515	177	157	7.2	0.10	ERN 304/414
				1/2	3/4	G 3/4	302	775	315	740	26.4	0.27	ERN 406/636
				1/2	3/4	G 3/4	365	775	315	740	32.8	0.31	ERN 406/640
				1/2	7/8	G 3/4	302	775	315	740	30.8	0.27	ERN 404/449
				1/2	7/8	G 3/4	365	775	315	740	33.4	0.31	ERN 404/456

Seleção e Factores Selection and Factors

RCm		DTm [K]						
TC [°C]	+5	1.298	1.168	1.039	0.909	0.781	0.679	0.564
	+2	1.200	1.080	1.000	0.857	0.741	0.638	0.517
	0	1.140	1.026	0.912	0.797	0.682	0.585	0.470
	-2	1.080	0.966	0.852	0.737	0.622	0.517	0.402

FC1	TE [°C]			
	+5	0	-5	-10
R404A / R507	1.00	1.00	1.00	1.00
R134a	1.02	1.00	0.98	0.95
R22 (DT1≤8K)		0.98	1.00	1.00
R22 (DT1>8K)		1.02	1.02	1.02

FC2	Alumínio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor	1.00	0.97	1.03

Capacidade corrigida	Corrected capacity
ERN 304/414 TC=0°C DTm=6K R134a Alumínio / Aluminium	$Q_{0m} = Q_{Sm} \times RCm \times FC1 \times FC2$ [kW] $Q_{0m} = 1,43 \text{ kW} \times 0,682 \times 0,97 \times 1 = 0,95 \text{ kW}$

Nomenclatura	Nomenclature
TC	Temperatura de câmara Room temperature
TE	Temperatura de evaporação Evaporating temperature
Q _{Sm}	Capacidade para selecção em DTm Selection capacity in DTm
Q _{0m}	Capacidade corrigida em DTm Corrected capacity in DTm
FC1	Factor de correcção do refrigerante Refrigerant correction factor
FC2	Factor de correcção do material das alhetas Fin material correction factor
RCm	Factor de correcção para dados em DTm Correction factors for data in DTm

Dados de cálculo	Selection data
Isolamento - Câmara de refrigerados Insulation - Chilling room	80mm PU
Isolamento - Câmara de congelados Insulation - Freezing room	100mm PU
Temperatura exterior Exterior temperature	+32°C
Entrada diária (% capacidade da câmara) Daily rotation (room capacity's %)	10%
Tempo de arrefecimento Cooling time	18h
Tipo de uso Usage	Normal

Câmara refrigerados Chilling room (TC=+2°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	kW	
18 - 21	2.3	406/636
27 - 35	3.0	404/449
35 - 40	3.4	404/456

Armário frigorífico Reach-in cooler (TC=+2°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	W	
0,15 - 0,17	180.0	204/403
0,25 - 0,29	260.0	234/405
0,50 - 0,58	400.0	234/406
1,50 - 1,70	680.0	304/412

BXN

Evaporadores Cúbicos Cubic Coolers

Espaçamento Fin Spacing

Ø Ventiladores Fan Ø

4,2 mm

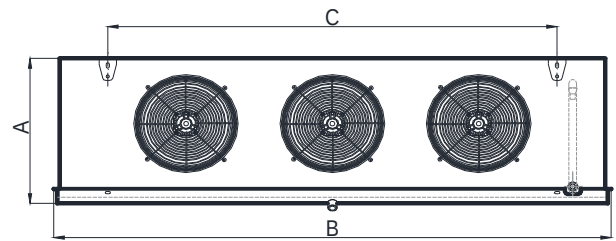
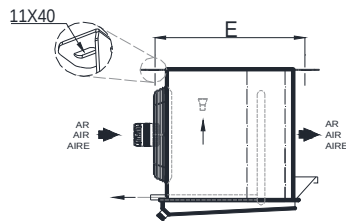
250 - 300 mm



Modelo Type	Capacidade QSm Capacity QSm (TC=+2°C / DTm=8K)	Capacidade Q0m Capacity Q0m (TC=-18°C / DTm=6K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans								
	kW		m²	dm³	Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	
						mm	m³/h	m	rpm	W	A	V / F / Hz	
BXN 125/16	1.57		6.10	1.00	1	250	760	7	1300	90	0.62	230/1/50	
BXN 130/24	2.38		8.74	1.40	1	300	1150	9	1300	110	0.75	230/1/50	
BXN 225/32	3.21		12.10	1.90	2	250	1520	7	1300	180	1.24	230/1/50	
BXN 230/49	4.89		17.48	2.80	2	300	2300	9	1300	220	1.50	230/1/50	
BXN 325/50	4.96		18.20	2.90	3	250	2280	7	1300	270	1.86	230/1/50	
BXN 425/64	6.36		22.50	3.60	4	250	2960	7	1300	360	2.48	230/1/50	
BXN 330/74	7.38		26.20	4.10	3	300	3450	9	1300	330	2.25	230/1/50	
BXN 430/99	9.91		34.90	5.50	4	300	4600	9	1300	440	3.00	230/1/50	

Modelo Type		Preço sem resistências Price without heaters	Preço com resistências Price with heaters	Opções Options										
				/GM	/GE	/GT	/W	AR	BL	BI	TI	BR	RG	AS
				Desc. gás quente GM hot gas defrost	Desc. gás quente GE hot gas defrost	Desc. gás quente GT hot gas defrost	Descongelamento água Water defrost	Alhetas revestidas Coated fins	Lacado branco White painted	Chaparia Inox Stainless steel casing	Tab. esgoto isol. Insul. drain pan	Bateria resistências Heater coil	Resistências gola Fan heaters	Adaptador Conduas Air Sock Adapter
				EUR										
BXN 125/16	•	•	•	•	•	•	•	•	•	•	•	•	•	
BXN 130/24	•	•	•	•	•	•	•	•	•	•	•	•	•	
BXN 225/32	•	•	•	•	•	•	•	•	•	•	•	•	•	
BXN 230/49	•	•	•	•	•	•	•	•	•	•	•	•	•	
BXN 325/50	•	•	•	•	•	•	•	•	•	•	•	•	•	
BXN 425/64	•	•	•	•	•	•	•	•	•	•	•	•	•	
BXN 330/74	•	•	•	•	•	•	•	•	•	•	•	•	•	
BXN 430/99	•	•	•	•	•	•	•	•	•	•	•	•	•	

S Standard SP Sob pedido
S Standard SP Under request



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain							
	kW	A	V / F / Hz	in			A	B	C	E			
	0.66	2.87	230/1/50	1/2	5/8	3/4 BSP	380	690	380	430	20.0	0.24	BXN 125/16
	0.90	3.91	230/1/50	1/2	5/8	3/4 BSP	445	760	450	430	24.0	0.31	BXN 130/24
	1.32	5.74	230/1/50	1/2	5/8	3/4 BSP	380	1040	730	430	30.0	0.34	BXN 225/32
	1.80	7.83	230/1/50	1/2	7/8	3/4 BSP	445	1180	870	430	38.0	0.46	BXN 230/49
	1.98	8.61	230/1/50	1/2	5/8	3/4 BSP	380	1390	1080	430	40.0	0.45	BXN 325/50
	2.40	10.44	230/1/50	1/2	7/8	3/4 BSP	380	1640	1330	430	49.0	0.52	BXN 425/64
	2.70	11.74	230/1/50	1/2	7/8	3/4 BSP	445	1600	1290	430	52.0	0.61	BXN 330/74
	3.60	15.65	230/1/50	1/2	1 1/8	3/4 BSP	445	2020	1710	430	66.0	0.76	BXN 430/99

Seleção e Factores Selection and Factors

RCm		DTm [K]						
		10	9	8	7	6	5	4
TC [°C]	+5	1.298	1.168	1.039	0.909	0.781	0.679	0.564
	+2	1.200	1.080	1.000	0.857	0.741	0.638	0.517
	0	1.140	1.026	0.912	0.797	0.682	0.585	0.470
	-2	1.111	1.001	0.909	0.794	0.680	0.582	0.466

FC1		TE [°C]			
		+5	0	-5	-10
R404A / R507		1.00	1.00	1.00	1.00
R134a		1.02	1.00	0.98	0.95
R22 (DT1≤8K)			0.98	1.00	1.00
R22 (DT1>8K)			1.02	1.02	1.02

FC2	Aluminio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor	1.00	0.97	1.03

Capacidade corrigida Corrected capacity	
BXN 230/49 TC=0°C DTm=6K R134a Alumínio / Aluminium	$Q_{0m} = Q_{Sm} \times RCm \times FC1 \times FC2$ [kW]
	$Q_{0m} = 4,89 \text{ kW} \times 0,682 \times 0,97 \times 1 = 3,23 \text{ kW}$

Nomenclatura	Nomenclature
TC	Temperatura de câmara Room temperature
TE	Temperatura de evaporação Evaporating temperature
Q _{Sm}	Capacidade para selecção em DTm Selection capacity in TDm
Q _{0m}	Capacidade corrigida em DTm Corrected capacity in TDm
FC1	Factor de correcção do refrigerante Refrigerant correction factor
FC2	Factor de correcção do material das alhetas Fin material correction factor
RCm	Factor de correcção para dados em DTm Correction factors for data in DTm

Dados de cálculo Selection data	
Isolamento - Câmara de refrigerados Insulation - Chilling room	80mm PU
Isolamento - Câmara de congelados Insulation - Freezing room	100mm PU
Temperatura exterior Exterior temperature	+32°C
Entrada diária (% capacidade da câmara) Daily rotation (room capacity's %)	10%
Tempo de arrefecimento Cooling time	18h
Tipo de uso Usage	Normal

Câmara refrigerados Chilling room (TC=0/+4°C - TE=-6/-7°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	kW	
9 - 11	1.1	125/16
10 - 11	1.6	130/24
22 - 25	2.2	225/32
33 - 38	3.3	230/49
36 - 42	3.5	325/50
50 - 57	4.3	425/64
63 - 72	5.0	330/74
95 - 105	6.8	430/99

BXL

Evaporadores Cúbicos Cubic Coolers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

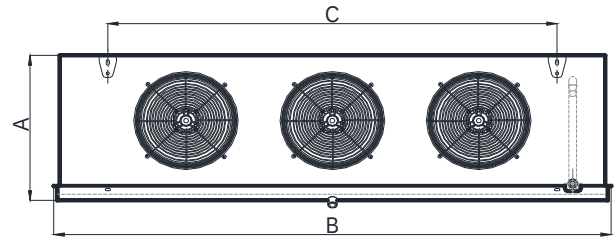
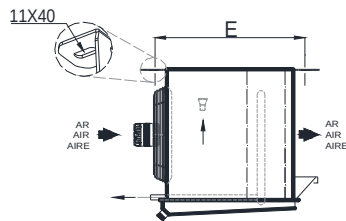
6,3 mm
250 - 300 mm



Modelo Type	Capacidade QSm Capacity QSm (TC=+2°C / DTm=8K)	Capacidade Q0m Capacity Q0m (TC=-18°C / DTm=6K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans								
					Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	
kW													
BXL 125/12	1.21	0.73	4.20	1.00	1	250	890	8	1300	90	0.62	230/1/50	
BXL 130/19	1.85	1.12	6.05	1.40	1	300	1300	10	1300	110	0.75	230/1/50	
BXL 225/24	2.44	1.48	8.40	1.90	2	250	1780	8	1300	180	1.24	230/1/50	
BXL 230/38	3.77	2.28	12.10	2.80	2	300	2600	10	1300	220	1.50	230/1/50	
BXL 325/38	3.81	2.31	12.60	2.90	3	250	2670	8	1300	270	1.86	230/1/50	
BXL 425/48	4.83	2.93	15.60	3.60	4	250	3560	8	1300	360	2.48	230/1/50	
BXL 330/57	5.72	3.47	18.15	4.10	3	300	3900	10	1300	330	2.25	230/1/50	
BXL 430/76	7.64	4.63	24.20	5.50	4	300	5200	10	1300	440	3.00	230/1/50	

Modelo Type		Preço sem resistências Price without heaters	Preço com resistências Price with heaters	Opções Options										
				/GM	/GE	/GT	/W	AR	BL	BI	TI	BR	RG	AS
				Desc. gás quente GM hot gas defrost	Desc. gás quente GE hot gas defrost	Desc. gás quente GT hot gas defrost	Descongelação água Water defrost	Alhetas revestidas Coated fins	Lacado branco White painted	Chaparia Inox Stainless steel casing	Tab. esgoto isol. Insul. drain pan	Bateria resistências Heater coil	Resistências gola Fan heaters	Adaptador Conduas Air Sock Adapter
				EUR										
BXL 125/12	•	•	•	•	•	•	•	•	•	•	•	•	-	
BXL 130/19	•	•	•	•	•	•	•	•	•	•	•	•	•	
BXL 225/24	•	•	•	•	•	•	•	•	•	•	•	•	•	
BXL 230/38	•	•	•	•	•	•	•	•	•	•	•	•	•	
BXL 325/38	•	•	•	•	•	•	•	•	•	•	•	•	•	
BXL 425/48	•	•	•	•	•	•	•	•	•	•	•	•	•	
BXL 330/57	•	•	•	•	•	•	•	•	•	•	•	•	•	
BXL 430/76	•	•	•	•	•	•	•	•	•	•	•	•	•	

S Standard SP Sob pedido
S Standard SP Under request



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type	
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain								
	kW	A	V / F / Hz	in			A	B	C	E	kg	m³		
	0.66	2.87	230/1/50	1/2	5/8	3/4 BSP	380	690	380	430	20.0	0.24	BXL	125/12
	0.90	3.91	230/1/50	1/2	5/8	3/4 BSP	445	760	450	430	24.0	0.31	BXL	130/19
	1.32	5.74	230/1/50	1/2	5/8	3/4 BSP	380	1040	730	430	30.0	0.34	BXL	225/24
	1.80	7.83	230/1/50	1/2	7/8	3/4 BSP	445	1180	870	430	38.0	0.46	BXL	230/38
	1.98	8.61	230/1/50	1/2	5/8	3/4 BSP	380	1390	1080	430	40.0	0.45	BXL	325/38
	2.40	10.44	230/1/50	1/2	7/8	3/4 BSP	380	1640	1330	430	49.0	0.52	BXL	425/48
	2.70	11.74	230/1/50	1/2	7/8	3/4 BSP	445	1600	1290	430	52.0	0.61	BXL	330/57
	3.60	15.65	230/1/50	1/2	1 1/8	3/4 BSP	445	2020	1710	430	66.0	0.76	BXL	430/76

Seleção e Factores Selection and Factors

RCm		DTm [K]						
		10	9	8	7	6	5	4
TC [°C]	+5	1.352	1.217	1.082	0.947	0.813	0.707	0.588
	+2	1.250	1.125	1.000	0.893	0.772	0.665	0.539
	0	1.188	1.069	0.950	0.830	0.710	0.609	0.490
	-15	1.018	0.918	0.830	0.730	0.640	0.539	0.434
	-20	0.963	0.867	0.770	0.660	0.583	0.490	0.393
	-25	0.950	0.854	0.764	0.649	0.567	0.476	0.385
	-34					0.561	0.471	0.381

FC1		TE [°C]						
		+5	0	-5	-10	-25	-35	-40
R404A / R507		1.00	1.00	1.00	1.00	1.00	1.00	1.00
R134a		1.02	1.00	0.98	0.95			
R22 (DT1≤8K)			0.98	1.00	1.00	1.02	1.04	1.06
R22 (DT1>8K)			1.02	1.02	1.02	1.04	1.06	1.08

FC2		Alumínio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor		1.00	0.97	1.03

Capacidade corrigida Corrected capacity	
BXL 425/48 AR TC=-20°C DTm=5K R404A Al. rev. / Coated al.	$Q_{0m} = Q_{Sm} \times RCm \times FC1 \times FC2 \text{ [kW]}$ $Q_{0m} = 4,83 \text{ kW} \times 0,490 \times 1 \times 0,97 = 2,30 \text{ kW}$

Nomenclatura	Nomenclature
TC	Temperatura de câmara Room temperature
TE	Temperatura de evaporação Evaporating temperature
Q _{Sm}	Capacidade para selecção em DTm Selection capacity in Tdm
Q _{0m}	Capacidade corrigida em DTm Corrected capacity in Tdm
FC1	Factor de correcção do refrigerante Refrigerant correction factor
FC2	Factor de correcção do material das alhetas Fin material correction factor
RCm	Factor de correcção para dados em DTm Correction factors for data in Tdm

Dados de cálculo Selection data	
Isolamento - Câmara de refrigerados Insulation - Chilling room	80mm PU
Isolamento - Câmara de congelados Insulation - Freezing room	100mm PU
Temperatura exterior Exterior temperature	+32°C
Entrada diária (% capacidade da câmara) Daily rotation (room capacity's %)	10%
Tempo de arrefecimento Cooling time	18h
Tipo de uso Usage	Normal

Câmara refrigerados Chilling room (TC=0/+4°C - TE=-6/-7°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	kW	
7 - 8	0.9	125/12
8 - 9	1.3	130/19
11 - 13	1.7	225/24
27 - 31	2.7	230/38
28 - 32	2.8	325/38
35 - 40	3.4	425/48
47 - 54	4.1	330/57
70 - 80	5.4	430/76

Câmara congelados Freezing room (TC=-18/-20°C - TE=-25/-27°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	kW	
4 - 5	0.7	125/12
8 - 9	1.1	130/19
12 - 14	1.4	225/24
20 - 23	2.2	230/38
21 - 24	2.3	325/38
31 - 35	2.8	425/48
46 - 52	3.3	330/57
60 - 69	4.6	430/76

MBX

Evaporadores Cúbicos Cubic Coolers

Espaçamento Fin Spacing

Ø Ventiladores Fan Ø

4,2 mm

300 mm

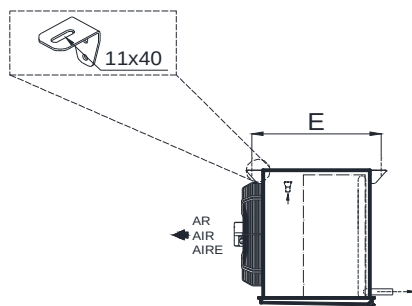


Modelo Type	Capacidade QSm Capacity QSm (TC=+2°C / DTm=8K)	Capacidade Q0m Capacity Q0m (TC=-18°C / DTm=6K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans								
					Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current		Alimentação MPS
MBX 130/21	1.98		8.74	1.40	1	300	820	7	870	36	0.16	230/1/50	
MBX 230/45	4.04		17.48	2.80	2	300	1640	7	870	72	0.32	230/1/50	
MBX 330/67	6.11		26.20	4.10	3	300	2460	7	870	108	0.48	230/1/50	
MBX 430/91	8.18		34.90	5.50	4	300	3280	7	870	144	0.64	230/1/50	

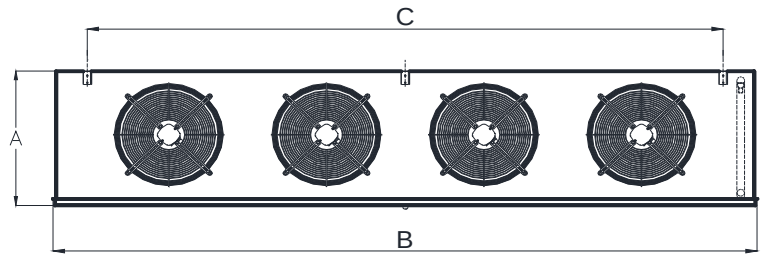
Modelo Type	Preço sem resistências Price without heaters		Preço com resistências Price with heaters		Opções Options										
					/GM	/GE	/GT	/W	AR	BL	BI	TI	BR	RG	AS
	Desc. gás quente GM GM hot gas defrost	Desc. gás quente GE GE hot gas defrost	Desc. gás quente GT GT hot gas defrost	Descongelamento água Water defrost	Alhetas revestidas Coated fins	Lacado branco White painted	Chaparia inox Stainless steel casing	Tab. esgoto isol. Insul. drain pan	Bateria resistências Heater coil	Resistências gola Fan heaters	Adaptador Conduas Air Sock Adapter				
	EUR		EUR												
MBX 130/21	•	•	•	•	•	•	•	•	•	•	•	•	-	-	
MBX 230/45	•	•	•	•	•	•	•	•	•	•	•	•	-	-	
MBX 330/67	•	•	•	•	•	•	•	•	•	•	•	•	-	-	
MBX 430/91	•	•	•	•	•	•	•	•	•	•	•	•	-	-	

S Standard
S Standard

SP Sob pedido
SP Under request



centauro



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain							
	kW	A	V / F / Hz		in		A	B	C	E	kg	m³	
	0.90	1x3,91	230/1/50	1/2	5/8	3/4 BSP	460	760	450	430	24.0	0.31	MBX 130/21
	1.80	1x7.83	230/1/50	1/2	7/8	3/4 BSP	460	1180	870	430	38.0	0.46	MBX 230/45
	2.70	1x11,74	230/1/50	1/2	7/8	3/4 BSP	460	1600	1290	430	52.0	0.61	MBX 330/67
	3.60	1x15.65	230/1/50	1/2	1 1/8	3/4 BSP	460	2020	1710	430	66.0	0.76	MBX 430/91

Seleção e Factores Selection and Factors

RCm		DTm [K]						
		10	9	8	7	6	5	4
TC [°C]	+5	1.298	1.168	1.039	0.909	0.781	0.679	0.564
	+2	1.200	1.080	1.000	0.857	0.741	0.638	0.517
	0	1.140	1.026	0.912	0.797	0.682	0.585	0.470
	-2	1.111	1.001	0.909	0.794	0.680	0.582	0.466

FC1		TE [°C]			
		+5	0	-5	-10
R404A / R507		1.00	1.00	1.00	1.00
R134a		1.02	1.00	0.98	0.95
R22 (DT1≤8K)			0.98	1.00	1.00
R22 (DT1>8K)			1.02	1.02	1.02

FC2	Aluminio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor	1.00	0.97	1.03

Capacidade corrigida Corrected capacity

BXN 230/45 TC=0°C DTm=6K R134a Alumínio / Aluminium	$Q_{0m} = Q_{Sm} \times RCm \times FC1 \times FC2$ [kW] $Q_{0m} = 4,04 \text{ kW} \times 0,682 \times 0,97 \times 1 = 2,67 \text{ kW}$
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Câmara refrigerados Chilling room (TC=+2/+4°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	kW	
10 - 11	1.4	130/21
25 - 30	2.8	230/45
55 - 65	4.5	330/67
80 - 92	6.0	430/91

Nomenclatura	Nomenclature
TC	Temperatura de câmara Room temperature
TE	Temperatura de evaporação Evaporating temperature
Q _{Sm}	Capacidade para selecção em DTm Selection capacity in TDm
Q _{0m}	Capacidade corrigida em DTm Corrected capacity in TDm
FC1	Factor de correcção do refrigerante Refrigerant correction factor
FC2	Factor de correcção do material das alhetas Fin material correction factor
RCm	Factor de correcção para dados em DTm Correction factors for data in DTm

Dados de cálculo	Selection data
Isolamento - Câmara de refrigerados Insulation - Chilling room	80mm PU
Isolamento - Câmara de congelados Insulation - Freezing room	100mm PU
Temperatura exterior Exterior temperature	+32°C
Entrada diária (% capacidade da câmara) Daily rotation (room capacity's %)	10%
Tempo de arrefecimento Cooling time	18h
Tipo de uso Usage	Normal

DBX

Evaporadores Cúbicos Cubic Coolers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

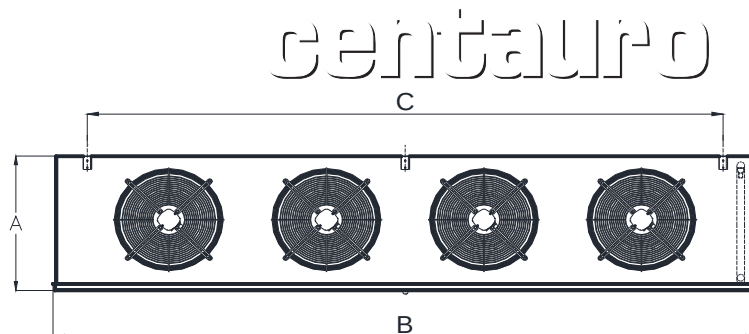
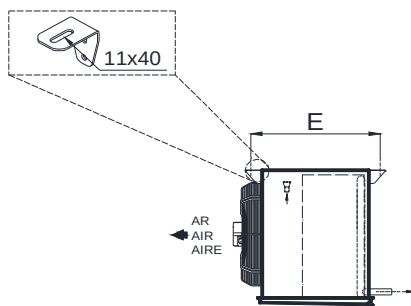
6,3 mm
300 mm



Modelo Type	Capacidade QSm Capacity QSm (TC=+2°C / DTm=8K)	Capacidade Q0m Capacity Q0m (TC=-18°C / DTm=6K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans							
					Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS
						mm	m³/h	m	rpm	W	A	V / F / Hz
DBX 130/17	1.66	1.01	6.05	1.40	1	300	970	9	870	36	0.16	230/1/50
DBX 230/34	3.38	2.05	12.10	2.80	2	300	1940	9	870	72	0.32	230/1/50
DBX 330/51	5.10	3.09	18.15	4.10	3	300	2910	9	870	108	0.48	230/1/50
DBX 430/68	6.84	4.14	24.20	5.50	4	300	3880	9	870	144	0.64	230/1/50

Modelo Type		Preço sem resistências Price without heaters	Preço com resistências Price with heaters	Opções Options									
				/GM	/GE	/GT	/W	AR	BL	BI	TI	BR	RG
		Desc. gás quente GM GM hot gas defrost	Desc. gás quente GE GE hot gas defrost	Desc. gás quente GT GT hot gas defrost	Descongelamento água Water defrost	Alhetas revestidas Coated fins	Lacado branco White painted	Chaparia inox Stainless steel casing	Tab. esgoto isol. Insul. drain pan	Bateria resistências Heater coil	Resistências gola Fan heaters	Adaptador Conduas Air Sock Adapter	
		EUR		EUR									
DBX 130/17		•	•	•	•	•	•	•	•	•	•	•	•
DBX 230/34		•	•	•	•	•	•	•	•	•	•	•	•
DBX 330/51		•	•	•	•	•	•	•	•	•	•	•	•
DBX 430/68		•	•	•	•	•	•	•	•	•	•	•	•

S Standard SP Sob pedido
S Standard SP Under request



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain							
	kW	A	V / F / Hz		in		A	B	C	E	kg	m³	
	0.90	1x3,91	230/1/50	1/2	5/8	3/4 BSP	460	760	450	430	24.0	0.31	DBX 130/17
	1.80	1x7,83	230/1/50	1/2	7/8	3/4 BSP	460	1180	870	430	38.0	0.46	DBX 230/34
	2.70	1x11,74	230/1/50	1/2	7/8	3/4 BSP	460	1600	1290	430	52.0	0.61	DBX 330/51
	3.60	1x15.65	230/1/50	1/2	1 1/8	3/4 BSP	460	2020	1710	430	66.0	0.76	DBX 430/68

Seleção e Factores Selection and Factors

RCm		DTm [K]						
		10	9	8	7	6	5	4
TC [°C]	+5	1.352	1.217	1.082	0.947	0.813	0.707	0.588
	+2	1.250	1.125	1.000	0.893	0.772	0.665	0.539
	0	1.188	1.069	0.950	0.830	0.710	0.609	0.490
	-15	1.018	0.918	0.830	0.730	0.640	0.539	0.434
	-20	0.963	0.867	0.770	0.660	0.583	0.490	0.393
	-25	0.950	0.854	0.764	0.649	0.567	0.476	0.385
	-34					0.561	0.471	0.381

FC1		TE [°C]						
		+5	0	-5	-10	-25	-35	-40
R404A / R507		1.00	1.00	1.00	1.00	1.00	1.00	1.00
R134a		1.02	1.00	0.98	0.95			
R22 (DT1≤8K)			0.98	1.00	1.00	1.02	1.04	1.06
R22 (DT1>8K)			1.02	1.02	1.02	1.04	1.06	1.08

FC2		Aluminio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor		1.00	0.97	1.03

Capacidade corrigida Corrected capacity

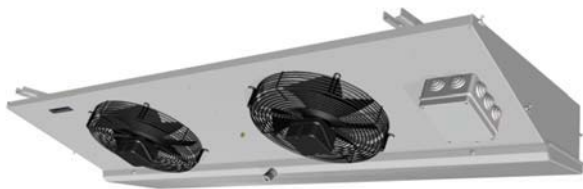
BXL 425/48 AR TC=-20°C DTm=5K R404A Al. rev. / Coated al.	$Q_{om} = Q_{sm} \times RCm \times FC1 \times FC2 \text{ [kW]}$ $Q_{om} = 4,83 \text{ kW} \times 0,490 \times 1 \times 0,97 = 2,30 \text{ kW}$
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Nomenclatura	Nomenclature
TC	Temperatura de câmara Room temperature
TE	Temperatura de evaporação Evaporating temperature
Q _{sm}	Capacidade para selecção em DTm Selection capacity in TDm
Q _{om}	Capacidade corrigida em DTm Corrected capacity in TDm
FC1	Factor de correcção do refrigerante Refrigerant correction factor
FC2	Factor de correcção do material das alhetas Fin material correction factor
RCm	Factor de correcção para dados em DTm Correction factors for data in DTm

Dados de cálculo	Selection data
Isolamento - Câmara de refrigerados Insulation - Chilling room	80mm PU
Isolamento - Câmara de congelados Insulation - Freezing room	100mm PU
Temperatura exterior Exterior temperature	+32°C
Entrada diária (% capacidade da câmara) Daily rotation (room capacity's %)	10%
Tempo de arrefecimento Cooling time	18h
Tipo de uso Usage	Normal

Câmara refrigerados Chilling room (TC=+2/+4°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	kW	
7 - 8	0.9	130/17
23 - 28	1.3	230/34
45 - 52	1.7	330/51
62 - 72	2.7	430/68

Câmara congelados Freezing room (TC=-18/-20°C - TE=-25/-27°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	kW	
6 - 7	0.9	130/17
18 - 20	1.8	230/34
30 - 35	2.8	330/51
50 - 55	3.7	430/68

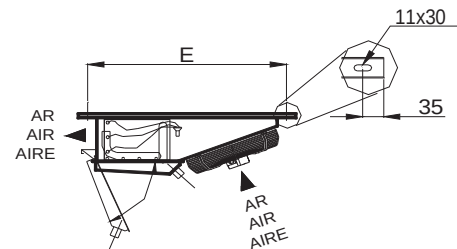
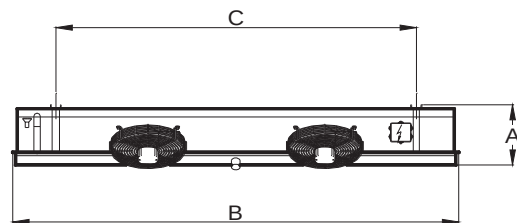


Modelo Type	Capacidade QSm Capacity QSm (TC=+2°C / DTm=8K)	Capacidade Q0m Capacity Q0m (TC=-18°C / DTm=6K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans							
					Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS
	KW		m²	dm³		mm	m³/h	m	rpm	W	A	V / F / Hz
RWK 4A1/20	2.04		6.76	1.06	1	300	950	10	1370	73	0.32	230/1/50
RWK 4A1/24	2.38		8.45	1.33	1	300	880	10	1370	73	0.32	230/1/50
RWK 4A1/27	2.71		10.14	1.60	1	300	830	10	1370	73	0.32	230/1/50
RWK 4A1/29	2.85		11.83	1.86	1	300	800	10	1370	73	0.32	230/1/50
RWK 4A2/40	4.06		13.52	2.13	2	300	1900	10	1370	146	0.64	230/1/50
RWK 4A2/49	4.86		16.90	2.66	2	300	1760	10	1370	146	0.64	230/1/50
RWK 4A2/53	5.33		20.28	3.19	2	300	1660	10	1370	146	0.64	230/1/50
RWK 4A3/63	6.33		20.28	3.19	3	300	2850	10	1370	219	0.96	230/1/50
RWK 4A3/69	6.94		25.36	3.99	3	300	2640	10	1370	219	0.96	230/1/50
RWK 4A3/76	7.61		30.43	4.79	3	300	2490	10	1370	219	0.96	230/1/50
RWK 4A1/16 R	1.55		6.76	1.06	1	300	630	7	900	32	0.15	230/1/50
RWK 4A1/18 R	1.81		8.45	1.33	1	300	590	7	900	32	0.15	230/1/50
RWK 4A1/21 R	2.07		10.14	1.60	1	300	550	7	900	32	0.15	230/1/50
RWK 4A1/22 R	2.19		11.83	1.86	1	300	520	7	900	32	0.15	230/1/50
RWK 4A2/32 R	3.18		13.52	2.13	2	300	1260	7	900	64	0.30	230/1/50
RWK 4A2/36 R	3.57		16.90	2.66	2	300	1180	7	900	64	0.30	230/1/50
RWK 4A2/41 R	4.13		20.28	3.19	2	300	1100	7	900	64	0.30	230/1/50
RWK 4A3/48 R	4.81		20.28	3.19	3	300	1890	7	900	96	0.45	230/1/50
RWK 4A3/55 R	5.54		25.36	3.99	3	300	1760	7	900	96	0.45	230/1/50
RWK 4A3/61 R	6.09		30.43	4.79	3	300	1660	7	900	96	0.45	230/1/50

Modelo Type	Preço sem resistências Price without heaters	Preço com resistências Price with heaters	Opções Options											
			Desc. gás quente GM GM hot gas defrost	Desc. gás quente GE GE hot gas defrost	Desc. gás quente GT GT hot gas defrost	Desc. água IW Water defrost	Alhetas revestidas Coated fins	Lacado branco White painted	Chaparia inox Stainless steel casing	Tab. esgoto isol. Insul. drain pan	Bateria resistências Heater coil	Resistências gola Fan heaters	Adaptador Conduitas Air Sock Adapter	
EUR		EUR												
RWK 4A1/20	•	•	•	•	•	•	-	•	S	•	•	•	-	-
RWK 4A1/24	•	•	•	•	•	•	-	•	S	•	•	•	-	-
RWK 4A1/27	•	•	•	•	•	•	-	•	S	•	•	•	-	-
RWK 4A1/29	•	•	•	•	•	•	-	•	S	•	•	•	-	-
RWK 4A2/40	•	•	•	•	•	•	-	•	S	•	•	•	-	-
RWK 4A2/49	•	•	•	•	•	•	-	•	S	•	•	•	-	-
RWK 4A2/53	•	•	•	•	•	•	-	•	S	•	•	•	-	-
RWK 4A3/63	•	•	•	•	•	•	-	•	S	•	•	•	-	-
RWK 4A3/69	•	•	•	•	•	•	-	•	S	•	•	•	-	-
RWK 4A3/76	•	•	•	•	•	•	-	•	S	•	•	•	-	-
RWK 4A1/16 R	•	•	•	•	•	•	-	•	S	•	•	•	-	-
RWK 4A1/18 R	•	•	•	•	•	•	-	•	S	•	•	•	-	-
RWK 4A1/21 R	•	•	•	•	•	•	-	•	S	•	•	•	-	-
RWK 4A1/22 R	•	•	•	•	•	•	-	•	S	•	•	•	-	-
RWK 4A2/32 R	•	•	•	•	•	•	-	•	S	•	•	•	-	-
RWK 4A2/36 R	•	•	•	•	•	•	-	•	S	•	•	•	-	-
RWK 4A2/41 R	•	•	•	•	•	•	-	•	S	•	•	•	-	-
RWK 4A3/48 R	•	•	•	•	•	•	-	•	S	•	•	•	-	-
RWK 4A3/55 R	•	•	•	•	•	•	-	•	S	•	•	•	-	-
RWK 4A3/61 R	•	•	•	•	•	•	-	•	S	•	•	•	-	-

S Standard
S Standard

SP Sob pedido
SP Under request



	Resistências do evaporador Cooler heaters			Ligações standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain							
	kW	A	V / F / Hz	in			mm						
	1.20	5.22	230/1/50	1/2	5/8	3/4	240	990	675	730	20.0	0.30	RWK 4A1/20
	1.20	5.22	230/1/50	1/2	5/8	3/4	240	990	675	730	21.0	0.30	RWK 4A1/24
	1.20	5.22	230/1/50	1/2	5/8	3/4	240	990	675	730	22.0	0.30	RWK 4A1/27
	1.20	5.22	230/1/50	1/2	5/8	3/4	240	990	675	730	23.0	0.30	RWK 4A1/29
	2.40	10.43	230/1/50	1/2	5/8	3/4	240	1640	1325	730	33.0	0.49	RWK 4A2/40
	2.40	10.43	230/1/50	1/2	7/8	3/4	240	1640	1325	730	35.0	0.49	RWK 4A2/49
	2.40	10.43	230/1/50	1/2	7/8	3/4	240	1640	1325	730	37.0	0.49	RWK 4A2/53
	3.60	15.65	230/1/50	1/2	7/8	3/4	240	2290	1975	730	46.0	0.68	RWK 4A3/63
	3.60	15.65	230/1/50	1/2	7/8	3/4	240	2290	1975	730	49.0	0.68	RWK 4A3/69
	3.60	15.65	230/1/50	1/2	1 1/8	3/4	240	2290	1975	730	52.0	0.68	RWK 4A3/76
	1.20	5.22	230/1/50	1/2	5/8	3/4	240	990	675	730	20.0	0.30	RWK 4A1/16 R
	1.20	5.22	230/1/50	1/2	5/8	3/4	240	990	675	730	21.0	0.30	RWK 4A1/18 R
	1.20	5.22	230/1/50	1/2	5/8	3/4	240	990	675	730	22.0	0.30	RWK 4A1/21 R
	1.20	5.22	230/1/50	1/2	5/8	3/4	240	990	675	730	23.0	0.30	RWK 4A1/22 R
	2.40	10.43	230/1/50	1/2	5/8	3/4	240	1640	1325	730	33.0	0.49	RWK 4A2/32 R
	2.40	10.43	230/1/50	1/2	7/8	3/4	240	1640	1325	730	35.0	0.49	RWK 4A2/36 R
	2.40	10.43	230/1/50	1/2	7/8	3/4	240	1640	1325	730	37.0	0.49	RWK 4A2/41 R
	3.60	15.65	230/1/50	1/2	7/8	3/4	240	2290	1975	730	46.0	0.68	RWK 4A3/48 R
	3.60	15.65	230/1/50	1/2	7/8	3/4	240	2290	1975	730	49.0	0.68	RWK 4A3/55 R
	3.60	15.65	230/1/50	1/2	1 1/8	3/4	240	2290	1975	730	52.0	0.68	RWK 4A3/61 R

Seleção e Factores Selection and Factors

RCm		DTm [K]						
		10	9	8	7	6	5	4
TC [°C]	+5	1.298	1.168	1.039	0.909	0.781	0.679	0.564
	+2	1.200	1.080	1.000	0.857	0.741	0.638	0.517
	0	1.140	1.026	0.912	0.797	0.682	0.585	0.470
	-2	1.111	1.001	0.909	0.794	0.680	0.582	0.466

FC1		TE [°C]			
		+5	0	-5	-10
R404A / R507		1.00	1.00	1.00	1.00
R134a		1.02	1.00	0.98	0.95
R22 (DT1≤8K)			0.98	1.00	1.00
R22 (DT1>8K)			1.02	1.02	1.02

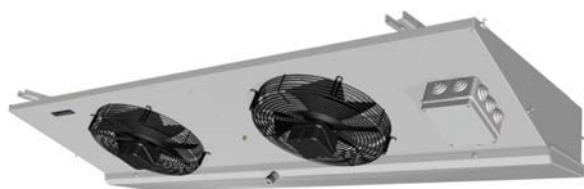
FC2		Alumínio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor		1.00	0.97	1.03

Capacidade corrigida Corrected capacity	
RWK 4A1/20 TC=0°C DTm=6K R134a Alumínio / Aluminium	$Q_{0m} = Q_{Sm} \times RCm \times FC1 \times FC2$ [kW]
	$Q_{01} = Q_{S1} \times RC1 \times FC1 \times FC2$ [kW]
	$Q_{0m} = 2,04 \text{ kW} \times 0,682 \times 0,97 \times 1 = 1,35 \text{ kW}$

Nomenclatura	Nomenclature
TC	Temperatura de câmara Room temperature
TE	Temperatura de evaporação Evaporating temperature
Q _{Sm}	Capacidade para selecção em DTm Selection capacity in DTm
Q _{0m}	Capacidade corrigida em DTm Corrected capacity in DTm
FC1	Factor de correcção do refrigerante Refrigerant correction factor
FC2	Factor de correcção do material das alhetas Fin material correction factor
RCm	Factor de correcção para dados em DTm Correction factors for data in DTm

Dados de cálculo Selection data	
Isolamento - Câmara de refrigerados Insulation - Chilling room	80mm PU
Isolamento - Câmara de congelados Insulation - Freezing room	100mm PU
Temperatura exterior Exterior temperature	+32°C
Entrada diária (% capacidade da câmara) Daily rotation (room capacity's %)	10%
Tempo de arrefecimento Cooling time	18h
Tipo de uso Usage	Normal

Câmara refrigerados Chilling room (TC=+2/+4°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m ³	kW	
10 - 11	1.4	4A1/20
11 - 12	1.7	4A1/24
13 - 15	1.9	4A1/27
19 - 22	2.4	4A1/29
27 - 31	2.9	4A2/40
32 - 37	3.3	4A2/49
39 - 45	3.7	4A2/53
56 - 64	4.4	4A3/63
64 - 73	5.1	4A3/76
RWK ... R		
7 - 8	1.1	4A1/16 R
9 - 10	1.2	4A1/18 R
10 - 11	1.4	4A1/21 R
12 - 14	1.5	4A1/22 R
17 - 20	2.2	4A2/32 R
19 - 22	2.4	4A2/36 R
26 - 30	2.8	4A2/41 R
32 - 37	3.3	4A3/48 R
40 - 46	3.8	4A3/55 R
54 - 62	4.2	4A3/61 R

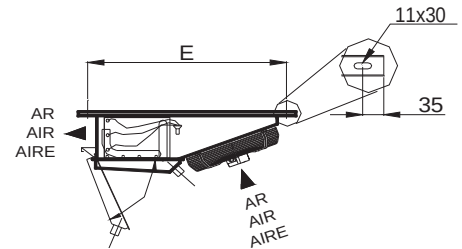
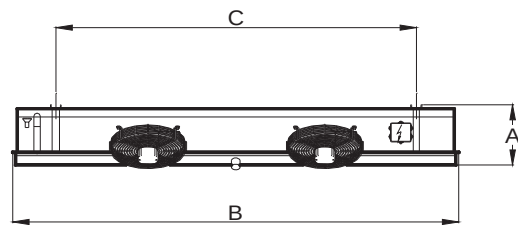


Modelo Type	Capacidade QSm Capacity QSm (TC=+2°C / DTm=8K)	Capacidade Q0m Capacity Q0m (TC=-18°C / DTm=6K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans							
					Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS
	KW		m²	dm³		mm	m³/h	m	rpm	W	A	V / F / Hz
BWK 6A1/16	1.55	0.94	4.68	1.06	1	300	1130	12	1370	73	0.32	230/1/50
BWK 6A1/19	1.85	1.12	5.85	1.33	1	300	1050	12	1370	73	0.32	230/1/50
BWK 6A1/21	2.07	1.25	7.02	1.60	1	300	980	12	1370	73	0.32	230/1/50
BWK 6A1/22	2.24	1.36	8.19	1.86	1	300	940	12	1370	73	0.32	230/1/50
BWK 6A2/32	3.18	1.93	9.36	2.13	2	300	2260	12	1370	146	0.64	230/1/50
BWK 6A2/37	3.77	2.28	11.70	2.66	2	300	2100	12	1370	146	0.64	230/1/50
BWK 6A2/41	4.07	2.47	14.04	3.19	2	300	1960	12	1370	146	0.64	230/1/50
BWK 6A3/47	4.70	2.85	14.04	3.19	3	300	3390	12	1370	219	0.96	230/1/50
BWK 6A3/55	5.53	3.35	17.55	3.99	3	300	3150	12	1370	219	0.96	230/1/50
BWK 6A3/61	6.12	3.71	21.06	4.79	3	300	2940	12	1370	219	0.96	230/1/50
BWK 6A1/12 R	1.24		4.68	1.06	1	300	670	9	900	32	0.15	230/1/50
BWK 6A1/14 R	1.43		5.85	1.33	1	300	630	9	900	32	0.15	230/1/50
BWK 6A1/17 R	1.67		7.02	1.60	1	300	600	9	900	32	0.15	230/1/50
BWK 6A1/18 R	1.80		8.19	1.86	1	300	570	9	900	32	0.15	230/1/50
BWK 6A2/25 R	2.49		9.36	2.13	2	300	1340	9	900	64	0.30	230/1/50
BWK 6A2/29 R	2.94		11.70	2.66	2	300	1260	9	900	64	0.30	230/1/50
BWK 6A2/34 R	3.40		14.04	3.19	2	300	1190	9	900	64	0.30	230/1/50
BWK 6A3/37 R	3.72		14.04	3.19	3	300	2010	9	900	96	0.45	230/1/50
BWK 6A3/44 R	4.40		17.55	3.99	3	300	1900	9	900	96	0.45	230/1/50
BWK 6A3/50 R	5.00		21.06	4.79	3	300	1790	9	900	96	0.45	230/1/50

Modelo Type	Preço sem resistências Price without heaters	Preço com resistências Price with heaters	Opções Options											
			Desc. gás quente GM GM hot gas defrost	Desc. gás quente GE GE hot gas defrost	Desc. gás quente GT GT hot gas defrost	Descongelação água Water defrost	Alhetas revestidas Coated fins	Lacado branco White painted	Chaparia Inox Stainless steel casing	Tab. esgoto isol. Insul. drain pan	Bateria resistências Heater coil	Resistências gola Fan heaters	Adaptador Conduas Air Sock Adapter	
EUR		EUR												
BWK 6A1/16	•	•	•	•	•	•	-	•	S	•	•	•	-	-
BWK 6A1/19	•	•	•	•	•	•	-	•	S	•	•	•	-	-
BWK 6A1/21	•	•	•	•	•	•	-	•	S	•	•	•	-	-
BWK 6A1/22	•	•	•	•	•	•	-	•	S	•	•	•	-	-
BWK 6A2/32	•	•	•	•	•	•	-	•	S	•	•	•	-	-
BWK 6A2/37	•	•	•	•	•	•	-	•	S	•	•	•	-	-
BWK 6A2/41	•	•	•	•	•	•	-	•	S	•	•	•	-	-
BWK 6A3/47	•	•	•	•	•	•	-	•	S	•	•	•	-	-
BWK 6A3/55	•	•	•	•	•	•	-	•	S	•	•	•	-	-
BWK 6A3/61	•	•	•	•	•	•	-	•	S	•	•	•	-	-
BWK 6A1/12 R	•	•	•	•	•	•	-	•	S	•	•	•	-	-
BWK 6A1/14 R	•	•	•	•	•	•	-	•	S	•	•	•	-	-
BWK 6A1/17 R	•	•	•	•	•	•	-	•	S	•	•	•	-	-
BWK 6A1/18 R	•	•	•	•	•	•	-	•	S	•	•	•	-	-
BWK 6A2/25 R	•	•	•	•	•	•	-	•	S	•	•	•	-	-
BWK 6A2/29 R	•	•	•	•	•	•	-	•	S	•	•	•	-	-
BWK 6A2/34 R	•	•	•	•	•	•	-	•	S	•	•	•	-	-
BWK 6A3/37 R	•	•	•	•	•	•	-	•	S	•	•	•	-	-
BWK 6A3/44 R	•	•	•	•	•	•	-	•	S	•	•	•	-	-
BWK 6A3/50 R	•	•	•	•	•	•	-	•	S	•	•	•	-	-

S Standard
S Standard

SP Sob pedido
SP Under request



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type	
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain								
	kW	A	V / F / Hz	in			mm							
	1.20	5.22	230/1/50	1/2	5/8	3/4	240	990	675	730	20.0	0.30	BWK	6A1/16
	1.20	5.22	230/1/50	1/2	5/8	3/4	240	990	675	730	21.0	0.30	BWK	6A1/19
	1.20	5.22	230/1/50	1/2	5/8	3/4	240	990	675	730	22.0	0.30	BWK	6A1/21
	1.20	5.22	230/1/50	1/2	5/8	3/4	240	990	675	730	23.0	0.30	BWK	6A1/22
	2.40	10.43	230/1/50	1/2	5/8	3/4	240	1640	1325	730	33.0	0.49	BWK	6A2/32
	2.40	10.43	230/1/50	1/2	7/8	3/4	240	1640	1325	730	35.0	0.49	BWK	6A2/37
	2.40	10.43	230/1/50	1/2	7/8	3/4	240	1640	1325	730	37.0	0.49	BWK	6A2/41
	3.60	15.65	230/1/50	1/2	7/8	3/4	240	2290	1975	730	46.0	0.68	BWK	6A3/47
	3.60	15.65	230/1/50	1/2	7/8	3/4	240	2290	1975	730	49.0	0.68	BWK	6A3/55
	3.60	15.65	230/1/50	1/2	1 1/8	3/4	240	2290	1975	730	52.0	0.68	BWK	6A3/61
	1.20	5.22	230/1/50	1/2	5/8	3/4	240	990	675	730	20.0	0.30	BWK	6A1/12 R
	1.20	5.22	230/1/50	1/2	5/8	3/4	240	990	675	730	21.0	0.30	BWK	6A1/14 R
	1.20	5.22	230/1/50	1/2	5/8	3/4	240	990	675	730	22.0	0.30	BWK	6A1/17 R
	1.20	5.22	230/1/50	1/2	5/8	3/4	240	990	675	730	23.0	0.30	BWK	6A1/18 R
	2.40	10.43	230/1/50	1/2	5/8	3/4	240	1640	1325	730	33.0	0.49	BWK	6A2/25 R
	2.40	10.43	230/1/50	1/2	7/8	3/4	240	1640	1325	730	35.0	0.49	BWK	6A2/29 R
	2.40	10.43	230/1/50	1/2	7/8	3/4	240	1640	1325	730	37.0	0.49	BWK	6A2/34 R
	3.60	15.65	230/1/50	1/2	7/8	3/4	240	2290	1975	730	46.0	0.68	BWK	6A3/37 R
	3.60	15.65	230/1/50	1/2	7/8	3/4	240	2290	1975	730	49.0	0.68	BWK	6A3/44 R
	3.60	15.65	230/1/50	1/2	1 1/8	3/4	240	2290	1975	730	52.0	0.68	BWK	6A3/50 R

Seleção e Factores Selection and Factors

RCm		DTm [K]						
TC [°C]	+5	1.352	1.217	1.082	0.947	0.813	0.707	0.588
	+2	1.250	1.125	1.000	0.893	0.772	0.665	0.539
	0	1.188	1.069	0.950	0.830	0.710	0.609	0.490
	-15	1.018	0.918	0.830	0.730	0.640	0.539	0.434
	-20	0.963	0.867	0.770	0.660	0.583	0.490	0.393
	-25	0.950	0.854	0.764	0.649	0.567	0.476	0.385
	-34					0.561	0.471	0.381

FC1		TE [°C]						
R404A / R507	+5	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	0	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	-15	1.02	1.00	0.98	0.95			
	-20		0.98	1.00	1.00	1.02	1.04	1.06
	-25		1.02	1.02	1.02	1.04	1.06	1.08

FC2		Alumínio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor		1.00	0.97	1.03

Capacidade corrigida	Corrected capacity
BWK/E 6A3/55 AR TC=-20°C DTm=5K R404A Al. rev. / Coated al.	$Q_{om} = Q_{Sm} \times RCm \times FC1 \times FC2$ [kW] $Q_{o1} = Q_{S1} \times RC1 \times FC1 \times FC2$ [kW] $Q_{om} = 5,53 \text{ kW} \times 0,490 \times 1 \times 0,97 = 2,63 \text{ kW}$

Nomenclatura	Nomenclature
TC	Temperatura de câmara Room temperature
TE	Temperatura de evaporação Evaporating temperature
Q _{Sm}	Capacidade para selecção em DTm Selection capacity in TDm
Q _{om}	Capacidade corrigida em DTm Corrected capacity in TDm
FC1	Factor de correcção do refrigerante Refrigerant correction factor
FC2	Factor de correcção do material das alhetas Fin material correction factor
RCm	Factor de correcção para dados em DTm Correction factors for data in DTm

Câmara congelados Freezing room (TC=-18/-20°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	kW	
6 - 7	0.9	6A1/16
8 - 9	1.1	6A1/19
12 - 14	1.4	6A1/21
16 - 18	1.7	6A2/32
20 - 23	2.0	6A2/32
21 - 24	2.2	6A2/37
23 - 26	2.3	6A2/41
40 - 46	3.0	6A3/55
47 - 54	3.5	6A3/61

Câmara refrigerados Chilling room (TC=+2/+4°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	kW	
6 - 7	1.1	6A1/16
8 - 9	1.3	6A1/19
13 - 15	1.5	6A1/21
15 - 17	1.9	6A1/22
28 - 32	2.3	6A2/32
31 - 35	2.7	6A2/38
32 - 37	2.9	6A2/41
37 - 42	3.4	6A3/47
54 - 62	4.0	6A3/55
59 - 68	4.6	6A3/61
BWK ... R		
5 - 6	0.9	6A1/12 R
6 - 7	1.0	6A1/14 R
7 - 8	1.2	6A1/17 R
8 - 9	1.3	6A1/18 R
14 - 16	1.8	6A2/25 R
16 - 19	2.1	6A2/29 R
28 - 32	2.4	6A2/34 R
31 - 35	2.6	6A3/37 R
35 - 40	3.1	6A3/44 R
39 - 44	3.6	6A3/50 R

Dados de cálculo	Selection data
Isolamento - Câmara de refrigerados Insulation - Chilling room	80mm PU
Isolamento - Câmara de congelados Insulation - Freezing room	100mm PU
Temperatura exterior Exterior temperature	+32°C
Entrada diária (% capacidade da câmara) Daily rotation (room capacity's %)	10%
Tempo de arrefecimento Cooling time	18h
Tipo de uso Usage	Normal

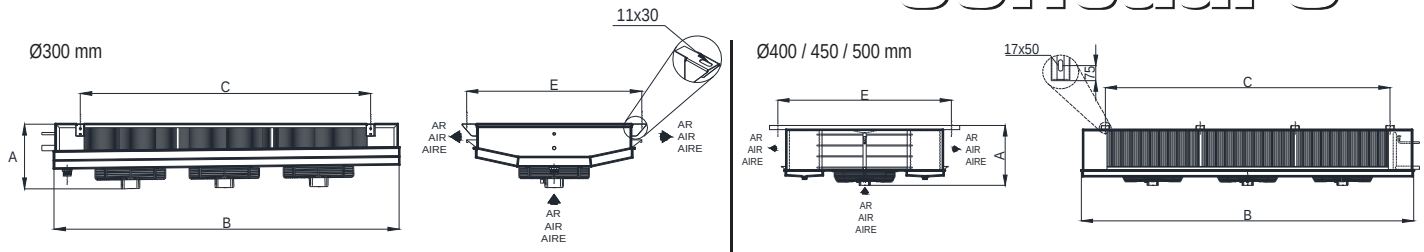


Modelo Type		Capacidade Qs1 Capacity Qs1 (Tse=+12°C / DTI=11K)	Capacidade 1,35 x SC1 Capacity 1,35 x SC1 (Tse=+10°C / DTI=10K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans									
						Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
		kw		m²	dm³		mm	m³/h	m	rpm	W	A	V / F / Hz	dB(A)	
CBK	4B1/2 R	2.87	2.60	14.77	2.90	1	300	950	6	900	32	0.15	230/1/50	40	
CBK	4B2/4 R	4.68	4.25	17.77	3.40	2	300	2050	6	900	64	0.30	230/1/50	43	
CBK	4B2/6 R	6.32	5.73	29.53	5.80	2	300	1900	6	900	64	0.30	230/1/50	43	
CBK	3F1/7 R	7.22	6.55	29.79	4.70	1	400	2200	10	870	120	0.53	230/1/50	49	
CBK	4B3/9 R	9.51	8.63	44.30	8.60	3	300	2850	6	900	96	0.45	230/1/50	45	
CBK	4B4/12 R	12.92	11.72	59.06	11.50	4	300	3800	6	900	128	0.60	230/1/50	46	
CBK	3F2/13 R	14.02	12.72	59.57	9.40	2	400	4400	10	870	240	1.06	230/1/50	52	
CBK	3F3/19 R	21.47	19.48	89.36	14.10	3	400	6600	10	870	360	1.59	230/1/50	54	
CBK	3F4/25 R	27.08	24.57	119.15	18.70	4	400	8800	10	870	480	2.12	230/1/50	55	
CBK	4H3/32 R	35.37	32.10	190.98	38.70	3	450	10500	12	940	495	2.40	230/1/50	58	
CBK	4K3/39 R	42.98	39.00	238.73	48.40	3	500	12600	14	915	810	3.54	230/1/50	51	
CBK	4H4/42 R	46.61	42.30	254.64	51.60	4	450	14000	12	940	660	3.20	230/1/50	59	
CBK	4K4/56 R	62.15	56.40	318.30	64.50	4	500	16800	14	915	1080	4.72	230/1/50	52	
CBK	4K5/69 R	75.49	68.50	397.88	80.60	5	500	21000	14	915	1350	5.90	230/1/50	53	
CBK	4B1/3	3.32	3.01	14.77	2.90	1	300	1300	9	1300	73	0.32	230/1/50	49	
CBK	4B2/5	5.30	4.81	17.77	3.40	2	300	2700	9	1300	146	0.64	230/1/50	52	
CBK	4B2/7	7.71	7.00	29.53	5.80	2	300	2600	9	1300	146	0.64	230/1/50	52	
CBK	4B3/10	11.64	10.56	44.30	8.60	3	300	3900	9	1300	219	0.96	230/1/50	54	
CBK	4B4/14	15.54	14.10	59.06	11.50	4	300	5200	9	1300	292	1.28	230/1/50	55	

(1) Pressão sonora a 3m, em campo livre sem reflexões Sound pressure level at 3m, in free field conditions, without reflections Pressión sonora a 3m, en campo libre sin reflexión

Modelo Type	Preço sem resistências Price without heaters	Preço com bateria de resistências BR Price with heater coil BR	Opções Options										
			/GM	/GE	/GT	/W	AR	BL	BI	TI	RG	AS	
			Desc. gás quente GM hot gas defrost	Desc. gás quente GE hot gas defrost	Desc. gás quente GT hot gas defrost	Descongelação água Water defrost	Alhetas revestidas Coated fins	Lacado branco White painted	Chaparia Inox Stainless steel casing	Tab. esgoto isol. Insul. drain pan	Resistências gola Fan heaters	Adaptador Conduitas Air Sock Adapter	
			EUR		EUR								
CBK 4B1/2 R	•	•	-	-	-	-	•	•	•	-	-	-	
CBK 4B2/4 R	•	•	-	-	-	-	•	•	•	-	-	-	
CBK 4B2/6 R	•	•	-	-	-	-	•	•	•	-	-	-	
CBK 3F1/7 R	•	•	-	-	-	-	•	•	•	-	-	-	
CBK 4B3/9 R	•	•	-	-	-	-	•	•	•	-	-	-	
CBK 4B4/12 R	•	•	-	-	-	-	•	•	•	-	-	-	
CBK 3F2/13 R	•	•	-	-	-	-	•	•	•	-	-	-	
CBK 3F3/19 R	•	•	-	-	-	-	•	•	•	-	-	-	
CBK 3F4/25 R	•	•	-	-	-	-	•	•	•	-	-	-	
CBK 4H3/32 R	•	•	-	-	-	-	•	•	•	-	-	-	
CBK 4K3/39 R	•	•	-	-	-	-	•	•	•	-	-	-	
CBK 4H4/42 R	•	•	-	-	-	-	•	•	•	-	-	-	
CBK 4K4/56 R	•	•	-	-	-	-	•	•	•	-	-	-	
CBK 4K5/69 R	•	•	-	-	-	-	•	•	•	-	-	-	
CBK 4B1/3	•	•	-	-	-	-	•	•	•	-	-	-	
CBK 4B2/5	•	•	-	-	-	-	•	•	•	-	-	-	
CBK 4B2/7	•	•	-	-	-	-	•	•	•	-	-	-	
CBK 4B3/10	•	•	-	-	-	-	•	•	•	-	-	-	
CBK 4B4/14	•	•	-	-	-	-	•	•	•	-	-	-	

S Standard SP Sob pedido
S Standard SP Under request



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain	A	B	C	E			
	kW	A	V / F / Hz		in		mm				kg	m ³	
				1/2	3/4	1 1/4	354	813	525	920	31.0	0.45	CBK 4B1/2 R
				1/2	7/8	1 1/4	354	1313	1025	920	41.0	0.70	CBK 4B2/4 R
				1/2	1 1/8	1 1/4	354	1313	1025	920	48.0	0.70	CBK 4B2/6 R
				1/2	1 1/8	2x1 1/4	400	1100	675	1070	48.0	0.68	CBK 3F1/7 R
				5/8	1 1/8	1 1/4	363	1813	1525	920	67.0	0.96	CBK 4B3/9 R
				5/8	1 3/8	1 1/4	363	2313	2025	920	90.0	1.21	CBK 4B4/12 R
				5/8	1 3/8	2x1 1/4	400	1750	1325	1070	78.0	1.06	CBK 3F2/13 R
				5/8	1 3/8	2x1 1/4	400	2400	1975	1070	112.0	1.45	CBK 3F3/19 R
				7/8	1 3/8	2x1 1/4	400	3050	2625	1070	145.0	1.83	CBK 3F4/25 R
				7/8	1 5/8	2x1 1/4	480	2970	2545	1330	234.0	2.47	CBK 4H3/32 R
				7/8	2 1/8	2x1 1/4	590	2970	2545	1550	354.0	3.54	CBK 4K3/39 R
				1 1/8	2 1/8	2x1 1/2	480	3810	3385	1330	296.0	3.16	CBK 4H4/42 R
				2 x 1 1/8	2x2 1/8	2x1 1/2	590	3810	3385	1550	439.0	4.51	CBK 4K4/56 R
				2 x 1 1/8	2x2 1/8	2x1 1/2	590	4650	4225	1550	539.0	5.47	CBK 4K5/69 R
				1/2	3/4	1 1/4	354	813	525	920	32.5	0.45	CBK 4B1/3
				1/2	7/8	1 1/4	354	1313	1025	920	43.6	0.70	CBK 4B2/5
				1/2	1 1/8	1 1/4	354	1313	1025	920	51.5	0.70	CBK 4B2/7
				5/8	1 1/8	1 1/4	363	1813	1525	920	71.1	0.96	CBK 4B3/10
				5/8	1 3/8	1 1/4	363	2313	2025	920	94.6	1.21	CBK 4B4/14

Seleção e Factores Selection and Factors

RC1		DT1 [K]												
		16	15	14	13	12	11	10	9	8	7	6	5	4
T _{se} [°C]	+16	1.762	1.652	1.469	1.322	1.220	1.119	1.018	0.916	0.805	0.703	0.604	0.499	0.402
	+14	1.750	1.640	1.458	1.458	1.211	1.111	1.010	0.909	0.800	0.698	0.600	0.496	0.399
	+12	1.737	1.628	1.447	1.447	1.203	1.102	1.003	0.902	0.794	0.694	0.595	0.493	0.397
	+10	1.723	1.616	1.436	1.436	1.193	1.094	1.000	0.895	0.788	0.689	0.591	0.490	0.394
	+8	1.713	1.606	1.427	1.427	1.186	1.087	0.979	0.881	0.782	0.684	0.587	0.487	0.391
	+6	1.700	1.594	1.417	1.417	1.177	1.078	0.971	0.874	0.776	0.679	0.582	0.485	0.387
	+4	1.685	1.580	1.405	1.405	1.167	1.070	0.963	0.867	0.771	0.674	0.578	0.482	0.385

FC1		TE [°C]			
		+5	0	-5	-10
R404A / R507		1.00	1.00	1.00	1.00
R134a		1.02	1.00	0.98	0.95
R22 (DT1≤8K)			0.98	1.00	1.00
R22 (DT1>8K)			1.02	1.02	1.02

FC2		Alumínio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor		1.00	0.97	1.03

Capacidade corrigida Corrected capacity	
CBK 3F2/13 R Tse=+12°C DT1=12K R134a Alumínio / Aluminium	$Q_{01} = Q_{S1} \times RC1 \times FC1 \times FC2 \text{ [kW]}$ $Q_{01} = 12,72 \text{ kW} \times 1,203 \times 1 \times 1 = 15,30 \text{ kW}$

Nomenclatura Nomenclature			
TC	Temperatura de câmara Room temperature	Q ₀₁	Capacidade corrigida em DT1 Corrected capacity in TD1
TE	Temperatura de evaporação Evaporating temperature	FC1	Factor de correcção do refrigerante Refrigerant correction factor
Tse	Temperatura seca de entrada de ar BS Air on DB	FC2	Factor de correcção do material das alhetas Fin material correction factor
Q _{S1}	Capacidade para selecção em DT1 Selection capacity in TD1	RC1	Factor de correcção para dados em DT1 Correction factors for data in DT1

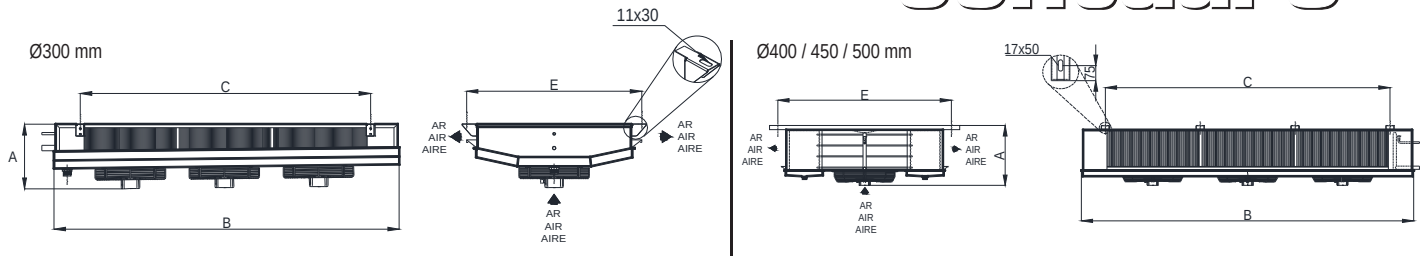
Dados de cálculo Selection data	
Altura da sala Room height	3,2m
Temp. exterior Exterior temp.	+32°C
Máquinas Machinery	nenhuma none
Ocupação (pessoas/m2) Occupation (persons/m2)	1P/4m ²
Iluminação Lighting	25W/m ²

Sala climatizada com isolamento Processing room with insulation (TC=+10/+12°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m ³	kW	
900 rpm		
53 - 59	2.5	4B1/2 R
85 - 94	4.0	4B2/4 R
117 - 129	5.5	4B2/6 R
149 - 164	7.0	3F1/7 R
192 - 211	9.0	4B3/9 R
256 - 282	12.0	4B4/12 R
299 - 329	14.0	3F2/13 R
427 - 470	20.0	3F3/19 R
555 - 610	26.0	3F4/25 R
704 - 775	33.0	4H3/32 R
853 - 939	40.0	4K3/39 R
960 - 1056	45.0	4H4/42 R
1237 - 1361	58.0	4K4/56 R
1493 - 1642	70.0	4K5/69 R
1300 rpm		
64 - 70	3.0	4B1/3
107 - 117	5.0	4B2/5
149 - 164	7.0	4B2/7
235 - 258	11.0	4B3/10
320 - 352	15.0	4B4/14



Modelo Type	Capacidade QSm Capacity QSm (TC=+2°C / DTm=8K)	Capacidade Q0m Capacity Q0m (TC=-18°C / DTm=6K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans									
	kW	m²			dm³	Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current		Alimentação MPS
CBN 4B1/3	3.16		14.77	2.90	1	300	1300	9	1300	73	0.32	230/1/50		
CBN 4B2/5	5.05		17.77	3.40	2	300	2700	9	1300	146	0.64	230/1/50		
CBN 4B2/7	7.35		29.53	5.80	2	300	2600	9	1300	146	0.64	230/1/50		
CBN 4B3/11	11.09		44.30	8.60	3	300	3900	9	1300	219	0.96	230/1/50		
CBN 4B4/15	14.81		59.06	11.50	4	300	5200	9	1300	292	1.28	230/1/50		
CBN 4F2/17	16.81		73.89	15.00	2	400	5600	11	1300	340	1.06	400/3/50		
CBN 4F3/25	25.41		110.84	22.50	3	400	8400	11	1300	510	1.59	400/3/50		
CBN 4F4/34	34.03		147.78	29.90	4	400	11200	11	1300	680	2.12	400/3/50		
CBN 4K2/37	36.52		159.15	32.30	2	500	12400	15	1300	1420	2.80	400/3/50		
CBN 4K3/51	50.49		238.73	48.40	3	500	18600	15	1300	2130	4.20	400/3/50		
CBN 4K4/79	78.98		318.30	64.50	4	500	24800	15	1300	2840	5.60	400/3/50		
CBN 4K5/93	92.60		397.88	80.60	5	500	31000	15	1300	3550	7.00	400/3/50		

Modelo Type	Preço sem resistências Price without heaters	Preço com resistências Price with heaters	Opções Options											
			/GM GM hot gas defrost	/GE GE hot gas defrost	/GT GT hot gas defrost	/W água Water defrost	AR Alhetas revestidas Coated fins	BL Lacado branco White painted	BI Chaparia Inox Stainless steel casing	TI Tab. esgoto isol. Insul. drain pan	BR Bateria resistências Heater coil	RG Resistências gola Fan heaters	AS Adaptador Condutas Air Sock Adapter	
			EUR											
	EUR		EUR											
CBN 4B1/3	•	•	SP	SP	SP	SP	•	•	•	SP	•	-	-	
CBN 4B2/5	•	•	SP	SP	SP	SP	•	•	•	SP	•	-	-	
CBN 4B2/7	•	•	SP	SP	SP	SP	•	•	•	SP	•	-	-	
CBN 4B3/11	•	•	SP	SP	SP	SP	•	•	•	SP	•	-	-	
CBN 4B4/15	•	•	SP	SP	SP	SP	•	•	•	SP	•	-	-	
CBN 4F2/17	•	•	SP	SP	SP	SP	•	•	•	SP	•	-	-	
CBN 4F3/25	•	•	SP	SP	SP	SP	•	•	•	SP	•	-	-	
CBN 4F4/34	•	•	SP	SP	SP	SP	•	•	•	SP	•	-	-	
CBN 4K2/37	•	•	SP	SP	SP	SP	•	•	•	SP	•	-	-	
CBN 4K3/51	•	•	SP	SP	SP	SP	•	•	•	SP	•	-	-	
CBN 4K4/79	•	•	SP	SP	SP	SP	•	•	•	SP	•	-	-	
CBN 4K5/93	•	•	SP	SP	SP	SP	•	•	•	SP	•	-	-	



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain							
	kW	A	V / F / Hz		in		A	B	C	E	kg	m³	
	1.08	4.69	230/1/50	1/2	3/4	1 1/4	354	813	525	920	32.5	0.45	CBN 4B1/3
	1.44	6.26	230/1/50	1/2	7/8	1 1/4	354	1313	1025	920	43.6	0.70	CBN 4B2/5
	2.16	9.36	230/1/50	1/2	1 1/8	1 1/4	354	1313	1025	920	51.5	0.70	CBN 4B2/7
	3.24	4.68	400/3/50	5/8	1 1/8	1 1/4	363	1813	1525	920	71.1	0.96	CBN 4B3/11
	4.32	6.23	400/3/50	5/8	1 3/8	1 1/4	363	2313	2025	920	94.6	1.21	CBN 4B4/15
	4.80	6.93	400/3/50	5/8	1 3/8	2x1 1/4	400	1750	1325	1280	108.2	1.27	CBN 4F2/17
	7.20	10.39	400/3/50	7/8	1 5/8	2x1 1/4	400	2400	1975	1280	153.5	1.73	CBN 4F3/25
	9.60	13.86	400/3/50	1 1/8	2 1/8	2x1 1/4	400	3050	2625	1280	200.8	2.19	CBN 4F4/34
	16.80	2x12,12	400/3/50	1 1/8	2 1/8	2x1 1/4	590	2130	1705	1550	231.5	2.51	CBN 4K2/37
	24.00	2x17,32	400/3/50	1 1/8	2 1/8	2x1 1/4	590	2970	2545	1550	354.5	3.54	CBN 4K3/51
	30.00	2x21,65	400/3/50	2x1 1/8	2x2 1/8	2x1 1/2	590	3810	3385	1550	438.0	4.51	CBN 4K4/79
	37.44	2x27,02	400/3/50	2x1 1/8	2x2 1/8	2x1 1/2	590	4650	4225	1550	539.0	5.47	CBN 4K5/93

Seleção e Factores Selection and Factors

RCm		DTm [K]						
		10	9	8	7	6	5	4
TC [°C]	+5	1.298	1.168	1.039	0.909	0.781	0.679	0.564
	+2	1.200	1.080	1.000	0.857	0.741	0.638	0.517
	0	1.140	1.026	0.912	0.797	0.682	0.585	0.470
	-2	1.111	1.001	0.909	0.794	0.680	0.582	0.466

FC1		TE [°C]			
		+5	0	-5	-10
R404A / R507		1.00	1.00	1.00	1.00
R134a		1.02	1.00	0.98	0.95
R22 (DT1≤8K)			0.98	1.00	1.00
R22 (DT1>8K)			1.02	1.02	1.02

FC2	Aluminio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor	1.00	0.97	1.03

Capacidade corrigida Corrected capacity

CBN 4F4/34 TC=0°C DTm=6K R134a Alumínio / Aluminium	$Q_{0m} = Q_{Sm} \times RCm \times FC1 \times FC2 \text{ [kW]}$ $Q_{0m} = 34,03 \text{ kW} \times 0,682 \times 0,97 \times 1 = 22,48 \text{ kW}$
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Nomenclatura	Nomenclature
TC	Temperatura de câmara Room temperature
TE	Temperatura de evaporação Evaporating temperature
Q _{Sm}	Capacidade para selecção em DTm Selection capacity in DTm
Q _{0m}	Capacidade corrigida em DTm Corrected capacity in DTm
FC1	Factor de correcção do refrigerante Refrigerant correction factor
FC2	Factor de correcção do material das alhetas Fin material correction factor
RCm	Factor de correcção para dados em DTm Correction factors for data in DTm

Dados de cálculo	Selection data
Isolamento - Câmara de refrigerados Insulation - Chilling room	80mm PU
Isolamento - Câmara de congelados Insulation - Freezing room	100mm PU
Temperatura exterior Exterior temperature	+32°C
Entrada diária (% capacidade da câmara) Daily rotation (room capacity's %)	10%
Tempo de arrefecimento Cooling time	18h
Tipo de uso Usage	Normal

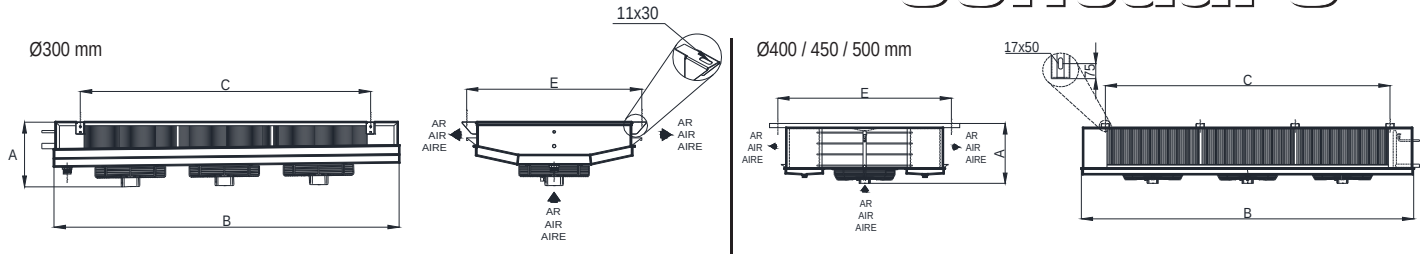
Câmara refrigerados Chilling room (TC=-1/0°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	kW	
20 - 23	2.3	4B1/3
40 - 46	3.7	4B2/5
62 - 71	5.0	4B2/7
120 - 140	7.7	4B3/11
180 - 210	10.9	4B4/15
300 - 345	16.5	4F3/25
480 - 550	23.0	4F4/34
700 - 805	33.0	4K3/51
1260 - 1450	55.5	4K4/79
1480 - 1700	64.3	4K5/93



Modelo Type	Capacidade QSm Capacity QSm (TC=+2°C / DTm=8K)	Capacidade Q0m Capacity Q0m (TC=-18°C / DTm=6K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans									
	kW	m²			dm³	Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current		Alimentação MPS
CBL 7B1/2	2.36	1.43	9.31	2.90	1	300	1400	10	1300	73	0.32	230/1/50		
CBL 7B2/3	3.32	2.01	11.17	3.40	2	300	2900	10	1300	146	0.64	230/1/50		
CBL 7B2/5	4.84	2.93	18.62	5.80	2	300	2800	10	1300	146	0.64	230/1/50		
CBL 7B3/7	7.32	4.43	27.93	8.60	3	300	4200	10	1300	219	0.96	230/1/50		
CBL 7B4/10	9.79	5.93	37.24	11.50	4	300	5600	10	1300	292	1.28	230/1/50		
CBL 7F2/12	12.25	7.42	46.47	15.00	2	400	6000	12	1440	340	1.06	400/3/50		
CBL 7F3/19	18.55	11.24	69.70	22.50	3	400	9000	12	1440	510	1.59	400/3/50		
CBL 7F4/25	25.02	15.16	92.93	29.90	4	400	12000	12	1440	680	2.12	400/3/50		
CBL 7K2/26	26.05	15.78	100.08	32.30	2	500	13000	16	1340	1420	2.80	400/3/50		
CBL 7K3/36	35.90	21.75	150.13	48.40	3	500	19500	16	1340	2130	4.20	400/3/50		
CBL 7K4/56	56.05	33.96	199.61	64.50	4	500	26000	16	1340	2840	5.60	400/3/50		
CBL 7K5/66	66.04	40.01	249.51	80.60	5	500	32500	16	1340	3550	7.00	400/3/50		

Modelo Type	Preço sem resistências Price without heaters	Preço com resistências Price with heaters	Opções Options											
			Desc. gás quente GM GM hot gas defrost	Desc. gás quente GE GE hot gas defrost	Desc. gás quente GT GT hot gas defrost	Descongelamento água Water defrost	Alhetas revestidas Coated fins	Lacado branco White painted	Chaparia Inox Stainless steel casing	Tab. esgoto isol. Insul. drain pan	Bateria resistências Heater coil	Resistências gola Fan heaters	Adaptador Condutas Air Sock Adapter	
			EUR											
			EUR											
CBL 7B1/2	•	•	SP	SP	SP	SP	•	•	•	SP	•	-	-	
CBL 7B2/3	•	•	SP	SP	SP	SP	•	•	•	SP	•	-	-	
CBL 7B2/5	•	•	SP	SP	SP	SP	•	•	•	SP	•	-	-	
CBL 7B3/7	•	•	SP	SP	SP	SP	•	•	•	SP	•	-	-	
CBL 7B4/10	•	•	SP	SP	SP	SP	•	•	•	SP	•	-	-	
CBL 7F2/12	•	•	SP	SP	SP	SP	•	•	•	SP	•	-	-	
CBL 7F3/19	•	•	SP	SP	SP	SP	•	•	•	SP	•	-	-	
CBL 7F4/25	•	•	SP	SP	SP	SP	•	•	•	SP	•	-	-	
CBL 7K2/26	•	•	SP	SP	SP	SP	•	•	•	SP	•	-	-	
CBL 7K3/36	•	•	SP	SP	SP	SP	•	•	•	SP	•	-	-	
CBL 7K4/56	•	•	SP	SP	SP	SP	•	•	•	SP	•	-	-	
CBL 7K5/66	•	•	SP	SP	SP	SP	•	•	•	SP	•	-	-	

S	Standard	SP	Sob pedido
S	Standard	SP	Under request



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain							
	kW	A	V / F / Hz		in		A	B	C	E	kg	m ³	
	1.44	6.26	230/1/50	1/2	3/4	1 1/4	354	813	525	920	32.6	0.45	CBL 7B1/2
	2.16	9.39	230/1/50	1/2	3/4	1 1/4	354	1313	1025	920	43.7	0.70	CBL 7B2/3
	2.88	12.52	230/1/50	1/2	7/8	1 1/4	354	1313	1025	920	52.0	0.70	CBL 7B2/5
	3.24 / 1.08	4.68 / 4.7	400/3/50 / 230/1/50	1/2	1 1/8	1 1/4	363	1813	1525	920	72.0	0.96	CBL 7B3/7
	4.32 / 1.44	6.23 / 6.26	400/3/50 / 230/1/50	5/8	1 1/8	1 1/4	363	2313	2025	920	96.0	1.21	CBL 7B4/10
	4.80	6.93	400/3/50	5/8	1 3/8	2x1 1/4	400	1750	1325	1280	108.6	1.27	CBL 7F2/12
	7.20	10.39	400/3/50	7/8	1 5/8	2x1 1/4	400	2400	1975	1280	154.0	1.73	CBL 7F3/19
	9.60	13.86	400/3/50	7/8	1 5/8	2x1 1/4	400	3050	2625	1280	203.8	2.19	CBL 7F4/25
	16.80	2x12.12	400/3/50	7/8	1 5/8	2x1 1/4	590	2130	1705	1550	230.3	2.51	CBL 7K2/26
	24.00	2x17.32	400/3/50	1 1/8	2 1/8	2x1 1/4	590	2970	2545	1550	353.9	3.54	CBL 7K3/36
	30.00	2x21.65	400/3/50	2x7/8	2x1 5/8	2x1 1/2	590	3810	3385	1550	439.0	4.51	CBL 7K4/56
	37.44	2x27.02	400/3/50	2x1 1/8	2x2 1/8	2x1 1/2	590	4650	4225	1550	539.0	5.47	CBL 7K5/66

Seleção e Factores Selection and Factors

RCm		DTm [K]						
		10	9	8	7	6	5	4
TC [°C]	+5	1.352	1.217	1.082	0.947	0.813	0.707	0.588
	+2	1.250	1.125	1.000	0.893	0.772	0.665	0.539
	0	1.188	1.069	0.950	0.830	0.710	0.609	0.490
	-15	1.018	0.918	0.830	0.730	0.640	0.539	0.434
	-20	0.963	0.867	0.770	0.660	0.583	0.490	0.393
	-25	0.950	0.854	0.764	0.649	0.567	0.476	0.385
	-34					0.561	0.471	0.381

FC1		TE [°C]						
		+5	0	-5	-10	-25	-35	-40
R404A / R507		1.00	1.00	1.00	1.00	1.00	1.00	1.00
R134a		1.02	1.00	0.98	0.95			
R22 (DT1≤8K)			0.98	1.00	1.00	1.02	1.04	1.06
R22 (DT1>8K)			1.02	1.02	1.02	1.04	1.06	1.08

FC2	Aluminio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor	1.00	0.97	1.03

Capacidade corrigida	Corrected capacity
CBL 7F4/25 AR TC=-20°C DTm=5K R404A Al. rev. / Coated al.	$Q_{0m} = Q_{Sm} \times RCm \times FC1 \times FC2$ [kW] $Q_{01} = Q_{S1} \times RC1 \times FC1 \times FC2$ [kW] $Q_{0m} = 25,02 \text{ kW} \times 0,490 \times 1 \times 0,97 = 11,89 \text{ kW}$

Nomenclatura	Nomenclature
TC	Temperatura de câmara Room temperature
TE	Temperatura de evaporação Evaporating temperature
Q _{Sm}	Capacidade para selecção em DTm Selection capacity in TDm
Q _{0m}	Capacidade corrigida em DTm Corrected capacity in TDm
FC1	Factor de correcção do refrigerante Refrigerant correction factor
FC2	Factor de correcção do material das alhetas Fin material correction factor
RCm	Factor de correcção para dados em DTm Correction factors for data in DTm

Dados de cálculo	Selection data
Isolamento - Câmara de refrigerados Insulation - Chilling room	80mm PU
Isolamento - Câmara de congelados Insulation - Freezing room	100mm PU
Temperatura exterior Exterior temperature	+32°C
Entrada diária (% capacidade da câmara) Daily rotation (room capacity's %)	10%
Tempo de arrefecimento Cooling time	18h
Tipo de uso Usage	Normal

Câmara congelados Freezing room (TC=-18/-20°C - TE=-25/-27°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m ³	kW	
10 - 11	1.5	7B1/2
25 - 28	2.2	7B2/3
45 - 51	3.2	7B2/5
65 - 74	4.4	7B3/7
85 - 97	5.2	7B4/10
120 - 135	7.0	7F2/12
225 - 255	11.1	7F3/19
290 - 330	14.1	7F4/25
550 - 660	20.0	7K3/36
990 - 1135	31.1	7K4/56
1200 - 1380	37.4	7K5/66

Câmara refrigerados Chilling room (TC=-1/0°C - TE=-6/-7°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m ³	kW	
10 - 11	1.6	7B1/2
24 - 27	2.3	7B2/3
35 - 40	3.4	7B2/5
62 - 71	4.9	7B3/7
100 - 120	7.1	7B4/10
135 - 150	8.6	7F2/12
215 - 245	13.0	7F3/19
320 - 365	16.5	7F4/25
400 - 460	18.9	7K2/26
550 - 630	27.1	7K3/36
820 - 940	37.0	7K4/56
1080 - 1240	49.2	7K5/66

MT

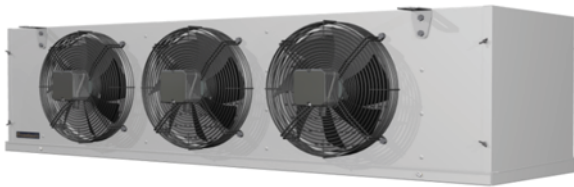
Evaporadores Cúbicos Cubic Coolers

Espaçamento Fin Spacing

Ø Ventiladores Fan Ø

4,2 mm

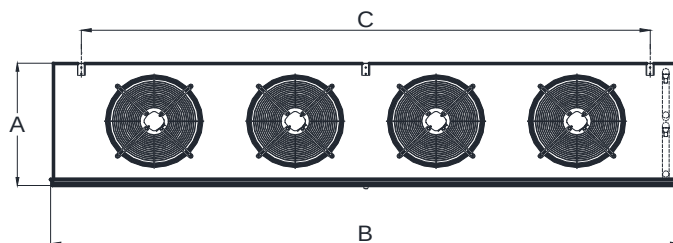
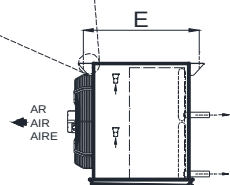
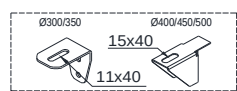
300 - 350 - 400 - 450 - 500 mm



Modelo Type	Capacidade QSm Capacity QSm (TC=+2°C / DTm=8K)	Capacidade Q0m Capacity Q0m (TC=-18°C / DTm=6K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans									
	kW	m²			dm³	Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power		Corrente total Total current	Alimentação MPS
MT 4C1/3	3.33		12.43	3.25	1	300	1300	11	1310	98	0.44	230/1/50		
MT 4E1/5	4.91		17.76	3.60	1	350	1800	14	1070	120	0.55	230/1/50		
MT 4C2/6	6.44		24.80	5.77	2	300	2600	11	1310	196	0.88	230/1/50		
MT 4C3/8	8.28		29.84	6.63	3	300	4050	11	1310	294	1.32	230/1/50		
MT 4E2/9	8.90		29.60	6.00	2	350	3800	14	1070	240	1.10	230/1/50		
MT 4E2/10	9.73		35.52	7.20	2	350	3600	14	1070	240	1.10	230/1/50		
MT 4C3/10	10.43		44.76	9.10	3	300	3750	11	1310	294	1.32	230/1/50		
MT 4E3/13	13.39		44.28	8.60	3	350	5700	14	1070	360	1.65	230/1/50		
MT 4E3/16	15.53		71.05	14.40	3	350	4950	14	1070	360	1.65	230/1/50		
MT 4E4/18	17.91		59.04	11.50	4	350	7600	14	1070	480	2.20	230/1/50		
MT 4E4/20	19.61		71.05	14.40	4	350	7200	14	1070	480	2.20	230/1/50		
MT 4G2/20	19.45		86.21	19.10	2	400	6000	16	1440	340	1.06	400/3/50		
MT 4G3/23	23.15		80.66	17.40	3	400	9750	16	1440	510	1.59	400/3/50		
MT 4J2/24	24.09		98.09	21.84	2	450	7900	18	1330	920	1.90	400/3/50		
MT 4G3/29	28.94		129.31	27.84	3	400	9000	16	1440	510	1.59	400/3/50		
MT 4L2/36	36.35		143.10	31.13	2	500	12000	20	1340	1340	2.40	400/3/50		
MT 4J4/49	48.87		196.83	41.80	4	450	15800	18	1330	1840	3.80	400/3/50		
MT 4L3/53	53.20		214.85	45.64	3	500	18000	20	1340	2010	3.60	400/3/50		
MT 4L4/68	67.92		250.66	52.64	4	500	25000	20	1340	2680	4.80	400/3/50		
MT 4L4/72	72.31		286.50	60.16	4	500	24000	20	1340	2680	4.80	400/3/50		

Modelo Type	Preço sem resistências Price without heaters	Preço com resistências Price with heaters	Opções Options											
			Desc. gás quente GM GM hot gas defrost	Desc. gás quente GE GE hot gas defrost	Desc. gás quente GT GT hot gas defrost	Desc. água Descongelamento Water defrost	Alhetas revestidas Coated fins	Lacado branco White painted	Chaparia inox Stainless steel casing	Tab. esgoto isol. Insul. drain pan	Bateria resistências Heater coil	Resistências gola Fan heaters	Adaptador Conduitas Air Sock Adapter	
	EUR		EUR											
MT 4C1/3	•	•	•	•	•	•	•	•	•	•	•	•	•	
MT 4E1/5	•	•	•	•	•	•	•	•	•	•	•	•	•	
MT 4C2/6	•	•	•	•	•	•	•	•	•	•	•	•	•	
MT 4C3/8	•	•	•	•	•	•	•	•	•	•	•	•	•	
MT 4E2/9	•	•	•	•	•	•	•	•	•	•	•	•	•	
MT 4E2/10	•	•	•	•	•	•	•	•	•	•	•	•	•	
MT 4C3/10	•	•	•	•	•	•	•	•	•	•	•	•	•	
MT 4E3/13	•	•	•	•	•	•	•	•	•	•	•	•	•	
MT 4E3/16	•	•	•	•	•	•	•	•	•	•	•	•	•	
MT 4E4/18	•	•	•	•	•	•	•	•	•	•	•	•	•	
MT 4E4/20	•	•	•	•	•	•	•	•	•	•	•	•	•	
MT 4G2/20	•	•	•	•	•	•	•	•	•	•	•	•	•	
MT 4G3/23	•	•	•	•	•	•	•	•	•	•	•	•	•	
MT 4J2/24	•	•	•	•	•	•	•	•	•	•	•	•	•	
MT 4G3/29	•	•	•	•	•	•	•	•	•	•	•	•	•	
MT 4L2/36	•	•	•	•	•	•	•	•	•	•	•	•	•	
MT 4J4/49	•	•	•	•	•	•	•	•	•	•	•	•	•	
MT 4L3/53	•	•	•	•	•	•	•	•	•	•	•	•	•	
MT 4L4/68	•	•	•	•	•	•	•	•	•	•	•	•	•	
MT 4L4/72	•	•	•	•	•	•	•	•	•	•	•	•	•	

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	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain							
	kW	A	V / F / Hz	in			mm						
	1.28	5.57	230/1/50	1/2	7/8	3/4 BSP	449	753	450	540	28.0	0.38	MT 4C1/3
	1.80	7.83	230/1/50	1/2	7/8	3/4 BSP	449	833	525	540	34.0	0.42	MT 4E1/5
	2.40	10.43	230/1/50	1/2	7/8	3/4 BSP	449	1173	870	540	43.0	0.56	MT 4C2/6
	4.80	20.87	230/1/50	1/2	1 1/8	3/4 BSP	449	1596	1290	540	55.0	0.77	MT 4C3/8
	3.60	15.65	230/1/50	1/2	1 1/8	3/4 BSP	449	1333	1025	540	53.0	0.65	MT 4E2/9
	4.32	18.78	230/1/50	1/2	1 1/8	3/4 BSP	449	1333	1025	540	57.0	0.65	MT 4E2/10
	4.80	20.87	230/1/50	1/2	1 1/8	3/4 BSP	449	1596	1290	540	69.0	0.77	MT 4C3/10
	6.48	9.35	400/3/50	5/8	1 3/8	3/4 BSP	449	1833	1525	540	74.0	0.88	MT 4E3/13
	6.48	9.35	400/3/50	5/8	1 3/8	3/4 BSP	449	1833	1525	540	89.0	0.88	MT 4E3/16
	8.64	12.47	400/3/50	5/8	1 3/8	3/4 BSP	449	2333	2025	540	98.0	1.10	MT 4E4/18
	8.64	12.47	400/3/50	7/8	1 5/8	3/4 BSP	449	2333	2025	540	106.0	1.10	MT 4E4/20
	7.20	10.39	400/3/50	7/8	1 5/8	3/4 BSP	615	1693	1330	625	110.0	1.15	MT 4G2/20
	10.80	15.59	400/3/50	7/8	1 5/8	1 1/4 BSP	615	2343	1980	625	125.0	1.57	MT 4G3/23
	10.80	15.59	400/3/50	7/8	1 5/8	3/4 BSP	690	1693	1330	625	123.0	1.27	MT 4J2/24
	10.80	15.59	400/3/50	7/8	1 5/8	1 1/4 BSP	615	2343	1980	625	154.0	1.57	MT 4G3/29
	12.60	18.19	400/3/50	7/8	1 5/8	3/4 BSP	765	2123	1710	690	175.0	1.82	MT 4L2/36
	18.00	25.98	400/3/50	1 1/8	2 1/8	1 1/4 BSP	690	2993	2630	625	227.0	2.19	MT 4J4/49
	18.00	25.98	400/3/50	1 1/8	2 1/8	1 1/4 BSP	765	2963	2550	690	253.0	2.52	MT 4L3/53
	30.00	2x21.65	400/3/50	2x1 1/8	2x2 1/8	1 1/4 BSP	765	3803	3390	690	333.0	3.22	MT 4L4/68
	30.00	2x21.65	400/3/50	2x1 1/8	2x2 1/8	1 1/4 BSP	765	3803	3390	690	354.0	3.22	MT 4L4/72

Seleção e Factores Selection and Factors

RCm		DTm [K]						
		10	9	8	7	6	5	4
TC [°C]	+5	1.298	1.168	1.039	0.909	0.781	0.679	0.564
	+2	1.200	1.080	1.000	0.857	0.741	0.638	0.517
	0	1.140	1.026	0.912	0.797	0.682	0.585	0.470
	-2	1.111	1.001	0.909	0.794	0.680	0.582	0.466

FC1		TE [°C]			
		+5	0	-5	-10
R404A / R507		1.00	1.00	1.00	1.00
R134a		1.02	1.00	0.98	0.95
R22 (DT1≤8K)			0.98	1.00	1.00
R22 (DT1>8K)			1.02	1.02	1.02

FC2		Alumínio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor		1.00	0.97	1.03

Capacidade corrigida Corrected capacity	
MT 4E3/13 TC=0°C DTm=6K R134a Alumínio / Aluminium	
$Q_{om} = Q_{sm} \times RCm \times FC1 \times FC2$ [kW]	
$Q_{om} = 13,39 \text{ kW} \times 0,682 \times 0,97 \times 1 = 8,60 \text{ kW}$	

Nomenclatura	Nomenclature
TC	Temperatura de câmara Room temperature
TE	Temperatura de evaporação Evaporating temperature
Q _{sm}	Capacidade para selecção em DTm Selection capacity in TDm
Q _{om}	Capacidade corrigida em DTm Corrected capacity in TDm
FC1	Factor de correcção do refrigerante Refrigerant correction factor
FC2	Factor de correcção do material das alhetas Fin material correction factor
RCm	Factor de correcção para dados em DTm Correction factors for data in DTm

Dados de cálculo	Selection data
Isolamento - Câmara de refrigerados Insulation - Chilling room	80mm PU
Isolamento - Câmara de congelados Insulation - Freezing room	100mm PU
Temperatura exterior Exterior temperature	+32°C
Entrada diária (% capacidade da câmara) Daily rotation (room capacity's %)	10%
Tempo de arrefecimento Cooling time	18h
Tipo de uso Usage	Normal

Câmara refrigerados Chilling room (TC=0/+4°C - TE=-6/-7°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	kW	
18 - 21	2.3	4C1/3
40 - 46	3.7	4E1/5
55 - 63	4.3	4C2/6
62 - 71	5.0	4C3/8
80 - 92	6.0	4E2/9
95 - 110	6.6	4E2/10
120 - 140	7.7	4C3/10
136 - 170	9.3	4E3/13
180 - 210	10.9	4E3/16
230 - 264	13.0	4E4/20
300 - 345	16.5	4G3/23
380 - 440	18.9	4G3/29
480 - 550	23.0	4L2/36
540 - 620	27.1	2x 4E4/20
700 - 805	33.0	4J4/49
920 - 1060	42.9	4L4/68
1100 - 1265	49.2	4L4/72
1180 - 1355	55.5	2x 4L2/36
1500 - 1725	64.3	2x 4J4/49
1750 - 2010	73.8	2x 4L3/53
2100 - 2415	87.3	2x 4L4/68
2600 - 2990	98.4	2x 4L4/72
3000 - 3450	110.9	3x 4L3/53

DD

Evaporadores Cúbicos Cubic Coolers

Espaçamento Fin Spacing

Ø Ventiladores Fan Ø

7,0 mm

300 - 350 - 400 - 450 - 500 mm

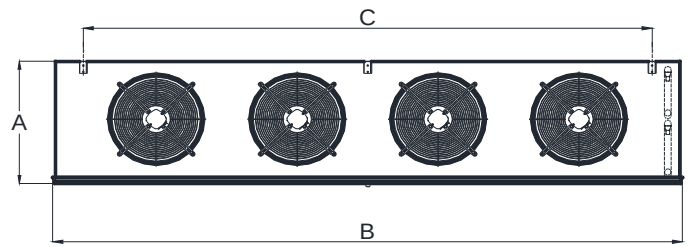
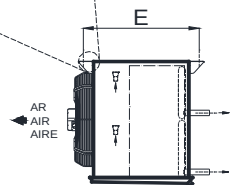
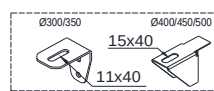


Modelo Type	Capacidade QSm Capacity QSm (TC=+2°C / DTm=8K)	Capacidade Q0m Capacity Q0m (TC=-18°C / DTm=6K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans									
	kW	m²			dm³	Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current		Alimentação MPS
DD 7C1/2	2.34	1.42	7.82	3.25	1	300	1350	12	1310	98	0.44	230/1/50		
DD 7C1/3	3.07	1.86	12.51	5.20	1	300	1250	12	1310	98	0.44	230/1/50		
DD 7E1/4	3.62	2.19	11.17	3.60	1	350	1940	16	1070	120	0.55	230/1/50		
DD 7C2/5	5.17	3.13	18.77	6.92	2	300	2600	12	1310	196	0.88	230/1/50		
DD 7C2/6	6.00	3.64	25.02	8.10	2	300	2500	12	1310	196	0.88	230/1/50		
DD 7E2/7	7.11	4.31	22.34	7.20	2	350	3880	16	1070	240	1.10	230/1/50		
DD 7E2/8	8.48	5.14	29.79	9.60	2	350	3500	16	1070	240	1.10	230/1/50		
DD 7C3/9	9.30	5.63	37.53	13.26	3	300	3750	12	1310	294	1.32	230/1/50		
DD 7E3/11	10.58	6.41	33.26	10.10	3	350	5820	16	1070	360	1.65	230/1/50		
DD 7E3/12	12.42	7.52	44.56	14.40	3	350	5250	16	1070	360	1.65	230/1/50		
DD 7E4/14	14.44	8.75	44.68	14.40	4	350	7760	16	1070	480	2.20	230/1/50		
DD 7G2/13	13.04	7.90	54.21	19.10	2	400	6000	18	1440	340	1.06	400/3/50		
DD 7G3/17	16.66	10.09	50.50	17.40	3	400	10200	18	1440	510	1.59	400/3/50		
DD 7J2/19	18.96	11.49	61.96	21.84	2	450	8200	20	1330	920	1.90	400/3/50		
DD 7G3/21	21.11	12.79	79.00	25.00	3	400	9000	18	1440	510	1.59	400/3/50		
DD 7J3/25	25.22	15.28	92.93	31.82	3	450	12300	20	1330	1380	2.85	400/3/50		
DD 7L2/26	26.30	15.93	90.08	31.13	2	500	12200	22	1340	1340	2.40	400/3/50		
DD 7L2/29	29.23	17.71	112.45	38.91	2	500	11600	22	1340	1340	2.40	400/3/50		
DD 7J4/34	33.66	20.39	123.70	41.80	4	450	16400	20	1330	1840	3.80	400/3/50		
DD 7L3/35	35.14	21.29	118.01	39.94	3	500	18900	22	1340	2010	3.60	400/3/50		
DD 7L3/38	37.85	22.93	134.90	45.64	3	500	18300	22	1340	2010	3.60	400/3/50		
DD 7L3/42	42.41	25.69	168.68	57.05	3	500	17400	22	1340	2010	3.60	400/3/50		
DD 7L4/53	53.17	32.21	179.87	60.16	4	500	24400	22	1340	2680	4.80	400/3/50		

Modelo Type	Preço sem resistências Price without heaters	Preço com resistências Price with heaters	Opções Options										
			/GM GM hot gas defrost	/GE GE hot gas defrost	/GT GT hot gas defrost	/W Water defrost	AR Alhetas revestidas Coated fins	BL Lacado branco White painted	BI Chaparia Inox Stainless steel casing	TI Tab. esgoto isol. Insul. drain pan	BR Bateria resistências Heater coil	RG Resistências gola Fan heaters	AS Adaptador Conduas Air Sock Adapter
	EUR		EUR										
	DD 7C1/2	•	•	•	•	•	•	•	•	•	•	•	•
DD 7C1/3	•	•	•	•	•	•	•	•	•	•	•	•	
DD 7E1/4	•	•	•	•	•	•	•	•	•	•	•	•	
DD 7C2/5	•	•	•	•	•	•	•	•	•	•	•	•	
DD 7C2/6	•	•	•	•	•	•	•	•	•	•	•	•	
DD 7E2/7	•	•	•	•	•	•	•	•	•	•	•	•	
DD 7E2/8	•	•	•	•	•	•	•	•	•	•	•	•	
DD 7C3/9	•	•	•	•	•	•	•	•	•	•	•	•	
DD 7E3/11	•	•	•	•	•	•	•	•	•	•	•	•	
DD 7E3/12	•	•	•	•	•	•	•	•	•	•	•	•	
DD 7E4/14	•	•	•	•	•	•	•	•	•	•	•	•	
DD 7G2/13	•	•	•	•	•	•	•	•	•	•	•	•	
DD 7G3/17	•	•	•	•	•	•	•	•	•	•	•	•	
DD 7J2/19	•	•	•	•	•	•	•	•	•	•	•	•	
DD 7G3/21	•	•	•	•	•	•	•	•	•	•	•	•	
DD 7J3/25	•	•	•	•	•	•	•	•	•	•	•	•	
DD 7L2/26	•	•	•	•	•	•	•	•	•	•	•	•	
DD 7L2/29	•	•	•	•	•	•	•	•	•	•	•	•	
DD 7J4/34	•	•	•	•	•	•	•	•	•	•	•	•	
DD 7L3/35	•	•	•	•	•	•	•	•	•	•	•	•	
DD 7L3/38	•	•	•	•	•	•	•	•	•	•	•	•	
DD 7L3/42	•	•	•	•	•	•	•	•	•	•	•	•	
DD 7L4/53	•	•	•	•	•	•	•	•	•	•	•	•	

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	Resistências do evaporador Cooler heaters			Ligações standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain							
	kW	A	V / F / Hz		in		A	B	C	E			
							mm				kg	m³	
	1.28	5.57	230/1/50	1/2	7/8	3/4 BSP	449	753	450	540	28.0	0.38	DD 7C1/2
	1.60	6.96	230/1/50	1/2	7/8	3/4 BSP	449	753	450	540	33.0	0.38	DD 7C1/3
	1.80	7.83	230/1/50	1/2	7/8	3/4 BSP	449	833	525	540	35.0	0.42	DD 7E1/4
	2.40	10.43	230/1/50	1/2	7/8	3/4 BSP	449	1173	870	540	46.0	0.56	DD 7C2/5
	3.00	13.04	230/1/50	1/2	7/8	3/4 BSP	449	1173	870	540	53.0	0.56	DD 7C2/6
	4.32	18.78	230/1/50	1/2	1 1/8	3/4 BSP	449	1333	1025	540	57.0	0.65	DD 7E2/7
	4.32	18.78	230/1/50	1/2	1 1/8	3/4 BSP	449	1333	1025	540	64.0	0.65	DD 7E2/8
	7.20	10.39	400/3/50	1/2	1 1/8	3/4 BSP	449	1596	1290	540	74.0	0.77	DD 7C3/9
	6.48	9.35	400/3/50	1/2	1 1/8	3/4 BSP	449	1833	1525	540	79.0	0.88	DD 7E3/11
	6.48	9.35	400/3/50	5/8	1 3/8	3/4 BSP	449	1833	1525	540	90.0	0.88	DD 7E3/12
	8.64	12.47	400/3/50	5/8	1 3/8	3/4 BSP	449	2333	2025	540	106.0	1.10	DD 7E4/14
	7.20	10.39	400/3/50	5/8	1 3/8	3/4 BSP	615	1693	1330	625	109.0	1.15	DD 7G2/13
	10.80	15.59	400/3/50	5/8	1 3/8	1 1/4 BSP	615	2343	1980	625	125.0	1.57	DD 7G3/17
	10.80	15.59	400/3/50	5/8	1 3/8	3/4 BSP	690	1693	1330	625	125.0	1.27	DD 7J2/19
	10.80	15.59	400/3/50	7/8	1 5/8	1 1/4 BSP	615	2343	1980	625	141.0	1.57	DD 7G3/21
	16.20	23.38	400/3/50	7/8	1 5/8	1 1/4 BSP	690	2343	1980	625	175.0	2.05	DD 7J3/25
	12.60	18.19	400/3/50	7/8	1 5/8	3/4 BSP	765	2123	1710	690	173.0	1.82	DD 7L2/26
	16.80	24.24	400/3/50	7/8	1 5/8	3/4 BSP	765	2123	1710	690	198.0	1.82	DD 7L2/29
	18.00	25.98	400/3/50	7/8	1 5/8	1 1/4 BSP	690	2993	2630	625	228.0	2.19	DD 7J4/34
	18.00	25.98	400/3/50	1 1/8	2 1/8	1 1/4 BSP	765	2963	2550	690	239.0	2.52	DD 7L3/35
	18.00	25.98	400/3/50	1 1/8	2 1/8	1 1/4 BSP	765	2963	2550	690	248.0	2.52	DD 7L3/38
	24.00	2x17,32	400/3/50	2x7/8	2x1 5/8	1 1/4 BSP	765	2963	2550	690	288.0	2.52	DD 7L3/42
	30.00	2x21,65	400/3/50	2x7/8	2x1 5/8	1 1/4 BSP	765	3803	3390	690	354.0	3.22	DD 7L4/53

Seleção e Factores Selection and Factors

RCm		DTm [K]						
		10	9	8	7	6	5	4
TC °C	+5	1.352	1.217	1.082	0.947	0.813	0.707	0.588
	+2	1.250	1.125	1.000	0.893	0.772	0.665	0.539
	0	1.188	1.069	0.950	0.830	0.710	0.609	0.490
	-15	1.018	0.918	0.830	0.730	0.640	0.539	0.434
	-20	0.963	0.867	0.770	0.660	0.583	0.490	0.393
	-25	0.950	0.854	0.764	0.649	0.567	0.476	0.385
	-34					0.561	0.471	0.381

Nomenclatura		Nomenclature	
TC	Temperatura de câmara Room temperature	FC1	Factor de correcção do refrigerante Refrigerant correction factor
TE	Temperatura de evaporação Evaporating temperature	FC2	Factor de correcção do material das a Fin material correction factor
Q _{Sm}	Capacidade para selecção em DTm Selection capacity in Tdm	RCm	Factor de correcção para dados em D Correction factor for data in DTm
Q _{Om}	Capacidade corrigida em DTm Corrected capacity in Tdm		

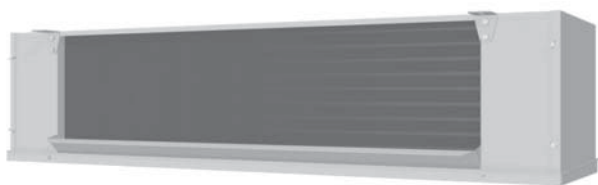
Dados de cálculo		Selection data	
Isolamento - Câmara de refrigerados Insulation - Chilling room	80mm PU		
Isolamento - Câmara de congelados Insulation - Freezing room	100mm PU		
Temperatura exterior Exterior temperature	+32°C		
Entrada diária (% capacidade da câmara) Daily rotation (room capacity's %)	10%		
Tempo de arrefecimento Cooling time	18h		
Tipo de uso Usage	Normal		

Capacidade corrigida		Corrected capacity	
DD 7G2/13 AR			
TC=-20°C			
DTm=5K			
R404A			
Al. rev. / Coated al.			
Q _{Om} = Q _{Sm} x RCm x FC1 x FC2 [kW]			
Q _{Om} = 13,04 kW x 0,490 x 1 x			
x 0,97 = 6,20 kW			

Câmara refrigerados Chilling room (TC=0/+4°C - TE=-6/-7°C)			Câmara congelados Freezing room (TC=-18/-20°C - TE=-25/-27°C)		
Volume Volume	Capacidade Capacity	Modelo Type	Volume Volume	Capacidade Capacity	Modelo Type
m³	kW		m³	kW	
9 - 10	1.5	7C1/2	9 - 10	1.2	7C1/2
15 - 17	1.9	7C1/3	13 - 15	1.5	7C1/3
24 - 27	2.3	7E1/4	20 - 23	2.2	7E1/4
35 - 40	3.4	7C2/5	30 - 34	2.7	7C2/5
45 - 51	3.7	7C2/5	45 - 51	3.2	7C2/6
50 - 57	4.3	7C2/6	55 - 63	4.4	7E2/7
62 - 71	4.9	7E2/7	80 - 92	5.2	7E2/8
80 - 92	6.1	7E2/8	92 - 120	6.2	7E3/11
90 - 100	6.6	7C3/9	120 - 135	7.0	7E3/12
120 - 135	7.7	7E3/11	150 - 170	7.5	7G2/13
145 - 165	9.4	7E3/12	180 - 210	9.2	7E4/14
180 - 205	10.9	7E4/14	225 - 255	11.1	7J2/19
240 - 275	13.0	7J2/19	290 - 330	14.1	7J3/25
300 - 345	16.8	7G3/21	480 - 550	17.9	7L2/29
340 - 390	17.5	7J3/25	550 - 660	20.0	7J4/34
400 - 460	18.9	7L2/26	660 - 760	23.1	7L3/38
450 - 515	23.0	7L2/29	800 - 920	26.8	7L3/42
520 - 595	26.0	7L3/35	990 - 1135	31.1	7L4/53
620 - 710	27.1	7L3/38	1200 - 1380	37.4	2x 7L2/29
700 - 805	33.0	7L3/42	1360 - 1565	41.5	2x 7L3/35
820 - 940	37.0	7L4/53	1680 - 1930	46.2	2x 7L3/38
1015 - 1170	42.9	2x 7L2/29	2000 - 2300	53.6	2x 7L3/42
1080 - 1240	49.2	2x 7L3/35	2300 - 2645	62.2	2x 7L4/53
1260 - 1450	55.5	2x 7L3/38	2800 - 3220	69.3	3x 7L3/38
1480 - 1700	64.3	2x 7L3/42	3150 - 3620	80.4	3x 7L3/42
1680 - 1930	73.8	2x 7L4/53	3800 - 4370	93.3	3x 7L4/53

FC2	Aluminio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor	1.00	0.97	1.03

FC1	TE [°C]					
	+5	0	-5	-10	-25	-35
R404A / R507	1.00	1.00	1.00	1.00	1.00	1.00
R134a	1.02	1.00	0.98	0.95		
R22 (DT1≤8K)		0.98	1.00	1.00	1.02	1.04
R22 (DT1>8K)		1.02	1.02	1.02	1.04	1.06

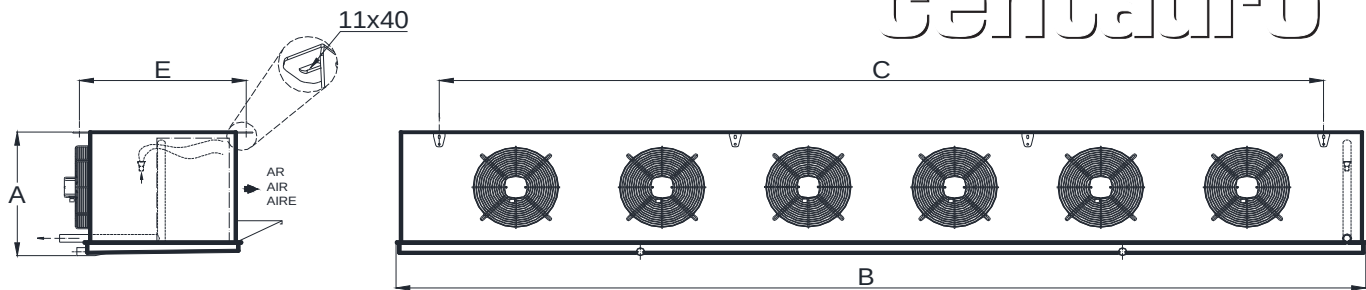


Modelo Type	Capacidade QSm (1) Capacity QSm (1)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	
	kW	m²	dm³		mm	m³/h	m	rpm	W	A	V / F / Hz	
TFC 7U1/2	2.59	26.76	5.20	1	350	2250	16	1390	190	0.40	400/3/50	
TFC 7U2/5	5.25	53.50	10.40	2	350	4500	16	1390	380	0.80	400/3/50	
TFC 7V2/6	6.66	67.96	13.20	2	400	5500	18	1360	460	0.92	400/3/50	
TFC 7U3/7	7.93	80.30	14.90	3	350	6750	16	1390	570	1.20	400/3/50	
TFC 7X2/8	8.20	84.95	16.60	2	450	7000	18	1280	700	1.28	400/3/50	
TFC 7Z1/9	9.70	93.40	17.30	1	560	9000	26	1220	1000	1.80	400/3/50	
TFC 7V3/9	9.96	100.35	19.00	3	400	8250	18	1360	690	1.38	400/3/50	
TFC 7U4/10	10.60	107.30	20.70	4	350	9000	16	1390	760	1.60	400/3/50	
TFC 7X2/11	11.30	105.80	19.20	2	450	11000	22	1320	1080	2.20	400/3/50	
TFC 7Z1/11	11.92	124.75	23.70	1	560	8500	26	1220	1000	1.80	400/3/50	
TFC 7X3/12	12.55	130.33	25.00	3	450	10500	18	1280	1050	1.92	400/3/50	
TFC 7V4/13	13.37	135.90	26.30	4	400	11000	18	1360	920	1.84	400/3/50	
TFC 7U5/13	13.40	138.75	26.85	5	350	11250	16	1390	950	2.00	400/3/50	
TFC 7X2/13	13.90	141.60	27.40	2	450	10500	22	1320	1080	2.20	400/3/50	
TFC 7Y2/15	15.50	140.10	27.10	2	500	15000	24	1340	1540	3.40	400/3/50	
TFC 7U6/15	15.90	160.60	31.10	6	350	13500	16	1390	1140	2.40	400/3/50	
TFC 7V5/16	16.49	165.25	32.00	5	400	13750	18	1360	1150	2.30	400/3/50	
TFC 7X4/16	16.50	169.90	32.90	4	450	14000	18	1280	1400	2.56	400/3/50	
TFC 7X3/17	17.20	159.10	30.15	3	450	16500	22	1320	1620	3.30	400/3/50	
TFC 7U7/18	18.76	172.99	33.18	7	350	15750	16	1390	1330	2.80	400/3/50	
TFC 7Y2/19	19.10	186.88	36.20	2	500	14500	24	1340	1540	3.40	400/3/50	

(1) Entrada de Ar: +1,2°C, 90% HR / Temperatura de evaporação: -5°C Air in: +1,2°C, 90% HR / Evaporating Temperature: -5°C

Modelo Type	Preço sem resistências Price without heaters	Preço com resistências Price with heaters	Opções Options										
			/GM Desc. gás quente GM hot gas defrost	/GE Desc. gás quente GE hot gas defrost	/GT Desc. gás quente GT hot gas defrost	/W Descongelação água Water defrost	AR Alhetas revestidas Coated fins	BL Lacado branco White painted	BI Chaparia Inox Stainless steel casing	TI Tab. esgoto isol. Insul. drain pan	BR Bateria resistências Heater coil	RG Resistências gola Fan heaters	AS Adaptador Conduas Air Sock Adapter
	EUR		EUR										
TFC 7U1/2	•	•	SP	SP	SP	•	•	S	SP	•	SP	-	-
TFC 7U2/5	•	•	SP	SP	SP	•	•	S	SP	•	SP	-	-
TFC 7V2/6	•	•	SP	SP	SP	•	•	S	SP	•	SP	-	-
TFC 7U3/7	•	•	SP	SP	SP	•	•	S	SP	•	SP	-	-
TFC 7X2/8	•	•	SP	SP	SP	•	•	S	SP	•	SP	-	-
TFC 7Z1/9	•	•	SP	SP	SP	•	•	S	SP	•	SP	-	-
TFC 7V3/9	•	•	SP	SP	SP	•	•	S	SP	•	SP	-	-
TFC 7U4/10	•	•	SP	SP	SP	•	•	S	SP	•	SP	-	-
TFC 7X2/11	•	•	SP	SP	SP	•	•	S	SP	•	SP	-	-
TFC 7Z1/11	•	•	SP	SP	SP	•	•	S	SP	•	SP	-	-
TFC 7X3/12	•	•	SP	SP	SP	•	•	S	SP	•	SP	-	-
TFC 7V4/13	•	•	SP	SP	SP	•	•	S	SP	•	SP	-	-
TFC 7U5/13	•	•	SP	SP	SP	•	•	S	SP	•	SP	-	-
TFC 7X2/13	•	•	SP	SP	SP	•	•	S	SP	•	SP	-	-
TFC 7Y2/15	•	•	SP	SP	SP	•	•	S	SP	•	SP	-	-
TFC 7U6/15	•	•	SP	SP	SP	•	•	S	SP	•	SP	-	-
TFC 7V5/16	•	•	SP	SP	SP	•	•	S	SP	•	SP	-	-
TFC 7X4/16	•	•	SP	SP	SP	•	•	S	SP	•	SP	-	-
TFC 7X3/17	•	•	SP	SP	SP	•	•	S	SP	•	SP	-	-
TFC 7U7/18	•	•	SP	SP	SP	•	•	S	SP	•	SP	-	-
TFC 7Y2/19	•	•	SP	SP	SP	•	•	S	SP	•	SP	-	-

S Standard
S StandardSP Sob pedido
SP Under request



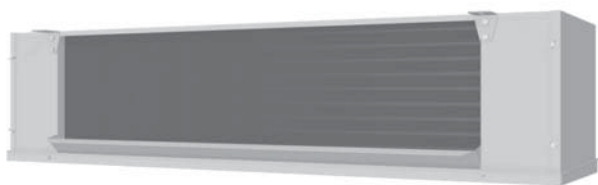
	Resistências do evaporador Cooler heaters			Ligações standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain							
	kW	A	V / F / Hz	in			mm						
	2.64	3.81	400/3/50	5/8	5/8	3/4"	570	1160	660	718	48.0	0.91	TFC 7U1/2
	4.80	6.93	400/3/50	5/8	7/8	3/4"	570	1790	1290	718	81.0	1.37	TFC 7U2/5
	7.20	10.39	400/3/50	5/8	1 1/8	3/4"	570	2130	1630	748	87.0	1.67	TFC 7V2/6
	9.00	12.99	400/3/50	5/8	1 1/8	3/4"	570	2420	1920	718	113.0	1.83	TFC 7U3/7
	10.80	15.59	400/3/50	5/8	1 3/8	3/4"	690	2130	1630	848	189.0	2.13	TFC 7X2/8
	9.60	13.86	400/3/50	5/8	1 3/8	3/4"	930	1810	1310	983	147.0	2.60	TFC 7Z1/9
	10.50	15.16	400/3/50	5/8	1 3/8	2 x 3/4"	570	2930	2430	748	126.0	2.27	TFC 7V3/9
	9.60	13.86	400/3/50	5/8	1 3/8	2 x 3/4"	570	2750	2250	718	146.0	2.07	TFC 7U4/10
	14.40	20.78	400/3/50	7/8	1 3/8	3/4"	690	2530	2030	848	162.0	2.51	TFC 7X2/11
	12.00	17.32	400/3/50	7/8	1 3/8	3/4"	930	1810	1310	983	528.0	2.60	TFC 7Z1/11
	15.75	22.73	400/3/50	7/8	1 3/8	2 x 3/4"	690	2930	2430	848	189.0	2.89	TFC 7X3/12
	13.80	19.92	400/3/50	7/8	1 3/8	2 x 3/4"	570	3730	3230	748	166.0	2.87	TFC 7V4/13
	13.80	19.92	400/3/50	7/8	1 3/8	2 x 3/4"	570	3680	3180	718	228.0	2.74	TFC 7U5/13
	19.20	27.71	400/3/50	7/8	1 5/8	3/4"	690	2530	2030	848	189.0	2.51	TFC 7X2/13
	18.90	27.28	400/3/50	7/8	1 5/8	3/4"	810	2730	2230	848	195.0	3.05	TFC 7Y2/15
	17.40	25.11	400/3/50	7/8	1 5/8	2 x 3/4"	570	4310	3810	718	211.0	3.20	TFC 7U6/15
	16.80	24.25	400/3/50	7/8	1 5/8	2 x 3/4"	570	4530	4030	748	207.0	3.47	TFC 7V5/16
	20.70	29.88	400/3/50	7/8	1 5/8	2 x 3/4"	690	3730	3230	848	270.0	3.65	TFC 7X4/16
	19.80	28.58	400/3/50	7/8	2 1/8	2 x 3/4"	690	3530	3030	848	232.0	3.46	TFC 7X3/17
	19.20	27.71	400/3/50	7/8	2 1/8	3 x 3/4"	570	4940	4440	718	247.0	3.66	TFC 7U7/18
	25.20	36.37	400/3/50	7/8	2 1/8	3/4"	810	2730	2230	848	229.0	3.05	TFC 7Y2/19

■ Aplicações: Câmaras de frutas e legumes

■ Para condições de funcionamento diferentes das nominais, por favor contactar a Centauro.

■ Application: Fruit and vegetable rooms

■ For other operating conditions please contact Centauro.



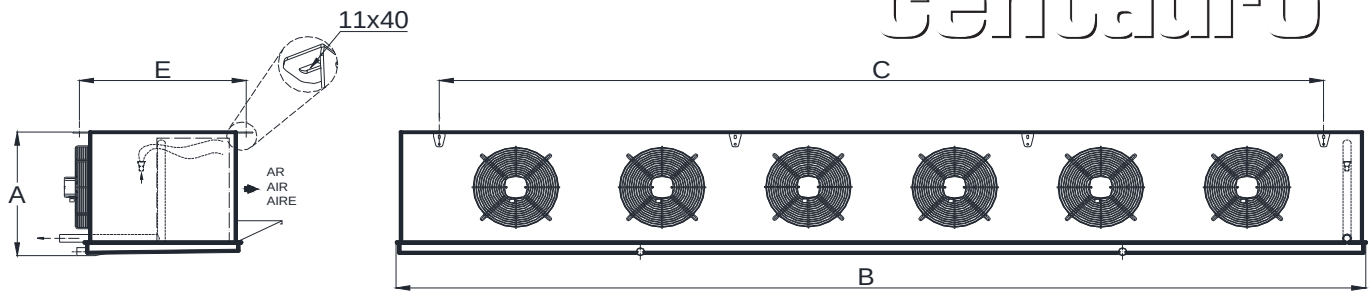
Modelo Type	Capacidade QSm (1) Capacity QSm (1)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	
	kW	m²	dm³		mm	m³/h	m	rpm	W	A	V / F / Hz	
TFC 722/19	19.60	187.30	36.30	2	560	18000	26	1220	2000	3.60	400/3/50	
TFC 7V6/20	20.00	203.87	39.50	6	400	16500	18	1360	1380	2.76	400/3/50	
TFC 7X5/20	20.47	208.94	40.45	5	450	17500	18	1280	1750	3.20	400/3/50	
TFC 7U8/21	21.20	214.00	41.40	8	350	18000	16	1390	1520	3.20	400/3/50	
TFC 7X3/21	21.20	212.40	41.10	3	450	15750	22	1320	1620	3.30	400/3/50	
TFC 7X4/23	23.30	212.40	41.10	4	450	22000	22	1320	2160	4.40	400/3/50	
TFC 7Y3/23	23.30	233.60	45.20	3	500	22500	24	1340	2310	5.10	400/3/50	
TFC 7Z2/23	23.30	249.75	48.40	2	560	17000	26	1220	2000	3.60	400/3/50	
TFC 7X6/25	25.20	254.80	49.30	6	450	21000	18	1280	2100	3.84	400/3/50	
TFC 7X4/28	28.10	283.16	54.80	4	450	21000	22	1320	2160	4.40	400/3/50	
TFC 7X5/28	28.80	265.46	51.40	5	450	27500	22	1320	2700	5.50	400/3/50	
TFC 7Y3/28	28.80	280.30	54.30	3	500	21750	24	1340	2310	5.10	400/3/50	
TFC 7Z3/29	29.20	280.20	51.80	3	560	27000	26	1220	3000	5.40	400/3/50	
TFC 7Y4/31	31.10	280.30	54.30	4	500	30000	24	1340	3080	6.80	400/3/50	
TFC 7X5/35	35.25	353.50	66.80	5	450	26250	22	1320	2700	5.50	400/3/50	
TFC 7Z3/35	35.90	374.62	72.50	3	560	25500	26	1220	3000	5.40	400/3/50	
TFC 7Y4/37	37.20	373.77	72.40	4	500	29000	24	1340	3080	6.80	400/3/50	
TFC 7Y5/39	39.00	350.40	67.80	5	500	37500	24	1340	3850	8.50	400/3/50	
TFC 7Z4/39	39.40	374.60	72.50	4	560	36000	26	1220	4000	7.20	400/3/50	
TFC 7Y5/47	47.10	467.21	90.50	5	500	36250	24	1340	3850	8.50	400/3/50	
TFC 7Z4/47	47.60	498.50	93.30	4	560	34000	26	1220	4000	7.20	400/3/50	

(1) Entrada de Ar: +1,2°C, 90% HR / Temperatura de evaporação: -5°C Air in: +1,2°C, 90% HR / Evaporating Temperature: -5°C

Modelo Type	Preço sem resistências Price without heaters	Preço com resistências Price with heaters	Opções Options																
			Desc. gás quente GM GM hot gas defrost	/GM	Desc. gás quente GE GE hot gas defrost	/GE	Desc. gás quente GT GT hot gas defrost	/GT	Desc. água Descongelação água Water defrost	/W	Alhetas revestidas Coated fins	AR	Lacado branco White painted	BL	BI Chaparia Inox Stainless steel casing	TI Tab. esgoto isol. Insul. drain pan	BR Bateria resistências Heater coil	RG Resistências gola Fan heaters	AS Adaptador Conduas Air Sock Adapter
EUR	EUR																		
TFC 722/19	•	•	SP		SP		SP		•		•		S	SP	•	SP		-	-
TFC 7V6/20	•	•	SP		SP		SP		•		•		S	SP	•	SP		-	-
TFC 7X5/20	•	•	SP		SP		SP		•		•		S	SP	•	SP		-	-
TFC 7U8/21	•	•	SP		SP		SP		•		•		S	SP	•	SP		-	-
TFC 7X3/21	•	•	SP		SP		SP		•		•		S	SP	•	SP		-	-
TFC 7X4/23	•	•	SP		SP		SP		•		•		S	SP	•	SP		-	-
TFC 7Y3/23	•	•	SP		SP		SP		•		•		S	SP	•	SP		-	-
TFC 722/23	•	•	SP		SP		SP		•		•		S	SP	•	SP		-	-
TFC 7X6/25	•	•	SP		SP		SP		•		•		S	SP	•	SP		-	-
TFC 7X4/28	•	•	SP		SP		SP		•		•		S	SP	•	SP		-	-
TFC 7X5/28	•	•	SP		SP		SP		•		•		S	SP	•	SP		-	-
TFC 7Y3/28	•	•	SP		SP		SP		•		•		S	SP	•	SP		-	-
TFC 7Z3/29	•	•	SP		SP		SP		•		•		S	SP	•	SP		-	-
TFC 7Y4/31	•	•	SP		SP		SP		•		•		S	SP	•	SP		-	-
TFC 7X5/35	•	•	SP		SP		SP		•		•		S	SP	•	SP		-	-
TFC 7Z3/35	•	•	SP		SP		SP		•		•		S	SP	•	SP		-	-
TFC 7Y4/37	•	•	SP		SP		SP		•		•		S	SP	•	SP		-	-
TFC 7Y5/39	•	•	SP		SP		SP		•		•		S	SP	•	SP		-	-
TFC 7Z4/39	•	•	SP		SP		SP		•		•		S	SP	•	SP		-	-
TFC 7Y5/47	•	•	SP		SP		SP		•		•		S	SP	•	SP		-	-
TFC 7Z4/47	•	•	SP		SP		SP		•		•		S	SP	•	SP		-	-

S Standard
S StandardSP Sob pedido
SP Under request

centauro



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain	A	B	C	E			
	kW	A	V / F / Hz		in		mm				kg	m ³	
	19.20	27.71	400/3/50	7/8	2 1/8	3/4"	930	3070	2570	983	254.0	4.31	TFC 7Z2/19
	21.00	30.31	400/3/50	7/8	2 1/8	3 x 3/4"	570	5330	4830	748	248.0	4.07	TFC 7V6/20
	25.20	36.37	400/3/50	7/8	2 1/8	2 x 3/4"	690	4530	4030	848	351.0	4.42	TFC 7X5/20
	23.40	33.77	400/3/50	7/8	2 1/8	3 x 3/4"	570	5570	5070	718	280.0	4.11	TFC 7U8/21
	26.40	38.11	400/3/50	7/8	2 1/8	2 x 3/4"	690	3530	3030	848	270.0	3.46	TFC 7X3/21
	25.20	36.37	400/3/50	7/8	2 1/8	2 x 3/4"	690	4530	4030	848	301.0	4.42	TFC 7X4/23
	22.50	32.48	400/3/50	7/8	2 1/8	2 x 3/4"	810	3830	3330	848	278.0	4.24	TFC 7Y3/23
	24.00	34.64	400/3/50	7/8	2 1/8	3/4"	930	3070	2570	983	297.0	4.31	TFC 7Z2/23
	31.50	45.47	400/3/50	7/8	2 1/8	3 x 3/4"	690	5330	4830	848	435.0	5.18	TFC 7X6/25
	33.60	48.5	400/3/50	7/8	2 1/8	2 x 3/4"	690	4530	4030	848	351.0	4.42	TFC 7X4/28
	32.40	46.77	400/3/50	7/8	2 1/8	3 x 3/4"	690	5530	5030	848	372.0	5.37	TFC 7X5/28
	30.00	43.3	400/3/50	7/8	2 1/8	2 x 3/4"	810	3830	3330	848	328.0	4.24	TFC 7Y3/28
	34.80	50.23	400/3/50	1 1/8	2 1/8	2 x 3/4"	930	4330	3830	983	369.0	6.03	TFC 7Z3/29
	34.20	49.36	400/3/50	1 1/8	2 1/8	2 x 3/4"	810	4930	4430	848	363.0	5.43	TFC 7Y4/31
	43.20	62.35	400/3/50	1 1/8	2 5/8	3 x 3/4"	690	5530	5030	848	435.0	5.37	TFC 7X5/35
	43.50	62.79	400/3/50	1 1/8	2 5/8	2 x 3/4"	930	4330	3830	983	435.0	6.03	TFC 7Z3/35
	45.60	65.82	400/3/50	1 1/8	2 5/8	2 x 3/4"	810	4930	4430	848	428.0	5.43	TFC 7Y4/37
	39.60	57.16	400/3/50	1 1/8	2 5/8	3 x 3/4"	810	6030	5530	848	449.0	6.62	TFC 7Y5/39
	46.80	67.55	400/3/50	1 1/8	2 5/8	2 x 3/4"	930	5590	5090	983	497.0	7.74	TFC 7Z4/39
	58.80	84.87	400/3/50	1 1/8	2 5/8	3 x 3/4"	810	6030	5530	848	528.0	6.62	TFC 7Y5/47
	52.80	76.21	400/3/50	1 1/8	2 5/8	2 x 3/4"	930	5590	5090	983	582.0	7.74	TFC 7Z4/47





Aplicações preferenciais: Salas de trabalho, cais de embarque com ou sem condutas de distribuição de ar.
 Main applications: Work areas, loading docks with or without air socks.

Modelo Type	Capacidade Qs1 Capacity Qs1 (Tse=+10°C / DT1=10K)	Pressão estática disponível Available static pressure	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans Ventiladores									
					Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	Pa	m ²	dm ³		mm	m ³ /h	m	rpm	W	A	V / F / Hz	dB(A)	
MTA 4M1/18	17.91		69.21	8.20	1	500	7100	20	1330	790	1.45	400/3/50	60	
MTA 4P1/26	25.69		101.75	12.10	1	560	9800	25	1220	1000	1.80	400/3/50	64	
MTA 4T1/50	49.86		193.80	23.00	1	800	20000	37	890	1800	3.90	400/3/50	60	
MTA 4T1/61	60.99		290.70	34.50	1	800	18900	37	890	1800	3.90	400/3/50	60	
MTA 4S3/84	83.84		348.84	41.40	3	710	34800	32	900	2820	5.25	400/3/50	63	
MTA 4T2/100	100.24		387.60	46.10	2	800	40000	37	890	3600	7.80	400/3/50	63	
MTA 4T2/122	122.44		581.40	69.10	2	800	37800	37	890	3600	7.80	400/3/50	63	
MTA 4T2/134	133.82		775.20	92.10	2	800	35800	37	890	3600	7.80	400/3/50	63	
MTA 4T3/170	170.33		872.10	103.60	3	800	56700	37	890	5400	11.70	400/3/50	65	
MTA 4T3/190	189.61		1162.80	138.20	3	800	53700	37	890	5400	11.70	400/3/50	65	

DADOS EM APLICAÇÃO DE CONDUTAS / DUCT APPLICATION (MTA .../AS)

MTA 4M1/18 AS	14.96	105	69.21	8.20	1	500	5400		1330	790	1.45	400/3/50	60	
MTA 4P1/26 AS	20.77	110	101.75	12.10	1	560	7200		1220	1000	1.80	400/3/50	64	
MTA 4T1/50 AS	41.03	105	193.80	23.00	1	800	14800		890	1800	3.90	400/3/50	60	
MTA 4T1/61 AS	47.58	105	290.70	34.50	1	800	13500		890	1800	3.90	400/3/50	60	
MTA 4S3/84 AS	63.31	105	348.84	41.40	3	710	21600		900	2820	5.25	400/3/50	63	
MTA 4T2/100 AS	82.36	105	387.60	46.10	2	800	29600		890	3600	7.80	400/3/50	63	
MTA 4T2/122 AS	95.40	105	581.40	69.10	2	800	27000		890	3600	7.80	400/3/50	63	
MTA 4T2/134 AS	100.02	100	775.20	92.10	2	800	25000		890	3600	7.80	400/3/50	63	
MTA 4T3/170 AS	136.11	105	872.10	103.60	3	800	40500		890	5400	11.70	400/3/50	65	
MTA 4T3/190 AS	144.76	100	1162.80	138.20	3	800	37500		890	5400	11.70	400/3/50	65	

(1) Pressão sonora a 3m, em campo livre sem reflexões Sound pressure level at 3m, in free field conditions, without reflections

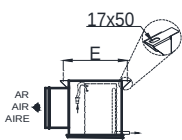
Modelo Type	Preço sem resistências Price without heaters	Preço com bateria de resistências BR Price with heater coil BR	Opções Options										
			/GM	/GE	/GT	/W	AR	BL	BI	TI	RG	AS	
			Desc. gás quente GM GM hot gas defrost	Desc. gás quente GE GE hot gas defrost	Desc. gás quente GT GT hot gas defrost	Descongelamento água Water defrost	Alhetas revestidas Coated fins	Lacado branco White painted	Chaparia Inox Stainless steel casing	Tab. esgoto isol. Insul. drain pan	Resistências gola Fan heaters	Adaptador Condutas Air Sock Adapter	
	EUR		EUR										
MTA 4M1/18	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4P1/26	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4T1/50	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4T1/61	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4S3/84	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4T2/100	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4T2/122	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4T2/134	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4T3/170	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4T3/190	•	•	•	•	•	•	•	•	•	•	•	•	
PREÇOS EM APLICAÇÃO DE CONDUTAS / DUCT APPLICATION (MTA .../AS)													
MTA 4M1/18 AS	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4P1/26 AS	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4T1/50 AS	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4T1/61 AS	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4S3/84 AS	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4T2/100 AS	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4T2/122 AS	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4T2/134 AS	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4T3/170 AS	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4T3/190 AS	•	•	•	•	•	•	•	•	•	•	•	•	

PREÇOS EM APLICAÇÃO DE CONDUTAS / DUCT APPLICATION (MTA .../AS)

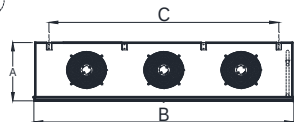
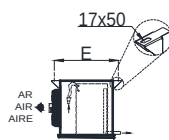
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MTA 4P1/26 AS	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4T1/50 AS	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4T1/61 AS	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4S3/84 AS	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4T2/100 AS	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4T2/122 AS	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4T2/134 AS	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4T3/170 AS	•	•	•	•	•	•	•	•	•	•	•	•	
MTA 4T3/190 AS	•	•	•	•	•	•	•	•	•	•	•	•	

S Standard SP Sob pedido
 S Standard SP Under request

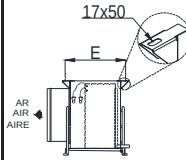
Ø500 / 560 mm
MTA ... AS



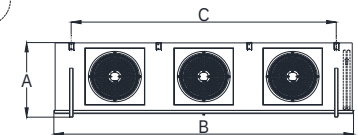
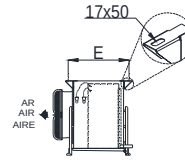
MTA



Ø710 / 800 mm
MTA ... AS



MTA



	Dados eléctricos resistências Heaters electrical data			Ligações standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain							
	kW	A	V / F / Hz		in		mm						
	5.16	7,45	400/3/50	5/8	1 3/8	3/4 BSP	840	1450	1050	615	104.0	0.90	MTA 4M1/18
	7.20	10,39	400/3/50	5/8	1 5/8	3/4 BSP	960	1710	1310	615	136.0	1.19	MTA 4P1/26
	16.20	2x11,69	400/3/50	7/8	2 1/8	2 BSP	1365	2230	1730	735	297.0	3.60	MTA 4T1/50
	20.25	2x14,62	400/3/50	7/8	2 1/8	2 BSP	1365	2230	1730	940	342.0	3.60	MTA 4T1/61
	26.10	25,11+12,5	400/3/50	1 1/8	2 1/8	2 BSP	1365	4330	3830	670	483.0	5.46	MTA 4S3/84
	30.36	2x21,91	400/3/50	1 1/8	2 5/8	2 BSP	1365	3910	3410	735	541.0	6.24	MTA 4T2/100
	37.95	2x21,91+10,96	400/3/50	2x7/8	2x2 1/8	2 BSP	1365	3910	3410	940	634.0	6.24	MTA 4T2/122
	45.54	3x21,91	400/3/50	2x1 1/8	2x2 1/8	2 BSP	1365	3910	3410	940	721.0	6.24	MTA 4T2/134
	58.50	5x16,89	400/3/50	2x1 1/8	2x2 5/8	2 BSP	1365	5590	5090	940	911.0	8.89	MTA 4T3/170
	70.20	6x16,89	400/3/50	2x1 1/8	2x2 5/8	2 BSP	1365	5590	5090	940	1040.0	8.89	MTA 4T3/190

DADOS EM APLICAÇÃO DE CONDUTAS / DUCT APPLICATION (MTA .../AS)

	5.16	7.45	400/3/50	5/8	1 3/8	3/4 BSP	840	1450	1050	615	104.0	0.90	MTA 4M1/18 AS
	7.20	10.39	400/3/50	5/8	1 5/8	3/4 BSP	960	1710	1310	615	136.0	1.19	MTA 4P1/26 AS
	16.20	2x11.69	400/3/50	7/8	2 1/8	2 BSP	1365	2230	1730	735	297.0	3.60	MTA 4T1/50 AS
	20.25	2x14.62	400/3/50	7/8	2 1/8	2 BSP	1365	2230	1730	940	342.0	3.60	MTA 4T1/61 AS
	26.10	25.11+12.5	400/3/50	1 1/8	2 1/8	2 BSP	1365	4330	3830	670	483.0	5.46	MTA 4S3/84 AS
	30.36	2x21.91	400/3/50	1 1/8	2 5/8	2 BSP	1365	3910	3410	735	541.0	6.24	MTA 4T2/100 AS
	37.95	2x21.91+10.96	400/3/50	2x7/8	2x2 1/8	2 BSP	1365	3910	3410	940	634.0	6.24	MTA 4T2/122 AS
	45.54	3x21.91	400/3/50	2x1 1/8	2x2 1/8	2 BSP	1365	3910	3410	940	721.0	6.24	MTA 4T2/134 AS
	58.50	5x16.89	400/3/50	2x1 1/8	2x2 5/8	2 BSP	1365	5590	5090	940	911.0	8.89	MTA 4T3/170 AS
	70.20	6x16.89	400/3/50	2x1 1/8	2x2 5/8	2 BSP	1365	5590	5090	940	1040.0	8.89	MTA 4T3/190 AS

Seleção e Factores Selection and Factors

RC1		DT1 [K]												
		16	15	14	13	12	11	10	9	8	7	6	5	4
Tse [°C]	+16	1.762	1.652	1.469	1.322	1.220	1.119	1.018	0.916	0.805	0.703	0.604	0.499	0.402
	+14	1.750	1.640	1.458	1.458	1.211	1.111	1.010	0.909	0.800	0.698	0.600	0.496	0.399
	+12	1.737	1.628	1.447	1.447	1.203	1.102	1.003	0.902	0.794	0.694	0.595	0.493	0.397
	+10	1.723	1.616	1.436	1.436	1.193	1.094	1.000	0.895	0.788	0.689	0.591	0.490	0.394
	+8	1.713	1.606	1.427	1.427	1.186	1.087	0.979	0.881	0.782	0.684	0.587	0.487	0.391
	+6	1.700	1.594	1.417	1.417	1.177	1.078	0.971	0.874	0.776	0.679	0.582	0.485	0.387
	+4	1.685	1.580	1.405	1.405	1.167	1.070	0.963	0.867	0.771	0.674	0.578	0.482	0.385

FC1		TE [°C]			
		+5	0	-5	-10
R404A / R507		1.00	1.00	1.00	1.00
R134a		1.02	1.00	0.98	0.95
R22 (DT1≤8K)			0.98	1.00	1.00
R22 (DT1>8K)			1.02	1.02	1.02

FC2		Alumínio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor		1.00	0.97	1.03

Capacidade corrigida Corrected capacity

MTA 4T2/122 Tse=+14°C DT1=10K R134a Alumínio / Aluminium	$Q_{01} = Q_{S1} \times RC1 \times FC1 \times FC2 \text{ [kW]}$ $Q_{01} = 122,4 \text{ kW} \times 1,010 \times 0,97 \times 1 = 119,9 \text{ kW}$
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Nomenclatura Nomenclature

TC	Temperatura de câmara Room temperature	Q ₀₁	Capacidade corrigida em DT1 Corrected capacity in DT1
TE	Temperatura de evaporação Evaporating temperature	FC1	Factor de correcção do refrigerante Refrigerant correction factor
Tse	Temperatura seca de entrada de ar BS Air on DB	FC2	Factor de correcção do material das alhetas Fin material correction factor
Q _{S1}	Capacidade para selecção em DT1 Selection capacity in DT1	RC1	Factor de correcção para dados em DT1 Correction factors for data in DT1

Dados de cálculo

Selection data

Altura da sala Room height	3,2m
Temp. exterior Exterior temp.	+32°C
Máquinas Machinery	nenhuma none
Ocupação (pessoas/m2) Occupation (persons/m2)	1P/4m ²
Iluminação Lighting	25W/m ²

Sala climatizada com isolamento Processing room with insulation (TC=+10/+12°C)

Volume Volume	Capacidade Capacity	Modelo Type	
m³	kW		
480 - 530	18.0	4M1/18	
660 - 730	25.0	4P1/26	
960 - 1060	36.0	2x 4M1/18	
1330 - 1460	50.0	4T1/50	2x 4P1/26
1600 - 1760	60.0	4T1/61	4x 4M1/18
2130 - 2350	80.0	4S3/84	3x 4P1/26
2660 - 2920	100.0	4T2/100	2x 4T1/50
3200 - 3520	120.0	4T2/122	2x 4T1/61
3470 - 3820	130.0	4T2/134	3x 4T1/50
3990 - 4380	150.0	2x 4S3/84	3x 4T1/50
4520 - 4970	170.0	4T3/170	3x 4T1/61
5050 - 5560	190.0	4T3/190	4x 4T1/50
MTA ... AS			
370 - 410	14.0	4M1/18 AS	
480 - 530	18.0	4P1/26 AS	
660 - 730	25.0	2x 4M1/18 AS	
960 - 1060	36.0	4T1/50 AS	2x 4P1/26 AS
1330 - 1460	50.0	4T1/61 AS	4x 4M1/18 AS
1600 - 1760	60.0	4S3/84 AS	3x 4P1/26 AS
2130 - 2350	80.0	4T2/100 AS	4x 4P1/26 AS
2660 - 2920	100.0	4T2/134 AS	2x 4T1/61 AS
3200 - 3520	120.0	2x 4S3/84 AS	3x 4T1/50 AS
3470 - 3820	130.0	4T3/170 AS	3x 4T1/50 AS
3990 - 4380	150.0	4T3/190 AS	3x 4T1/61 AS
4520 - 4970	170.0	2x 4T2/100 AS	3x 4S3/84 AS
5050 - 5560	190.0	3x 4S3/84 AS	4x 4T1/61 AS



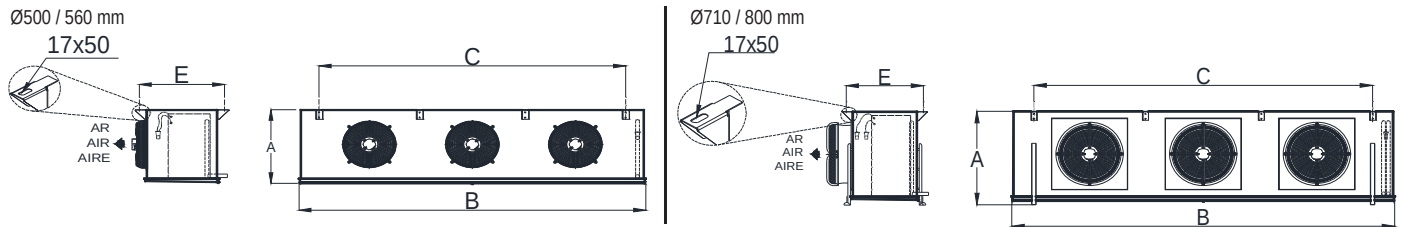
Aplicações preferenciais: Câmaras de refrigerados, em especial câmaras de frutas.
Main applications: Medium temperature cold rooms, especially fruit rooms.

Modelo Type	Capacidade QSm Capacity QSm (TC=+2°C / DTm=8K)	Capacidade Q0m Capacity Q0m (TC=-18°C / DTm=6K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans							
					Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS
	KW		m²	dm³		mm	m³/h	m	rpm	W	A	V / F / Hz
MTB 6M1/14	14.11		46.93	8.20	1	500	7200	21	1330	790	1.45	400/3/50
MTB 6P1/21	20.47		68.99	12.10	1	560	10000	26	1220	1000	1.80	400/3/50
MTB 6P1/25	24.57		103.48	18.10	1	560	9600	26	1220	1000	1.80	400/3/50
MTB 6M2/28	28.44		93.86	16.40	2	500	14400	21	1330	1580	2.90	400/3/50
MTB 6M2/34	34.07		140.79	24.70	2	500	13800	21	1330	1580	2.90	400/3/50
MTB 6P2/41	41.10		137.98	24.20	2	560	20000	26	1220	2000	3.60	400/3/50
MTB 6M3/43	42.79		140.79	24.70	3	500	21600	21	1330	2370	4.35	400/3/50
MTB 6P2/50	49.65		206.96	36.30	2	560	19200	26	1220	2000	3.60	400/3/50
MTB 6P3/59	58.47		206.96	36.30	3	560	30000	26	1220	3000	5.40	400/3/50
MTB 6M4/69	68.66		281.58	49.30	4	500	27600	21	1330	3160	5.80	400/3/50
MTB 6P3/75	74.72		310.45	54.40	3	560	28800	26	1220	3000	5.40	400/3/50
MTB 6T2/79	79.07		262.81	46.10	2	800	41600	38	890	3600	7.80	400/3/50
MTB 6S3/86	86.43		354.80	62.20	3	710	33600	33	900	2820	5.25	400/3/50
MTB 6T2/100	99.63		394.22	69.10	2	800	38600	38	890	3600	7.80	400/3/50
MTB 6T2/114	114.09		525.62	92.10	2	800	37000	38	890	3600	7.80	400/3/50
MTB 6T3/132	132.31		591.33	103.60	3	800	57900	38	890	5400	11.70	400/3/50
MTB 6T3/151	151.45		788.43	138.20	3	800	55500	38	890	5400	11.70	400/3/50

Modelo Type	Preço sem resistências Price without heaters	Preço com resistências Price with heaters	Opções Options												
			/GM Desc. gás quente GM hot gas defrost	/GE Desc. gás quente GE hot gas defrost	/GT Desc. gás quente GT hot gas defrost	/W Descongelamento água Water defrost	AR Alhetas revestidas Coated fins	BL Lacado branco White painted	BI Chaparia Inox Stainless steel casing	TI Tab. esgoto isol. Insul. drain pan	BR Bateria resistências Heater coil	RG Resistências gola Fan heaters	AS Adaptador Conduas Air Sock Adapter		
	EUR		EUR												
	MTB 6M1/14	•	•	•	•	•	•	•	•	•	•	•	SP	SP	•
MTB 6P1/21	•	•	•	•	•	•	•	•	•	•	•	•	SP	SP	•
MTB 6P1/25	•	•	•	•	•	•	•	•	•	•	•	•	SP	SP	•
MTB 6M2/28	•	•	•	•	•	•	•	•	•	•	•	•	SP	SP	•
MTB 6M2/34	•	•	•	•	•	•	•	•	•	•	•	•	SP	SP	•
MTB 6P2/41	•	•	•	•	•	•	•	•	•	•	•	•	SP	SP	•
MTB 6M3/43	•	•	•	•	•	•	•	•	•	•	•	•	SP	SP	•
MTB 6P2/50	•	•	•	•	•	•	•	•	•	•	•	•	SP	SP	•
MTB 6P3/59	•	•	•	•	•	•	•	•	•	•	•	•	SP	SP	•
MTB 6M4/69	•	•	•	•	•	•	•	•	•	•	•	•	SP	SP	•
MTB 6P3/75	•	•	•	•	•	•	•	•	•	•	•	•	SP	SP	•
MTB 6T2/79	•	•	•	•	•	•	•	•	•	•	•	•	SP	SP	•
MTB 6S3/86	•	•	•	•	•	•	•	•	•	•	•	•	SP	SP	•
MTB 6T2/100	•	•	•	•	•	•	•	•	•	•	•	•	SP	SP	•
MTB 6T2/114	•	•	•	•	•	•	•	•	•	•	•	•	SP	SP	•
MTB 6T3/132	•	•	•	•	•	•	•	•	•	•	•	•	SP	SP	•
MTB 6T3/151	•	•	•	•	•	•	•	•	•	•	•	•	SP	SP	•

S Standard
S Standard

SP Sob pedido
SP Under request



	Dados eléctricos resistências Heaters electrical data			Ligações standard Standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain							
	kW	A	V / F / Hz		in		A	B	C	E	kg	m³	
	5.16	7.45	400/3/50	5/8	1 3/8	3/4 BSP	840	1450	1050	615	103.0	0.90	MTB 6M1/14
	7.20	10.39	400/3/50	5/8	1 5/8	3/4 BSP	960	1710	1310	615	135.0	1.19	MTB 6P1/21
	9.60	13.86	400/3/50	7/8	1 5/8	3/4 BSP	960	1710	1310	850	173.0	1.62	MTB 6P1/25
	9.60	13.86	400/3/50	7/8	1 5/8	1 1/4 BSP	840	2450	2050	615	166.0	1.51	MTB 6M2/28
	14.40	20.78	400/3/50	7/8	2 1/8	1 1/4 BSP	840	2450	2050	850	215.0	2.05	MTB 6M2/34
	14.40	20.78	400/3/50	7/8	2 1/8	1 1/4 BSP	960	2970	2570	615	235.0	2.04	MTB 6P2/41
	13.20	19.05	400/3/50	1 1/8	2 1/8	1 1/4 BSP	840	3450	3050	615	234.0	2.11	MTB 6M3/43
	19.20	2x13.85	400/3/50	1 1/8	2 1/8	1 1/4 BSP	960	2970	2570	850	304.0	2.78	MTB 6P2/50
	21.60	20.79+10.39	400/3/50	1 1/8	2 1/8	2 BSP	960	4230	3830	615	338.0	2.90	MTB 6P3/59
	25.20	24.25+12.12	400/3/50	1 1/8	2 5/8	2 BSP	840	4450	4050	850	390.0	3.69	MTB 6M4/69
	28.80	2x20.79	400/3/50	1 1/8	2 5/8	2 BSP	960	4280	3830	850	442.0	3.98	MTB 6P3/75
	30.36	2x21.91	400/3/50	1 1/8	2 5/8	2 BSP	1365	3910	3410	735	537.0	6.24	MTB 6T2/79
	34.80	2x25.11	400/3/50	1 1/8	2 5/8	2 BSP	1125	4330	3830	875	532.0	5.46	MTB 6S3/86
	37.95	2x21.91+10.96	400/3/50	2x7/8	2x2 1/8	2 BSP	1365	3910	3410	940	627.0	6.24	MTB 6T2/100
	45.54	3x21.91	400/3/50	2x1 1/8	2x2 1/8	2 BSP	1365	3910	3410	940	711.0	6.24	MTB 6T2/114
	58.50	5x16.89	400/3/50	2x1 1/8	2x2 5/8	2 BSP	1365	5590	5090	940	901.0	8.89	MTB 6T3/132
	70.20	6x16.89	400/3/50	2x1 1/8	2x2 5/8	2 BSP	1365	5590	5090	940	1026.0	8.89	MTB 6T3/151

Seleção e Factores Selection and Factors

RCm		DTm [K]						
TC [°C]	+8	1.460	1.325	1.165	1.045	0.899	0.795	0.681
	+7	1.399	1.266	1.119	0.993	0.854	0.752	0.637
	+5	1.298	1.168	1.039	0.909	0.781	0.679	0.564
	+2	1.200	1.08	1.000	0.857	0.741	0.638	0.517
	0	1.140	1.026	0.912	0.797	0.682	0.585	0.470
	-2	1.111	1.001	0.909	0.794	0.680	0.582	0.466

FC1		TE [°C]			
R404A / R507 R134a R22 (DT1≤8K) R22 (DT1>8K)	+5	1.00	1.00	1.00	1.00
	0	1.02	1.00	0.98	0.95
	-5		0.98	1.00	1.00
	-10		1.02	1.02	1.02

FC2	Alumínio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor	1.00	0.97	1.03

Capacidade corrigida Corrected capacity	
MTB 6T2/100 TC=0°C DTm=6K R134a Alumínio / Aluminium	$Q_{om} = Q_{sm} \times RCm \times FC1 \times FC2 \text{ [kW]}$ $Q_{om} = 99,63 \text{ kW} \times 0,710 \times 0,97 \times 1 = 68,62 \text{ kW}$

Nomenclatura	Nomenclature
TC	Temperatura de câmara Room temperature
TE	Temperatura de evaporação Evaporating temperature
Q _{sm}	Capacidade para selecção em DTm Selection capacity in TDm
Q _{om}	Capacidade corrigida em DTm Corrected capacity in TDm
FC1	Factor de correcção do refrigerante Refrigerant correction factor
FC2	Factor de correcção do material das alhetas Fin material correction factor
RCm	Factor de correcção para dados em DTm Correction factor for data in DTm

Dados de cálculo Selection data	
Isolamento - Câmara de refrigerados Insulation - Chilling room	80mm PU
Isolamento - Câmara de congelados Insulation - Freezing room	100mm PU
Temperatura exterior Exterior temperature	+32°C
Entrada diária (% capacidade da câmara) Daily rotation (room capacity's %)	10%
Tempo de arrefecimento Cooling time	18h
Tipo de uso Usage	Normal

Câmara refrigerados Chilling room (TC=+2/+4°C - TE=-6/-7°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	kW	
145 - 165	9.5	6M1/14
180 - 280	14.0	6P1/21
300 - 345	16.5	6P1/25
370 - 425	18.9	6P1/25 6N2/28
430 - 520	24.1	6M2/34
520 - 595	27.1	6P2/41 6M3/43
675 - 775	33.0	6P2/50 2x 6P1/25
825 - 945	37.0	6P3/59 2x 6M2/28
945 - 1150	44.0	6M4/69 2x 6M2/34
1150 - 1320	49.2	6P3/75 2x 6M2/34
1340 - 1540	55.5	6T2/79 6S3/86
1560 - 1790	64.3	6T2/100 2x 6P2/50
1860 - 2140	73.8	6T2/114 2x 6P3/59
1980 - 2275	87.3	6T3/132 2x 6M4/69
2600 - 2990	98.4	6T3/151 2x 6P3/75
2900 - 3335	110.9	2x 6T2/79 4x 6P2/41
4000 - 4600	147.5	2x 6T2/114 4x 6P2/50



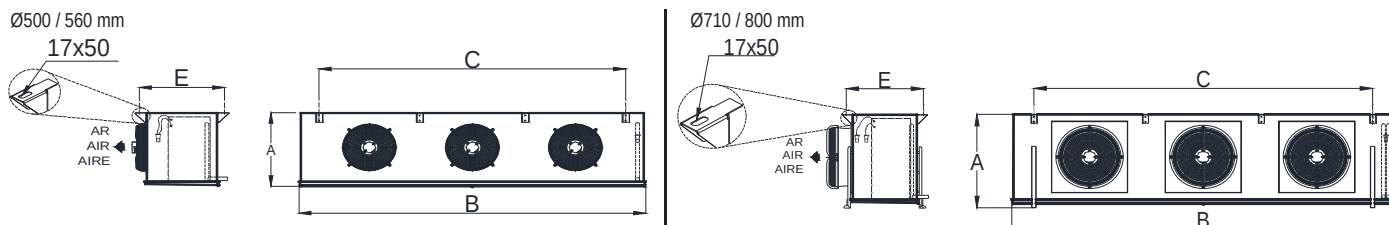
Aplicações preferenciais: Câmaras de congelados e refrigerados (produtos não embalados e serviço forte).
Main applications: Medium and low temperature cold rooms (unpacked products and heavy duty).

Modelo Type	Capacidade QSm Capacity QSm (TC=+2°C / DTm=8K)	Capacidade Q0m Capacity Q0m (TC=-18°C / DTm=6K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans							
					Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS
	KW		m²	dm³		mm	m³/h	m	rpm	W	A	V / F / Hz
DDC 8M1/11	11.33	6.86	37.90	8.20	1	500	7200	22	1330	790	1.45	400/3/50
DDC 8P1/17	17.22	10.43	55.72	12.10	1	560	10200	27	1220	1000	1.80	400/3/50
DDC 8P1/19	19.20	11.63	83.58	18.10	1	560	9600	27	1220	1000	1.80	400/3/50
DDC 8P1/22	22.09	13.38	111.44	24.20	1	560	9200	27	1220	1000	1.80	400/3/50
DDC 8S1/24	23.83	14.44	95.15	19.40	1	710	11300	34	900	940	1.75	400/3/50
DDC 8M2/30	30.25	18.33	113.71	24.70	2	500	13800	22	1330	1580	2.90	400/3/50
DDC 8P2/35	34.79	21.08	111.44	24.20	2	560	20400	27	1220	2000	3.60	400/3/50
DDC 8P2/39	39.25	23.78	167.16	36.30	2	560	19200	27	1220	2000	3.60	400/3/50
DDC 8S2/40	40.24	24.38	127.36	27.60	2	710	23800	34	900	1880	3.50	400/3/50
DDC 8M3/46	45.67	27.67	170.57	37.00	3	500	20700	22	1330	2370	4.35	400/3/50
DDC 8T1/46	46.19	27.98	212.26	46.10	1	800	18700	39	890	1800	3.90	400/3/50
DDC 8P3/59	59.33	35.95	250.74	54.40	3	560	28800	27	1220	3000	5.40	400/3/50
DDC 8T2/61	61.07	37.00	212.26	46.10	2	800	42000	39	890	3600	7.80	400/3/50
DDC 8P3/69	69.10	41.86	334.32	72.50	3	560	27600	27	1220	3000	5.40	400/3/50
DDC 8T2/80	79.69	48.28	318.40	69.10	2	800	39200	39	890	3600	7.80	400/3/50
DDC 8S3/80	79.76	48.32	382.07	82.90	3	710	32100	34	900	2820	5.25	400/3/50
DDC 8T2/94	93.53	56.67	424.53	92.10	2	800	37400	39	890	3600	7.80	400/3/50

Modelo Type	Preço sem resistências Price without heaters	Preço com resistências Price with heaters	Opções Options												
			/GM Desc. gás quente GM hot gas defrost	/GE Desc. gás quente GE hot gas defrost	/GT Desc. gás quente GT hot gas defrost	/W Descongelação água Water defrost	AR Alhetas revestidas Coated fins	BL Lacado branco White painted	BI Chaparia Inox Stainless steel casing	TI Tab. esgoto isol. Insul. drain pan	BR Bateria resistências Heater coil	RG Resistências gola Fan heaters	AS Adaptador Conduas Air Sock Adapter		
	EUR		EUR												
	DDC 8M1/11	•	•	•	•	•	•	•	•	•	•	•	SP	•	•
DDC 8P1/17	•	•	•	•	•	•	•	•	•	•	•	•	SP	•	•
DDC 8P1/19	•	•	•	•	•	•	•	•	•	•	•	•	SP	•	•
DDC 8P1/22	•	•	•	•	•	•	•	•	•	•	•	•	SP	•	•
DDC 8S1/24	•	•	•	•	•	•	•	•	•	•	•	•	SP	•	•
DDC 8M2/30	•	•	•	•	•	•	•	•	•	•	•	•	SP	•	•
DDC 8P2/35	•	•	•	•	•	•	•	•	•	•	•	•	SP	•	•
DDC 8P2/39	•	•	•	•	•	•	•	•	•	•	•	•	SP	•	•
DDC 8S2/40	•	•	•	•	•	•	•	•	•	•	•	•	SP	•	•
DDC 8M3/46	•	•	•	•	•	•	•	•	•	•	•	•	SP	•	•
DDC 8T1/46	•	•	•	•	•	•	•	•	•	•	•	•	SP	•	•
DDC 8P3/59	•	•	•	•	•	•	•	•	•	•	•	•	SP	•	•
DDC 8T2/61	•	•	•	•	•	•	•	•	•	•	•	•	SP	•	•
DDC 8P3/69	•	•	•	•	•	•	•	•	•	•	•	•	SP	•	•
DDC 8T2/80	•	•	•	•	•	•	•	•	•	•	•	•	SP	•	•
DDC 8S3/80	•	•	•	•	•	•	•	•	•	•	•	•	SP	•	•
DDC 8T2/94	•	•	•	•	•	•	•	•	•	•	•	•	SP	•	•

S Standard
S Standard

SP Sob pedido
SP Under request



	Dados eléctricos resistências Heaters electrical data			Ligações standard Standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain							
	kW	A	V / F / Hz	in			mm				kg	m³	
	5.16	7.45	400/3/50	5/8	1 3/8	3/4 BSP	840	1450	1050	615	108.0	0.90	DDC 8M1/11
	7.20	10.39	400/3/50	5/8	1 5/8	3/4 BSP	960	1710	1310	615	142.0	1.19	DDC 8P1/17
	9.60	6.93	400/3/50	7/8	1 5/8	3/4 BSP	960	1710	1310	850	184.0	1.62	DDC 8P1/19
	12.00	17.32	400/3/50	7/8	1 5/8	3/4 BSP	960	1710	1310	850	212.0	1.62	DDC 8P1/22
	11.40	16.45	400/3/50	7/8	1 5/8	2 BSP	1125	1710	1310	875	232.0	2.19	DDC 8S1/24
	14.40	20.78	400/3/50	7/8	2 1/8	1 1/4 BSP	840	2450	2050	850	231.0	2.05	DDC 8M2/30
	14.40	20.78	400/3/50	7/8	2 1/8	1 1/4 BSP	960	2970	2570	615	252.0	2.04	DDC 8P2/35
	19.20	2x13.85	400/3/50	7/8	2 1/8	1 1/4 BSP	960	2970	2570	850	327.0	2.78	DDC 8P2/39
	14.40	20.78	400/3/50	7/8	2 1/8	2 BSP	1125	2970	2570	670	352.0	3.77	DDC 8S2/40
	19.80	28.58	400/3/50	7/8	2 1/8	1 1/4 BSP	840	3450	3050	850	332.0	2.87	DDC 8M3/46
	24.30	2x17.54	400/3/50	7/8	2 1/8	2 BSP	1365	2230	1730	940	419.0	3.60	DDC 8T1/46
	28.80	2x20.79	400/3/50	1 1/8	2 5/8	2 BSP	960	4280	3830	850	477.0	3.98	DDC 8P3/59
	30.36	2x21.91	400/3/50	1 1/8	2 5/8	2 BSP	1365	3910	3410	735	566.0	6.24	DDC 8T2/61
	36.00	2x20.78+10.39	400/3/50	2x7/8	2x2 1/8	2 BSP	960	4280	3830	850	561.0	3.98	DDC 8P3/69
	37.95	2x21.91+10.96	400/3/50	2x7/8	2x2 1/8	2 BSP	1365	3910	3410	940	671.0	6.24	DDC 8T2/80
	43.50	2x25.11+12.56	400/3/50	2x7/8	2x2 1/8	2 BSP	1125	4330	3830	875	694.0	5.46	DDC 8S3/80
	45.54	3x21.91	400/3/50	2x1 1/8	2x2 1/8	2 BSP	1365	3910	3410	940	770.0	6.24	DDC 8T2/94

Seleção e Factores Selection and Factors

RCm		DTm [K]						
		10	9	8	7	6	5	4
TC [°C]	+5	1.352	1.217	1.082	0.947	0.813	0.707	0.588
	+2	1.250	1.125	1.000	0.893	0.772	0.665	0.539
	0	1.188	1.069	0.950	0.830	0.710	0.609	0.490
	-15	1.018	0.918	0.830	0.730	0.640	0.539	0.434
	-20	0.963	0.867	0.770	0.660	0.583	0.490	0.393
	-25	0.950	0.854	0.764	0.649	0.567	0.476	0.385
	-34					0.561	0.471	0.381

FC1		TE [°C]						
		+5	0	-5	-10	-25	-35	-40
R404A / R507		1.00	1.00	1.00	1.00	1.00	1.00	1.00
R134a		1.02	1.00	0.98	0.95			
R22 (DT1≤8K)			0.98	1.00	1.00	1.02	1.04	1.06
R22 (DT1>8K)			1.02	1.02	1.02	1.04	1.06	1.08

FC2	Alumínio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor	1.00	0.97	1.03

Capacidade corrigida Corrected capacity	
DDC/E 8S2/40 AR TC=-20°C DTm=5K R404A Al. rev. / Coated al.	$Q_{om} = Q_{sm} \times RCm \times FC1 \times FC2$ [kW] $Q_{om} = 40,24 \text{ kW} \times 0,490 \times 1 \times 0,97 = 19,13 \text{ kW}$

Nomenclatura	Nomenclature
TC	Temperatura de câmara Room temperature
TE	Temperatura de evaporação Evaporating temperature
Q _{sm}	Capacidade para selecção em DTm Selection capacity in DTm
Q _{om}	Capacidade corrigida em DTm Corrected capacity in DTm
FC1	Factor de correcção do refrigerante Refrigerant correction factor
FC2	Factor de correcção do material das alhetas Fin material correction factor
RCm	Factor de correcção para dados em DTm Correction factor for data in DTm

Dados de cálculo	Selection data
Isolamento - Câmara de refrigerados Insulation - Chilling room	80mm PU
Isolamento - Câmara de congelados Insulation - Freezing room	100mm PU
Temperatura exterior Exterior temperature	+32°C
Entrada diária (% capacidade da câmara) Daily rotation (room capacity's %)	10%
Tempo de arrefecimento Cooling time	18h
Tipo de uso Usage	Normal

Câmara refrigerados Chilling room (TC=-10°C - TE=-6/-7°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	kW	
120 - 135	8.0	8M1/11
225 - 255	13.0	8P1/17
320 - 365	16.5	8P1/22
400 - 460	23.0	8M2/30
460 - 510	25.0	8P2/35
510 - 585	27.1	8P2/39
680 - 780	33.0	8M3/46
970 - 1115	42.9	8P3/59
1080 - 1240	49.2	8P3/69
1300 - 1495	55.5	8T2/80
1420 - 1630	64.3	8T2/94
2200 - 2530	87.3	2x 8P3/59
2600 - 2990	98.4	2x 8T2/61
3500 - 4025	128.7	2x 8S3/80

Câmara congelados Freezing room (TC=-18/-20°C - TE=-25/-27°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	kW	
120 - 135	7.0	8M1/11
195 - 220	9.2	8P1/17
260 - 300	11.1	8P1/19
300 - 410	13.0	8P1/22
410 - 470	15.4	8S1/24
470 - 540	17.5	8M2/30
540 - 620	20.7	8P2/35
700 - 800	23.1	8P2/39
800 - 980	27.0	8M3/46
980 - 1125	31.1	8P3/59
1200 - 1380	37.4	8P3/59
1400 - 1610	41.5	8P3/69
1600 - 1840	44.8	8T2/80
1840 - 2300	55.0	8T2/94
2300 - 2645	64.0	2x 8P3/59
2900 - 3335	74.8	2x 8T2/61

DDL

Evaporadores Cúbicos Industriais Industrial Cubic Coolers

Espaçamento Fin Spacing

10,0 mm

Ø Ventiladores Fan Ø

500 - 560 - 710 - 800 mm



Aplicações preferenciais: Câmaras de conservação de congelados.
Main applications: Low temperature cold rooms.

Modelo Type	Capacidade QSm Capacity QSm (TC=+2°C / DTm=8K)	Capacidade Q0m Capacity Q0m (TC=-18°C / DTm=6K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans										
	kW				m²	dm³	Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power		Corrente total Total current	Alimentação MPS
DDL 10M1/10	9.57	6.03	30.44	8.20	1	500	7400	23	1330	790	1.45	400/3/50			
DDL 10P1/14	14.21	8.95	44.75	12.10	1	560	10400	28	1220	1000	1.80	400/3/50			
DDL 10P1/17	16.83	10.60	67.12	18.10	1	560	9700	28	1220	1000	1.80	400/3/50			
DDL 10M2/19	19.43	12.24	60.88	16.40	2	500	14800	23	1330	1580	2.90	400/3/50			
DDL 10S1/21	20.57	12.96	76.34	19.40	1	710	11500	35	900	940	1.75	400/3/50			
DDL 10M2/26	25.74	16.22	91.32	24.70	2	500	14000	23	1330	1580	2.90	400/3/50			
DDL 10P2/29	28.63	18.04	89.50	24.20	2	560	20800	28	1220	2000	3.60	400/3/50			
DDL 10M2/30	30.37	19.14	121.76	32.90	2	500	13400	23	1330	1580	2.90	400/3/50			
DDL 10P2/34	34.25	21.58	134.24	36.30	2	560	19400	28	1220	2000	3.60	400/3/50			
DDL 10M3/39	38.79	24.44	136.98	37.00	3	500	21000	23	1330	2370	4.35	400/3/50			
DDL 10S2/40	39.95	25.17	153.42	41.40	2	710	23000	35	900	1880	3.50	400/3/50			
DDL 10P2/41	40.45	25.49	178.49	46.60	2	560	18800	28	1220	2000	3.60	400/3/50			
DDL 10M3/46	45.79	28.85	182.64	49.30	3	500	20100	23	1330	2370	4.35	400/3/50			
DDL 10P3/52	51.68	32.56	201.36	54.40	3	560	29100	28	1220	3000	5.40	400/3/50			
DDL 10T2/54	53.58	33.76	170.47	46.10	2	800	42000	40	890	3600	7.80	400/3/50			
DDL 10P3/62	61.71	38.88	268.49	72.50	3	560	28200	28	1220	3000	5.40	400/3/50			
DDL 10T2/71	71.13	44.82	255.70	69.10	2	800	39800	40	890	3600	7.80	400/3/50			
DDL 10S3/72	71.51	45.06	306.84	82.90	3	710	33000	35	900	2820	5.25	400/3/50			
DDL 10T2/85	84.61	53.31	340.93	92.10	2	800	38200	40	890	3600	7.80	400/3/50			

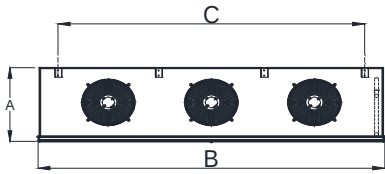
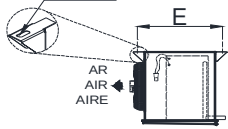
Modelo Type	Preço sem resistências Price without heaters	Preço com resistências Price with heaters	Opções Options											
			/GM Desc. gás quente GM hot gas defrost	/GE Desc. gás quente GE hot gas defrost	/GT Desc. gás quente GT hot gas defrost	/W Descongelação água Water defrost	AR Alhetas revestidas Coated fins	BL Lacado branco White painted	BI Chaparia Inox Stainless steel casing	TI Tab. esgoto isol. Insul. drain pan	BR Bateria resistências Heater coil	RG Resistências gola Fan heaters	AS Adaptador Conduas Air Sock Adapter	
	EUR		EUR											
	DDL 10M1/10	•	•	•	•	•	•	•	•	•	•	•	•	•
DDL 10P1/14	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DDL 10P1/17	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DDL 10M2/19	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DDL 10S1/21	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DDL 10M2/26	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DDL 10P2/29	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DDL 10M2/30	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DDL 10P2/34	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DDL 10M3/39	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DDL 10S2/40	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DDL 10P2/41	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DDL 10M3/46	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DDL 10P3/52	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DDL 10T2/54	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DDL 10P3/62	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DDL 10T2/71	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DDL 10S3/72	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DDL 10T2/85	•	•	•	•	•	•	•	•	•	•	•	•	•	•

S Standard
S Standard

SP Sob pedido
SP Under request

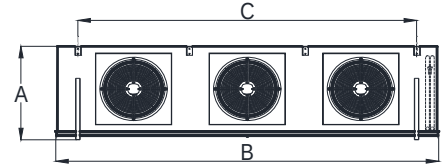
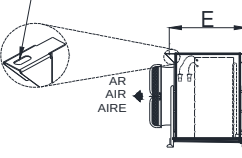
Ø500 / 560 mm

17x50



Ø710 / 800 mm

17x50



	Dados eléctricos resistências Heaters electrical data			Ligações standard Standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain							
	kW	A	V / F / Hz		in		A	B	C	E			
	5.16	7.45	400/3/50	5/8	1 3/8	3/4 BSP	mm				kg	m³	
	7.20	10.39	400/3/50	5/8	1 5/8	3/4 BSP	840	1450	1050	615	103.0	0.90	DDL 10M1/10
	9.60	2x6,93	400/3/50	7/8	1 5/8	3/4 BSP	960	1710	1310	615	136.0	1.19	DDL 10P1/14
	9.60	13.86	400/3/50	7/8	1 5/8	1 1/4 BSP	960	1710	1310	850	174.0	1.62	DDL 10P1/17
	11.40	16.45	400/3/50	7/8	1 5/8	2 BSP	840	2450	2050	615	167.0	1.51	DDL 10M2/19
	14.40	20.78	400/3/50	7/8	1 5/8	2 BSP	1125	1710	1310	875	220.0	2.19	DDL 10S1/21
	14.40	20.78	400/3/50	7/8	2 1/8	1 1/4 BSP	840	2450	2050	850	217.0	2.05	DDL 10M2/26
	19.20	2x13,85	400/3/50	7/8	2 1/8	1 1/4 BSP	960	2970	2570	615	239.0	2.04	DDL 10P2/29
	19.20	2x13,85	400/3/50	7/8	2 1/8	1 1/4 BSP	840	2450	2050	850	250.0	2.05	DDL 10M2/30
	19.80	28.58	400/3/50	7/8	2 1/8	1 1/4 BSP	960	2970	2570	850	307.0	2.78	DDL 10P2/34
	19.20	2x13,85	400/3/50	7/8	2 1/8	1 1/4 BSP	840	3450	3050	850	312.0	2.87	DDL 10M3/39
	24.00	20,78+13,86	400/3/50	1 1/8	2 1/8	2 BSP	1125	2970	2570	875	389.0	3.77	DDL 10S2/40
	26.40	2x19,05	400/3/50	1 1/8	2 1/8	1 1/4 BSP	960	2970	2570	850	380.0	2.78	DDL 10P2/41
	28.80	2x20,79	400/3/50	1 1/8	2 1/8	1 1/4 BSP	840	3450	3050	850	365.0	2.87	DDL 10M3/46
	30.36	2x21,91	400/3/50	1 1/8	2 5/8	2 BSP	960	4280	3830	850	446.0	3.98	DDL 10P3/52
	36.00	2x20,79+10,38	400/3/50	1 1/8	2 5/8	2 BSP	1365	3910	3410	735	540.0	6.24	DDL 10T2/54
	37.95	2x21,91+10,96	400/3/50	2x7/8	2x2 1/8	2 BSP	960	4280	3830	850	545.0	3.98	DDL 10P3/62
	43.50	2x25,11+12,56	400/3/50	2x7/8	2x2 1/8	2 BSP	1365	3910	3410	940	632.0	6.24	DDL 10T2/71
	45.54	3x21,91	400/3/50	2x7/8	2x2 1/8	2 BSP	1125	4330	3830	875	647.0	5.46	DDL 10S3/72
			400/3/50	2x1 1/8	2x2 1/8	2 BSP	1365	3910	3410	940	719.0	6.24	DDL 10T2/85

Seleção e Factores Selection and Factors

RCm	DTm [K]						
	10	9	8	7	6	5	4
TC [°C]	-15	1.059	0.955	0.863	0.759	0.666	0.561
	-20	1.002	0.902	0.801	0.686	0.606	0.510
	-25	0.988	0.888	0.795	0.675	0.590	0.495
	-34					0.584	0.490

FC1	TE [°C]						
	+5	0	-5	-10	-25	-35	-40
R404A / R507	1.00	1.00	1.00	1.00	1.00	1.00	1.00
R134a	1.02	1.00	0.98	0.95			
R22 (DT1≤8K)		0.98	1.00	1.00	1.02	1.04	1.06
R22 (DT1>8K)		1.02	1.02	1.02	1.04	1.06	1.08

FC2	Alumínio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor	1.00	0.97	1.03

Capacidade corrigida Corrected capacity	
DDL/E 10M3/39 TC=-20°C DTm=5K R404A Alumínio / Aluminium	$Q_{om} = Q_{sm} \times RCm \times FC1 \times FC2 \text{ [kW]}$ $Q_{om} = 38,79 \text{ kW} \times 0,510 \times 1 \times 1 = 19,78 \text{ kW}$

Nomenclatura	Nomenclature
TC	Temperatura de câmara Room temperature
TE	Temperatura de evaporação Evaporating temperature
Q _{sm}	Capacidade para selecção em DTm Selection capacity in DTm
Q _{om}	Capacidade corrigida em DTm Corrected capacity in DTm
FC1	Factor de correcção do refrigerante Refrigerant correction factor
FC2	Factor de correcção do material das alhetas Fin material correction factor
RCm	Factor de correcção para dados em DTm Correction factor for data in DTm

Dados de cálculo	Selection data
Isolamento - Câmara de refrigerados Insulation - Chilling room	80mm PU
Isolamento - Câmara de congelados Insulation - Freezing room	100mm PU
Temperatura exterior Exterior temperature	+32°C
Entrada diária (% capacidade da câmara) Daily rotation (room capacity's %)	10%
Tempo de arrefecimento Cooling time	18h
Tipo de uso Usage	Normal

Câmara congelados Freezing room (TC=-18/-20°C - TE=-25/-27°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	kW	
100 - 115	5.7	10M1/10
130 - 149	7.2	10P1/15
170 - 195	8.8	10P1/15 10P1/18
240 - 275	11.3	10M2/20 10S1/21
320 - 365	14.2	10M2/27
420 - 480	16.5	10P2/30 10P2/32
580 - 665	21.2	10P2/36 10M3/40
670 - 820	24.0	10S2/42 10P2/42
820 - 940	28.4	10M3/48 2x 10M2/27
950 - 1090	30.1	10M3/54 10T2/56
1000 - 1150	33.1	10T2/56 2x 10P2/30
1150 - 1500	37.0	10P3/64 2x 10M2/32
1500 - 1725	42.4	10T2/74 10S3/74
1700 - 1955	49.2	10T2/88 2x 10P2/42
2100 - 2415	54.8	2x 10M3/48 2x 10M3/48
2350 - 2700	60.1	2x 10P3/54 2x 10P3/54
3400 - 3910	84.8	2x 10T2/74 2x 10T2/74
4000 - 4600	90.2	3x 10P3/54 3x 10T2/56

DXL

Evaporadores Cúbicos Industriais Industrial Cubic Coolers

Espaçamento Fin Spacing

12,0 mm

Ø Ventiladores Fan Ø

500 - 560 - 710 - 800 mm



Aplicações preferenciais: Câmaras de conservação de congelados com elevada carga latente.
Main applications: Low temperature cold rooms with high latent heat.

Modelo Type	Capacidade QSm Capacity QSm (TC=+2°C / DTm=8K)	Capacidade Q0m Capacity Q0m (TC=-18°C / DTm=6K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans								
	kW		m ²	dm ³	Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current		Alimentação MPS
						mm	m ³ /h	m	rpm	W	A		V / F / Hz
DXL 12M1/8	8.44	5.32	25.76	8.20	1	500	7400	24	1330	790	1.45	400/3/50	
DXL 12P1/12	12.42	7.83	37.87	12.10	1	560	10500	30	1220	1000	1.80	400/3/50	
DXL 12M2/17	17.11	10.78	51.52	16.40	2	500	14800	24	1330	1580	2.90	400/3/50	
DXL 12P1/18	18.40	11.59	75.49	23.30	1	560	9500	30	1220	1000	1.80	400/3/50	
DXL 12M2/23	23.03	14.51	77.28	24.70	2	500	14200	24	1330	1580	2.90	400/3/50	
DXL 12P2/25	24.98	15.74	75.74	24.20	2	560	21000	30	1220	2000	3.60	400/3/50	
DXL 12M2/28	27.63	17.41	103.04	32.90	2	500	13600	24	1330	1580	2.90	400/3/50	
DXL 12P2/31	31.21	19.67	113.61	36.30	2	560	19600	30	1220	2000	3.60	400/3/50	
DXL 12M3/35	34.66	21.84	115.92	37.00	3	500	21300	24	1330	2370	4.35	400/3/50	
DXL 12P2/37	37.34	23.53	150.98	46.60	2	560	19000	30	1220	2000	3.60	400/3/50	
DXL 12P3/47	47.03	29.63	170.41	54.40	3	560	29400	30	1220	3000	5.40	400/3/50	
DXL 12T2/48	47.77	30.10	144.26	46.10	2	800	42400	42	890	3600	7.80	400/3/50	
DXL 12P3/57	56.83	35.81	227.21	72.50	3	560	28500	30	1220	3000	5.40	400/3/50	
DXL 12T2/64	64.39	40.57	216.39	69.10	2	800	40400	42	890	3600	7.80	400/3/50	
DXL 12S3/66	66.19	41.71	259.67	82.90	3	710	33600	36	900	2820	5.25	400/3/50	
DXL 12T2/77	77.12	48.59	288.52	92.10	2	800	38800	42	890	3600	7.80	400/3/50	

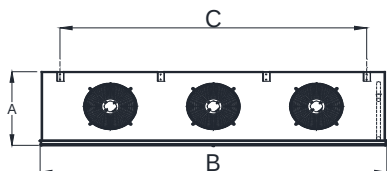
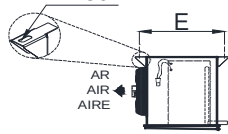
Modelo Type	Preço sem resistências Price without heaters	Preço com resistências Price with heaters	Opções Options										
	EUR		Desc. gás quente GM GM hot gas defrost	Desc. gás quente GE GE hot gas defrost	Desc. gás quente GT GT hot gas defrost	Desc. água descongelamento Water defrost	Alhetas revestidas Coated fins	Lacado branco White painted	Chaparia Inox Stainless steel casing	Tab. esgoto isol. Insul. drain pan	Bateria resistências Heater coil	Resistências gola Fan heaters	Adaptador Conduas Air Sock Adapter
DXL 12M1/8	•	•	•	•	•	•	•	•	•	•	SP	•	•
DXL 12P1/12	•	•	•	•	•	•	•	•	•	•	SP	•	•
DXL 12M2/17	•	•	•	•	•	•	•	•	•	•	SP	•	•
DXL 12P1/18	•	•	•	•	•	•	•	•	•	•	SP	•	•
DXL 12M2/23	•	•	•	•	•	•	•	•	•	•	SP	•	•
DXL 12P2/25	•	•	•	•	•	•	•	•	•	•	SP	•	•
DXL 12M2/28	•	•	•	•	•	•	•	•	•	•	SP	•	•
DXL 12P2/31	•	•	•	•	•	•	•	•	•	•	SP	•	•
DXL 12M3/35	•	•	•	•	•	•	•	•	•	•	SP	•	•
DXL 12P2/37	•	•	•	•	•	•	•	•	•	•	SP	•	•
DXL 12P3/47	•	•	•	•	•	•	•	•	•	•	SP	•	•
DXL 12T2/48	•	•	•	•	•	•	•	•	•	•	SP	•	•
DXL 12P3/57	•	•	•	•	•	•	•	•	•	•	SP	•	•
DXL 12T2/64	•	•	•	•	•	•	•	•	•	•	SP	•	•
DXL 12S3/66	•	•	•	•	•	•	•	•	•	•	SP	•	•
DXL 12T2/77	•	•	•	•	•	•	•	•	•	•	SP	•	•

S Standard
S Standard

SP Sob pedido
SP Under request

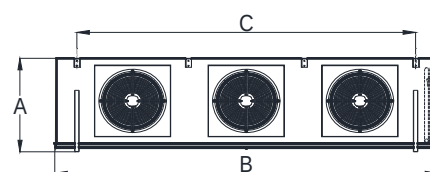
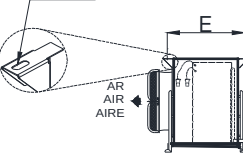
Ø500 / 560 mm

17x50



Ø710 / 800 mm

17x50



	Dados eléctricos resistências Heaters electrical data			Ligações standard Standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain							
	kW	A	V / F / Hz		in		A	B	C	E	kg	m³	
	5.16	7.45	400/3/50	5/8	1 3/8	3/4 BSP	840	1450	1050	615	102.0	0.90	DXL 12M1/8
	7.20	10.39	400/3/50	5/8	1 5/8	3/4 BSP	960	1710	1310	615	134.0	1.19	DXL 12P1/12
	9.60	13.86	400/3/50	7/8	1 5/8	1 1/4 BSP	840	2450	2050	615	165.0	1.51	DXL 12M2/17
	12.00	17.32	400/3/50	7/8	1 5/8	3/4 BSP	960	1710	1310	850	208.0	1.62	DXL 12P1/18
	14.40	20.78	400/3/50	7/8	2 1/8	1 1/4 BSP	840	2450	2050	850	214.0	2.05	DXL 12M2/23
	14.40	20.78	400/3/50	7/8	2 1/8	1 1/4 BSP	960	2970	2570	615	236.0	2.04	DXL 12P2/25
	19.20	2x13,85	400/3/50	7/8	2 1/8	1 1/4 BSP	840	2450	2050	850	246.0	2.05	DXL 12M2/28
	19.20	2x13,85	400/3/50	7/8	2 1/8	1 1/4 BSP	960	2970	2570	850	302.0	2.78	DXL 12P2/31
	19.80	28.58	400/3/50	7/8	2 1/8	1 1/4 BSP	840	3450	3050	850	307.0	2.87	DXL 12M3/35
	24.00	20,79+13,86	400/3/50	1 1/8	2 1/8	1 1/4 BSP	960	2970	2570	850	374.0	2.78	DXL 12P2/37
	28.80	2x20,79	400/3/50	1 1/8	2 5/8	2 BSP	960	4280	3830	850	439.0	3.98	DXL 12P3/47
	30.36	2x21,91	400/3/50	1 1/8	2 5/8	2 BSP	1365	3910	3410	735	535.0	6.24	DXL 12T2/48
	36.00	2x20,79 +10,38	400/3/50	2x7/8	2x2 1/8	2 BSP	960	4280	3830	850	535.0	3.98	DXL 12P3/57
	37.95	2x21,91+10,96	400/3/50	2x7/8	2x2 1/8	2 BSP	1365	3910	3410	940	624.0	6.24	DXL 12T2/64
	43.50	2x25,11+12,56	400/3/50	2x7/8	2x2 1/8	2 BSP	1125	4330	3830	875	637.0	5.46	DXL 12S3/66
	45.54	3x21,91	400/3/50	2x1 1/8	2x2 1/8	2 BSP	1365	3910	3410	940	707.0	6.24	DXL 12T2/77

Seleção e Factores Selection and Factors

RCm	DTm [K]						
	10	9	8	7	6	5	4
TC [°C]	-15	1.059	0.955	0.863	0.759	0.666	0.561
	-20	1.002	0.902	0.801	0.686	0.606	0.510
	-25	0.988	0.888	0.795	0.675	0.590	0.495
	-34					0.584	0.490

FC1	TE [°C]						
	+5	0	-5	-10	-25	-35	-40
R404A / R507	1.00	1.00	1.00	1.00	1.00	1.00	1.00
R134a	1.02	1.00	0.98	0.95			
R22 (DT1≤8K)		0.98	1.00	1.00	1.02	1.04	1.06
R22 (DT1>8K)		1.02	1.02	1.02	1.04	1.06	1.08

FC2	Aluminio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor	1.00	0.97	1.03

Capacidade corrigida Corrected capacity

DXL/E 12P2/37 AR TC=-25°C DTm=5K R404A Al. rev. / Coated al.	$Q_{om} = Q_{sm} \times RCm \times FC1 \times FC2 \text{ [kW]}$ $Q_{om} = 37,34 \text{ kW} \times 0,495 \times 1 \times 0,97 = 17,93 \text{ kW}$
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Nomenclatura	Nomenclature
TC	Temperatura de câmara Room temperature
TE	Temperatura de evaporação Evaporating temperature
Q _{sm}	Capacidade para selecção em DTm Selection capacity in TDm
Q _{om}	Capacidade corrigida em DTm Corrected capacity in TDm
FC1	Factor de correcção do refrigerante Refrigerant correction factor
FC2	Factor de correcção do material das alhetas Fin material correction factor
RCm	Factor de correcção para dados em DTm Correction factor for data in DTm

Dados de cálculo Selection data

Isolamento - Câmara de refrigerados Insulation - Chilling room	80mm PU
Isolamento - Câmara de congelados Insulation - Freezing room	100mm PU
Temperatura exterior Exterior temperature	+32°C
Entrada diária (% capacidade da câmara) Daily rotation (room capacity's %)	10%
Tempo de arrefecimento Cooling time	18h
Tipo de uso Usage	Normal

Câmara congelados Freezing room (TC=-18/-20°C - TE=-25/-27°C)		
Volume Volume	Capacidade Capacity	Modelo Type
m³	kW	
80 - 90	5.0	12M1/8
150 - 170	7.5	12P1/12
200 - 240	10.0	12M2/17 12P1/18
290 - 330	14.0	12M2/23 12P2/25
400 - 450	16.5	12M2/28 12P2/31
500 - 600	18.5	12P2/31 12M3/35
580 - 660	21.0	12M3/35 12P2/37
740 - 850	25.0	12P3/47 12T2/48
950 - 1100	30.0	12P3/57 2x 12M2/28
1100 - 1250	35.0	12T2/64 2x 12P2/31
1280 - 1450	38.0	12S3/66 2x 12M3/35
1580 - 1830	44.0	12T2/77 2x 12P2/37
1840 - 2300	55.0	2x 12P3/57 4x 12M2/28
2300 - 2650	64.0	2x 12T2/64 4x 12P2/31
2900 - 3340	75.0	2x 12S3/66 4x 12M3/35

BSUT



Evaporadores de Túnel Blast Freezers

Espaçamento Fin Spacing

7,9x15,8 mm

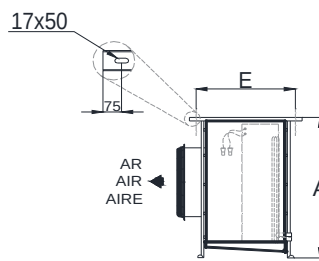
Ø Ventiladores Fan Ø

700 - 800 mm

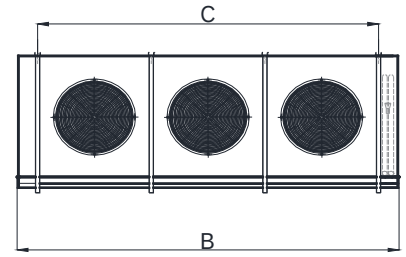
Modelo Type	Capacidade QSm Capacity QSm (TC=+2°C / DTm=8K)	Capacidade Q0m Capacity Q0m (TC=-18°C / DTm=6K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans							
					Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Pressão estática Static pressure	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS
	KW		m²	dm³		mm	m³/h	Pa	rpm	W	A	V / F / Hz
BSUT 1102.2	19.45	11.78	88.70	36.90	1	700	11500	128	1300	2800	4.96	400/3/50
BSUT 1202.2	37.31	22.60	158.70	62.80	2	700	23000	115	1300	5600	9.92	400/3/50
BSUT 1302.2	52.16	31.60	209.40	82.50	2	700	34000	89	1300	7400	13.46	400/3/50
BSUT 1402.2	62.68	37.98	297.60	114.90	3	700	34500	149	1300	8400	14.88	400/3/50
BSUT 1402.2 XL	62.68	37.98	297.60	114.90	2	800	34500	190	1300	9600	19.44	400/3/50
BSUT 1502.2	76.20	46.17	297.60	114.90	3	700	51000	80	1300	11100	20.19	400/3/50
BSUT 1502.2 XL	76.20	46.17	297.60	114.90	2	800	51000	150	1300	12600	23.00	400/3/50
BSUT 1602.2	92.50	56.04	407.80	155.30	4	700	54000	77	1300	11200	19.84	400/3/50
BSUT 1602.2 XL	92.50	56.04	407.80	155.30	3	800	54000	162	1300	14400	29.16	400/3/50
BSUT 1702.2	119.18	72.21	501.40	194.20	4	700	64000	85	1300	14800	26.92	400/3/50
BSUT 1702.2 XL	119.18	72.21	501.40	194.20	3	800	64000	135	1300	18900	34.50	400/3/50
BSUT 1802.2 XL	123.90	75.07	489.30	186.30	3	800	81000	106	1300	18900	34.50	400/3/50
BSUT 1902.2 XL	156.88	95.05	608.30	230.10	4	800	108000	104	1300	25200	46.00	400/3/50

Modelo Type	Preço sem resistências Price without heaters	Preço com resistências Price with heaters	Opções Options											
			/GM GM hot gas defrost	/GE GE hot gas defrost	/GT GT hot gas defrost	/W Water defrost	AR Alheias revestidas Coated fins	BL Lacado branco White painted	BI Chaparia inox Stainless steel casing	TI Tab. esgoto isol. Insul. drain pan	BR Bateria resistências Heater coil	RG Resistências gola Fan heaters	AS Adaptador Conduas Air Sock Adapter	
	EUR		EUR											
BSUT 1102.2	•	•	•	•	•	•	•	•	•	•	•	•	SP	-
BSUT 1202.2	•	•	•	•	•	•	•	•	•	•	•	•	SP	-
BSUT 1302.2	•	•	•	•	•	•	•	•	•	•	•	•	SP	-
BSUT 1402.2	•	•	•	•	•	•	•	•	•	•	•	•	SP	-
BSUT 1402.2 XL	•	•	•	•	•	•	•	•	•	•	•	•	SP	-
BSUT 1502.2	•	•	•	•	•	•	•	•	•	•	•	•	SP	-
BSUT 1502.2 XL	•	•	•	•	•	•	•	•	•	•	•	•	SP	-
BSUT 1602.2	•	•	•	•	•	•	•	•	•	•	•	•	SP	-
BSUT 1602.2 XL	•	•	•	•	•	•	•	•	•	•	•	•	SP	-
BSUT 1702.2	•	•	•	•	•	•	•	•	•	•	•	•	SP	-
BSUT 1702.2 XL	•	•	•	•	•	•	•	•	•	•	•	•	SP	-
BSUT 1802.2 XL	•	•	•	•	•	•	•	•	•	•	•	•	SP	-
BSUT 1902.2 XL	•	•	•	•	•	•	•	•	•	•	•	•	SP	-

S Standard SP Sob pedido
S Standard SP Under request



BSUT



	Dados eléctricos resistências Heaters electrical data			Ligações standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain							
	kW	A	V / F / Hz	in			mm						
	9.60	8,3+5,5	400/3/50	7/8	1 5/8	2 BSP	1190	1400	1050	990	280.0	3.57	BSUT 1102.2
	18.00	15,6+10,4	400/3/50	7/8	2 1/8	2 BSP	1190	2200	1850	990	460.0	5.48	BSUT 1202.2
	22.50	2x16,2	400/3/50	1 1/8	2 1/8	2 BSP	1430	2300	1950	1040	540.0	6.79	BSUT 1302.2
	33.12	2x23,94	400/3/50	2x7/8	2x2 1/8	2 BSP	1430	3200	2750	1040	750.0	9.34	BSUT 1402.2
	33.12	2x23,94	400/3/50	2x7/8	2x2 1/8	2 BSP	1430	3200	2750	1040	750.0	9.34	BSUT 1402.2 XL
	33.12	2x23,94	400/3/50	2x7/8	2x2 1/8	2 BSP	1430	3200	2750	1040	760.0	9.34	BSUT 1502.2
	33.12	2x23,94	400/3/50	2x7/8	2x2 1/8	2 BSP	1430	3200	2750	1040	760.0	9.34	BSUT 1502.2 XL
	51.12	3x24,60	400/3/50	2x7/8	2x2 1/8	2 BSP	1430	4200	3750	1040	990.0	12.17	BSUT 1602.2
	51.12	3x24,60	400/3/50	2x7/8	2x2 1/8	2 BSP	1430	4200	3750	1040	990.0	12.17	BSUT 1602.2 XL
	51.12	3x24,60	400/3/50	2x7/8	2x2 1/8	2 BSP	1430	4200	3750	1140	1115.0	12.82	BSUT 1702.2
	51.12	3x24,60	400/3/50	2x7/8	2x2 1/8	2 BSP	1430	4200	3750	1140	1115.0	12.82	BSUT 1702.2 XL
	57.96	3x23,88+11,94	400/3/50	2x1 1/8	2x2 5/8	2 BSP	1670	4200	3750	1090	1090.0	14.41	BSUT 1802.2 XL
	61.32	3x25,32+12,66	400/3/50	2x1 1/8	2x2 5/8	2 BSP	1670	5100	4650	1090	1360.0	17.06	BSUT 1902.2 XL

Seleção e Factores Selection and Factors

RCm		DTm [K]						
		10	9	8	7	6	5	4
TC [°C]	+5	1.352	1.217	1.082	0.947	0.813	0.707	0.588
	+2	1.250	1.125	1.000	0.893	0.772	0.665	0.539
	0	1.188	1.069	0.950	0.830	0.710	0.609	0.490
	-15	1.018	0.918	0.830	0.730	0.640	0.539	0.434
	-20	0.963	0.867	0.770	0.660	0.583	0.490	0.393
	-25	0.950	0.854	0.764	0.649	0.567	0.476	0.385
		-34				0.561	0.471	0.381

FC1		TE [°C]						
		+5	0	-5	-10	-25	-35	-40
R404A / R507		1.00	1.00	1.00	1.00	1.00	1.00	1.00
R134a		1.02	1.00	0.98	0.95			
R22 (DT1≤8K)			0.98	1.00	1.00	1.02	1.04	1.06
R22 (DT1>8K)			1.02	1.02	1.02	1.04	1.06	1.08

FC2	Aluminio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor	1.00	0.97	1.03

FG	Ciclo T [horas] T Cycle [hours]		
	T < 6	6 < T < 8	8 < T < 10
Arrefecimento Chilling	1.00	0.95	0.90
Congelamento Freezing	1.00	0.90	0.85

Nomenclatura	Nomenclature
TC	Temperatura de câmara Room temperature
TE	Temperatura de evaporação Evaporating temperature
Q _{sm}	Capacidade para selecção em DTm Selection capacity in TDm
Q _{0m}	Capacidade corrigida em DTm Corrected capacity in TDm
FC1	Factor de correcção do refrigerante Refrigerant correction factor
FC2	Factor de correcção do material das alhetas Fin material correction factor
FG	Factor de gelo Ice factor
RCm	Factor de correcção para dados em DTm Correction factor for data in DTm

Capacidade corrigida Corrected capacity

BSUT/E 1502.2 TC=0°C DTm=5K R404A T = 7h Alumínio / Aluminium	$Q_{0m} = Q_{sm} \times RCm \times FC1 \times FC2 \times FG \text{ [kW]}$ $Q_{0m} = 76,20 \text{ kW} \times 0,609 \times 1 \times 1 \times 0,95 = 44,09 \text{ kW}$
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BSUT



Evaporadores de Túnel Blast Freezers

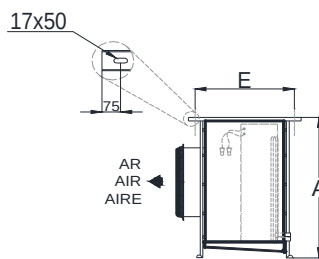
Espaçamento Fin Spacing

Ø Ventiladores Fan Ø

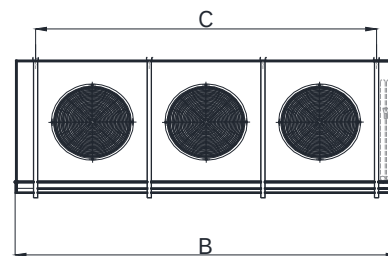
10,0x20,0 mm

700 - 800 mm

AP	APL	APD	DF	TAL	ERK	BXN	MBX	RWK	CBK	DD	TFC	MTA	MTB	BSUT



BSUT



	Dados eléctricos resistências Heaters electrical data			Ligações standard Standard connections			Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain							
	kW	A	V / F / Hz		in		A	B	C	E	kg	m³	
	9.60	8,3+5,5	400/3/50	7/8	1 5/8	2 BSP	1190	1400	1050	1090	320.0	3.76	BSUT 2102.2
	18.00	15,6+10,4	400/3/50	7/8	2 1/8	2 BSP	1190	2200	1850	1090	515.0	5.77	BSUT 2202.2
	22.50	2x16,2	400/3/50	1 1/8	2 1/8	2 BSP	1430	2300	1950	1140	605.0	7.16	BSUT 2302.2
	33.12	2x23,94	400/3/50	1 1/8	2 1/8	2 BSP	1430	3200	2750	1040	740.0	9.34	BSUT 2402.2
	33.12	2x23,94	400/3/50	1 1/8	2 1/8	2 BSP	1430	3200	2750	1040	740.0	9.34	BSUT 2402.2 XL
	33.12	2x23,94	400/3/50	2x7/8	2x2 1/8	2 BSP	1430	3200	2750	1140	840.0	9.34	BSUT 2502.2
	33.12	2x23,94	400/3/50	2x7/8	2x2 1/8	2 BSP	1430	3200	2750	1140	840.0	9.34	BSUT 2502.2 XL
	51.12	3x24,60	400/3/50	2x7/8	2x2 1/8	2 BSP	1430	4200	3750	1040	985.0	12.17	BSUT 2602.2
	51.12	3x24,60	400/3/50	2x7/8	2x2 1/8	2 BSP	1430	4200	3750	1040	985.0	12.17	BSUT 2602.2 XL
	51.12	3x24,60	400/3/50	2x7/8	2x2 1/8	2 BSP	1430	4200	3750	1140	1100.0	12.82	BSUT 2702.2 XL
	57.96	3x23,88+11,94	400/3/50	2x7/8	2x2 1/8	2 BSP	1670	4200	3750	1190	1235.0	14.86	BSUT 2802.2 XL
	61.32	3x25,32+12,66	400/3/50	2x1 1/8	2x2 5/8	2 BSP	1670	5100	4650	1090	1365.0	17.06	BSUT 2902.2 XL

Seleção e Factores Selection and Factors

RCm		DTm [K]						
		10	9	8	7	6	5	4
TC [°C]	+5	1.406	1.266	1.125	0.985	0.846	0.735	0.612
	+2	1.300	1.170	1.000	0.929	0.803	0.692	0.561
	0	1.235	1.112	0.988	0.863	0.738	0.633	0.510
	-15	1.013	0.910	0.808	0.708	0.626	0.522	0.421
	-20	1.002	0.902	0.801	0.686	0.606	0.510	0.409
	-25	0.988	0.888	0.795	0.675	0.590	0.495	0.400
	-34					0.584	0.490	0.396
	-40					0.571	0.478	0.389

FC1		TE [°C]						
		+5	0	-5	-10	-25	-35	-40
R404A / R507		1.00	1.00	1.00	1.00	1.00	1.00	1.00
R134a		1.02	1.00	0.98	0.95			
R22 (DT1≤8K)			0.98	1.00	1.00	1.02	1.04	1.06
R22 (DT1>8K)			1.02	1.02	1.02	1.04	1.06	1.08

FC2	Aluminio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor	1.00	0.97	1.03

FG	Ciclo T [horas] T Cycle [hours]		
	T < 6	6 < T < 8	8 < T < 10
Arrefecimento Chilling	1.00	0.95	0.90
Congelamento Freezing	1.00	0.90	0.85

Capacidade corrigida Corrected capacity	
BSUT/E 2702.2 TC=-34°C DTm=5K R404A T = 9h Alumínio / Aluminium	$Q_{0m} = Q_{Sm} \times RCm \times FC1 \times FC2 \times FG$ [kW]
	$Q_{0m} = 106,55 \text{ kW} \times 0,490 \times 1 \times 1 \times 0,90 = 46,99 \text{ kW}$

Nomenclatura	Nomenclature
TC	Temperatura de câmara Room temperature
TE	Temperatura de evaporação Evaporating temperature
Q _{Sm}	Capacidade para selecção em DTm Selection capacity in TDm
Q _{0m}	Capacidade corrigida em DTm Corrected capacity in TDm
FC1	Factor de correcção do refrigerante Refrigerant correction factor
FC2	Factor de correcção do material das alhetas Fin material correction factor
FG	Factor de gelo Ice factor
RCm	Factor de correcção para dados em DTm Correction factor for data in DTm

BSUS

Evaporadores de Túnel Blast Freezers

Espaçamento Fin Spacing

7,9x15,8 mm

Ø Ventiladores Fan Ø

700 - 800 mm

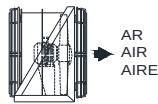


Modelo Type	Capacidade QSm Capacity QSm (TC=+2°C / DTm=8K)	Capacidade Q0m Capacity Q0m (TC=-18°C / DTm=6K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans							
					Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Pressão estática Static pressure	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS
	KW		m²	dm³		mm	m³/h	Pa	rpm	W	A	V / F / Hz
BSUS 3102.2	19.45	11.78	88.70	36.90	1	700	11500	128	1300	2800	4.96	400/3/50
BSUS 3202.2	37.31	22.60	158.70	62.80	2	700	23000	115	1300	5600	9.92	400/3/50
BSUS 3302.2	52.16	31.60	209.40	82.50	2	700	34000	89	1300	7400	13.46	400/3/50
BSUS 3402.2	62.68	37.98	297.60	114.90	3	700	34500	149	1300	8400	14.88	400/3/50
BSUS 3402.2 XL	62.68	37.98	297.60	114.90	2	800	34500	190	1300	9600	19.44	400/3/50
BSUS 3502.2	76.20	46.17	297.60	114.90	3	700	51000	80	1300	11100	20.19	400/3/50
BSUS 3502.2 XL	76.20	46.17	297.60	114.90	2	800	51000	150	1300	12600	23.00	400/3/50
BSUS 3602.2	92.50	56.04	407.80	155.30	4	700	54000	77	1300	11200	19.84	400/3/50
BSUS 3602.2 XL	92.50	56.04	407.80	155.30	3	800	54000	162	1300	14400	29.16	400/3/50
BSUS 3702.2	119.18	72.21	501.40	194.20	4	700	64000	85	1300	14800	26.92	400/3/50
BSUS 3702.2 XL	119.18	72.21	501.40	194.20	3	800	64000	135	1300	18900	34.50	400/3/50
BSUS 3802.2 XL	123.90	75.07	489.30	186.30	3	800	81000	106	1300	18900	34.50	400/3/50
BSUS 3902.2 XL	156.88	95.05	608.30	230.10	4	800	108000	104	1300	25200	46.00	400/3/50

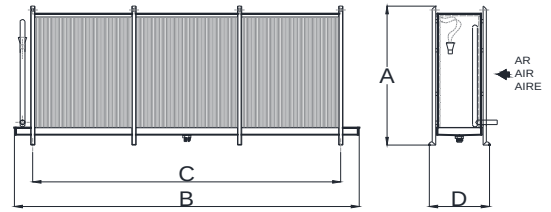
Modelo Type	Preço sem resistências Price without heaters	Preço com resistências Price with heaters	Opções Options										
			/GM GM hot gas defrost	/GE GE hot gas defrost	/GT GT hot gas defrost	/W Water defrost	AR Alhélas revestidas Coated fins	BL Lacado branco White painted	BI Chaparia Inox Stainless steel casing	TI Tab. esgoto isol. Insul. drain pan	BR Bateria resistências Heater coil	RG Resistências gola Fan heaters	AS Adaptador Conduas Air Sock Adapter
	EUR												
BSUS 3102.2	•	•	•	•	•	•	•	•	•	•	•	•	•
BSUS 3202.2	•	•	•	•	•	•	•	•	•	•	•	•	•
BSUS 3302.2	•	•	•	•	•	•	•	•	•	•	•	•	•
BSUS 3402.2	•	•	•	•	•	•	•	•	•	•	•	•	•
BSUS 3402.2 XL	•	•	•	•	•	•	•	•	•	•	•	•	•
BSUS 3502.2	•	•	•	•	•	•	•	•	•	•	•	•	•
BSUS 3502.2 XL	•	•	•	•	•	•	•	•	•	•	•	•	•
BSUS 3602.2	•	•	•	•	•	•	•	•	•	•	•	•	•
BSUS 3602.2 XL	•	•	•	•	•	•	•	•	•	•	•	•	•
BSUS 3702.2	•	•	•	•	•	•	•	•	•	•	•	•	•
BSUS 3702.2 XL	•	•	•	•	•	•	•	•	•	•	•	•	•
BSUS 3802.2 XL	•	•	•	•	•	•	•	•	•	•	•	•	•
BSUS 3902.2 XL	•	•	•	•	•	•	•	•	•	•	•	•	•

S Standard SP Sob pedido
S Standard SP Under request

Painel de Ventilação Fan panel



Bateria Coil



	Dados eléctricos resistências Heaters electrical data			Ligações standard Standard connections			Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain								
	kW	A	V / F / Hz	in	in	in	A	B	C	D	H	kg	m³	
	9.60	8,3+5,5	400/3/50	7/8	1 5/8	2 BSP	1350	1400	1050	731	815	235.0	2.44	BSUS 3102.2
	18.00	15,6+10,4	400/3/50	7/8	2 1/8	2 BSP	1350	2200	1850	731	815	385.0	3.79	BSUS 3202.2
	22.50	2x16,2	400/3/50	1 1/8	2 1/8	2 BSP	1590	2300	1950	731	815	450.0	4.42	BSUS 3302.2
	33.12	2x23,94	400/3/50	2x7/8	2x2 1/8	2 BSP	1590	3200	2750	731	815	620.0	6.24	BSUS 3402.2
	33.12	2x23,94	400/3/50	2x7/8	2x2 1/8	2 BSP	1590	3200	2750	731	915	620.0	6.24	BSUS 3402.2 XL
	33.12	2x23,94	400/3/50	2x7/8	2x2 1/8	2 BSP	1590	3200	2750	731	815	635.0	6.24	BSUS 3502.2
	33.12	2x23,94	400/3/50	2x7/8	2x2 1/8	2 BSP	1590	3200	2750	731	915	635.0	6.24	BSUS 3502.2 XL
	51.12	3x24,60	400/3/50	2x7/8	2x2 1/8	2 BSP	1590	4200	3750	731	815	855.0	8.18	BSUS 3602.2
	51.12	3x24,60	400/3/50	2x7/8	2x2 1/8	2 BSP	1590	4200	3750	731	915	855.0	8.18	BSUS 3602.2 XL
	51.12	3x24,60	400/3/50	2x7/8	2x2 1/8	2 BSP	1590	4200	3750	829	815	990.0	9.30	BSUS 3702.2
	51.12	3x24,60	400/3/50	2x7/8	2x2 1/8	2 BSP	1590	4200	3750	829	915	990.0	9.30	BSUS 3702.2 XL
	57.96	3x23,88+11,94	400/3/50	2x1 1/8	2x2 5/8	2 BSP	1830	4200	3750	731	915	970.0	8.99	BSUS 3802.2 XL
	61.32	3x25,32+12,66	400/3/50	2x1 1/8	2x2 5/8	2 BSP	1830	5100	4650	731	915	1165.0	10.92	BSUS 3902.2 XL

Seleção e Factores Selection and Factors

RCm		DTm [K]						
		10	9	8	7	6	5	4
TC [°C]	+5	1.352	1.217	1.082	0.947	0.813	0.707	0.588
	+2	1.250	1.125	1.000	0.893	0.772	0.665	0.539
	0	1.188	1.069	0.950	0.830	0.710	0.609	0.490
	-15	1.018	0.918	0.830	0.730	0.640	0.539	0.434
	-20	0.963	0.867	0.770	0.660	0.583	0.490	0.393
	-25	0.950	0.854	0.764	0.649	0.567	0.476	0.385
		-34				0.561	0.471	0.381

FC1		TE [°C]						
		+5	0	-5	-10	-25	-35	-40
R404A / R507		1.00	1.00	1.00	1.00	1.00	1.00	1.00
R134a		1.02	1.00	0.98	0.95			
R22 (DT1≤8K)			0.98	1.00	1.00	1.02	1.04	1.06
R22 (DT1>8K)			1.02	1.02	1.02	1.04	1.06	1.08

FC2		Aluminio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor		1.00	0.97	1.03

FG		Ciclo T [horas] T Cycle [hours]		
		T < 6	6 < T < 8	8 < T < 10
Arrefecimento Chilling		1.00	0.95	0.90
Congelamento Freezing		1.00	0.90	0.85

Nomenclatura Nomenclature	
TC	Temperatura de câmara Room temperature
TE	Temperatura de evaporação Evaporating temperature
Q _{sm}	Capacidade para selecção em DTm Selection capacity in DTm
Q _{0m}	Capacidade corrigida em DTm Corrected capacity in DTm
FC1	Factor de correcção do refrigerante Refrigerant correction factor
FC2	Factor de correcção do material das alhetas Fin material correction factor
FG	Factor de gelo Ice factor
RCm	Factor de correcção para dados em DTm Correction factor for data in DTm

Capacidade corrigida Corrected capacity	
BSUS/E 3502.2 TC=0°C DTm=5K R404A T = 7h Alumínio / Aluminium	$Q_{0m} = Q_{sm} \times RCm \times FC1 \times FC2 \times FG \text{ [kW]}$ $Q_{0m} = 76,20 \text{ kW} \times 0,609 \times 1 \times 1 \times 0,95 = 44,09 \text{ kW}$

BSUS



Evaporadores de Túnel Blast Freezers

Espaçamento Fin Spacing

10,0x20,0 mm

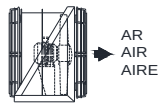
Ø Ventiladores Fan Ø

700 - 800 mm

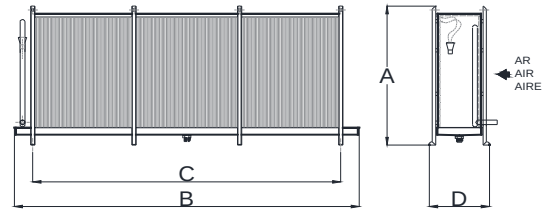
AP	APD	DF	TAL	ERK	BXN	MBX	RWK	CBN	DD	TFC	MTA	BSUT		
APL											DDL	DXL		
														
		Modelo Type	Capacidade QSm Capacity QSm (TC=+2°C / DTm=8K)	Capacidade Q0m Capacity Q0m (TC=-18°C / DTm=6K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans							
			kW		m ²	dm ³	Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Pressão estática Static pressure	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS
								mm	m ³ /h	Pa	rpm	W	A	V / F / Hz
TA		BSUS 4102.2	19.31	11.86	88.70	46.10	1	700	11500	106	1300	2800	4.96	400/3/50
		BSUS 4202.2	37.71	23.15	159.60	78.40	2	700	23000	94	1300	5600	9.92	400/3/50
		BSUS 4302.2	52.16	32.03	210.50	103.10	2	700	34000	86	1300	7400	13.46	400/3/50
		BSUS 4402.2	55.84	34.29	243.20	114.90	3	700	39000	106	1300	8400	14.88	400/3/50
		BSUS 4402.2 XL	55.84	34.29	243.20	114.90	2	800	39000	146	1300	9600	19.44	400/3/50
		BSUS 4502.2	75.68	46.47	299.20	143.60	3	700	51000	85	1300	11100	20.19	400/3/50
		BSUS 4502.2 XL	75.68	46.47	299.20	143.60	2	800	51000	140	1300	12600	23.00	400/3/50
ERK		BSUS 4602.2	79.49	48.81	333.30	155.30	4	700	54000	82	1300	11200	19.84	400/3/50
		BSUS 4602.2 XL	79.49	48.81	333.30	155.30	3	800	54000	132	1300	14400	29.16	400/3/50
		BSUS 4702.2 XL	106.55	65.42	410.00	194.20	3	800	74000	145	1300	18900	34.50	400/3/50
		BSUS 4802.2 XL	123.90	76.08	492.00	233.00	3	800	81000	109	1300	18900	34.50	400/3/50
		BSUS 4902.2 XL	131.33	80.64	497.20	230.00	4	800	108000	124	1300	25200	46.00	400/3/50

S Standard
S StandardSP Sob pedido
SP Under request

Painel de Ventilação Fan panel



Bateria Coil



	Dados eléctricos resistências Heaters electrical data			Ligações standard Standard connections			Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain								
	kW	A	V / F / Hz	in	in	in	A	B	C	D	H	kg	m³	
	9.60	8,3+5,5	400/3/50	7/8	1 5/8	2 BSP	1350	1400	1050	829	815	265.0	2.76	BSUS 4102.2
	18.00	15,6+10,4	400/3/50	7/8	2 1/8	2 BSP	1350	2200	1850	829	815	440.0	4.29	BSUS 4202.2
	22.50	2x16,2	400/3/50	1 1/8	2 1/8	2 BSP	1590	2300	1950	829	815	520.0	5.01	BSUS 4302.2
	33.12	2x23,94	400/3/50	1 1/8	2 1/8	2 BSP	1590	3200	2750	731	815	630.0	6.24	BSUS 4402.2
	33.12	2x23,94	400/3/50	1 1/8	2 1/8	2 BSP	1590	3200	2750	731	915	630.0	6.24	BSUS 4402.2 XL
	33.12	2x23,94	400/3/50	2x7/8	2x2 1/8	2 BSP	1590	3200	2750	829	815	730.0	7.09	BSUS 4502.2
	33.12	2x23,94	400/3/50	2x7/8	2x2 1/8	2 BSP	1590	3200	2750	829	915	730.0	7.09	BSUS 4502.2 XL
	51.12	3x24,60	400/3/50	2x7/8	2x2 1/8	2 BSP	1590	4200	3750	731	815	885.0	8.18	BSUS 4602.2
	51.12	3x24,60	400/3/50	2x7/8	2x2 1/8	2 BSP	1590	4200	3750	731	915	885.0	8.18	BSUS 4602.2 XL
	51.12	3x24,60	400/3/50	2x7/8	2x2 1/8	2 BSP	1590	4200	3750	829	915	1010.0	9.30	BSUS 4702.2 XL
	57.96	3x23,88+11,94	400/3/50	2x7/8	2x2 1/8	2 BSP	1830	4200	3750	829	915	1115.0	10.22	BSUS 4802.2 XL
	61.32	3x25,32+12,66	400/3/50	2x1 1/8	2x2 5/8	2 BSP	1830	5100	4650	731	915	1200.0	10.92	BSUS 4902.2 XL

Seleção e Factores Selection and Factors

RCm		DTm [K]						
		10	9	8	7	6	5	4
TC [°C]	+5	1.406	1.266	1.125	0.985	0.846	0.735	0.612
	+2	1.300	1.170	1.000	0.929	0.803	0.692	0.561
	0	1.235	1.112	0.988	0.863	0.738	0.633	0.510
	-15	1.013	0.910	0.808	0.708	0.626	0.522	0.421
	-20	1.002	0.902	0.801	0.686	0.606	0.510	0.409
	-25	0.988	0.888	0.795	0.675	0.590	0.495	0.400
	-34					0.584	0.490	0.396
	-40					0.571	0.478	0.389

FC1		TE [°C]						
		+5	0	-5	-10	-25	-35	-40
R404A / R507		1.00	1.00	1.00	1.00	1.00	1.00	1.00
R134a		1.02	1.00	0.98	0.95			
R22 (DT1≤8K)			0.98	1.00	1.00	1.02	1.04	1.06
R22 (DT1>8K)			1.02	1.02	1.02	1.04	1.06	1.08

FC2		Aluminio Aluminium	Al. revestido Coated aluminium	Cobre Copper
Factor		1.00	0.97	1.03

FG		Ciclo T [horas] T Cycle [hours]		
		T < 6	6 < T < 8	8 < T < 10
Arrefecimento Chilling		1.00	0.95	0.90
Congelamento Freezing		1.00	0.90	0.85

Nomenclatura Nomenclature	
TC	Temperatura de câmara Room temperature
TE	Temperatura de evaporação Evaporating temperature
Q _{Sm}	Capacidade para selecção em DTm Selection capacity in TDm
Q _{0m}	Capacidade corrigida em DTm Corrected capacity in TDm
FC1	Factor de correcção do refrigerante Refrigerant correction factor
FC2	Factor de correcção do material das alhetas Fin material correction factor
FG	Factor de gelo Ice factor
RCm	Factor de correcção para dados em DTm Correction factor for data in DTm

Capacidade corrigida Corrected capacity

BSUS/E 4702.2 TC=-34°C DTm=5K R404A T = 9h Alumínio / Aluminium	Q _{0m} = Q _{Sm} x RCm x FC1 x FC2 x FG [kW]
	Q _{0m} = 106,55 kW x 0,490 x 1 x 1 x 0,90 = 46,99 kW

EVAPORADORES ESTÁTICOS

GRAVITY COILS





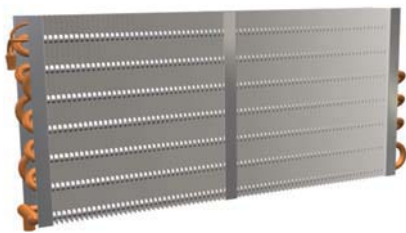
Evaporador ECT com apara pingos
ECT coil with drip tray



Evaporador ECT com apara pingos
ECT coil with drip tray

70 - 83

BBX - VBN



Evaporadores Estáticos Gravity Coils
Espaçamento Fin Spacing
Ø Tubo Tube Ø

12,0 mm
3/8"

BBX
VBN

VBT
VBI
VPB

VBN
VCT
BCX

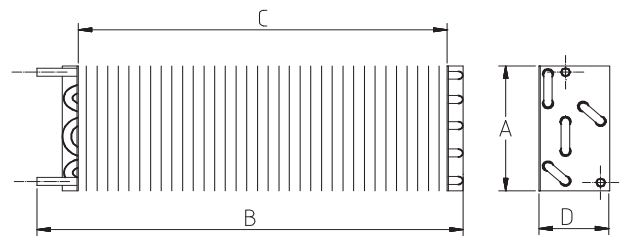
TX
EAC
EPC

ECT

VEH
BEH
MEH

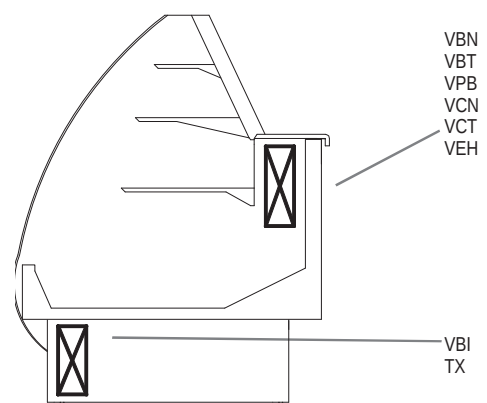
Modelo Type	Preço Price	Capacidade Capacity (DT=10K)	Superfície Surface	Dimensões Dimensions				
				A	B	C	D	
				mm				
BBX								
4BBX5	•	38	0.36	127	610	530	40	
4BBX6	•	43	0.40	127	680	600	40	
4BBX7	•	50	0.47	127	780	700	40	
4BBX13	•	94	0.88	127	1410	1330	40	
4BBX15	•	108	1.00	127	1610	1530	40	
4BBX20	•	147	1.37	127	2160	2080	40	
4BBX25	•	181	1.69	127	2660	2580	40	
4BBX30	•	216	2.02	127	3160	3080	40	
6BBX5	•	57	0.54	191	610	530	40	
6BBX6	•	65	0.61	191	680	600	40	
6BBX7	•	756	0.70	191	780	700	40	
6BBX13	•	141	1.32	191	1410	1330	40	
6BBX15	•	162	1.52	191	1610	1530	40	
6BBX20	•	220	2.05	191	2160	2080	40	
6BBX25	•	272	2.54	191	2660	2580	40	
6BBX30	•	323	3.03	191	3160	3080	40	
8BBX5	•	77	0.72	254	610	530	40	
8BBX6	•	86	0.81	254	680	600	40	
8BBX7	•	126	0.94	254	780	700	40	
8BBX13	•	188	1.76	254	1410	1330	40	
8BBX15	•	216	2.02	254	1610	1530	40	
8BBX20	•	293	2.74	254	2160	2080	40	
8BBX25	•	363	3.39	254	2660	2580	40	
8BBX30	•	433	4.04	254	3160	3080	40	
10BBX5	•	95	0.89	318	610	530	40	
10BBX6	•	108	1.00	318	680	600	40	
10BBX7	•	126	1.17	318	780	700	40	
10BBX13	•	235	2.20	318	1410	1330	40	
10BBX15	•	270	2.52	318	1610	1530	40	
10BBX20	•	366	3.42	318	2160	2080	40	
10BBX25	•	453	4.24	318	2660	2580	40	
10BBX30	•	541	5.01	318	3160	3080	40	
12BBX5	•	115	1.07	381	610	530	40	
12BBX6	•	129	1.21	381	680	600	40	
12BBX7	•	150	1.40	381	780	700	40	
12BBX13	•	282	2.64	381	1410	1330	40	
12BBX15	•	324	3.03	381	1610	1530	40	
12BBX20	•	439	4.11	381	2160	2080	40	
12BBX25	•	544	5.09	381	2060	2580	40	
12BBX30	•	646	6.07	381	3160	3080	40	

centauro



Modelo Type	Preço Price	Capacidade Capacity (DT=10K)	Superfície Surface	Dimensões Dimensions				
				A	B	C	D	
				mm				
VBN								
6VBN5	•	72	0.77	96	650	530	98	
6VBN7	•	94	1.02	96	820	700	98	
6VBN11	•	153	1.64	96	1265	1145	98	
6VBN13	•	178	1.91	96	1450	1330	98	
6VBN16	•	219	2.35	96	1765	1645	98	
6VBN21	•	285	3.06	96	2265	2145	98	
6VBN26	•	349	3.77	96	2765	2645	98	
6VBN31	•	419	4.48	96	3265	3145	98	
8VBN5	•	96	1.03	127	650	530	98	
8VBN7	•	126	1.35	127	820	700	98	
8VBN11	•	203	2.19	127	1265	1145	98	
8VBN13	•	238	2.54	127	1450	1330	98	
8VBN16	•	291	3.14	127	1765	1645	98	
8VBN21	•	384	4.08	127	2265	2145	98	
8VBN26	•	465	5.03	127	2765	2645	98	
8VBN31	•	558	5.96	127	3265	3145	98	
10VBN5	•	120	1.29	159	650	530	98	
10VBN7	•	160	1.69	159	820	700	98	
10VBN11	•	253	2.74	159	1265	1145	98	
10VBN13	•	295	3.18	159	1450	1330	98	
10VBN16	•	366	3.92	159	1765	1645	98	
10VBN21	•	474	5.10	159	2265	2145	98	
10VBN26	•	588	6.28	159	2765	2645	98	
10VBN31	•	698	7.46	159	3265	3145	98	
12VBN5	•	144	1.55	191	650	530	98	
12VBN7	•	195	2.03	191	820	700	98	
12VBN11	•	312	3.29	191	1265	1145	98	
12VBN13	•	356	3.81	191	1450	1330	98	
12VBN16	•	442	4.70	191	1765	1645	98	
12VBN21	•	570	6.12	191	2265	2145	98	
12VBN26	•	819	7.54	191	2765	2645	98	
12VBN31	•	972	8.95	191	3265	3145	98	
14VBN5	•	169	1.81	223	650	530	98	
14VBN7	•	221	2.37	223	820	700	98	
14VBN11	•	357	3.84	223	1265	1145	98	
14VBN13	•	414	4.45	223	1450	1330	98	
14VBN16	•	510	5.49	223	1765	1645	98	
14VBN21	•	664	7.14	223	2265	2145	98	
14VBN26	•	819	8.79	223	2765	2645	98	
14VBN31	•	972	10.44	223	3265	3145	98	

Aplicações Applications



VB-T - VBI - VPB

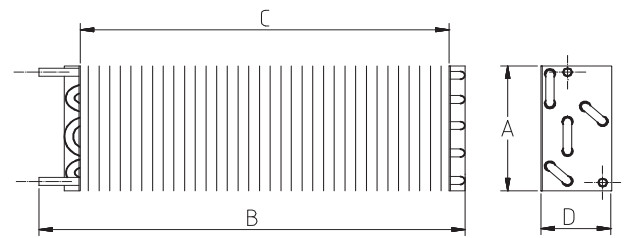
Evaporadores Estáticos Gravity Coils
Espaçamento Fin Spacing
Ø Tubo Tube Ø

12,0 mm
3/8"



Modelo Type				Dimensões Dimensions				
	Preço Price	Capacidade Capacity (DT=10K)	Superfície Surface	A	B	C	D	
	EUR	W	m²	mm				
VBT								
6VBT5	•	88	1.00	127	650	530	98	
6VBT7	•	115	1.32	127	820	700	98	
6VBT11	•	186	2.14	127	1265	1145	98	
6VBT13	•	217	2.49	127	1450	1330	98	
6VBT16	•	267	3.07	127	1765	1645	98	
6VBT21	•	349	3.99	127	2265	2145	98	
6VBT26	•	430	4.92	127	2765	2645	98	
6VBT31	•	510	5.85	127	3265	3145	98	
8VBT5	•	110	1.26	159	650	530	98	
8VBT7	•	145	1.66	159	820	700	98	
8VBT11	•	235	2.69	159	1265	1145	98	
8VBT13	•	272	3.12	159	1450	1330	98	
8VBT16	•	336	3.86	159	1765	1645	98	
8VBT21	•	437	5.02	159	2265	2145	98	
8VBT26	•	538	6.18	159	2765	2645	98	
8VBT31	•	639	7.34	159	3265	3145	98	
10VBT5	•	132	1.52	191	650	530	98	
10VBT7	•	174	1.99	191	820	700	98	
10VBT11	•	285	3.24	191	1265	1145	98	
10VBT13	•	328	3.76	191	1450	1330	98	
10VBT16	•	405	4.64	191	1765	1645	98	
10VBT21	•	527	6.04	191	2265	2145	98	
10VBT26	•	649	7.44	191	2765	2645	98	
10VBT31	•	771	8.83	191	3265	3145	98	
12VBT5	•	156	1.78	223	650	530	98	
12VBT7	•	203	2.34	223	820	700	98	
12VBT11	•	330	3.79	223	1265	1145	98	
12VBT13	•	384	4.39	223	1450	1330	98	
12VBT16	•	473	5.42	223	1765	1645	98	
12VBT21	•	615	7.06	223	2265	2145	98	
12VBT26	•	758	8.69	223	2765	2645	98	
12VBT31	•	901	10.33	223	3265	3145	98	
14VBT5	•	178	2.04	254	650	530	98	
14VBT7	•	233	2.67	254	820	700	98	
14VBT11	•	379	4.34	254	1265	1145	98	
14VBT13	•	438	5.03	254	1450	1330	98	
14VBT16	•	542	6.21	254	1765	1645	98	
14VBT21	•	705	8.08	254	2265	2145	98	
14VBT26	•	867	9.95	254	2765	2645	98	
14VBT31	•	1031	11.82	254	3265	3145	98	

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BBX
VBN

VBT
VBI
VPB

VCN
VCT
BCX

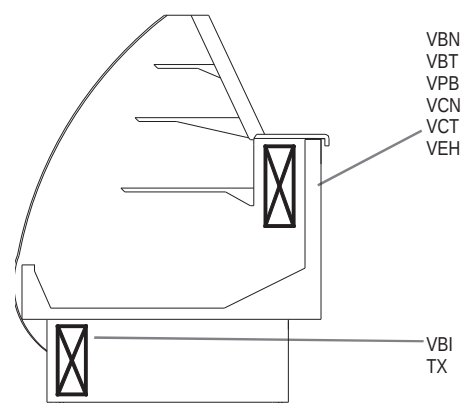
TX
EAC
EPC

ECT

VEH
BEH
MEH

Modelo Type	Preço Price	Capacidade Capacity (DT=10K)	Superfície Surface	Dimensões Dimensions				
				A	B	C	D	
	EUR	W	m ²	mm				
VBI								
4VBI5	•	51	0.51	96	610	530	68	
4VBI7	•	66	0.67	96	780	700	68	
4VBI10	•	97	0.99	96	1110	1030	68	
4VBI13	•	126	1.27	96	1410	1330	68	
4VBI15	•	143	1.45	96	1610	1530	68	
4VBI20	•	195	1.98	96	2160	2080	68	
4VBI25	•	242	2.45	96	2660	2580	68	
4VBI30	•	291	2.92	96	3160	3080	68	
6VBI5	•	69	0.69	127	610	530	68	
6VBI7	•	90	0.91	127	780	700	68	
6VBI10	•	145	1.47	127	1110	1030	68	
6VBI13	•	169	1.71	127	1410	1330	68	
6VBI15	•	208	2.11	127	1610	1530	68	
6VBI20	•	271	2.74	127	2160	2080	68	
6VBI25	•	334	3.38	127	2660	2580	68	
6VBI30	•	395	4.00	127	3160	3080	68	
VPB								
6VPB5	•	102	1.23	159	650	530	98	
6VPB7	•	135	1.62	159	820	700	98	
6VPB11	•	219	2.64	159	1265	1145	98	
6VPB13	•	253	3.07	159	1450	1330	98	
6VPB16	•	313	3.79	159	1765	1645	98	
6VPB21	•	407	4.94	159	2265	2145	98	
6VPB26	•	502	6.08	159	2765	2645	98	
6VPB31	•	596	7.22	159	3265	3145	98	
8VPB5	•	123	1.49	191	650	530	98	
8VPB7	•	162	1.96	191	820	700	98	
8VPB11	•	264	3.19	191	1265	1145	98	
8VPB13	•	308	3.70	191	1450	1330	98	
8VPB16	•	376	4.58	191	1765	1645	98	
8VPB21	•	489	5.96	191	2265	2145	98	
8VPB26	•	603	7.33	191	2765	2645	98	
8VPB31	•	720	8.72	191	3265	3145	98	

Aplicações Applications



VEH
BEH
MEH

VCN - VCT - BCX

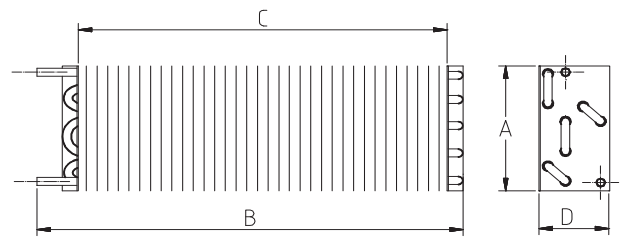


Evaporadores Estáticos Gravity Coils
Espaçamento Fin Spacing
Ø Tubo Tube Ø

12,0 mm
1/2"

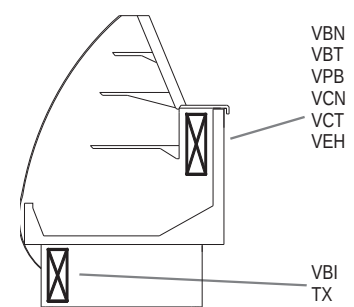
Modelo Type	Preço Price	Capacidade Capacity (DT=10K)	Superfície Surface	Dimensões Dimensions				
				A	B	C	D	
	EUR	W	m²	mm				
VCN								
6VCN5	•	100	1.07	115	660	520	114	
6VCN7	•	132	1.41	115	830	690	114	
6VCN11	•	214	2.29	115	1275	1135	114	
6VCN13	•	248	2.67	115	1460	1320	114	
6VCN16	•	307	3.29	115	1775	1635	114	
6VCN21	•	399	4.29	115	2275	2135	114	
6VCN26	•	492	5.28	115	2775	2635	114	
6VCN31	•	585	6.28	115	3275	3135	114	
6VCN36	•	677	7.28	115	3775	3635	114	
8VCN5	•	133	1.43	153	660	520	114	
8VCN7	•	174	1.88	153	830	690	114	
8VCN11	•	285	3.06	153	1275	1135	114	
8VCN13	•	330	3.55	153	1460	1320	114	
8VCN16	•	408	4.39	153	1775	1635	114	
8VCN21	•	533	5.72	153	2275	2135	114	
8VCN26	•	656	7.05	153	2775	2635	114	
8VCN31	•	779	8.37	153	3275	3135	114	
8VCN36	•	904	9.71	153	3775	3635	114	
10VCN5	•	166	1.78	191	660	520	114	
10VCN7	•	219	2.35	191	830	690	114	
10VCN11	•	356	3.83	191	1275	1135	114	
10VCN13	•	413	4.44	191	1460	1320	114	
10VCN16	•	510	5.49	191	1775	1635	114	
10VCN21	•	665	7.15	191	2275	2135	114	
10VCN26	•	820	8.81	191	2775	2635	114	
10VCN31	•	974	10.47	191	3275	3135	114	
10VCN36	•	1129	12.13	191	3775	3635	114	
12VCN5	•	199	2.14	229	660	520	114	
12VCN7	•	262	2.82	229	830	690	114	
12VCN11	•	427	4.59	229	1275	1135	114	
12VCN13	•	495	5.33	229	1460	1320	114	
12VCN16	•	613	6.59	229	1775	1635	114	
12VCN21	•	798	8.58	229	2275	2135	114	
12VCN26	•	984	10.57	229	2775	2635	114	
12VCN31	•	1167	12.56	229	3275	3135	114	
12VCN36	•	1354	14.56	229	3775	3635	114	
14VCN5	•	233	2.49	267	660	520	114	
14VCN7	•	306	3.29	267	830	690	114	
14VCN11	•	499	5.36	267	1275	1135	114	
14VCN13	•	579	6.22	267	1460	1320	114	
14VCN16	•	715	7.68	267	1775	1635	114	
14VCN21	•	930	10.00	267	2275	2135	114	
14VCN26	•	1148	12.33	267	2775	2635	114	
14VCN31	•	1364	14.66	267	3275	3135	114	
14VCN36	•	1580	15.98	267	3775	3635	114	
VCT								
12VCT5	•	154	1.47	153	620	520	114	
12VCT7	•	202	1.93	153	790	690	114	
12VCT11	•	329	3.14	153	1235	1135	114	
12VCT13	•	381	3.65	153	1420	1320	114	
12VCT16	•	472	4.51	153	1735	1635	114	
12VCT21	•	615	5.87	153	2235	2135	114	
12VCT26	•	756	7.23	153	2735	2635	114	
12VCT31	•	900	8.60	153	3235	3135	114	
12VCT36	•	1043	9.96	153	3735	3635	114	
15VCT5	•	192	1.83	191	620	520	114	
15VCT7	•	252	2.41	191	790	690	114	
15VCT11	•	410	3.93	191	1235	1135	114	
15VCT13	•	477	4.56	191	1420	1320	114	
15VCT16	•	590	5.63	191	1735	1635	114	
15VCT21	•	767	7.34	191	2235	2135	114	
15VCT26	•	947	9.04	191	2735	2635	114	
15VCT31	•	1126	10.75	191	3235	3135	114	
15VCT36	•	1302	12.45	191	3735	3635	114	

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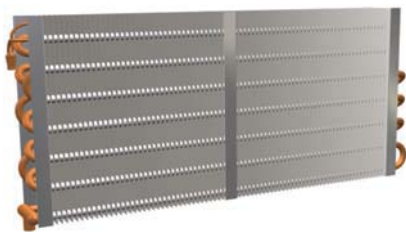


Modelo Type	Preço Price	Capacidade Capacity (DT=10K)	Superfície Surface	Dimensões Dimensions				
				A	B	C	D	
	EUR	W	m²	mm				
BCX								
4BCX5	•	49	0.49	77	620	520	79	
4BCX6	•	56	0.55	77	690	590	79	
4BCX7	•	65	0.64	77	790	690	79	
4BCX10	•	94	0.94	77	1120	1020	79	
4BCX13	•	122	1.22	77	1420	1320	79	
4BCX15	•	140	1.40	77	1620	1520	79	
4BCX20	•	190	1.90	77	2170	2070	79	
4BCX25	•	236	2.35	77	2670	2570	79	
4BCX30	•	281	2.81	77	3170	3070	79	
4BCX36	•	334	3.33	77	3745	3645	79	
6BCX5	•	73	0.73	115	620	520	79	
6BCX6	•	83	0.83	115	690	590	79	
6BCX7	•	97	0.96	115	790	690	79	
6BCX10	•	142	1.42	115	1120	1020	79	
6BCX13	•	183	1.82	115	1420	1320	79	
6BCX15	•	209	2.10	115	1620	1520	79	
6BCX20	•	285	2.85	115	2170	2070	79	
6BCX25	•	353	3.53	115	2670	2570	79	
6BCX30	•	421	4.21	115	3170	3070	79	
6BCX36	•	500	4.99	115	3745	3645	79	
8BCX5	•	102	0.97	153	620	520	79	
8BCX6	•	115	1.10	153	690	590	79	
8BCX7	•	135	1.28	153	790	690	79	
8BCX10	•	198	1.88	153	1120	1020	79	
8BCX13	•	255	2.43	153	1420	1320	79	
8BCX15	•	293	2.79	153	1620	1520	79	
8BCX20	•	398	3.79	153	2170	2070	79	
8BCX25	•	493	4.70	153	2670	2570	79	
8BCX30	•	588	5.62	153	3170	3070	79	
8BCX36	•	698	6.66	153	3745	3645	79	
10BCX5	•	128	1.22	191	620	520	79	
10BCX6	•	144	1.38	191	690	590	79	
10BCX7	•	169	1.61	191	790	690	79	
10BCX10	•	247	2.36	191	1120	1020	79	
10BCX13	•	319	3.04	191	1420	1320	79	
10BCX15	•	366	3.49	191	1620	1520	79	
10BCX20	•	497	4.74	191	2170	2070	79	
10BCX25	•	616	5.88	191	2670	2570	79	
10BCX30	•	735	7.02	191	3170	3070	79	
10BCX36	•	872	8.33	191	3745	3645	79	
12BCX5	•	153	1.47	229	620	520	79	
12BCX6	•	173	1.66	229	690	590	79	
12BCX7	•	202	1.93	229	790	690	79	
12BCX10	•	297	2.83	229	1120	1020	79	
12BCX13	•	381	3.65	229	1420	1320	79	
12BCX15	•	438	4.19	229	1620	1520	79	
12BCX20	•	597	5.69	229	2170	2070	79	
12BCX25	•	738	7.06	229	2670	2570	79	
12BCX30	•	881	8.42	229	3170	3070	79	
12BCX36	•	1045	9.99	229	3745	3645	79	

Aplicações Applications



TX - EPC - EAC

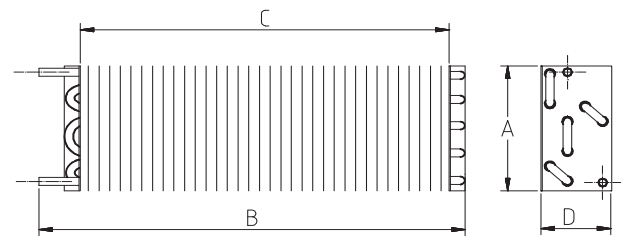


Evaporadores Estáticos Gravity Coils
Espaçamento Fin Spacing
Ø Tubo Tube Ø

12,0 mm
1/2"

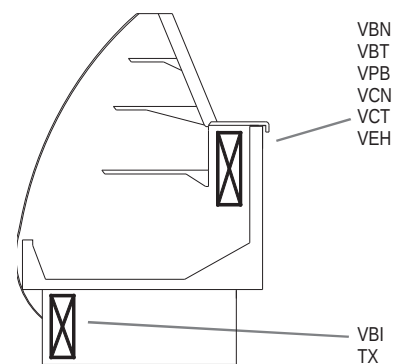
Modelo Type	Preço Price	Capacidade Capacity (DT=10K)	Superfície Surface	Dimensões Dimensions				
				A	B	C	D	
				mm				
TX								
4TX620	•	63	0.68	115	620	520	79	
4TX720	•	76	0.81	115	720	620	79	
4TX800	•	86	0.92	115	800	700	79	
4TX1100	•	121	1.31	115	1100	1000	79	
4TX1200	•	134	1.44	115	1200	1100	79	
4TX1400	•	158	1.70	115	1400	1300	79	
4TX1700	•	194	2.09	115	1700	1600	79	
4TX2000	•	231	2.49	115	2000	1900	79	
4TX2230	•	259	2.79	115	2230	2130	79	
4TX2300	•	267	2.88	115	2300	2200	79	
4TX2600	•	305	3.27	115	2600	2500	79	
4TX2750	•	323	3.47	115	2750	2650	79	
4TX3250	•	384	4.12	115	3250	3150	79	
4TX3750	•	444	4.78	115	3750	3650	79	
6TX620	•	85	0.91	153	620	520	79	
6TX720	•	100	1.08	153	720	620	79	
6TX800	•	114	1.23	153	800	700	79	
6TX1100	•	163	1.75	153	1100	1000	79	
6TX1200	•	179	1.92	153	1200	1100	79	
6TX1400	•	212	2.27	153	1400	1300	79	
6TX1700	•	259	2.79	153	1700	1600	79	
6TX2000	•	309	3.32	153	2000	1900	79	
6TX2230	•	347	3.72	153	2230	2130	79	
6TX2300	•	357	3.84	153	2300	2200	79	
6TX2600	•	406	4.36	153	2600	2500	79	
6TX2750	•	430	4.63	153	2750	2650	79	
6TX3250	•	510	5.49	153	3250	3150	79	
6TX3650	•	593	6.37	153	3750	3650	79	
8TX620	•	106	1.13	191	620	520	79	
8TX720	•	126	1.35	191	720	620	79	
8TX800	•	143	1.54	191	800	700	79	
8TX1100	•	205	2.19	191	1100	1000	79	
8TX1200	•	223	2.49	191	1200	1100	79	
8TX1400	•	264	2.84	191	1400	1300	79	
8TX1700	•	324	3.49	191	1700	1600	79	
8TX2000	•	386	4.15	191	2000	1900	79	
8TX2230	•	433	4.65	191	2230	2130	79	
8TX2300	•	448	4.81	191	2300	2200	79	
8TX2600	•	507	5.45	191	2600	2500	79	
8TX2750	•	538	5.79	191	2750	2650	79	
8TX3250	•	640	6.87	191	3250	3150	79	
8TX3750	•	742	7.97	191	3750	3650	79	
10TX620	•	127	1.36	229	620	520	79	
10TX720	•	151	1.62	229	720	620	79	
10TX800	•	171	1.84	229	800	700	79	
10TX1100	•	244	2.62	229	1100	1000	79	
10TX1200	•	267	2.88	229	1200	1100	79	
10TX1400	•	316	3.40	229	1400	1300	79	
10TX1700	•	390	4.18	229	1700	1600	79	
10TX2000	•	463	4.98	229	2000	1900	79	
10TX2230	•	519	5.58	229	2230	2130	79	
10TX2300	•	536	5.76	229	2300	2200	79	
10TX2600	•	608	6.54	229	2600	2500	79	
10TX2750	•	645	6.94	229	2750	2650	79	
10TX3250	•	766	8.24	229	3250	3150	79	
10TX3750	•	890	9.56	229	3750	3650	79	
EPC								
12EPC280	•	141	1.52	458	390	280	70	
12EPC380	•	190	2.05	458	490	380	70	
12EPC480	•	240	2.57	458	590	480	70	
12EPC580	•	288	3.09	458	690	580	70	
12EPC780	•	386	4.14	458	890	780	70	
12EPC980	•	484	5.19	458	1090	980	70	
12EPC1180	•	581	6.24	458	1290	1180	70	
12EPC1380	•	678	7.29	458	1490	1380	70	
18EPC280	•	213	2.29	686	390	280	70	

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Modelo Type	Preço Price	Capacidade Capacity (DT=10K)	Superfície Surface	Dimensões Dimensions				
				A	B	C	D	
				mm				
EUR		W	m²					
EPC								
18EPC380	•	286	3.07	686	490	380	70	
18EPC480	•	359	3.86	686	590	480	70	
18EPC580	•	433	4.64	686	690	580	70	
18EPC780	•	579	6.22	686	890	780	70	
18EPC980	•	726	7.79	686	1090	980	70	
18EPC1180	•	1162	9.36	686	1290	1180	70	
18EPC1380	•	1017	10.94	686	1490	1380	70	
24EPC280	•	284	3.05	915	390	280	70	
24EPC380	•	381	4.09	915	490	380	70	
24EPC480	•	479	5.14	915	590	480	70	
24EPC580	•	577	6.19	915	690	580	70	
24EPC780	•	770	8.29	915	890	780	70	
24EPC980	•	965	10.39	915	1090	980	70	
24EPC1180	•	1162	12.49	915	1290	1180	70	
24EPC1380	•	1357	14.58	915	1490	1380	70	
EAC								
12EAC300	•	180	2.21	420	460	300	105	
12EAC400	•	238	2.92	420	560	400	105	
12EAC550	•	326	3.99	420	710	550	105	
12EAC650	•	383	4.70	420	810	650	105	
12EAC750	•	441	5.42	420	910	750	105	
12EAC950	•	557	6.84	420	1110	950	105	
16EAC300	•	245	3.00	572	460	300	105	
16EAC400	•	324	3.98	572	560	400	105	
16EAC550	•	443	5.44	572	710	550	105	
16EAC650	•	522	6.40	572	810	650	105	
16EAC750	•	601	7.38	572	910	750	105	
16EAC950	•	759	9.32	572	1110	950	105	
20EAC300	•	311	3.81	724	460	300	105	
20EAC400	•	411	5.04	724	560	400	105	
20EAC550	•	561	6.88	724	710	550	105	
20EAC650	•	661	8.11	724	810	650	105	
20EAC750	•	761	9.34	724	910	750	105	
20EAC950	•	961	11.80	724	1110	950	105	
24EAC300	•	376	4.61	877	460	300	105	
24EAC400	•	497	6.10	877	560	400	105	
24EAC550	•	678	8.33	877	710	550	105	
24EAC650	•	798	9.82	877	810	650	105	
24EAC750	•	921	11.30	877	910	750	105	
24EAC950	•	1163	14.28	877	1110	950	105	
28EAC300	•	440	5.40	1029	460	300	105	
28EAC400	•	581	7.15	1029	560	400	105	
28EAC550	•	795	9.77	1029	710	550	105	
28EAC650	•	938	11.52	1029	810	650	105	
28EAC750	•	1079	13.27	1029	910	750	105	
28EAC950	•	1364	16.76	1029	1110	950	105	

Aplicações Applications



ECT

Evaporadores Estáticos Gravity Coils

Espaçamento Fin Spacing

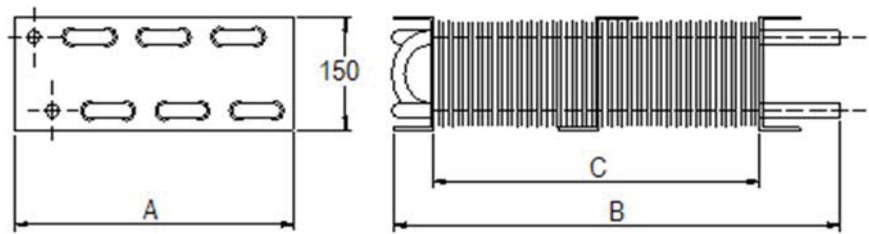
Ø Tubo Tube Ø

12,0 mm

1/2"



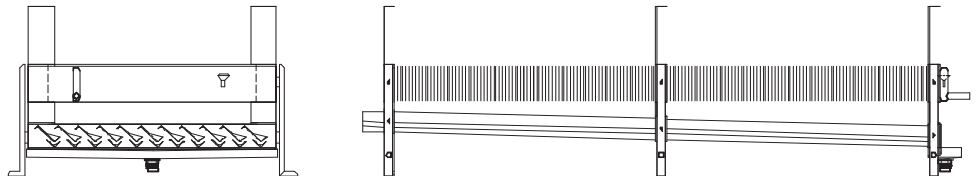
Modelo Type	Preços Prices				Capacidade Capacity (DT=10K)	Superfície Surface m²	Dimensões Dimensions			Pesos Weights				
	Permutador Coil	DT	DR	/E						Permutador Coil	Com apara pingos normal With normal drip tray	Com apara pingos reforçado With reinf. drip tray	Resistências Heaters	
		Normal drip tray	Apara pingos reforçado Reinforced drip tray											
		EUR					W	m²	mm					
ECT														
10ECT10	•	•	•	•	545	7.94	503	1180	1020	5.4	15.1	18.4	1.3	
10ECT13	•	•	•	•	703	10.25	503	1480	1320	7.0	17.7	21.6	1.6	
10ECT15	•	•	•	•	809	11.80	503	1680	1520	8.0	21.5	25.9	1.8	
10ECT17	•	•	•	•	923	13.46	503	1895	1735	9.2	23.4	28.2	2.1	
10ECT20	•	•	•	•	1101	16.05	503	2230	2070	11.0	26.3	31.8	2.5	
10ECT23	•	•	•	•	1242	18.09	503	2495	2335	12.4	30.7	36.8	2.8	
10ECT26	•	•	•	•	1400	20.41	503	2795	2635	14.0	33.3	40.1	3.2	
10ECT30	•	•	•	•	1631	23.77	503	3230	3070	16.3	37.0	44.7	3.6	
10ECT36	•	•	•	•	1930	28.13	503	3795	3635	19.2	43.9	53.0	4.4	
12ECT10	•	•	•	•	665	9.69	580	1180	1020	6.5	17.3	22.1	1.3	
12ECT13	•	•	•	•	859	12.53	580	1480	1320	8.4	20.4	26.0	1.6	
12ECT15	•	•	•	•	988	14.41	580	1680	1520	9.7	24.7	31.1	1.8	
12ECT17	•	•	•	•	1128	16.44	580	1895	1735	11.1	26.9	33.9	2.1	
12ECT20	•	•	•	•	1345	19.60	580	2230	2070	13.2	30.4	38.3	2.5	
12ECT23	•	•	•	•	1516	22.10	580	2495	2335	14.9	35.3	44.2	2.8	
12ECT26	•	•	•	•	1709	24.93	580	2795	2635	16.8	38.4	48.1	3.2	
12ECT30	•	•	•	•	1991	29.00	580	3230	3070	19.6	42.9	53.8	3.6	
12ECT36	•	•	•	•	2358	34.40	580	3795	3635	23.2	51.0	63.7	4.4	
14ECT10	•	•	•	•	786	11.45	656	1180	1020	7.7	19.6	25.9	1.3	
14ECT13	•	•	•	•	1015	14.80	656	1480	1320	10.0	23.2	30.5	1.6	
14ECT15	•	•	•	•	1169	17.03	656	1680	1520	11.5	28.0	36.5	1.8	
14ECT17	•	•	•	•	1332	19.42	656	1895	1735	13.1	30.6	39.8	2.1	
14ECT20	•	•	•	•	1589	23.16	656	2230	2070	15.6	34.7	44.9	2.5	
14ECT23	•	•	•	•	1792	26.11	656	2495	2335	17.6	40.2	51.9	2.8	
14ECT26	•	•	•	•	2021	29.45	656	2795	2635	19.9	43.8	56.5	3.2	
14ECT30	•	•	•	•	2353	34.30	656	3230	3070	23.2	49.2	63.1	3.6	
14ECT36	•	•	•	•	2786	40.69	656	3795	3635	27.4	58.3	74.7	4.4	
16ECT10	•	•	•	•	907	13.21	732	1180	1020	8.8	21.8	29.6	1.3	
16ECT13	•	•	•	•	1171	17.07	732	1480	1320	11.4	26.0	34.8	1.6	
16ECT15	•	•	•	•	1348	19.64	732	1680	1520	13.1	31.1	41.7	1.8	
16ECT17	•	•	•	•	1537	22.41	732	1895	1735	15.0	34.1	45.4	2.1	
16ECT20	•	•	•	•	1833	26.71	732	2230	2070	17.9	38.8	51.3	2.5	
16ECT23	•	•	•	•	2066	30.12	732	2495	2335	20.1	44.8	59.3	2.8	
16ECT26	•	•	•	•	2330	33.90	732	2795	2635	22.7	49.0	64.5	3.2	
16ECT30	•	•	•	•	2715	39.57	732	3230	3070	26.5	55.1	72.1	3.6	
16ECT36	•	•	•	•	3213	46.84	732	3795	3635	31.4	65.3	85.3	4.4	
18ECT10	•	•	•	•	1028	14.97	808	1180	1020	9.9	24.0	33.2	1.3	
18ECT13	•	•	•	•	1327	19.34	808	1480	1320	12.8	28.7	39.2	1.6	
18ECT15	•	•	•	•	1527	22.26	808	1680	1520	14.8	34.2	46.9	1.8	
18ECT17	•	•	•	•	1742	25.39	808	1895	1735	16.8	37.6	51.1	2.1	
18ECT20	•	•	•	•	2077	30.27	808	2230	2070	20.1	42.9	57.7	2.5	
18ECT23	•	•	•	•	2342	34.13	808	2495	2335	22.7	49.5	66.7	2.8	
18ECT26	•	•	•	•	2642	38.50	808	2795	2635	25.6	54.2	72.6	3.2	
18ECT30	•	•	•	•	3077	44.84	808	3230	3070	29.8	61.0	81.1	3.6	
18ECT36	•	•	•	•	3642	53.07	808	3795	3635	35.3	72.3	96.0	4.4	
20ECT10	•	•	•	•	1148	16.73	884	1180	1020	11.1	26.3	37.0	1.3	
20ECT13	•	•	•	•	1484	21.62	884	1480	1320	14.4	31.5	43.6	1.6	
20ECT15	•	•	•	•	1707	24.87	884	1680	1520	16.5	37.5	52.3	1.8	
20ECT17	•	•	•	•	1946	28.37	884	1895	1735	18.9	41.3	57.0	2.1	
20ECT20	•	•	•	•	2320	33.83	884	2230	2070	22.5	47.2	64.3	2.5	
20ECT23	•	•	•	•	2616	38.14	884	2495	2335	25.4	54.3	74.4	2.8	
20ECT26	•	•	•	•	2952	43.00	884	2795	2635	28.7	59.6	80.9	3.2	
20ECT30	•	•	•	•	3438	50.10	884	3230	3070	33.4	67.2	90.4	3.6	
20ECT36	•	•	•	•	4069	59.31	884	3795	3635	39.6	79.6	107.0	4.4	
22ECT10	•	•	•	•	1269	18.49	960	1180	1020	35.3	72.3	96.0	4.4	
22ECT13	•	•	•	•	1640	23.89	960	1480	1320	11.1	26.3	37.0	1.3	
22ECT15	•	•	•	•	1886	27.49	960	1680	1520	14.4	31.5	43.6	1.6	
22ECT17	•	•	•	•	2151	31.35	960	1895	1735	16.5	37.5	52.3	1.8	
22ECT20	•	•	•	•	2565	37.38	960	2230	2070	18.9	41.3	57.0	2.1	
22ECT23	•	•	•	•	2892	42.15	960	2495	2335	22.5	47.2	64.3	2.5	
22ECT26	•	•	•	•	3263	47.55	960	2795	2635	25.4	54.3	74.4	2.8	
22ECT30	•	•	•	•	3800	55.38	960	3230	3070	28.7	59.6	80.9	3.2	
22ECT36	•	•	•	•	4496	65.54	960	3795	3635	33.4	67.2	90.4	3.6	



DADOS TÉCNICOS TECHNICAL DATA

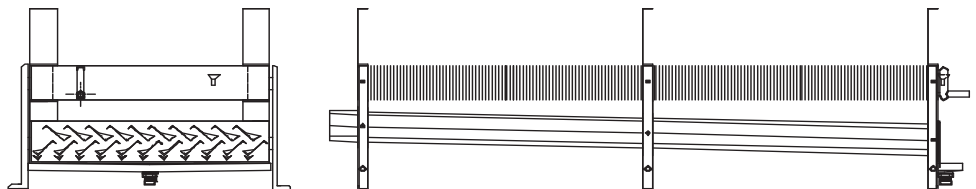
APARA PINGOS NORMAL NORMAL DRIP TRAY

TC > +2°C



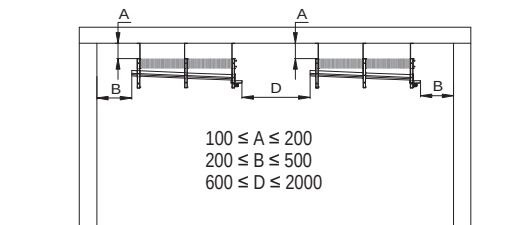
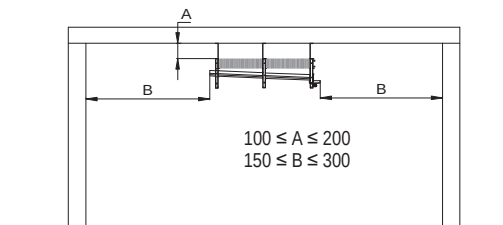
APARA PINGOS REFORÇADO REINFORCED DRIP TRAY

0°C < TC < +2°C



INSTALAÇÃO INSTALLATION

Medidas em mm
Dimensions in mm

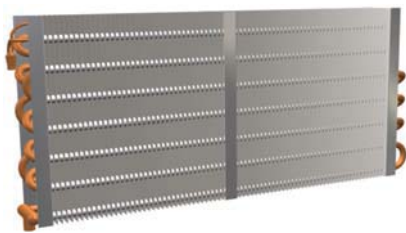


SELECCÇÃO RÁPIDA QUICK SELECTION

Importante Important	
Isolamento Insulation - Chilling room	80mm PU
Temperatura exterior Exterior temperature	+32°C
Serviço fraco - Conservação pura Weak service - Pure conservation	
Se a carga diária é importante e se pretende arrefecimento da mesma, considerar evaporador com ventilação forçada. If daily rotation is important and its cooling is intended, please consider an evaporator with forced ventilation.	
Para temperaturas de câmara ≤ +2°C deverão ser utilizadas resistências For room temperatures ≤ +2°C heaters should be used	
Nomenclatura Nomenclature	
TC	Temperatura de câmara Room temperature

Câmara refrigerados Chilling room (TC=0/+4°C - TE=-10°C)		
Volume Volume m³	Capacidade Capacity kW	Superfície mínima evaporador Minimum evaporator surface
3,5 - 4	545	7.5
4,5 - 5	660	9.5
5 - 6	790	12.0
6 - 7	920	13.6
7 - 8	990	14.4
8 - 9	1130	16.0
9 - 10	1280	19.4
10 - 11	1395	20.4
11 - 13	1455	22.0
12 - 14	1570	23.5
13 - 15	1630	24.5
14 - 16	1745	26.0
15 - 17	1920	29.0
17 - 19	2095	30.0
19 - 22	2325	34.0
24 - 28	2790	39.0
28 - 32	3140	44.0
35 - 40	3720	53.0
40 - 46	4300	59.0
43 - 49	4650	65.0

VEH - BEH - MEH

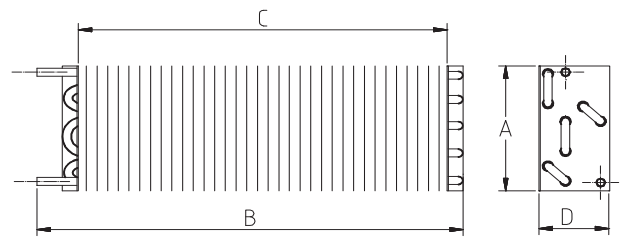


Evaporadores Estáticos Gravity Coils
Espaceamento Fin Spacing
Ø Tubo Tube Ø

7,9 mm
5/8"

Modelo Type	Preço Price	Capacidade Capacity (DT=10K)	Superfície Surface	Dimensões Dimensions				
				A	B	C	D	
				mm				
VEH								
6VEH7	•	186	2.49	148	830	690	100	
6VEH11	•	302	4.07	148	1275	1135	100	
6VEH16	•	435	5.84	148	1775	1635	100	
6VEH21	•	567	7.62	148	2275	2135	100	
6VEH26	•	698	9.39	148	2775	2635	100	
6VEH31	•	830	11.17	148	3275	3135	100	
6VEH36	•	963	12.94	148	3775	3635	100	
8VEH7	•	248	3.32	198	830	690	100	
8VEH11	•	405	5.43	198	1275	1135	100	
8VEH16	•	579	7.79	198	1775	1635	100	
8VEH21	•	756	10.16	198	2275	2135	100	
8VEH26	•	930	12.53	198	2775	2635	100	
8VEH31	•	1105	14.89	198	3275	3135	100	
8VEH36	•	1279	17.26	198	3775	3635	100	
10VEH7	•	309	4.15	247	830	690	100	
10VEH11	•	505	6.78	247	1275	1135	100	
10VEH16	•	726	9.74	247	1775	1635	100	
10VEH21	•	945	12.70	247	2275	2135	100	
10VEH26	•	1163	15.66	247	2775	2635	100	
10VEH31	•	1384	18.62	247	3275	3135	100	
10VEH36	•	1605	21.58	247	3775	3635	100	
12VEH7	•	371	4.98	296	830	690	100	
12VEH11	•	606	8.14	296	1275	1135	100	
12VEH16	•	870	11.69	296	1775	1635	100	
12VEH21	•	1135	15.24	296	2275	2135	100	
12VEH26	•	1395	18.79	296	2775	2635	100	
12VEH31	•	1663	22.34	296	3275	3135	100	
12VEH36	•	1926	25.89	296	3775	3635	100	
14VEH7	•	433	5.81	346	830	690	100	
14VEH11	•	707	9.50	346	1275	1135	100	
14VEH16	•	1015	13.64	346	1775	1635	100	
14VEH21	•	1323	17.78	346	2275	2135	100	
14VEH26	•	1628	21.92	346	2775	2635	100	
14VEH31	•	1939	26.06	346	3275	3135	100	
14VEH36	•	2248	30.21	346	3775	3635	100	
BEH								
4BEH6	•	88	0.95	99	690	590	79	
4BEH7	•	100	1.10	99	790	690	79	
4BEH11	•	166	1.80	99	1235	1135	79	
4BEH16	•	236	2.59	99	1735	1635	79	
4BEH21	•	308	3.38	99	2235	2135	79	
4BEH26	•	384	4.17	99	2735	2635	79	
4BEH31	•	453	4.96	99	3235	3135	79	
4BEH36	•	535	5.74	99	3735	3635	79	
6BEH6	•	130	1.42	148	690	590	79	
6BEH7	•	152	1.66	148	790	690	79	
6BEH11	•	249	2.71	148	1235	1135	79	
6BEH16	•	358	3.89	148	1735	1635	79	
6BEH21	•	465	5.07	148	2235	2135	79	
6BEH26	•	574	6.25	148	2735	2635	79	
6BEH31	•	684	7.44	148	3235	3135	79	
6BEH36	•	792	8.62	148	3735	3635	79	
8BEH6	•	174	1.89	198	690	590	79	
8BEH7	•	203	2.21	198	790	690	79	
8BEH11	•	331	3.61	198	1235	1135	79	
8BEH16	•	477	5.19	198	1735	1635	79	
8BEH21	•	621	6.76	198	2235	2135	79	
8BEH26	•	766	8.34	198	2735	2635	79	
8BEH31	•	910	9.92	198	3235	3135	79	
8BEH36	•	1056	11.49	198	3735	3635	79	
10BEH6	•	217	2.37	247	690	590	79	
10BEH7	•	253	2.76	247	790	690	79	
10BEH11	•	415	4.52	247	1235	1135	79	
10BEH16	•	595	6.49	247	1735	1635	79	
10BEH21	•	777	8.45	247	2235	2135	79	
10BEH26	•	958	10.42	247	2735	2635	79	

centauro



BBX
VBN

VBT
VBI VPB

VCN
VCT BCX

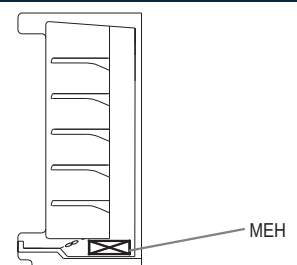
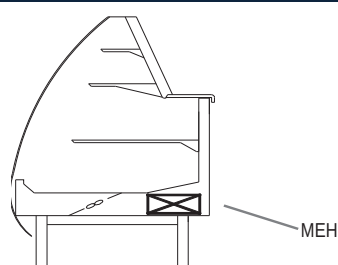
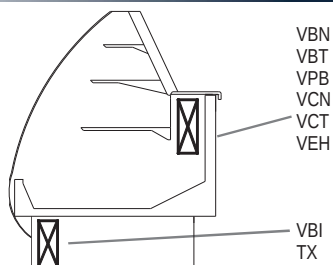
TX
EAC EPC

ECT

VEH
BEH MEH

Modelo Type	Preço Price	Capacidade Capacity (DT=10K)	Superfície Surface	Dimensões Dimensions				
				A	B	C	D	
				mm				
EUR								
BEH								
10BEH31	•	1138	12.39	247	3235	3135	79	
10BEH36	•	1319	14.36	247	3735	3635	79	
12BEH6	•	262	2.84	296	690	590	79	
12BEH7	•	305	3.32	296	790	690	79	
12BEH11	•	498	5.42	296	1235	1135	79	
12BEH16	•	715	7.78	296	1735	1635	79	
12BEH21	•	933	10.14	296	2235	2135	79	
12BEH26	•	1149	12.51	296	2735	2635	79	
12BEH31	•	1366	14.87	296	3235	3135	79	
12BEH36	•	1584	17.24	296	3735	3635	79	
MEH								
9MEH6	•	196	2.14	148	720	590	100	
9MEH7	•	229	2.49	148	820	690	100	
9MEH11	•	374	4.07	148	1265	1135	100	
9MEH16	•	537	5.84	148	1765	1635	100	
9MEH21	•	700	7.62	148	2265	2135	100	
9MEH26	•	863	9.39	148	2765	2635	100	
9MEH31	•	1026	11.16	148	3265	3135	100	
9MEH36	•	1188	12.94	148	3765	3635	100	
12MEH6	•	263	2.85	198	720	590	100	
12MEH7	•	306	3.33	198	820	690	100	
12MEH11	•	499	5.43	198	1265	1135	100	
12MEH16	•	716	7.79	198	1765	1635	100	
12MEH21	•	934	10.16	198	2265	2135	100	
12MEH26	•	1151	12.52	198	2765	2635	100	
12MEH31	•	1366	14.89	198	3265	3135	100	
12MEH36	•	1584	17.52	198	3765	3635	100	
15MEH6	•	328	3.56	247	720	590	100	
15MEH7	•	381	4.15	247	820	690	100	
15MEH11	•	623	6.79	247	1265	1135	100	
15MEH16	•	895	9.74	247	1765	1635	100	
15MEH21	•	1166	12.70	247	2265	2135	100	
15MEH26	•	1438	15.66	247	2765	2635	100	
15MEH31	•	1709	18.61	247	3265	3135	100	
15MEH36	•	1981	21.57	247	3765	3635	100	
18MEH6	•	393	4.28	296	720	590	100	
18MEH7	•	458	4.99	296	820	690	100	
18MEH11	•	749	8.14	296	1265	1135	100	
18MEH16	•	1074	11.69	296	1765	1635	100	
18MEH21	•	1400	15.24	296	2265	2135	100	
18MEH26	•	1726	18.78	296	2765	2635	100	
18MEH31	•	2051	22.33	296	3265	3135	100	
18MEH36	•	2378	25.88	296	3765	3635	100	
21MEH6	•	459	4.99	346	720	590	100	
21MEH7	•	535	5.82	346	820	690	100	
21MEH11	•	873	9.50	346	1265	1135	100	
21MEH16	•	1252	13.64	346	1765	1635	100	
21MEH21	•	1634	17.77	346	2265	2135	100	
21MEH26	•	2013	21.91	346	2765	2635	100	
21MEH31	•	2393	26.01	346	3265	3135	100	
21MEH36	•	2773	30.19	346	3765	3635	100	

Aplicações Applications



EVAPORADORES SAHE

SAHE COOLERS



Bateria em aço inox
Stainless steel coil



Bateria em aço inox
Stainless steel coil

NOTA IMPORTANTE

Apresentação da Gama, Características e Considerandos de Cálculo encontram-se na página 210 e 211.

IMPORTANT NOTES

Range Presentation, Main Features and Capacity Considerations can be found on page 210 and 211.



Evaporador BSUIT especial em aço inox
Special stainless steel BSUIT



Evaporador BSUIT especial em aço inox
Special stainless steel BSUIT

84 - 123



CBIB

CBIC

CBIL

MTI

DDI

DLI

DXI

BSUT

BSUS

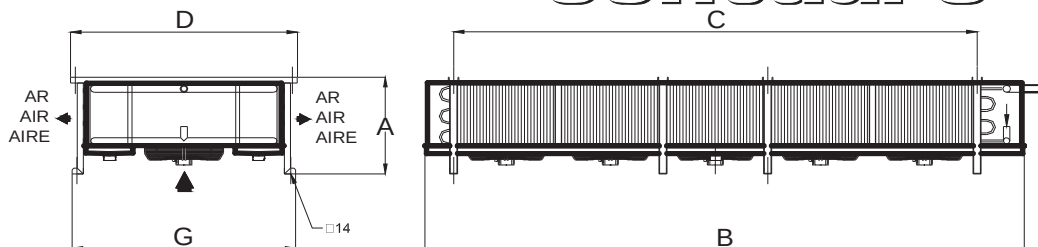
Modelo Type	Capacidade Q _{S1} Capacity Q _{S1} (T _{se} =+4°C / DT ₁ =10K)	Capacidade Capacity (T _{se} =-18°C / DT ₁ =7K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans								
	kW		m ²	dm ³	Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	
						mm	m ³ /h	m	rpm	W	A	V / F / Hz	
CBIB 2/16.76	15.54		76.80	16.60	2	400	8100	12	1300	270	0.88	400/3/50	
CBIB 3/16.76	17.99		76.80	16.60	3	400	12700	12	1300	405	1.32	400/3/50	
CBIB 3/16.153	27.78		153.60	33.20	3	400	11500	12	1300	405	1.32	400/3/50	
CBIB 2/16.52*	12.13		52.30	16.60	2	400	8300	12	1300	270	0.88	400/3/50	
CBIB 3/16.52*	13.31		52.30	16.60	3	400	13000	12	1300	405	1.32	400/3/50	
CBIB 3/16.104*	22.14		104.70	33.20	3	400	12000	12	1300	405	1.32	400/3/50	
CBIB 2/16.102	18.91		102.40	22.13	2	400	8500	12	1300	270	0.88	400/3/50	
CBIB 3/16.102	21.58		102.40	22.13	3	400	13200	12	1300	405	1.32	400/3/50	
CBIB 3/16.204	33.40		204.90	44.26	3	400	12400	12	1300	405	1.32	400/3/50	
CBIB 4/16.136	25.98		136.60	29.51	4	400	17600	12	1300	540	1.76	400/3/50	
CBIB 4/16.204	34.48		204.90	44.26	4	400	17100	12	1300	540	1.76	400/3/50	
CBIB 4/16.273	43.85		273.10	59.01	4	400	16600	12	1300	540	1.76	400/3/50	
CBIB 5/16.256	44.76		256.10	55.33	5	400	21400	12	1300	675	2.20	400/3/50	
CBIB 5/16.341	52.94		341.40	73.77	5	400	20800	12	1300	675	2.20	400/3/50	
CBIB 5/16.512	63.05		512.10	110.70	5	400	19600	12	1300	675	2.20	400/3/50	
CBIB 2/20.102	24.30		102.40	22.13	2	500	14100	20	1300	1500	3.00	400/3/50	
CBIB 3/20.102	27.28		102.40	22.13	3	500	22100	20	1300	2250	4.50	400/3/50	
CBIB 3/20.204	43.72		204.90	44.26	3	500	20400	20	1300	2250	4.50	400/3/50	
CBIB 4/20.136	34.38		136.60	29.51	4	500	29500	20	1300	3000	6.00	400/3/50	
CBIB 4/20.204	45.97		204.90	44.26	4	500	28100	20	1300	3000	6.00	400/3/50	
CBIB 4/20.273	58.66		273.10	59.01	4	500	27100	20	1300	3000	6.00	400/3/50	
CBIB 5/20.256	59.79		256.10	55.33	5	500	35200	20	1300	3750	7.50	400/3/50	
CBIB 5/20.341	71.51		341.40	73.77	5	500	33900	20	1300	3750	7.50	400/3/50	
CBIB 5/20.512	86.51		512.10	110.70	5	500	31500	20	1300	3750	7.50	400/3/50	

* 6,3mm espaçamento 6,3mm fin spacing

Modelo Type	Preço sem resistências Price without heaters	Opções Options			
		BL	/E	/GTB	/W
		Lacado branco White painted	Descongelação elétrica Electrical defrost	Descongelação gás quente Hot gas defrost	Descongelação água Water defrost
	EUR	EUR			
CBIB 2/16.76	•	•	•	•	•
CBIB 3/16.76	•	•	•	•	•
CBIB 3/16.153	•	•	•	•	•
CBIB 2/16.52*	•	•	•	•	•
CBIB 3/16.52*	•	•	•	•	•
CBIB 3/16.104*	•	•	•	•	•
CBIB 2/16.102	•	•	•	•	•
CBIB 3/16.102	•	•	•	•	•
CBIB 3/16.204	•	•	•	•	•
CBIB 4/16.136	•	•	•	•	•
CBIB 4/16.204	•	•	•	•	•
CBIB 4/16.273	•	•	•	•	•
CBIB 5/16.256	•	•	•	•	•
CBIB 5/16.341	•	•	•	•	•
CBIB 5/16.512	•	•	•	•	•
CBIB 2/20.102	•	•	•	•	•
CBIB 3/20.102	•	•	•	•	•
CBIB 3/20.204	•	•	•	•	•
CBIB 4/20.136	•	•	•	•	•
CBIB 4/20.204	•	•	•	•	•
CBIB 4/20.273	•	•	•	•	•
CBIB 5/20.256	•	•	•	•	•
CBIB 5/20.341	•	•	•	•	•
CBIB 5/20.512	•	•	•	•	•

S Standard
S Standard

SP Sob pedido
SP Under request



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain								
	kW	A	V / F / Hz	mm			A	B	C	D	G			
	6.48	1x9,4	400/3/50	22.0	26.9	2x1½	650	1850	1330	1420	1400	154	2.20	CBIB 2/16.76
	8.64	1x12,5	400/3/50	22.0	33.7	2x1½	650	2500	1980	1420	1400	178	2.91	CBIB 3/16.76
	17.28	1x24,9	400/3/50	22.0	33.7	2x1½	650	2500	1980	1420	1400	234	2.91	CBIB 3/16.153
	6.48	1x9,4	400/3/50	22.0	26.9	2x1½	650	1850	1330	1420	1400	147	2.20	CBIB 2/16.52*
	8.64	1x12,5	400/3/50	22.0	26.9	2x1½	650	2500	1980	1420	1400	172	2.91	CBIB 3/16.52*
	17.28	1x24,9	400/3/50	22.0	33.7	2x1½	650	2500	1980	1420	1400	220	2.91	CBIB 3/16.104*
	12.96	1x18,7	400/3/50	22.0	33.7	2x1½	780	1850	1330	1640	1626	191	2.99	CBIB 2/16.102
	12.96	1x18,7	400/3/50	22.0	33.7	2x1½	780	2500	1980	1640	1626	215	3.98	CBIB 3/16.102
	17.28	1x24,9	400/3/50	22.0	33.7	2x1½	780	2500	1980	1640	1626	287	3.98	CBIB 3/16.204
	13.50	1x19,5	400/3/50	22.0	33.7	2x2	780	3150	2630	1640	1626	280	4.98	CBIB 4/16.136
	18.00	1x26,0	400/3/50	22.0	33.7	2x2	780	3150	2630	1640	1626	327	4.98	CBIB 4/16.204
	22.50	1x19,53+1x13,02	400/3/50	33.7	42.4	2x2	780	3150	2630	1640	1626	373	4.98	CBIB 4/16.273
	25.92	2x18,71	400/3/50	33.7	42.4	2x2½	780	3800	3280	1640	1626	413	5.97	CBIB 5/16.256
	25.92	2x18,71	400/3/50	33.7	42.4	2x2½	780	3800	3280	1640	1626	470	5.97	CBIB 5/16.341
	38.88	3x18,71	400/3/50	33.7	42.4	2x2½	780	3800	3280	1640	1626	584	5.97	CBIB 5/16.512
	12.96	1x18,7	400/3/50	22.0	33.7	2x1½	850	1850	1330	1640	1626	207	3.04	CBIB 2/20.102
	12.96	1x18,7	400/3/50	22.0	33.7	2x1½	850	2500	1980	1640	1626	239	4.05	CBIB 3/20.102
	17.28	1x24,9	400/3/50	33.7	42.4	2x1½	850	2500	1980	1640	1626	311	4.05	CBIB 3/20.204
	13.50	1x19,5	400/3/50	22.0	33.7	2x2	850	3150	2630	1640	1626	312	5.06	CBIB 4/20.136
	18.00	1x26,0	400/3/50	33.7	42.4	2x2	850	3150	2630	1640	1626	359	5.06	CBIB 4/20.204
	22.50	1x19,53+1x13,02	400/3/50	33.7	42.4	2x2	850	3150	2630	1640	1626	405	5.06	CBIB 4/20.273
	25.92	2x18,71	400/3/50	33.7	42.4	2x2½	850	3800	3280	1640	1626	453	6.07	CBIB 5/20.256
	25.92	2x18,71	400/3/50	33.7	42.4	2x2½	850	3800	3280	1640	1626	510	6.07	CBIB 5/20.341
	38.88	3x18,71	400/3/50	42.6	48.3	2x2½	850	3800	3280	1640	1626	624	6.07	CBIB 5/20.512

Seleção e Factores Selection and Factors

RC1		DT1 [K]						
		10	9	8	7	6	5	4
Tse [°C]	10	1.023	0.921	0.818	0.716	0.614	0.512	0.410
	8	1.016	0.914	0.812	0.710	0.609	0.506	0.406
	6	1.008	0.907	0.806	0.705	0.604	0.503	0.402
	4	1.000	0.900	0.800	0.700	0.600	0.500	0.400
	2	0.947	0.852	0.758	0.663	0.568	0.474	0.379
	0	0.871	0.784	0.697	0.610	0.523	0.436	0.348

Capacidade corrigida Corrected capacity

CBIB 4/16.136 Tse=0°C DT1=8K R717	$Q_{01} = Q_{S1} \times RC1$ [kW]
	$Q_{01} = 25,98 \text{ kW} \times 0,697 = 18,11 \text{ kW}$

Nomenclatura	Nomenclature
Tse	Temperatura seca de entrada de ar BS Air on DB
Q _{S1}	Capacidade para seleção em DT1 Selection capacity in TD1
Q ₀₁	Capacidade corrigida em DT1 Corrected capacity in TD1
RC1	Factor de correcção de dados em DT1 Correction factor for data in DT1



CBIB

CBIC

CBIL

MTI

DDI

DLI

DXI

BSUT

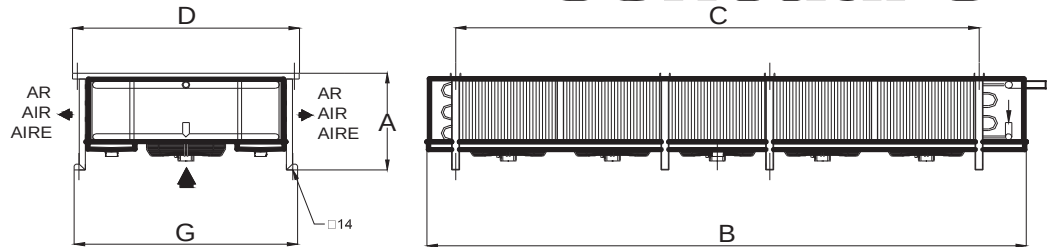
BSUS

Modelo Type	Capacidade QS1 Capacity QS1 (Tse=+4°C / DT1=10K)	Capacidade Capacity (Tse=-18°C / DT1=7K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans								
	kW		m ²	dm ³	Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	
						mm	m ³ /h	m	rpm	W	A	V / F / Hz	
CBIC 2/16.55	12.46	7.55	55.90	22.13	2	400	8800	12	1300	270	0.88	400/3/50	
CBIC 3/16.111	22.56	13.67	111.80	44.26	3	400	12900	12	1300	405	1.32	400/3/50	
CBIC 4/16.111	23.18	14.04	111.80	44.26	4	400	17500	12	1300	540	1.76	400/3/50	
CBIC 4/16.149	31.68	19.19	149.10	59.01	4	400	17200	12	1300	540	1.76	400/3/50	
CBIC 5/16.139	30.34	18.38	139.80	55.33	5	400	21900	12	1300	675	2.20	400/3/50	
CBIC 5/16.186	37.46	22.69	186.30	73.77	5	400	21400	12	1300	675	2.20	400/3/50	
CBIC 5/16.279	48.43	29.34	279.50	110.70	5	400	20700	12	1300	675	2.20	400/3/50	
CBIC 2/20.55	17.84	10.81	55.90	22.13	2	500	14700	20	1300	1500	3.00	400/3/50	
CBIC 3/20.111	30.87	18.70	111.80	44.26	3	500	21300	20	1300	2250	4.50	400/3/50	
CBIC 4/20.111	30.83	18.68	111.80	44.26	4	500	29300	20	1300	3000	6.00	400/3/50	
CBIC 4/20.149	42.20	25.56	149.10	59.01	4	500	28400	20	1300	3000	6.00	400/3/50	
CBIC 5/20.139	40.39	24.47	139.80	55.33	5	500	36700	20	1300	3750	7.50	400/3/50	
CBIC 5/20.186	50.12	30.36	186.30	73.77	5	500	35500	20	1300	3750	7.50	400/3/50	
CBIC 5/20.279	65.44	39.64	279.50	110.70	5	500	33600	20	1300	3750	7.50	400/3/50	

Modelo Type	Preço sem resistências Price without heaters	Opções Options			
		BL	/E	/GTB	/W
		Lacado branco White painted	Descongelação elétrica Electrical defrost	Descongelação gas quente Hot gas defrost	Descongelação água Water defrost
	EUR	EUR			
CBIC 2/16.55	•	•	•	•	
CBIC 3/16.111	•	•	•	•	
CBIC 4/16.111	•	•	•	•	
CBIC 4/16.149	•	•	•	•	
CBIC 5/16.139	•	•	•	•	
CBIC 5/16.186	•	•	•	•	
CBIC 5/16.279	•	•	•	•	
CBIC 2/20.55	•	•	•	•	
CBIC 3/20.111	•	•	•	•	
CBIC 4/20.111	•	•	•	•	
CBIC 4/20.149	•	•	•	•	
CBIC 5/20.139	•	•	•	•	
CBIC 5/20.186	•	•	•	•	
CBIC 5/20.279	•	•	•	•	

S Standard
S Standard

SP Sob pedido
SP Under request



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain								
	kW	A	V / F / Hz	mm			A	B	C	D	G	kg	m³	
	12.96	1x18,7	400/3/50	22.0	33.7	2x1½	780	1850	1330	1640	1626	176	2.99	CBIC 2/16.55
	17.28	1x24,9	400/3/50	22.0	42.4	2x1½	780	2500	1980	1640	1626	257	3.98	CBIC 3/16.111
	18.00	1x26,0	400/3/50	22.0	42.4	2x2	780	3150	2630	1640	1626	297	4.98	CBIC 4/16.111
	22.50	1x19,53+1x13,02	400/3/50	22.0	48.3	2x2	780	3150	2630	1640	1626	333	4.98	CBIC 4/16.149
	25.92	2x18,71	400/3/50	22.0	48.3	2x2½	780	3800	3280	1640	1626	375	5.97	CBIC 5/16.139
	25.92	2x18,71	400/3/50	22.0	48.3	2x2½	780	3800	3280	1640	1626	420	5.97	CBIC 5/16.186
	38.88	3x18,71	400/3/50	33.7	48.3	2x2½	780	3800	3280	1640	1626	509	5.97	CBIC 5/16.279
	12.96	1x18,7	400/3/50	22.0	42.4	2x1½	850	1850	1330	1640	1626	192	3.04	CBIC 2/20.55
	17.28	1x24,9	400/3/50	22.0	48.3	2x1½	850	2500	1980	1640	1626	281	4.05	CBIC 3/20.111
	18.00	1x26,0	400/3/50	22.0	48.3	2x2	850	3150	2630	1640	1626	329	5.06	CBIC 4/20.111
	22.50	1x19,53+1x13,02	400/3/50	22.0	48.3	2x2	850	3150	2630	1640	1626	365	5.06	CBIC 4/20.149
	25.92	2x18,71	400/3/50	22.0	48.3	2x2½	850	3800	3280	1640	1626	415	6.07	CBIC 5/20.139
	25.92	2x18,71	400/3/50	33.7	48.3	2x2½	850	3800	3280	1640	1626	460	6.07	CBIC 5/20.186
	38.88	3x18,71	400/3/50	33.7	60.3	2x2½	850	3800	3280	1640	1626	549	6.07	CBIC 5/20.279

Seleção e Factores Selection and Factors

RC1		DT1 [K]						
		10	9	8	7	6	5	4
Tse [°C]	10	1.023	0.921	0.818	0.716	0.614	0.512	0.410
	6	1.008	0.907	0.806	0.705	0.604	0.503	0.402
	4	1.000	0.900	0.800	0.700	0.600	0.500	0.400
	2	0.947	0.852	0.758	0.663	0.568	0.474	0.379
	0	0.871	0.784	0.697	0.610	0.523	0.436	0.348
	-2	0.856	0.770	0.685	0.599	0.514	0.428	0.342
	-10	0.826	0.743	0.661	0.578	0.496	0.413	0.330
	-12	0.818	0.736	0.654	0.573	0.491	0.409	0.327
	-14	0.811	0.730	0.649	0.568	0.487	0.406	0.324
	-18	0.795	0.716	0.636	0.557	0.477	0.398	0.318
	-20	0.788	0.709	0.630	0.552	0.473	0.394	0.315
	-25	0.758	0.682	0.606	0.531	0.455	0.379	0.303
	-34	0.751	0.677	0.599	0.525	0.445	0.370	0.295

Capacidade corrigida Corrected capacity

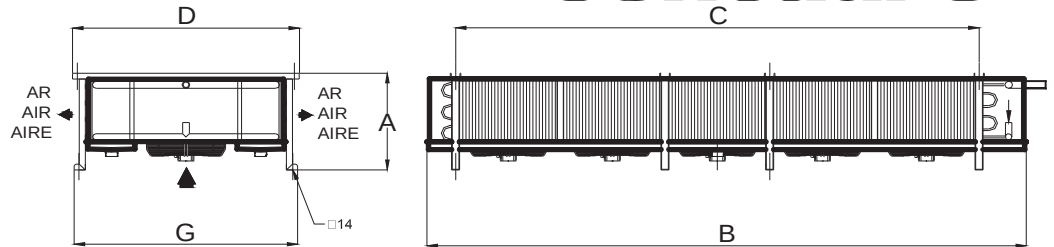
CBIC 4/16.149 Tse=0°C DT1=8K R717	$Q_{01} = Q_{S1} \times RC1$ [kW]
	$Q_{01} = 31,68 \text{ kW} \times 0,697 = 22,08 \text{ kW}$

Nomenclatura	Nomenclature
Tse	Temperatura seca de entrada de ar BS Air on DB
Q _{S1}	Capacidade para seleção em DT1 Selection capacity in TD1
Q ₀₁	Capacidade corrigida em DT1 Corrected capacity in TD1
RC1	Factor de correcção de dados em DT1 Correction factor for data in DT1



	Modelo Type	Capacidade Q _{S1} Capacity Q _{S1} (T _{se} =+4°C / DT ₁ =10K)	Capacidade Capacity (T _{se} =+18°C / DT ₁ =7K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans							
						Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS
							mm	m ³ /h	m	rpm	W	A	V / F / Hz
CBIL	CBIL 2/16.45	10.25	6.21	45.62	22.13	2	400	8800	12	1300	270	0.88	400/3/50
	CBIL 3/16.91	19.21	11.64	91.23	44.26	3	400	13000	12	1300	405	1.32	400/3/50
	CBIL 4/16.91	18.98	11.50	91.23	44.26	4	400	17700	12	1300	540	1.76	400/3/50
	CBIL 4/16.121	26.43	16.01	121.60	59.01	4	400	17300	12	1300	540	1.76	400/3/50
	CBIL 5/16.114	24.87	15.07	114.00	55.33	5	400	22100	12	1300	675	2.20	400/3/50
	CBIL 5/16.152	31.08	18.83	152.10	73.77	5	400	21700	12	1300	675	2.20	400/3/50
MTI	CBIL 5/16.228	41.09	24.89	228.10	110.70	5	400	20900	12	1300	675	2.20	400/3/50
	CBIL 2/20.45	13.60	8.24	45.62	22.13	2	500	12900	22	1300	1500	3.00	400/3/50
	CBIL 3/20.91	25.60	15.51	91.23	44.26	3	500	18800	22	1300	2250	4.50	400/3/50
	CBIL 4/20.91	25.19	15.26	91.23	44.26	4	500	25800	22	1300	3000	6.00	400/3/50
	CBIL 4/20.121	35.16	21.30	121.60	59.01	4	500	25000	22	1300	3000	6.00	400/3/50
	CBIL 5/20.114	33.08	20.04	114.00	55.33	5	500	32300	22	1300	3750	7.50	400/3/50
	CBIL 5/20.152	38.38	23.25	152.10	73.77	5	500	31300	22	1300	3750	7.50	400/3/50
	CBIL 5/20.228	51.23	31.04	228.10	110.70	5	500	29900	22	1300	3750	7.50	400/3/50

	Modelo Type	Preço sem resistências Price without heaters	Opções Options			
			BL Lacado branco White painted	/E Descongelação eléctrica Electrical defrost	/GTB Descongelação gás quente Hot gas defrost	/W Descongelação água Water defrost
		EUR	EUR			
DXI	CBIL 2/16.45	•	•	•	•	•
	CBIL 3/16.91	•	•	•	•	•
	CBIL 4/16.91	•	•	•	•	•
	CBIL 4/16.121	•	•	•	•	•
	CBIL 5/16.114	•	•	•	•	•
	CBIL 5/16.152	•	•	•	•	•
	CBIL 5/16.228	•	•	•	•	•
	CBIL 2/20.45	•	•	•	•	•
	CBIL 3/20.91	•	•	•	•	•
	CBIL 4/20.91	•	•	•	•	•
BSUT	CBIL 4/20.121	•	•	•	•	•
	CBIL 5/20.114	•	•	•	•	•
	CBIL 5/20.152	•	•	•	•	•
	CBIL 5/20.228	•	•	•	•	•



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain								
	kW	A	V / F / Hz	mm			A	B	C	D	G	kg	m³	
	12.96	1x18,7	400/3/50	22.0	33.7	2x1½	780	1850	1330	1640	1626	180	2.99	CBIL 2/16.45
	17.28	1x24,9	400/3/50	22.0	42.4	2x1½	780	2500	1980	1640	1626	263	3.98	CBIL 3/16.91
	18.00	1x26,0	400/3/50	22.0	42.4	2x2	780	3150	2630	1640	1626	303	4.98	CBIL 4/16.91
	22.50	1x19,53+1x13,02	400/3/50	22.0	48.3	2x2	780	3150	2630	1640	1626	341	4.98	CBIL 4/16.121
	25.92	2x18,71	400/3/50	22.0	48.3	2x2½	780	3800	3280	1640	1626	383	5.97	CBIL 5/16.114
	25.92	2x18,71	400/3/50	22.0	48.3	2x2½	780	3800	3280	1640	1626	431	5.97	CBIL 5/16.152
	38.88	3x18,71	400/3/50	22.0	48.3	2x2½	780	3800	3280	1640	1626	526	5.97	CBIL 5/16.228
	12.96	1x18,7	400/3/50	22.0	33.7	2x1½	850	1850	1330	1640	1626	196	3.04	CBIL 2/20.45
	17.28	1x24,9	400/3/50	22.0	42.4	2x1½	850	2500	1980	1640	1626	287	4.05	CBIL 3/20.91
	18.00	1x26,0	400/3/50	22.0	42.4	2x2	850	3150	2630	1640	1626	335	5.06	CBIL 4/20.91
	22.50	1x19,53+1x13,02	400/3/50	22.0	48.3	2x2	850	3150	2630	1640	1626	373	5.06	CBIL 4/20.121
	25.92	2x18,71	400/3/50	22.0	48.3	2x2½	850	3800	3280	1640	1626	423	6.07	CBIL 5/20.114
	25.92	2x18,71	400/3/50	22.0	48.3	2x2½	850	3800	3280	1640	1626	471	6.07	CBIL 5/20.152
	38.88	3x18,71	400/3/50	33.7	60.3	2x2½	850	3800	3280	1640	1626	566	6.07	CBIL 5/20.228

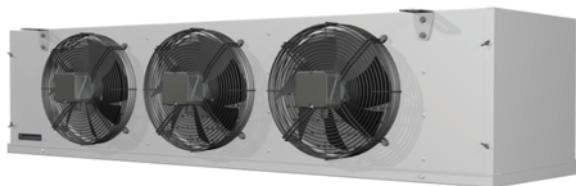
Seleção e Factores Selection and Factors

RC1		DT1 [K]						
		10	9	8	7	6	5	4
Tse [°C]	10	1.023	0.921	0.818	0.716	0.614	0.512	0.410
	6	1.008	0.907	0.806	0.705	0.604	0.503	0.402
	4	1.000	0.900	0.800	0.700	0.600	0.500	0.400
	2	0.947	0.852	0.758	0.663	0.568	0.474	0.379
	0	0.871	0.784	0.697	0.610	0.523	0.436	0.348
	-2	0.856	0.770	0.685	0.599	0.514	0.428	0.342
	-10	0.826	0.743	0.661	0.578	0.496	0.413	0.330
	-12	0.818	0.736	0.654	0.573	0.491	0.409	0.327
	-14	0.811	0.730	0.649	0.568	0.487	0.406	0.324
	-18	0.795	0.716	0.636	0.557	0.477	0.398	0.318
	-20	0.788	0.709	0.630	0.552	0.473	0.394	0.315
	-25	0.758	0.682	0.606	0.531	0.455	0.379	0.303
	-34	0.751	0.677	0.599	0.525	0.445	0.370	0.295

Capacidade corrigida Corrected capacity

CBIL 5/16.228 Tse=0°C DT1=8K R717	$Q_{01} = Q_{S1} \times RC1$ [kW]
	$Q_{01} = 41,09 \text{ kW} \times 0,697 = 28,64 \text{ kW}$

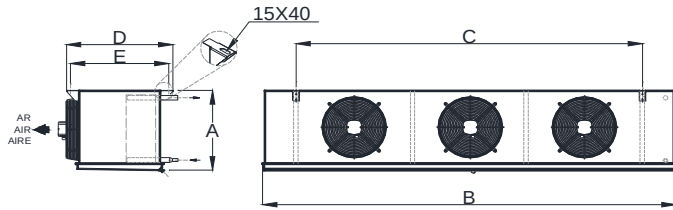
Nomenclatura	Nomenclature
Tse	Temperatura seca de entrada de ar BS Air on DB
Q _{S1}	Capacidade para selecção em DT1 Selection capacity in TD1
Q ₀₁	Capacidade corrigida em DT1 Corrected capacity in TD1
RC1	Factor de correcção de dados em DT1 Correction factor for data in DT1



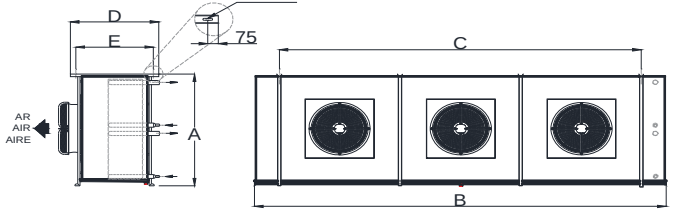
	Modelo Type	Capacidade Q _{S1} Capacity Q _{S1} (T _{se} =+4°C / DT ₁ =10K)	Capacidade Capacity (T _{se} =-18°C / DT ₁ =7K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans							
						Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS
		KW		m ²	dm ³		mm	m ³ /h	m	rpm	W	A	V / F / Hz
MTI	6E1/5	5.01		20.65	3.30	1	350	2950	15	1390	190	0.40	400/3/50
MTI	6E1/6	6.46		30.97	5.00	1	350	2750	15	1390	190	0.40	400/3/50
MTI	6E2/9	9.91		41.29	6.60	2	350	5900	15	1390	380	0.80	400/3/50
MTI	6G2/11	11.97		52.44	8.40	2	400	6600	16	1360	460	0.92	400/3/50
MTI	6E2/13	13.00		61.94	9.90	2	350	5500	15	1390	380	0.80	400/3/50
MTI	6G2/15	15.16		78.65	12.60	2	400	6200	16	1360	460	0.92	400/3/50
MTI	6G3/17	17.56		78.65	12.60	3	400	9900	16	1360	690	1.38	400/3/50
MTI	6E3/19	19.53		92.91	14.90	3	350	8850	15	1390	570	1.20	400/3/50
MTI	6G3/22	22.81		117.98	18.90	3	400	9300	16	1360	690	1.38	400/3/50
MTI	6G4/23	23.97		104.87	16.80	4	400	13200	16	1360	920	1.84	400/3/50
MTI	6J3/29	29.87		117.98	18.90	3	450	18300	20	1320	1620	3.30	400/3/50
MTI	6G4/30	30.76		157.31	25.30	4	400	12400	16	1360	920	1.84	400/3/50
MTI	6G5/38	38.62		196.64	31.60	5	400	15500	16	1360	1150	2.30	400/3/50
MTI	6L3/39	39.07		162.20	26.00	3	500	24300	22	1340	2310	5.10	400/3/50
MTI	6J3/46	46.50		235.96	37.90	3	450	17250	20	1320	1620	3.30	400/3/50
MTI	6J4/51	51.66		235.96	37.90	4	450	23400	20	1320	2160	4.40	400/3/50
MTI	6P3/52	52.32		216.30	34.70	3	560	30300	24	1220	3000	5.40	400/3/50
MTI	6L4/54	54.12		216.30	34.70	4	500	32400	22	1340	3080	6.80	400/3/50

Modelo Type	Preço sem resistências Price without heaters	Opções Options			
		BL Lacado branco White painted	/E Descongelação elétrica Electrical defrost	/GTB Descongelação gás quente Hot gas defrost	/W Descongelação água Water defrost
	EUR	EUR			
MTI	6E1/5	•	•	•	SP
MTI	6E1/6	•	•	•	SP
MTI	6E2/9	•	•	•	SP
MTI	6G2/11	•	•	•	SP
MTI	6E2/13	•	•	•	SP
MTI	6G2/15	•	•	•	SP
MTI	6G3/17	•	•	•	SP
MTI	6E3/19	•	•	•	SP
MTI	6G3/22	•	•	•	SP
MTI	6G4/23	•	•	•	SP
MTI	6J3/29	•	•	•	SP
MTI	6G4/30	•	•	•	SP
MTI	6G5/38	•	•	•	SP
MTI	6L3/39	•	•	•	SP
MTI	6J3/46	•	•	•	SP
MTI	6J4/51	•	•	•	SP
MTI	6P3/52	•	•	•	SP
MTI	6L4/54	•	•	•	SP

Ø350 / 400 / 450 / 500 / 560 / 630 mm



Ø800 mm



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain								
	kW	A	V / F / Hz	mm			A	B	C	D	E	kg	m³	
	2.64	3.81	400/3/50	15.0	15.0	3/4 BSP	590	1130	660	720	658	59	1.12	MTI 6E1/5
	2.64	3.81	400/3/50	15.0	15.0	3/4 BSP	590	1130	660	720	658	66	1.12	MTI 6E1/6
	4.80	6.93	400/3/50	22.0	33.7	3/4 BSP	590	1760	1290	720	658	89	1.69	MTI 6E2/9
	7.20	10.39	400/3/50	22.0	33.7	3/4 BSP	590	2100	1630	746	690	104	2.04	MTI 6G2/11
	4.80	6.93	400/3/50	22.0	33.7	3/4 BSP	590	1760	1290	720	658	102	1.69	MTI 6E2/13
	7.20	10.39	400/3/50	22.0	33.7	3/4 BSP	590	2100	1630	746	690	132	2.04	MTI 6G2/15
	10.50	15.16	400/3/50	22.0	33.7	1 1/4 BSP	590	2900	2430	746	690	153	2.78	MTI 6G3/17
	9.00	12.99	400/3/50	22.0	33.7	3/4 BSP	590	2390	1920	720	658	137	2.26	MTI 6E3/19
	10.50	15.16	400/3/50	22.0	33.7	1 1/4 BSP	590	2900	2430	746	690	176	2.78	MTI 6G3/22
	13.80	19.92	400/3/50	22.0	33.7	1 1/4 BSP	590	3650	3180	746	690	189	3.48	MTI 6G4/23
	15.00	21.65	400/3/50	22.0	33.7	1 1/4 BSP	830	3000	2450	671	615	220	3.49	MTI 6J3/29
	13.80	19.92	400/3/50	22.0	33.7	1 1/4 BSP	590	3650	3180	746	690	220	3.48	MTI 6G4/30
	16.80	24.25	400/3/50	22.0	33.7	2 BSP	590	4500	4030	746	690	252	4.27	MTI 6G5/38
	15.18	21.91	400/3/50	22.0	33.7	2 BSP	830	3900	3350	671	615	274	4.50	MTI 6L3/39
	30.00	2x21.65	400/3/50	26.9	42.4	1 1/4 BSP	830	3000	2450	881	825	302	4.17	MTI 6J3/46
	30.00	2x21.65	400/3/50	26.9	42.4	1 1/4 BSP	830	3750	3200	881	825	338	5.18	MTI 6J4/51
	23.39	21,91+10,96	400/3/50	26.9	42.4	2 BSP	1080	3900	3350	750	670	327	5.98	MTI 6P3/52
	22.80	2x16,45	400/3/50	26.9	42.4	2 BSP	830	5000	4450	671	615	340	5.74	MTI 6L4/54

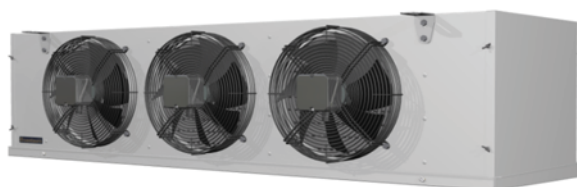
Seleção e Factores Selection and Factors

RC1		DT1 [K]						
		10	9	8	7	6	5	4
Tse [°C]	10	1.023	0.921	0.818	0.716	0.614	0.512	0.410
	8	1.016	0.914	0.812	0.710	0.609	0.506	0.406
	6	1.008	0.907	0.806	0.705	0.604	0.503	0.402
	4	1.000	0.900	0.800	0.700	0.600	0.500	0.400
	2	0.947	0.852	0.758	0.663	0.568	0.474	0.379
	0	0.871	0.784	0.697	0.610	0.523	0.436	0.348

Capacidade corrigida Corrected capacity

MTI 6E2/13 Tse=0°C DT1=8K R717	$Q_{01} = Q_{S1} \times RC1$ [kW]
	$Q_{01} = 13,00 \text{ kW} \times 0,697 = 9,06 \text{ kW}$

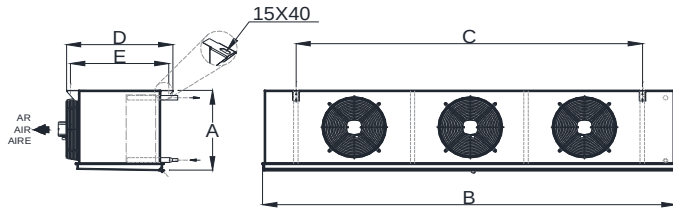
Nomenclatura	Nomenclature
Tse	Temperatura seca de entrada de ar BS Air on DB
Q _{S1}	Capacidade para seleção em DT1 Selection capacity in TD1
Q ₀₁	Capacidade corrigida em DT1 Corrected capacity in TD1
RC1	Factor de correcção de dados em DT1 Correction factor for data in DT1



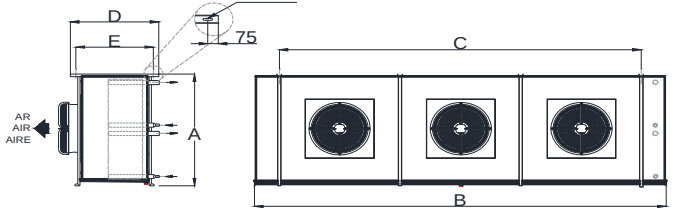
	Modelo Type	Capacidade Q _{S1} Capacity Q _{S1} (T _{se} =+4°C / DT ₁ =10K)	Capacidade Capacity (T _{se} =-18°C / DT ₁ =7K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans							
						Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	
						m ²	mm	m ³ /h	m	rpm	W	A	V / F / Hz
CBIB	MTI 6J4/62	62.08		314.62	50.50	4	450	23000	20	1320	2160	4.40	400/3/50
	MTI 6J5/65	65.90		294.95	47.40	5	450	29250	20	1320	2700	5.50	400/3/50
	MTI 6P4/68	68.58		288.40	46.30	4	560	40400	24	1220	4000	7.20	400/3/50
	MTI 6R2/69	69.80		309.70	49.70	2	630	31100	32	1340	3800	6.40	400/3/50
	MTI 6L4/71	71.52		324.45	52.10	4	500	31200	22	1340	3080	6.80	400/3/50
	MTI 6R3/76	76.18		309.70	49.70	3	630	47700	32	1340	5700	9.60	400/3/50
MTI	MTI 6J5/78	78.38		393.27	63.10	5	450	28750	20	1320	2700	5.50	400/3/50
	MTI 6L4/85	85.22		432.60	69.50	4	500	30800	22	1340	3080	6.80	400/3/50
	MTI 6T2/85	85.28		377.53	114.40	2	800	44000	36	890	3600	7.60	400/3/50
	MTI 6P4/91	91.31		432.60	69.50	4	560	39200	24	1220	4000	7.20	400/3/50
	MTI 6R3/102	102.65		464.55	74.60	3	630	46650	32	1340	5700	9.60	400/3/50
	MTI 6P4/108	108.71		576.80	92.60	4	560	38400	24	1220	4000	7.20	400/3/50
	MTI 6T2/109	109.17		566.30	171.60	2	800	42000	36	890	3600	7.60	400/3/50
	MTI 6R3/123	123.03		619.40	99.50	3	630	45600	32	1340	5700	9.60	400/3/50
	MTI 6T3/124	124.23		566.29	171.60	3	800	66000	36	890	5400	11.40	400/3/50
	MTI 6T3/159	159.08		849.44	257.40	3	800	63000	36	890	5400	11.40	400/3/50
	MTI 6T3/181	181.52		1132.60	343.20	3	800	60000	36	890	5400	11.40	400/3/50

DDI	DLI	Modelo Type	Preço sem resistências Price without heaters	Opções Options			
				BL Lacado branco White painted	/E Descongelação elétrica Electrical defrost	/GTB Descongelação gás quente Hot gas defrost	/W Descongelação água Water defrost
				EUR	EUR		
				EUR	EUR	EUR	EUR
DXI		MTI 6J4/62	•	•	•	SP	
		MTI 6J5/65	•	•	•	SP	
		MTI 6P4/68	•	•	•	SP	
		MTI 6R2/69	•	•	•	SP	
		MTI 6L4/71	•	•	•	SP	
		MTI 6R3/76	•	•	•	SP	
BSUIT		MTI 6J5/78	•	•	•	SP	
		MTI 6L4/85	•	•	•	SP	
		MTI 6T2/85	•	•	•	SP	
		MTI 6P4/91	•	•	•	SP	
		MTI 6R3/102	•	•	•	SP	
		MTI 6P4/108	•	•	•	SP	
		MTI 6T2/109	•	•	•	SP	
		MTI 6R3/123	•	•	•	SP	
		MTI 6T3/124	•	•	•	SP	
		MTI 6T3/159	•	•	•	SP	
		MTI 6T3/181	•	•	•	SP	

Ø350 / 400 / 450 / 500 / 560 / 630 mm



Ø800 mm



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain								
	kW	A	V / F / Hz	mm			A	B	C	D	E	kg	m³	
	30.00	2x21,65	400/3/50	26.9	42.4	1 1/4 BSP	830	3750	3200	881	825	385	5.18	MTI 6J4/62
	33.60	2x24,25	400/3/50	26.9	42.4	2 BSP	830	4600	4050	881	825	411	6.32	MTI 6J5/65
	34.20	3x16,45	400/3/50	26.9	42.4	2 BSP	1080	5000	4450	750	670	402	7.62	MTI 6P4/68
	30.00	2x21,65	400/3/50	26.9	42.4	2 BSP	1365	3170	2570	1022	940	421	7.37	MTI 6R2/69
	45.60	4x16,46	400/3/50	26.9	42.4	2 BSP	830	5000	4450	933	850	421	7.14	MTI 6L4/71
	34.80	2x25,11	400/3/50	26.9	42.4	2 BSP	1365	4430	3830	815	735	472	8.72	MTI 6R3/76
	33.60	2x24,25	400/3/50	26.9	42.4	2 BSP	830	4600	4050	881	825	469	6.32	MTI 6J5/78
	45.60	4x16,46	400/3/50	26.9	42.4	2 BSP	830	5000	4450	933	850	485	7.14	MTI 6L4/85
	37.95	2x21,91+1x10,96	400/3/50	26.9	42.4	2 BSP	1830	4110	3410	1040	890	714	12.43	MTI 6T2/85
	45.60	4x16,45	400/3/50	33.7	48.3	2 BSP	1080	5000	4450	958	875	513	9.00	MTI 6P4/91
	43.50	2x25,11+1x12,56	400/3/50	33.7	48.3	2 BSP	1365	4430	3830	1022	940	603	10.21	MTI 6R3/102
	57.00	5x16,45	400/3/50	33.7	48.3	2 BSP	1080	5000	4450	958	875	606	9.00	MTI 6P4/108
	53.13	3x21,91+1x7,59	400/3/50	33.7	48.3	2 BSP	1830	4110	3410	1240	1090	951	14.15	MTI 6T2/109
	52.20	3x25,11	400/3/50	33.7	60.3	2 BSP	1365	4430	3830	1022	940	708	10.21	MTI 6R3/123
	58.50	5x16,89	400/3/50	2x26,9	2x42,4	2 1/2 BSP	1830	5790	5090	1040	890	974	17.39	MTI 6T3/124
	81.90	7x16,89	400/3/50	2x26,9	2x42,4	2 1/2 BSP	1830	5790	5090	1240	1090	1309	19.80	MTI 6T3/159
	105.30	9x16,89	400/3/50	2x33,7	2x48,3	2 1/2 BSP	1830	5790	5090	1240	1090	1547	19.80	MTI 6T3/181

Seleção e Factores Selection and Factors

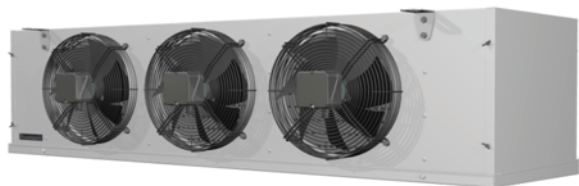
RC1		DT1 [K]						
		10	9	8	7	6	5	4
Tse [°C]	10	1.023	0.921	0.818	0.716	0.614	0.512	0.410
	8	1.016	0.914	0.812	0.710	0.609	0.506	0.406
	6	1.008	0.907	0.806	0.705	0.604	0.503	0.402
	4	1.000	0.900	0.800	0.700	0.600	0.500	0.400
	2	0.947	0.852	0.758	0.663	0.568	0.474	0.379
	0	0.871	0.784	0.697	0.610	0.523	0.436	0.348

Capacidade corrigida Corrected capacity

MTI 6T2/109 Tse=0°C DT1=8K R717	$Q_{01} = Q_{S1} \times RC1$ [kW]
	$Q_{01} = 109,17 \text{ kW} \times 0,697 = 76,09 \text{ kW}$

Nomenclatura	Nomenclature
Tse	Temperatura seca de entrada de ar BS Air on DB
Q _{S1}	Capacidade para seleção em DT1 Selection capacity in TD1
Q ₀₁	Capacidade corrigida em DT1 Corrected capacity in TD1
RC1	Factor de correcção de dados em DT1 Correction factor for data in DT1

CBIB



CBIC

CBL

MTI

DDI

DLI

DXI

BSUT

BSUS

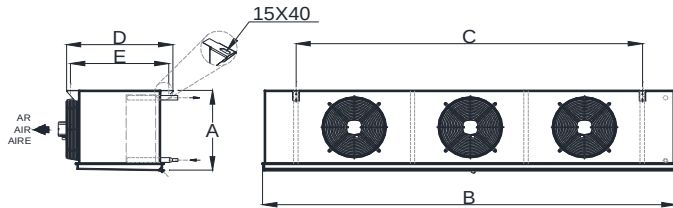
Modelo Type	Capacidade QS1 Capacity QS1 (T _{se} =+4°C / DT1=10K)	Capacidade Capacity (T _{se} =-18°C / DT1=7K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans								
					Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	
	KW		m ²	dm ³		mm	m ³ /h	m	rpm	W	A	V / F / Hz	
DDI 8E1/4	4.33	2.62	15.73	3.30	1	350	2950	16	1390	190	0.40	400/3/50	
DDI 8E1/5	5.66	3.43	23.60	5.00	1	350	2800	16	1390	190	0.40	400/3/50	
DDI 8E2/8	8.62	5.22	31.47	6.60	2	350	5900	16	1390	380	0.80	400/3/50	
DDI 8G2/10	10.45	6.33	39.96	8.40	2	400	6700	18	1360	460	0.92	400/3/50	
DDI 8E2/11	11.45	6.94	47.20	9.90	2	350	5600	16	1390	380	0.80	400/3/50	
DDI 8G2/13	13.32	8.07	59.94	12.60	2	400	6400	18	1360	460	0.92	400/3/50	
DDI 8G3/15	15.44	9.35	59.94	12.60	3	400	10050	18	1360	690	1.38	400/3/50	
DDI 8E3/17	17.24	10.44	70.80	14.90	3	350	8400	16	1390	570	1.20	400/3/50	
DDI 8G3/20	20.09	12.17	89.90	18.90	3	400	9600	18	1360	690	1.38	400/3/50	
DDI 8G4/20	20.95	12.69	79.91	16.80	4	400	13400	18	1360	920	1.84	400/3/50	
DDI 8J3/25	25.78	15.62	89.90	18.90	3	450	18600	22	1320	1620	3.30	400/3/50	
DDI 8G4/27	27.88	16.89	119.87	25.30	4	400	12800	18	1360	920	1.84	400/3/50	
DDI 8G5/34	34.45	20.87	149.84	31.60	5	400	16000	18	1360	1150	2.30	400/3/50	
DDI 8L3/35	35.08	21.25	123.62	26.00	3	500	24750	24	1340	2310	5.10	400/3/50	
DDI 8J3/40	40.95	24.81	179.81	37.90	3	450	17400	22	1320	1620	3.30	400/3/50	
DDI 8J4/44	44.76	27.12	179.81	37.90	4	450	23800	22	1320	2160	4.40	400/3/50	
DDI 8P3/45	45.19	27.38	164.82	34.70	3	560	30600	26	1220	3000	5.40	400/3/50	
DDI 8L4/46	46.95	28.44	164.82	34.70	4	500	33000	24	1340	3080	6.80	400/3/50	

Modelo Type	Preço sem resistências Price without heaters	Opções Options			
		BL Lacado branco White painted	/E Descongelação elétrica Electrical defrost	/GTB Descongelação gás quente Hot gas defrost	/W Descongelação água Water defrost
	EUR	EUR			
DDI 8E1/4	•	•	•	•	SP
DDI 8E1/5	•	•	•	•	SP
DDI 8E2/8	•	•	•	•	SP
DDI 8G2/10	•	•	•	•	SP
DDI 8E2/11	•	•	•	•	SP
DDI 8G2/13	•	•	•	•	SP
DDI 8G3/15	•	•	•	•	SP
DDI 8E3/17	•	•	•	•	SP
DDI 8G3/20	•	•	•	•	SP
DDI 8G4/20	•	•	•	•	SP
DDI 8J3/25	•	•	•	•	SP
DDI 8G4/27	•	•	•	•	SP
DDI 8G5/34	•	•	•	•	SP
DDI 8L3/35	•	•	•	•	SP
DDI 8J3/40	•	•	•	•	SP
DDI 8J4/44	•	•	•	•	SP
DDI 8P3/45	•	•	•	•	SP
DDI 8L4/46	•	•	•	•	SP

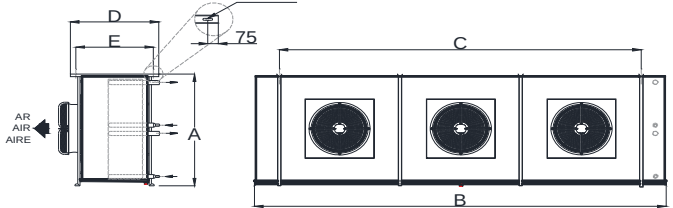
S Standard
S Standard

SP Sob pedido
SP Under request

Ø350 / 400 / 450 / 500 / 560 / 630 mm



Ø800 mm



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain								
	kW	A	V / F / Hz	mm			A	B	C	D	E	kg	m³	
	2.64	3.81	400/3/50	15.0	15.0	3/4 BSP	590	1130	660	720	658	60	1.12	DDI 8E1/4
	2.64	3.81	400/3/50	15.0	15.0	3/4 BSP	590	1130	660	720	658	68	1.12	DDI 8E1/5
	4.80	6.93	400/3/50	22.0	33.7	3/4 BSP	590	1760	1290	720	658	92	1.69	DDI 8E2/8
	7.20	10.39	400/3/50	22.0	33.7	3/4 BSP	590	2100	1630	746	690	109	2.04	DDI 8G2/10
	4.80	6.93	400/3/50	22.0	33.7	3/4 BSP	590	1760	1290	720	658	108	1.69	DDI 8E2/11
	7.20	10.39	400/3/50	22.0	33.7	3/4 BSP	590	2100	1630	746	690	139	2.04	DDI 8G2/13
	10.50	15.16	400/3/50	22.0	33.7	1 1/4 BSP	590	2900	2430	746	690	159	2.78	DDI 8G3/15
	9.00	12.99	400/3/50	22.0	33.7	3/4 BSP	590	2390	1920	720	658	145	2.26	DDI 8E3/17
	10.50	15.16	400/3/50	22.0	33.7	1 1/4 BSP	590	2900	2430	746	690	187	2.78	DDI 8G3/20
	13.80	19.92	400/3/50	22.0	33.7	1 1/4 BSP	590	3650	3180	746	690	198	3.48	DDI 8G4/20
	15.00	21.65	400/3/50	22.0	33.7	1 1/4 BSP	830	3000	2450	671	615	230	3.49	DDI 8J3/25
	13.80	19.92	400/3/50	22.0	33.7	1 1/4 BSP	590	3650	3180	746	690	234	3.48	DDI 8G4/27
	16.80	24.25	400/3/50	22.0	33.7	2 BSP	590	4500	4030	746	690	269	4.27	DDI 8G5/34
	15.18	21.91	400/3/50	22.0	33.7	2 BSP	830	3900	3350	671	615	288	4.50	DDI 8L3/35
	30.00	2x21.65	400/3/50	22.0	33.7	1 1/4 BSP	830	3000	2450	881	825	323	4.17	DDI 8J3/40
	30.00	2x21.65	400/3/50	26.9	42.4	1 1/4 BSP	830	3750	3200	881	825	359	5.18	DDI 8J4/44
	23.39	21,91+10,96	400/3/50	26.9	42.4	2 BSP	1080	3900	3350	750	670	333	5.98	DDI 8P3/45
	22.80	2x16,45	400/3/50	26.9	42.4	2 BSP	830	5000	4450	671	615	359	5.74	DDI 8L4/46

Seleção e Factores Selection and Factors

RC1		DT1 [K]						
		10	9	8	7	6	5	4
Tse [°C]	10	1.023	0.921	0.818	0.716	0.614	0.512	0.410
	6	1.008	0.907	0.806	0.705	0.604	0.503	0.402
	4	1.000	0.900	0.800	0.700	0.600	0.500	0.400
	2	0.947	0.852	0.758	0.663	0.568	0.474	0.379
	0	0.871	0.784	0.697	0.610	0.523	0.436	0.348
	-2	0.856	0.770	0.685	0.599	0.514	0.428	0.342
	-10	0.826	0.743	0.661	0.578	0.496	0.413	0.330
	-12	0.818	0.736	0.654	0.573	0.491	0.409	0.327
	-14	0.811	0.730	0.649	0.568	0.487	0.406	0.324
	-18	0.795	0.716	0.636	0.557	0.477	0.398	0.318
	-20	0.788	0.709	0.630	0.552	0.473	0.394	0.315
	-25	0.758	0.682	0.606	0.531	0.455	0.379	0.303
	-34	0.751	0.677	0.599	0.525	0.445	0.370	0.295

Capacidade corrigida Corrected capacity

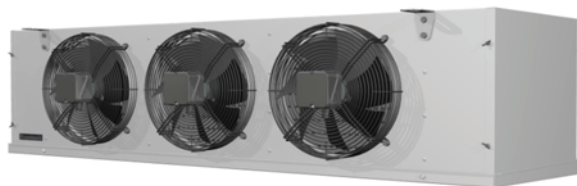
DDI 8G2/13 Tse=0°C DT1=8K R717	$Q_{01} = Q_{S1} \times RC1$ [kW]
	$Q_{01} = 13,32 \text{ kW} \times 0,697 = 9,28 \text{ kW}$

Nomenclatura	Nomenclature
Tse	Temperatura seca de entrada de ar BS Air on DB
Q _{S1}	Capacidade para seleção em DT1 Selection capacity in TD1
Q ₀₁	Capacidade corrigida em DT1 Corrected capacity in TD1
RC1	Factor de correcção de dados em DT1 Correction factor for data in DT1

DDI

Evaporadores Cúbicos Cubic Coolers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

8,0 mm
350 - 400 - 450 - 500 - 560 - 630 - 800 mm



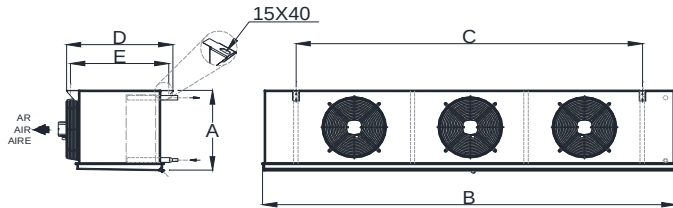
	Modelo Type	Capacidade Q _{S1} Capacity Q _{S1} (T _{se} =+4°C / DT ₁ =10K)	Capacidade Capacity (T _{se} =-18°C / DT ₁ =7K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans							
						Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	
							mm	m³/h	m	rpm	W	A	V / F / Hz
CBL	DDI 8J4/54	54.76	33.17	239.74	50.50	4	450	23200	22	1320	2160	4.40	400/3/50
	DDI 8P4/58	58.51	35.45	219.76	46.30	4	560	40800	26	1220	4000	7.20	400/3/50
	DDI 8J5/60	60.29	36.52	224.76	47.40	5	450	29750	22	1320	2700	5.50	400/3/50
	DDI 8R2/62	62.53	37.88	236.00	49.70	2	630	31200	34	1340	3800	6.40	400/3/50
	DDI 8L4/63	63.77	38.63	247.24	52.10	4	500	32000	24	1340	3080	6.80	400/3/50
MTI	DDI 8R3/64	64.83	39.27	236.00	49.70	3	630	47900	34	1340	5700	9.60	400/3/50
	DDI 8J5/71	71.65	43.41	299.68	63.10	5	450	29000	22	1320	2700	5.50	400/3/50
	DDI 8L4/77	77.88	47.18	329.65	69.50	4	500	31400	24	1340	3080	6.80	400/3/50
	DDI 8P4/80	80.16	48.56	329.65	69.50	4	560	40000	26	1220	4000	7.20	400/3/50
	DDI 8T2/74	81.94	49.64	288.93	114.40	2	800	45000	34	1340	3800	6.40	400/3/50
	DDI 8R3/89	89.34	54.12	354.00	74.60	3	630	46800	34	1340	5700	9.60	400/3/50
	DDI 8P4/97	97.63	59.14	439.53	92.60	4	560	39200	26	1220	4000	7.20	400/3/50
	DDI 8T2/98	98.83	59.87	433.40	171.60	2	800	43000	34	1340	3800	6.40	400/3/50
	DDI 8R3/109	109.59	66.39	472.00	99.50	3	630	46000	34	1340	5700	9.60	400/3/50
	DDI 8T3/110	110.11	66.70	433.40	171.60	3	800	67500	34	1340	5700	9.60	400/3/50
	DDI 8T3/145	145.10	87.90	650.10	257.40	3	800	64500	34	1340	5700	9.60	400/3/50
	DDI 8T3/169	169.95	102.96	866.80	343.20	3	800	61500	34	1340	5700	9.60	400/3/50

Modelo Type	Preço sem resistências Price without heaters	Opções Options			
		BL Lacado branco White painted	/E Descongelação eléctrica Electrical defrost	/GTB Descongelação gás quente Hot gas defrost	/W Descongelação água Water defrost
		EUR	EUR		
DDI 8J4/54	•	•	•	•	SP
DDI 8P4/58	•	•	•	•	SP
DDI 8J5/60	•	•	•	•	SP
DDI 8R2/62	•	•	•	•	SP
DDI 8L4/63	•	•	•	•	SP
DDI 8R3/64	•	•	•	•	SP
DDI 8J5/71	•	•	•	•	SP
DDI 8L4/77	•	•	•	•	SP
DDI 8P4/80	•	•	•	•	SP
DDI 8T2/74	•	•	•	•	SP
DDI 8R3/89	•	•	•	•	SP
DDI 8P4/97	•	•	•	•	SP
DDI 8T2/98	•	•	•	•	SP
DDI 8R3/109	•	•	•	•	SP
DDI 8T3/110	•	•	•	•	SP
DDI 8T3/145	•	•	•	•	SP
DDI 8T3/169	•	•	•	•	SP

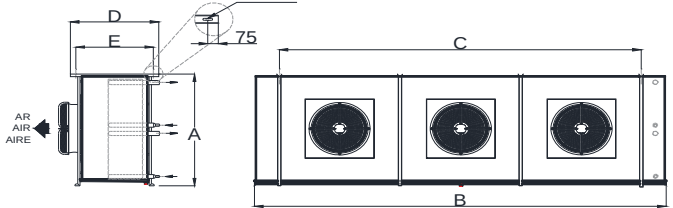
S Standard
S Standard

SP Sob pedido
SP Under request

Ø350 / 400 / 450 / 500 / 560 / 630 mm



Ø800 mm



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain								
	kW	A	V / F / Hz	mm			mm					kg	m³	
	30.00	2x21,65	400/3/50	26.9	42.4	1 1/4 BSP	830	3750	3200	881	825	413	5.18	DDI 8J4/54
	34.20	3x16,45	400/3/50	26.9	42.4	2 BSP	1080	5000	4450	750	670	427	7.62	DDI 8P4/58
	33.60	2x24,25	400/3/50	26.9	42.4	2 BSP	830	4600	4050	881	825	437	6.32	DDI 8J5/60
	30.00	2x21,65	400/3/50	26.9	42.4	2 BSP	1365	3170	2570	1022	940	450	7.37	DDI 8R2/62
	45.60	4x16,46	400/3/50	26.9	42.4	2 BSP	830	5000	4450	933	850	449	7.14	DDI 8L4/63
	34.80	2x25,11	400/3/50	26.9	42.4	2 BSP	1365	4430	3830	815	735	501	8.72	DDI 8R3/64
	33.60	2x24,25	400/3/50	26.9	42.4	2 BSP	830	4600	4050	881	825	503	6.32	DDI 8J5/71
	45.60	4x16,46	400/3/50	26.9	42.4	2 BSP	830	5000	4450	933	850	522	7.14	DDI 8L4/77
	45.60	4x16,45	400/3/50	26.9	42.4	2 BSP	1080	5000	4450	958	875	551	9.00	DDI 8P4/80
	37.95	2x21,91+1x10,96	400/3/50	26.9	42.4	2 BSP	1830	4110	3410	1040	890	748	12.43	DDI 8T2/74
	43.50	2x25,11+1x12,56	400/3/50	33.7	48.3	2 BSP	1365	4430	3830	1022	940	645	10.21	DDI 8R3/89
	57.00	5x16,45	400/3/50	33.7	48.3	2 BSP	1080	5000	4450	958	875	551	9.00	DDI 8P4/97
	53.13	3x21,91+1x7,59	400/3/50	33.7	48.3	2 BSP	1830	4110	3410	1240	1090	1002	14.15	DDI 8T2/98
	52.20	3x25,11	400/3/50	33.7	48.3	2 BSP	1365	4430	3830	1022	940	765	10.21	DDI 8R3/109
	58.50	5x16,89	400/3/50	2x26,9	2x42,4	2 1/2 BSP	1830	5790	5090	1040	890	1025	17.39	DDI 8T3/110
	81.90	7x16,89	400/3/50	2x26,9	2x42,4	2 1/2 BSP	1830	5790	5090	1240	1090	1385	19.80	DDI 8T3/145
	105.30	9x16,89	400/3/50	2x33,7	2x48,3	2 1/2 BSP	1830	5790	5090	1240	1090	1649	19.80	DDI 8T3/169

Seleção e Factores Selection and Factors

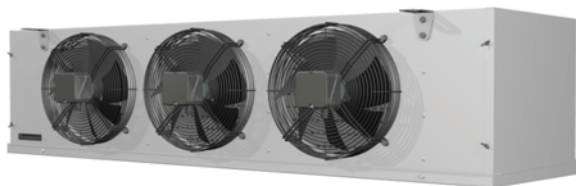
RC1		DT1 [K]						
		10	9	8	7	6	5	4
Tse [°C]	10	1.023	0.921	0.818	0.716	0.614	0.512	0.410
	6	1.008	0.907	0.806	0.705	0.604	0.503	0.402
	4	1.000	0.900	0.800	0.700	0.600	0.500	0.400
	2	0.947	0.852	0.758	0.663	0.568	0.474	0.379
	0	0.871	0.784	0.697	0.610	0.523	0.436	0.348
	-2	0.856	0.770	0.685	0.599	0.514	0.428	0.342
	-10	0.826	0.743	0.661	0.578	0.496	0.413	0.330
	-12	0.818	0.736	0.654	0.573	0.491	0.409	0.327
	-14	0.811	0.730	0.649	0.568	0.487	0.406	0.324
	-18	0.795	0.716	0.636	0.557	0.477	0.398	0.318
	-20	0.788	0.709	0.630	0.552	0.473	0.394	0.315
	-25	0.758	0.682	0.606	0.531	0.455	0.379	0.303
	-34	0.751	0.677	0.599	0.525	0.445	0.370	0.295

Capacidade corrigida Corrected capacity

DDI 8T3/110 Tse=0°C DT1=8K R717	$Q_{01} = Q_{S1} \times RC1$ [kW]
	$Q_{01} = 110,11 \text{ kW} \times 0,697 = 76,75 \text{ kW}$

Nomenclatura	Nomenclature
Tse	Temperatura seca de entrada de ar BS Air on DB
Q _{S1}	Capacidade para seleção em DT1 Selection capacity in DT1
Q ₀₁	Capacidade corrigida em DT1 Corrected capacity in DT1
RC1	Factor de correcção de dados em DT1 Correction factor for data in DT1

CBIB



CBIC

CBL

MTI

DDI

DLI

DXI

BSUT

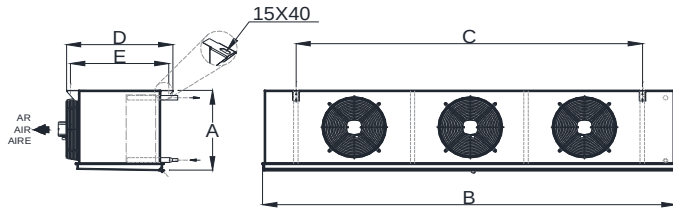
BSUS

	Modelo Type	Capacidade QS1 Capacity QS1 (T _{se} =+4°C / DT1=10K)	Capacidade Capacity (T _{se} =-18°C / DT1=7K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans								
		kW		m ²	dm ³	Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current		Alimentação MPS
							mm	m ³ /h	m	rpm	W	A		V / F / Hz
DLI	10E1/3	3.49	2.11	12.79	3.30	1	350	3050	16	1390	190	0.40	400/3/50	
DLI	10E1/4	4.76	2.88	19.18	5.00	1	350	2900	16	1390	190	0.40	400/3/50	
DLI	10E2/7	7.02	4.25	25.57	6.60	2	350	6100	16	1390	380	0.80	400/3/50	
DLI	10G2/8	8.46	5.13	32.47	8.40	2	400	6800	18	1360	460	0.92	400/3/50	
DLI	10E2/9	9.64	5.84	38.36	9.90	2	350	5800	16	1390	380	0.80	400/3/50	
DLI	10G2/11	11.23	6.80	48.70	12.60	2	400	6500	18	1360	460	0.92	400/3/50	
DLI	10G3/12	12.49	7.57	48.70	12.60	3	400	10200	18	1360	690	1.38	400/3/50	
DLI	10E3/14	14.50	8.78	57.53	14.90	3	350	8700	16	1390	570	1.20	400/3/50	
DLI	10G3/16	16.91	10.24	73.06	18.90	3	400	9750	18	1360	690	1.38	400/3/50	
DLI	10G4/16	16.98	10.29	64.94	16.80	4	400	13600	18	1360	920	1.84	400/3/50	
DLI	10J3/21	21.01	12.73	73.10	18.90	3	450	18750	22	1320	1620	3.30	400/3/50	
DLI	10G4/23	23.07	13.98	97.41	25.30	4	400	13000	18	1360	920	1.84	400/3/50	
DLI	10L3/28	28.25	17.11	100.45	26.00	3	500	25050	24	1340	2310	5.10	400/3/50	
DLI	10G5/28	28.79	17.44	121.76	31.60	5	400	16250	18	1360	1150	2.30	400/3/50	
DLI	10J3/34	34.76	21.06	146.11	37.90	3	450	17550	22	1320	1620	3.30	400/3/50	
DLI	10P3/36	36.74	22.26	133.94	34.70	3	560	30900	26	1220	3000	5.40	400/3/50	
DLI	10J4/37	37.23	22.55	146.11	37.90	4	450	23600	22	1320	2160	4.40	400/3/50	
DLI	10L4/38	38.18	23.13	133.94	34.70	4	500	33400	24	1340	3080	6.80	400/3/50	

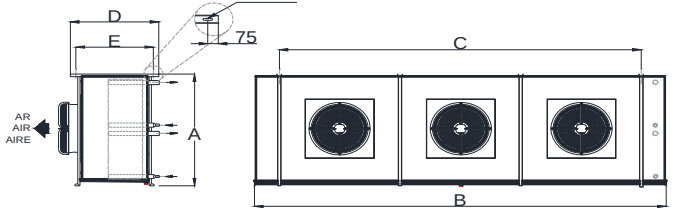
Modelo Type	Preço sem resistências Price without heaters	Opções Options			
		BL Lacado branco White painted	/E Descongelação eléctrica Electrical defrost	/GTB Descongelação gás quente Hot gas defrost	/W Descongelação água Water defrost
	EUR	EUR			
DLI	10E1/3	•	•	•	SP
DLI	10E1/4	•	•	•	SP
DLI	10E2/7	•	•	•	SP
DLI	10G2/8	•	•	•	SP
DLI	10E2/9	•	•	•	SP
DLI	10G2/11	•	•	•	SP
DLI	10G3/12	•	•	•	SP
DLI	10E3/14	•	•	•	SP
DLI	10G3/16	•	•	•	SP
DLI	10G4/16	•	•	•	SP
DLI	10J3/21	•	•	•	SP
DLI	10G4/23	•	•	•	SP
DLI	10L3/28	•	•	•	SP
DLI	10G5/28	•	•	•	SP
DLI	10J3/34	•	•	•	SP
DLI	10P3/36	•	•	•	SP
DLI	10J4/37	•	•	•	SP
DLI	10L4/38	•	•	•	SP

S Standard SP Sob pedido
S Standard SP Under request

Ø350 / 400 / 450 / 500 / 560 / 630 mm



Ø800 mm



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain								
	kW	A	V / F / Hz	mm			A	B	C	D	E	kg	m³	
	2.64	3.81	400/3/50	15.0	15.0	3/4 BSP	590	1130	660	720	658	59	1.12	DLI 10E1/3
	2.64	3.81	400/3/50	15.0	15.0	3/4 BSP	590	1130	660	720	658	66	1.12	DLI 10E1/4
	4.80	6.93	400/3/50	22.0	33.7	3/4 BSP	590	1760	1290	720	658	89	1.69	DLI 10E2/7
	7.20	10.39	400/3/50	22.0	33.7	3/4 BSP	590	2100	1630	746	690	104	2.04	DLI 10G2/8
	4.80	6.93	400/3/50	22.0	33.7	3/4 BSP	590	1760	1290	720	658	102	1.69	DLI 10E2/9
	7.20	10.39	400/3/50	22.0	33.7	3/4 BSP	590	2100	1630	746	690	133	2.04	DLI 10G2/11
	10.50	15.16	400/3/50	22.0	33.7	1 1/4 BSP	590	2900	2430	746	690	153	2.78	DLI 10G3/12
	9.00	12.99	400/3/50	22.0	33.7	3/4 BSP	590	2390	1920	720	658	140	2.26	DLI 10E3/14
	10.50	15.16	400/3/50	22.0	33.7	1 1/4 BSP	590	2900	2430	746	690	177	2.78	DLI 10G3/16
	13.80	19.92	400/3/50	22.0	33.7	1 1/4 BSP	590	3650	3180	746	690	189	3.48	DLI 10G4/16
	15.00	21.65	400/3/50	22.0	33.7	1 1/4 BSP	830	3000	2450	671	615	220	3.49	DLI 10J3/21
	13.80	19.92	400/3/50	22.0	33.7	1 1/4 BSP	590	3650	3180	746	690	221	3.48	DLI 10G4/23
	15.18	21.91	400/3/50	22.0	33.7	2 BSP	830	3900	3350	671	615	275	4.50	DLI 10L3/28
	16.80	24.25	400/3/50	22.0	33.7	2 BSP	590	4500	4030	746	690	252	4.27	DLI 10G5/28
	30.00	2x21.65	400/3/50	22.0	33.7	1 1/4 BSP	830	3000	2450	881	825	303	4.17	DLI 10J3/34
	23.39	21,91+10,96	400/3/50	22.0	33.7	2 BSP	1080	3900	3350	750	670	328	5.98	DLI 10P3/36
	30.00	2x21.65	400/3/50	22.0	33.7	1 1/4 BSP	830	3750	3200	881	825	339	5.18	DLI 10J4/37
	22.80	2x16,45	400/3/50	22.0	33.7	2 BSP	830	5000	4450	671	615	341	5.74	DLI 10L4/38

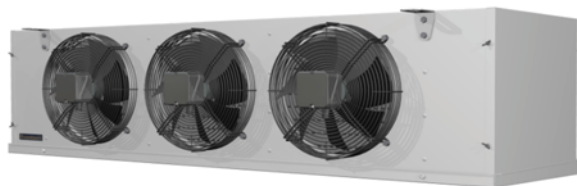
Seleção e Factores Selection and Factors

RC1		DT1 [K]						
Tse [°C]	4	10.00	9	0.936	8	0.832	7	0.728
	2	0.970	0.886	0.788	0.690	0.591	0.493	0.394
	0	0.906	0.815	0.725	0.634	0.544	0.453	0.362
	-2	0.890	0.801	0.712	0.623	0.534	0.445	0.356
	-10	0.859	0.773	0.687	0.601	0.515	0.429	0.344
	-12	0.851	0.765	0.680	0.596	0.511	0.426	0.340
	-14	0.843	0.759	0.675	0.591	0.506	0.422	0.337
	-18	0.827	0.745	0.661	0.579	0.496	0.414	0.331
	-20	0.820	0.737	0.655	0.574	0.492	0.410	0.328
	-25	0.788	0.709	0.630	0.552	0.473	0.394	0.315
	-34	0.734	0.658	0.587	0.546	0.468	0.390	0.312

Capacidade corrigida Corrected capacity	
DLI 10G4/23 Tse=0°C DT1=8K R717	$Q_{01} = Q_{S1} \times RC1$ [kW]
	$Q_{01} = 23,07 \text{ kW} \times 0,725 = 16,73 \text{ kW}$

Nomenclatura Nomenclature	
Tse	Temperatura seca de entrada de ar BS Air on DB
Q _{S1}	Capacidade para selecção em DT1 Selection capacity in TD1
Q ₀₁	Capacidade corrigida em DT1 Corrected capacity in TD1
RC1	Factor de correcção de dados em DT1 Correction factor for data in DT1

CBIB



CBIC

CBL

MTI

DDI

DLI

DXI

BSUT

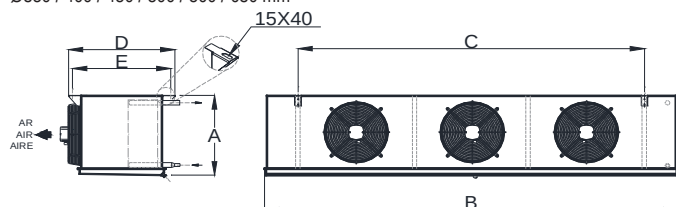
BSUS

Modelo Type	Capacidade QS1 Capacity QS1 (Tse=+4°C / DT1=10K)	Capacidade Capacity (Tse=-18°C / DT1=7K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans									
					Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS		
DLI	10J4/46	46.45	28.14	194.82	50.50	4	450	23400	22	1320	2160	4.40	400/3/50	
DLI	10P4/48	48.20	29.20	178.60	46.30	4	560	41200	26	1220	4000	7.20	400/3/50	
DLI	10J5/49	49.30	29.87	182.64	47.40	5	450	29500	22	1320	2700	5.50	400/3/50	
DLI	10R2/51	51.08	30.94	191.80	49.70	2	630	31400	34	1340	3800	6.40	400/3/50	
DLI	10L4/52	52.37	31.73	200.91	52.10	4	500	32000	24	1340	3080	6.80	400/3/50	
DLI	10R3/53	53.45	32.38	191.80	49.70	3	630	48000	34	1340	5700	9.60	400/3/50	
DLI	10J5/59	59.26	35.90	243.52	63.10	5	450	29250	22	1320	2700	5.50	400/3/50	
DLI	10T2/60	60.74	36.80	235.78	114.40	2	800	44600	38	890	3600	7.60	400/3/50	
DLI	10L4/64	64.84	39.28	267.88	69.50	4	500	31600	24	1340	3080	6.80	400/3/50	
DLI	10P4/67	67.29	40.76	267.88	69.50	4	560	40800	26	1220	4000	7.20	400/3/50	
DLI	10R3/74	74.71	45.26	287.70	74.60	3	630	47100	34	1340	5700	9.60	400/3/50	
DLI	10T2/82	82.81	50.17	353.67	171.60	2	800	43600	38	890	3600	7.60	400/3/50	
DLI	10P4/83	83.55	50.61	357.17	92.60	4	560	40400	26	1220	4000	7.20	400/3/50	
DLI	10T3/91	91.61	55.50	353.67	171.60	3	800	66900	38	890	5400	11.40	400/3/50	
DLI	10R3/92	92.73	56.18	383.55	99.50	3	630	46600	34	1340	5700	9.60	400/3/50	
DLI	10T3/124	124.44	75.39	530.50	257.40	3	800	65400	38	890	5400	11.40	400/3/50	
DLI	10T3/149	149.11	90.33	707.34	343.20	3	800	63000	38	890	5400	11.40	400/3/50	

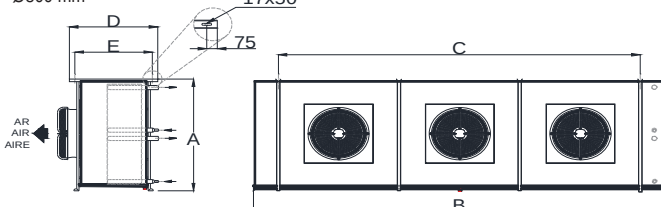
Modelo Type	Preço sem resistências Price without heaters	Opções Options			
		BL Lacado branco White painted	/E Descongelação elétrica Electrical defrost	/GTB Descongelação gás quente Hot gas defrost	/W Descongelação água Water defrost
	EUR	EUR			
DLI	10J4/46	•	•	•	SP
DLI	10P4/48	•	•	•	SP
DLI	10J5/49	•	•	•	SP
DLI	10R2/51	•	•	•	SP
DLI	10L4/52	•	•	•	SP
DLI	10R3/53	•	•	•	SP
DLI	10J5/59	•	•	•	SP
DLI	10T2/60	•	•	•	SP
DLI	10L4/64	•	•	•	SP
DLI	10P4/67	•	•	•	SP
DLI	10R3/74	•	•	•	SP
DLI	10T2/82	•	•	•	SP
DLI	10P4/83	•	•	•	SP
DLI	10T3/91	•	•	•	SP
DLI	10R3/92	•	•	•	SP
DLI	10T3/124	•	•	•	SP
DLI	10T3/149	•	•	•	SP

S Standard SP Sob pedido
S Standard SP Under request

Ø350 / 400 / 450 / 500 / 560 / 630 mm



Ø800 mm



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain								
	kW	A	V / F / Hz	mm			mm					kg	m³	
	30.00	2x21,65	400/3/50	26.9	42.4	1 1/4 BSP	830	3750	3200	881	825	386	5.18	DLI 10J4/46
	34.20	3x16,45	400/3/50	26.9	42.4	2 BSP	1080	5000	4450	750	670	403	7.62	DLI 10P4/48
	33.60	2x24,25	400/3/50	26.9	42.4	2 BSP	830	4600	4050	881	825	412	6.32	DLI 10J5/49
	30.00	2x21,65	400/3/50	26.9	42.4	2 BSP	1365	3170	2570	1022	940	422	7.37	DLI 10R2/51
	45.60	4x16,46	400/3/50	26.9	42.4	2 BSP	830	5000	4450	933	850	422	7.14	DLI 10L4/52
	34.80	2x25,11	400/3/50	26.9	42.4	2 BSP	1365	4430	3830	815	735	473	8.72	DLI 10R3/53
	33.60	2x24,25	400/3/50	26.9	42.4	2 BSP	830	4600	4050	881	825	470	6.32	DLI 10J5/59
	37.95	2x21,91+1x10,96	400/3/50	26.9	42.4	2 BSP	1830	4110	3410	1040	890	715	12.43	DLI 10T2/60
	45.60	4x16,46	400/3/50	26.9	42.4	2 BSP	830	5000	4450	933	850	486	7.14	DLI 10L4/64
	45.60	4x16,45	400/3/50	26.9	42.4	2 BSP	1080	5000	4450	958	875	514	9.00	DLI 10P4/67
	43.50	2x25,11+1x12,56	400/3/50	26.9	42.4	2 BSP	1365	4430	3830	1022	940	604	10.21	DLI 10R3/74
	53.13	3x21,91+1x7,59	400/3/50	26.9	42.4	2 BSP	1830	4110	3410	1240	1090	953	14.15	DLI 10T2/82
	57.00	5x16,45	400/3/50	26.9	42.4	2 BSP	1080	5000	4450	958	875	607	9.00	DLI 10P4/83
	58.50	5x16,89	400/3/50	33.7	48.3	2 1/2 BSP	1830	5790	5090	1040	890	975	17.39	DLI 10T3/91
	52.20	3x25,11	400/3/50	2x26,9	2x42,4	2 BSP	1365	4430	3830	1022	940	710	10.21	DLI 10R3/92
	81.90	7x16,89	400/3/50	2x26,9	2x42,4	2 1/2 BSP	1830	5790	5090	1240	1090	1311	19.80	DLI 10T3/124
	105.30	9x16,89	400/3/50	2x33,7	2x48,3	2 1/2 BSP	1830	5790	5090	1240	1090	1550	19.80	DLI 10T3/149

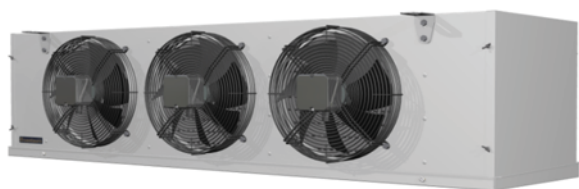
Seleção e Factores Selection and Factors

RC1		DT1 [K]						
		10	9	8	7	6	5	4
Tse [°C]	4	1.000	0.936	0.832	0.728	0.624	0.520	0.416
	2	0.970	0.886	0.788	0.690	0.591	0.493	0.394
	0	0.906	0.815	0.725	0.634	0.544	0.453	0.362
	-2	0.890	0.801	0.712	0.623	0.534	0.445	0.356
	-10	0.859	0.773	0.687	0.601	0.515	0.429	0.344
	-12	0.851	0.765	0.680	0.596	0.511	0.426	0.340
	-14	0.843	0.759	0.675	0.591	0.506	0.422	0.337
	-18	0.827	0.745	0.661	0.579	0.496	0.414	0.331
	-20	0.820	0.737	0.655	0.574	0.492	0.410	0.328
	-25	0.788	0.709	0.630	0.552	0.473	0.394	0.315
	-34	0.734	0.658	0.587	0.546	0.468	0.390	0.312

Capacidade corrigida Corrected capacity

DLI 10R3/74 Tse=0°C DT1=8K R717	$Q_{01} = Q_{S1} \times RC1$ [kW]
	$Q_{01} = 74,71 \text{ kW} \times 0,725 = 54,16 \text{ kW}$

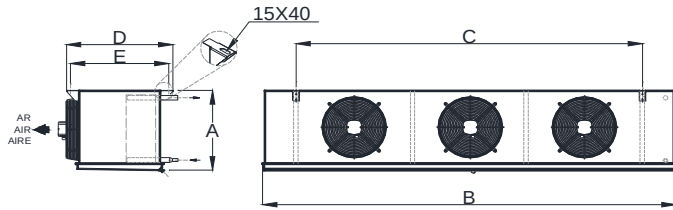
Nomenclatura	Nomenclature
Tse	Temperatura seca de entrada de ar BS Air on DB
Q _{S1}	Capacidade para seleção em DT1 Selection capacity in TD1
Q ₀₁	Capacidade corrigida em DT1 Corrected capacity in TD1
RC1	Factor de correcção de dados em DT1 Correction factor for data in DT1



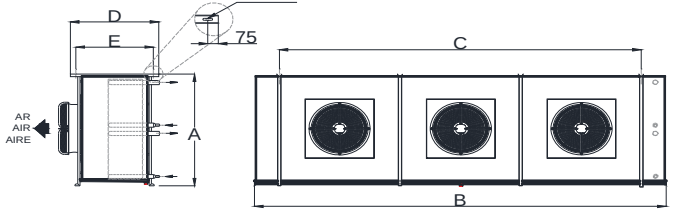
	Modelo Type	Capacidade QS1 Capacity QS1 (T _{se} =+4°C / DT1=10K)	Capacidade Capacity (T _{se} =-18°C / DT1=7K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans								
		kW		m ²	dm ³	Nº.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	
							mm	m ³ /h	m	rpm	W	A	V / F / Hz	
DXI	12E1/3	3.21	1.94	10.82	3.30	1	350	3100	17	1390	190	0.40	400/3/50	
DXI	12E1/4	4.44	2.69	16.23	5.00	1	350	2950	17	1390	190	0.40	400/3/50	
DXI	12E2/6	6.47	3.92	21.64	6.60	2	350	6200	17	1390	380	0.80	400/3/50	
DXI	12G2/7	7.80	4.73	27.48	8.40	2	400	6900	19	1360	460	0.92	400/3/50	
DXI	12E2/8	8.99	5.45	32.46	9.90	2	350	5900	17	1390	380	0.80	400/3/50	
DXI	12G2/10	10.49	6.35	41.22	12.60	2	400	6600	19	1360	460	0.92	400/3/50	
DXI	12G3/11	11.46	6.94	41.22	12.60	3	400	10350	19	1360	690	1.38	400/3/50	
DXI	12E3/13	13.51	8.18	48.69	14.90	3	350	8850	17	1390	570	1.20	400/3/50	
DXI	12G4/15	15.62	9.46	54.96	16.80	4	400	13800	19	1360	920	1.84	400/3/50	
DXI	12G3/15	15.79	9.57	61.83	18.90	3	400	9900	19	1360	690	1.38	400/3/50	
DXI	12J3/19	19.37	11.73	61.83	18.90	3	450	18900	23	1320	1620	3.30	400/3/50	
DXI	12G4/21	21.40	12.96	82.44	25.30	4	400	13200	19	1360	920	1.84	400/3/50	
DXI	12L3/25	25.86	15.67	85.01	26.00	3	500	25200	25	1340	2310	5.10	400/3/50	
DXI	12G5/26	26.79	16.23	103.04	31.60	5	400	16500	19	1360	1150	2.30	400/3/50	
DXI	12J3/32	32.88	19.92	123.65	37.90	3	450	18000	23	1320	1620	3.30	400/3/50	
DXI	12P3/33	33.78	20.46	113.35	34.70	3	560	31200	27	1220	3000	5.40	400/3/50	
DXI	12L4/35	35.10	21.26	113.35	34.70	4	500	33600	25	1340	3080	6.80	400/3/50	
DXI	12J4/35	35.16	21.30	123.65	37.90	4	450	24400	23	1320	2160	4.40	400/3/50	

	Modelo Type	Preço sem resistências Price without heaters	Opções Options			
		EUR	BL Lacado branco White painted	/E Descongelação eléctrica Electrical defrost	/GTB Descongelação gás quente Hot gas defrost	/W Descongelação água Water defrost
			EUR			
DXI	DXI 12E1/3	•	•	•	•	SP
	DXI 12E1/4	•	•	•	•	SP
	DXI 12E2/6	•	•	•	•	SP
	DXI 12G2/7	•	•	•	•	SP
	DXI 12E2/8	•	•	•	•	SP
	DXI 12G2/10	•	•	•	•	SP
BSUT	DXI 12G3/11	•	•	•	•	SP
	DXI 12E3/13	•	•	•	•	SP
	DXI 12G4/15	•	•	•	•	SP
	DXI 12G3/15	•	•	•	•	SP
	DXI 12J3/19	•	•	•	•	SP
	DXI 12G4/21	•	•	•	•	SP
BSUS	DXI 12L3/25	•	•	•	•	SP
	DXI 12G5/26	•	•	•	•	SP
	DXI 12J3/32	•	•	•	•	SP
	DXI 12P3/33	•	•	•	•	SP
	DXI 12L4/35	•	•	•	•	SP
	DXI 12J4/35	•	•	•	•	SP

Ø350 / 400 / 450 / 500 / 560 / 630 mm



Ø800 mm



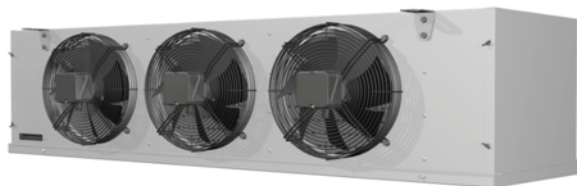
	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain								
	kW	A	V / F / Hz	mm			A	B	C	D	E	kg	m³	
	2.64	3.81	400/3/50	15.0	15.0	3/4 BSP	590	1130	660	720	658	58	1.12	DXI 12E1/3
	2.64	3.81	400/3/50	15.0	15.0	3/4 BSP	590	1130	660	720	658	65	1.12	DXI 12E1/4
	4.80	6.93	400/3/50	22.0	33.7	3/4 BSP	590	1760	1290	720	658	88	1.69	DXI 12E2/6
	7.20	10.39	400/3/50	22.0	33.7	3/4 BSP	590	2100	1630	746	690	103	2.04	DXI 12G2/7
	4.80	6.93	400/3/50	22.0	33.7	3/4 BSP	590	1760	1290	720	658	101	1.69	DXI 12E2/8
	7.20	10.39	400/3/50	22.0	33.7	3/4 BSP	590	2100	1630	746	690	131	2.04	DXI 12G2/10
	10.50	15.16	400/3/50	22.0	33.7	1 1/4 BSP	590	2900	2430	746	690	151	2.78	DXI 12G3/11
	9.00	12.99	400/3/50	22.0	33.7	3/4 BSP	590	2390	1920	720	658	135	2.26	DXI 12E3/13
	13.80	19.92	400/3/50	22.0	33.7	1 1/4 BSP	590	3650	3180	746	690	187	3.48	DXI 12G4/15
	10.50	15.16	400/3/50	22.0	33.7	1 1/4 BSP	590	2900	2430	746	690	174	2.78	DXI 12G3/15
	15.00	21.65	400/3/50	22.0	33.7	1 1/4 BSP	830	3000	2450	671	615	261	3.49	DXI 12J3/19
	13.80	19.92	400/3/50	22.0	33.7	1 1/4 BSP	590	3650	3180	746	690	218	3.48	DXI 12G4/21
	15.18	21.91	400/3/50	22.0	33.7	2 BSP	830	3900	3350	671	615	271	4.50	DXI 12L3/25
	16.80	24.25	400/3/50	22.0	33.7	2 BSP	590	4500	4030	746	690	248	4.27	DXI 12G5/26
	30.00	2x21.65	400/3/50	22.0	33.7	1 1/4 BSP	830	3000	2450	881	825	298	4.17	DXI 12J3/32
	23.39	21,91+10,96	400/3/50	22.0	33.7	2 BSP	1080	3900	3350	750	670	324	5.98	DXI 12P3/33
	22.80	2x16.45	400/3/50	22.0	33.7	2 BSP	830	5000	4450	671	615	336	5.74	DXI 12L4/35
	30.00	2x21.65	400/3/50	22.0	33.7	1 1/4 BSP	830	3750	3200	881	825	334	5.18	DXI 12J4/35

Seleção e Factores Selection and Factors

RC1		DT1 [K]						
Tse [°C]	4	10.00	9	0.936	8	0.832	7	0.728
	2	0.970	0.886	0.788	0.690	0.591	0.493	0.394
	0	0.906	0.815	0.725	0.634	0.544	0.453	0.362
	-2	0.890	0.801	0.712	0.623	0.534	0.445	0.356
	-10	0.859	0.773	0.687	0.601	0.515	0.429	0.344
	-12	0.851	0.765	0.680	0.596	0.511	0.426	0.340
	-14	0.843	0.759	0.675	0.591	0.506	0.422	0.337
	-18	0.827	0.745	0.661	0.579	0.496	0.414	0.331
	-20	0.820	0.737	0.655	0.574	0.492	0.410	0.328
	-25	0.788	0.709	0.630	0.552	0.473	0.394	0.315
	-34	0.734	0.658	0.587	0.546	0.468	0.390	0.312

Capacidade corrigida Corrected capacity	
DXI 12E3/13 Tse=0°C DT1=8K R717	$Q_{01} = Q_{S1} \times RC1$ [kW]
	$Q_{01} = 13,51 \text{ kW} \times 0,725 = 9,79 \text{ kW}$

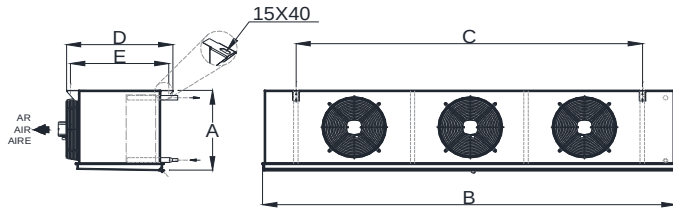
Nomenclatura Nomenclature	
Tse	Temperatura seca de entrada de ar BS Air on DB
Q _{S1}	Capacidade para seleção em DT1 Selection capacity in TD1
Q ₀₁	Capacidade corrigida em DT1 Corrected capacity in TD1
RC1	Factor de correcção de dados em DT1 Correction factor for data in DT1



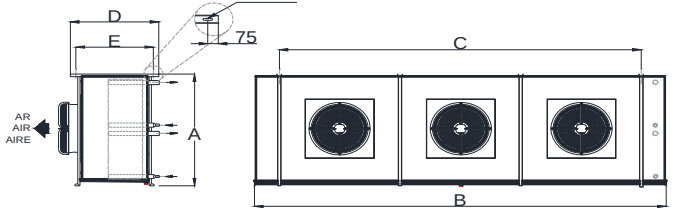
	Modelo Type	Capacidade Q _{S1} Capacity Q _{S1} (T _{se} =+4°C / DT ₁ =10K)	Capacidade Capacity (T _{se} =-18°C / DT ₁ =7K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans							
						Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Projeção ar Air throw	Rotação Revolutions	Potência total Total power	Corrente total Total current	
						m ²	mm	m ³ /h	m	rpm	W	A	V / F / Hz
CBL	DXI 12J4/43	43.93	26.61	164.87	50.50	4	450	24000	23	1320	2160	4.40	400/3/50
	DXI 12P4/44	44.59	27.01	151.10	46.30	4	560	41600	27	1220	4000	7.20	400/3/50
	DXI 12J5/44	44.82	27.15	154.57	47.40	5	450	30500	23	1320	2700	5.50	400/3/50
	DXI 12L4/48	48.25	29.23	170.02	52.10	4	500	32200	25	1340	3080	6.80	400/3/50
	DXI 12R2/46	46.77	28.33	162.29	49.70	2	630	31600	36	1340	3800	6.40	400/3/50
	DXI 12R3/49	49.11	29.75	162.29	49.70	3	630	48200	36	1340	5700	9.60	400/3/50
MTI	DXI 12T2/55	55.50	33.62	200.34	114.40	2	800	45000	42	890	3600	7.60	400/3/50
	DXI 12J5/55	55.84	33.83	206.09	63.10	5	450	30000	23	1320	2700	5.50	400/3/50
	DXI 12L4/60	60.30	36.53	226.70	69.50	4	500	31800	25	1340	3080	6.80	400/3/50
	DXI 12P4/62	62.60	37.92	226.70	69.50	4	560	41200	27	1220	4000	7.20	400/3/50
	DXI 12R3/68	68.96	41.78	243.44	74.60	3	630	47400	36	1340	5700	9.60	400/3/50
	DXI 12T2/76	76.11	46.11	300.51	171.60	2	800	43800	42	890	3600	7.60	400/3/50
	DXI 12P4/78	78.18	47.36	302.26	92.60	4	560	40800	27	1220	4000	7.20	400/3/50
	DXI 12T3/82	82.92	50.23	300.51	171.60	3	800	67500	42	890	5400	11.40	400/3/50
	DXI 12R3/86	86.19	52.21	324.59	99.50	3	630	46700	36	1340	5700	9.60	400/3/50
	DXI 12T3/113	113.36	68.67	450.77	257.40	3	800	65700	42	890	5400	11.40	400/3/50
	DXI 12T3/138	138.29	83.78	601.00	343.20	3	800	64200	42	890	5400	11.40	400/3/50

	Modelo Type	Preço sem resistências Price without heaters	Opções Options			
			BL Lacado branco White painted	/E Descongelação eléctrica Electrical defrost	/GTB Descongelação gás quente Hot gas defrost	/W Descongelação água Water defrost
		EUR	EUR			
DXI	DXI 12J4/43	•	•	•	•	SP
	DXI 12P4/44	•	•	•	•	SP
	DXI 12J5/44	•	•	•	•	SP
	DXI 12L4/48	•	•	•	•	SP
	DXI 12R2/46	•	•	•	•	SP
	DXI 12R3/49	•	•	•	•	SP
	DXI 12T2/55	•	•	•	•	SP
	DXI 12J5/55	•	•	•	•	SP
	DXI 12L4/60	•	•	•	•	SP
	DXI 12P4/62	•	•	•	•	SP
	DXI 12R3/68	•	•	•	•	SP
	DXI 12T2/76	•	•	•	•	SP
BSUT	DXI 12P4/78	•	•	•	•	SP
	DXI 12T3/82	•	•	•	•	SP
	DXI 12R3/86	•	•	•	•	SP
	DXI 12T3/113	•	•	•	•	SP
	DXI 12T3/138	•	•	•	•	SP

Ø350 / 400 / 450 / 500 / 560 / 630 mm



Ø800 mm



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain								
	kW	A	V / F / Hz	mm			mm					kg	m³	
	30.00	2x21,65	400/3/50	26.9	42.4	1 1/4 BSP	830	3750	3200	881	825	380	5.18	DXI 12J4/43
	34.20	3x16,45	400/3/50	26.9	42.4	2 BSP	1080	5000	4450	750	670	397	7.62	DXI 12P4/44
	33.60	2x24,25	400/3/50	26.9	42.4	2 BSP	830	4600	4050	881	825	406	6.32	DXI 12J5/44
	45.60	4x16,46	400/3/50	26.9	42.4	2 BSP	830	5000	4450	933	850	416	7.14	DXI 12L4/48
	30.00	2x21,65	400/3/50	26.9	42.4	2 BSP	1365	3170	2570	1022	940	416	7.37	DXI 12R2/46
	34.80	2x25,11	400/3/50	26.9	42.4	2 BSP	1365	4430	3830	815	735	466	8.72	DXI 12R3/49
	37.95	2x21,91+1x10,96	400/3/50	26.9	42.4	2 BSP	1830	4110	3410	1040	890	707	12.43	DXI 12T2/55
	33.60	2x24,25	400/3/50	26.9	42.4	2 BSP	830	4600	4050	881	825	462	6.32	DXI 12J5/55
	45.60	4x16,46	400/3/50	26.9	42.4	2 BSP	830	5000	4450	933	850	478	7.14	DXI 12L4/60
	45.60	4x16,45	400/3/50	26.9	42.4	2 BSP	1080	5000	4450	958	875	516	9.00	DXI 12P4/62
	43.50	2x25,11+12,56	400/3/50	26.9	42.4	2 BSP	1365	4430	3830	1022	940	594	10.21	DXI 12R3/68
	53.13	3x21,91+1x7,59	400/3/50	26.9	42.4	2 BSP	1830	4110	3410	1240	1090	941	14.15	DXI 12T2/76
	57.00	5x16,45	400/3/50	26.9	42.4	2 BSP	1080	5000	4450	958	875	596	9.00	DXI 12P4/78
	58.50	5x16,89	400/3/50	33.7	48.3	2 1/2 BSP	1830	5790	5090	1040	890	964	17.39	DXI 12T3/82
	52.20	3x25,11	400/3/50	2x26,9	2x42,4	2 BSP	1365	4430	3830	1022	940	697	10.21	DXI 12R3/86
	81.90	7x16,89	400/3/50	2x26,9	2x42,4	2 1/2 BSP	1830	5790	5090	1240	1090	1294	19.80	DXI 12T3/113
	105.30	9x16,89	400/3/50	2x33,7	2x48,3	2 1/2 BSP	1830	5790	5090	1240	1090	1527	19.80	DXI 12T3/138

Seleção e Factores Selection and Factors

RC1		DT1 [K]						
Tse [°C]		10	9	8	7	6	5	4
	4	1.000	0.936	0.832	0.728	0.624	0.520	0.416
	2	0.970	0.886	0.788	0.690	0.591	0.493	0.394
	0	0.906	0.815	0.725	0.634	0.544	0.453	0.362
	-2	0.890	0.801	0.712	0.623	0.534	0.445	0.356
	-10	0.859	0.773	0.687	0.601	0.515	0.429	0.344
	-12	0.851	0.765	0.680	0.596	0.511	0.426	0.340
	-14	0.843	0.759	0.675	0.591	0.506	0.422	0.337
	-18	0.827	0.745	0.661	0.579	0.496	0.414	0.331
	-20	0.820	0.737	0.655	0.574	0.492	0.410	0.328
	-25	0.788	0.709	0.630	0.552	0.473	0.394	0.315
	-34	0.734	0.658	0.587	0.546	0.468	0.390	0.312

Capacidade corrigida Corrected capacity	
DXI 12T3/113 Tse=0°C DT1=8K R717	$Q_{01} = Q_{S1} \times RC1$ [kW] $Q_{01} = 113,36 \text{ kW} \times 0,697 = 79,01 \text{ kW}$

Nomenclatura Nomenclature	
Tse	Temperatura seca de entrada de ar BS Air on DB
Q _{S1}	Capacidade para seleção em DT1 Selection capacity in TD1
Q ₀₁	Capacidade corrigida em DT1 Corrected capacity in TD1
RC1	Factor de correcção de dados em DT1 Correction factor for data in DT1

BSUIT



Evaporadores de Túnel Blast Freezers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

12,0 mm
600 - 700 - 800 mm

CBIB

CBIC

CBIL

MTI

DDI

DLI

DXI

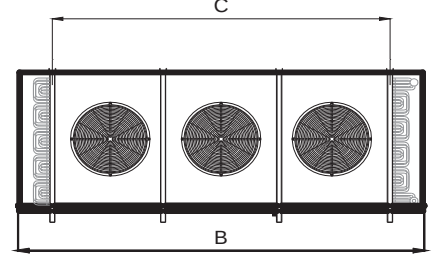
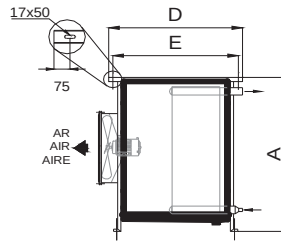
BSUIT

BSUIS

Modelo Type	Capacidade Q _{S1} Capacity Q _{S1} (T _{se} =+4°C / DT ₁ =10K)	Capacidade Capacity (T _{se} =-18°C / DT ₁ =7K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans								
	kW		m ²	dm ³	Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Pressão estática Static pressure	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	
						mm	m ³ /h	m	rpm	W	A	V / F / Hz	
BSUIT 12.125 M	38.27	23.18	125.20	71.50	2	600	23000	33	1300	4000	7.10	400/3/50	
BSUIT 12.125 L	38.27	23.18	125.20	71.50	2	700	23000	128	1300	5600	9.92	400/3/50	
BSUIT 12.125 XL	38.27	23.18	125.20	71.50	1	800	23000	233	1300	6300	11.50	400/3/50	
BSUIT 12.167 M	47.26	28.63	167.00	95.30	2	600	23000	33	1300	4000	7.10	400/3/50	
BSUIT 12.167 L	47.26	28.63	167.00	95.30	2	700	23000	128	1300	5600	9.92	400/3/50	
BSUIT 12.167 XL	47.26	28.63	167.00	95.30	1	800	23000	233	1300	6300	11.50	400/3/50	
BSUIT 12.187 M	54.83	33.22	187.80	107.20	3	600	34500	20	1300	6000	10.65	400/3/50	
BSUIT 12.187 L	54.83	33.22	187.80	107.20	3	700	34500	95	1300	8400	14.88	400/3/50	
BSUIT 12.187 XL	54.83	33.22	187.80	107.20	2	800	34500	155	1300	9600	19.44	400/3/50	
BSUIT 12.250 M	67.75	41.04	250.50	143.00	3	600	34500	20	1300	6000	10.65	400/3/50	
BSUIT 12.250 L	67.75	41.04	250.50	143.00	3	700	34500	95	1300	8400	14.88	400/3/50	
BSUIT 12.250 XL	67.75	41.04	250.50	143.00	2	800	34500	155	1300	9600	19.44	400/3/50	
BSUIT 12.281 M	94.46	57.22	281.80	160.90	3	700	51000	50	1300	11100	20.19	400/3/50	
BSUIT 12.281 L	94.46	57.22	281.80	160.90	2	800	51000	130	1300	12600	23.00	400/3/50	
BSUIT 12.281 XL	94.46	57.22	281.80	160.90	3	800	51000	140	1300	14400	29.16	400/3/50	

Modelo Type	Preço sem resistências Price without heaters	Opções Options			
		BL Lacado branco White painted	/E Descongelação elétrica Electrical defrost	/GTB Descongelação gás quente Hot gas defrost	/W Descongelação água Water defrost
	EUR	EUR			
BSUIT 12.125 M	•	•	•	•	•
BSUIT 12.125 L	•	•	•	•	•
BSUIT 12.125 XL	•	•	•	•	•
BSUIT 12.167 M	•	•	•	•	•
BSUIT 12.167 L	•	•	•	•	•
BSUIT 12.167 XL	•	•	•	•	•
BSUIT 12.187 M	•	•	•	•	•
BSUIT 12.187 L	•	•	•	•	•
BSUIT 12.187 XL	•	•	•	•	•
BSUIT 12.250 M	•	•	•	•	•
BSUIT 12.250 L	•	•	•	•	•
BSUIT 12.250 XL	•	•	•	•	•
BSUIT 12.281 M	•	•	•	•	•
BSUIT 12.281 L	•	•	•	•	•
BSUIT 12.281 XL	•	•	•	•	•

S Standard SP Sob pedido
S Standard SP Under request



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain								
	kW	A	V / F / Hz	mm			A	B	C	D	E	kg	m³	
	16.80	1x24,2	400/3/50	22.0	48.3	2	1280	2850	2150	1340	1190	624	7.45	BSUIT 12.125 M
	16.80	1x24,2	400/3/50	22.0	48.3	2	1280	2850	2150	1340	1190	638	7.45	BSUIT 12.125 L
	16.80	1x24,2	400/3/50	22.0	48.3	2	1280	2850	2150	1340	1190	628	7.45	BSUIT 12.125 XL
	21.00	1x18,18+1x12,12	400/3/50	26.9	48.3	2	1280	2850	2150	1340	1190	682	7.45	BSUIT 12.167 M
	21.00	1x18,18+1x12,12	400/3/50	26.9	48.3	2	1280	2850	2150	1340	1190	696	7.45	BSUIT 12.167 L
	21.00	1x18,18+1x12,12	400/3/50	26.9	48.3	2	1280	2850	2150	1340	1190	686	7.45	BSUIT 12.167 XL
	25.90	2x18,71	400/3/50	26.9	60.3	2½	1280	3900	3200	1340	1190	908	10.24	BSUIT 12.187 M
	25.90	2x18,71	400/3/50	26.9	60.3	2½	1280	3900	3200	1340	1190	929	10.24	BSUIT 12.187 L
	25.90	2x18,71	400/3/50	26.9	60.3	2½	1280	3900	3200	1340	1190	918	10.24	BSUIT 12.187 XL
	32.40	1x28,06+1x18,71	400/3/50	26.9	60.3	2½	1280	3900	3200	1340	1190	992	10.24	BSUIT 12.250 M
	32.40	1x28,06+1x18,71	400/3/50	26.9	60.3	2½	1280	3900	3200	1340	1190	1013	10.24	BSUIT 12.250 L
	32.40	1x28,06+1x18,71	400/3/50	26.9	60.3	2½	1280	3900	3200	1340	1190	1002	10.24	BSUIT 12.250 XL
	32.40	1x28,06+1x18,71	400/3/50	33.7	76.1	2½	1280	3900	3200	1430	1280	1065	10.24	BSUIT 12.281 M
	32.40	1x28,06+1x18,71	400/3/50	33.7	76.1	2½	1280	3900	3200	1430	1280	1071	10.24	BSUIT 12.281 L
	32.40	1x28,06+1x18,71	400/3/50	33.7	76.1	2½	1280	3900	3200	1430	1280	1092	10.24	BSUIT 12.281 XL

Seleção e Factores Selection and Factors

RC1		DT1 [K]						
		10	9	8	7	6	5	4
Tse [°C]	10	1.023	0.921	0.818	0.716	0.614	0.512	0.410
	6	1.008	0.907	0.806	0.705	0.604	0.503	0.402
	4	1.000	0.900	0.800	0.700	0.600	0.500	0.400
	2	0.947	0.852	0.758	0.663	0.568	0.474	0.379
	0	0.871	0.784	0.697	0.610	0.523	0.436	0.348
	-2	0.856	0.770	0.685	0.599	0.514	0.428	0.342
	-10	0.826	0.743	0.661	0.578	0.496	0.413	0.330
	-12	0.818	0.736	0.654	0.573	0.491	0.409	0.327
	-14	0.811	0.730	0.649	0.568	0.487	0.406	0.324
	-18	0.795	0.716	0.636	0.557	0.477	0.398	0.318
	-20	0.788	0.709	0.630	0.552	0.473	0.394	0.315
	-25	0.758	0.682	0.606	0.531	0.455	0.379	0.303
	-34	0.751	0.677	0.599	0.525	0.445	0.370	0.295

Capacidade corrigida Corrected capacity

BSUIT 12.125 M Tse=0°C DT1=8K R717	$Q_{01} = Q_{S1} \times RC1$ [kW]
	$Q_{01} = 38,27 \text{ kW} \times 0,697 = 26,67 \text{ kW}$

Nomenclatura	Nomenclature
Tse	Temperatura seca de entrada de ar BS Air on DB
Q _{S1}	Capacidade para seleção em DT1 Selection capacity in TD1
Q ₀₁	Capacidade corrigida em DT1 Corrected capacity in TD1
RC1	Factor de correcção de dados em DT1 Correction factor for data in DT1

BSUIT



Evaporadores de Túnel Blast Freezers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

12,0 mm
600 - 700 - 800 mm

CBIB

CBIC

CBIL

MTI

DDI

DLI

DXI

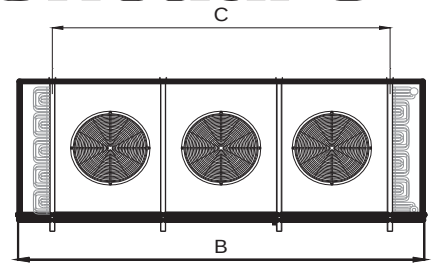
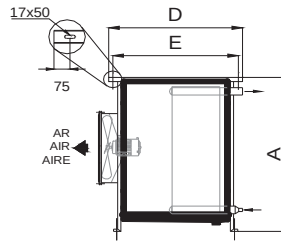
BSUIT

BSUIS

Modelo Type	Capacidade Q _{S1} Capacity Q _{S1} (T _{se} =+4°C / DT ₁ =10K)	Capacidade Capacity (T _{se} =-18°C / DT ₁ =7K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans								
	kW		m ²	dm ³	Nº.	Diâmetro Diameter	Caudal de ar Air flow	Pressão estática Static pressure	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	
						mm	m ³ /h	m	rpm	W	A	V / F / Hz	
BSUIT 12.313 M	104.29	63.18	313.10	178.70	3	800	64000	42	1300	14400	29.16	400/3/50	
BSUIT 12.313 L	104.29	63.18	313.10	178.70	4	700	64000	107	1300	14800	26.92	400/3/50	
BSUIT 12.313 XL	104.29	63.18	313.10	178.70	3	800	64000	237	1300	18900	34.50	400/3/50	
BSUIT 12.417 M	129.31	78.34	417.50	238.30	3	800	64000	42	1300	14400	29.16	400/3/50	
BSUIT 12.417 L	129.31	78.34	417.50	238.30	4	700	64000	107	1300	14800	26.92	400/3/50	
BSUIT 12.417 XL	129.31	78.34	417.50	238.30	3	800	64000	237	1300	18900	34.50	400/3/50	
BSUIT 12.469 M	137.12	83.07	469.50	268.10	4	700	81000	20	1300	11100	20.19	400/3/50	
BSUIT 12.469 L	137.12	83.07	469.50	268.10	4	800	81000	90	1300	19200	38.88	400/3/50	
BSUIT 12.469 XL	137.12	83.07	469.50	268.10	3	800	81000	130	1300	18900	34.50	400/3/50	
BSUIT 12.625 M	168.94	102.34	625.90	357.50	4	700	81000	20	1300	14800	26.92	400/3/50	
BSUIT 12.625 L	168.94	102.34	625.90	357.50	4	800	81000	90	1300	19200	38.88	400/3/50	
BSUIT 12.625 XL	168.94	102.34	625.90	357.50	3	800	81000	130	1300	18900	34.50	400/3/50	
BSUIT 12.704 M	220.60	133.64	704.20	402.20	5	800	108000	56	1300	24000	48.60	400/3/50	
BSUIT 12.704 L	220.60	133.64	704.20	402.20	4	800	108000	126	1300	25200	46.00	400/3/50	
BSUIT 12.704 XL	220.60	133.64	704.20	402.20	5	800	108000	256	1300	31500	57.50	400/3/50	

Modelo Type	Preço sem resistências Price without heaters	Opções Options			
		BL Lacado branco White painted	/E Descongelação elétrica Electrical defrost	/GTB Descongelação gás quente Hot gas defrost	/W Descongelação água Water defrost
	EUR	EUR			
BSUIT 12.313 M	•	•	•	•	•
BSUIT 12.313 L	•	•	•	•	•
BSUIT 12.313 XL	•	•	•	•	•
BSUIT 12.417 M	•	•	•	•	•
BSUIT 12.417 L	•	•	•	•	•
BSUIT 12.417 XL	•	•	•	•	•
BSUIT 12.469 M	•	•	•	•	•
BSUIT 12.469 L	•	•	•	•	•
BSUIT 12.469 XL	•	•	•	•	•
BSUIT 12.625 M	•	•	•	•	•
BSUIT 12.625 L	•	•	•	•	•
BSUIT 12.625 XL	•	•	•	•	•
BSUIT 12.704 M	•	•	•	•	•
BSUIT 12.704 L	•	•	•	•	•
BSUIT 12.704 XL	•	•	•	•	•

S Standard SP Sob pedido
S Standard SP Under request



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain								
	kW	A	V / F / Hz	mm			A	B	C	D	E	kg	m³	
	45.00	2x25,98+1x12,99	400/3/50	33.7	76.1	3	1542	5000	4250	1340	1190	1321	15.55	BSUIT 12.313 M
	45.00	2x25,98+1x12,99	400/3/50	33.7	76.1	3	1542	5000	4250	1340	1190	1332	15.55	BSUIT 12.313 L
	45.00	2x25,98+1x12,99	400/3/50	33.7	76.1	3	1542	5000	4250	1340	1190	1360	15.55	BSUIT 12.313 XL
	54.00	3x25,98	400/3/50	33.7	76.1	3	1542	5000	4250	1340	1190	1458	15.55	BSUIT 12.417 M
	54.00	3x25,98	400/3/50	33.7	76.1	3	1542	5000	4250	1340	1190	1469	15.55	BSUIT 12.417 L
	54.00	3x25,98	400/3/50	33.7	76.1	3	1542	5000	4250	1340	1190	1497	15.55	BSUIT 12.417 XL
	54.00	3x25,98	400/3/50	33.7	2 x 60,3	2x2½	1804	6050	5300	1340	1190	1820	21.93	BSUIT 12.469 M
	54.00	3x25,98	400/3/50	33.7	2 x 60,3	2x2½	1804	6050	5300	1340	1190	1856	21.93	BSUIT 12.469 L
	54.00	3x25,98	400/3/50	33.7	2 x 60,3	2x2½	1804	6050	5300	1340	1190	1848	21.93	BSUIT 12.469 XL
	63.00	3x25,98+1x12,99	400/3/50	33.7	2 x 76,1	2x2½	1804	6050	5300	1340	1190	2024	21.93	BSUIT 12.625 M
	63.00	3x25,98+1x12,99	400/3/50	33.7	2 x 76,1	2x2½	1804	6050	5300	1340	1190	2060	21.93	BSUIT 12.625 L
	63.00	3x25,98+1x12,99	400/3/50	33.7	2 x 76,1	2x2½	1804	6050	5300	1340	1190	2052	21.93	BSUIT 12.625 XL
	63.00	3x25,98+1x12,99	400/3/50	42.6	2 x 76,1	2x2½	1804	6050	5300	1430	1280	2229	21.93	BSUIT 12.704 M
	63.00	3x25,98+1x12,99	400/3/50	42.6	2 x 76,1	2x2½	1804	6050	5300	1430	1280	2234	21.93	BSUIT 12.704 L
	63.00	3x25,98+1x12,99	400/3/50	42.6	2 x 76,1	2x2½	1804	6050	5300	1430	1280	2294	21.93	BSUIT 12.704 XL

Seleção e Factores Selection and Factors

RC1		DT1 [K]						
		10	9	8	7	6	5	4
Tse [°C]	10	1.023	0.921	0.818	0.716	0.614	0.512	0.410
	6	1.008	0.907	0.806	0.705	0.604	0.503	0.402
	4	1.000	0.900	0.800	0.700	0.600	0.500	0.400
	2	0.947	0.852	0.758	0.663	0.568	0.474	0.379
	0	0.871	0.784	0.697	0.610	0.523	0.436	0.348
	-2	0.856	0.770	0.685	0.599	0.514	0.428	0.342
	-10	0.826	0.743	0.661	0.578	0.496	0.413	0.330
	-12	0.818	0.736	0.654	0.573	0.491	0.409	0.327
	-14	0.811	0.730	0.649	0.568	0.487	0.406	0.324
	-18	0.795	0.716	0.636	0.557	0.477	0.398	0.318
	-20	0.788	0.709	0.630	0.552	0.473	0.394	0.315
	-25	0.758	0.682	0.606	0.531	0.455	0.379	0.303
	-34	0.751	0.677	0.599	0.525	0.445	0.370	0.295

Capacidade corrigida Corrected capacity

BSUIT 12.704 XL
Tse=0°C
DT1=8K
R717

$$Q_{01} = Q_{S1} \times RC1 \quad [kW]$$

$$Q_{01} = 220,60 \text{ kW} \times 0,697 = 153,76 \text{ kW}$$

Nomenclatura	Nomenclature
Tse	Temperatura seca de entrada de ar BS Air on DB
Q _{S1}	Capacidade para seleção em DT1 Selection capacity in TD1
Q ₀₁	Capacidade corrigida em DT1 Corrected capacity in TD1
RC1	Factor de correcção de dados em DT1 Correction factor for data in DT1

BSUIT



Evaporadores de Túnel Blast Freezers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

16,0 mm
600 - 700 - 800 mm

CBB

CBC

CBL

MTI

DDI

DLI

DXI

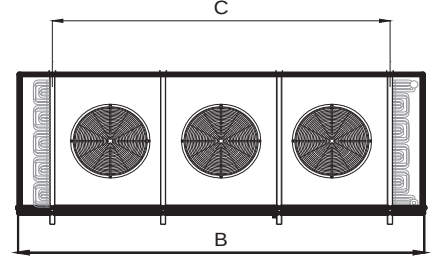
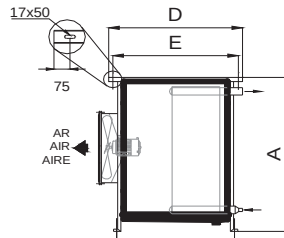
BSUIT

BSUIS

Modelo Type	Capacidade Q _{S1} Capacity Q _{S1} (T _{se} =+4°C / DT ₁ =10K)	Capacidade Capacity (T _{se} =+18°C / DT ₁ =7K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans								
	kW		m ²	dm ³	Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Pressão estática Static pressure	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	
						mm	m ³ /h	m	rpm	W	A	V / F / Hz	
BSUIT 16.81 M	26.20	15.87	81.28	59.60	2	600	23000	33	1300	4000	7.10	400/3/50	
BSUIT 16.81 L	26.20	15.87	81.28	59.60	1	700	23000	128	1300	2800	4.96	400/3/50	
BSUIT 16.81 XL	26.20	15.87	81.28	59.60	1	800	23000	233	1300	6300	11.50	400/3/50	
BSUIT 16.162 M	44.89	27.19	162.60	119.20	2	600	23000	33	1300	4000	7.10	400/3/50	
BSUIT 16.162 L	44.89	27.19	162.60	119.20	2	700	23000	128	1300	5600	9.92	400/3/50	
BSUIT 16.162 XL	44.89	27.19	162.60	119.20	1	800	23000	233	1300	6300	11.50	400/3/50	
BSUIT 16.203 M	63.96	38.75	203.20	149.00	1	800	34000	20	1300	6300	11.50	400/3/50	
BSUIT 16.203 L	63.96	38.75	203.20	149.00	2	700	34000	88	1300	7400	13.46	400/3/50	
BSUIT 16.203 XL	63.96	38.75	203.20	149.00	2	800	34000	178	1300	9600	19.44	400/3/50	
BSUIT 16.243 M	64.16	38.87	243.80	178.70	3	600	34500	20	1300	6000	10.65	400/3/50	
BSUIT 16.243 L	64.16	38.87	243.80	178.70	3	700	34500	95	1300	8400	14.88	400/3/50	
BSUIT 16.243 XL	64.16	38.87	243.80	178.70	2	800	34500	155	1300	9600	19.44	400/3/50	
BSUIT 16.304 M	92.93	56.30	304.90	223.40	3	700	51000	50	1300	11100	20.19	400/3/50	
BSUIT 16.304 L	92.93	56.30	304.90	223.40	2	800	51000	130	1300	12600	23.00	400/3/50	
BSUIT 16.304 XL	92.93	56.30	304.90	223.40	3	800	51000	140	1300	14400	29.16	400/3/50	

Modelo Type	Preço sem resistências Price without heaters	Opções Options			
		BL Lacado branco White painted	/E Descongelação elétrica Electrical defrost	/GTB Descongelação gás quente Hot gas defrost	/W Descongelação água Water defrost
	EUR	EUR			
BSUIT 16.81 M	•	•	•	•	•
BSUIT 16.81 L	•	•	•	•	•
BSUIT 16.81 XL	•	•	•	•	•
BSUIT 16.162 M	•	•	•	•	•
BSUIT 16.162 L	•	•	•	•	•
BSUIT 16.162 XL	•	•	•	•	•
BSUIT 16.203 M	•	•	•	•	•
BSUIT 16.203 L	•	•	•	•	•
BSUIT 16.203 XL	•	•	•	•	•
BSUIT 16.243 M	•	•	•	•	•
BSUIT 16.243 L	•	•	•	•	•
BSUIT 16.243 XL	•	•	•	•	•
BSUIT 16.304 M	•	•	•	•	•
BSUIT 16.304 L	•	•	•	•	•
BSUIT 16.304 XL	•	•	•	•	•

S Standard SP Sob pedido
S Standard SP Under request



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain								
	kW	A	V / F / Hz	mm			A	B	C	D	E	kg	m ³	
	16.80	1x24,2	400/3/50	22.0	48.3	2	1280	2850	2150	1340	1190	575	7.45	BSUIT 16.81 M
	16.80	1x24,2	400/3/50	22.0	48.3	2	1280	2850	2150	1340	1190	589	7.45	BSUIT 16.81 L
	16.80	1x24,2	400/3/50	22.0	48.3	2	1280	2850	2150	1340	1190	579	7.45	BSUIT 16.81 XL
	25.20	2x18,18	400/3/50	26.9	48.3	2	1280	2850	2150	1430	1280	708	7.45	BSUIT 16.162 M
	25.20	2x18,18	400/3/50	26.9	48.3	2	1280	2850	2150	1430	1280	722	7.45	BSUIT 16.162 L
	25.20	2x18,18	400/3/50	26.9	48.3	2	1280	2850	2150	1430	1280	712	7.45	BSUIT 16.162 XL
	29.40	1x24,24+18,18	400/3/50	26.9	60.3	2	1542	2900	2150	1430	1280	805	8.88	BSUIT 16.203 M
	29.40	1x24,24+18,18	400/3/50	26.9	60.3	2	1542	2900	2150	1430	1280	821	8.88	BSUIT 16.203 L
	29.40	1x24,24+18,18	400/3/50	26.9	60.3	2	1542	2900	2150	1430	1280	839	8.88	BSUIT 16.203 XL
	38.90	3x18,71	400/3/50	26.9	60.3	2½	1280	3900	3200	1430	1280	1040	10.24	BSUIT 16.243 M
	38.90	3x18,71	400/3/50	26.9	60.3	2½	1280	3900	3200	1430	1280	1061	10.24	BSUIT 16.243 L
	38.90	3x18,71	400/3/50	26.9	60.3	2½	1280	3900	3200	1430	1280	1050	10.24	BSUIT 16.243 XL
	45.40	2x18,71+1x28,06	400/3/50	33.7	76.1	2½	1542	3950	3200	1430	1280	1193	12.22	BSUIT 16.304 M
	45.40	2x18,71+1x28,06	400/3/50	33.7	76.1	2½	1542	3950	3200	1430	1280	1199	12.22	BSUIT 16.304 L
	45.40	2x18,71+1x28,06	400/3/50	33.7	76.1	2½	1542	3950	3200	1430	1280	1220	12.22	BSUIT 16.304 XL

Seleção e Factores Selection and Factors

RC1		DT1 [K]						
Tse [°C]		10	9	8	7	6	5	4
	4	1.000	0.900	0.800	0.700	0.600	0.500	0.400
	2	0.947	0.852	0.758	0.663	0.568	0.474	0.379
	0	0.871	0.784	0.697	0.610	0.523	0.436	0.348
	-2	0.856	0.77	0.685	0.599	0.514	0.428	0.342
	-10	0.826	0.743	0.661	0.578	0.496	0.413	0.330
	-12	0.818	0.736	0.654	0.573	0.491	0.409	0.327
	-14	0.811	0.730	0.649	0.568	0.487	0.406	0.324
	-18	0.795	0.716	0.636	0.557	0.477	0.398	0.318
	-20	0.788	0.709	0.630	0.552	0.473	0.394	0.315
	-25	0.758	0.682	0.606	0.531	0.455	0.379	0.303
	-34	0.751	0.677	0.599	0.525	0.445	0.370	0.295
	-40	0.743	0.671	0.592	0.521	0.445	0.371	0.296

Nomenclatura	Nomenclature
Tse	Temperatura seca de entrada de ar BS Air on DB
Q _{S1}	Capacidade para seleção em DT1 Selection capacity in TD1
Q ₀₁	Capacidade corrigida em DT1 Corrected capacity in TD1
RC1	Factor de correcção de dados em DT1 Correction factor for data in DT1

Capacidade corrigida	Corrected capacity
BSUIT 16.243 M Tse=0°C DT1=8K R717	Q ₀₁ = Q _{S1} x RC1 [kW] Q ₀₁ = 64,16 kW x 0,697 = 44,72 kW

BSUIT



Evaporadores de Túnel Blast Freezers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

16,0 mm
600 - 700 - 800 mm

CBB

CBIC

CBIL

MTI

DDI

DLI

DXI

BSUIT

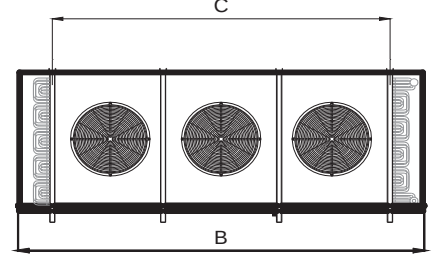
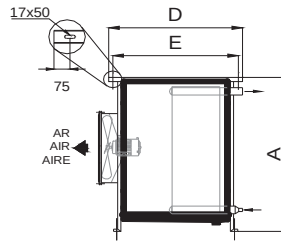
BSUIS

Modelo Type	Capacidade QS1 Capacity QS1 (T _{se} =+4°C / DT ₁ =10K)	Capacidade Capacity (T _{se} =-18°C / DT ₁ =7K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans								
					Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Pressão estática Static pressure	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	
	kW		m²	dm³		mm	m³/h	m	rpm	W	A	V / F / Hz	
BSUIT 16.406 M	123.23	74.65	406.50	297.90	3	800	64000	42	1300	14400	29.16	400/3/50	
BSUIT 16.406 L	123.23	74.65	406.50	297.90	4	700	64000	107	1300	14800	26.92	400/3/50	
BSUIT 16.406 XL	123.23	74.65	406.50	297.90	3	800	64000	237	1300	18900	34.50	400/3/50	
BSUIT 16.487 M	128.22	77.68	487.50	357.50	3	800	64000	42	1300	14400	29.16	400/3/50	
BSUIT 16.487 L	128.22	77.68	487.50	357.50	4	700	64000	107	1300	14800	26.92	400/3/50	
BSUIT 16.487 XL	128.22	77.68	487.50	357.50	3	800	64000	237	1300	18900	34.50	400/3/50	
BSUIT 16.650 M	165.20	100.08	650.00	476.70	4	700	81000	20	1300	14800	26.92	400/3/50	
BSUIT 16.650 L	165.20	100.08	650.00	476.70	4	800	81000	90	1300	19200	38.88	400/3/50	
BSUIT 16.650 XL	165.20	100.08	650.00	476.70	3	800	81000	130	1300	18900	34.50	400/3/50	
BSUIT 16.609 M	165.95	100.53	609.40	446.90	4	700	81000	20	1300	14800	26.92	400/3/50	
BSUIT 16.609 L	165.95	100.53	609.40	446.90	4	800	81000	90	1300	19200	38.88	400/3/50	
BSUIT 16.609 XL	165.95	100.53	609.40	446.90	3	800	81000	130	1300	18900	34.50	400/3/50	
BSUIT 16.812 M	221.30	134.06	812.80	595.80	5	800	108000	56	1300	24000	48.60	400/3/50	
BSUIT 16.812 L	221.30	134.06	812.80	595.80	4	800	108000	126	1300	25200	46.00	400/3/50	
BSUIT 16.812 XL	221.30	134.06	812.80	595.80	5	800	108000	256	1300	31500	57.50	400/3/50	

Modelo Type	Preço sem resistências Price without heaters	Opções Options			
		BL Lacado branco White painted	/E Descongelação elétrica Electrical defrost	/GTB Descongelação gás quente Hot gas defrost	/W Descongelação água Water defrost
	EUR	EUR			
BSUIT 16.406 M	•	•	•	•	•
BSUIT 16.406 L	•	•	•	•	•
BSUIT 16.406 XL	•	•	•	•	•
BSUIT 16.487 M	•	•	•	•	•
BSUIT 16.487 L	•	•	•	•	•
BSUIT 16.487 XL	•	•	•	•	•
BSUIT 16.650 M	•	•	•	•	•
BSUIT 16.650 L	•	•	•	•	•
BSUIT 16.650 XL	•	•	•	•	•
BSUIT 16.609 M	•	•	•	•	•
BSUIT 16.609 L	•	•	•	•	•
BSUIT 16.609 XL	•	•	•	•	•
BSUIT 16.812 M	•	•	•	•	•
BSUIT 16.812 L	•	•	•	•	•
BSUIT 16.812 XL	•	•	•	•	•

S Standard SP Sob pedido
S Standard SP Under request

gentaro



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain								
	kW	A	V / F / Hz	mm			A	B	C	D	E	kg	m³	
	63.00	3x25,98+1x12,99	400/3/50	33.7	76.1	2x2½	1542	5000	4250	1430	1280	1474	15.55	BSUIT 16.406 M
	63.00	3x25,98+1x12,99	400/3/50	33.7	76.1	2x2½	1542	5000	4250	1430	1280	1532	15.55	BSUIT 16.406 L
	63.00	3x25,98+1x12,99	400/3/50	33.7	76.1	2x2½	1542	5000	4250	1430	1280	1560	15.55	BSUIT 16.406 XL
	72.00	4x25,98	400/3/50	33.7	2 x 60,3	2x2½	1804	5000	4250	1430	1280	1757	18.06	BSUIT 16.487 M
	72.00	4x25,98	400/3/50	33.7	2 x 60,3	2x2½	1804	5000	4250	1430	1280	1768	18.06	BSUIT 16.487 L
	72.00	4x25,98	400/3/50	33.7	2 x 60,3	2x2½	1804	5000	4250	1430	1280	1796	18.06	BSUIT 16.487 XL
	99.00	5x25,98+1x12,99	400/3/50	33.7	2 x 76,1	2x2½	2327	5000	4250	1430	1280	2133	23.00	BSUIT 16.650 M
	99.00	5x25,98+1x12,99	400/3/50	33.7	2 x 76,1	2x2½	2327	5000	4250	1430	1280	2169	23.00	BSUIT 16.650 L
	99.00	5x25,98+1x12,99	400/3/50	33.7	2 x 76,1	2x2½	2327	5000	4250	1430	1280	2161	23.00	BSUIT 16.650 XL
	72.00	4x25,98	400/3/50	33.7	2 x 76,1	2x3	1804	6050	5300	1430	1280	2067	21.93	BSUIT 16.609 M
	72.00	4x25,98	400/3/50	33.7	2 x 76,1	2x3	1804	6050	5300	1430	1280	2097	21.93	BSUIT 16.609 L
	72.00	4x25,98	400/3/50	33.7	2 x 76,1	2x3	1804	6050	5300	1430	1280	2095	21.93	BSUIT 16.609 XL
	99.00	5x25,98+1x12,99	400/3/50	42.6	2 x 76,1	2x3	2327	6050	5300	1430	1280	2678	27.92	BSUIT 16.812 M
	99.00	5x25,98+1x12,99	400/3/50	42.6	2 x 76,1	2x3	2327	6050	5300	1430	1280	2683	27.92	BSUIT 16.812 L
	99.00	5x25,98+1x12,99	400/3/50	42.6	2 x 76,1	2x3	2327	6050	5300	1430	1280	2743	27.92	BSUIT 16.812 XL

Seleção e Factores Selection and Factors

RC1		DT1 [K]						
		10	9	8	7	6	5	4
Tse [°C]	4	1.000	0.900	0.800	0.700	0.600	0.500	0.400
	2	0.947	0.852	0.758	0.663	0.568	0.474	0.379
	0	0.871	0.784	0.697	0.610	0.523	0.436	0.348
	-2	0.856	0.77	0.685	0.599	0.514	0.428	0.342
	-10	0.826	0.743	0.661	0.578	0.496	0.413	0.330
	-12	0.818	0.736	0.654	0.573	0.491	0.409	0.327
	-14	0.811	0.730	0.649	0.568	0.487	0.406	0.324
	-18	0.795	0.716	0.636	0.557	0.477	0.398	0.318
	-20	0.788	0.709	0.630	0.552	0.473	0.394	0.315
	-25	0.758	0.682	0.606	0.531	0.455	0.379	0.303
	-34	0.751	0.677	0.599	0.525	0.445	0.370	0.295
	-40	0.743	0.671	0.592	0.521	0.445	0.371	0.296

Capacidade corrigida Corrected capacity	
BSUIS 16.812 M Tse=0°C DT1=8K R717	$Q_{01} = Q_{S1} \times RC1$ [kW] $Q_{01} = 221,30 \text{ kW} \times 0,697 = 154,25 \text{ kW}$

Nomenclatura	Nomenclature
Tse	Temperatura seca de entrada de ar BS Air on DB
Q _{S1}	Capacidade para seleção em DT1 Selection capacity in TD1
Q ₀₁	Capacidade corrigida em DT1 Corrected capacity in TD1
RC1	Factor de correcção de dados em DT1 Correction factor for data in DT1

BSUIS



Evaporadores de Túnel Blast Freezers

Espaçamento Fin Spacing

Ø Ventiladores Fan Ø

12,0 mm

600 - 700 - 800 mm

CBIB

CBIC

CBL

MTI

DDI

DLI

DXI

BSUT

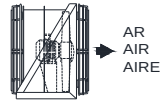
BSUIS

Modelo Type	Capacidade QS1 Capacity QS1 (Tse=+4°C / DT1=10K)	Capacidade Capacity (Tse=-18°C / DT1=7K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans								
	kW		m²	dm³	Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Pressão estática Static pressure	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	
BSUIS 12.125 M	38.27	23.18	125.20	71.50	2	600	23000	33	1300	4000	7.10	400/3/50	
BSUIS 12.125 L	38.27	23.18	125.20	71.50	2	700	23000	128	1300	5600	9.92	400/3/50	
BSUIS 12.125 XL	38.27	23.18	125.20	71.50	1	800	23000	233	1300	6300	11.50	400/3/50	
BSUIS 12.167 M	47.26	28.63	167.00	95.30	2	600	23000	33	1300	4000	7.10	400/3/50	
BSUIS 12.167 L	47.26	28.63	167.00	95.30	2	700	23000	128	1300	5600	9.92	400/3/50	
BSUIS 12.167 XL	47.26	28.63	167.00	95.30	1	800	23000	233	1300	6300	11.50	400/3/50	
BSUIS 12.187 M	54.83	33.22	187.80	107.20	3	600	34500	20	1300	6000	10.65	400/3/50	
BSUIS 12.187 L	54.83	33.22	187.80	107.20	3	700	34500	95	1300	8400	14.88	400/3/50	
BSUIS 12.187 XL	54.83	33.22	187.80	107.20	2	800	34500	155	1300	9600	19.44	400/3/50	
BSUIS 12.250 M	67.75	41.04	250.50	143.00	3	600	34500	20	1300	6000	10.65	400/3/50	
BSUIS 12.250 L	67.75	41.04	250.50	143.00	3	700	34500	95	1300	8400	14.88	400/3/50	
BSUIS 12.250 XL	67.75	41.04	250.50	143.00	2	800	34500	155	1300	9600	19.44	400/3/50	
BSUIS 12.281 M	94.46	57.22	281.80	160.90	3	700	51000	50	1300	11100	20.19	400/3/50	
BSUIS 12.281 L	94.46	57.22	281.80	160.90	2	800	51000	130	1300	12600	23.00	400/3/50	
BSUIS 12.281 XL	94.46	57.22	281.80	160.90	3	800	51000	140	1300	14400	29.16	400/3/50	

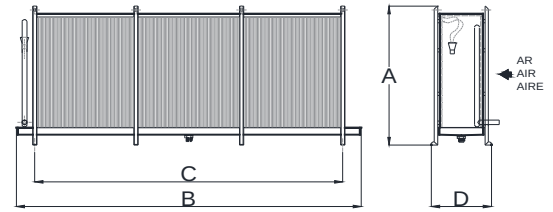
Modelo Type	Preço sem resistências Price without heaters	Opções Options			
		BL Lacado branco White painted	/E Descongelação eléctrica Electrical defrost	/GTB Descongelação gás quente Hot gas defrost	/W Descongelação água Water defrost
	EUR	EUR			
BSUIS 12.125 M	•	•	•	•	•
BSUIS 12.125 L	•	•	•	•	•
BSUIS 12.125 XL	•	•	•	•	•
BSUIS 12.167 M	•	•	•	•	•
BSUIS 12.167 L	•	•	•	•	•
BSUIS 12.167 XL	•	•	•	•	•
BSUIS 12.187 M	•	•	•	•	•
BSUIS 12.187 L	•	•	•	•	•
BSUIS 12.187 XL	•	•	•	•	•
BSUIS 12.250 M	•	•	•	•	•
BSUIS 12.250 L	•	•	•	•	•
BSUIS 12.250 XL	•	•	•	•	•
BSUIS 12.281 M	•	•	•	•	•
BSUIS 12.281 L	•	•	•	•	•
BSUIS 12.281 XL	•	•	•	•	•

S Standard
S StandardSP Sob pedido
SP Under request

Painel de Ventilação Fan panel



Bateria Coil



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain								
	kW	A	V / F / Hz	mm			A	B	C	D	H			
	16.80	1x24,2	400/3/50	22.0	48.3	2	1450	2700	2136	787	725	412	1.46	BSUIS 12.125 M
	16.80	1x24,2	400/3/50	22.0	48.3	2	1450	2700	2136	787	725	432	1.64	BSUIS 12.125 L
	16.80	1x24,2	400/3/50	22.0	48.3	2	1450	2700	2136	787	725	403	1.82	BSUIS 12.125 XL
	21.00	1x18,18+1x12,12	400/3/50	26.9	48.3	2	1450	2700	2136	787	725	470	1.46	BSUIS 12.167 M
	21.00	1x18,18+1x12,12	400/3/50	26.9	48.3	2	1450	2700	2136	787	725	490	1.64	BSUIS 12.167 L
	21.00	1x18,18+1x12,12	400/3/50	26.9	48.3	2	1450	2700	2136	787	725	461	1.82	BSUIS 12.167 XL
	25.90	2x18,71	400/3/50	26.9	60.3	2½	1450	3750	3186	787	725	620	2.14	BSUIS 12.187 M
	25.90	2x18,71	400/3/50	26.9	60.3	2½	1450	3750	3186	787	725	650	2.40	BSUIS 12.187 L
	25.90	2x18,71	400/3/50	26.9	60.3	2½	1450	3750	3186	787	725	623	2.66	BSUIS 12.187 XL
	32.40	1x28,06+1x18,71	400/3/50	26.9	60.3	2½	1450	3750	3186	787	725	704	2.14	BSUIS 12.250 M
	32.40	1x28,06+1x18,71	400/3/50	26.9	60.3	2½	1450	3750	3186	787	725	734	2.40	BSUIS 12.250 L
	32.40	1x28,06+1x18,71	400/3/50	26.9	60.3	2½	1450	3750	3186	787	725	707	2.66	BSUIS 12.250 XL
	32.40	1x28,06+1x18,71	400/3/50	33.7	76.1	2½	1450	3750	3186	787	725	786	2.40	BSUIS 12.281 M
	32.40	1x28,06+1x18,71	400/3/50	33.7	76.1	2½	1450	3750	3186	787	725	776	2.66	BSUIS 12.281 L
	32.40	1x28,06+1x18,71	400/3/50	33.7	76.1	2½	1450	3750	3186	787	725	822	2.66	BSUIS 12.281 XL

Seleção e Factores Selection and Factors

RC1		DT1 [K]						
		10	9	8	7	6	5	4
Tse [°C]	10	1.023	0.921	0.818	0.716	0.614	0.512	0.410
	6	1.008	0.907	0.806	0.705	0.604	0.503	0.402
	4	1.000	0.900	0.800	0.700	0.600	0.500	0.400
	2	0.947	0.852	0.758	0.663	0.568	0.474	0.379
	0	0.871	0.784	0.697	0.610	0.523	0.436	0.348
	-2	0.856	0.770	0.685	0.599	0.514	0.428	0.342
	-10	0.826	0.743	0.661	0.578	0.496	0.413	0.330
	-12	0.818	0.736	0.654	0.573	0.491	0.409	0.327
	-14	0.811	0.730	0.649	0.568	0.487	0.406	0.324
	-18	0.795	0.716	0.636	0.557	0.477	0.398	0.318
	-20	0.788	0.709	0.630	0.552	0.473	0.394	0.315
	-25	0.758	0.682	0.606	0.531	0.455	0.379	0.303
	-34	0.751	0.677	0.599	0.525	0.445	0.370	0.295

Capacidade corrigida Corrected capacity

BSUIS 12.167 M Tse=0°C DT1=8K R717	$Q_{01} = Q_{S1} \times RC1$ [kW]
	$Q_{01} = 47,26 \text{ kW} \times 0,697 = 32,94 \text{ kW}$

Nomenclatura	Nomenclature
Tse	Temperatura seca de entrada de ar BS Air on DB
Q _{S1}	Capacidade para seleção em DT1 Selection capacity in TD1
Q ₀₁	Capacidade corrigida em DT1 Corrected capacity in TD1
RC1	Factor de correcção de dados em DT1 Correction factor for data in DT1

BSUIS



Evaporadores de Túnel Blast Freezers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

12,0 mm
600 - 700 - 800 mm

CBIB

CBIC

CBIL

MTI

DDI

DLI

DXI

BSUT

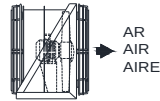
BSUIS

Modelo Type	Capacidade Q _{S1} Capacity Q _{S1} (T _{se} =+4°C / DT ₁ =10K)	Capacidade Capacity (T _{se} =-18°C / DT ₁ =7K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans								
	kW		m ²	dm ³	Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Pressão estática Static pressure	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	
BSUIS 12.313 M	104.29	63.18	313.10	178.70	3	800	64000	42	1300	14400	29.16	400/3/50	
BSUIS 12.313 L	104.29	63.18	313.10	178.70	4	700	64000	107	1300	14800	26.92	400/3/50	
BSUIS 12.313 XL	104.29	63.18	313.10	178.70	3	800	64000	237	1300	18900	34.50	400/3/50	
BSUIS 12.417 M	129.31	78.34	417.50	238.30	3	800	64000	42	1300	14400	29.16	400/3/50	
BSUIS 12.417 L	129.31	78.34	417.50	238.30	4	700	64000	107	1300	14800	26.92	400/3/50	
BSUIS 12.417 XL	129.31	78.34	417.50	238.30	3	800	64000	237	1300	18900	34.50	400/3/50	
BSUIS 12.469 M	137.12	83.07	469.50	268.10	4	700	81000	20	1300	11100	20.19	400/3/50	
BSUIS 12.469 L	137.12	83.07	469.50	268.10	4	800	81000	90	1300	19200	38.88	400/3/50	
BSUIS 12.469 XL	137.12	83.07	469.50	268.10	3	800	81000	130	1300	18900	34.50	400/3/50	
BSUIS 12.625 M	168.94	102.34	625.90	357.50	4	700	81000	20	1300	14800	26.92	400/3/50	
BSUIS 12.625 L	168.94	102.34	625.90	357.50	4	800	81000	90	1300	19200	38.88	400/3/50	
BSUIS 12.625 XL	168.94	102.34	625.90	357.50	3	800	81000	130	1300	18900	34.50	400/3/50	
BSUIS 12.704 M	220.60	133.64	704.20	402.20	5	800	108000	56	1300	24000	48.60	400/3/50	
BSUIS 12.704 L	220.60	133.64	704.20	402.20	4	800	108000	126	1300	25200	46.00	400/3/50	
BSUIS 12.704 XL	220.60	133.64	704.20	402.20	5	800	108000	256	1300	31500	57.50	400/3/50	

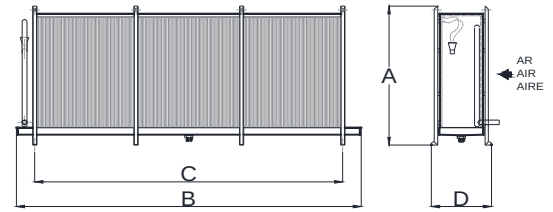
Modelo Type	Preço sem resistências Price without heaters	Opções Options			
		BL Lacado branco White painted	/E Descongelação elétrica Electrical defrost	/GTB Descongelação gás quente Hot gas defrost	/W Descongelação água Water defrost
	EUR	EUR			
BSUIS 12.313 M	•	•	•	•	•
BSUIS 12.313 L	•	•	•	•	•
BSUIS 12.313 XL	•	•	•	•	•
BSUIS 12.417 M	•	•	•	•	•
BSUIS 12.417 L	•	•	•	•	•
BSUIS 12.417 XL	•	•	•	•	•
BSUIS 12.469 M	•	•	•	•	•
BSUIS 12.469 L	•	•	•	•	•
BSUIS 12.469 XL	•	•	•	•	•
BSUIS 12.625 M	•	•	•	•	•
BSUIS 12.625 L	•	•	•	•	•
BSUIS 12.625 XL	•	•	•	•	•
BSUIS 12.704 M	•	•	•	•	•
BSUIS 12.704 L	•	•	•	•	•
BSUIS 12.704 XL	•	•	•	•	•

S Standard SP Sob pedido
S Standard SP Under request

Painel de Ventilação Fan panel



Bateria Coil



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain								
	kW	A	V / F / Hz	mm			A	B	C	D	H	kg	m³	
	45.00	2x25,98+1x12,99	400/3/50	33.7	76.1	3	1710	4800	4236	787	925	972	3.50	BSUIS 12.313 M
	45.00	2x25,98+1x12,99	400/3/50	33.7	76.1	3	1710	4800	4236	787	925	996	3.15	BSUIS 12.313 L
	45.00	2x25,98+1x12,99	400/3/50	33.7	76.1	3	1710	4800	4236	787	925	1011	3.50	BSUIS 12.313 XL
	54.00	3x25,98	400/3/50	33.7	76.1	3	1710	4800	4236	787	925	1109	3.50	BSUIS 12.417 M
	54.00	3x25,98	400/3/50	33.7	76.1	3	1710	4800	4236	787	925	1133	3.15	BSUIS 12.417 L
	54.00	3x25,98	400/3/50	33.7	76.1	3	1710	4800	4236	787	925	1148	3.50	BSUIS 12.417 XL
	54.00	3x25,98	400/3/50	33.7	2 x 60,3	2x2½	1970	5850	5286	787	825	1334	3.91	BSUIS 12.469 M
	54.00	3x25,98	400/3/50	33.7	2 x 60,3	2x2½	1970	5850	5286	787	825	1382	4.33	BSUIS 12.469 L
	54.00	3x25,98	400/3/50	33.7	2 x 60,3	2x2½	1970	5850	5286	787	825	1349	4.33	BSUIS 12.469 XL
	63.00	3x25,98+1x12,99	400/3/50	33.7	2 x 76,1	2x2½	1970	5850	5286	787	825	1538	3.91	BSUIS 12.625 M
	63.00	3x25,98+1x12,99	400/3/50	33.7	2 x 76,1	2x2½	1970	5850	5286	787	825	1586	4.33	BSUIS 12.625 L
	63.00	3x25,98+1x12,99	400/3/50	33.7	2 x 76,1	2x2½	1970	5850	5286	787	825	1553	4.33	BSUIS 12.625 XL
	63.00	3x25,98+1x12,99	400/3/50	42.6	2 x 76,1	2x2½	1970	5850	5286	787	925	1772	4.33	BSUIS 12.704 M
	63.00	3x25,98+1x12,99	400/3/50	42.6	2 x 76,1	2x2½	1970	5850	5286	787	925	1752	4.33	BSUIS 12.704 L
	63.00	3x25,98+1x12,99	400/3/50	42.6	2 x 76,1	2x2½	1970	5850	5286	787	925	1837	4.33	BSUIS 12.704 XL

Seleção e Factores Selection and Factors

RC1		DT1 [K]						
		10	9	8	7	6	5	4
Tse [°C]	10	1.023	0.921	0.818	0.716	0.614	0.512	0.410
	6	1.008	0.907	0.806	0.705	0.604	0.503	0.402
	4	1.000	0.900	0.800	0.700	0.600	0.500	0.400
	2	0.947	0.852	0.758	0.663	0.568	0.474	0.379
	0	0.871	0.784	0.697	0.610	0.523	0.436	0.348
	-2	0.856	0.770	0.685	0.599	0.514	0.428	0.342
	-10	0.826	0.743	0.661	0.578	0.496	0.413	0.330
	-12	0.818	0.736	0.654	0.573	0.491	0.409	0.327
	-14	0.811	0.730	0.649	0.568	0.487	0.406	0.324
	-18	0.795	0.716	0.636	0.557	0.477	0.398	0.318
	-20	0.788	0.709	0.630	0.552	0.473	0.394	0.315
	-25	0.758	0.682	0.606	0.531	0.455	0.379	0.303
	-34	0.751	0.677	0.599	0.525	0.445	0.370	0.295

Capacidade corrigida Corrected capacity

BSUIS 12.313 M Tse=0°C DT1=8K R717	$Q_{01} = Q_{S1} \times RC1$ [kW]
	$Q_{01} = 104,29 \text{ kW} \times 0,697 = 72,69 \text{ kW}$

Nomenclatura	Nomenclature
Tse	Temperatura seca de entrada de ar BS Air on DB
Q _{S1}	Capacidade para seleção em DT1 Selection capacity in TD1
Q ₀₁	Capacidade corrigida em DT1 Corrected capacity in TD1
RC1	Factor de correcção de dados em DT1 Correction factor for data in DT1

BSUIS



Evaporadores de Túnel Blast Freezers
 Espaçamento Fin Spacing
 Ø Ventiladores Fan Ø

16,0 mm
 600 - 700 - 800 mm

CBIB

CBIC

CBL

MTI

DDI

DLI

DXI

BSUT

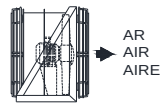
BSUIS

Modelo Type	Capacidade QS1 Capacity QS1 (T _{se} =+4°C / DT1=10K)	Capacidade Capacity (T _{se} =-18°C / DT1=7K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans								
	kW		m ²	dm ³	Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Pressão estática Static pressure	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	
BSUIS 16.81 M	26.20	15.87	81.28	59.60	2	600	23000	33	1300	4000	7.10	400/3/50	
BSUIS 16.81 L	26.20	15.87	81.28	59.60	1	700	23000	128	1300	2800	4.96	400/3/50	
BSUIS 16.81 XL	26.20	15.87	81.28	59.60	1	800	23000	233	1300	6300	11.50	400/3/50	
BSUIS 16.162 M	44.89	27.19	162.60	119.20	2	600	23000	33	1300	4000	7.10	400/3/50	
BSUIS 16.162 L	44.89	27.19	162.60	119.20	2	700	23000	128	1300	5600	9.92	400/3/50	
BSUIS 16.162 XL	44.89	27.19	162.60	119.20	1	800	23000	233	1300	6300	11.50	400/3/50	
BSUIS 16.203 M	63.96	38.75	203.20	149.00	1	800	34000	20	1300	6300	11.50	400/3/50	
BSUIS 16.203 L	63.96	38.75	203.20	149.00	2	700	34000	88	1300	7400	13.46	400/3/50	
BSUIS 16.203 XL	63.96	38.75	203.20	149.00	2	800	34000	178	1300	9600	19.44	400/3/50	
BSUIS 16.243 M	64.16	38.87	243.80	178.70	3	600	34500	20	1300	6000	10.65	400/3/50	
BSUIS 16.243 L	64.16	38.87	243.80	178.70	3	700	34500	95	1300	8400	14.88	400/3/50	
BSUIS 16.243 XL	64.16	38.87	243.80	178.70	2	800	34500	155	1300	9600	19.44	400/3/50	
BSUIS 16.304 M	92.93	56.30	304.90	223.40	3	700	51000	50	1300	11100	20.19	400/3/50	
BSUIS 16.304 L	92.93	56.30	304.90	223.40	2	800	51000	130	1300	12600	23.00	400/3/50	
BSUIS 16.304 XL	92.93	56.30	304.90	223.40	3	800	51000	140	1300	14400	29.16	400/3/50	

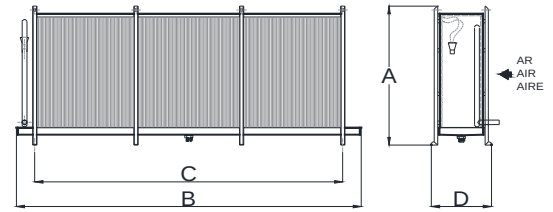
Modelo Type	Preço sem resistências Price without heaters	Opções Options			
		BL Lacado branco White painted	/E Descongelação eléctrica Electrical defrost	/GTB Descongelação gás quente Hot gas defrost	/W Descongelação água Water defrost
	EUR	EUR			
BSUIS 16.81 M	•	•	•	•	•
BSUIS 16.81 L	•	•	•	•	•
BSUIS 16.81 XL	•	•	•	•	•
BSUIS 16.162 M	•	•	•	•	•
BSUIS 16.162 L	•	•	•	•	•
BSUIS 16.162 XL	•	•	•	•	•
BSUIS 16.203 M	•	•	•	•	•
BSUIS 16.203 L	•	•	•	•	•
BSUIS 16.203 XL	•	•	•	•	•
BSUIS 16.243 M	•	•	•	•	•
BSUIS 16.243 L	•	•	•	•	•
BSUIS 16.243 XL	•	•	•	•	•
BSUIS 16.304 M	•	•	•	•	•
BSUIS 16.304 L	•	•	•	•	•
BSUIS 16.304 XL	•	•	•	•	•

S Standard SP Sob pedido
 S Standard SP Under request

Painel de Ventilação Fan panel



Bateria Coil



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain								
	kW	A	V / F / Hz	mm			A	B	C	D	H	kg	m³	
	16.80	1x24,2	400/3/50	22.0	48.3	2	1450	2700	2136	847	725	373	1.57	BSUIS 16.81 M
	16.80	1x24,2	400/3/50	22.0	48.3	2	1450	2700	2136	847	725	393	1.77	BSUIS 16.81 L
	16.80	1x24,2	400/3/50	22.0	48.3	2	1450	2700	2136	847	725	364	1.96	BSUIS 16.81 XL
	25.20	2x18,18	400/3/50	26.9	48.3	2	1450	2700	2136	847	725	506	1.57	BSUIS 16.162 M
	25.20	2x18,18	400/3/50	26.9	48.3	2	1450	2700	2136	847	725	526	1.77	BSUIS 16.162 L
	25.20	2x18,18	400/3/50	26.9	48.3	2	1450	2700	2136	847	725	497	1.96	BSUIS 16.162 XL
	29.40	1x24,24+18,18	400/3/50	26.9	60.3	2	1450	2700	2136	847	925	574	1.96	BSUIS 16.203 M
	29.40	1x24,24+18,18	400/3/50	26.9	60.3	2	1450	2700	2136	847	925	609	1.77	BSUIS 16.203 L
	29.40	1x24,24+18,18	400/3/50	26.9	60.3	2	1450	2700	2136	847	925	633	1.96	BSUIS 16.203 XL
	38.90	3x18,71	400/3/50	26.9	60.3	2x2½	1450	3750	3186	847	725	753	2.30	BSUIS 16.243 M
	38.90	3x18,71	400/3/50	26.9	60.3	2x2½	1450	3750	3186	847	725	783	2.58	BSUIS 16.243 L
	38.90	3x18,71	400/3/50	26.9	60.3	2x2½	1450	3750	3186	847	725	756	2.86	BSUIS 16.243 XL
	45.40	2x18,71+1x28,06	400/3/50	33.7	76.1	2x2½	1710	3750	3186	847	725	907	2.58	BSUIS 16.304 M
	45.40	2x18,71+1x28,06	400/3/50	33.7	76.1	2x2½	1710	3750	3186	847	725	897	2.86	BSUIS 16.304 L
	45.40	2x18,71+1x28,06	400/3/50	33.7	76.1	2x2½	1710	3750	3186	847	725	943	2.86	BSUIS 16.304 XL

Seleção e Factores Selection and Factors

RC1		DT1 [K]						
Tse [°C]		10	9	8	7	6	5	4
	4	1.000	0.900	0.800	0.700	0.600	0.500	0.400
	2	0.947	0.852	0.758	0.663	0.568	0.474	0.379
	0	0.871	0.784	0.697	0.610	0.523	0.436	0.348
	-2	0.856	0.77	0.685	0.599	0.514	0.428	0.342
	-10	0.826	0.743	0.661	0.578	0.496	0.413	0.330
	-12	0.818	0.736	0.654	0.573	0.491	0.409	0.327
	-14	0.811	0.730	0.649	0.568	0.487	0.406	0.324
	-18	0.795	0.716	0.636	0.557	0.477	0.398	0.318
	-20	0.788	0.709	0.630	0.552	0.473	0.394	0.315
	-25	0.758	0.682	0.606	0.531	0.455	0.379	0.303
	-34	0.751	0.677	0.599	0.525	0.445	0.370	0.295
	-40	0.743	0.671	0.592	0.521	0.445	0.371	0.296

Capacidade corrigida Corrected capacity	
BSUIS 16.81 M Tse=0°C DT1=8K R717	$Q_{01} = Q_{S1} \times RC1$ [kW]
	$Q_{01} = 26,20 \text{ kW} \times 0,697 = 18,26 \text{ kW}$

Nomenclatura Nomenclature	
Tse	Temperatura seca de entrada de ar BS Air on DB
Q _{S1}	Capacidade para seleção em DT1 Selection capacity in TD1
Q ₀₁	Capacidade corrigida em DT1 Corrected capacity in TD1
RC1	Factor de correcção de dados em DT1 Correction factor for data in DT1

BSUIS



Evaporadores de Túnel Blast Freezers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

16,0 mm
600 - 700 - 800 mm

CBIB

CBIC

CBIL

MTI

DDI

DLI

DXI

BSUT

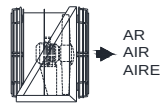
BSUIS

Modelo Type	Capacidade Q _{S1} Capacity Q _{S1} (T _{se} =+4°C / DT ₁ =10K)	Capacidade Capacity (T _{se} =-18°C / DT ₁ =7K)	Superfície Surface	Volume interno Internal Volume	Ventiladores Fans								
					Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Pressão estática Static pressure	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	
	KW		m ²	dm ³		mm	m ³ /h	m	rpm	W	A	V / F / Hz	
BSUIS 16.406 M	123.23	74.65	406.50	297.90	3	800	64000	42	1300	14400	29.16	400/3/50	
BSUIS 16.406 L	123.23	74.65	406.50	297.90	4	700	64000	107	1300	14800	26.92	400/3/50	
BSUIS 16.406 XL	123.23	74.65	406.50	297.90	3	800	64000	237	1300	18900	34.50	400/3/50	
BSUIS 16.487 M	128.22	77.68	487.50	357.50	3	800	64000	42	1300	14400	29.16	400/3/50	
BSUIS 16.487 L	128.22	77.68	487.50	357.50	4	700	64000	107	1300	14800	26.92	400/3/50	
BSUIS 16.487 XL	128.22	77.68	487.50	357.50	3	800	64000	237	1300	18900	34.50	400/3/50	
BSUIS 16.650 M	165.20	100.08	650.00	476.70	4	700	81000	20	1300	14800	26.92	400/3/50	
BSUIS 16.650 L	165.20	100.08	650.00	476.70	4	800	81000	90	1300	19200	38.88	400/3/50	
BSUIS 16.650 XL	165.20	100.08	650.00	476.70	3	800	81000	130	1300	18900	34.50	400/3/50	
BSUIS 16.609 M	165.95	100.53	609.40	446.90	4	700	81000	20	1300	14800	26.92	400/3/50	
BSUIS 16.609 L	165.95	100.53	609.40	446.90	4	800	81000	90	1300	19200	38.88	400/3/50	
BSUIS 16.609 XL	165.95	100.53	609.40	446.90	3	800	81000	130	1300	18900	34.50	400/3/50	
BSUIS 16.812 M	221.30	134.06	812.80	595.80	5	800	108000	56	1300	24000	48.60	400/3/50	
BSUIS 16.812 L	221.30	134.06	812.80	595.80	4	800	108000	126	1300	25200	46.00	400/3/50	
BSUIS 16.812 XL	221.30	134.06	812.80	595.80	5	800	108000	256	1300	31500	57.50	400/3/50	

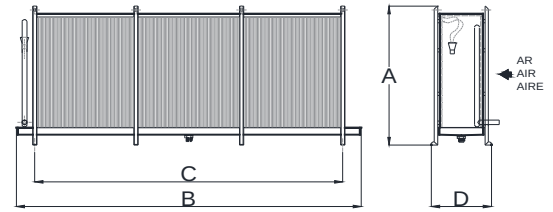
Modelo Type	Preço sem resistências Price without heaters	Opções Options			
		BL	/E	/GTB	/W
		Lacado branco White painted	Descongelação elétrica Electrical defrost	Descongelação gás quente Hot gas defrost	Descongelação água Water defrost
	EUR	EUR			
BSUIS 16.406 M	•	•	•	•	•
BSUIS 16.406 L	•	•	•	•	•
BSUIS 16.406 XL	•	•	•	•	•
BSUIS 16.487 M	•	•	•	•	•
BSUIS 16.487 L	•	•	•	•	•
BSUIS 16.487 XL	•	•	•	•	•
BSUIS 16.650 M	•	•	•	•	•
BSUIS 16.650 L	•	•	•	•	•
BSUIS 16.650 XL	•	•	•	•	•
BSUIS 16.609 M	•	•	•	•	•
BSUIS 16.609 L	•	•	•	•	•
BSUIS 16.609 XL	•	•	•	•	•
BSUIS 16.812 M	•	•	•	•	•
BSUIS 16.812 L	•	•	•	•	•
BSUIS 16.812 XL	•	•	•	•	•

S Standard SP Sob pedido
S Standard SP Under request

Panel de Ventilação Fan panel



Bateria Coil



	Resistências do evaporador Cooler heaters			Ligações standard Standard connections			Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Potência total Total power	Corrente total Total current	Alimentação MPS	Entrada Inlet	Saída Outlet	Esgoto Drain								
	kW	A	V / F / Hz	mm			A	B	C	D	H	kg	m³	
	63.00	3x25,98+1x12,99	400/3/50	33.7	76.1	2x2½	1710	4800	4236	847	925	1253	3.76	BSUIS 16.406 M
	63.00	3x25,98+1x12,99	400/3/50	33.7	76.1	2x2½	1710	4800	4236	847	925	1205	3.40	BSUIS 16.406 L
	63.00	3x25,98+1x12,99	400/3/50	33.7	76.1	2x2½	1710	4800	4236	847	925	1220	3.76	BSUIS 16.406 XL
	72.00	4x25,98	400/3/50	33.7	2 x 60,3	2x2½	1970	4800	4236	847	925	1350	3.76	BSUIS 16.487 M
	72.00	4x25,98	400/3/50	33.7	2 x 60,3	2x2½	1970	4800	4236	847	925	1374	3.40	BSUIS 16.487 L
	72.00	4x25,98	400/3/50	33.7	2 x 60,3	2x2½	1970	4800	4236	847	925	1389	3.76	BSUIS 16.487 XL
	99.00	5x25,98+1x12,99	400/3/50	33.7	2 x 76,1	2x2½	2495	4800	5286	847	825	1665	3.40	BSUIS 16.650 M
	99.00	5x25,98+1x12,99	400/3/50	33.7	2 x 76,1	2x2½	2495	4800	5286	847	825	1713	3.76	BSUIS 16.650 L
	99.00	5x25,98+1x12,99	400/3/50	33.7	2 x 76,1	2x2½	2495	4800	5286	847	825	1680	3.76	BSUIS 16.650 XL
	72.00	4x25,98	400/3/50	33.7	2 x 76,1	2x3	1970	5850	5286	847	825	1614	4.21	BSUIS 16.609 M
	72.00	4x25,98	400/3/50	33.7	2 x 76,1	2x3	1970	5850	5286	847	825	1662	4.67	BSUIS 16.609 L
	72.00	4x25,98	400/3/50	33.7	2 x 76,1	2x3	1970	5850	5286	847	825	1629	4.67	BSUIS 16.609 XL
	99.00	5x25,98+1x12,99	400/3/50	42.6	2 x 76,1	2x3	2495	5850	5286	847	925	2122	4.67	BSUIS 16.812 M
	99.00	5x25,98+1x12,99	400/3/50	42.6	2 x 76,1	2x3	2495	5850	5286	847	925	2102	4.67	BSUIS 16.812 L
	99.00	5x25,98+1x12,99	400/3/50	42.6	2 x 76,1	2x3	2495	5850	5286	847	925	2187	4.67	BSUIS 16.812 XL

Seleção e Factores Selection and Factors

RC1		DT1 [K]						
Tse [°C]		10	9	8	7	6	5	4
	4	1.000	0.900	0.800	0.700	0.600	0.500	0.400
	2	0.947	0.852	0.758	0.663	0.568	0.474	0.379
	0	0.871	0.784	0.697	0.610	0.523	0.436	0.348
	-2	0.856	0.77	0.685	0.599	0.514	0.428	0.342
	-10	0.826	0.743	0.661	0.578	0.496	0.413	0.330
	-12	0.818	0.736	0.654	0.573	0.491	0.409	0.327
	-14	0.811	0.730	0.649	0.568	0.487	0.406	0.324
	-18	0.795	0.716	0.636	0.557	0.477	0.398	0.318
	-20	0.788	0.709	0.630	0.552	0.473	0.394	0.315
	-25	0.758	0.682	0.606	0.531	0.455	0.379	0.303
	-34	0.751	0.677	0.599	0.525	0.445	0.370	0.295
	-40	0.743	0.671	0.592	0.521	0.445	0.371	0.296

Capacidade corrigida Corrected capacity	
BSUIS 16.650 L Tse=0°C DT1=8K R717	$Q_{01} = Q_{S1} \times RC1$ [kW] $Q_{01} = 165,20 \text{ kW} \times 0,697 = 115,14 \text{ kW}$

Nomenclatura Nomenclature	
Tse	Temperatura seca de entrada de ar BS Air on DB
Q _{S1}	Capacidade para seleção em DT1 Selection capacity in TD1
Q ₀₁	Capacidade corrigida em DT1 Corrected capacity in TD1
RC1	Factor de correcção de dados em DT1 Correction factor for data in DT1

CONDENSADORES

CONDENSERS



Condensador ACM
ACM Condenser



Condensador ACH
ACH Condenser



Condensador VACD
VACD Condenser



Condensador ACP
ACP Condenser

124 - 187

AC

Condensadores Condensers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

2,1 mm
154-172-200-230-254-300 mm



AC

ACM

ACH

ACI

ACP

ACPD

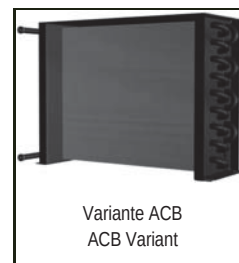
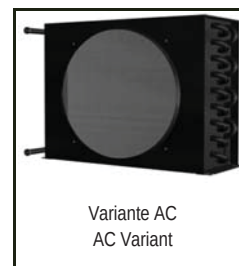
ACJ

VAC

VACD

Modelo Type			Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
						Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS		Ruído (1) Noise level (1)
		Referência OEM OEM Reference	kW	m²	dm³		mm	m³/h	rpm	W	A	V / F / Hz	dB(A)	
AC	115/0.17	16	0.17	0.36	0.07	1	154	190	1300	32	0.20	230/1/50		
AC	115/0.30	26	0.30	0.72	0.15	1	154	170	1300	32	0.20	230/1/50		
AC	117/0.24	17	0.24	0.51	0.10	1	172	280	1300	32	0.20	230/1/50		
AC	117/0.44	27	0.44	1.02	0.20	1	172	250	1300	32	0.20	230/1/50		
AC	120/0.59	28	0.59	1.28	0.24	1	200	370	1300	35	0.21	230/1/50		
AC	117/0.47	207	0.47	1.11	0.21	1	172	260	1300	32	0.20	230/1/50		
AC	117/0.50	208	0.50	1.28	0.24	1	172	280	1300	32	0.20	230/1/50		
AC	120/0.68	209	0.68	1.59	0.29	1	200	400	1320	35	0.21	230/1/50		
AC	120/0.88	309	0.88	2.38	0.43	1	200	370	1320	35	0.21	230/1/50		
AC	120/1.09	409	1.09	3.17	0.58	1	200	350	1300	35	0.21	230/1/50		
AC	123/1.26	310	1.26	2.84	0.51	1	230	540	1300	38	0.23	230/1/50		
AC	123/1.50	410	1.50	3.79	0.68	1	230	500	1300	38	0.23	230/1/50		
AC	125/1.68	311	1.68	3.27	0.59	1	254	750	1300	70	0.48	230/1/50		
AC	125/2.00	411	2.00	4.37	0.79	1	254	700	1300	70	0.48	230/1/50		
AC	130/2.69	314	2.69	5.20	0.90	1	300	1125	1300	90	0.62	230/1/50		
AC	130/2.95	414	2.95	6.94	1.30	1	300	1050	1300	90	0.62	230/1/50		
AC	130/3.35	514	3.35	8.68	1.60	1	300	1000	1300	90	0.62	230/1/50		
AC	220/1.79	609	1.79	4.76	0.84	2	200	740	1320	70	0.42	230/1/50		
AC	220/2.15	809	2.15	6.34	1.09	2	200	700	1320	70	0.42	230/1/50		
AC	223/2.97	810	2.97	7.58	1.29	2	230	1000	1300	72	0.50	230/1/50		
AC	225/3.99	811	3.99	8.74	1.51	2	254	1400	1300	140	0.96	230/1/50		
AC	230/5.38	614	5.38	10.04	1.94	2	300	2250	1300	180	1.24	230/1/50		
AC	230/6.27	814	6.27	13.88	2.49	2	300	2100	1300	180	1.24	230/1/50		
AC	230/6.73	1014	6.73	17.35	3.13	2	300	2000	1300	180	1.24	230/1/50		

	Modelo Type	Referência OEM OEM Reference	Preço Price			Opções Options			
			AC	ACB	AC/E	AR Alhetas revestidas Coated fins	BL Pintado Painted	/EC Motores EC EC motor's	EC Cablagem EC EC wiring
			EUR			EUR			
AC	115/0.17	16	•	•	SP	•	S	-	-
AC	115/0.30	26	•	•	SP	•	S	-	-
AC	117/0.24	17	•	•	SP	•	S	-	-
AC	117/0.44	27	•	•	SP	•	S	-	-
AC	120/0.59	28	•	•	SP	•	S	-	-
AC	117/0.47	207	•	•	SP	•	S	-	-
AC	117/0.50	208	•	•	SP	•	S	-	-
AC	120/0.68	209	•	•	SP	•	S	-	-
AC	120/0.88	309	•	•	SP	•	S	-	-
AC	120/1.09	409	•	•	SP	•	S	-	-
AC	123/1.26	310	•	•	SP	•	S	-	-
AC	123/1.50	410	•	•	SP	•	S	-	-
AC	125/1.68	311	•	•	SP	•	S	-	-
AC	125/2.00	411	•	•	SP	•	S	-	-
AC	130/2.69	314	•	•	SP	•	S	-	-
AC	130/2.95	414	•	•	SP	•	S	-	-
AC	130/3.35	514	•	•	SP	•	S	-	-
AC	220/1.79	609	•	•	SP	•	S	-	-
AC	220/2.15	809	•	•	SP	•	S	-	-
AC	223/2.97	810	•	•	SP	•	S	-	-
AC	225/3.99	811	•	•	SP	•	S	-	-
AC	230/5.38	614	•	•	SP	•	S	-	-
AC	230/6.27	814	•	•	SP	•	S	-	-
AC	230/6.73	1014	•	•	SP	•	S	-	-

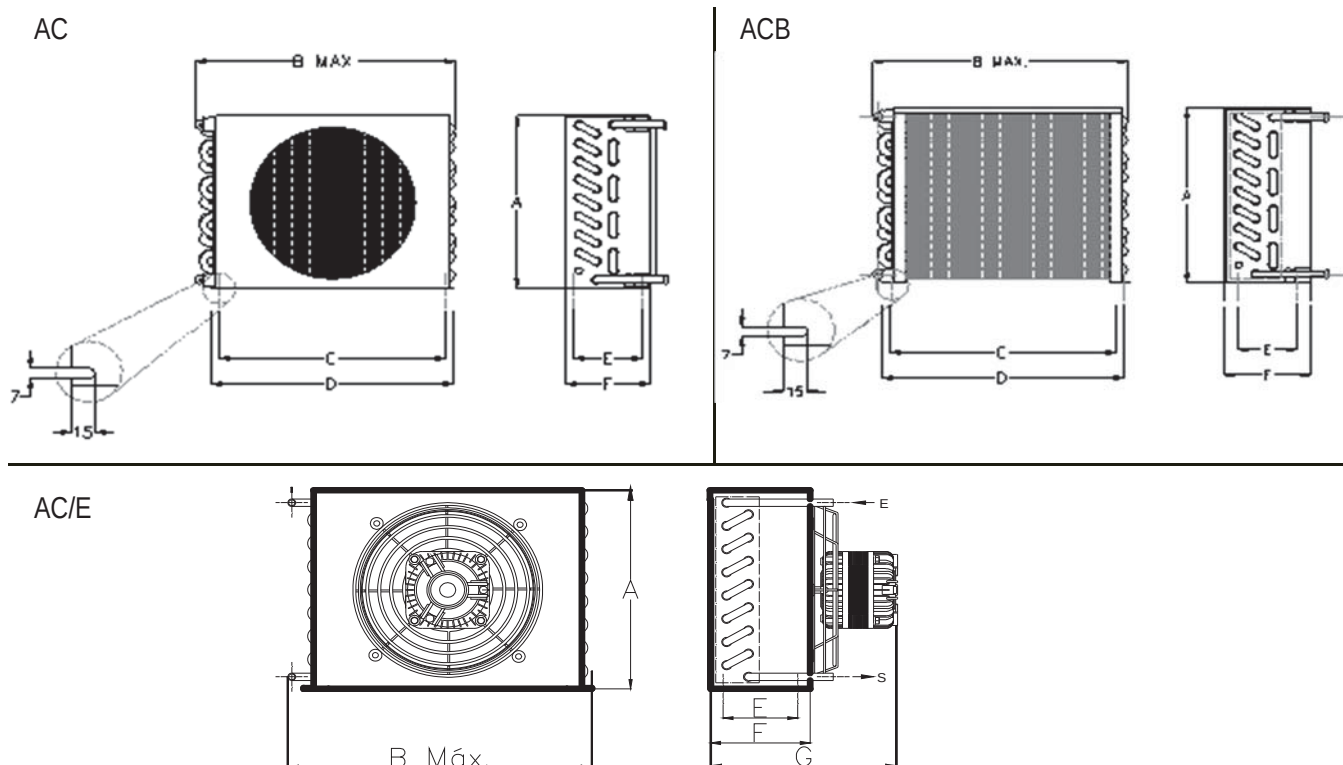


S Standard
S Standard

SP Sob pedido
SP Under request

	Ligações standard Standard connections		Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type	
	Entrada Inlet	Saída Outlet								
	in		A	B	E	F	Kg	dm ³		Referência OEM OEM Reference
	5/16	5/16	165	248	51	71	1.1	3.41	AC 115/0.17	16
	5/16	5/16	165	248	51	71	1.4	3.41	AC 115/0.30	26
	5/16	5/16	190	288	75	100	1.3	6.18	AC 117/0.24	17
	5/16	5/16	190	288	75	100	1.7	6.18	AC 117/0.44	27
	5/16	5/16	217	312	75	100	2.1	7.62	AC 120/0.59	28
	5/16	5/16	190	312	75	100	1.9	6.69	AC 117/0.47	207
	5/16	5/16	217	312	75	100	2.2	7.62	AC 117/0.50	208
	5/16	5/16	240	332	89	110	2.4	9.76	AC 120/0.68	209
	5/16	5/16	240	332	89	110	3.0	9.76	AC 120/0.88	309
	5/16	5/16	240	332	126	149	3.8	12.93	AC 120/1.09	409
	5/16	5/16	268	352	89	110	3.4	11.53	AC 123/1.26	310
	5/16	5/16	268	352	126	149	4.4	15.28	AC 123/1.50	410
	5/16	5/16	295	372	89	110	3.9	13.39	AC 125/1.68	311
	5/16	5/16	295	372	126	149	5.0	17.75	AC 125/2.00	411
	5/16	5/16	372	442	126	149	6.3	26.97	AC 130/2.69	314
	1/2	1/2	372	450	126	149	7.5	26.97	AC 130/2.95	414
	1/2	1/2	372	450	126	162	8.7	29.18	AC 130/3.35	514
	1/2	1/2	240	600	89	110	5.2	17.64	AC 220/1.79	609
	1/2	1/2	240	600	126	149	6.6	23.37	AC 220/2.15	809
	1/2	1/2	268	640	126	149	7.6	27.78	AC 223/2.97	810
	1/2	1/2	295	680	126	149	8.7	32.44	AC 225/3.99	811
	1/2	1/2	372	820	126	149	10.9	49.15	AC 230/5.38	614
	1/2	1/2	372	820	126	149	13.1	49.15	AC 230/6.27	814
	5/8	1/2	372	820	126	162	15.1	53.17	AC 230/6.73	1014

Desenhos Drawings



ACM

Condensadores Condensers

Espaçamento Fin Spacing

Ø Ventiladores Fan Ø

2,1 mm

315-350-400-450-500 mm



AC

ACM

ACH

ACI

ACP

ACPD

ACJ

VAC

VACD

Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V / F / Hz	dB(A)	
ACM/E				4-4 PÓLOS 4-4 POLES								
ACM/E 131/3.47S	3.47	5.63	0.80	1	315	1550	1410	102	0.52	230/1/50	39	
ACM/E 131/4.40S	4.40	8.40	1.20	1	315	1400	1410	102	0.52	230/1/50	39	
ACM/E 231/6.95S	6.95	11.25	1.50	2	315	3100	1410	204	1.04	230/1/50	42	
ACM/E 231/9.05S	9.05	16.90	2.40	2	315	2800	1410	204	1.04	230/1/50	42	
ACM/E 135/5.04S	5.04	7.91	1.10	1	350	2150	1400	130	0.58	230/1/50	44	
ACM/E 135/6.02S	6.02	11.90	1.70	1	350	1900	1400	130	0.58	230/1/50	44	
ACM/E 235/10.1S	10.10	15.80	2.20	2	350	4300	1400	260	1.16	230/1/50	47	
ACM/E 235/11.6S	11.63	23.60	3.30	2	350	3800	1400	260	1.16	230/1/50	47	
ACM/E 140/6.41S	6.41	10.20	1.40	1	400	2900	1430	160	0.73	230/1/50	49	
ACM/E 140/8.25S	8.25	15.20	2.10	1	400	2600	1430	160	0.73	230/1/50	49	
ACM/E 240/13.4S	13.39	20.30	2.70	2	400	5800	1430	320	1.46	230/1/50	52	
ACM/E 240/16.5S	16.50	30.40	4.10	2	400	5200	1430	320	1.46	230/1/50	52	
ACM/E 145/8.75Y	8.75	13.40	1.90	1	450	3700	1380	200	0.48	Y 400/3/50	52	
ACM/E 145/11.0Y	11.01	20.10	2.80	1	450	3500	1380	200	0.48	Y 400/3/50	52	
ACM/E 245/17.5Y	17.50	26.70	3.70	2	450	7400	1380	400	0.96	Y 400/3/50	55	
ACM/E 245/21.8Y	21.80	40.10	5.60	2	450	7000	1380	400	0.96	Y 400/3/50	55	
ACM/E 245/23.4Y	23.40	53.50	7.40	2	450	6400	1380	400	0.96	Y 400/3/50	55	
ACM/E 150/15.7T	15.65	22.70	3.20	1	500	7200	1390	720	1.41	Δ 400/3/50	44	
ACM/E 150/19.9T	19.85	34.10	4.80	1	500	6800	1390	720	1.41	Δ 400/3/50	44	
ACM/E 150/22.5T	22.47	45.40	6.40	1	500	6300	1390	720	1.41	Δ 400/3/50	44	
ACM/E 245/25.0Y	24.95	63.74	9.30	2	450	8100	1380	400	0.96	Y 400/3/50	55	
ACM/E 245/29.5Y	29.50	84.98	12.40	2	450	7600	1380	400	0.96	Y 400/3/50	55	
ACM/E 250/33.8T	33.80	72.80	6.90	2	500	13900	1390	1440	2.82	Δ 400/3/50	47	
ACM/E 250/45.1T	45.10	109.60	11.50	2	500	13200	1390	1440	2.82	Δ 400/3/50	47	
ACM/E 250/52.2T	52.20	146.10	15.40	2	500	12700	1390	1440	2.82	Δ 400/3/50	47	

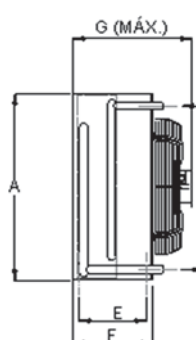
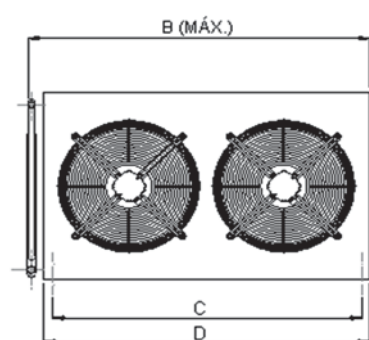
(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
		Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
	EUR	EUR			
ACM/E 131/3.47S	•	•	S	SP	SP
ACM/E 131/4.40S	•	•	S	SP	SP
ACM/E 231/6.95S	•	•	S	SP	SP
ACM/E 231/9.05S	•	•	S	SP	SP
ACM/E 135/5.04S	•	•	S	SP	SP
ACM/E 135/6.02S	•	•	S	SP	SP
ACM/E 235/10.1S	•	•	S	SP	SP
ACM/E 235/11.6S	•	•	S	SP	SP
ACM/E 140/6.41S	•	•	S	SP	SP
ACM/E 140/8.25S	•	•	S	SP	SP
ACM/E 240/13.4S	•	•	S	SP	SP
ACM/E 240/16.5S	•	•	S	SP	SP
ACM/E 145/8.75Y	•	•	S	SP	SP
ACM/E 145/11.0Y	•	•	S	SP	SP
ACM/E 245/17.5Y	•	•	S	SP	SP
ACM/E 245/21.8Y	•	•	S	SP	SP
ACM/E 245/23.4Y	•	•	S	SP	SP
ACM/E 150/15.7T	•	•	S	SP	SP
ACM/E 150/19.9T	•	•	S	SP	SP
ACM/E 150/22.5T	•	•	S	SP	SP
ACM/E 245/25.0Y	•	•	S	SP	SP
ACM/E 245/29.5Y	•	•	S	SP	SP
ACM/E 250/33.8T	•	•	S	SP	SP
ACM/E 250/45.1T	•	•	S	SP	SP
ACM/E 250/52.2T	•	•	S	SP	SP

S Standard SP Sob pedido
S Standard SP Under request

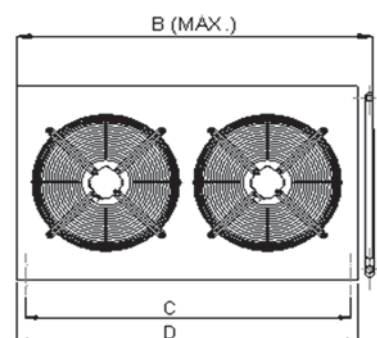
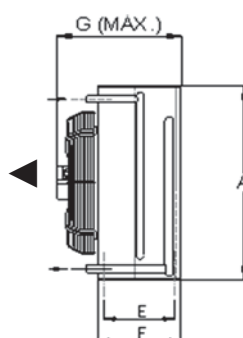
	Ligações standard Standard connections			Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Diâmetro tubo Tube diameter	Entrada Inlet	Saída Outlet								
	in			A	B	C	E	G			
4-4 PÓLOS 4-4 POLES											
	3/8	1/2	1/2	417	465	410	180	350	16	0.13	ACM/E 131/3.47S
	3/8	1/2	1/2	417	465	410	180	350	18	0.13	ACM/E 131/4.40S
	3/8	5/8	1/2	417	830	770	180	350	28	0.21	ACM/E 231/6.95S
	3/8	5/8	1/2	417	830	770	180	350	31	0.21	ACM/E 231/9.05S
	3/8	5/8	1/2	468	560	500	180	350	21	0.17	ACM/E 135/5.04S
	3/8	5/8	1/2	468	560	500	180	350	23	0.17	ACM/E 135/6.02S
	3/8	3/4	5/8	468	1010	950	180	350	36	0.17	ACM/E 235/10.1S
	3/8	3/4	5/8	468	1010	950	180	350	40	0.17	ACM/E 235/11.6S
	3/8	5/8	1/2	519	630	570	180	365	24	0.21	ACM/E 140/6.41S
	3/8	5/8	1/2	519	630	570	180	365	27	0.21	ACM/E 140/8.25S
	3/8	7/8	3/4	519	1160	1090	180	365	43	0.36	ACM/E 240/13.4S
	3/8	7/8	3/4	519	1160	1090	180	365	48	0.36	ACM/E 240/16.5S
	3/8	5/8	1/2	620	685	620	220	415	32	0.26	ACM/E 145/8.75Y
	3/8	3/4	5/8	620	685	620	220	415	35	0.26	ACM/E 145/11.0Y
	3/8	7/8	3/4	620	1260	1190	220	415	56	0.48	ACM/E 245/17.5Y
	3/8	1 1/8	7/8	620	1260	1190	220	415	63	0.48	ACM/E 245/21.8Y
	3/8	1 1/8	7/8	620	1260	1190	220	415	70	0.48	ACM/E 245/23.4Y
	3/8	7/8	3/4	774	900	825	220	440	54	0.46	ACM/E 150/15.7T
	3/8	1 1/8	7/8	774	900	825	220	440	61	0.46	ACM/E 150/19.9T
	3/8	1 1/8	7/8	774	900	825	220	440	66	0.46	ACM/E 150/22.5T
	1/2	1 1/8	7/8	698	1260	1130	240	460	78	0.51	ACM/E 245/25.0Y
	1/2	1 1/8	7/8	698	1260	1130	240	460	86	0.51	ACM/E 245/29.5Y
	1/2	1 3/8	1 1/8	774	1790	1650	240	490	104	0.97	ACM/E 250/33.8T
	1/2	1 3/8	1 1/8	774	1790	1650	240	490	118	0.97	ACM/E 250/45.1T
	1/2	1 3/8	1 1/8	774	1790	1650	240	490	132	0.97	ACM/E 250/52.2T

Desenhos Drawings



Tubo de 3/8" 3/8"
tube

Tubo de 1/2" 1/2"
tube



ACM



Condensadores Condensers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

2,1 mm
315-350-400-450-500 mm

AC

ACM

ACH

ACI

ACP

ACPD

ACJ

VAC

VACD

Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V/F/Hz	dB(A)	
ACM/M				6-6 PÓLOS 6-6 POLES								
ACM/M 135/5.04S	4.00	7.91	1.10	1	350	1500	910	75	0.35	230/1/50	34	
ACM/M 135/6.02S	4.58	11.90	1.70	1	350	1300	910	75	0.35	230/1/50	34	
ACM/M 235/10.1S	8.00	15.80	2.20	2	350	3000	910	150	0.70	230/1/50	37	
ACM/M 235/11.6S	8.86	23.60	3.30	2	350	2600	910	150	0.70	230/1/50	37	
ACM/M 140/6.41S	5.42	10.20	1.40	1	400	2200	940	120	0.55	230/1/50	39	
ACM/M 140/8.25S	6.59	15.20	2.10	1	400	1900	940	120	0.55	230/1/50	39	
ACM/M 240/13.4S	11.26	20.30	2.70	2	400	4400	940	240	1.10	230/1/50	42	
ACM/M 240/16.5S	13.18	30.40	4.10	2	400	3800	940	240	1.10	230/1/50	42	
ACM/M 145/8.75S	7.45	13.40	1.90	1	450	2900	930	165	0.80	230/1/50	43	
ACM/M 145/11.0S	9.15	20.10	2.80	1	450	2700	930	165	0.80	230/1/50	43	
ACM/M 245/17.5S	14.90	26.70	3.70	2	450	5800	930	330	1.60	230/1/50	46	
ACM/M 245/21.8S	18.15	40.10	5.60	2	450	5400	930	330	1.60	230/1/50	46	
ACM/M 245/23.4S	19.00	53.50	7.40	2	450	4900	930	330	1.60	230/1/50	46	
ACM/M 150/15.7S	12.30	22.70	3.20	1	500	4800	915	270	1.18	230/1/50	34	
ACM/M 150/19.9S	15.05	34.10	4.80	1	500	4500	915	270	1.18	230/1/50	34	
ACM/M 150/22.5S	16.70	45.40	6.40	1	500	4250	915	270	1.18	230/1/50	34	
ACM/M 245/25.0S	21.55	63.74	9.30	2	450	6500	930	330	1.60	230/1/50	46	
ACM/M 245/29.5S	24.50	84.98	12.40	2	450	6000	930	330	1.60	230/1/50	46	
ACM/M 250/33.8S	26.20	72.80	6.90	2	500	9200	915	540	2.36	230/1/50	37	
ACM/M 250/45.1S	33.80	109.60	11.50	2	500	8700	915	540	2.36	230/1/50	37	
ACM/M 250/52.2S	37.80	146.10	15.40	2	500	8400	915	540	2.36	230/1/50	37	

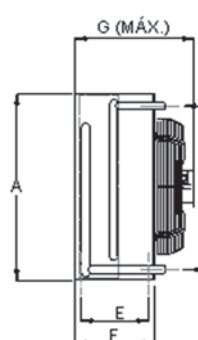
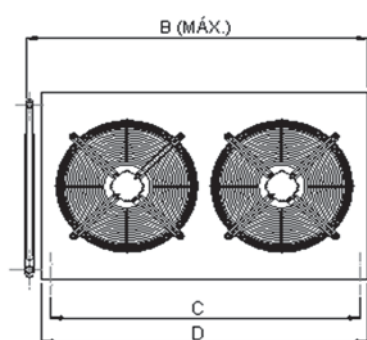
(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
		Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
	EUR	EUR			
ACM/M 135/5.04S	•	•	S	SP	SP
ACM/M 135/6.02S	•	•	S	SP	SP
ACM/M 235/10.1S	•	•	S	SP	SP
ACM/M 235/11.6S	•	•	S	SP	SP
ACM/M 140/6.41S	•	•	S	SP	SP
ACM/M 140/8.25S	•	•	S	SP	SP
ACM/M 240/13.4S	•	•	S	SP	SP
ACM/M 240/16.5S	•	•	S	SP	SP
ACM/M 145/8.75S	•	•	S	SP	SP
ACM/M 145/11.0S	•	•	S	SP	SP
ACM/M 245/17.5S	•	•	S	SP	SP
ACM/M 245/21.8S	•	•	S	SP	SP
ACM/M 245/23.4S	•	•	S	SP	SP
ACM/M 150/15.7S	•	•	S	SP	SP
ACM/M 150/19.9S	•	•	S	SP	SP
ACM/M 150/22.5S	•	•	S	SP	SP
ACM/M 245/25.0S	•	•	S	SP	SP
ACM/M 245/29.5S	•	•	S	SP	SP
ACM/M 250/33.8S	•	•	S	SP	SP
ACM/M 250/45.1S	•	•	S	SP	SP
ACM/M 250/52.2S	•	•	S	SP	SP

S Standard SP Sob pedido
S Standard SP Under request

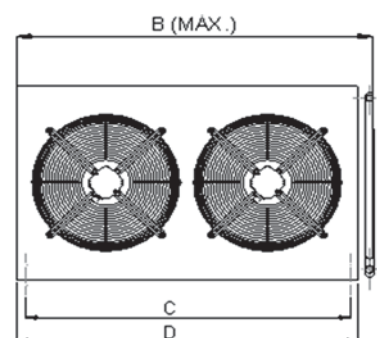
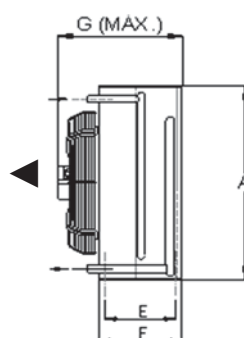
	Ligações standard Standard connections			Dimensões Dimensions					Peso em vazio Net weight Kg	Volume embarque Shipment volume dm ³	Modelo Type
	Diâmetro tubo Tube diameter in	Entrada Inlet	Saída Outlet	A	B	C	E	G			
				mm							
				6-6 PÓLOS 6-6 POLES							ACM/M
	3/8	5/8	1/2	468	560	500	180	350	21	0.17	ACM/M 135/5.04S
	3/8	5/8	1/2	468	560	500	180	350	23	0.17	ACM/M 135/6.02S
	3/8	3/4	5/8	468	1010	950	180	350	36	0.17	ACM/M 235/10.1S
	3/8	3/4	5/8	468	1010	950	180	350	40	0.17	ACM/M 235/11.6S
	3/8	5/8	1/2	519	630	570	180	365	24	0.21	ACM/M 140/6.41S
	3/8	5/8	1/2	519	630	570	180	365	27	0.21	ACM/M 140/8.25S
	3/8	7/8	3/4	519	1160	1090	180	365	43	0.36	ACM/M 240/13.4S
	3/8	7/8	3/4	519	1160	1090	180	365	48	0.36	ACM/M 240/16.5S
	3/8	5/8	1/2	620	685	620	220	415	32	0.26	ACM/M 145/8.75S
	3/8	3/4	5/8	620	685	620	220	415	35	0.26	ACM/M 145/11.0S
	3/8	7/8	3/4	620	1260	1190	220	415	56	0.48	ACM/M 245/17.5S
	3/8	1 1/8	7/8	620	1260	1190	220	415	63	0.48	ACM/M 245/21.8S
	3/8	1 1/8	7/8	620	1260	1190	220	415	70	0.48	ACM/M 245/23.4S
	3/8	7/8	3/4	774	900	825	220	440	54	0.46	ACM/M 150/15.7S
	3/8	1 1/8	7/8	774	900	825	220	440	61	0.46	ACM/M 150/19.9S
	3/8	1 1/8	7/8	774	900	825	220	440	66	0.46	ACM/M 150/22.5S
	1/2	1 1/8	7/8	698	1260	1130	240	460	78	0.51	ACM/M 245/25.0S
	1/2	1 1/8	7/8	698	1260	1130	240	460	86	0.51	ACM/M 245/29.5S
	1/2	1 3/8	1 1/8	774	1790	1650	240	490	104	0.97	ACM/M 250/33.8S
	1/2	1 3/8	1 1/8	774	1790	1650	240	490	118	0.97	ACM/M 250/45.1S
	1/2	1 3/8	1 1/8	774	1790	1650	240	490	132	0.97	ACM/M 250/52.2S

Desenhos Drawings



Tubo de 3/8" 3/8"
tube

Tubo de 1/2" 1/2"
tube



ACH

Condensadores Condensers

Espaçamento Fin Spacing

Ø Ventiladores Fan Ø

2,1 mm

500 mm



Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V/F/Hz	dB(A)	
ACH/E	4-4 PÓLOS 4-4 POLES											
ACH/E 150/18.9T	18.90	36.40	3.50	1	500	7550	1390	720	1.41	Δ 400/3/50	44	
ACH/E 150/18.9Y	17.54	36.40	3.50	1	500	6600	1180	550	0.95	Y 400/3/50	40	
ACH/E 150/24.4T	24.36	54.70	5.40	1	500	7200	1390	720	1.41	Δ 400/3/50	44	
ACH/E 150/24.4Y	22.16	54.70	5.40	1	500	6250	1180	550	0.95	Y 400/3/50	40	
ACH/E 150/27.4T	27.41	73.10	7.70	1	500	6900	1390	720	1.41	Δ 400/3/50	44	
ACH/E 150/27.4Y	24.57	73.10	7.70	1	500	6000	1180	550	0.95	Y 400/3/50	40	
ACH/E 250/35.5T	35.49	72.80	6.90	2	500	15100	1390	1440	2.82	Δ 400/3/50	47	
ACH/E 250/35.5Y	32.87	72.80	6.90	2	500	13200	1180	1100	1.90	Y 400/3/50	43	
ACH/E 250/47.4T	47.36	109.60	11.50	2	500	14400	1390	1440	2.82	Δ 400/3/50	47	
ACH/E 250/47.4Y	43.16	109.60	11.50	2	500	12500	1180	1100	1.90	Y 400/3/50	43	
ACH/E 250/54.8T	54.81	146.10	15.40	2	500	13800	1390	1440	2.82	Δ 400/3/50	47	
ACH/E 250/54.8Y	49.25	146.10	15.40	2	500	12000	1180	1100	1.90	Y 400/3/50	43	
ACH/E 350/57.0T	57.02	109.60	11.50	3	500	22650	1390	2160	4.23	Δ 400/3/50	49	
ACH/E 350/57.0Y	52.92	109.60	11.50	3	500	19800	1180	1650	2.85	Y 400/3/50	45	
ACH/E 350/71.0T	70.98	164.40	17.30	3	500	21600	1390	2160	4.23	Δ 400/3/50	49	
ACH/E 350/71.0Y	64.79	164.40	17.30	3	500	18750	1180	1650	2.85	Y 400/3/50	45	
ACH/E 350/82.4T	82.43	219.20	23.00	3	500	20700	1390	2160	4.23	Δ 400/3/50	49	
ACH/E 350/82.4Y	74.03	219.20	23.00	3	500	18000	1180	1650	2.85	Y 400/3/50	45	
ACH/E 450/98.5T	98.49	219.20	23.00	4	500	28800	1390	2880	5.64	Δ 400/3/50	50	
ACH/E 450/98.5Y	89.36	219.20	23.00	4	500	25000	1180	2200	3.80	Y 400/3/50	46	
ACH/E 450/110T	109.62	292.20	30.70	4	500	27600	1390	2880	5.64	Δ 400/3/50	50	
ACH/E 450/110Y	98.60	292.20	30.70	4	500	24000	1180	2200	3.80	Y 400/3/50	46	

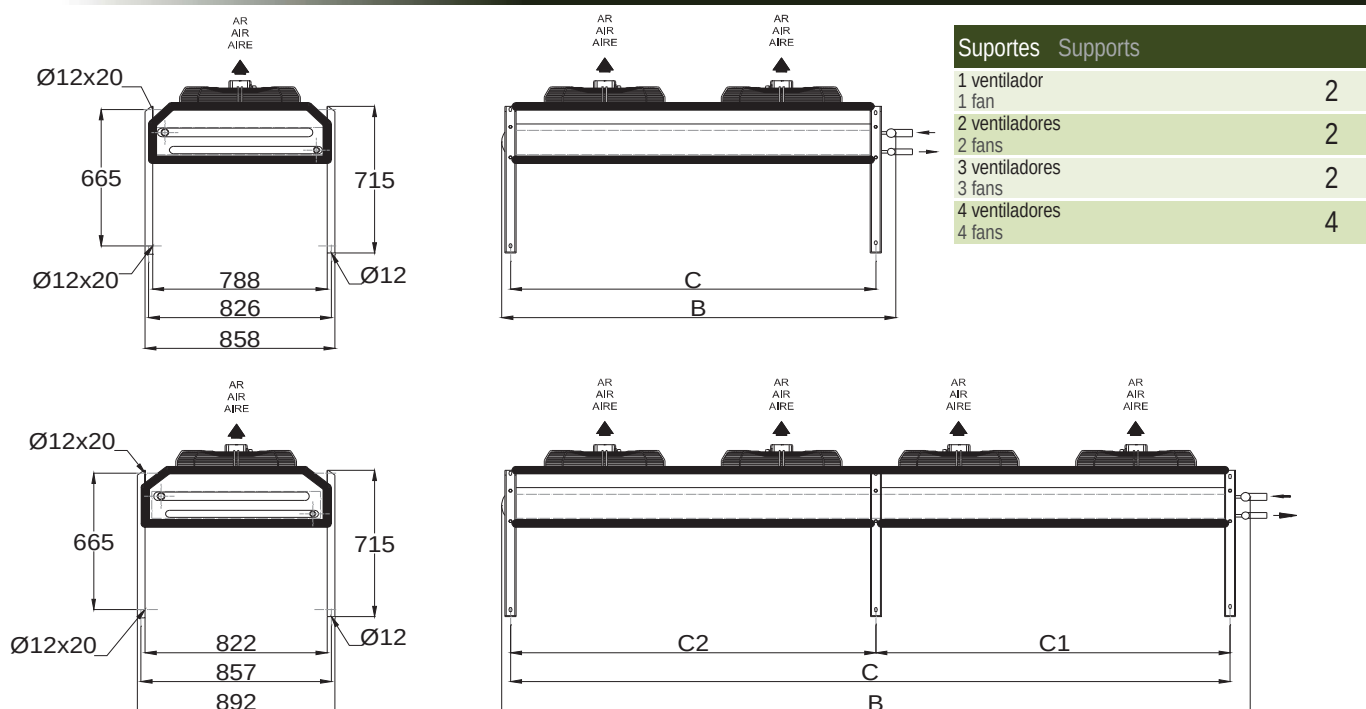
(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
		Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
	EUR	EUR			
ACH/E 150/18.9T	•	•	S	-	-
ACH/E 150/18.9Y	•	•	S	-	-
ACH/E 150/24.4T	•	•	S	-	-
ACH/E 150/24.4Y	•	•	S	-	-
ACH/E 150/27.4T	•	•	S	-	-
ACH/E 150/27.4Y	•	•	S	-	-
ACH/E 250/35.5T	•	•	S	-	-
ACH/E 250/35.5Y	•	•	S	-	-
ACH/E 250/47.4T	•	•	S	-	-
ACH/E 250/47.4Y	•	•	S	-	-
ACH/E 250/54.8T	•	•	S	-	-
ACH/E 250/54.8Y	•	•	S	-	-
ACH/E 350/57.0T	•	•	S	-	-
ACH/E 350/57.0Y	•	•	S	-	-
ACH/E 350/71.0T	•	•	S	-	-
ACH/E 350/71.0Y	•	•	S	-	-
ACH/E 350/82.4T	•	•	S	-	-
ACH/E 350/82.4Y	•	•	S	-	-
ACH/E 450/98.5T	•	•	S	-	-
ACH/E 450/98.5Y	•	•	S	-	-
ACH/E 450/110T	•	•	S	-	-
ACH/E 450/110Y	•	•	S	-	-

S Standard
S StandardSP Sob pedido
SP Under request

	Ligações standard Standard connections		Dimensões Dimensions				Peso em vazio Net weight Kg	Volume embarque Shipment volume dm ³	Modelo Type
	Entrada Inlet	Saída Outlet	B	C	C1	C2			
	in		mm						
4-4 PÓLOS 4-4 POLES									ACH/E
	7/8	3/4	980	850	-	-	71	0.64	ACH/E 150/18.9T
	7/8	3/4	980	850	-	-	71	0.64	ACH/E 150/18.9Y
	1 1/8	7/8	980	850	-	-	79	0.64	ACH/E 150/24.4T
	1 1/8	7/8	980	850	-	-	79	0.64	ACH/E 150/24.4Y
	1 1/8	7/8	980	850	-	-	86	0.64	ACH/E 150/27.4T
	1 1/8	7/8	980	850	-	-	86	0.64	ACH/E 150/27.4Y
	1 3/8	1 1/8	1790	1650	-	-	118	1.12	ACH/E 250/35.5T
	1 3/8	1 1/8	1790	1650	-	-	118	1.12	ACH/E 250/35.5Y
	1 3/8	1 1/8	1790	1650	-	-	132	1.12	ACH/E 250/47.4T
	1 3/8	1 1/8	1790	1650	-	-	132	1.12	ACH/E 250/47.4Y
	1 3/8	1 1/8	1790	1650	-	-	145	1.12	ACH/E 250/54.8T
	1 3/8	1 1/8	1790	1650	-	-	145	1.12	ACH/E 250/54.8Y
	1 3/8	1 1/8	2605	2450	-	-	165	1.61	ACH/E 350/57.0T
	1 3/8	1 1/8	2605	2450	-	-	165	1.61	ACH/E 350/57.0Y
	1 5/8	1 3/8	2605	2450	-	-	186	1.61	ACH/E 350/71.0T
	1 5/8	1 3/8	2605	2450	-	-	186	1.61	ACH/E 350/71.0Y
	1 5/8	1 3/8	2605	2450	-	-	206	1.61	ACH/E 350/82.4T
	1 5/8	1 3/8	2605	2450	-	-	206	1.61	ACH/E 350/82.4Y
	1 5/8	1 3/8	3450	3250	1600	1650	299	2.40	ACH/E 450/98.5T
	1 5/8	1 3/8	3450	3250	1600	1650	299	2.40	ACH/E 450/98.5Y
	1 5/8	1 3/8	3450	3250	1600	1650	325	2.40	ACH/E 450/110T
	1 5/8	1 3/8	3450	3250	1600	1650	325	2.40	ACH/E 450/110Y

Desenhos Drawings



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices

ACH

Condensadores Condensers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

2,1 mm
500 mm



Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V/F/Hz	dB(A)	
ACH/E				4-4 PÓLOS 4-4 POLES								
ACH/E 150/18.9S	18.48	36.40	3.50	1	500	7250	1300	680	3.00	230/1/50	43	
ACH/E 150/24.4S	23.73	54.70	5.40	1	500	6900	1300	680	3.00	230/1/50	43	
ACH/E 150/27.4S	26.46	73.10	7.70	1	500	6600	1300	680	3.00	230/1/50	43	
ACH/E 250/35.5S	34.65	72.80	6.90	2	500	14500	1300	1360	6.00	230/1/50	46	
ACH/E 250/47.4S	46.10	109.60	11.50	2	500	13800	1300	1360	6.00	230/1/50	46	
ACH/E 250/54.8S	53.03	146.10	15.40	2	500	13200	1300	1360	6.00	230/1/50	46	
ACH/E 350/57.0S	55.76	109.60	11.50	3	500	21750	1300	2040	9.00	230/1/50	48	
ACH/E 350/71.0S	69.20	164.40	17.30	3	500	20700	1300	2040	9.00	230/1/50	48	
ACH/E 350/82.4S	79.80	219.20	23.00	3	500	19800	1300	2040	9.00	230/1/50	48	
ACH/E 450/98.5S	95.87	219.20	23.00	4	500	27600	1300	2720	12.00	230/1/50	49	
ACH/E 450/110S	106.16	292.20	30.70	4	500	26400	1300	2720	12.00	230/1/50	49	

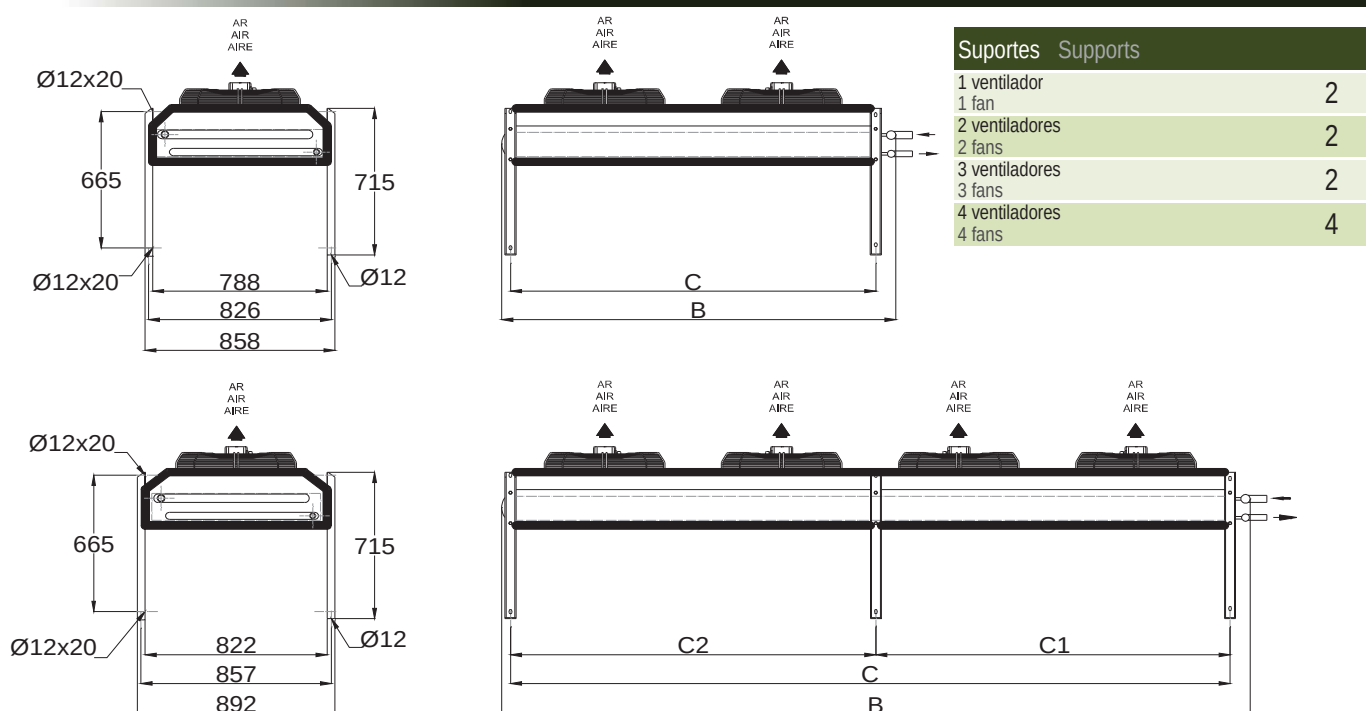
(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
		Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
	EUR	EUR			
ACH/E 150/18.9S	•	•	S	-	-
ACH/E 150/24.4S	•	•	S	-	-
ACH/E 150/27.4S	•	•	S	-	-
ACH/E 250/35.5S	•	•	S	-	-
ACH/E 250/47.4S	•	•	S	-	-
ACH/E 250/54.8S	•	•	S	-	-
ACH/E 350/57.0S	•	•	S	-	-
ACH/E 350/71.0S	•	•	S	-	-
ACH/E 350/82.4S	•	•	S	-	-
ACH/E 450/98.5S	•	•	S	-	-
ACH/E 450/110S	•	•	S	-	-

S Standard SP Sob pedido
S Standard SP Under request

	Ligações standard Standard connections		Dimensões Dimensions				Peso em vazio Net weight Kg	Volume embarque Shipment volume dm ³	Modelo Type
	Entrada Inlet in	Saída Outlet	B	C	C1	C2			
	4-4 PÓLOS 4-4 POLES								ACH/E
	7/8	3/4	980	850	-	-	71	0.64	ACH/E 150/18.9S
	1 1/8	7/8	980	850	-	-	79	0.64	ACH/E 150/24.4S
	1 1/8	7/8	980	850	-	-	86	0.64	ACH/E 150/27.4S
	1 3/8	1 1/8	1790	1650	-	-	118	1.12	ACH/E 250/35.5S
	1 3/8	1 1/8	1790	1650	-	-	132	1.12	ACH/E 250/47.4S
	1 3/8	1 1/8	1790	1650	-	-	145	1.12	ACH/E 250/54.8S
	1 3/8	1 1/8	2605	2450	-	-	165	1.61	ACH/E 350/57.0S
	1 5/8	1 3/8	2605	2450	-	-	186	1.61	ACH/E 350/71.0S
	1 5/8	1 3/8	2605	2450	-	-	206	1.61	ACH/E 350/82.4S
	1 5/8	1 3/8	3450	3250	1600	1650	299	2.40	ACH/E 450/98.5S
	1 5/8	1 3/8	3450	3250	1600	1650	325	2.40	ACH/E 450/110S

Desenhos Drawings



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices

ACH

Condensadores Condensers

Espaçamento Fin Spacing

Ø Ventiladores Fan Ø

2,1 mm

500 mm



Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V/F/Hz	dB(A)	
ACH/M				6-6 PÓLOS 6-6 POLES								
ACH/M 150/18.9T	14.60	36.40	3.50	1	500	5000	930	270	0.69	Δ 400/3/50	34	
ACH/M 150/18.9Y	13.55	36.40	3.50	1	500	4450	800	190	0.40	Y 400/3/50	31	
ACH/M 150/24.4T	18.06	54.70	5.40	1	500	4750	930	270	0.69	Δ 400/3/50	34	
ACH/M 150/24.4Y	16.49	54.70	5.40	1	500	4200	800	190	0.40	Y 400/3/50	31	
ACH/M 150/27.4T	19.85	73.10	7.70	1	500	4550	930	270	0.69	Δ 400/3/50	34	
ACH/M 150/27.4Y	17.96	73.10	7.70	1	500	4050	800	190	0.40	Y 400/3/50	31	
ACH/M 250/35.5T	27.51	72.80	6.90	2	500	10000	930	540	1.38	Δ 400/3/50	37	
ACH/M 250/35.5Y	25.62	72.80	6.90	2	500	8900	800	380	0.80	Y 400/3/50	34	
ACH/M 250/47.4T	35.49	109.60	11.50	2	500	9500	930	540	1.38	Δ 400/3/50	37	
ACH/M 250/47.4Y	32.45	109.60	11.50	2	500	8400	800	380	0.80	Y 400/3/50	34	
ACH/M 250/54.8T	39.69	146.10	15.40	2	500	9100	930	540	1.38	Δ 400/3/50	37	
ACH/M 250/54.8Y	35.91	146.10	15.40	2	500	8100	800	380	0.80	Y 400/3/50	34	
ACH/M 350/57.0T	44.21	109.60	11.50	3	500	15000	930	810	2.07	Δ 400/3/50	39	
ACH/M 350/57.0Y	40.95	109.60	11.50	3	500	13350	800	570	1.20	Y 400/3/50	36	
ACH/M 350/71.0T	53.34	164.40	17.30	3	500	14250	930	810	2.07	Δ 400/3/50	39	
ACH/M 350/71.0Y	48.62	164.40	17.30	3	500	12600	800	570	1.20	Y 400/3/50	36	
ACH/M 350/82.4T	59.43	219.20	23.00	3	500	13650	930	810	2.07	Δ 400/3/50	39	
ACH/M 350/82.4Y	53.87	219.20	23.00	3	500	12150	800	570	1.20	Y 400/3/50	36	
ACH/M 450/98.5T	72.98	219.20	23.00	4	500	19000	930	1080	2.76	Δ 400/3/50	40	
ACH/M 450/98.5Y	66.36	219.20	23.00	4	500	16800	800	760	1.60	Y 400/3/50	37	
ACH/M 450/110T	79.38	292.20	30.70	4	500	18200	930	1080	2.76	Δ 400/3/50	40	
ACH/M 450/110Y	71.93	292.20	30.70	4	500	16200	800	760	1.60	Y 400/3/50	37	

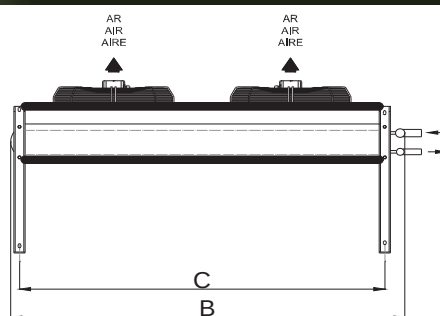
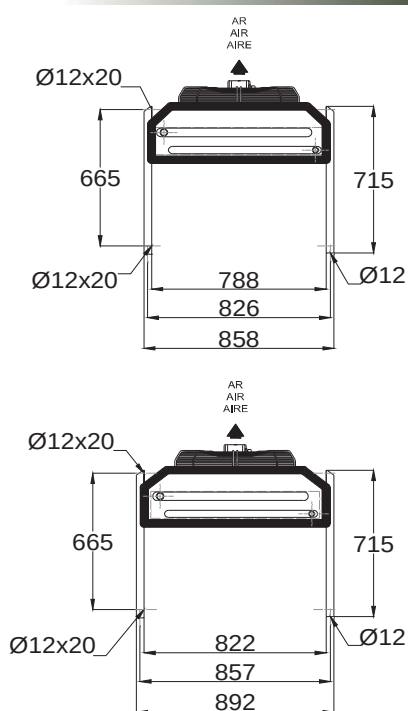
(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
		Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
	EUR	EUR			
ACH/M 150/18.9T	•	•	S	-	-
ACH/M 150/18.9Y	•	•	S	-	-
ACH/M 150/24.4T	•	•	S	-	-
ACH/M 150/24.4Y	•	•	S	-	-
ACH/M 150/27.4T	•	•	S	-	-
ACH/M 150/27.4Y	•	•	S	-	-
ACH/M 250/35.5T	•	•	S	-	-
ACH/M 250/35.5Y	•	•	S	-	-
ACH/M 250/47.4T	•	•	S	-	-
ACH/M 250/47.4Y	•	•	S	-	-
ACH/M 250/54.8T	•	•	S	-	-
ACH/M 250/54.8Y	•	•	S	-	-
ACH/M 350/57.0T	•	•	S	-	-
ACH/M 350/57.0Y	•	•	S	-	-
ACH/M 350/71.0T	•	•	S	-	-
ACH/M 350/71.0Y	•	•	S	-	-
ACH/M 350/82.4T	•	•	S	-	-
ACH/M 350/82.4Y	•	•	S	-	-
ACH/M 450/98.5T	•	•	S	-	-
ACH/M 450/98.5Y	•	•	S	-	-
ACH/M 450/110T	•	•	S	-	-
ACH/M 450/110Y	•	•	S	-	-

S Standard
S StandardSP Sob pedido
SP Under request

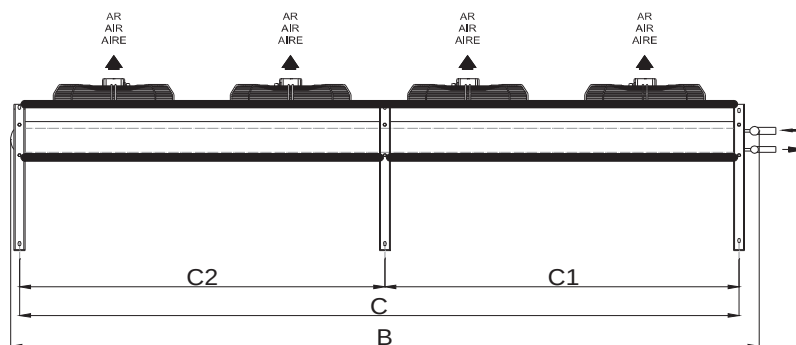
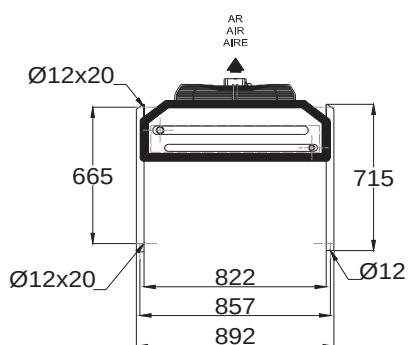
	Ligações standard Standard connections		Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type	
	Entrada Inlet	Saída Outlet								
	in		B	C	C1	C2	Kg	dm ³		
6-6 PÓLOS 6-6 POLES										
	7/8	3/4	980	850	-	-	71	0.64	ACH/M	150/18.9T
	7/8	3/4	980	850	-	-	71	0.64	ACH/M	150/18.9Y
	1 1/8	7/8	980	850	-	-	79	0.64	ACH/M	150/24.4T
	1 1/8	7/8	980	850	-	-	79	0.64	ACH/M	150/24.4Y
	1 1/8	7/8	980	850	-	-	86	0.64	ACH/M	150/27.4T
	1 1/8	7/8	980	850	-	-	86	0.64	ACH/M	150/27.4Y
	1 3/8	1 1/8	1790	1650	-	-	118	1.12	ACH/M	250/35.5T
	1 3/8	1 1/8	1790	1650	-	-	118	1.12	ACH/M	250/35.5Y
	1 3/8	1 1/8	1790	1650	-	-	132	1.12	ACH/M	250/47.4T
	1 3/8	1 1/8	1790	1650	-	-	132	1.12	ACH/M	250/47.4Y
	1 3/8	1 1/8	1790	1650	-	-	145	1.12	ACH/M	250/54.8T
	1 3/8	1 1/8	1790	1650	-	-	145	1.12	ACH/M	250/54.8Y
	1 3/8	1 1/8	2605	2450	-	-	165	1.61	ACH/M	350/57.0T
	1 3/8	1 1/8	2605	2450	-	-	165	1.61	ACH/M	350/57.0Y
	1 5/8	1 3/8	2605	2450	-	-	186	1.61	ACH/M	350/71.0T
	1 5/8	1 3/8	2605	2450	-	-	186	1.61	ACH/M	350/71.0Y
	1 5/8	1 3/8	2605	2450	-	-	206	1.61	ACH/M	350/82.4T
	1 5/8	1 3/8	2605	2450	-	-	206	1.61	ACH/M	350/82.4Y
	1 5/8	1 3/8	3450	3250	1600	1650	299	2.40	ACH/M	450/98.5T
	1 5/8	1 3/8	3450	3250	1600	1650	299	2.40	ACH/M	450/98.5Y
	1 5/8	1 3/8	3450	3250	1600	1650	325	2.40	ACH/M	450/110T
	1 5/8	1 3/8	3450	3250	1600	1650	325	2.40	ACH/M	450/110Y

Desenhos Drawings



Suportes Supports

1 ventilador 1 fan	2
2 ventiladores 2 fans	2
3 ventiladores 3 fans	2
4 ventiladores 4 fans	4



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices

ACH

Condensadores Condensers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

2,1 mm
500 mm



Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V/F/Hz	dB(A)	
ACH/M				6-6 PÓLOS 6-6 POLES								
ACH/M 150/18.9S	14.60	36.40	3.50	1	500	5000	915	270	1.18	230/1/50	35	
ACH/M 150/24.4S	18.06	54.70	5.40	1	500	4750	915	270	1.18	230/1/50	35	
ACH/M 150/27.4S	19.85	73.10	7.70	1	500	4550	915	270	1.18	230/1/50	35	
ACH/M 250/35.5S	27.51	72.80	6.90	2	500	10000	915	540	2.36	230/1/50	38	
ACH/M 250/47.4S	35.49	109.60	11.50	2	500	9500	915	540	2.36	230/1/50	38	
ACH/M 250/54.8S	39.69	146.10	15.40	2	500	9100	915	540	2.36	230/1/50	38	
ACH/M 350/57.0S	44.21	109.60	11.50	3	500	15000	915	810	3.54	230/1/50	40	
ACH/M 350/71.0S	53.34	164.40	17.30	3	500	14250	915	810	3.54	230/1/50	40	
ACH/M 350/82.4S	59.43	219.20	23.00	3	500	13650	915	810	3.54	230/1/50	40	
ACH/M 450/98.5S	72.98	219.20	23.00	4	500	19000	915	1080	4.72	230/1/50	41	
ACH/M 450/110S	79.38	292.20	30.70	4	500	18200	915	1080	4.72	230/1/50	41	

(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

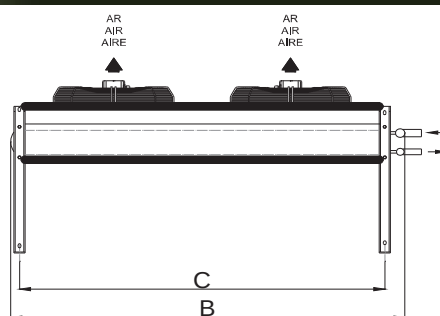
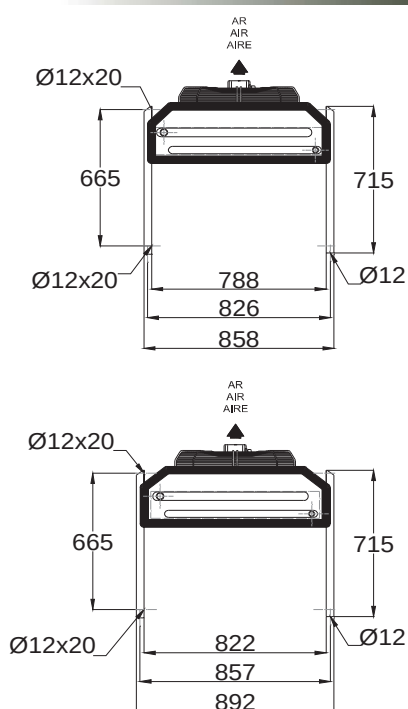
Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
	EUR	Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
ACH/M 150/18.9S	•	•	S	375.0	127.7
ACH/M 150/24.4S	•	•	S	375.0	127.7
ACH/M 150/27.4S	•	•	S	375.0	127.7
ACH/M 250/35.5S	•	•	S	750.0	242.1
ACH/M 250/47.4S	•	•	S	750.0	242.1
ACH/M 250/54.8S	•	•	S	750.0	242.1
ACH/M 350/57.0S	•	•	S	1125.0	366.7
ACH/M 350/71.0S	•	•	S	1125.0	366.7
ACH/M 350/82.4S	•	•	S	1125.0	366.7
ACH/M 450/98.5S	•	•	S	1500.0	489.3
ACH/M 450/110S	•	•	S	1500.0	489.3

S Standard
S Standard

SP Sob pedido
SP Under request

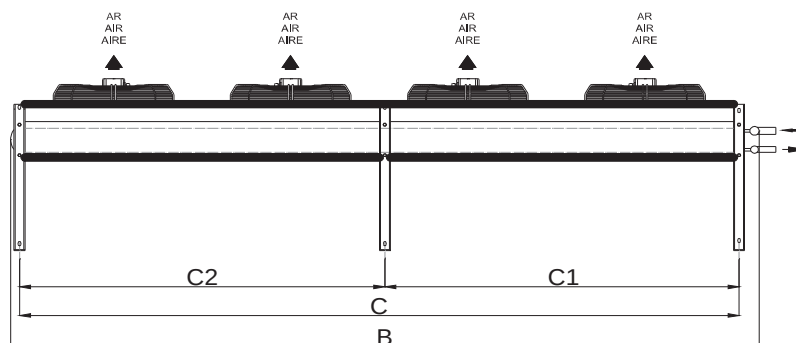
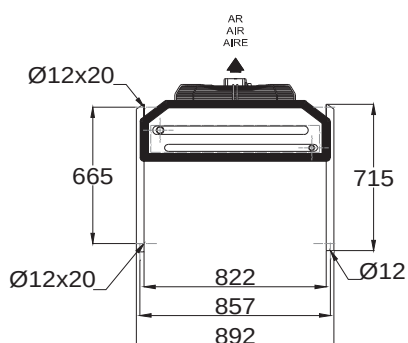
	Ligações standard Standard connections		Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type	
	Entrada Inlet	Saída Outlet								
	in		mm							Kg
6-6 PÓLOS 6-6 POLESACH/M										
	7/8	3/4	980	850	-	-	71	0.64	ACH/M	150/18.9S
	1 1/8	7/8	980	850	-	-	79	0.64	ACH/M	150/24.4S
	1 1/8	7/8	980	850	-	-	86	0.64	ACH/M	150/27.4S
	1 3/8	1 1/8	1790	1650	-	-	118	1.12	ACH/M	250/35.5S
	1 3/8	1 1/8	1790	1650	-	-	132	1.12	ACH/M	250/47.4S
	1 3/8	1 1/8	1790	1650	-	-	145	1.12	ACH/M	250/54.8S
	1 3/8	1 1/8	2605	2450	-	-	165	1.61	ACH/M	350/57.0S
	1 5/8	1 3/8	2605	2450	-	-	186	1.61	ACH/M	350/71.0S
	1 5/8	1 3/8	2605	2450	-	-	206	1.61	ACH/M	350/82.4S
	1 5/8	1 3/8	3450	3250	1600	1650	299	2.40	ACH/M	450/98.5S
	1 5/8	1 3/8	3450	3250	1600	1650	325	2.40	ACH/M	450/110S

Desenhos Drawings



Suportes Supports

1 ventilador	2
1 fan	2
2 ventiladores	2
2 fans	2
3 ventiladores	2
3 fans	2
4 ventiladores	4
4 fans	4



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices

ACH

Condensadores Condensers

Espaçamento Fin Spacing

Ø Ventiladores Fan Ø

2,1 mm

500 mm



Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V/F/Hz	dB(A)	
ACH/R				8-8 PÓLOS 8-8 POLES								
ACH/R 150/18.9T	11.55	36.40	3.50	1	500	3600	680	150	0.40	Δ 400/3/50	27	
ACH/R 150/18.9Y	10.40	36.40	3.50	1	500	3150	560	90	0.18	Y 400/3/50	24	
ACH/R 150/24.4T	13.86	54.70	5.40	1	500	3400	680	150	0.40	Δ 400/3/50	27	
ACH/R 150/24.4Y	12.50	54.70	5.40	1	500	3000	560	90	0.18	Y 400/3/50	24	
ACH/R 150/27.4T	14.81	73.10	7.70	1	500	3250	680	150	0.40	Δ 400/3/50	27	
ACH/R 150/27.4Y	13.13	73.10	7.70	1	500	2800	560	90	0.18	Y 400/3/50	24	
ACH/R 250/35.5T	21.84	72.80	6.90	2	500	7200	680	300	0.80	Δ 400/3/50	30	
ACH/R 250/35.5Y	19.85	72.80	6.90	2	500	6300	560	180	0.36	Y 400/3/50	27	
ACH/R 250/47.4T	27.30	109.60	11.50	2	500	6800	680	300	0.80	Δ 400/3/50	30	
ACH/R 250/47.4Y	24.78	109.60	11.50	2	500	6000	560	180	0.36	Y 400/3/50	27	
ACH/R 250/54.8T	29.72	146.10	15.40	2	500	6500	680	300	0.80	Δ 400/3/50	30	
ACH/R 250/54.8Y	26.25	146.10	15.40	2	500	5600	560	180	0.36	Y 400/3/50	27	
ACH/R 350/57.0T	34.86	109.60	11.50	3	500	10800	680	450	1.20	Δ 400/3/50	32	
ACH/R 350/57.0Y	31.61	109.60	11.50	3	500	9450	560	270	0.54	Y 400/3/50	29	
ACH/R 350/71.0T	40.95	164.40	17.30	3	500	10200	680	450	1.20	Δ 400/3/50	32	
ACH/R 350/71.0Y	37.17	164.40	17.30	3	500	9000	560	270	0.54	Y 400/3/50	29	
ACH/R 350/82.4T	44.52	219.20	23.00	3	500	9750	680	450	1.20	Δ 400/3/50	32	
ACH/R 350/82.4Y	39.27	219.20	23.00	3	500	8400	560	270	0.54	Y 400/3/50	29	
ACH/R 450/98.5T	55.65	219.20	23.00	4	500	13600	680	600	1.60	Δ 400/3/50	33	
ACH/R 450/98.5Y	50.40	219.20	23.00	4	500	12000	560	360	0.72	Y 400/3/50	30	
ACH/R 450/110T	59.43	292.20	30.70	4	500	13000	680	600	1.60	Δ 400/3/50	33	
ACH/R 450/110Y	52.50	292.20	30.70	4	500	11200	560	360	0.72	Y 400/3/50	30	

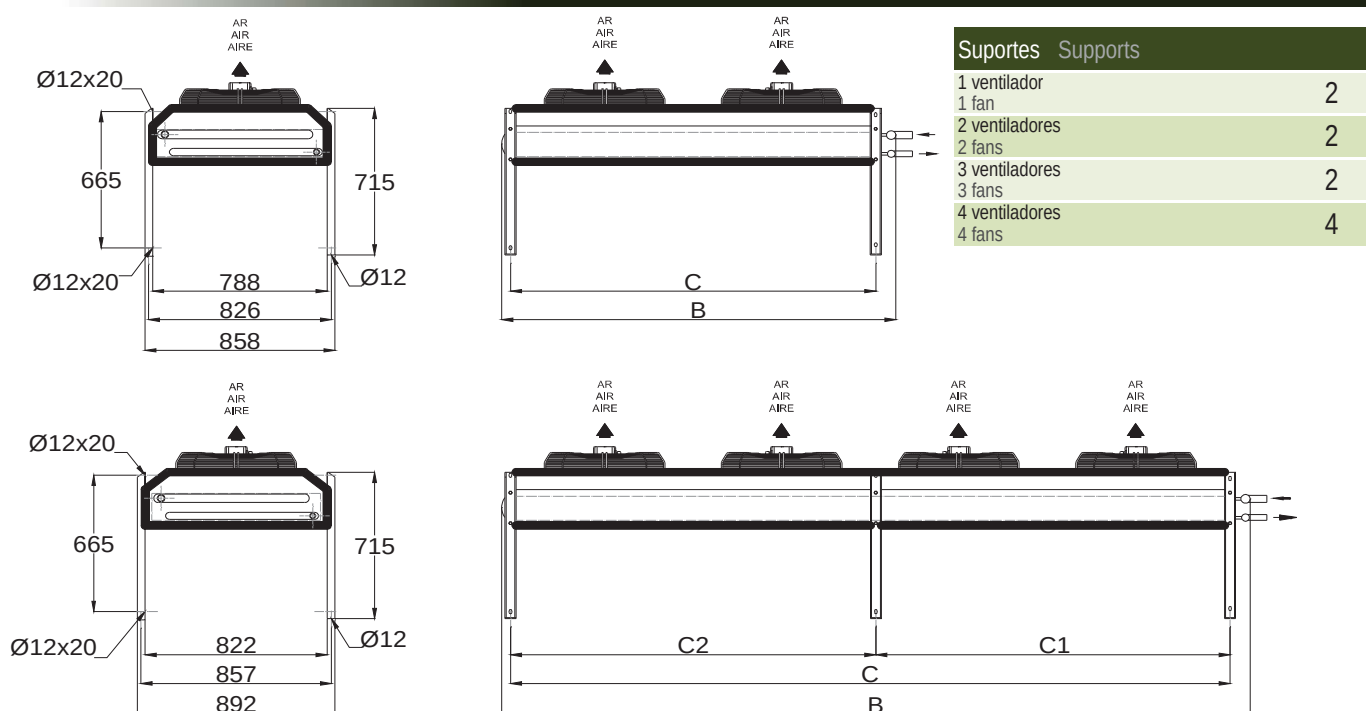
(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
		Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
	EUR	EUR			
ACH/R 150/18.9T	•	•	S	-	-
ACH/R 150/18.9Y	•	•	S	-	-
ACH/R 150/24.4T	•	•	S	-	-
ACH/R 150/24.4Y	•	•	S	-	-
ACH/R 150/27.4T	•	•	S	-	-
ACH/R 150/27.4Y	•	•	S	-	-
ACH/R 250/35.5T	•	•	S	-	-
ACH/R 250/35.5Y	•	•	S	-	-
ACH/R 250/47.4T	•	•	S	-	-
ACH/R 250/47.4Y	•	•	S	-	-
ACH/R 250/54.8T	•	•	S	-	-
ACH/R 250/54.8Y	•	•	S	-	-
ACH/R 350/57.0T	•	•	S	-	-
ACH/R 350/57.0Y	•	•	S	-	-
ACH/R 350/71.0T	•	•	S	-	-
ACH/R 350/71.0Y	•	•	S	-	-
ACH/R 350/82.4T	•	•	S	-	-
ACH/R 350/82.4Y	•	•	S	-	-
ACH/R 450/98.5T	•	•	S	-	-
ACH/R 450/98.5Y	•	•	S	-	-
ACH/R 450/110T	•	•	S	-	-
ACH/R 450/110Y	•	•	S	-	-

S Standard
S StandardSP Sob pedido
SP Under request

	Ligações standard Standard connections		Dimensões Dimensions				Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type	
	Entrada Inlet	Saída Outlet								
	in		B	C	C1	C2	Kg	dm ³		
8-8 PÓLOS 8-8 POLES										
	7/8	3/4	980	850	-	-	71	0.64	ACH/R	150/18.9T
	7/8	3/4	980	850	-	-	71	0.64	ACH/R	150/18.9Y
	1 1/8	7/8	980	850	-	-	79	0.64	ACH/R	150/24.4T
	1 1/8	7/8	980	850	-	-	79	0.64	ACH/R	150/24.4Y
	1 1/8	7/8	980	850	-	-	86	0.64	ACH/R	150/27.4T
	1 1/8	7/8	980	850	-	-	86	0.64	ACH/R	150/27.4Y
	1 3/8	1 1/8	1790	1650	-	-	118	1.12	ACH/R	250/35.5T
	1 3/8	1 1/8	1790	1650	-	-	118	1.12	ACH/R	250/35.5Y
	1 3/8	1 1/8	1790	1650	-	-	132	1.12	ACH/R	250/47.4T
	1 3/8	1 1/8	1790	1650	-	-	132	1.12	ACH/R	250/47.4Y
	1 3/8	1 1/8	1790	1650	-	-	145	1.12	ACH/R	250/54.8T
	1 3/8	1 1/8	1790	1650	-	-	145	1.12	ACH/R	250/54.8Y
	1 3/8	1 1/8	2605	2450	-	-	165	1.61	ACH/R	350/57.0T
	1 3/8	1 1/8	2605	2450	-	-	165	1.61	ACH/R	350/57.0Y
	1 5/8	1 3/8	2605	2450	-	-	186	1.61	ACH/R	350/71.0T
	1 5/8	1 3/8	2605	2450	-	-	186	1.61	ACH/R	350/71.0Y
	1 5/8	1 3/8	2605	2450	-	-	206	1.61	ACH/R	350/82.4T
	1 5/8	1 3/8	2605	2450	-	-	206	1.61	ACH/R	350/82.4Y
	1 5/8	1 3/8	3450	3250	1600	1650	299	2.40	ACH/R	450/98.5T
	1 5/8	1 3/8	3450	3250	1600	1650	299	2.40	ACH/R	450/98.5Y
	1 5/8	1 3/8	3450	3250	1600	1650	325	2.40	ACH/R	450/110T
	1 5/8	1 3/8	3450	3250	1600	1650	325	2.40	ACH/R	450/110Y

Desenhos Drawings



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices

ACH

Condensadores Condensers

Espaçamento Fin Spacing

Ø Ventiladores Fan Ø

2,1 mm

500 mm



Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V/F/Hz	dB(A)	
ACH/R				8-8 PÓLOS 8-8 POLES								
ACH/R 150/18.9S	11.55	36.40	3.50	1	500	3600	665	130	0.59	230/1/50	28	
ACH/R 150/24.4S	13.86	54.70	5.40	1	500	3400	665	130	0.59	230/1/50	28	
ACH/R 150/27.4S	14.81	73.10	7.70	1	500	3250	665	130	0.59	230/1/50	28	
ACH/R 250/35.5S	21.84	72.80	6.90	2	500	7200	665	260	1.18	230/1/50	31	
ACH/R 250/47.4S	27.30	109.60	11.50	2	500	6800	665	260	1.18	230/1/50	31	
ACH/R 250/54.8S	29.72	146.10	15.40	2	500	6500	665	260	1.18	230/1/50	31	
ACH/R 350/57.0S	34.86	109.60	11.50	3	500	10800	665	390	1.77	230/1/50	33	
ACH/R 350/71.0S	40.95	164.40	17.30	3	500	10200	665	390	1.77	230/1/50	33	
ACH/R 350/82.4S	44.52	219.20	23.00	3	500	9750	665	390	1.77	230/1/50	33	
ACH/R 450/98.5S	55.65	219.20	23.00	4	500	13600	665	520	2.36	230/1/50	34	
ACH/R 450/110S	59.43	292.20	30.70	4	500	13000	665	520	2.36	230/1/50	34	

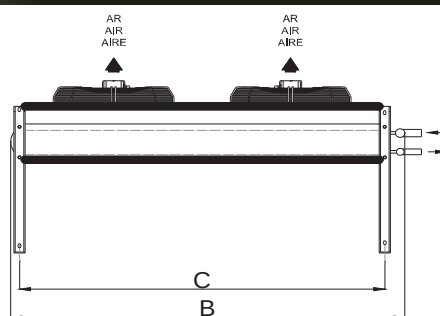
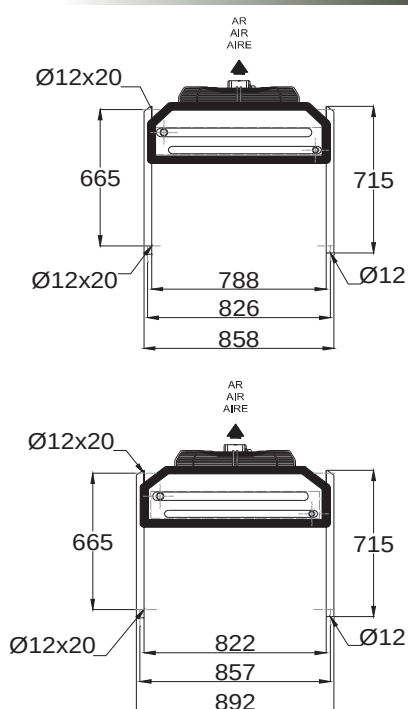
(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
	EUR	Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
ACH/R 150/18.9S	•	•	S	375.0	127.7
ACH/R 150/24.4S	•	•	S	375.0	127.7
ACH/R 150/27.4S	•	•	S	375.0	127.7
ACH/R 250/35.5S	•	•	S	750.0	242.1
ACH/R 250/47.4S	•	•	S	750.0	242.1
ACH/R 250/54.8S	•	•	S	750.0	242.1
ACH/R 350/57.0S	•	•	S	1125.0	366.7
ACH/R 350/71.0S	•	•	S	1125.0	366.7
ACH/R 350/82.4S	•	•	S	1125.0	366.7
ACH/R 450/98.5S	•	•	S	1500.0	489.3
ACH/R 450/110S	•	•	S	1500.0	489.3

S Standard
S StandardSP Sob pedido
SP Under request

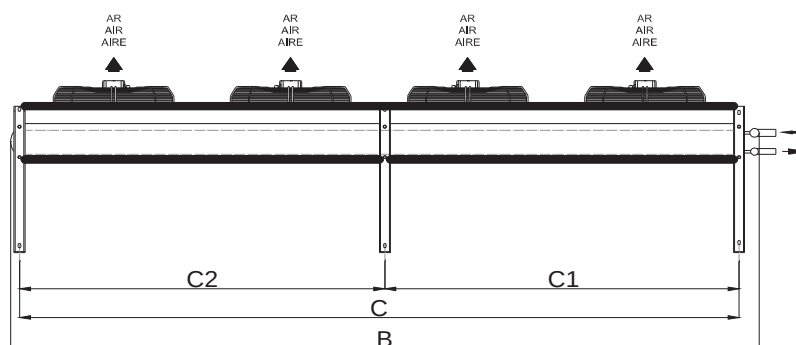
	Ligações standard Standard connections		Dimensões Dimensions				Peso em vazio Net weight Kg	Volume embarque Shipment volume dm ³	Modelo Type	
	Entrada Inlet in	Saída Outlet	B	C	C1	C2				
	8-8 PÓLOS 8-8 POLES								ACH/R	
	7/8	3/4	980	850	-	-	71	0.64	ACH/R	150/18.9S
	1 1/8	7/8	980	850	-	-	79	0.64	ACH/R	150/24.4S
	1 1/8	7/8	980	850	-	-	86	0.64	ACH/R	150/27.4S
	1 3/8	1 1/8	1790	1650	-	-	118	1.12	ACH/R	250/35.5S
	1 3/8	1 1/8	1790	1650	-	-	132	1.12	ACH/R	250/47.4S
	1 3/8	1 1/8	1790	1650	-	-	145	1.12	ACH/R	250/54.8S
	1 3/8	1 1/8	2605	2450	-	-	165	1.61	ACH/R	350/57.0S
	1 5/8	1 3/8	2605	2450	-	-	186	1.61	ACH/R	350/71.0S
	1 5/8	1 3/8	2605	2450	-	-	206	1.61	ACH/R	350/82.4S
	1 5/8	1 3/8	3450	3250	1600	1650	299	2.40	ACH/R	450/98.5S
	1 5/8	1 3/8	3450	3250	1600	1650	325	2.40	ACH/R	450/110S

Desenhos Drawings



Suportes Supports

1 ventilador 1 fan	2
2 ventiladores 2 fans	2
3 ventiladores 3 fans	2
4 ventiladores 4 fans	4



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices

ACI

Condensadores Condensers

Espaçamento Fin Spacing

Ø Ventiladores Fan Ø

2,1 mm

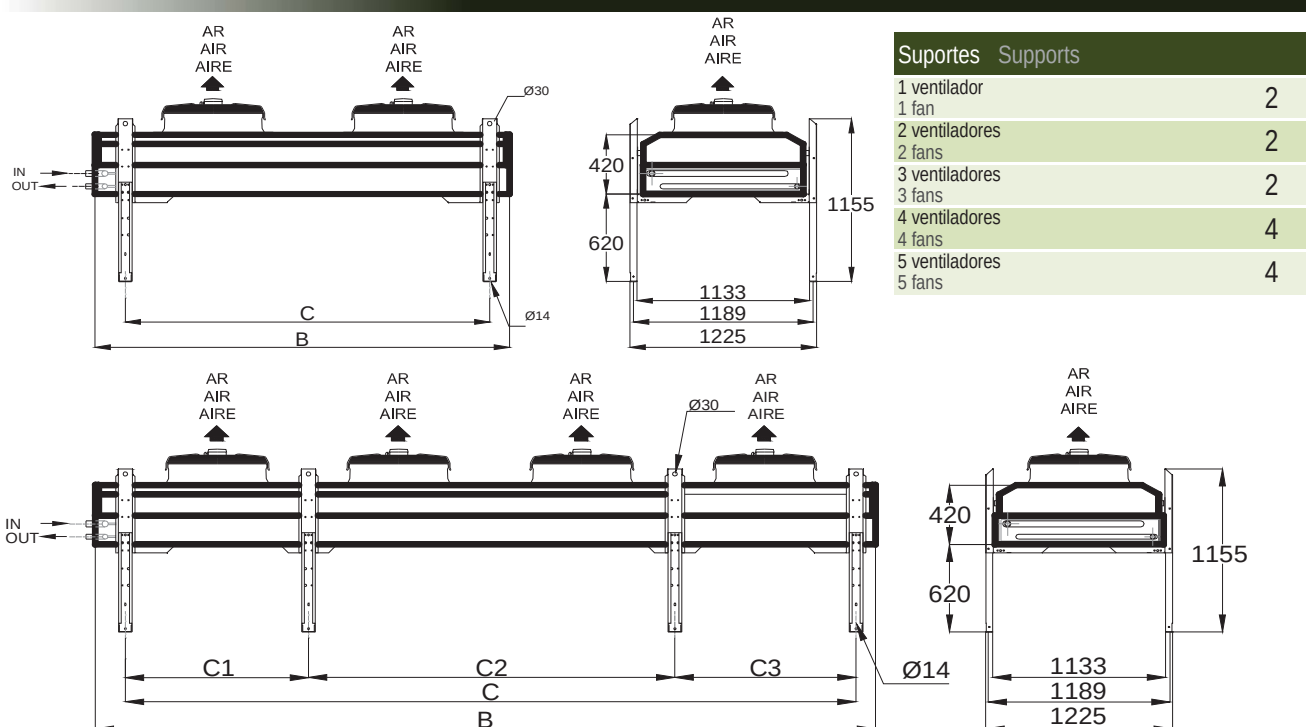
630 mm



	Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
					Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
		kW	m²	dm³		mm	m³/h	rpm	W	A	V/F/Hz	dB(A)	
ACH	ACI/E	4-4 PÓLOS 4-4 POLES											
	ACI/E 163/38.6T	38.64	76.71	8.10	1	630	15000	1310	1970	3.40	Δ 400/3/50	47	
	ACI/E 163/38.6Y	34.44	76.71	8.10	1	630	12100	1000	1290	2.10	Y 400/3/50	41	
	ACI/E 163/46.6T	46.62	114.90	11.50	1	630	14500	1310	1970	3.40	Δ 400/3/50	47	
	ACI/E 163/46.6Y	39.90	114.90	11.50	1	630	11400	1000	1290	2.10	Y 400/3/50	41	
	ACI/E 163/54.5T	54.50	153.40	16.10	1	630	14000	1310	1970	3.40	Δ 400/3/50	47	
	ACI/E 163/54.5Y	45.47	153.40	16.10	1	630	11000	1000	1290	2.10	Y 400/3/50	41	
	ACI/E 263/77.5T	77.49	153.41	16.10	2	630	30000	1310	3940	6.80	Δ 400/3/50	50	
	ACI/E 263/77.5Y	67.83	153.41	16.10	2	630	24200	1000	2580	4.20	Y 400/3/50	44	
	ACI/E 263/96.9T	96.92	230.10	24.20	2	630	29000	1310	3940	6.80	Δ 400/3/50	50	
	ACI/E 263/96.9Y	82.01	230.10	24.20	2	630	22800	1000	1290	2.10	Y 400/3/50	44	
	ACI/E 263/112T	112.04	306.82	32.30	2	630	28000	1310	3940	6.80	Δ 400/3/50	50	
	ACI/E 263/112Y	92.72	306.82	32.30	2	630	22000	1000	2580	4.20	Y 400/3/50	44	
	ACI/E 363/116T	115.61	230.12	24.20	3	630	45000	1310	5910	10.20	Δ 400/3/50	52	
	ACI/E 363/116Y	97.86	230.12	24.20	3	630	36300	1000	3870	6.30	Y 400/3/50	46	
	ACI/E 363/153T	153.09	345.20	36.30	3	630	43500	1310	5910	10.20	Δ 400/3/50	52	
	ACI/E 363/153Y	128.63	345.20	36.30	3	630	34200	1000	3870	6.30	Y 400/3/50	46	
	ACI/E 363/171T	170.52	460.20	48.40	3	630	42000	1310	5910	10.20	Δ 400/3/50	52	
	ACI/E 363/171Y	140.91	460.20	48.40	3	630	33000	1000	3870	6.30	Y 400/3/50	46	
	ACI/E 363/182T	181.86	575.30	60.50	3	630	41100	1310	5910	10.20	Δ 400/3/50	52	
	ACI/E 363/182Y	148.16	575.30	60.50	3	630	32100	1000	3870	6.30	Y 400/3/50	46	
	ACI/E 463/194T	193.94	460.20	48.40	4	630	58000	1310	7880	13.60	Δ 400/3/50	53	
	ACI/E 463/194Y	164.12	460.20	48.40	4	630	45600	1000	5160	8.40	Y 400/3/50	47	
	ACI/E 463/218T	218.19	613.60	64.50	4	630	56000	1310	7880	13.60	Δ 400/3/50	53	
	ACI/E 463/218Y	182.18	613.60	64.50	4	630	44000	1000	5160	8.40	Y 400/3/50	47	
	ACI/E 563/250T	249.69	575.30	60.50	5	630	72500	1310	9850	17.00	Δ 400/3/50	54	
	ACI/E 563/250Y	210.11	575.30	60.50	5	630	57000	1000	6450	10.50	Y 400/3/50	48	
	ACI/E 563/279T	278.99	767.10	80.60	5	630	70000	1310	9850	17.00	Δ 400/3/50	54	
	ACI/E 563/279Y	231.53	767.10	80.60	5	630	55000	1000	6450	10.50	Y 400/3/50	48	
ACPD	(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections												
	Modelo Type	Preço Price	Opções Options										
			AR		BL		/EC						
			Alhetas revestidas Coated fins		Pintado Painted		Motores EC EC motors		Cablagem EC EC wiring				
		EUR	EUR										
	ACI/E 163/38.6T	•	•		S		-		-				
	ACI/E 163/38.6Y	•	•		S		-		-				
	ACI/E 163/46.6T	•	•		S		-		-				
	ACI/E 163/46.6Y	•	•		S		-		-				
	ACI/E 163/54.5T	•	•		S		-		-				
	ACI/E 163/54.5Y	•	•		S		-		-				
	ACI/E 263/77.5T	•	•		S		-		-				
	ACI/E 263/77.5Y	•	•		S		-		-				
	ACI/E 263/96.9T	•	•		S		-		-				
	ACI/E 263/96.9Y	•	•		S		-		-				
	ACI/E 263/112T	•	•		S		-		-				
	ACI/E 263/112Y	•	•		S		-		-				
	ACI/E 363/116T	•	•		S		-		-				
	ACI/E 363/116Y	•	•		S		-		-				
	ACI/E 363/153T	•	•		S		-		-				
	ACI/E 363/153Y	•	•		S		-		-				
	ACI/E 363/171T	•	•		S		-		-				
	ACI/E 363/171Y	•	•		S		-		-				
	ACI/E 363/182T	•	•		S		-		-				
	ACI/E 363/182Y	•	•		S		-		-				
	ACI/E 463/194T	•	•		S		-		-				
	ACI/E 463/194Y	•	•		S		-		-				
	ACI/E 463/218T	•	•		S		-		-				
	ACI/E 463/218Y	•	•		S		-		-				
	ACI/E 563/250T	•	•		S		-		-				
	ACI/E 563/250Y	•	•		S		-		-				
	ACI/E 563/279T	•	•		S		-		-				
	ACI/E 563/279Y	•	•		S		-		-				
							S	Standard		SP	Sob pedido		
							S	Standard		SP	Under request		

	Ligações standard connections		Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Entrada Inlet	Saída Outlet								
	in		B	C	C1	C2	C3			
	4-4 PÓLOS 4-4 POLES									
	1 3/8	1 1/8	1520	1193	-	-	-	172	1.65	ACI/E 163/38.6T
	1 3/8	1 1/8	1520	1193	-	-	-	172	1.65	ACI/E 163/38.6Y
	1 3/8	1 1/8	1520	1193	-	-	-	187	1.65	ACI/E 163/46.6T
	1 3/8	1 1/8	1520	1193	-	-	-	187	1.65	ACI/E 163/46.6Y
	1 3/8	1 1/8	1520	1193	-	-	-	201	1.65	ACI/E 163/54.5T
	1 3/8	1 1/8	1520	1193	-	-	-	201	1.65	ACI/E 163/54.5Y
	1 5/8	1 3/8	2720	2393	-	-	-	256	2.91	ACI/E 263/77.5T
	1 5/8	1 3/8	2720	2393	-	-	-	256	2.91	ACI/E 263/77.5Y
	1 5/8	1 3/8	2720	2393	-	-	-	283	2.91	ACI/E 263/96.9T
	1 5/8	1 3/8	2720	2393	-	-	-	283	2.91	ACI/E 263/96.9Y
	2 1/8	1 5/8	2720	2393	-	-	-	311	2.91	ACI/E 263/112T
	2 1/8	1 5/8	2720	2393	-	-	-	311	2.91	ACI/E 263/112Y
	2 1/8	1 5/8	3920	3593	-	-	-	404	4.18	ACI/E 363/116T
	2 1/8	1 5/8	3920	3593	-	-	-	404	4.18	ACI/E 363/116Y
	2 1/8	1 5/8	3920	3593	-	-	-	447	4.18	ACI/E 363/153T
	2 1/8	1 5/8	3920	3593	-	-	-	447	4.18	ACI/E 363/153Y
	2 1/8	1 5/8	3920	3593	-	-	-	488	4.18	ACI/E 363/171T
	2 1/8	1 5/8	3920	3593	-	-	-	488	4.18	ACI/E 363/171Y
	2 1/8	1 5/8	3920	3593	-	-	-	528	4.18	ACI/E 363/182T
	2 1/8	1 5/8	3920	3593	-	-	-	528	4.18	ACI/E 363/182Y
	2 5/8	2 1/8	5120	4793	1171	2400	1222	541	5.44	ACI/E 463/194T
	2 5/8	2 1/8	5120	4793	1171	2400	1222	541	5.44	ACI/E 463/194Y
	2 5/8	2 1/8	5120	4793	1171	2400	1222	595	5.44	ACI/E 463/218T
	2 5/8	2 1/8	5120	4793	1171	2400	1222	595	5.44	ACI/E 463/218Y
	2 5/8	2 1/8	6320	5993	1171	3600	1222	639	6.70	ACI/E 563/250T
	2 5/8	2 1/8	6320	5993	1171	3600	1222	639	6.70	ACI/E 563/250Y
	2 5/8	2 1/8	6320	5993	1171	3600	1222	705	6.70	ACI/E 563/279T
	2 5/8	2 1/8	6320	5993	1171	3600	1222	705	6.70	ACI/E 563/279Y

Desenhos Drawings



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices

ACI

Condensadores Condensers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

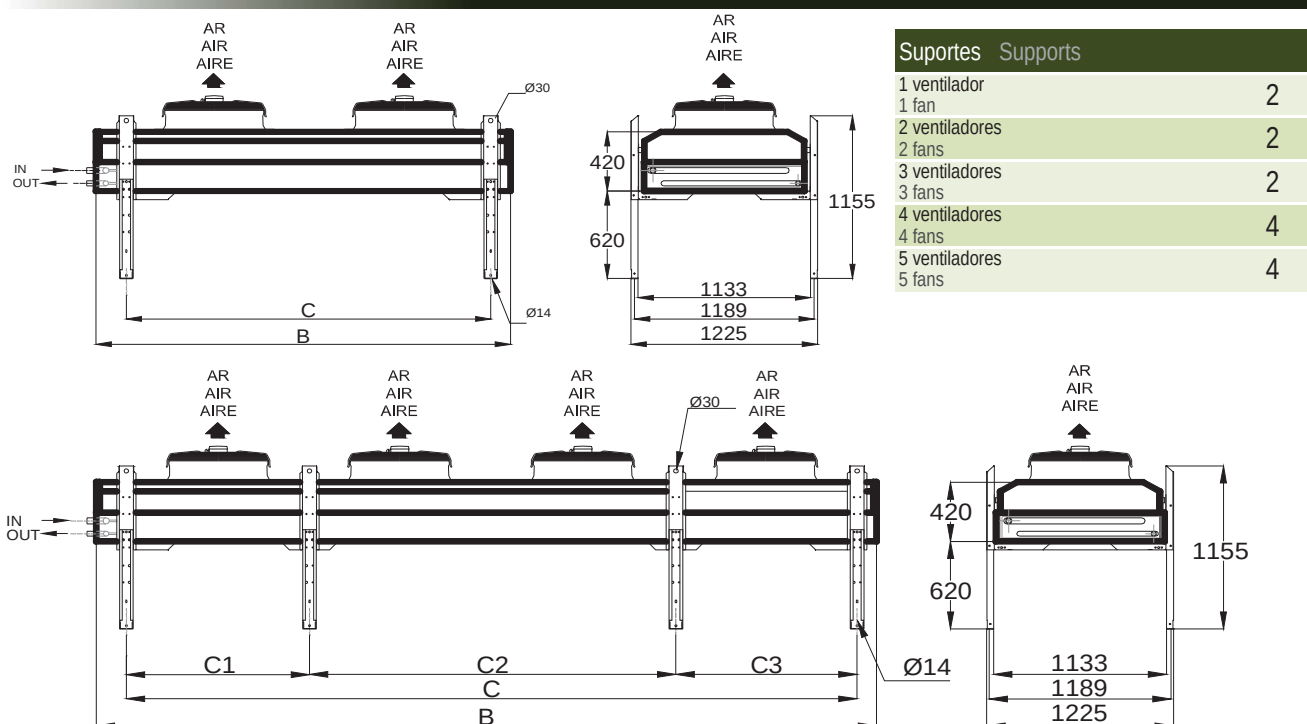
2,1 mm
630 mm



Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V / F / Hz	dB(A)	
ACI/M				6-6 PÓLOS 6-6 POLES								
ACI/M 163/38.6T	31.50	76.71	8.10	1	630	10800	850	740	1.38	Δ 400/3/50	37	
ACI/M 163/38.6Y	25.94	76.71	8.10	1	630	8200	620	440	0.76	Y 400/3/50	32	
ACI/M 163/46.6T	36.96	114.90	11.50	1	630	10200	850	740	1.38	Δ 400/3/50	37	
ACI/M 163/46.6Y	30.24	114.90	11.50	1	630	7800	620	440	0.76	Y 400/3/50	32	
ACI/M 163/54.5T	42.00	153.40	16.10	1	630	9900	850	740	1.38	Δ 400/3/50	37	
ACI/M 163/54.5Y	32.97	153.40	16.10	1	630	7400	620	440	0.76	Y 400/3/50	32	
ACI/M 263/77.5T	63.00	153.41	16.10	2	630	21600	850	1480	2.76	Δ 400/3/50	40	
ACI/M 263/77.5Y	51.98	153.41	16.10	2	630	16400	620	880	1.52	Y 400/3/50	35	
ACI/M 263/96.9T	75.81	230.10	24.20	2	630	20400	850	1480	2.76	Δ 400/3/50	40	
ACI/M 263/96.9Y	61.64	230.10	24.20	2	630	15600	620	880	1.52	Y 400/3/50	35	
ACI/M 263/112T	85.26	306.82	32.30	2	630	19800	850	1480	2.76	Δ 400/3/50	40	
ACI/M 263/112Y	66.57	306.82	32.30	2	630	14800	620	880	1.52	Y 400/3/50	35	
ACI/M 363/116T	91.25	230.12	24.20	3	630	32400	850	2220	4.14	Δ 400/3/50	42	
ACI/M 363/116Y	76.02	230.12	24.20	3	630	24600	620	1320	2.28	Y 400/3/50	37	
ACI/M 363/153T	118.34	345.20	36.30	3	630	30600	850	2220	4.14	Δ 400/3/50	42	
ACI/M 363/153Y	95.24	345.20	36.30	3	630	23400	620	1320	2.28	Y 400/3/50	37	
ACI/M 363/171T	129.57	460.20	48.40	3	630	29700	850	2220	4.14	Δ 400/3/50	42	
ACI/M 363/171Y	101.01	460.20	48.40	3	630	22200	620	1320	2.28	Y 400/3/50	37	
ACI/M 363/182T	135.35	575.30	60.50	3	630	28800	850	2220	4.14	Δ 400/3/50	42	
ACI/M 363/182Y	104.69	575.30	60.50	3	630	21600	620	1320	2.28	Y 400/3/50	37	
ACI/M 463/194T	151.83	460.20	48.40	4	630	40800	850	2960	5.52	Δ 400/3/50	43	
ACI/M 463/194Y	123.38	460.20	48.40	4	630	31200	620	1760	3.04	Y 400/3/50	38	
ACI/M 463/218T	168.11	613.60	64.50	4	630	39600	850	2960	5.52	Δ 400/3/50	43	
ACI/M 463/218Y	132.20	613.60	64.50	4	630	29600	620	1760	3.04	Y 400/3/50	38	
ACI/M 563/250T	193.73	575.30	60.50	5	630	51000	850	3700	6.90	Δ 400/3/50	44	
ACI/M 563/250Y	156.56	575.30	60.50	5	630	39000	620	2200	3.80	Y 400/3/50	39	
ACI/M 563/279T	213.36	767.10	80.60	5	630	49500	850	3700	6.90	Δ 400/3/50	44	
ACI/M 563/279Y	166.95	767.10	80.60	5	630	37000	620	2200	3.80	Y 400/3/50	39	
(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections												
Modelo Type	Preço Price	Opções Options										
		AR	BL	/EC								
		Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring							
EUR	EUR											
ACI/M 163/38.6T	•	•	S	843.0	139.1							
ACI/M 163/38.6Y	•	•	S	843.0	139.1							
ACI/M 163/46.6T	•	•	S	843.0	139.1							
ACI/M 163/46.6Y	•	•	S	843.0	139.1							
ACI/M 163/54.5T	•	•	S	843.0	139.1							
ACI/M 163/54.5Y	•	•	S	843.0	139.1							
ACI/M 263/77.5T	•	•	S	1686.0	254.4							
ACI/M 263/77.5Y	•	•	S	1686.0	254.4							
ACI/M 263/96.9T	•	•	S	1686.0	254.4							
ACI/M 263/96.9Y	•	•	S	1686.0	254.4							
ACI/M 263/112T	•	•	S	1686.0	254.4							
ACI/M 263/112Y	•	•	S	1686.0	254.4							
ACI/M 363/116T	•	•	S	2529.0	378.0							
ACI/M 363/116Y	•	•	S	2529.0	378.0							
ACI/M 363/153T	•	•	S	2529.0	378.0							
ACI/M 363/153Y	•	•	S	2529.0	378.0							
ACI/M 363/171T	•	•	S	2529.0	378.0							
ACI/M 363/171Y	•	•	S	2529.0	378.0							
ACI/M 363/182T	•	•	S	2529.0	378.0							
ACI/M 363/182Y	•	•	S	2529.0	378.0							
ACI/M 463/194T	•	•	S	3372.0	520.2							
ACI/M 463/194Y	•	•	S	3372.0	520.2							
ACI/M 463/218T	•	•	S	3372.0	520.2							
ACI/M 463/218Y	•	•	S	3372.0	520.2							
ACI/M 563/250T	•	•	S	4215.0	670.5							
ACI/M 563/250Y	•	•	S	4215.0	670.5							
ACI/M 563/279T	•	•	S	4215.0	670.5	S	Standard		SP	Sob pedido		
ACI/M 563/279Y	•	•	S	4215.0	670.5	S	Standard		SP	Under request		

	Ligações standard connections		Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type			
	Entrada Inlet	Saída Outlet											
												B	C
	in		mm					Kg	dm ³				
6-6 PÓLOS 6-6 POLES												ACI/M	
	1 3/8	1 1/8	1520	1193	-	-	-	172	1.65	ACI/M	163/38.6T		
	1 3/8	1 1/8	1520	1193	-	-	-	172	1.65	ACI/M	163/38.6Y		
	1 3/8	1 1/8	1520	1193	-	-	-	187	1.65	ACI/M	163/46.6T		
	1 3/8	1 1/8	1520	1193	-	-	-	187	1.65	ACI/M	163/46.6Y		
	1 3/8	1 1/8	1520	1193	-	-	-	201	1.65	ACI/M	163/54.5T		
	1 3/8	1 1/8	1520	1193	-	-	-	201	1.65	ACI/M	163/54.5Y		
	1 5/8	1 3/8	2720	2393	-	-	-	256	2.91	ACI/M	263/77.5T		
	1 5/8	1 3/8	2720	2393	-	-	-	256	2.91	ACI/M	263/77.5Y		
	1 5/8	1 3/8	2720	2393	-	-	-	283	2.91	ACI/M	263/96.9T		
	1 5/8	1 3/8	2720	2393	-	-	-	283	2.91	ACI/M	263/96.9Y		
	2 1/8	1 5/8	2720	2393	-	-	-	311	2.91	ACI/M	263/112T		
	2 1/8	1 5/8	2720	2393	-	-	-	311	2.91	ACI/M	263/112Y		
	2 1/8	1 5/8	3920	3593	-	-	-	404	4.18	ACI/M	363/116T		
	2 1/8	1 5/8	3920	3593	-	-	-	404	4.18	ACI/M	363/116Y		
	2 1/8	1 5/8	3920	3593	-	-	-	447	4.18	ACI/M	363/153T		
	2 1/8	1 5/8	3920	3593	-	-	-	447	4.18	ACI/M	363/153Y		
	2 1/8	1 5/8	3920	3593	-	-	-	488	4.18	ACI/M	363/171T		
	2 1/8	1 5/8	3920	3593	-	-	-	488	4.18	ACI/M	363/171Y		
	2 1/8	1 5/8	3920	3593	-	-	-	528	4.18	ACI/M	363/182T		
	2 1/8	1 5/8	3920	3593	-	-	-	528	4.18	ACI/M	363/182Y		
	2 5/8	2 1/8	5120	4793	1171	2400	1222	541	5.44	ACI/M	463/194T		
	2 5/8	2 1/8	5120	4793	1171	2400	1222	541	5.44	ACI/M	463/194Y		
	2 5/8	2 1/8	5120	4793	1171	2400	1222	595	5.44	ACI/M	463/218T		
	2 5/8	2 1/8	5120	4793	1171	2400	1222	595	5.44	ACI/M	463/218Y		
	2 5/8	2 1/8	6320	5993	1171	3600	1222	639	6.70	ACI/M	563/250T		
	2 5/8	2 1/8	6320	5993	1171	3600	1222	639	6.70	ACI/M	563/250Y		
	2 5/8	2 1/8	6320	5993	1171	3600	1222	705	6.70	ACI/M	563/279T		
	2 5/8	2 1/8	6320	5993	1171	3600	1222	705	6.70	ACI/M	563/279Y		

Desenhos Drawings



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices



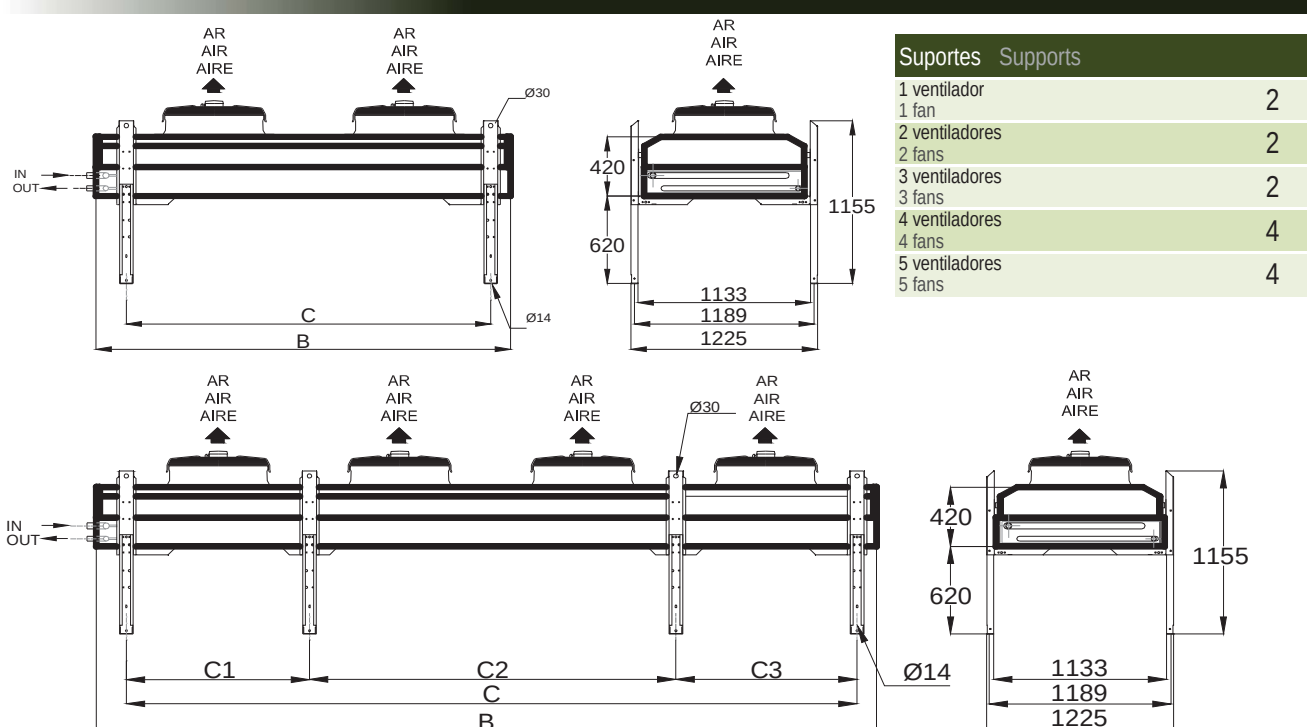
Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V/F/Hz	dB(A)	
ACI/M				6-6 PÓLOS 6-6 POLES								
ACI/M 163/38.6S	29.19	76.71	8.10	1	630	9600	860	600	2.62	230/1/50	38	
ACI/M 163/46.6S	34.44	114.90	11.50	1	630	9200	860	600	2.62	230/1/50	38	
ACI/M 163/54.5S	38.64	153.40	16.10	1	630	8900	860	600	2.62	230/1/50	38	
ACI/M 263/77.5S	58.38	153.41	16.10	2	630	19200	860	1200	5.24	230/1/50	41	
ACI/M 263/96.9S	70.46	230.10	24.20	2	630	18400	860	1200	5.24	230/1/50	41	
ACI/M 263/112S	78.12	306.82	32.30	2	630	17800	860	1200	5.24	230/1/50	41	
ACI/M 363/116S	84.95	230.12	24.20	3	630	28800	860	1800	7.86	230/1/50	43	
ACI/M 363/153S	109.52	345.20	36.30	3	630	27600	860	1800	7.86	230/1/50	43	
ACI/M 363/171S	118.76	460.20	48.40	3	630	26700	860	1800	7.86	230/1/50	43	
ACI/M 363/182S	124.11	575.30	60.50	3	630	26100	860	1800	7.86	230/1/50	43	
ACI/M 463/194S	141.12	460.20	48.40	4	630	36800	860	2400	10.48	230/1/50	44	
ACI/M 463/218S	154.56	613.60	64.50	4	630	35600	860	2400	10.48	230/1/50	44	
ACI/M 563/250S	179.55	575.30	60.50	5	630	46000	860	3000	13.10	230/1/50	45	
ACI/M 563/279S	195.72	767.10	80.60	5	630	44500	860	3000	13.10	230/1/50	45	

(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
		Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
	EUR	EUR			
ACI/M 163/38.6S	•	•	S	-	-
ACI/M 163/46.6S	•	•	S	-	-
ACI/M 163/54.5S	•	•	S	-	-
ACI/M 263/77.5S	•	•	S	-	-
ACI/M 263/96.9S	•	•	S	-	-
ACI/M 263/112S	•	•	S	-	-
ACI/M 363/116S	•	•	S	-	-
ACI/M 363/153S	•	•	S	-	-
ACI/M 363/171S	•	•	S	-	-
ACI/M 363/182S	•	•	S	-	-
ACI/M 463/194S	•	•	S	-	-
ACI/M 463/218S	•	•	S	-	-
ACI/M 563/250S	•	•	S	-	-
ACI/M 563/279S	•	•	S	-	-

	Ligações standard Standard connections		Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Entrada Inlet	Saída Outlet								
	in		B	C	C1	C2	C3			
	6-6 PÓLOS 6-6 POLES									
	1 3/8	1 1/8	1520	1193	-	-	-	172	1.65	ACI/M 163/38.6S
	1 3/8	1 1/8	1520	1193	-	-	-	187	1.65	ACI/M 163/46.6S
	1 3/8	1 1/8	1520	1193	-	-	-	201	1.65	ACI/M 163/54.5S
	1 5/8	1 3/8	2720	2393	-	-	-	256	2.91	ACI/M 263/77.5S
	1 5/8	1 3/8	2720	2393	-	-	-	283	2.91	ACI/M 263/96.9S
	2 1/8	1 5/8	2720	2393	-	-	-	311	2.91	ACI/M 263/112S
	2 1/8	1 5/8	3920	3593	-	-	-	404	4.18	ACI/M 363/116S
	2 1/8	1 5/8	3920	3593	-	-	-	447	4.18	ACI/M 363/153S
	2 1/8	1 5/8	3920	3593	-	-	-	488	4.18	ACI/M 363/171S
	2 1/8	1 5/8	3920	3593	-	-	-	528	4.18	ACI/M 363/182S
	2 5/8	2 1/8	5120	4793	1171	2400	1222	541	5.44	ACI/M 463/194S
	2 5/8	2 1/8	5120	4793	1171	2400	1222	595	5.44	ACI/M 463/218S
	2 5/8	2 1/8	6320	5993	1171	3600	1222	639	6.70	ACI/M 563/250S
	2 5/8	2 1/8	6320	5993	1171	3600	1222	705	6.70	ACI/M 563/279S

Desenhos Drawings



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices

ACI

Condensadores Condensers

Espaçamento Fin Spacing

Ø Ventiladores Fan Ø

2,1 mm

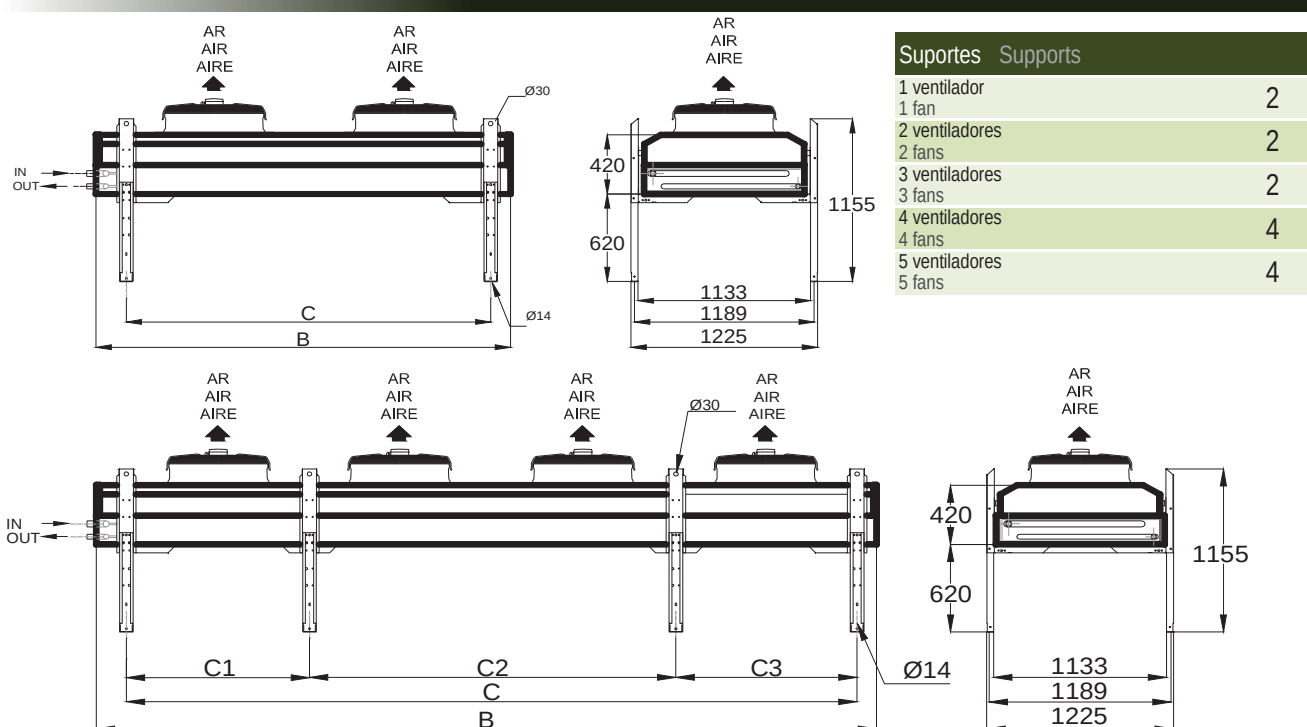
630 mm



Modelo Type	Capacidade Capacity (DT=15K) kW	Superfície Surface m ²	Volume interno Internal volume dm ³	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter mm	Caudal de ar Air flow m ³ /h	Rotação Revolutions rpm	Potência total Total power W	Corrente total Total current A	Alimentação MPS V / F / Hz	Ruído (1) Noise level (1) dB(A)	
ACI/R				8-8 PÓLOS				8-8 POLES				
ACI/R 163/38.6T	25.94	76.71	8.10	1	630	8200	650	370	0.88	Δ 400/3/50	31	
ACI/R 163/38.6Y	20.69	76.71	8.10	1	630	6000	470	210	0.41	Y 400/3/50	26	
ACI/R 163/46.6T	30.24	114.90	11.50	1	630	7800	650	370	0.88	Δ 400/3/50	31	
ACI/R 163/46.6Y	23.84	114.90	11.50	1	630	5700	470	210	0.41	Y 400/3/50	26	
ACI/R 163/54.5T	32.97	153.40	16.10	1	630	7400	650	370	0.88	Δ 400/3/50	31	
ACI/R 163/54.5Y	25.41	153.40	16.10	1	630	5400	470	210	0.41	Y 400/3/50	26	
ACI/R 263/77.5T	51.98	153.41	16.10	2	630	16400	650	740	1.76	Δ 400/3/50	34	
ACI/R 263/77.5Y	41.37	153.41	16.10	2	630	12000	470	420	0.82	Y 400/3/50	29	
ACI/R 263/96.9T	61.64	230.10	24.20	2	630	15600	650	740	1.76	Δ 400/3/50	34	
ACI/R 263/96.9Y	48.30	230.10	24.20	2	630	11400	470	420	0.82	Y 400/3/50	29	
ACI/R 263/112T	66.57	306.82	32.30	2	630	14800	650	740	1.76	Δ 400/3/50	34	
ACI/R 263/112Y	51.03	306.82	32.30	2	630	10800	470	420	0.82	Y 400/3/50	29	
ACI/R 363/116T	76.02	230.12	24.20	3	630	24600	650	1110	2.64	Δ 400/3/50	36	
ACI/R 363/116Y	61.01	230.12	24.20	3	630	18000	470	630	1.23	Y 400/3/50	31	
ACI/R 363/153T	95.24	345.20	36.30	3	630	23400	650	1110	2.64	Δ 400/3/50	36	
ACI/R 363/153Y	73.92	345.20	36.30	3	630	17100	470	630	1.23	Y 400/3/50	31	
ACI/R 363/171T	101.01	460.20	48.40	3	630	22200	650	1110	2.64	Δ 400/3/50	36	
ACI/R 363/171Y	77.39	460.20	48.40	3	630	16200	470	630	1.23	Y 400/3/50	31	
ACI/R 363/182T	104.69	575.30	60.50	3	630	21600	650	1110	2.64	Δ 400/3/50	36	
ACI/R 363/182Y	79.28	575.30	60.50	3	630	15900	470	630	1.23	Y 400/3/50	31	
ACI/R 463/194T	123.38	460.20	48.40	4	630	31200	650	1480	3.52	Δ 400/3/50	37	
ACI/R 463/194Y	96.71	460.20	48.40	4	630	22800	470	840	1.64	Y 400/3/50	32	
ACI/R 463/218T	132.20	613.60	64.50	4	630	29600	650	1480	3.52	Δ 400/3/50	37	
ACI/R 463/218Y	101.96	613.60	64.50	4	630	21600	470	840	1.64	Y 400/3/50	32	
ACI/R 563/250T	156.56	575.30	60.50	5	630	39000	650	1850	4.40	Δ 400/3/50	38	
ACI/R 563/250Y	122.12	575.30	60.50	5	630	28500	470	1050	2.05	Y 400/3/50	33	
ACI/R 563/279T	166.95	767.10	80.60	5	630	37000	650	1850	4.40	Δ 400/3/50	38	
ACI/R 563/279Y	128.21	767.10	80.60	5	630	27000	470	1050	2.05	Y 400/3/50	33	
(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections												
Modelo Type	Preço Price EUR	Opções Options				S	Standard Standard	SP	Sob pedido Under request			
		AR	BL	/EC								
		Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors						Cablagem EC EC wiring		
ACI/R 163/38.6T	•	•	S	843.0	139.1							
ACI/R 163/38.6Y	•	•	S	843.0	139.1							
ACI/R 163/46.6T	•	•	S	843.0	139.1							
ACI/R 163/46.6Y	•	•	S	843.0	139.1							
ACI/R 163/54.5T	•	•	S	843.0	139.1							
ACI/R 163/54.5Y	•	•	S	843.0	139.1							
ACI/R 263/77.5T	•	•	S	1686.0	254.4							
ACI/R 263/77.5Y	•	•	S	1686.0	254.4							
ACI/R 263/96.9T	•	•	S	1686.0	254.4							
ACI/R 263/96.9Y	•	•	S	1686.0	254.4							
ACI/R 263/112T	•	•	S	1686.0	254.4							
ACI/R 263/112Y	•	•	S	1686.0	254.4							
ACI/R 363/116T	•	•	S	2529.0	378.0							
ACI/R 363/116Y	•	•	S	2529.0	378.0							
ACI/R 363/153T	•	•	S	2529.0	378.0							
ACI/R 363/153Y	•	•	S	2529.0	378.0							
ACI/R 363/171T	•	•	S	2529.0	378.0							
ACI/R 363/171Y	•	•	S	2529.0	378.0							
ACI/R 363/182T	•	•	S	2529.0	378.0							
ACI/R 363/182Y	•	•	S	2529.0	378.0							
ACI/R 463/194T	•	•	S	3372.0	520.2							
ACI/R 463/194Y	•	•	S	3372.0	520.2							
ACI/R 463/218T	•	•	S	3372.0	520.2							
ACI/R 463/218Y	•	•	S	3372.0	520.2							
ACI/R 563/250T	•	•	S	4215.0	670.5							
ACI/R 563/250Y	•	•	S	4215.0	670.5							
ACI/R 563/279T	•	•	S	4215.0	670.5							
ACI/R 563/279Y	•	•	S	4215.0	670.5	S	Standard	SP	Sob pedido			
						S	Standard	SP	Under request			

	Ligações standard connections		Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type	
	Entrada Inlet	Saída Outlet									
	in		B	C	C1	C2	C3				
8-8 PÓLOS 8-8 POLES											
	1 3/8	1 1/8	1520	1193	-	-	-	172	1.65	ACI/R	163/38.6T
	1 3/8	1 1/8	1520	1193	-	-	-	172	1.65	ACI/R	163/38.6Y
	1 3/8	1 1/8	1520	1193	-	-	-	187	1.65	ACI/R	163/46.6T
	1 3/8	1 1/8	1520	1193	-	-	-	187	1.65	ACI/R	163/46.6Y
	1 3/8	1 1/8	1520	1193	-	-	-	201	1.65	ACI/R	163/54.5T
	1 3/8	1 1/8	1520	1193	-	-	-	201	1.65	ACI/R	163/54.5Y
	1 5/8	1 3/8	2720	2393	-	-	-	256	2.91	ACI/R	263/77.5T
	1 5/8	1 3/8	2720	2393	-	-	-	256	2.91	ACI/R	263/77.5Y
	1 5/8	1 3/8	2720	2393	-	-	-	283	2.91	ACI/R	263/96.9T
	1 5/8	1 3/8	2720	2393	-	-	-	283	2.91	ACI/R	263/96.9Y
	2 1/8	1 5/8	2720	2393	-	-	-	311	2.91	ACI/R	263/112T
	2 1/8	1 5/8	2720	2393	-	-	-	311	2.91	ACI/R	263/112Y
	2 1/8	1 5/8	3920	3593	-	-	-	404	4.18	ACI/R	363/116T
	2 1/8	1 5/8	3920	3593	-	-	-	404	4.18	ACI/R	363/116Y
	2 1/8	1 5/8	3920	3593	-	-	-	447	4.18	ACI/R	363/153T
	2 1/8	1 5/8	3920	3593	-	-	-	447	4.18	ACI/R	363/153Y
	2 1/8	1 5/8	3920	3593	-	-	-	488	4.18	ACI/R	363/171T
	2 1/8	1 5/8	3920	3593	-	-	-	488	4.18	ACI/R	363/171Y
	2 1/8	1 5/8	3920	3593	-	-	-	528	4.18	ACI/R	363/182T
	2 1/8	1 5/8	3920	3593	-	-	-	528	4.18	ACI/R	363/182Y
	2 5/8	2 1/8	5120	4793	1171	2400	1222	541	5.44	ACI/R	463/194T
	2 5/8	2 1/8	5120	4793	1171	2400	1222	541	5.44	ACI/R	463/194Y
	2 5/8	2 1/8	5120	4793	1171	2400	1222	595	5.44	ACI/R	463/218T
	2 5/8	2 1/8	5120	4793	1171	2400	1222	595	5.44	ACI/R	463/218Y
	2 5/8	2 1/8	6320	5993	1171	3600	1222	639	6.70	ACI/R	563/250T
	2 5/8	2 1/8	6320	5993	1171	3600	1222	639	6.70	ACI/R	563/250Y
	2 5/8	2 1/8	6320	5993	1171	3600	1222	705	6.70	ACI/R	563/279T
	2 5/8	2 1/8	6320	5993	1171	3600	1222	705	6.70	ACI/R	563/279Y

Desenhos Drawings



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices



Condensadores Condensers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

2,1 mm
630 mm



Modelo Type	Capacidade Capacity (DT=15K) kW	Superfície Surface m ²	Volume interno Internal volume dm ³	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter mm	Caudal de ar Air flow m ³ /h	Rotação Revolutions rpm	Potência total Total power W	Corrente total Total current A	Alimentação MPS V / F / Hz	Ruído (1) Noise level (1) dB(A)	
ACI/R				8-8 PÓLOS 8-8 POLES								
ACI/R 163/38.6S	25.94	76.71	8.10	1	630	8200	635	380	1.92	230/1/50	31	
ACI/R 163/46.6S	30.24	114.90	11.50	1	630	7800	635	380	1.92	230/1/50	31	
ACI/R 163/54.5S	32.97	153.40	16.10	1	630	7400	635	380	1.92	230/1/50	31	
ACI/R 263/77.5S	51.98	153.41	16.10	2	630	16400	635	760	3.84	230/1/50	34	
ACI/R 263/96.9S	61.64	230.10	24.20	2	630	15600	635	760	3.84	230/1/50	34	
ACI/R 263/112S	66.57	306.82	32.30	2	630	14800	635	760	3.84	230/1/50	34	
ACI/R 363/116S	76.02	230.12	24.20	3	630	24600	635	1140	5.76	230/1/50	36	
ACI/R 363/153S	95.24	345.20	36.30	3	630	23400	635	1140	5.76	230/1/50	36	
ACI/R 363/171S	101.01	460.20	48.40	3	630	22200	635	1140	5.76	230/1/50	36	
ACI/R 363/182S	104.69	575.30	60.50	3	630	21600	635	1140	5.76	230/1/50	36	
ACI/R 463/194S	123.38	460.20	48.40	4	630	31200	635	1520	7.68	230/1/50	37	
ACI/R 463/218S	132.20	613.60	64.50	4	630	29600	635	1520	7.68	230/1/50	37	
ACI/R 563/250S	156.56	575.30	60.50	5	630	39000	635	1900	9.60	230/1/50	38	
ACI/R 563/279S	166.95	767.10	80.60	5	630	37000	635	1900	9.60	230/1/50	38	

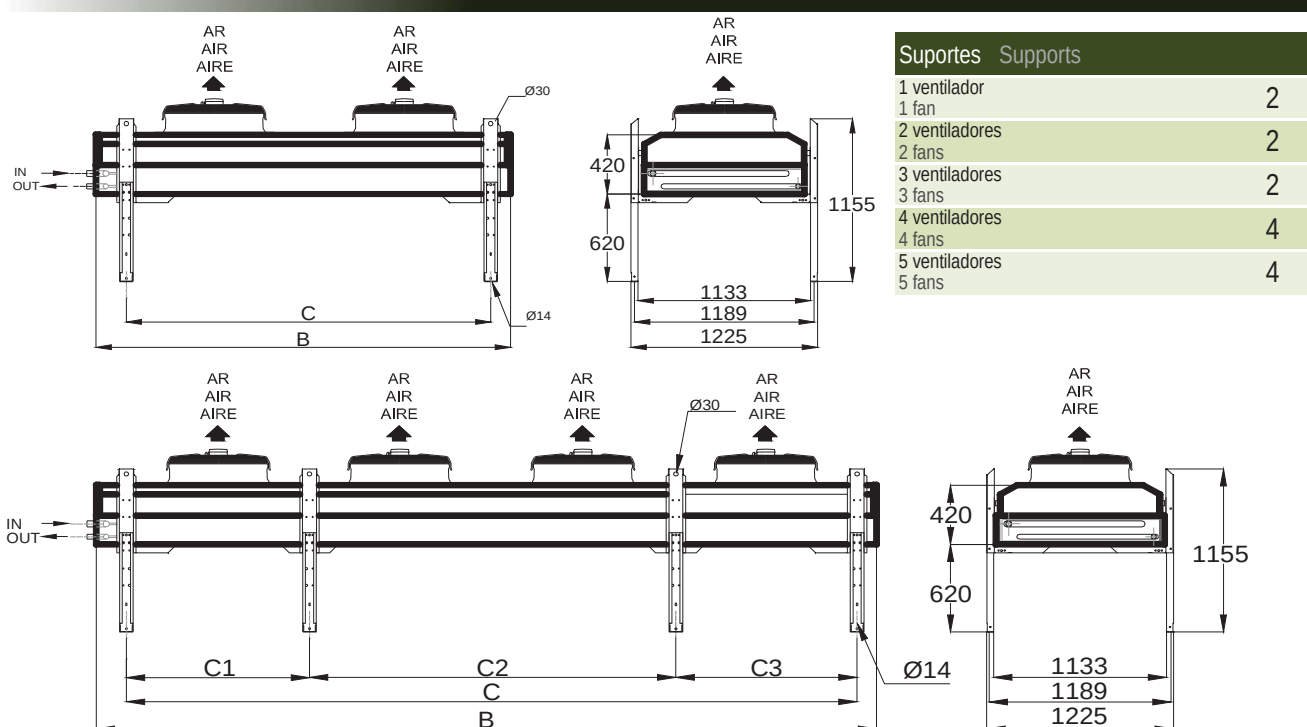
(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
		Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
	EUR	EUR			
ACI/R 163/38.6S	•	•	S	-	-
ACI/R 163/46.6S	•	•	S	-	-
ACI/R 163/54.5S	•	•	S	-	-
ACI/R 263/77.5S	•	•	S	-	-
ACI/R 263/96.9S	•	•	S	-	-
ACI/R 263/112S	•	•	S	-	-
ACI/R 363/116S	•	•	S	-	-
ACI/R 363/153S	•	•	S	-	-
ACI/R 363/171S	•	•	S	-	-
ACI/R 363/182S	•	•	S	-	-
ACI/R 463/194S	•	•	S	-	-
ACI/R 463/218S	•	•	S	-	-
ACI/R 563/250S	•	•	S	-	-
ACI/R 563/279S	•	•	S	-	-

S Standard SP Sob pedido
S Standard SP Under request

	Ligações standard Standard connections		Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Entrada Inlet	Saída Outlet								
	in		B	C	C1	C2	C3			
			mm							
	8-8 PÓLOS 8-8 POLES									ACI/R
	1 3/8	1 1/8	1520	1193	-	-	-	172	1.65	ACI/R 163/38.6S
	1 3/8	1 1/8	1520	1193	-	-	-	187	1.65	ACI/R 163/46.6S
	1 3/8	1 1/8	1520	1193	-	-	-	201	1.65	ACI/R 163/54.5S
	1 5/8	1 3/8	2720	2393	-	-	-	256	2.91	ACI/R 263/77.5S
	1 5/8	1 3/8	2720	2393	-	-	-	283	2.91	ACI/R 263/96.9S
	2 1/8	1 5/8	2720	2393	-	-	-	311	2.91	ACI/R 263/112S
	2 1/8	1 5/8	3920	3593	-	-	-	404	4.18	ACI/R 363/116S
	2 1/8	1 5/8	3920	3593	-	-	-	447	4.18	ACI/R 363/153S
	2 1/8	1 5/8	3920	3593	-	-	-	488	4.18	ACI/R 363/171S
	2 1/8	1 5/8	3920	3593	-	-	-	528	4.18	ACI/R 363/182S
	2 5/8	2 1/8	5120	4793	1171	2400	1222	541	5.44	ACI/R 463/194S
	2 5/8	2 1/8	5120	4793	1171	2400	1222	595	5.44	ACI/R 463/218S
	2 5/8	2 1/8	6320	5993	1171	3600	1222	639	6.70	ACI/R 563/250S
	2 5/8	2 1/8	6320	5993	1171	3600	1222	705	6.70	ACI/R 563/279S

Desenhos Drawings



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices

ACP

Condensadores Condensers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

2,1 mm
800 mm



Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V / F / Hz	dB(A)	
ACP/M				6-6 PÓLOS 6-6 POLES								
ACP/M 280/103T	102.90	204.60	21.50	2	800	43400	880	3880	7.80	Δ 400/3/50	46	
ACP/M 280/103Y	98.70	204.60	21.50	2	800	34800	670	2420	4.46	Y 400/3/50	42	
ACP/M 280/140T	139.65	306.80	32.30	2	800	41200	880	3880	7.80	Δ 400/3/50	46	
ACP/M 280/140Y	119.28	306.80	32.30	2	800	32800	670	2420	4.46	Y 400/3/50	42	
ACP/M 280/156T	155.93	409.10	43.00	2	800	39400	880	3880	7.80	Δ 400/3/50	46	
ACP/M 280/156Y	130.31	409.10	43.00	2	800	31200	670	2420	4.46	Y 400/3/50	42	
ACP/M 380/162T	162.23	306.80	32.30	3	800	65100	880	5820	11.70	Δ 400/3/50	48	
ACP/M 380/162Y	142.49	306.80	32.30	3	800	52200	670	3630	6.69	Y 400/3/50	44	
ACP/M 380/202T	201.71	460.20	48.40	3	800	61800	880	5820	11.70	Δ 400/3/50	48	
ACP/M 380/202Y	173.25	460.20	48.40	3	800	49200	670	3630	6.69	Y 400/3/50	44	
ACP/M 380/226T	226.28	613.60	64.50	3	800	59100	880	5820	11.70	Δ 400/3/50	48	
ACP/M 380/226Y	190.89	613.60	64.50	3	800	46800	670	3630	6.69	Y 400/3/50	44	
ACP/M 480/280T	279.93	613.60	64.50	4	800	82400	880	7760	15.60	Δ 400/3/50	49	
ACP/M 480/280Y	238.77	613.60	64.50	4	800	65600	670	4840	8.92	Y 400/3/50	45	
ACP/M 480/311T	311.33	819.20	86.00	4	800	78800	895	7760	15.60	Δ 400/3/50	49	
ACP/M 480/311Y	260.61	819.20	86.00	4	800	62400	685	4840	8.92	Y 400/3/50	45	
ACP/M 480/329T	328.86	1022.70	107.50	4	800	75600	895	7760	15.60	Δ 400/3/50	49	
ACP/M 480/329Y	271.53	1022.70	107.50	4	800	59700	685	4840	8.92	Y 400/3/50	45	

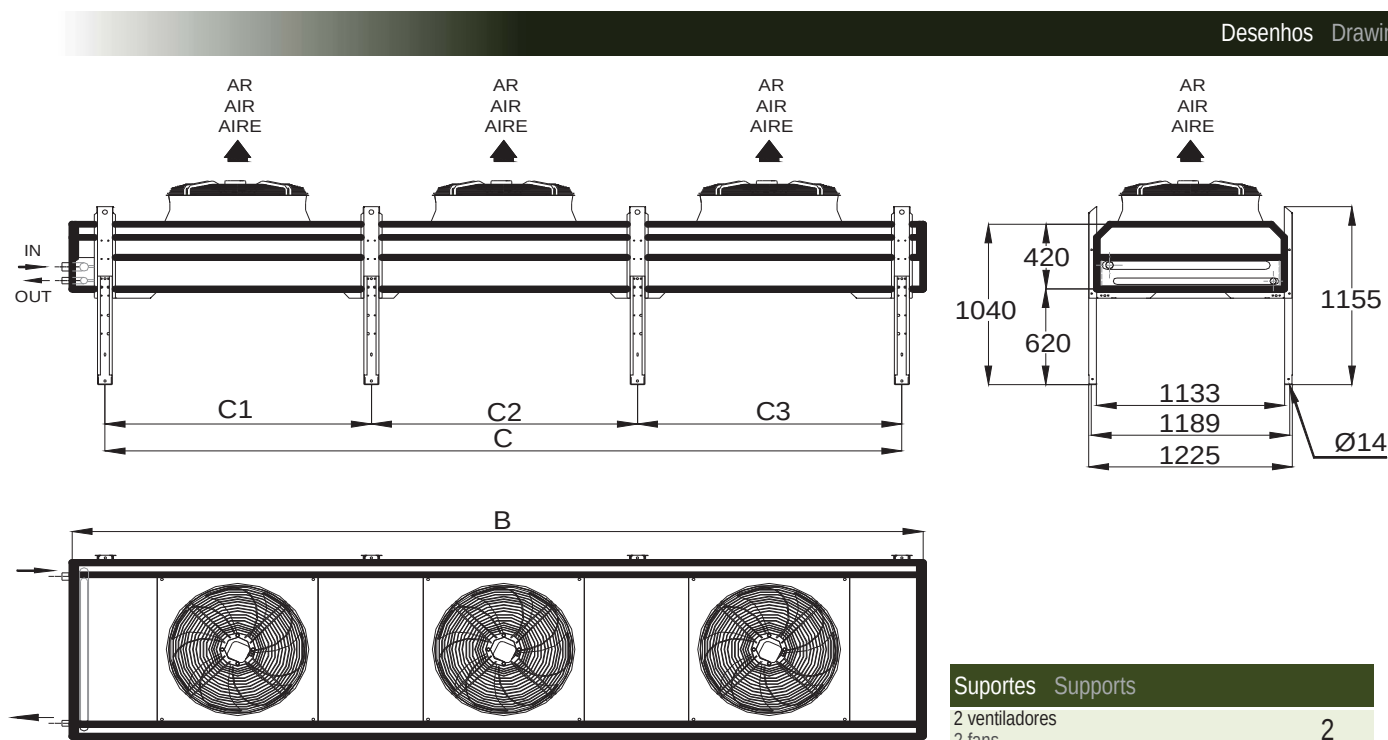
(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
		Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
	EUR	EUR			
ACP/M 280/103T	•	•	S	1686.0	242.1
ACP/M 280/103Y	•	•	S	1686.0	242.1
ACP/M 280/140T	•	•	S	1686.0	242.1
ACP/M 280/140Y	•	•	S	1686.0	242.1
ACP/M 280/156T	•	•	S	1686.0	242.1
ACP/M 280/156Y	•	•	S	1686.0	242.1
ACP/M 380/162T	•	•	S	2529.0	378.0
ACP/M 380/162Y	•	•	S	2529.0	378.0
ACP/M 380/202T	•	•	S	2529.0	378.0
ACP/M 380/202Y	•	•	S	2529.0	378.0
ACP/M 380/226T	•	•	S	2529.0	378.0
ACP/M 380/226Y	•	•	S	2529.0	378.0
ACP/M 480/280T	•	•	S	3372.0	503.7
ACP/M 480/280Y	•	•	S	3372.0	503.7
ACP/M 480/311T	•	•	S	3372.0	503.7
ACP/M 480/311Y	•	•	S	3372.0	503.7
ACP/M 480/329T	•	•	S	3372.0	503.7
ACP/M 480/329Y	•	•	S	3372.0	503.7

S Standard
S Standard

SP Sob pedido
SP Under request

	Ligações standard connections		Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type	
	Entrada Inlet	Saída Outlet									
	in		B	C	C1	C2	C3				
6-6 PÓLOS 6-6 POLES											
	2 1/8	1 5/8	3520	3193	-	-	-	329	3.90	ACP/M	280/103T
	2 1/8	1 5/8	3520	3193	-	-	-	329	3.90	ACP/M	280/103Y
	2 1/8	1 5/8	3520	3193	-	-	-	368	3.90	ACP/M	280/140T
	2 1/8	1 5/8	3520	3193	-	-	-	368	3.90	ACP/M	280/140Y
	2 1/8	1 5/8	3520	3193	-	-	-	404	3.90	ACP/M	280/156T
	2 1/8	1 5/8	3520	3193	-	-	-	404	3.90	ACP/M	280/156Y
	2 1/8	1 5/8	5120	4793	1571	1600	1622	516	5.65	ACP/M	380/162T
	2 1/8	1 5/8	5120	4793	1571	1600	1622	516	5.65	ACP/M	380/162Y
	2 5/8	2 1/8	5120	4793	1571	1600	1622	570	5.65	ACP/M	380/202T
	2 5/8	2 1/8	5120	4793	1571	1600	1622	570	5.65	ACP/M	380/202Y
	2 5/8	2 1/8	5120	4793	1571	1600	1622	623	5.65	ACP/M	380/226T
	2 5/8	2 1/8	5120	4793	1571	1600	1622	623	5.65	ACP/M	380/226Y
	2 5/8	2 1/8	6720	6393	1571	3200	1622	707	7.40	ACP/M	480/280T
	2 5/8	2 1/8	6720	6393	1571	3200	1622	707	7.40	ACP/M	480/280Y
	3 1/8	2 5/8	6720	6393	1571	3200	1622	778	7.40	ACP/M	480/311T
	3 1/8	2 5/8	6720	6393	1571	3200	1622	778	7.40	ACP/M	480/311Y
	3 1/8	2 5/8	6720	6393	1571	3200	1622	849	7.40	ACP/M	480/329T
	3 1/8	2 5/8	6720	6393	1571	3200	1622	849	7.40	ACP/M	480/329Y



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices

ACP

Condensadores Condensers

Espaçamento Fin Spacing

Ø Ventiladores Fan Ø

2,1 mm

800 mm



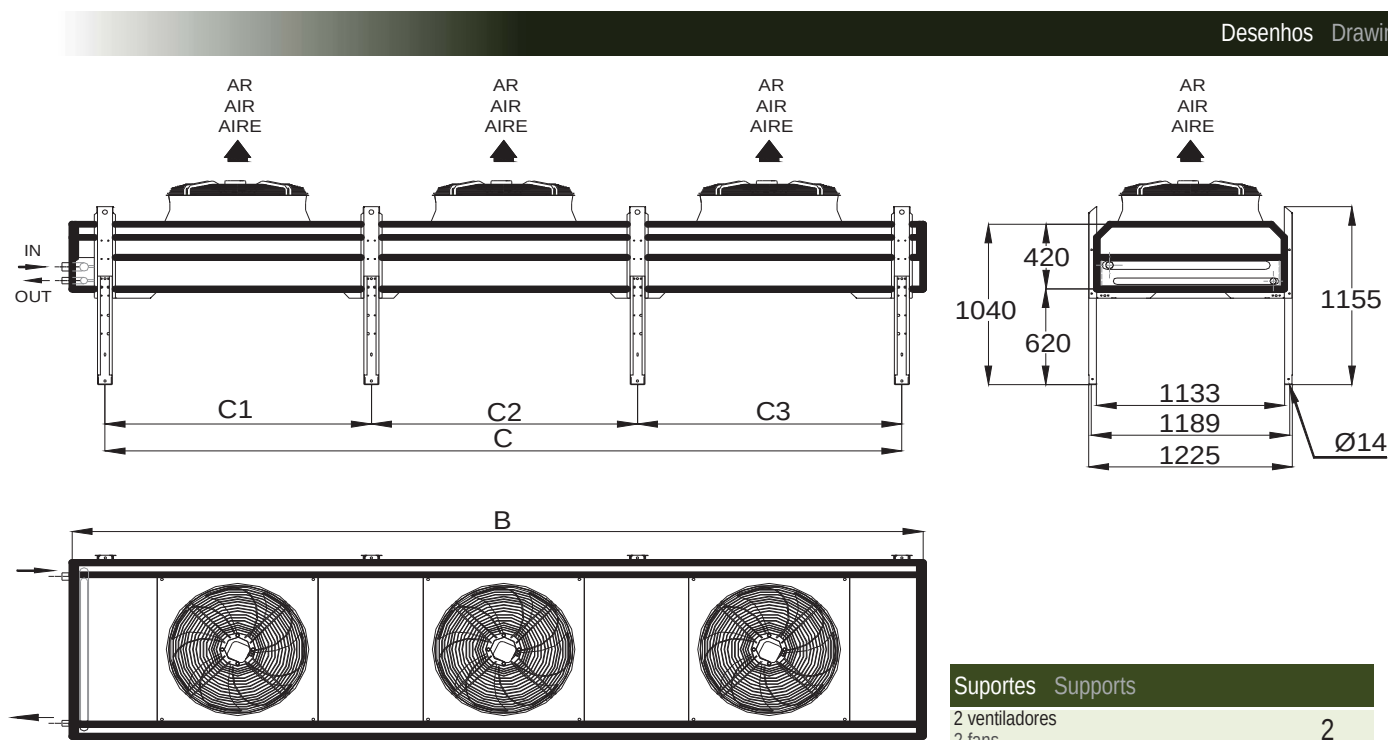
Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V / F / Hz	dB(A)	
ACP/R				8-8 PÓLOS 8-8 POLES								
ACP/R 280/103T	95.03	204.60	21.50	2	800	32600	660	1980	4.74	Δ 400/3/50	41	
ACP/R 280/103Y	80.75	204.60	21.50	2	800	25600	485	1160	2.42	Y 400/3/50	35	
ACP/R 280/140T	114.77	306.80	32.30	2	800	31100	660	1980	4.74	Δ 400/3/50	41	
ACP/R 280/140Y	95.13	306.80	32.30	2	800	24200	485	1160	2.42	Y 400/3/50	35	
ACP/R 280/156T	125.16	409.10	43.00	2	800	29600	660	1980	4.74	Δ 400/3/50	41	
ACP/R 280/156Y	101.22	409.10	43.00	2	800	22800	485	1160	2.42	Y 400/3/50	35	
ACP/R 380/162T	136.61	306.80	32.30	3	800	48900	660	2970	7.11	Δ 400/3/50	43	
ACP/R 380/162Y	116.76	306.80	32.30	3	800	38400	485	1740	3.63	Y 400/3/50	37	
ACP/R 380/202T	166.85	460.20	48.40	3	800	46650	660	2970	7.11	Δ 400/3/50	43	
ACP/R 380/202Y	139.34	460.20	48.40	3	800	36300	485	1740	3.63	Y 400/3/50	37	
ACP/R 380/226T	183.33	613.60	64.50	3	800	44400	660	2970	7.11	Δ 400/3/50	43	
ACP/R 380/226Y	149.42	613.60	64.50	3	800	34200	485	1740	3.63	Y 400/3/50	37	
ACP/R 480/280T	229.74	613.60	64.50	4	800	62200	660	3960	9.48	Δ 400/3/50	44	
ACP/R 480/280Y	190.47	613.60	64.50	4	800	48400	485	2320	4.84	Y 400/3/50	38	
ACP/R 480/311T	250.01	819.20	86.00	4	800	59200	660	3960	9.48	Δ 400/3/50	44	
ACP/R 480/311Y	202.34	819.20	86.00	4	800	45600	485	2320	4.84	Y 400/3/50	38	
ACP/R 480/329T	259.14	1022.70	107.50	4	800	56400	660	3960	9.48	Δ 400/3/50	44	
ACP/R 480/329Y	205.28	1022.70	107.50	4	800	43000	485	2320	4.84	Y 400/3/50	38	

(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
	EUR	Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
ACP/R 280/103T	•	•	S	1686.0	242.1
ACP/R 280/103Y	•	•	S	1686.0	242.1
ACP/R 280/140T	•	•	S	1686.0	242.1
ACP/R 280/140Y	•	•	S	1686.0	242.1
ACP/R 280/156T	•	•	S	1686.0	242.1
ACP/R 280/156Y	•	•	S	1686.0	242.1
ACP/R 380/162T	•	•	S	2529.0	378.0
ACP/R 380/162Y	•	•	S	2529.0	378.0
ACP/R 380/202T	•	•	S	2529.0	378.0
ACP/R 380/202Y	•	•	S	2529.0	378.0
ACP/R 380/226T	•	•	S	2529.0	378.0
ACP/R 380/226Y	•	•	S	2529.0	378.0
ACP/R 480/280T	•	•	S	3372.0	503.7
ACP/R 480/280Y	•	•	S	3372.0	503.7
ACP/R 480/311T	•	•	S	3372.0	503.7
ACP/R 480/311Y	•	•	S	3372.0	503.7
ACP/R 480/329T	•	•	S	3372.0	503.7
ACP/R 480/329Y	•	•	S	3372.0	503.7

S Standard
S StandardSP Sob pedido
SP Under request

	Ligações standard connections		Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type	
	Entrada Inlet	Saída Outlet									
		in		B	C	C1	C2	C3	Kg	dm ³	
8-8 PÓLOS 8-8 POLES											
	2 1/8	1 5/8	3520	3193	-	-	-	329	3.90	ACP/R	280/103T
	2 1/8	1 5/8	3520	3193	-	-	-	329	3.90	ACP/R	280/103Y
	2 1/8	1 5/8	3520	3193	-	-	-	368	3.90	ACP/R	280/140T
	2 1/8	1 5/8	3520	3193	-	-	-	368	3.90	ACP/R	280/140Y
	2 1/8	1 5/8	3520	3193	-	-	-	404	3.90	ACP/R	280/156T
	2 1/8	1 5/8	3520	3193	-	-	-	404	3.90	ACP/R	280/156Y
	2 1/8	1 5/8	5120	4793	1571	1600	1622	516	5.65	ACP/R	380/162T
	2 1/8	1 5/8	5120	4793	1571	1600	1622	516	5.65	ACP/R	380/162Y
	2 5/8	2 1/8	5120	4793	1571	1600	1622	570	5.65	ACP/R	380/202T
	2 5/8	2 1/8	5120	4793	1571	1600	1622	570	5.65	ACP/R	380/202Y
	2 5/8	2 1/8	5120	4793	1571	1600	1622	623	5.65	ACP/R	380/226T
	2 5/8	2 1/8	5120	4793	1571	1600	1622	623	5.65	ACP/R	380/226Y
	2 5/8	2 1/8	6720	6393	1571	3200	1622	707	7.40	ACP/R	480/280T
	2 5/8	2 1/8	6720	6393	1571	3200	1622	707	7.40	ACP/R	480/280Y
	3 1/8	2 5/8	6720	6393	1571	3200	1622	778	7.40	ACP/R	480/311T
	3 1/8	2 5/8	6720	6393	1571	3200	1622	778	7.40	ACP/R	480/311Y
	3 1/8	2 5/8	6720	6393	1571	3200	1622	849	7.40	ACP/R	480/329T
	3 1/8	2 5/8	6720	6393	1571	3200	1622	849	7.40	ACP/R	480/329Y



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices

ACP

Condensadores Condensers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

2,1 mm
800 mm



Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m ²	dm ³		mm	m ³ /h	rpm	W	A	V/F/Hz	dB(A)	
ACP/L				12-12 PÓLOS 12-12 POLES								
ACP/L 280/103T	68.78	204.60	21.50	2	800	20800	435	720	2.24	Δ 400/3/50	30	
ACP/L 280/103Y	58.38	204.60	21.50	2	800	16800	340	400	0.94	Y 400/3/50	25	
ACP/L 280/140T	80.54	306.80	32.30	2	800	19800	435	720	2.24	Δ 400/3/50	30	
ACP/L 280/140Y	67.31	306.80	32.30	2	800	15800	340	400	0.94	Y 400/3/50	25	
ACP/L 280/156T	85.58	409.10	43.00	2	800	18800	435	720	2.24	Δ 400/3/50	30	
ACP/L 280/156Y	70.56	409.10	43.00	2	800	14900	340	400	0.94	Y 400/3/50	25	
ACP/L 380/162T	100.17	306.80	32.30	3	800	31200	435	1080	3.36	Δ 400/3/50	32	
ACP/L 380/162Y	85.58	306.80	32.30	3	800	25200	340	600	1.41	Y 400/3/50	27	
ACP/L 380/202T	118.55	460.20	48.40	3	800	29700	435	1080	3.36	Δ 400/3/50	32	
ACP/L 380/202Y	99.54	460.20	48.40	3	800	23700	340	600	1.41	Y 400/3/50	27	
ACP/L 380/226T	126.95	613.60	64.50	3	800	28200	435	1080	3.36	Δ 400/3/50	32	
ACP/L 380/226Y	104.90	613.60	64.50	3	800	22350	340	600	1.41	Y 400/3/50	27	
ACP/L 480/280T	161.07	613.60	64.50	4	800	39600	435	1440	4.48	Δ 400/3/50	33	
ACP/L 480/280Y	134.61	613.60	64.50	4	800	31600	340	800	1.88	Y 400/3/50	28	
ACP/L 480/311T	171.26	819.20	86.00	4	800	37600	435	1440	4.48	Δ 400/3/50	33	
ACP/L 480/311Y	141.02	819.20	86.00	4	800	29800	340	800	1.88	Y 400/3/50	28	
ACP/L 480/329T	175.25	1022.70	107.50	4	800	36000	435	1440	4.48	Δ 400/3/50	33	
ACP/L 480/329Y	139.55	1022.70	107.50	4	800	28000	340	800	1.88	Y 400/3/50	28	

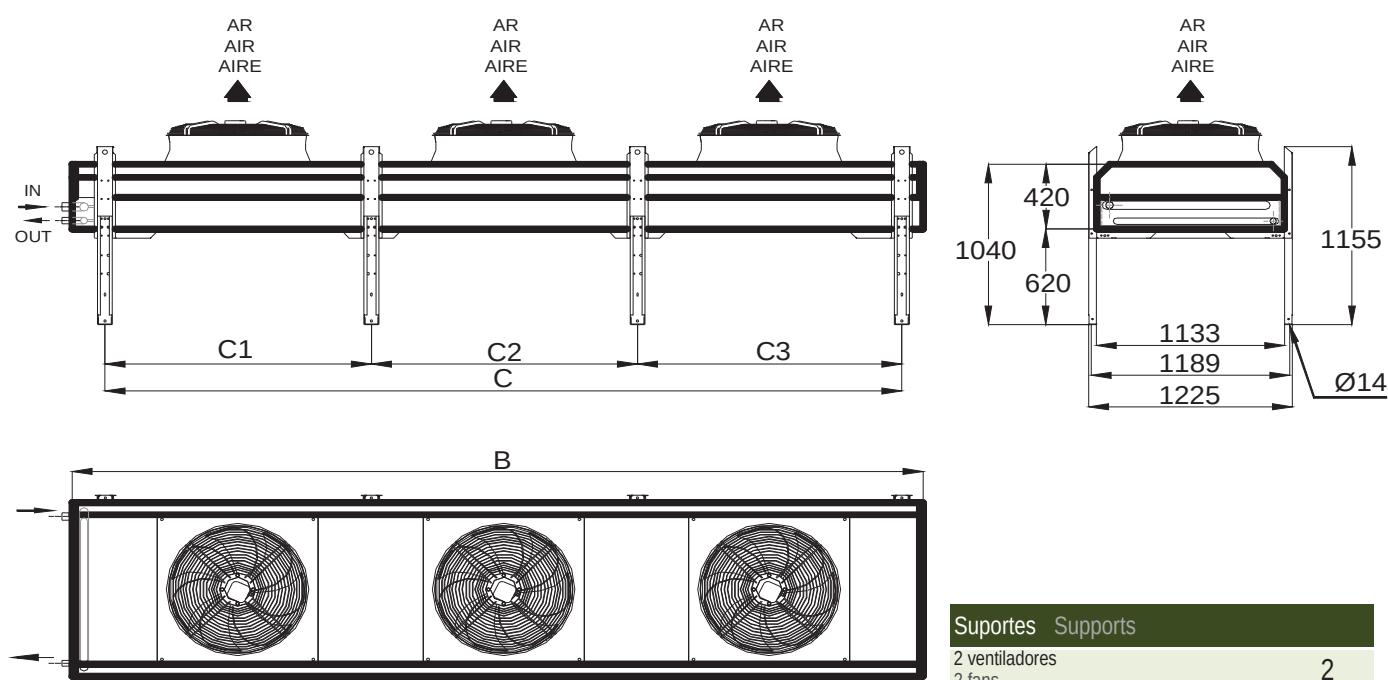
(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
		Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
	EUR	EUR			
ACP/L 280/103T	•	•	S	1686.0	242.1
ACP/L 280/103Y	•	•	S	1686.0	242.1
ACP/L 280/140T	•	•	S	1686.0	242.1
ACP/L 280/140Y	•	•	S	1686.0	242.1
ACP/L 280/156T	•	•	S	1686.0	242.1
ACP/L 280/156Y	•	•	S	1686.0	242.1
ACP/L 380/162T	•	•	S	2529.0	378.0
ACP/L 380/162Y	•	•	S	2529.0	378.0
ACP/L 380/202T	•	•	S	2529.0	378.0
ACP/L 380/202Y	•	•	S	2529.0	378.0
ACP/L 380/226T	•	•	S	2529.0	378.0
ACP/L 380/226Y	•	•	S	2529.0	378.0
ACP/L 480/280T	•	•	S	3372.0	503.7
ACP/L 480/280Y	•	•	S	3372.0	503.7
ACP/L 480/311T	•	•	S	3372.0	503.7
ACP/L 480/311Y	•	•	S	3372.0	503.7
ACP/L 480/329T	•	•	S	3372.0	503.7
ACP/L 480/329Y	•	•	S	3372.0	503.7

S Standard SP Sob pedido
S Standard SP Under request

	Ligações standard connections		Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Entrada Inlet	Saída Outlet								
	B	C	C1	C2	C3	Kg	dm ³			
	in		mm							
12-12 PÓLOS 12-12 POLES										
	2 1/8	1 5/8	3520	3193	-	-	-	329	3.90	ACP/L 280/103T
	2 1/8	1 5/8	3520	3193	-	-	-	329	3.90	ACP/L 280/103Y
	2 1/8	1 5/8	3520	3193	-	-	-	368	3.90	ACP/L 280/140T
	2 1/8	1 5/8	3520	3193	-	-	-	368	3.90	ACP/L 280/140Y
	2 1/8	1 5/8	3520	3193	-	-	-	404	3.90	ACP/L 280/156T
	2 1/8	1 5/8	3520	3193	-	-	-	404	3.90	ACP/L 280/156Y
	2 1/8	1 5/8	5120	4793	1571	1600	1622	516	5.65	ACP/L 380/162T
	2 1/8	1 5/8	5120	4793	1571	1600	1622	516	5.65	ACP/L 380/162Y
	2 5/8	2 1/8	5120	4793	1571	1600	1622	570	5.65	ACP/L 380/202T
	2 5/8	2 1/8	5120	4793	1571	1600	1622	570	5.65	ACP/L 380/202Y
	2 5/8	2 1/8	5120	4793	1571	1600	1622	623	5.65	ACP/L 380/226T
	2 5/8	2 1/8	5120	4793	1571	1600	1622	623	5.65	ACP/L 380/226Y
	2 5/8	2 1/8	6720	6393	1571	3200	1622	707	7.40	ACP/L 480/280T
	2 5/8	2 1/8	6720	6393	1571	3200	1622	707	7.40	ACP/L 480/280Y
	3 1/8	2 5/8	6720	6393	1571	3200	1622	778	7.40	ACP/L 480/311T
	3 1/8	2 5/8	6720	6393	1571	3200	1622	778	7.40	ACP/L 480/311Y
	3 1/8	2 5/8	6720	6393	1571	3200	1622	849	7.40	ACP/L 480/329T
	3 1/8	2 5/8	6720	6393	1571	3200	1622	849	7.40	ACP/L 480/329Y

Desenhos Drawings



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices

Suportes Supports

2 ventiladores	2
2 fans	
3 ventiladores	4
3 fans	
4 ventiladores	4
4 fans	

ACP

Condensadores Condensers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

2,1 mm
800 mm



Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V / F / Hz	dB(A)	
ACP/N				12-12(S) PÓLOS 12-12(S) POLES								
ACP/N 280/103T	58.38	204.60	21.50	2	800	16800	360	460	1.20	Δ 400/3/50	28	
ACP/N 280/103Y	44.63	204.60	21.50	2	800	11600	250	200	0.50	Y 400/3/50	19	
ACP/N 280/140T	67.31	306.80	32.30	2	800	15800	360	460	1.20	Δ 400/3/50	28	
ACP/N 280/140Y	49.77	306.80	32.30	2	800	10800	250	200	0.50	Y 400/3/50	19	
ACP/N 280/156T	70.56	409.10	43.00	2	800	14900	360	460	1.20	Δ 400/3/50	28	
ACP/N 280/156Y	50.82	409.10	43.00	2	800	10200	250	200	0.50	Y 400/3/50	19	
ACP/N 380/162T	85.58	306.80	32.30	3	800	25200	360	690	1.80	Δ 400/3/50	30	
ACP/N 380/162Y	66.26	306.80	32.30	3	800	17400	250	300	0.75	Y 400/3/50	21	
ACP/N 380/202T	99.54	460.20	48.40	3	800	23700	360	690	1.80	Δ 400/3/50	30	
ACP/N 380/202Y	74.03	460.20	48.40	3	800	16200	250	300	0.75	Y 400/3/50	21	
ACP/N 380/226T	104.90	613.60	64.50	3	800	22350	360	690	1.80	Δ 400/3/50	30	
ACP/N 380/226Y	76.02	613.60	64.50	3	800	15300	250	300	0.75	Y 400/3/50	21	
ACP/N 480/280T	134.61	613.60	64.50	4	800	31600	360	920	2.40	Δ 400/3/50	31	
ACP/N 480/280Y	99.44	613.60	64.50	4	800	21600	250	400	1.00	Y 400/3/50	22	
ACP/N 480/311T	141.02	819.20	86.00	4	800	29800	360	920	2.40	Δ 400/3/50	31	
ACP/N 480/311Y	101.66	819.20	86.00	4	800	20400	250	400	1.00	Y 400/3/50	22	
ACP/N 480/329T	139.55	1022.70	107.50	4	800	28000	360	920	2.40	Δ 400/3/50	31	
ACP/N 480/329Y	101.85	1022.70	107.50	4	800	19600	250	400	1.00	Y 400/3/50	22	

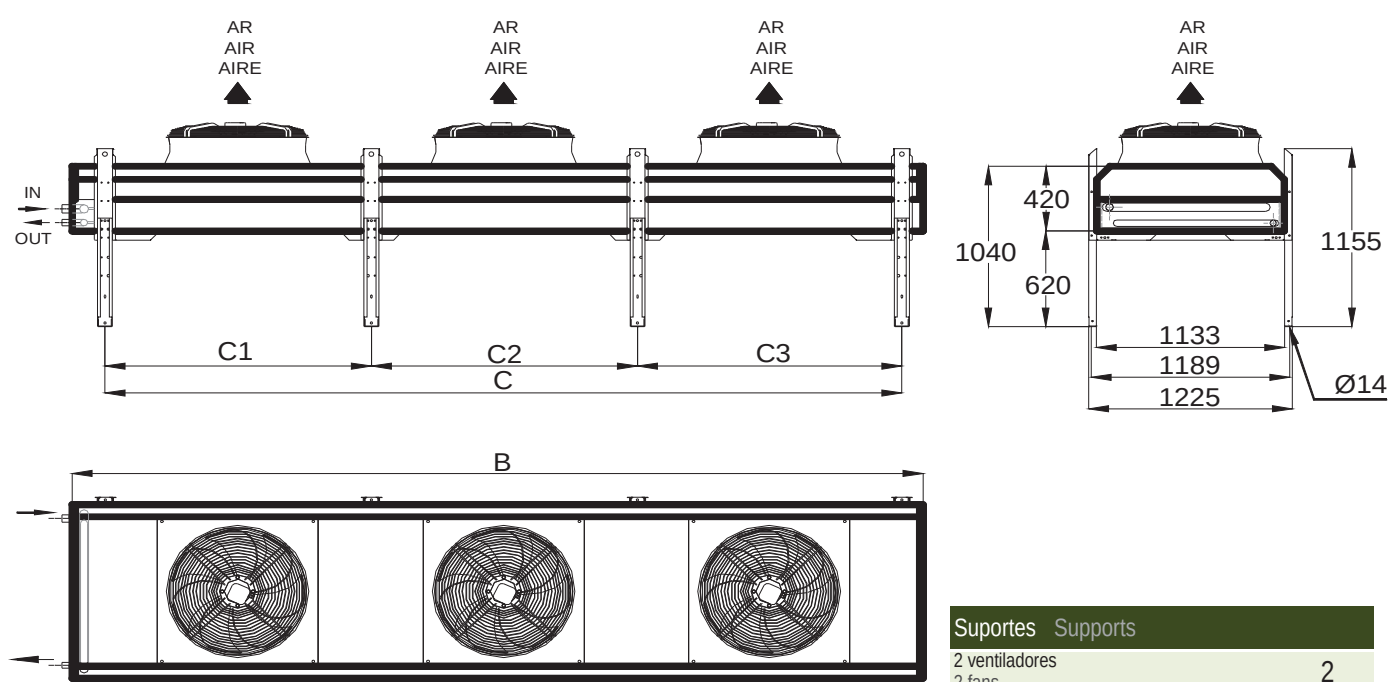
(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
		Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
	EUR	EUR			
ACP/N 280/103T	•	•	S	1686.0	242.1
ACP/N 280/103Y	•	•	S	1686.0	242.1
ACP/N 280/140T	•	•	S	1686.0	242.1
ACP/N 280/140Y	•	•	S	1686.0	242.1
ACP/N 280/156T	•	•	S	1686.0	242.1
ACP/N 280/156Y	•	•	S	1686.0	242.1
ACP/N 380/162T	•	•	S	2529.0	378.0
ACP/N 380/162Y	•	•	S	2529.0	378.0
ACP/N 380/202T	•	•	S	2529.0	378.0
ACP/N 380/202Y	•	•	S	2529.0	378.0
ACP/N 380/226T	•	•	S	2529.0	378.0
ACP/N 380/226Y	•	•	S	2529.0	378.0
ACP/N 480/280T	•	•	S	3372.0	503.7
ACP/N 480/280Y	•	•	S	3372.0	503.7
ACP/N 480/311T	•	•	S	3372.0	503.7
ACP/N 480/311Y	•	•	S	3372.0	503.7
ACP/N 480/329T	•	•	S	3372.0	503.7
ACP/N 480/329Y	•	•	S	3372.0	503.7

S Standard SP Sob pedido
S Standard SP Under request

	Ligações standard connections		Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type	
	Entrada Inlet	Saída Outlet									
		in		B	C	C1	C2	C3	Kg	dm ³	
12-12(S) PÓLOS 12-12(S) POLES											
	2 1/8	1 5/8	3520	3193	-	-	-	329	3.90	ACP/N	280/103T
	2 1/8	1 5/8	3520	3193	-	-	-	329	3.90	ACP/N	280/103Y
	2 1/8	1 5/8	3520	3193	-	-	-	368	3.90	ACP/N	280/140T
	2 1/8	1 5/8	3520	3193	-	-	-	368	3.90	ACP/N	280/140Y
	2 1/8	1 5/8	3520	3193	-	-	-	404	3.90	ACP/N	280/156T
	2 1/8	1 5/8	3520	3193	-	-	-	404	3.90	ACP/N	280/156Y
	2 1/8	1 5/8	5120	4793	1571	1600	1622	516	5.65	ACP/N	380/162T
	2 1/8	1 5/8	5120	4793	1571	1600	1622	516	5.65	ACP/N	380/162Y
	2 5/8	2 1/8	5120	4793	1571	1600	1622	570	5.65	ACP/N	380/202T
	2 5/8	2 1/8	5120	4793	1571	1600	1622	570	5.65	ACP/N	380/202Y
	2 5/8	2 1/8	5120	4793	1571	1600	1622	623	5.65	ACP/N	380/226T
	2 5/8	2 1/8	5120	4793	1571	1600	1622	623	5.65	ACP/N	380/226Y
	2 5/8	2 1/8	6720	6393	1571	3200	1622	707	7.40	ACP/N	480/280T
	2 5/8	2 1/8	6720	6393	1571	3200	1622	707	7.40	ACP/N	480/280Y
	3 1/8	2 5/8	6720	6393	1571	3200	1622	778	7.40	ACP/N	480/311T
	3 1/8	2 5/8	6720	6393	1571	3200	1622	778	7.40	ACP/N	480/311Y
	3 1/8	2 5/8	6720	6393	1571	3200	1622	849	7.40	ACP/N	480/329T
	3 1/8	2 5/8	6720	6393	1571	3200	1622	849	7.40	ACP/N	480/329Y

Desenhos Drawings



Suportes Supports

2 ventiladores	2
2 fans	
3 ventiladores	4
3 fans	
4 ventiladores	4
4 fans	

ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices

ACPD

Condensadores Condensers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

2,1 mm
800 mm



Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V / F / Hz	dB(A)	
ACPD/M				6-6 PÓLOS 6-6 POLES								
ACPD/M 680/325T	324.45	613.60	64.60	6	800	130200	880	11640	23.40	Δ 400/3/50	51	
ACPD/M 680/325Y	284.97	613.60	64.60	6	800	104400	670	7260	13.38	Y 400/3/50	47	
ACPD/M 680/403T	403.41	920.40	96.80	6	800	123600	880	11640	23.40	Δ 400/3/50	51	
ACPD/M 680/403Y	346.50	920.40	96.80	6	800	98400	670	7260	13.38	Y 400/3/50	47	
ACPD/M 680/453T	452.55	1227.20	129.00	6	800	118200	880	11640	23.40	Δ 400/3/50	51	
ACPD/M 680/453Y	381.78	1227.20	129.00	6	800	93600	670	7260	13.38	Y 400/3/50	47	
ACPD/M 880/560T	559.86	1227.20	129.00	8	800	164800	880	15520	31.20	Δ 400/3/50	52	
ACPD/M 880/560Y	477.54	1227.20	129.00	8	800	131200	670	9680	17.84	Y 400/3/50	48	
ACPD/M 880/623T	622.65	1638.40	172.00	8	800	157600	880	15520	31.20	Δ 400/3/50	52	
ACPD/M 880/623Y	521.22	1638.40	172.00	8	800	124800	670	9680	17.84	Y 400/3/50	48	
ACPD/M 880/658T	657.72	2045.40	215.00	8	800	151200	880	15520	31.20	Δ 400/3/50	52	
ACPD/M 880/658Y	543.06	2045.40	215.00	8	800	119400	670	9680	17.84	Y 400/3/50	48	

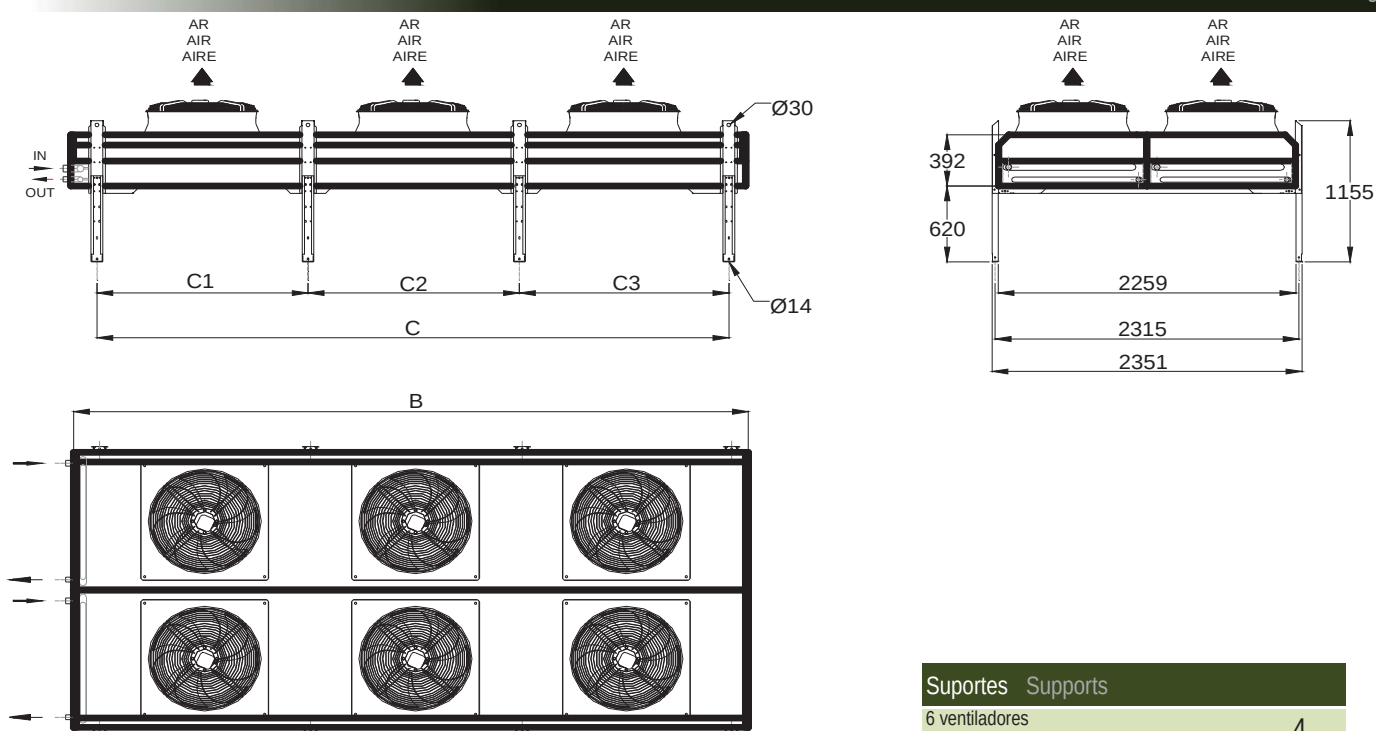
(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
	EUR	Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
ACPD/M 680/325T	•	•	S	5058.0	715.9
ACPD/M 680/325Y	•	•	S	5058.0	715.9
ACPD/M 680/403T	•	•	S	5058.0	715.9
ACPD/M 680/403Y	•	•	S	5058.0	715.9
ACPD/M 680/453T	•	•	S	5058.0	715.9
ACPD/M 680/453Y	•	•	S	5058.0	715.9
ACPD/M 880/560T	•	•	S	6744.0	958.9
ACPD/M 880/560Y	•	•	S	6744.0	958.9
ACPD/M 880/623T	•	•	S	6744.0	958.9
ACPD/M 880/623Y	•	•	S	6744.0	958.9
ACPD/M 880/658T	•	•	S	6744.0	958.9
ACPD/M 880/658Y	•	•	S	6744.0	958.9

S Standard SP Sob pedido
S Standard SP Under request

	Ligações standard Standard connections		Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Entrada Inlet	Saída Outlet								
	B	C	C1	C2	C3					
	in		mm					Kg	dm ³	
6-6 PÓLOS 6-6 POLES ACPD/M										
	2 x 2 1/8	2 x 1 5/8	5120	4793	1571	1600	1622	1032	11.30	ACPD/M 680/325T
	2 x 2 1/8	2 x 1 5/8	5120	4793	1571	1600	1622	1032	11.30	ACPD/M 680/325Y
	2 x 2 5/8	2 x 2 1/8	5120	4793	1571	1600	1622	1139	11.30	ACPD/M 680/403T
	2 x 2 5/8	2 x 2 1/8	5120	4793	1571	1600	1622	1139	11.30	ACPD/M 680/403Y
	2 x 2 5/8	2 x 2 1/8	5120	4793	1571	1600	1622	1247	11.30	ACPD/M 680/453T
	2 x 2 5/8	2 x 2 1/8	5120	4793	1571	1600	1622	1247	11.30	ACPD/M 680/453Y
	2 x 2 5/8	2 x 2 1/8	6720	6393	1571	3200	1622	1414	14.80	ACPD/M 880/560T
	2 x 2 5/8	2 x 2 1/8	6720	6393	1571	3200	1622	1414	14.80	ACPD/M 880/560Y
	2 x 3 1/8	2 x 2 5/8	6720	6393	1571	3200	1622	1556	14.80	ACPD/M 880/623T
	2 x 3 1/8	2 x 2 5/8	6720	6393	1571	3200	1622	1556	14.80	ACPD/M 880/623Y
	2 x 3 1/8	2 x 2 5/8	6720	6393	1571	3200	1622	1698	14.80	ACPD/M 880/658T
	2 x 3 1/8	2 x 2 5/8	6720	6393	1571	3200	1622	1698	14.80	ACPD/M 880/658Y

Desenhos Drawings



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices

Suportes	Supports
6 ventiladores 6 fans	4
8 ventiladores 8 fans	4

ACPD

Condensadores Condensers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

2,1 mm
800 mm



Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V / F / Hz	dB(A)	
ACPD/R				8-8 PÓLOS 8-8 POLES								
ACPD/R 680/325T	273.21	613.60	64.60	6	800	97800	660	5940	14.22	Δ 400/3/50	46	
ACPD/R 680/325Y	233.52	613.60	64.60	6	800	76800	485	3480	7.26	Y 400/3/50	40	
ACPD/R 680/403T	333.69	920.40	96.80	6	800	93300	660	5940	14.22	Δ 400/3/50	46	
ACPD/R 680/403Y	278.67	920.40	96.80	6	800	72600	485	3480	7.26	Y 400/3/50	40	
ACPD/R 680/453T	366.66	1227.20	129.00	6	800	88800	660	5940	14.22	Δ 400/3/50	46	
ACPD/R 680/453Y	298.83	1227.20	129.00	6	800	68400	485	3480	7.26	Y 400/3/50	40	
ACPD/R 880/560T	459.48	1227.20	129.00	8	800	124400	660	7920	18.96	Δ 400/3/50	47	
ACPD/R 880/560Y	380.94	1227.20	129.00	8	800	96800	485	4640	9.68	Y 400/3/50	41	
ACPD/R 880/623T	500.01	1638.40	172.00	8	800	118400	660	7920	18.96	Δ 400/3/50	47	
ACPD/R 880/623Y	404.67	1638.40	172.00	8	800	91200	485	4640	9.68	Y 400/3/50	41	
ACPD/R 880/658T	518.28	2045.40	215.00	8	800	112800	660	7920	18.96	Δ 400/3/50	47	
ACPD/R 880/658Y	410.55	2045.40	215.00	8	800	86000	485	4640	9.68	Y 400/3/50	41	

(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
	EUR	Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
ACPD/R 680/325T	•	•	S	5058.0	715.9
ACPD/R 680/325Y	•	•	S	5058.0	715.9
ACPD/R 680/403T	•	•	S	5058.0	715.9
ACPD/R 680/403Y	•	•	S	5058.0	715.9
ACPD/R 680/453T	•	•	S	5058.0	715.9
ACPD/R 680/453Y	•	•	S	5058.0	715.9
ACPD/R 880/560T	•	•	S	6744.0	958.9
ACPD/R 880/560Y	•	•	S	6744.0	958.9
ACPD/R 880/623T	•	•	S	6744.0	958.9
ACPD/R 880/623Y	•	•	S	6744.0	958.9
ACPD/R 880/658T	•	•	S	6744.0	958.9
ACPD/R 880/658Y	•	•	S	6744.0	958.9

S Standard
S Standard

SP Sob pedido
SP Under request

Desenhos Drawings

165

ACPD

Condensadores Condensers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

2,1 mm
800 mm



Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V / F / Hz	dB(A)	
ACPD/L				12-12 PÓLOS 12-12 POLES								
ACPD/L 680/325T	200.34	613.60	64.60	6	800	62400	435	2160	6.72	Δ 400/3/50	35	
ACPD/L 680/325Y	171.15	613.60	64.60	6	800	50400	340	1200	2.82	Y 400/3/50	30	
ACPD/L 680/403T	237.09	920.40	96.80	6	800	59400	435	2160	6.72	Δ 400/3/50	35	
ACPD/L 680/403Y	199.08	920.40	96.80	6	800	47400	340	1200	2.82	Y 400/3/50	30	
ACPD/L 680/453T	253.89	1227.20	129.00	6	800	56400	435	2160	6.72	Δ 400/3/50	35	
ACPD/L 680/453Y	209.79	1227.20	129.00	6	800	44700	340	1200	2.82	Y 400/3/50	30	
ACPD/L 880/560T	322.14	1227.20	129.00	8	800	79200	435	2880	8.96	Δ 400/3/50	36	
ACPD/L 880/560Y	269.22	1227.20	129.00	8	800	63200	340	1600	3.76	Y 400/3/50	31	
ACPD/L 880/623T	342.51	1638.40	172.00	8	800	75200	435	2880	8.96	Δ 400/3/50	36	
ACPD/L 880/623Y	282.03	1638.40	172.00	8	800	59600	340	1600	3.76	Y 400/3/50	31	
ACPD/L 880/658T	350.49	2045.40	215.00	8	800	72000	435	2880	8.96	Δ 400/3/50	36	
ACPD/L 880/658Y	279.09	2045.40	215.00	8	800	56000	340	1600	3.76	Y 400/3/50	31	

(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

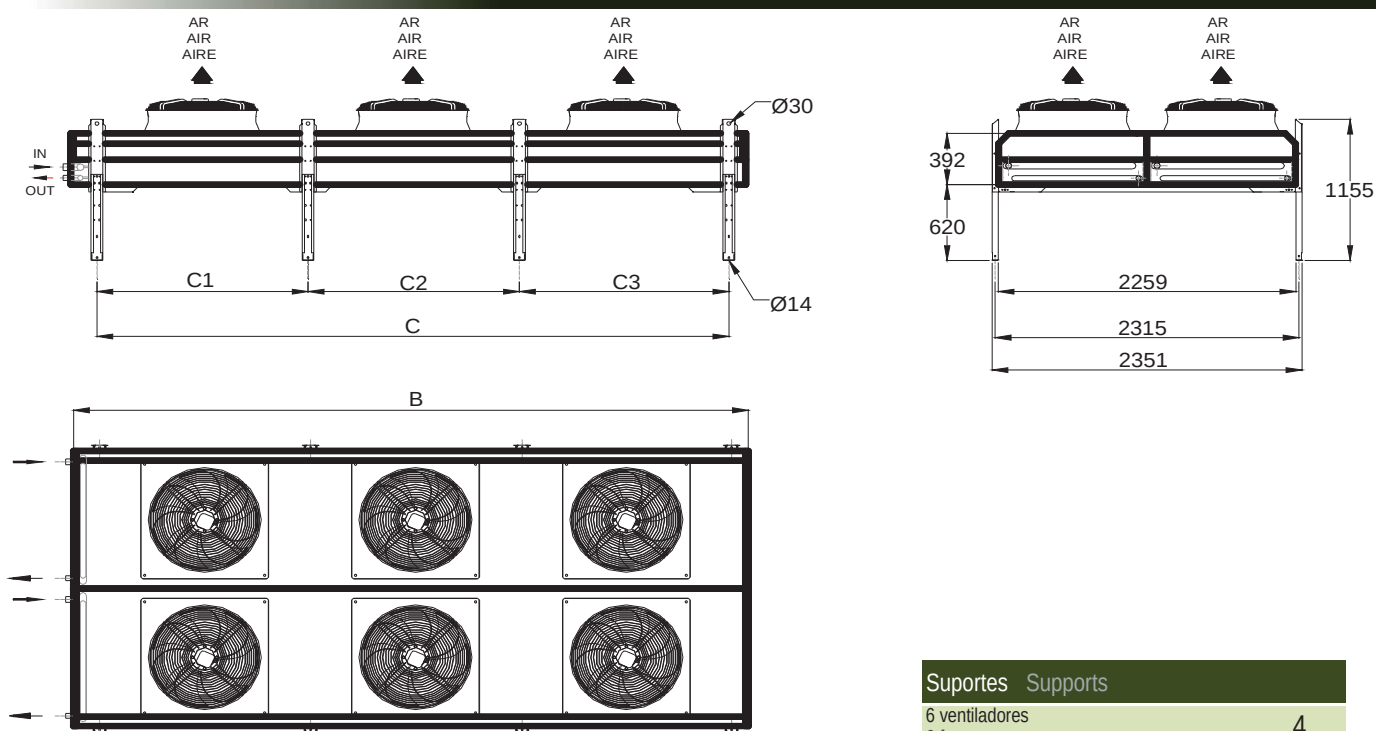
Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
		Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
	EUR	EUR			
ACPD/L 680/325T	•	•	S	5058.0	715.9
ACPD/L 680/325Y	•	•	S	5058.0	715.9
ACPD/L 680/403T	•	•	S	5058.0	715.9
ACPD/L 680/403Y	•	•	S	5058.0	715.9
ACPD/L 680/453T	•	•	S	5058.0	715.9
ACPD/L 680/453Y	•	•	S	5058.0	715.9
ACPD/L 880/560T	•	•	S	6744.0	958.9
ACPD/L 880/560Y	•	•	S	6744.0	958.9
ACPD/L 880/623T	•	•	S	6744.0	958.9
ACPD/L 880/623Y	•	•	S	6744.0	958.9
ACPD/L 880/658T	•	•	S	6744.0	958.9
ACPD/L 880/658Y	•	•	S	6744.0	958.9

S Standard
S Standard

SP Sob pedido
SP Under request

	Ligações standard Standard connections		Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type			
	Entrada Inlet	Saída Outlet											
	B	C	C1	C2	C3								
	in		mm					Kg	dm ³				
12-12 PÓLOS 12-12 POLES												ACPD/L	
	2 x 2 1/8	2 x 1 5/8	5120	4793	1571	1600	1622	1032	11.30	ACPD/L	680/325T		
	2 x 2 1/8	2 x 1 5/8	5120	4793	1571	1600	1622	1032	11.30	ACPD/L	680/325Y		
	2 x 2 5/8	2 x 2 1/8	5120	4793	1571	1600	1622	1139	11.30	ACPD/L	680/403T		
	2 x 2 5/8	2 x 2 1/8	5120	4793	1571	1600	1622	1139	11.30	ACPD/L	680/403Y		
	2 x 2 5/8	2 x 2 1/8	5120	4793	1571	1600	1622	1247	11.30	ACPD/L	680/453T		
	2 x 2 5/8	2 x 2 1/8	5120	4793	1571	1600	1622	1247	11.30	ACPD/L	680/453Y		
	2 x 2 5/8	2 x 2 1/8	6720	6393	1571	3200	1622	1414	14.80	ACPD/L	880/560T		
	2 x 2 5/8	2 x 2 1/8	6720	6393	1571	3200	1622	1414	14.80	ACPD/L	880/560Y		
	2 x 3 1/8	2 x 2 5/8	6720	6393	1571	3200	1622	1556	14.80	ACPD/L	880/623T		
	2 x 3 1/8	2 x 2 5/8	6720	6393	1571	3200	1622	1556	14.80	ACPD/L	880/623Y		
	2 x 3 1/8	2 x 2 5/8	6720	6393	1571	3200	1622	1698	14.80	ACPD/L	880/658T		
	2 x 3 1/8	2 x 2 5/8	6720	6393	1571	3200	1622	1698	14.80	ACPD/L	880/658Y		

Desenhos Drawings



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices

Suportes	Supports
6 ventiladores	4
6 fans	
8 ventiladores	4
8 fans	

ACPD

Condensadores Condensers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

2,1 mm
800 mm



Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V / F / Hz	dB(A)	
ACPD/N				12-12(S) PÓLOS 12-12(S) POLES								
ACPD/N 680/325T	171.15	613.60	64.60	6	800	50400	360	1380	3.60	Δ 400/3/50	33	
ACPD/N 680/325Y	132.51	613.60	64.60	6	800	34800	250	600	1.50	Y 400/3/50	24	
ACPD/N 680/403T	199.08	920.40	96.80	6	800	47400	360	1380	3.60	Δ 400/3/50	33	
ACPD/N 680/403Y	148.05	920.40	96.80	6	800	32400	250	600	1.50	Y 400/3/50	24	
ACPD/N 680/453T	209.79	1227.20	129.00	6	800	44700	360	1380	3.60	Δ 400/3/50	33	
ACPD/N 680/453Y	152.04	1227.20	129.00	6	800	30600	250	600	1.50	Y 400/3/50	24	
ACPD/N 880/560T	269.22	1227.20	129.00	8	800	63200	360	1840	4.80	Δ 400/3/50	34	
ACPD/N 880/560Y	198.87	1227.20	129.00	8	800	43200	250	800	2.00	Y 400/3/50	25	
ACPD/N 880/623T	282.03	1638.40	172.00	8	800	59600	360	1840	4.80	Δ 400/3/50	34	
ACPD/N 880/623Y	203.32	1638.40	172.00	8	800	40800	250	800	2.00	Y 400/3/50	25	
ACPD/N 880/658T	279.09	2045.40	215.00	8	800	56000	360	1840	4.80	Δ 400/3/50	34	
ACPD/N 880/658Y	204.75	2045.40	215.00	8	800	39200	250	800	2.00	Y 400/3/50	25	

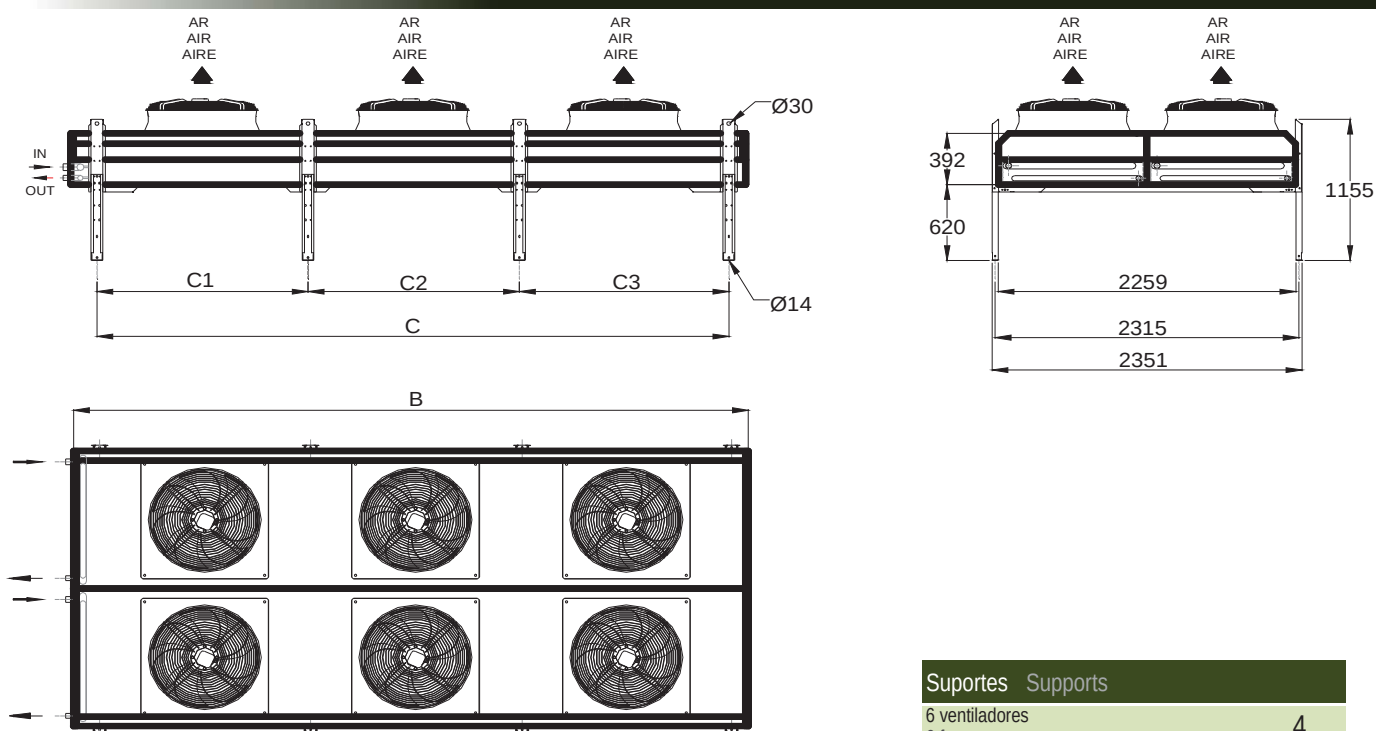
(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
	EUR	Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
ACPD/N 680/325T	•	•	S	5058.0	715.9
ACPD/N 680/325Y	•	•	S	5058.0	715.9
ACPD/N 680/403T	•	•	S	5058.0	715.9
ACPD/N 680/403Y	•	•	S	5058.0	715.9
ACPD/N 680/453T	•	•	S	5058.0	715.9
ACPD/N 680/453Y	•	•	S	5058.0	715.9
ACPD/N 880/560T	•	•	S	6744.0	958.9
ACPD/N 880/560Y	•	•	S	6744.0	958.9
ACPD/N 880/623T	•	•	S	6744.0	958.9
ACPD/N 880/623Y	•	•	S	6744.0	958.9
ACPD/N 880/658T	•	•	S	6744.0	958.9
ACPD/N 880/658Y	•	•	S	6744.0	958.9

S Standard SP Sob pedido
S Standard SP Under request

	Ligações standard Standard connections		Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type		
	Entrada Inlet	Saída Outlet										
	B	C	C1	C2	C3							
	in		mm					Kg	dm ³			
12-12(S) PÓLOS 12-12(S) POLES											ACPD/N	
	2 x 2 1/8	2 x 1 5/8	5120	4793	1571	1600	1622	1032	11.30	ACPD/N	680/325T	
	2 x 2 1/8	2 x 1 5/8	5120	4793	1571	1600	1622	1032	11.30	ACPD/N	680/325Y	
	2 x 2 5/8	2 x 2 1/8	5120	4793	1571	1600	1622	1139	11.30	ACPD/N	680/403T	
	2 x 2 5/8	2 x 2 1/8	5120	4793	1571	1600	1622	1139	11.30	ACPD/N	680/403Y	
	2 x 2 5/8	2 x 2 1/8	5120	4793	1571	1600	1622	1247	11.30	ACPD/N	680/453T	
	2 x 2 5/8	2 x 2 1/8	5120	4793	1571	1600	1622	1247	11.30	ACPD/N	680/453Y	
	2 x 2 5/8	2 x 2 1/8	6720	6393	1571	3200	1622	1414	14.80	ACPD/N	880/560T	
	2 x 2 5/8	2 x 2 1/8	6720	6393	1571	3200	1622	1414	14.80	ACPD/N	880/560Y	
	2 x 3 1/8	2 x 2 5/8	6720	6393	1571	3200	1622	1556	14.80	ACPD/N	880/623T	
	2 x 3 1/8	2 x 2 5/8	6720	6393	1571	3200	1622	1556	14.80	ACPD/N	880/623Y	
	2 x 3 1/8	2 x 2 5/8	6720	6393	1571	3200	1622	1698	14.80	ACPD/N	880/658T	
	2 x 3 1/8	2 x 2 5/8	6720	6393	1571	3200	1622	1698	14.80	ACPD/N	880/658Y	

Desenhos Drawings



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices

Suportes	Supports
6 ventiladores 6 fans	4
8 ventiladores 8 fans	4

ACJ

Condensadores Condensers

Espaçamento Fin Spacing

Ø Ventiladores Fan Ø

2,1 mm

910 mm



Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (l) Noise level (l)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V/F/Hz	dB(A)	
ACJ/M				6-6 PÓLOS 6-6 POLES								
ACJ/M 291/132T	132.20	263.10	27.60	2	910	51400	890	3680	7.66	Δ 400/3/50	51	
ACJ/M 291/132Y	120.23	263.10	27.60	2	910	41000	670	2300	4.44	Y 400/3/50	45	
ACJ/M 291/172T	171.68	394.60	41.50	2	910	49400	890	3680	7.66	Δ 400/3/50	51	
ACJ/M 291/172Y	144.27	394.60	41.50	2	910	38800	670	2300	4.44	Y 400/3/50	45	
ACJ/M 291/190T	190.16	526.00	55.30	2	910	47200	890	3680	7.66	Δ 400/3/50	51	
ACJ/M 291/190Y	156.56	526.00	55.30	2	910	36800	670	2300	4.44	Y 400/3/50	45	
ACJ/M 391/199T	199.19	394.60	41.50	3	910	77100	890	5520	11.49	Δ 400/3/50	53	
ACJ/M 391/199Y	173.15	394.60	41.50	3	910	61500	670	3450	6.66	Y 400/3/50	47	
ACJ/M 391/248T	247.91	591.90	62.20	3	910	74100	890	5520	11.49	Δ 400/3/50	53	
ACJ/M 391/248Y	210.11	591.90	62.20	3	910	58200	670	3450	6.66	Y 400/3/50	47	
ACJ/M 391/277T	277.31	789.20	82.90	3	910	70800	890	5520	11.49	Δ 400/3/50	53	
ACJ/M 391/277Y	229.95	789.20	82.90	3	910	55200	670	3450	6.66	Y 400/3/50	47	
ACJ/M 491/344T	343.77	789.20	82.90	4	910	98800	890	7360	15.32	Δ 400/3/50	54	
ACJ/M 491/344Y	288.54	789.20	82.90	4	910	77600	670	4600	8.88	Y 400/3/50	48	
ACJ/M 491/380T	380.21	1052.00	110.60	4	910	94400	890	7360	15.32	Δ 400/3/50	54	
ACJ/M 491/380Y	313.11	1052.00	110.60	4	910	73600	670	4600	8.88	Y 400/3/50	48	
ACJ/M 491/401T	400.58	1315.40	138.20	4	910	90800	890	7360	15.32	Δ 400/3/50	54	
ACJ/M 491/401Y	322.14	1315.40	138.20	4	910	69600	670	4600	8.88	Y 400/3/50	48	

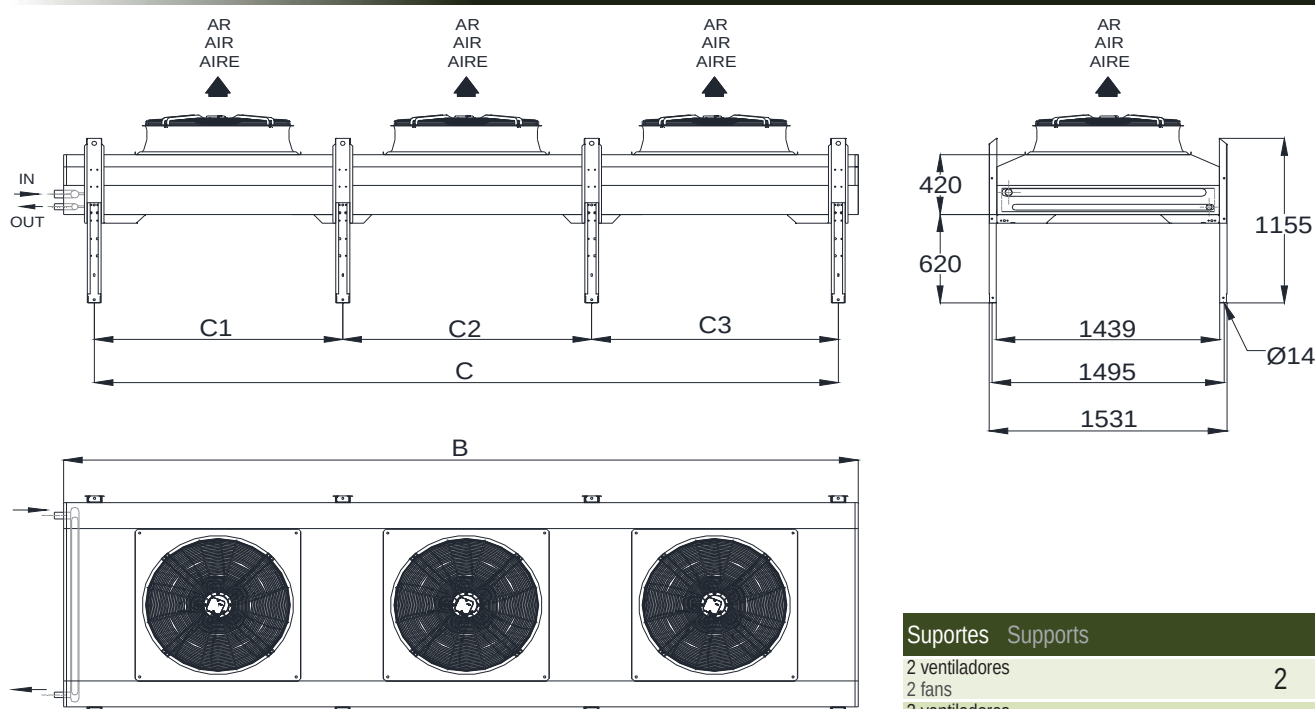
(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
		Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
	EUR	EUR			
ACJ/M 291/132T	•	•	S	1686.0	243.1
ACJ/M 291/132Y	•	•	S	1686.0	243.1
ACJ/M 291/172T	•	•	S	1686.0	243.1
ACJ/M 291/172Y	•	•	S	1686.0	243.1
ACJ/M 291/190T	•	•	S	1686.0	243.1
ACJ/M 291/190Y	•	•	S	1686.0	243.1
ACJ/M 391/199T	•	•	S	2529.0	382.1
ACJ/M 391/199Y	•	•	S	2529.0	382.1
ACJ/M 391/248T	•	•	S	2529.0	382.1
ACJ/M 391/248Y	•	•	S	2529.0	382.1
ACJ/M 391/277T	•	•	S	2529.0	382.1
ACJ/M 391/277Y	•	•	S	2529.0	382.1
ACJ/M 491/344T	•	•	S	3372.0	509.9
ACJ/M 491/344Y	•	•	S	3372.0	509.9
ACJ/M 491/380T	•	•	S	3372.0	509.9
ACJ/M 491/380Y	•	•	S	3372.0	509.9
ACJ/M 491/401T	•	•	S	3372.0	509.9
ACJ/M 491/401Y	•	•	S	3372.0	509.9

S Standard
S StandardSP Sob pedido
SP Under request

	Ligações standard connections		Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Entrada Inlet	Saída Outlet								
	in		B	C	C1	C2	C3			
			mm							
6-6 PÓLOS 6-6 POLES ACJ/M										
	2 1/8	1 5/8	3520	3193	-	-	-	431	4.89	ACJ/M 291/132T
	2 1/8	1 5/8	3520	3193	-	-	-	431	4.89	ACJ/M 291/132Y
	2 1/8	1 5/8	3520	3193	-	-	-	481	4.89	ACJ/M 291/172T
	2 1/8	1 5/8	3520	3193	-	-	-	481	4.89	ACJ/M 291/172Y
	2 1/8	1 5/8	3520	3193	-	-	-	528	4.89	ACJ/M 291/190T
	2 1/8	1 5/8	3520	3193	-	-	-	528	4.89	ACJ/M 291/190Y
	2 5/8	2 1/8	5120	4793	1571	1600	1622	613	7.08	ACJ/M 391/199T
	2 5/8	2 1/8	5120	4793	1571	1600	1622	613	7.08	ACJ/M 391/199Y
	2 5/8	2 1/8	5120	4793	1571	1600	1622	686	7.08	ACJ/M 391/248T
	2 5/8	2 1/8	5120	4793	1571	1600	1622	686	7.08	ACJ/M 391/248Y
	2 5/8	2 1/8	5120	4793	1571	1600	1622	755	7.08	ACJ/M 391/277T
	2 5/8	2 1/8	5120	4793	1571	1600	1622	755	7.08	ACJ/M 391/277Y
	3 1/8	2 5/8	6720	6393	1571	3200	1622	887	9.28	ACJ/M 491/344T
	3 1/8	2 5/8	6720	6393	1571	3200	1622	887	9.28	ACJ/M 491/344Y
	3 1/8	2 5/8	6720	6393	1571	3200	1622	985	9.28	ACJ/M 491/380T
	3 1/8	2 5/8	6720	6393	1571	3200	1622	985	9.28	ACJ/M 491/380Y
	3 1/8	2 5/8	6720	6393	1571	3200	1622	1076	9.28	ACJ/M 491/401T
	3 1/8	2 5/8	6720	6393	1571	3200	1622	1076	9.28	ACJ/M 491/401Y

Desenhos Drawings



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices

Suportes / Supports	
2 ventiladores / 2 fans	2
3 ventiladores / 3 fans	4
4 ventiladores / 4 fans	4

ACJ

Condensadores Condensers

Espaçamento Fin Spacing

Ø Ventiladores Fan Ø

2,1 mm

910 mm



Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m ²	dm ³		mm	m ³ /h	rpm	W	A	V / F / Hz	dB(A)	
ACJ/R				8-8 PÓLOS 8-8 POLES								
ACJ/R 291/132T	120.23	263.10	27.60	2	910	41000	650	2300	5.56	Δ 400/3/50	42	
ACJ/R 291/132Y	102.17	263.10	27.60	2	910	32200	475	1280	2.72	Y 400/3/50	36	
ACJ/R 291/172T	144.27	394.60	41.50	2	910	38800	650	2300	5.56	Δ 400/3/50	42	
ACJ/R 291/172Y	119.28	394.60	41.50	2	910	30200	475	1280	2.72	Y 400/3/50	36	
ACJ/R 291/190T	156.56	526.00	55.30	2	910	36800	650	2300	5.56	Δ 400/3/50	42	
ACJ/R 291/190Y	126.63	526.00	55.30	2	910	28400	475	1280	2.72	Y 400/3/50	36	
ACJ/R 391/199T	173.15	394.60	41.50	3	910	61500	650	3450	8.34	Δ 400/3/50	44	
ACJ/R 391/199Y	148.16	394.60	41.50	3	910	48300	475	1920	4.08	Y 400/3/50	38	
ACJ/R 391/248T	210.11	591.90	62.20	3	910	58200	650	3450	8.34	Δ 400/3/50	44	
ACJ/R 391/248Y	175.14	591.90	62.20	3	910	45300	475	1920	4.08	Y 400/3/50	38	
ACJ/R 391/277T	229.95	789.20	82.90	3	910	55200	650	3450	8.34	Δ 400/3/50	44	
ACJ/R 391/277Y	187.11	789.20	82.90	3	910	42600	475	1920	4.08	Y 400/3/50	38	
ACJ/R 491/344T	288.54	789.20	82.90	4	910	77600	650	4600	11.12	Δ 400/3/50	45	
ACJ/R 491/344Y	238.88	789.20	82.90	4	910	60400	475	2560	5.44	Y 400/3/50	39	
ACJ/R 491/380T	313.11	1052.00	110.60	4	910	73600	650	4600	11.12	Δ 400/3/50	45	
ACJ/R 491/380Y	253.26	1052.00	110.60	4	910	56800	475	2560	5.44	Y 400/3/50	39	
ACJ/R 491/401T	322.14	1315.40	138.20	4	910	69600	650	4600	11.12	Δ 400/3/50	45	
ACJ/R 491/401Y	256.73	1315.40	138.20	4	910	53600	475	2560	5.44	Y 400/3/50	39	

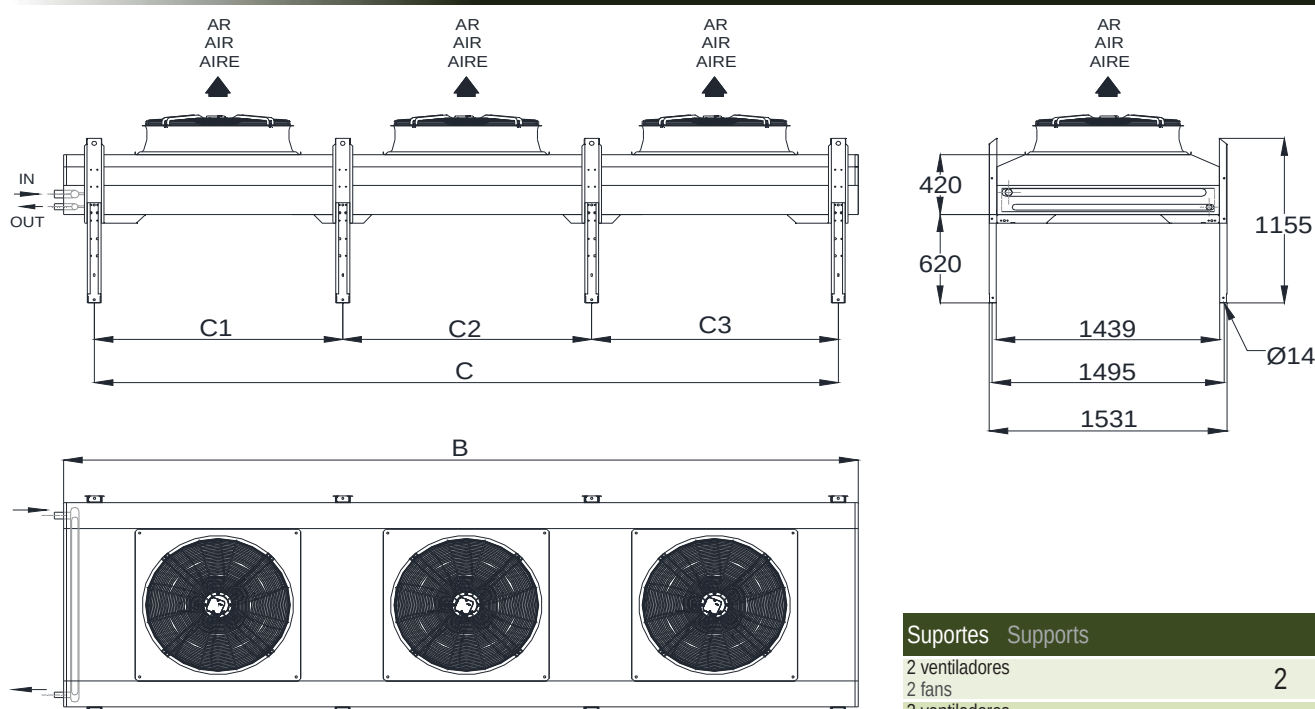
(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
	EUR	Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
ACJ/R 291/132T	•	•	S	1686.0	243.1
ACJ/R 291/132Y	•	•	S	1686.0	243.1
ACJ/R 291/172T	•	•	S	1686.0	243.1
ACJ/R 291/172Y	•	•	S	1686.0	243.1
ACJ/R 291/190T	•	•	S	1686.0	243.1
ACJ/R 291/190Y	•	•	S	1686.0	243.1
ACJ/R 391/199T	•	•	S	2529.0	382.1
ACJ/R 391/199Y	•	•	S	2529.0	382.1
ACJ/R 391/248T	•	•	S	2529.0	382.1
ACJ/R 391/248Y	•	•	S	2529.0	382.1
ACJ/R 391/277T	•	•	S	2529.0	382.1
ACJ/R 391/277Y	•	•	S	2529.0	382.1
ACJ/R 491/344T	•	•	S	3372.0	509.9
ACJ/R 491/344Y	•	•	S	3372.0	509.9
ACJ/R 491/380T	•	•	S	3372.0	509.9
ACJ/R 491/380Y	•	•	S	3372.0	509.9
ACJ/R 491/401T	•	•	S	3372.0	509.9
ACJ/R 491/401Y	•	•	S	3372.0	509.9

S Standard
S StandardSP Sob pedido
SP Under request

	Ligações standard connections		Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Entrada Inlet	Saída Outlet								
	in		B	C	C1	C2	C3			
			mm							
8-8 PÓLOS 8-8 POLES ACJ/R										
	2 1/8	1 5/8	3520	3193	-	-	-	431	4.89	ACJ/R 291/132T
	2 1/8	1 5/8	3520	3193	-	-	-	431	4.89	ACJ/R 291/132Y
	2 1/8	1 5/8	3520	3193	-	-	-	481	4.89	ACJ/R 291/172T
	2 1/8	1 5/8	3520	3193	-	-	-	481	4.89	ACJ/R 291/172Y
	2 1/8	1 5/8	3520	3193	-	-	-	528	4.89	ACJ/R 291/190T
	2 1/8	1 5/8	3520	3193	-	-	-	528	4.89	ACJ/R 291/190Y
	2 5/8	2 1/8	5120	4793	1571	1600	1622	613	7.08	ACJ/R 391/199T
	2 5/8	2 1/8	5120	4793	1571	1600	1622	613	7.08	ACJ/R 391/199Y
	2 5/8	2 1/8	5120	4793	1571	1600	1622	686	7.08	ACJ/R 391/248T
	2 5/8	2 1/8	5120	4793	1571	1600	1622	686	7.08	ACJ/R 391/248Y
	2 5/8	2 1/8	5120	4793	1571	1600	1622	755	7.08	ACJ/R 391/277T
	2 5/8	2 1/8	5120	4793	1571	1600	1622	755	7.08	ACJ/R 391/277Y
	3 1/8	2 5/8	6720	6393	1571	3200	1622	887	9.28	ACJ/R 491/344T
	3 1/8	2 5/8	6720	6393	1571	3200	1622	887	9.28	ACJ/R 491/344Y
	3 1/8	2 5/8	6720	6393	1571	3200	1622	985	9.28	ACJ/R 491/380T
	3 1/8	2 5/8	6720	6393	1571	3200	1622	985	9.28	ACJ/R 491/380Y
	3 1/8	2 5/8	6720	6393	1571	3200	1622	1076	9.28	ACJ/R 491/401T
	3 1/8	2 5/8	6720	6393	1571	3200	1622	1076	9.28	ACJ/R 491/401Y

Desenhos Drawings



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices

ACJ

Condensadores Condensers

Espaçamento Fin Spacing

Ø Ventiladores Fan Ø

2,1 mm

910 mm



Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V/F/Hz	dB(A)	
ACJ/L				12-12 PÓLOS 12-12 POLES								
ACJ/L 291/132T	88.94	263.10	27.60	2	910	27000	420	820	2.26	Δ 400/3/50	31	
ACJ/L 291/132Y	71.61	263.10	27.60	2	910	20200	305	420	0.96	Y 400/3/50	24	
ACJ/L 291/172T	104.06	394.60	41.50	2	910	25600	420	820	2.26	Δ 400/3/50	31	
ACJ/L 291/172Y	81.48	394.60	41.50	2	910	18800	305	420	0.96	Y 400/3/50	24	
ACJ/L 291/190T	109.41	526.00	55.30	2	910	24000	420	820	2.26	Δ 400/3/50	31	
ACJ/L 291/190Y	83.58	526.00	55.30	2	910	17400	305	420	0.96	Y 400/3/50	24	
ACJ/L 391/199T	129.68	394.60	41.50	3	910	40500	420	1230	3.39	Δ 400/3/50	33	
ACJ/L 391/199Y	105.11	394.60	41.50	3	910	30300	305	630	1.44	Y 400/3/50	26	
ACJ/L 391/248T	153.20	591.90	62.20	3	910	38400	420	1230	3.39	Δ 400/3/50	33	
ACJ/L 391/248Y	120.65	591.90	62.20	3	910	28200	305	630	1.44	Y 400/3/50	26	
ACJ/L 391/277T	162.23	789.20	82.90	3	910	36000	420	1230	3.39	Δ 400/3/50	33	
ACJ/L 391/277Y	124.53	789.20	82.90	3	910	26100	305	630	1.44	Y 400/3/50	26	
ACJ/L 491/344T	208.11	789.20	82.90	4	910	51200	420	1640	4.52	Δ 400/3/50	34	
ACJ/L 491/344Y	162.96	789.20	82.90	4	910	37600	305	840	1.92	Y 400/3/50	27	
ACJ/L 491/380T	218.93	1052.00	110.60	4	910	48000	420	1640	4.52	Δ 400/3/50	34	
ACJ/L 491/380Y	167.16	1052.00	110.60	4	910	34800	305	840	1.92	Y 400/3/50	27	
ACJ/L 491/401T	223.23	1315.40	138.20	4	910	45800	420	1640	4.52	Δ 400/3/50	34	
ACJ/L 491/401Y	168.00	1315.40	138.20	4	910	33000	305	840	1.92	Y 400/3/50	27	

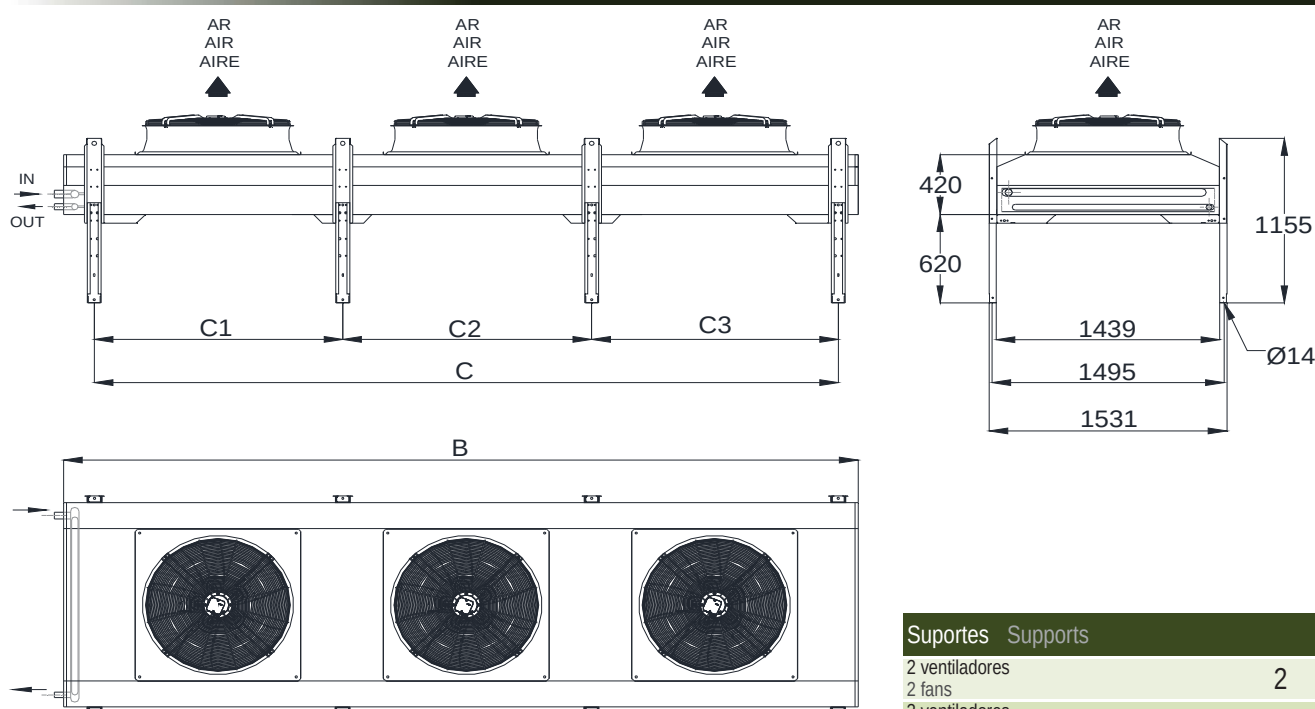
(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
		Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
	EUR	EUR			
ACJ/L 291/132T	•	•	S	1686.0	243.1
ACJ/L 291/132Y	•	•	S	1686.0	243.1
ACJ/L 291/172T	•	•	S	1686.0	243.1
ACJ/L 291/172Y	•	•	S	1686.0	243.1
ACJ/L 291/190T	•	•	S	1686.0	243.1
ACJ/L 291/190Y	•	•	S	1686.0	243.1
ACJ/L 391/199T	•	•	S	2529.0	382.1
ACJ/L 391/199Y	•	•	S	2529.0	382.1
ACJ/L 391/248T	•	•	S	2529.0	382.1
ACJ/L 391/248Y	•	•	S	2529.0	382.1
ACJ/L 391/277T	•	•	S	2529.0	382.1
ACJ/L 391/277Y	•	•	S	2529.0	382.1
ACJ/L 491/344T	•	•	S	3372.0	509.9
ACJ/L 491/344Y	•	•	S	3372.0	509.9
ACJ/L 491/380T	•	•	S	3372.0	509.9
ACJ/L 491/380Y	•	•	S	3372.0	509.9
ACJ/L 491/401T	•	•	S	3372.0	509.9
ACJ/L 491/401Y	•	•	S	3372.0	509.9

S Standard
S StandardSP Sob pedido
SP Under request

	Ligações standard connections		Dimensões Dimensions					Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Entrada Inlet	Saída Outlet								
	B	C	C1	C2	C3	Kg	dm ³			
	in		mm							
12-12 PÓLOS 12-12 POLES ACJ/L										
	2 1/8	1 5/8	3520	3193	-	-	-	431	4.89	ACJ/L 291/132T
	2 1/8	1 5/8	3520	3193	-	-	-	431	4.89	ACJ/L 291/132Y
	2 1/8	1 5/8	3520	3193	-	-	-	481	4.89	ACJ/L 291/172T
	2 1/8	1 5/8	3520	3193	-	-	-	481	4.89	ACJ/L 291/172Y
	2 1/8	1 5/8	3520	3193	-	-	-	528	4.89	ACJ/L 291/190T
	2 1/8	1 5/8	3520	3193	-	-	-	528	4.89	ACJ/L 291/190Y
	2 5/8	2 1/8	5120	4793	1571	1600	1622	613	7.08	ACJ/L 391/199T
	2 5/8	2 1/8	5120	4793	1571	1600	1622	613	7.08	ACJ/L 391/199Y
	2 5/8	2 1/8	5120	4793	1571	1600	1622	686	7.08	ACJ/L 391/248T
	2 5/8	2 1/8	5120	4793	1571	1600	1622	686	7.08	ACJ/L 391/248Y
	2 5/8	2 1/8	5120	4793	1571	1600	1622	755	7.08	ACJ/L 391/277T
	2 5/8	2 1/8	5120	4793	1571	1600	1622	755	7.08	ACJ/L 391/277Y
	3 1/8	2 5/8	6720	6393	1571	3200	1622	887	9.28	ACJ/L 491/344T
	3 1/8	2 5/8	6720	6393	1571	3200	1622	887	9.28	ACJ/L 491/344Y
	3 1/8	2 5/8	6720	6393	1571	3200	1622	985	9.28	ACJ/L 491/380T
	3 1/8	2 5/8	6720	6393	1571	3200	1622	985	9.28	ACJ/L 491/380Y
	3 1/8	2 5/8	6720	6393	1571	3200	1622	1076	9.28	ACJ/L 491/401T
	3 1/8	2 5/8	6720	6393	1571	3200	1622	1076	9.28	ACJ/L 491/401Y

Desenhos Drawings



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices

Suportes Supports

2 ventiladores 2 fans	2
3 ventiladores 3 fans	4
4 ventiladores 4 fans	4

VAC

Condensadores Condensers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

2,1 mm
910 mm



Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V/F/Hz	dB(A)	
VAC/M				6-6 PÓLOS 6-6 POLES								
VAC/M 291/132T	132.10	293.12	30.80	2	910	52800	890	3680	7.66	Δ 400/3/50	52	
VAC/M 291/132Y	115.00	293.12	30.80	2	910	42400	670	2300	4.44	Y 400/3/50	47	
VAC/M 291/173T	172.60	439.69	46.20	2	910	50800	890	3680	7.66	Δ 400/3/50	52	
VAC/M 291/173Y	145.00	439.69	46.20	2	910	40200	670	2300	4.44	Y 400/3/50	47	
VAC/M 391/209T	209.00	439.69	46.20	3	910	79200	890	5520	11.49	Δ 400/3/50	54	
VAC/M 391/209Y	182.00	439.69	46.20	3	910	63600	670	3450	6.66	Y 400/3/50	49	
VAC/M 391/258T	258.00	659.53	69.30	3	910	76200	890	5520	11.49	Δ 400/3/50	54	
VAC/M 391/258Y	217.00	659.53	69.30	3	910	60300	670	3450	6.66	Y 400/3/50	49	
VAC/M 491/264T	264.00	586.25	61.60	4	910	105600	890	7360	15.32	Δ 400/3/50	55	
VAC/M 491/264Y	230.00	586.25	61.60	4	910	84800	670	4600	8.88	Y 400/3/50	50	
VAC/M 491/329T	328.50	879.37	92.40	4	910	101600	890	7360	15.32	Δ 400/3/50	55	
VAC/M 491/329Y	279.00	879.37	92.40	4	910	80400	670	4600	8.88	Y 400/3/50	50	
VAC/M 591/343T	343.20	732.81	77.00	5	910	132000	890	9200	19.15	Δ 400/3/50	56	
VAC/M 591/343Y	296.00	732.81	77.00	5	910	106000	670	5750	11.10	Y 400/3/50	51	
VAC/M 591/421T	421.00	1099.22	115.50	5	910	127000	890	9200	19.15	Δ 400/3/50	56	
VAC/M 591/421Y	356.00	1099.22	115.50	5	910	100500	670	5750	11.10	Y 400/3/50	51	
VAC/M 691/420T	420.00	879.40	92.40	6	910	158400	890	11040	22.98	Δ 400/3/50	57	
VAC/M 691/420Y	364.00	879.40	92.40	6	910	127200	670	6900	13.32	Y 400/3/50	52	
VAC/M 691/517T	517.00	1319.10	138.00	6	910	152400	890	11040	22.98	Δ 400/3/50	57	
VAC/M 691/517Y	435.00	1319.10	138.00	6	910	120600	670	6900	13.32	Y 400/3/50	52	

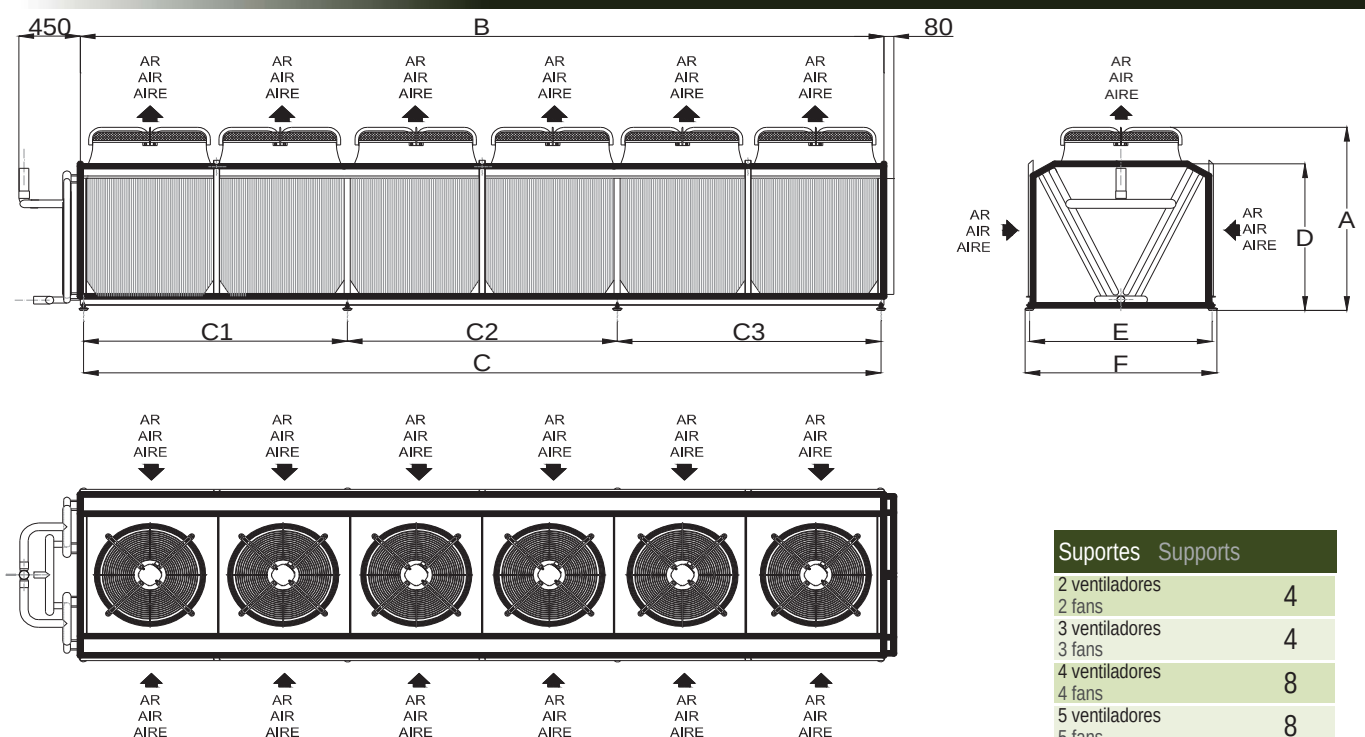
(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
	EUR	Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
VAC/M 291/132T	•	•	S	1686.0	363.6
VAC/M 291/132Y	•	•	S	1686.0	363.6
VAC/M 291/173T	•	•	S	1686.0	363.6
VAC/M 291/173Y	•	•	S	1686.0	363.6
VAC/M 391/209T	•	•	S	2529.0	503.7
VAC/M 391/209Y	•	•	S	2529.0	503.7
VAC/M 391/258T	•	•	S	2529.0	503.7
VAC/M 391/258Y	•	•	S	2529.0	503.7
VAC/M 491/264T	•	•	S	3372.0	654.1
VAC/M 491/264Y	•	•	S	3372.0	654.1
VAC/M 491/329T	•	•	S	3372.0	654.1
VAC/M 491/329Y	•	•	S	3372.0	654.1
VAC/M 591/343T	•	•	S	4215.0	808.6
VAC/M 591/343Y	•	•	S	4215.0	808.6
VAC/M 591/421T	•	•	S	4215.0	808.6
VAC/M 591/421Y	•	•	S	4215.0	808.6
VAC/M 691/420T	•	•	S	5058.0	954.8
VAC/M 691/420Y	•	•	S	5058.0	954.8
VAC/M 691/517T	•	•	S	5058.0	954.8
VAC/M 691/517Y	•	•	S	5058.0	954.8

S Standard SP Sob pedido
S Standard SP Under request

	Ligações standard connections		Dimensões Dimensions							Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type		
	Entrada Inlet	Saída Outlet												
	B	C												C1
	in		mm							Kg	dm³			
6-6 PÓLOS 6-6 POLES													VAC/M	
	2 1/8	1 5/8	2240	2190	-	-	-	1460	1535	518	8.60	VAC/M	291/132T	
	2 1/8	1 5/8	2240	2190	-	-	-	1460	1535	518	8.60	VAC/M	291/132Y	
	2 1/8	1 5/8	2240	2190	-	-	-	1460	1535	571	8.60	VAC/M	291/173T	
	2 1/8	1 5/8	2240	2190	-	-	-	1460	1535	571	8.60	VAC/M	291/173Y	
	2 5/8	2 1/8	3310	3260	-	-	-	1470	1545	722	12.45	VAC/M	391/209T	
	2 5/8	2 1/8	3310	3260	-	-	-	1470	1545	722	12.45	VAC/M	391/209Y	
	2 5/8	2 1/8	3310	3260	-	-	-	1470	1545	799	12.45	VAC/M	391/258T	
	2 5/8	2 1/8	3310	3260	-	-	-	1470	1545	799	12.45	VAC/M	391/258Y	
	2 5/8	2 1/8	4380	4330	1070	2190	1070	1470	1545	900	16.30	VAC/M	491/264T	
	2 5/8	2 1/8	4380	4330	1070	2190	1070	1470	1545	900	16.30	VAC/M	491/264Y	
	3 1/8	2 5/8	4380	4330	1070	2190	1070	1470	1545	1036	16.30	VAC/M	491/329T	
	3 1/8	2 5/8	4380	4330	1070	2190	1070	1470	1545	1036	16.30	VAC/M	491/329Y	
	3 1/8	2 5/8	5450	5400	2140	1120	2140	1480	1555	1107	20.15	VAC/M	591/343T	
	3 1/8	2 5/8	5450	5400	2140	1120	2140	1480	1555	1107	20.15	VAC/M	591/343Y	
	3 1/8	2 5/8	5450	5400	2140	1120	2140	1480	1555	1243	20.15	VAC/M	591/421T	
	3 1/8	2 5/8	5450	5400	2140	1120	2140	1480	1555	1243	20.15	VAC/M	591/421Y	
	3 1/8	2 5/8	6520	6470	2140	2190	2140	1480	1555	1374	24.00	VAC/M	691/420T	
	3 1/8	2 5/8	6520	6470	2140	2190	2140	1480	1555	1374	24.00	VAC/M	691/420Y	
	2 x 2 5/8	2 x 2 1/8	6520	6470	2140	2190	2140	1480	1555	1526	24.00	VAC/M	691/517T	
	2 x 2 5/8	2 x 2 1/8	6520	6470	2140	2190	2140	1480	1555	1526	24.00	VAC/M	691/517Y	

Desenhos Drawings



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices

Suportes	Supports
2 ventiladores 2 fans	4
3 ventiladores 3 fans	4
4 ventiladores 4 fans	8
5 ventiladores 5 fans	8
6 ventiladores 6 fans	8

VAC



Condensadores Condensers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

2,1 mm
910 mm

AC

ACM

ACH

ACI

ACP

ACPD

ACJ

VAC

VACD

Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V / F / Hz	dB(A)	
VAC/R				8-8 PÓLOS 8-8 POLES								
VAC/R 291/132T	115.00	293.12	30.80	2	910	42400	650	2300	5.56	Δ 400/3/50	43	
VAC/R 291/132Y	98.20	293.12	30.80	2	910	33400	475	1280	2.72	Y 400/3/50	37	
VAC/R 291/173T	145.00	439.69	46.20	2	910	40200	650	2300	5.56	Δ 400/3/50	43	
VAC/R 291/173Y	120.30	439.69	46.20	2	910	31600	475	1280	2.72	Y 400/3/50	37	
VAC/R 391/209T	182.00	439.69	46.20	3	910	63600	650	3450	8.34	Δ 400/3/50	45	
VAC/R 391/209Y	154.10	439.69	46.20	3	910	50100	475	1920	4.08	Y 400/3/50	39	
VAC/R 391/258T	217.00	659.53	69.30	3	910	60300	650	3450	8.34	Δ 400/3/50	45	
VAC/R 391/258Y	180.40	659.53	69.30	3	910	47400	475	1920	4.08	Y 400/3/50	39	
VAC/R 491/264T	230.00	586.25	61.60	4	910	84800	650	4600	11.12	Δ 400/3/50	46	
VAC/R 491/264Y	196.60	586.25	61.60	4	910	66800	475	2560	5.44	Y 400/3/50	40	
VAC/R 491/329T	279.00	879.37	92.40	4	910	80400	650	4600	11.12	Δ 400/3/50	46	
VAC/R 491/329Y	233.60	879.37	92.40	4	910	63200	475	2560	5.44	Y 400/3/50	40	
VAC/R 591/343T	296.00	732.81	77.00	5	910	106000	650	5750	13.90	Δ 400/3/50	47	
VAC/R 591/343Y	251.60	732.81	77.00	5	910	83500	475	3200	6.80	Y 400/3/50	41	
VAC/R 591/421T	356.00	1099.22	115.50	5	910	100500	650	5750	13.90	Δ 400/3/50	47	
VAC/R 591/421Y	296.60	1099.22	115.50	5	910	79000	475	3200	6.80	Y 400/3/50	41	
VAC/R 691/420T	364.00	879.40	92.40	6	910	127200	650	6900	16.68	Δ 400/3/50	48	
VAC/R 691/420Y	308.10	879.40	92.40	6	910	100200	475	3840	8.16	Y 400/3/50	42	
VAC/R 691/517T	435.00	1319.10	138.00	6	910	120600	650	6900	16.68	Δ 400/3/50	48	
VAC/R 691/517Y	360.50	1319.10	138.00	6	910	94800	475	3840	8.16	Y 400/3/50	42	

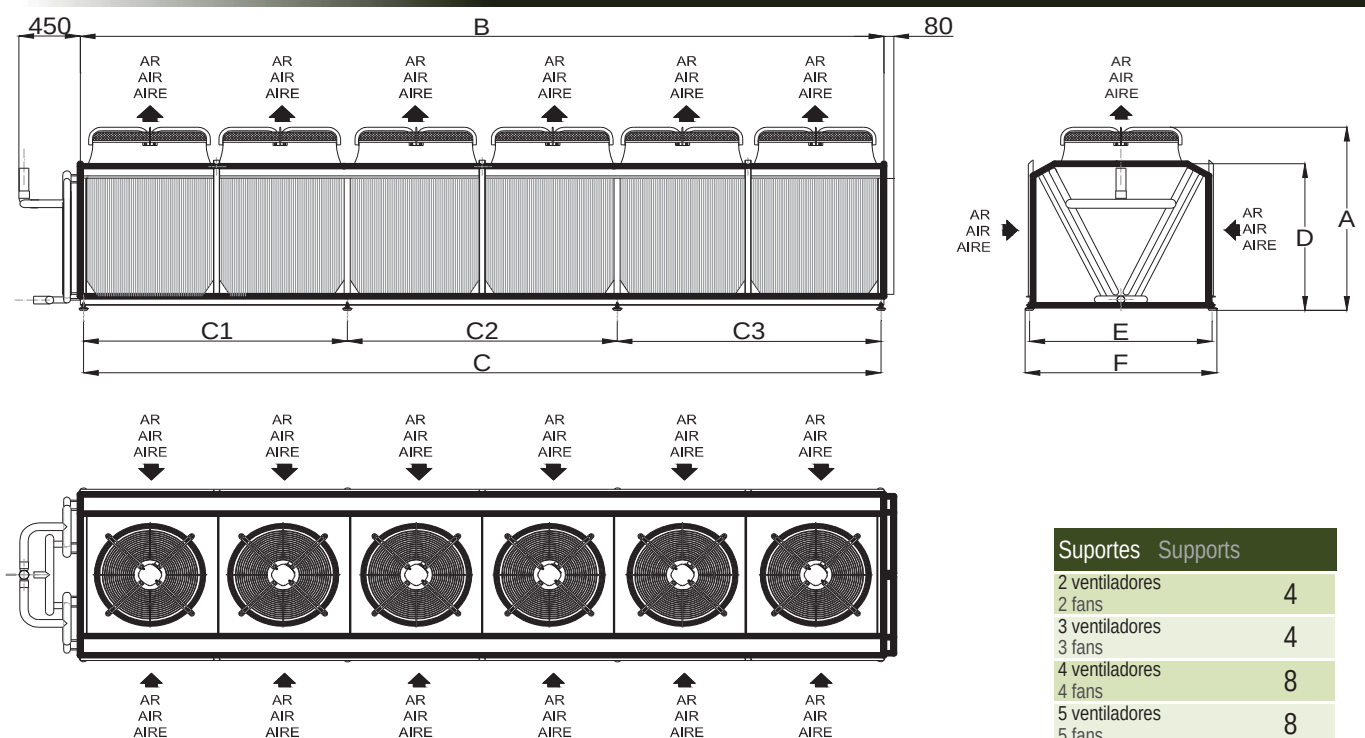
(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
	EUR	Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
VAC/R 291/132T	•	•	S	1686.0	363.6
VAC/R 291/132Y	•	•	S	1686.0	363.6
VAC/R 291/173T	•	•	S	1686.0	363.6
VAC/R 291/173Y	•	•	S	1686.0	363.6
VAC/R 391/209T	•	•	S	2529.0	503.7
VAC/R 391/209Y	•	•	S	2529.0	503.7
VAC/R 391/258T	•	•	S	2529.0	503.7
VAC/R 391/258Y	•	•	S	2529.0	503.7
VAC/R 491/264T	•	•	S	3372.0	654.1
VAC/R 491/264Y	•	•	S	3372.0	654.1
VAC/R 491/329T	•	•	S	3372.0	654.1
VAC/R 491/329Y	•	•	S	3372.0	654.1
VAC/R 591/343T	•	•	S	4215.0	808.6
VAC/R 591/343Y	•	•	S	4215.0	808.6
VAC/R 591/421T	•	•	S	4215.0	808.6
VAC/R 591/421Y	•	•	S	4215.0	808.6
VAC/R 691/420T	•	•	S	5058.0	954.8
VAC/R 691/420Y	•	•	S	5058.0	954.8
VAC/R 691/517T	•	•	S	5058.0	954.8
VAC/R 691/517Y	•	•	S	5058.0	954.8

S Standard SP Sob pedido
S Standard SP Under request

	Ligações standard connections		Dimensões Dimensions								Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type	
	Entrada Inlet	Saída Outlet												
	B	C												
	in		mm								Kg	dm³		
8-8 PÓLOS 8-8 POLES													VAC/R	
	2 1/8	1 5/8	2240	2190	-	-	-	1460	1535	518	8.60	VAC/R	291/132T	
	2 1/8	1 5/8	2240	2190	-	-	-	1460	1535	518	8.60	VAC/R	291/132Y	
	2 1/8	1 5/8	2240	2190	-	-	-	1460	1535	571	8.60	VAC/R	291/173T	
	2 1/8	1 5/8	2240	2190	-	-	-	1460	1535	571	8.60	VAC/R	291/173Y	
	2 5/8	2 1/8	3310	3260	-	-	-	1470	1545	722	12.45	VAC/R	391/209T	
	2 5/8	2 1/8	3310	3260	-	-	-	1470	1545	722	12.45	VAC/R	391/209Y	
	2 5/8	2 1/8	3310	3260	-	-	-	1470	1545	799	12.45	VAC/R	391/258T	
	2 5/8	2 1/8	3310	3260	-	-	-	1470	1545	799	12.45	VAC/R	391/258Y	
	2 5/8	2 1/8	4380	4330	1070	2190	1070	1470	1545	900	16.30	VAC/R	491/264T	
	2 5/8	2 1/8	4380	4330	1070	2190	1070	1470	1545	900	16.30	VAC/R	491/264Y	
	3 1/8	2 5/8	4380	4330	1070	2190	1070	1470	1545	1036	16.30	VAC/R	491/329T	
	3 1/8	2 5/8	4380	4330	1070	2190	1070	1470	1545	1036	16.30	VAC/R	491/329Y	
	3 1/8	2 5/8	5450	5400	2140	1120	2140	1480	1555	1107	20.15	VAC/R	591/343T	
	3 1/8	2 5/8	5450	5400	2140	1120	2140	1480	1555	1107	20.15	VAC/R	591/343Y	
	3 1/8	2 5/8	5450	5400	2140	1120	2140	1480	1555	1243	20.15	VAC/R	591/421T	
	3 1/8	2 5/8	5450	5400	2140	1120	2140	1480	1555	1243	20.15	VAC/R	591/421Y	
	3 1/8	2 5/8	6520	6470	2140	2190	2140	1480	1555	1374	24.00	VAC/R	691/420T	
	3 1/8	2 5/8	6520	6470	2140	2190	2140	1480	1555	1374	24.00	VAC/R	691/420Y	
	2 x 2 5/8	2 x 2 1/8	6520	6470	2140	2190	2140	1480	1555	1526	24.00	VAC/R	691/517T	
	2 x 2 5/8	2 x 2 1/8	6520	6470	2140	2190	2140	1480	1555	1526	24.00	VAC/R	691/517Y	

Desenhos Drawings



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices

Suportes	Supports
2 ventiladores 2 fans	4
3 ventiladores 3 fans	4
4 ventiladores 4 fans	8
5 ventiladores 5 fans	8
6 ventiladores 6 fans	8

VAC



Condensadores Condensers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

2,1 mm
910 mm

AC

ACM

ACH

ACI

ACP

ACPD

ACJ

VAC

VACD

Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V/F/Hz	dB(A)	
VAC/L				12-12 PÓLOS 12-12 POLES								
VAC/L 291/132T	85.60	293.12	30.80	2	910	27800	420	820	2.26	Δ 400/3/50	33	
VAC/L 291/132Y	70.40	293.12	30.80	2	910	21000	305	420	0.96	Y 400/3/50	24	
VAC/L 291/173T	103.50	439.69	46.20	2	910	26400	420	820	2.26	Δ 400/3/50	33	
VAC/L 291/173Y	82.10	439.69	46.20	2	910	19600	305	420	0.96	Y 400/3/50	24	
VAC/L 391/209T	133.10	439.69	46.20	3	910	41700	420	1230	3.39	Δ 400/3/50	35	
VAC/L 391/209Y	108.60	439.69	46.20	3	910	31500	305	630	1.44	Y 400/3/50	26	
VAC/L 391/258T	155.20	659.53	69.30	3	910	39600	420	1230	3.39	Δ 400/3/50	35	
VAC/L 391/258Y	123.10	659.53	69.30	3	910	29400	305	630	1.44	Y 400/3/50	26	
VAC/L 491/264T	171.10	586.25	61.60	4	910	55600	420	1640	4.52	Δ 400/3/50	36	
VAC/L 491/264Y	141.00	586.25	61.60	4	910	42000	305	840	1.92	Y 400/3/50	27	
VAC/L 491/329T	202.20	879.37	92.40	4	910	52800	420	1640	4.52	Δ 400/3/50	36	
VAC/L 491/329Y	161.60	879.37	92.40	4	910	39200	305	840	1.92	Y 400/3/50	27	
VAC/L 591/343T	218.00	732.81	77.00	5	910	69500	420	2050	5.65	Δ 400/3/50	37	
VAC/L 591/343Y	178.70	732.81	77.00	5	910	52500	305	1050	2.40	Y 400/3/50	28	
VAC/L 591/421T	256.00	1099.22	115.50	5	910	66000	420	2050	5.65	Δ 400/3/50	37	
VAC/L 591/421Y	203.50	1099.22	115.50	5	910	49000	305	1050	2.40	Y 400/3/50	28	
VAC/L 691/420T	266.10	879.40	92.40	6	910	83400	420	2460	6.78	Δ 400/3/50	38	
VAC/L 691/420Y	217.30	879.40	92.40	6	910	63000	305	1260	2.88	Y 400/3/50	29	
VAC/L 691/517T	310.50	1319.10	138.00	6	910	79200	420	2460	6.78	Δ 400/3/50	38	
VAC/L 691/517Y	246.30	1319.10	138.00	6	910	58800	305	1260	2.88	Y 400/3/50	29	

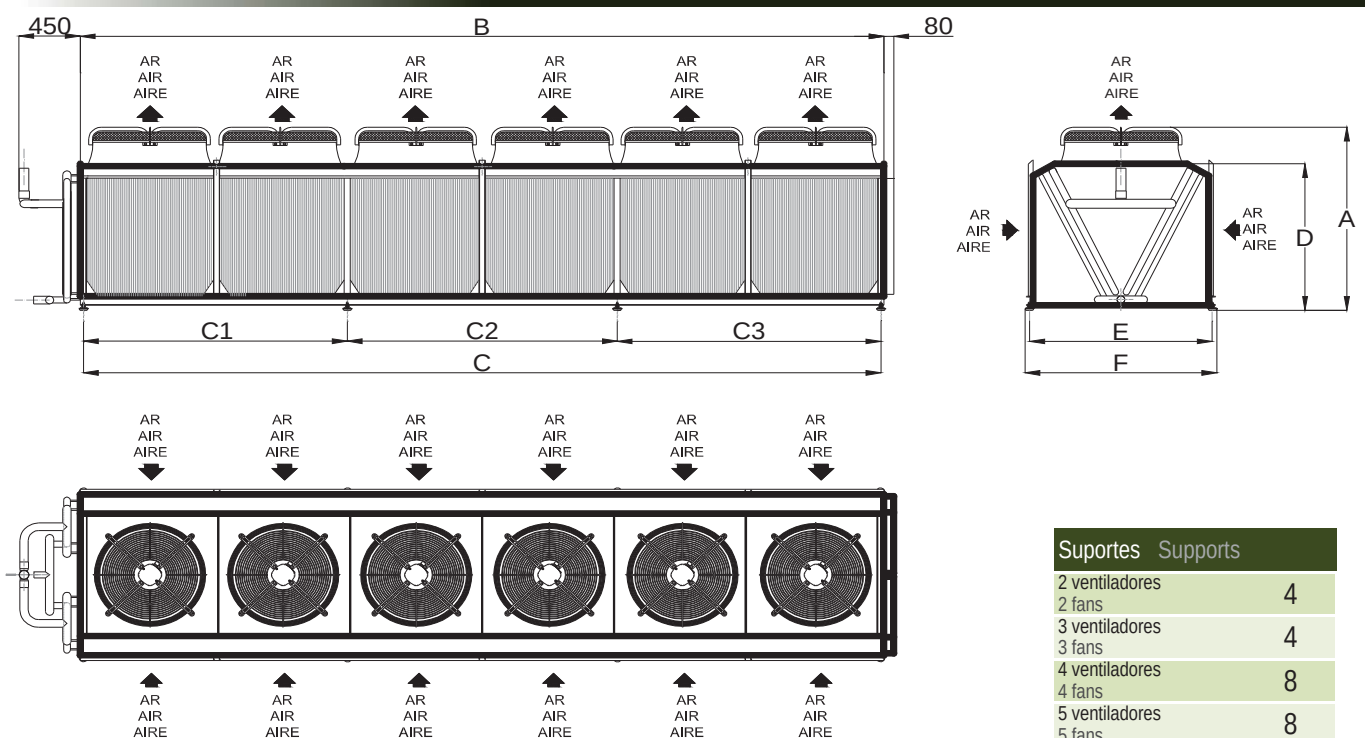
(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
		Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
	EUR	EUR			
VAC/L 291/132T	•	•	S	1686.0	363.6
VAC/L 291/132Y	•	•	S	1686.0	363.6
VAC/L 291/173T	•	•	S	1686.0	363.6
VAC/L 291/173Y	•	•	S	1686.0	363.6
VAC/L 391/209T	•	•	S	2529.0	503.7
VAC/L 391/209Y	•	•	S	2529.0	503.7
VAC/L 391/258T	•	•	S	2529.0	503.7
VAC/L 391/258Y	•	•	S	2529.0	503.7
VAC/L 491/264T	•	•	S	3372.0	654.1
VAC/L 491/264Y	•	•	S	3372.0	654.1
VAC/L 491/329T	•	•	S	3372.0	654.1
VAC/L 491/329Y	•	•	S	3372.0	654.1
VAC/L 591/343T	•	•	S	4215.0	808.6
VAC/L 591/343Y	•	•	S	4215.0	808.6
VAC/L 591/421T	•	•	S	4215.0	808.6
VAC/L 591/421Y	•	•	S	4215.0	808.6
VAC/L 691/420T	•	•	S	5058.0	954.8
VAC/L 691/420Y	•	•	S	5058.0	954.8
VAC/L 691/517T	•	•	S	5058.0	954.8
VAC/L 691/517Y	•	•	S	5058.0	954.8

S Standard SP Sob pedido
S Standard SP Under request

	Ligações standard connections		Dimensões Dimensions								Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type	
	Entrada Inlet	Saída Outlet												
	B	C												
	in		mm								Kg	dm³		
12-12 PÓLOS 12-12 POLES													VAC/L	
	2 1/8	1 5/8	2240	2190	-	-	-	1460	1535	518	8.60	VAC/L	291/132T	
	2 1/8	1 5/8	2240	2190	-	-	-	1460	1535	518	8.60	VAC/L	291/132Y	
	2 1/8	1 5/8	2240	2190	-	-	-	1460	1535	571	8.60	VAC/L	291/173T	
	2 1/8	1 5/8	2240	2190	-	-	-	1460	1535	571	8.60	VAC/L	291/173Y	
	2 5/8	2 1/8	3310	3260	-	-	-	1470	1545	722	12.45	VAC/L	391/209T	
	2 5/8	2 1/8	3310	3260	-	-	-	1470	1545	722	12.45	VAC/L	391/209Y	
	2 5/8	2 1/8	3310	3260	-	-	-	1470	1545	799	12.45	VAC/L	391/258T	
	2 5/8	2 1/8	3310	3260	-	-	-	1470	1545	799	12.45	VAC/L	391/258Y	
	2 5/8	2 1/8	4380	4330	1070	2190	1070	1470	1545	900	16.30	VAC/L	491/264T	
	2 5/8	2 1/8	4380	4330	1070	2190	1070	1470	1545	900	16.30	VAC/L	491/264Y	
	3 1/8	2 5/8	4380	4330	1070	2190	1070	1470	1545	1036	16.30	VAC/L	491/329T	
	3 1/8	2 5/8	4380	4330	1070	2190	1070	1470	1545	1036	16.30	VAC/L	491/329Y	
	3 1/8	2 5/8	5450	5400	2140	1120	2140	1480	1555	1107	20.15	VAC/L	591/343T	
	3 1/8	2 5/8	5450	5400	2140	1120	2140	1480	1555	1107	20.15	VAC/L	591/343Y	
	3 1/8	2 5/8	5450	5400	2140	1120	2140	1480	1555	1243	20.15	VAC/L	591/421T	
	3 1/8	2 5/8	5450	5400	2140	1120	2140	1480	1555	1243	20.15	VAC/L	591/421Y	
	3 1/8	2 5/8	6520	6470	2140	2190	2140	1480	1555	1374	24.00	VAC/L	691/420T	
	3 1/8	2 5/8	6520	6470	2140	2190	2140	1480	1555	1374	24.00	VAC/L	691/420Y	
	2 x 2 5/8	2 x 2 1/8	6520	6470	2140	2190	2140	1480	1555	1526	24.00	VAC/L	691/517T	
	2 x 2 5/8	2 x 2 1/8	6520	6470	2140	2190	2140	1480	1555	1526	24.00	VAC/L	691/517Y	

Desenhos Drawings



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices

Suportes	Supports
2 ventiladores 2 fans	4
3 ventiladores 3 fans	4
4 ventiladores 4 fans	8
5 ventiladores 5 fans	8
6 ventiladores 6 fans	8

VACD



Condensadores Condensers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

2,1 mm
910 mm

AC

ACM

ACH

ACI

ACP

ACPD

ACJ

VAC

VACD

Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V / F / Hz	dB(A)	
VACD/M				6-6 PÓLOS 6-6 POLES								
VACD/M 491/281T	281.00	615.56	64.70	4	910	90000	890	7360	15.32	Δ 400/3/50	55	
VACD/M 491/281Y	235.00	615.56	64.70	4	910	68800	670	4600	8.88	Y 400/3/50	50	
VACD/M 491/313T	313.00	820.75	86.30	4	910	84800	890	7360	15.32	Δ 400/3/50	55	
VACD/M 491/313Y	253.00	820.75	86.30	4	910	64000	670	4600	8.88	Y 400/3/50	50	
VACD/M 691/422T	422.00	923.34	97.10	6	910	135000	890	11040	22.98	Δ 400/3/50	57	
VACD/M 691/422Y	353.00	923.34	97.10	6	910	103200	670	6900	13.32	Y 400/3/50	52	
VACD/M 691/469T	469.00	1231.12	129.40	6	910	127200	890	11040	22.98	Δ 400/3/50	57	
VACD/M 691/469Y	380.00	1231.12	129.40	6	910	96000	670	6900	13.32	Y 400/3/50	52	
VACD/M 891/531T	531.00	1231.12	129.40	8	910	180000	890	14720	30.64	Δ 400/3/50	58	
VACD/M 891/531Y	449.00	1231.12	129.40	8	910	137600	670	9200	17.76	Y 400/3/50	53	
VACD/M 891/598T	598.00	1641.50	172.50	8	910	169600	890	14720	30.64	Δ 400/3/50	58	
VACD/M 891/598Y	490.00	1641.50	172.50	8	910	128000	670	9200	17.76	Y 400/3/50	53	
VACD/M 1091/686T	686.00	1538.90	161.80	10	910	225000	890	18400	38.30	Δ 400/3/50	59	
VACD/M 1091/686Y	576.00	1538.90	161.80	10	910	172000	670	11500	22.20	Y 400/3/50	54	
VACD/M 1091/766T	766.00	2051.87	215.70	10	910	212000	890	18400	38.30	Δ 400/3/50	59	
VACD/M 1091/766Y	623.00	2051.87	215.70	10	910	160000	670	11500	22.20	Y 400/3/50	54	
VACD/M 1291/844T	844.00	1846.70	194.10	12	910	270000	890	22080	45.96	Δ 400/3/50	60	
VACD/M 1291/844Y	707.00	1846.70	194.10	12	910	206400	670	13800	26.64	Y 400/3/50	55	
VACD/M 1291/938T	938.00	2462.20	258.80	12	910	254400	890	22080	45.96	Δ 400/3/50	60	
VACD/M 1291/938Y	760.00	2462.20	258.80	12	910	192000	670	13800	26.64	Y 400/3/50	55	

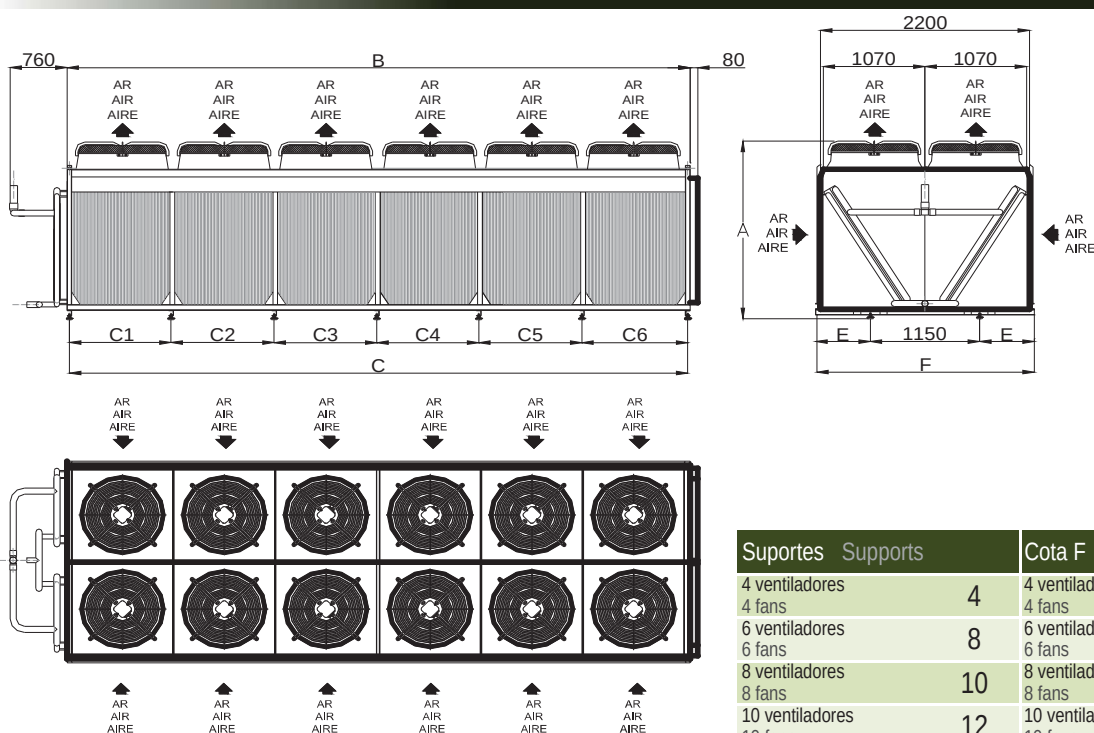
(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
		Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
	EUR	EUR			
VACD/M 491/281T	•	•	S	3372.0	666.4
VACD/M 491/281Y	•	•	S	3372.0	666.4
VACD/M 491/313T	•	•	S	3372.0	666.4
VACD/M 491/313Y	•	•	S	3372.0	666.4
VACD/M 691/422T	•	•	S	5058.0	949.7
VACD/M 691/422Y	•	•	S	5058.0	949.7
VACD/M 691/469T	•	•	S	5058.0	949.7
VACD/M 691/469Y	•	•	S	5058.0	949.7
VACD/M 891/531T	•	•	S	6744.0	1290.6
VACD/M 891/531Y	•	•	S	6744.0	1290.6
VACD/M 891/598T	•	•	S	6744.0	1290.6
VACD/M 891/598Y	•	•	S	6744.0	1290.6
VACD/M 1091/686T	•	•	S	8430.0	1602.7
VACD/M 1091/686Y	•	•	S	8430.0	1602.7
VACD/M 1091/766T	•	•	S	8430.0	1602.7
VACD/M 1091/766Y	•	•	S	8430.0	1602.7
VACD/M 1291/844T	•	•	S	10116.0	1911.7
VACD/M 1291/844Y	•	•	S	10116.0	1911.7
VACD/M 1291/938T	•	•	S	10116.0	1911.7
VACD/M 1291/938Y	•	•	S	10116.0	1911.7

S Standard SP Sob pedido
S Standard SP Under request

	Ligações standard connections		Dimensões Dimensions								Peso em vazio Net weight Kg	Volume embarque Shipment volume dm ³	Modelo Type
	Entrada Inlet	Saída Outlet											
	in		B	C	C1	C2	C3	C4	C5	C6			
			mm										
			6-6 PÓLOS 6-6 POLES										VACD/M
	2 5/8	2 1/8	2240	2190	1070	1120	-	-	-	-	1022	15.33	VACD/M 491/281T
	2 5/8	2 1/8	2240	2190	1070	1120	-	-	-	-	1022	15.33	VACD/M 491/281Y
	3 1/8	2 5/8	2240	2190	1070	1120	-	-	-	-	1095	15.33	VACD/M 491/313T
	3 1/8	2 5/8	2240	2190	1070	1120	-	-	-	-	1095	15.33	VACD/M 491/313Y
	3 1/8	2 5/8	3310	3260	1070	1120	1070	-	-	-	1434	21.25	VACD/M 691/422T
	3 1/8	2 5/8	3310	3260	1070	1120	1070	-	-	-	1434	21.25	VACD/M 691/422Y
	3 1/8	2 5/8	3310	3260	1070	1120	1070	-	-	-	1543	21.25	VACD/M 691/469T
	3 1/8	2 5/8	3310	3260	1070	1120	1070	-	-	-	1543	21.25	VACD/M 691/469Y
	2 x 2 5/8	2 x 2 1/8	4380	4330	1070	1070	1120	1070	-	-	1784	27.17	VACD/M 891/531T
	2 x 2 5/8	2 x 2 1/8	4380	4330	1070	1070	1120	1070	-	-	1784	27.17	VACD/M 891/531Y
	2 x 3 1/8	2 x 2 5/8	4380	4330	1070	1070	1120	1070	-	-	1927	27.17	VACD/M 891/598T
	2 x 3 1/8	2 x 2 5/8	4380	4330	1070	1070	1120	1070	-	-	1927	27.17	VACD/M 891/598Y
	2 x 3 1/8	2 x 2 5/8	5450	5400	1070	1070	1120	1070	1070	-	2134	33.09	VACD/M 1091/686T
	2 x 3 1/8	2 x 2 5/8	5450	5400	1070	1070	1120	1070	1070	-	2134	33.09	VACD/M 1091/686Y
	2 x 3 1/8	2 x 2 5/8	5450	5400	1070	1070	1120	1070	1070	-	2313	33.09	VACD/M 1091/766T
	2 x 3 1/8	2 x 2 5/8	5450	5400	1070	1070	1120	1070	1070	-	2313	33.09	VACD/M 1091/766Y
	2 x 3 1/8	2 x 2 5/8	6520	6470	1070	1070	1070	1120	1070	1070	2562	39.01	VACD/M 1291/844T
	2 x 3 1/8	2 x 2 5/8	6520	6470	1070	1070	1070	1120	1070	1070	2562	39.01	VACD/M 1291/844Y
	2 x 3 1/8	2 x 2 5/8	6520	6470	1070	1070	1070	1120	1070	1070	2775	39.01	VACD/M 1291/938T
	2 x 3 1/8	2 x 2 5/8	6520	6470	1070	1070	1070	1120	1070	1070	2775	39.01	VACD/M 1291/938Y

Desenhos Drawings



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices

Suportes	Supports	Cota F	F dimension
4 ventiladores 4 fans	4	4 ventiladores 4 fans	2300
6 ventiladores 6 fans	8	6 ventiladores 6 fans	2300
8 ventiladores 8 fans	10	8 ventiladores 8 fans	2300
10 ventiladores 10 fans	12	10 ventiladores 10 fans	2310
12 ventiladores 12 fans	14	12 ventiladores 12 fans	2310

VACD



Condensadores Condensers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

2,1 mm
910 mm

AC

ACM

ACH

ACI

ACP

ACPD

ACJ

VAC

VACD

Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V / F / Hz	dB(A)	
VACD/R				8-8 PÓLOS 8-8 POLES								
VACD/R 491/281T	235.00	615.56	64.70	4	910	68800	650	4600	11.12	Δ 400/3/50	46	
VACD/R 491/281Y	193.70	615.56	64.70	4	910	52800	475	2560	5.44	Y 400/3/50	40	
VACD/R 491/313T	253.00	820.75	86.30	4	910	64000	650	4600	11.12	Δ 400/3/50	46	
VACD/R 491/313Y	204.50	820.75	86.30	4	910	48800	475	2560	5.44	Y 400/3/50	40	
VACD/R 691/422T	353.00	923.34	97.10	6	910	103200	650	6900	16.68	Δ 400/3/50	48	
VACD/R 691/422Y	290.60	923.34	97.10	6	910	79200	475	3840	8.16	Y 400/3/50	42	
VACD/R 691/469T	380.00	1231.12	129.40	6	910	96000	650	6900	16.68	Δ 400/3/50	48	
VACD/R 691/469Y	306.80	1231.12	129.40	6	910	73200	475	3840	8.16	Y 400/3/50	42	
VACD/R 891/531T	449.00	1231.12	129.40	8	910	137600	650	9200	22.24	Δ 400/3/50	49	
VACD/R 891/531Y	374.00	1231.12	129.40	8	910	105600	475	5120	10.88	Y 400/3/50	43	
VACD/R 891/598T	490.00	1641.50	172.50	8	910	128000	650	9200	22.24	Δ 400/3/50	49	
VACD/R 891/598Y	399.50	1641.50	172.50	8	910	97600	475	5120	10.88	Y 400/3/50	43	
VACD/R 1091/686T	576.00	1538.90	161.80	10	910	172000	650	11500	27.80	Δ 400/3/50	50	
VACD/R 1091/686Y	476.70	1538.90	161.80	10	910	132000	475	6400	13.60	Y 400/3/50	44	
VACD/R 1091/766T	623.00	2051.87	215.70	10	910	160000	650	11500	27.80	Δ 400/3/50	50	
VACD/R 1091/766Y	505.80	2051.87	215.70	10	910	122000	475	6400	13.60	Y 400/3/50	44	
VACD/R 1291/844T	707.00	1846.70	194.10	12	910	206400	650	13800	33.36	Δ 400/3/50	51	
VACD/R 1291/844Y	581.70	1846.70	194.10	12	910	158400	475	7680	16.32	Y 400/3/50	45	
VACD/R 1291/938T	760.00	2462.20	258.80	12	910	192000	650	13800	33.36	Δ 400/3/50	51	
VACD/R 1291/938Y	613.60	2462.20	258.80	12	910	146400	475	7680	16.32	Y 400/3/50	45	

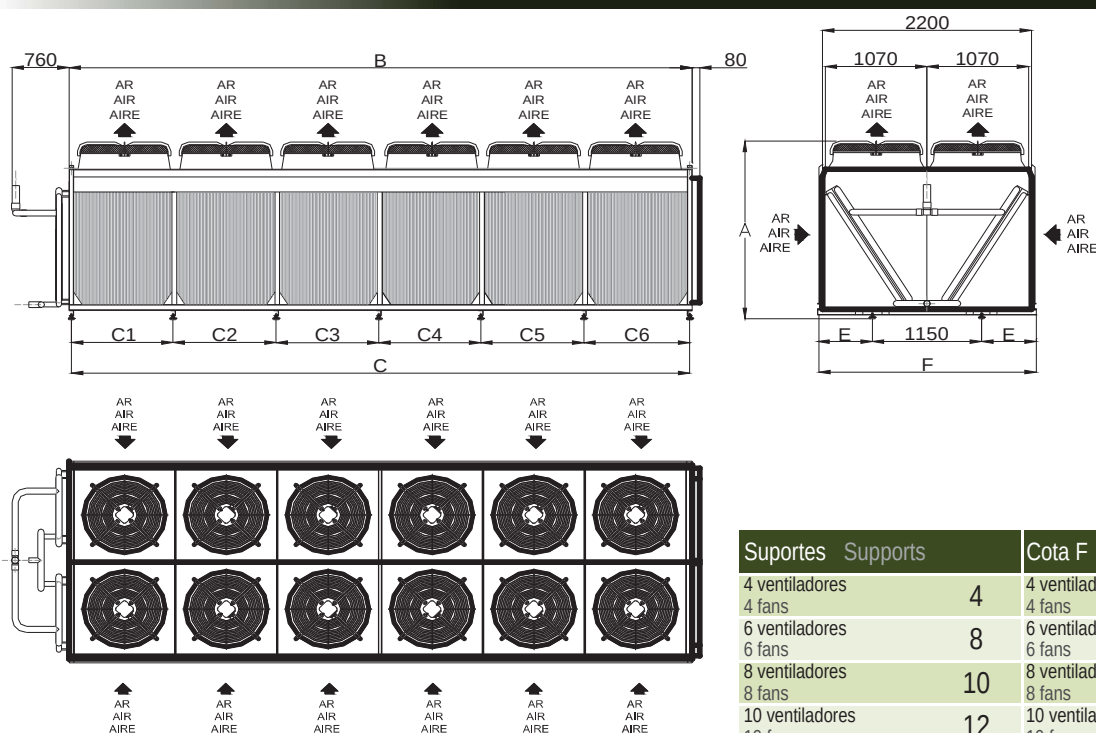
(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR	BL	/EC	
	EUR	Alhetas revestidas Coated fins	Pintado Painted	Motores EC EC motors	Cablagem EC EC wiring
VACD/R 491/281T	•	•	S	3372.0	666.4
VACD/R 491/281Y	•	•	S	3372.0	666.4
VACD/R 491/313T	•	•	S	3372.0	666.4
VACD/R 491/313Y	•	•	S	3372.0	666.4
VACD/R 691/422T	•	•	S	5058.0	949.7
VACD/R 691/422Y	•	•	S	5058.0	949.7
VACD/R 691/469T	•	•	S	5058.0	949.7
VACD/R 691/469Y	•	•	S	5058.0	949.7
VACD/R 891/531T	•	•	S	6744.0	1290.6
VACD/R 891/531Y	•	•	S	6744.0	1290.6
VACD/R 891/598T	•	•	S	6744.0	1290.6
VACD/R 891/598Y	•	•	S	6744.0	1290.6
VACD/R 1091/686T	•	•	S	8430.0	1602.7
VACD/R 1091/686Y	•	•	S	8430.0	1602.7
VACD/R 1091/766T	•	•	S	8430.0	1602.7
VACD/R 1091/766Y	•	•	S	8430.0	1602.7
VACD/R 1291/844T	•	•	S	10116.0	1911.7
VACD/R 1291/844Y	•	•	S	10116.0	1911.7
VACD/R 1291/938T	•	•	S	10116.0	1911.7
VACD/R 1291/938Y	•	•	S	10116.0	1911.7

S Standard SP Sob pedido
S Standard SP Under request

	Ligações standard connections		Dimensões Dimensions								Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type	
	Entrada Inlet	Saída Outlet												
	B	C	C1	C2	C3	C4	C5	C6						
in		mm								Kg				dm³
8-8 PÓLOS 8-8 POLES														VACD/R
	2 5/8	2 1/8	2240	2190	1070	1120	-	-	-	-	1022	15.33	VACD/R 491/281T	
	2 5/8	2 1/8	2240	2190	1070	1120	-	-	-	-	1022	15.33	VACD/R 491/281Y	
	3 1/8	2 5/8	2240	2190	1070	1120	-	-	-	-	1095	15.33	VACD/R 491/313T	
	3 1/8	2 5/8	2240	2190	1070	1120	-	-	-	-	1095	15.33	VACD/R 491/313Y	
	3 1/8	2 5/8	3310	3260	1070	1120	1070	-	-	-	1434	21.25	VACD/R 691/422T	
	3 1/8	2 5/8	3310	3260	1070	1120	1070	-	-	-	1434	21.25	VACD/R 691/422Y	
	3 1/8	2 5/8	3310	3260	1070	1120	1070	-	-	-	1543	21.25	VACD/R 691/469T	
	3 1/8	2 5/8	3310	3260	1070	1120	1070	-	-	-	1543	21.25	VACD/R 691/469Y	
	2 x 2 5/8	2 x 2 1/8	4380	4330	1070	1070	1120	1070	-	-	1784	27.17	VACD/R 891/531T	
	2 x 2 5/8	2 x 2 1/8	4380	4330	1070	1070	1120	1070	-	-	1784	27.17	VACD/R 891/531Y	
	2 x 3 1/8	2 x 2 5/8	4380	4330	1070	1070	1120	1070	-	-	1927	27.17	VACD/R 891/598T	
	2 x 3 1/8	2 x 2 5/8	4380	4330	1070	1070	1120	1070	-	-	1927	27.17	VACD/R 891/598Y	
	2 x 3 1/8	2 x 2 5/8	5450	5400	1070	1070	1120	1070	1070	-	2134	33.09	VACD/R 1091/686T	
	2 x 3 1/8	2 x 2 5/8	5450	5400	1070	1070	1120	1070	1070	-	2134	33.09	VACD/R 1091/686Y	
	2 x 3 1/8	2 x 2 5/8	5450	5400	1070	1070	1120	1070	1070	-	2313	33.09	VACD/R 1091/766T	
	2 x 3 1/8	2 x 2 5/8	5450	5400	1070	1070	1120	1070	1070	-	2313	33.09	VACD/R 1091/766Y	
	2 x 3 1/8	2 x 2 5/8	6520	6470	1070	1070	1070	1120	1070	1070	2562	39.01	VACD/R 1291/844T	
	2 x 3 1/8	2 x 2 5/8	6520	6470	1070	1070	1070	1120	1070	1070	2562	39.01	VACD/R 1291/844Y	
	2 x 3 1/8	2 x 2 5/8	6520	6470	1070	1070	1070	1120	1070	1070	2775	39.01	VACD/R 1291/938T	
	2 x 3 1/8	2 x 2 5/8	6520	6470	1070	1070	1070	1120	1070	1070	2775	39.01	VACD/R 1291/938Y	

Desenhos Drawings



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
 ATTENTION: New legs solution / New dimensions / New prices

Suportes	Supports	Cota F	F dimension
4 ventiladores 4 fans	4	4 ventiladores 4 fans	2300
6 ventiladores 6 fans	8	6 ventiladores 6 fans	2300
8 ventiladores 8 fans	10	8 ventiladores 8 fans	2300
10 ventiladores 10 fans	12	10 ventiladores 10 fans	2310
12 ventiladores 12 fans	14	12 ventiladores 12 fans	2310

VACD



Condensadores Condensers
Espaçamento Fin Spacing
Ø Ventiladores Fan Ø

2,1 mm
910 mm

AC

ACM

ACH

ACI

ACP

ACPD

ACJ

VAC

VACD

Modelo Type	Capacidade Capacity (DT=15K)	Superfície Surface	Volume interno Internal volume	Ventiladores Fans Ventiladores								
				Nº. Nr.	Diâmetro Diameter	Caudal de ar Air flow	Rotação Revolutions	Potência total Total power	Corrente total Total current	Alimentação MPS	Ruído (1) Noise level (1)	
	kW	m²	dm³		mm	m³/h	rpm	W	A	V / F / Hz	dB(A)	
VACD/L				12-12 PÓLOS 12-12 POLES								
VACD/L 491/281T	171.30	615.56	64.70	4	910	45200	420	1640	4.52	Δ 400/3/50	36	
VACD/L 491/281Y	130.90	615.56	64.70	4	910	32400	305	840	1.92	Y 400/3/50	27	
VACD/L 491/313T	179.60	820.75	86.30	4	910	42000	420	1640	4.52	Δ 400/3/50	36	
VACD/L 491/313Y	135.10	820.75	86.30	4	910	30000	305	840	1.92	Y 400/3/50	27	
VACD/L 691/422T	257.00	923.34	97.10	6	910	67800	420	2460	6.78	Δ 400/3/50	38	
VACD/L 691/422Y	196.30	923.34	97.10	6	910	48600	305	1260	2.88	Y 400/3/50	29	
VACD/L 691/469T	269.30	1231.12	129.40	6	910	63000	420	2460	6.78	Δ 400/3/50	38	
VACD/L 691/469Y	202.70	1231.12	129.40	6	910	45000	305	1260	2.88	Y 400/3/50	29	
VACD/L 891/531T	332.80	1231.12	129.40	8	910	90400	420	3280	9.04	Δ 400/3/50	39	
VACD/L 891/531Y	256.60	1231.12	129.40	8	910	64800	305	1680	3.84	Y 400/3/50	30	
VACD/L 891/598T	352.20	1641.50	172.50	8	910	84000	420	3280	9.04	Δ 400/3/50	39	
VACD/L 891/598Y	267.20	1641.50	172.50	8	910	60000	305	1680	3.84	Y 400/3/50	30	
VACD/L 1091/686T	422.60	1538.90	161.80	10	910	113000	420	4100	11.30	Δ 400/3/50	40	
VACD/L 1091/686Y	324.20	1538.90	161.80	10	910	81000	305	2100	4.80	Y 400/3/50	31	
VACD/L 1091/766T	445.00	2051.87	215.70	10	910	105000	420	4100	11.30	Δ 400/3/50	40	
VACD/L 1091/766Y	336.00	2051.87	215.70	10	910	75000	305	2100	4.80	Y 400/3/50	31	
VACD/L 1291/844T	514.40	1846.70	194.10	12	910	135600	420	4920	13.56	Δ 400/3/50	41	
VACD/L 1291/844Y	392.60	1846.70	194.10	12	910	97200	305	2520	5.76	Y 400/3/50	32	
VACD/L 1291/938T	539.00	2462.20	258.80	12	910	126000	420	4920	13.56	Δ 400/3/50	41	
VACD/L 1291/938Y	405.50	2462.20	258.80	12	910	90000	305	2520	5.76	Y 400/3/50	32	

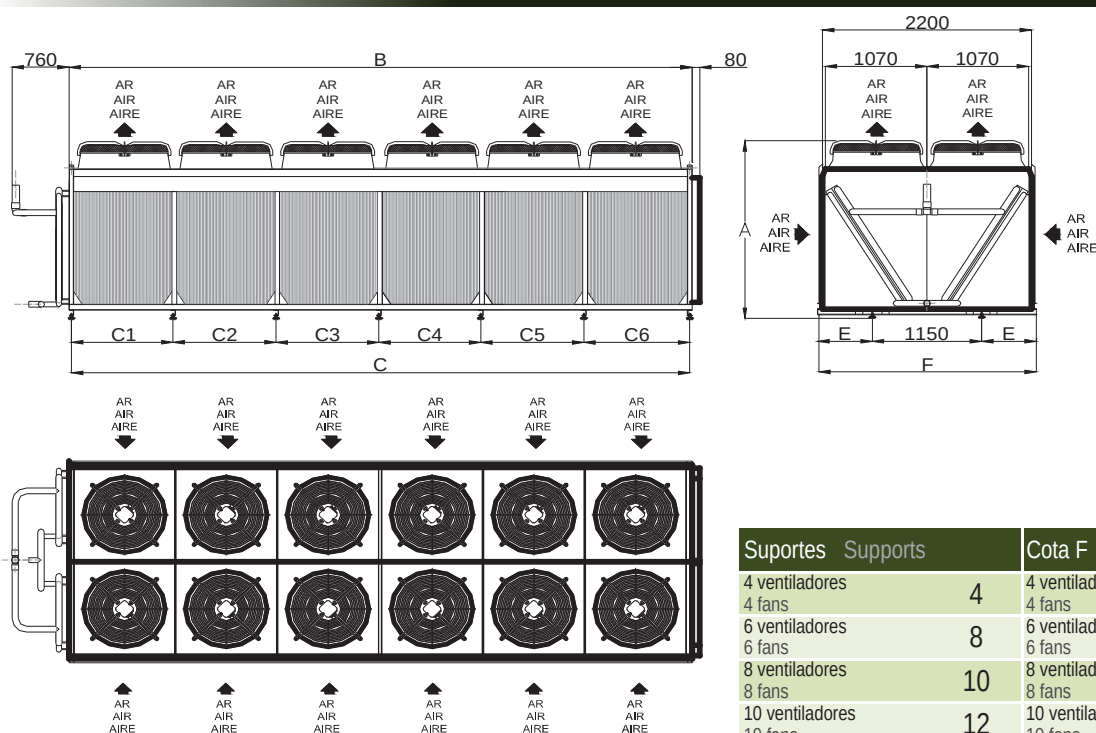
(1) Pressão sonora a 10m, em campo livre sem reflexões Sound pressure level at 10m, in free field conditions, without reflections

Modelo Type	Preço Price	Opções Options			
		AR Alhetas revestidas Coated fins	BL Pintado Painted	/EC Motores EC EC motors	Cablagem EC EC wiring
	EUR	EUR			
VACD/L 491/281T	•	•	S	3372.0	666.4
VACD/L 491/281Y	•	•	S	3372.0	666.4
VACD/L 491/313T	•	•	S	3372.0	666.4
VACD/L 491/313Y	•	•	S	3372.0	666.4
VACD/L 691/422T	•	•	S	5058.0	949.7
VACD/L 691/422Y	•	•	S	5058.0	949.7
VACD/L 691/469T	•	•	S	5058.0	949.7
VACD/L 691/469Y	•	•	S	5058.0	949.7
VACD/L 891/531T	•	•	S	6744.0	1290.6
VACD/L 891/531Y	•	•	S	6744.0	1290.6
VACD/L 891/598T	•	•	S	6744.0	1290.6
VACD/L 891/598Y	•	•	S	6744.0	1290.6
VACD/L 1091/686T	•	•	S	8430.0	1602.7
VACD/L 1091/686Y	•	•	S	8430.0	1602.7
VACD/L 1091/766T	•	•	S	8430.0	1602.7
VACD/L 1091/766Y	•	•	S	8430.0	1602.7
VACD/L 1291/844T	•	•	S	10116.0	1911.7
VACD/L 1291/844Y	•	•	S	10116.0	1911.7
VACD/L 1291/938T	•	•	S	10116.0	1911.7
VACD/L 1291/938Y	•	•	S	10116.0	1911.7

S Standard SP Sob pedido
S Standard SP Under request

	Ligações standard connections		Dimensões Dimensions								Peso em vazio Net weight	Volume embarque Shipment volume	Modelo Type
	Entrada Inlet	Saída Outlet											
	in		B	C	C1	C2	C3	C4	C5	C6			
			mm										
12-12 PÓLOS 12-12 POLES													VACD/L
	2 5/8	2 1/8	2240	2190	1070	1120	-	-	-	-	1022	15.33	VACD/L 491/281T
	2 5/8	2 1/8	2240	2190	1070	1120	-	-	-	-	1022	15.33	VACD/L 491/281Y
	3 1/8	2 5/8	2240	2190	1070	1120	-	-	-	-	1095	15.33	VACD/L 491/313T
	3 1/8	2 5/8	2240	2190	1070	1120	-	-	-	-	1095	15.33	VACD/L 491/313Y
	3 1/8	2 5/8	3310	3260	1070	1120	1070	-	-	-	1434	21.25	VACD/L 691/422T
	3 1/8	2 5/8	3310	3260	1070	1120	1070	-	-	-	1434	21.25	VACD/L 691/422Y
	3 1/8	2 5/8	3310	3260	1070	1120	1070	-	-	-	1543	21.25	VACD/L 691/469T
	3 1/8	2 5/8	3310	3260	1070	1120	1070	-	-	-	1543	21.25	VACD/L 691/469Y
	2 x 2 5/8	2 x 2 1/8	4380	4330	1070	1070	1120	1070	-	-	1784	27.17	VACD/L 891/531T
	2 x 2 5/8	2 x 2 1/8	4380	4330	1070	1070	1120	1070	-	-	1784	27.17	VACD/L 891/531Y
	2 x 3 1/8	2 x 2 5/8	4380	4330	1070	1070	1120	1070	-	-	1927	27.17	VACD/L 891/598T
	2 x 3 1/8	2 x 2 5/8	4380	4330	1070	1070	1120	1070	-	-	1927	27.17	VACD/L 891/598Y
	2 x 3 1/8	2 x 2 5/8	5450	5400	1070	1070	1120	1070	1070	-	2134	33.09	VACD/L 1091/686T
	2 x 3 1/8	2 x 2 5/8	5450	5400	1070	1070	1120	1070	1070	-	2134	33.09	VACD/L 1091/686Y
	2 x 3 1/8	2 x 2 5/8	5450	5400	1070	1070	1120	1070	1070	-	2313	33.09	VACD/L 1091/766T
	2 x 3 1/8	2 x 2 5/8	5450	5400	1070	1070	1120	1070	1070	-	2313	33.09	VACD/L 1091/766Y
	2 x 3 1/8	2 x 2 5/8	6520	6470	1070	1070	1070	1120	1070	1070	2562	39.01	VACD/L 1291/844T
	2 x 3 1/8	2 x 2 5/8	6520	6470	1070	1070	1070	1120	1070	1070	2562	39.01	VACD/L 1291/844Y
	2 x 3 1/8	2 x 2 5/8	6520	6470	1070	1070	1070	1120	1070	1070	2775	39.01	VACD/L 1291/938T
	2 x 3 1/8	2 x 2 5/8	6520	6470	1070	1070	1070	1120	1070	1070	2775	39.01	VACD/L 1291/938Y

Desenhos Drawings



ATENÇÃO: Nova solução de sapatas / Novas dimensões / Novos preços
ATTENTION: New legs solution / New dimensions / New prices

Suportes	Supports	Cota F	F dimension
4 ventiladores 4 fans	4	4 ventiladores 4 fans	2300
6 ventiladores 6 fans	8	6 ventiladores 6 fans	2300
8 ventiladores 8 fans	10	8 ventiladores 8 fans	2300
10 ventiladores 10 fans	12	10 ventiladores 10 fans	2310
12 ventiladores 12 fans	14	12 ventiladores 12 fans	2310

APLICAÇÕES ESPECIAIS CUSTOMIZED SOLUTIONS



Central de compressores de parafuso semi-herméticos capotada com condensador acoplado
Semi-hermetic screw compressor pack with weatherproof housing and attached condenser



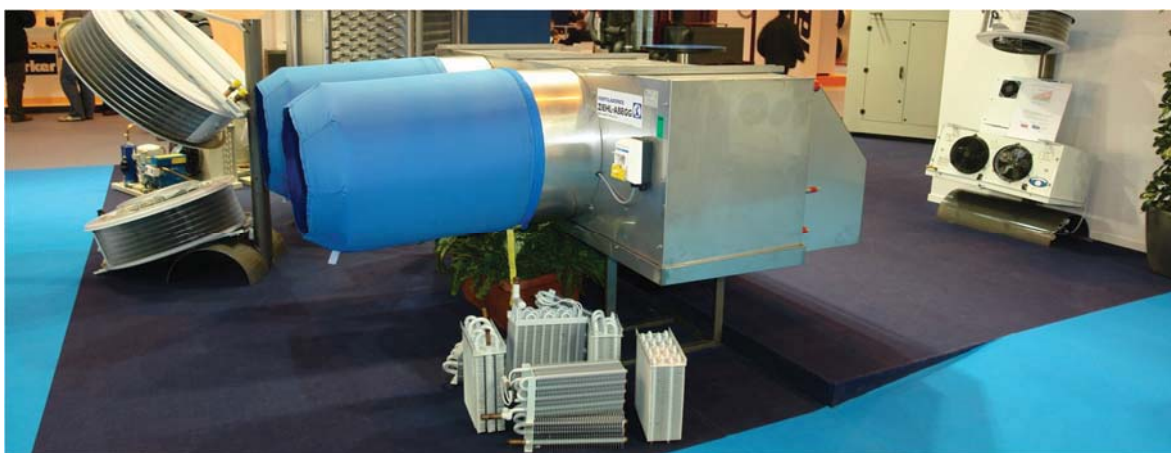
Chiller de compressores de parafuso abertos
Open screw compressor chiller



Evaporador de túnel especial em inox com streamers
Special stainless steel blast freezer cooler with streamers



Evaporador de túnel especial
Special blast freezer cooler

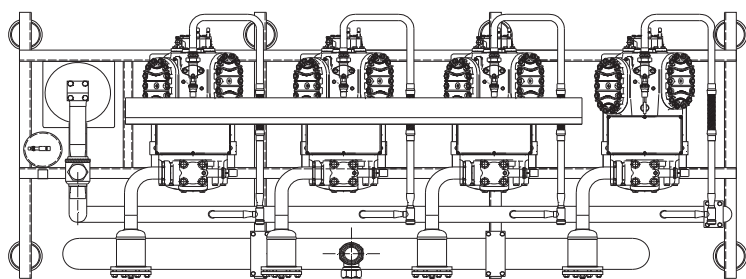
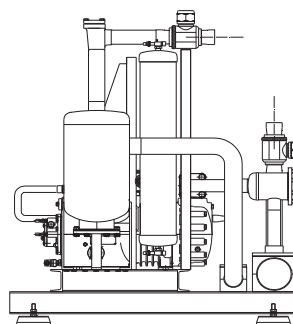
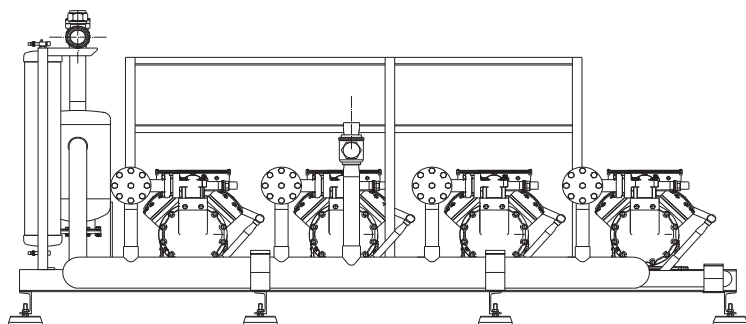


Evaporador cúbico com shut-up e pleno de aspiração
Cubic cooler with shut-up and plenum



CENTRAIS RACKS / PACKS

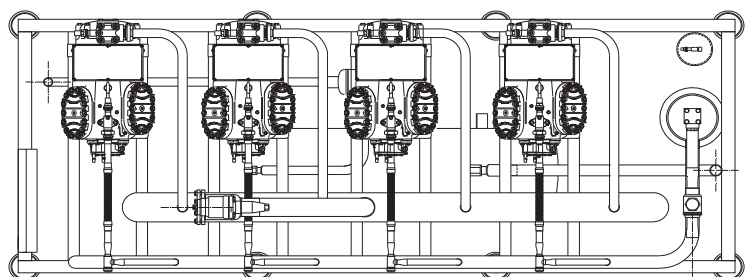
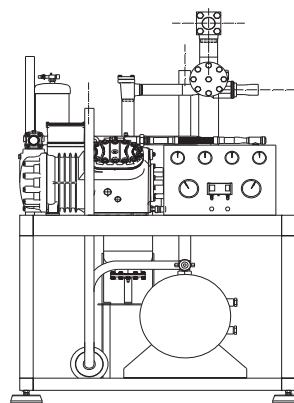
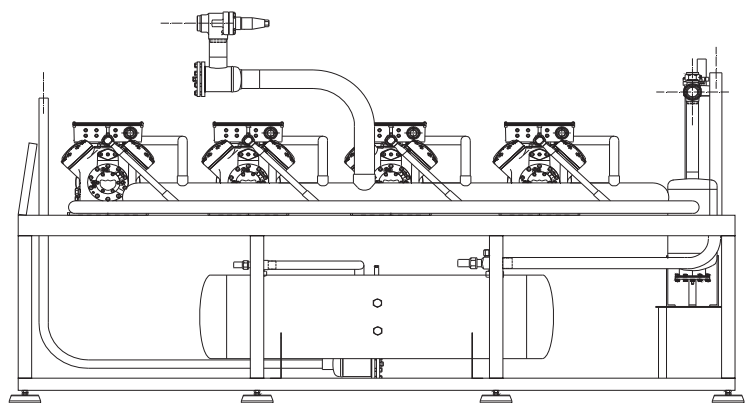
CENTRAIS TIPO 1 TYPE 1 RACKS



Sob pedido a Rack 1 pode ser igual à Rack 2, com depósito horizontal fornecido fora da central.

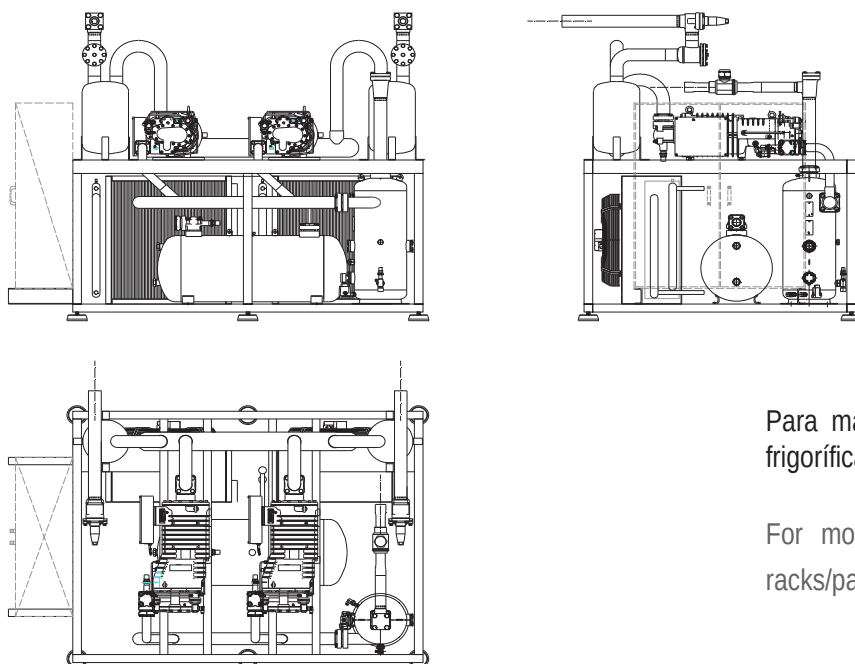
Under request, RACK 1's layout can be the same as RACK 2 with an horizontal receiver supplied outside the packs's structure.

CENTRAIS TIPO 2 TYPE 2 RACKS



CENTRAIS PARAFUSO TIPO 3 TYPE 3 SCREW RACKS

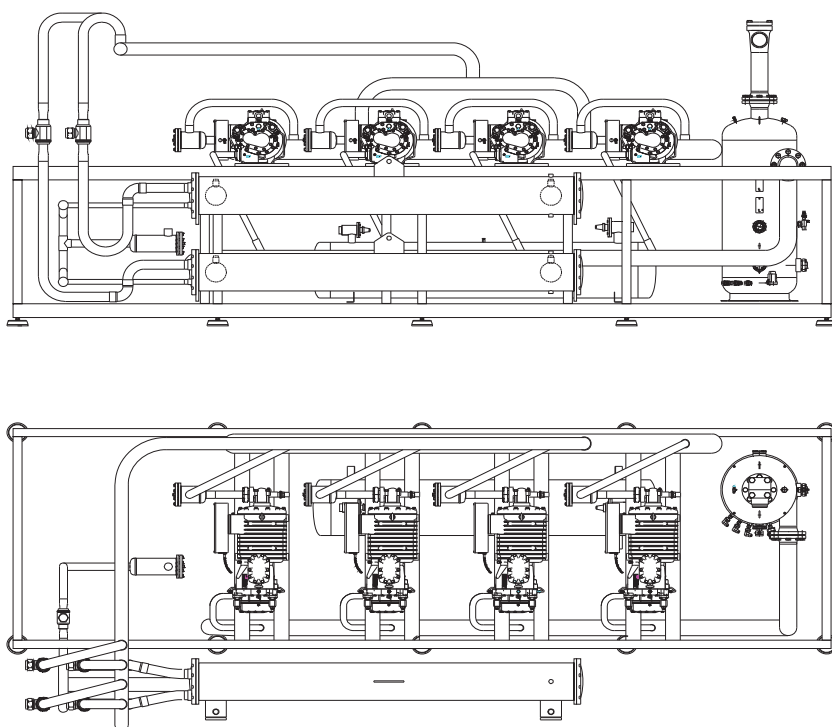
Central de compressores de parafuso com arrefecedor de óleo a ar
Rack with screw compressors and air cooled oil cooler



Para mais informação acerca de centrais frigoríficas por favor consulte a Centauro.

For more information about refrigeration racks/packs please contact Centauro.

Chiller de compressores de parafuso with shell and tube heat exchangers
Chiller with screw compressors and shell and tube heat exchangers

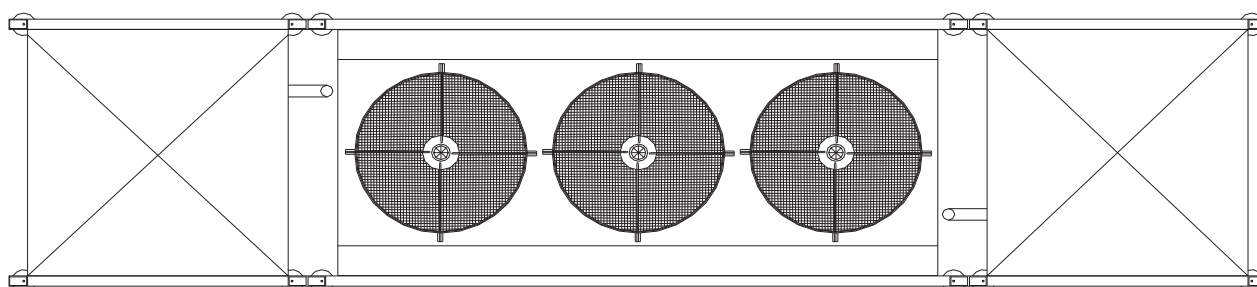
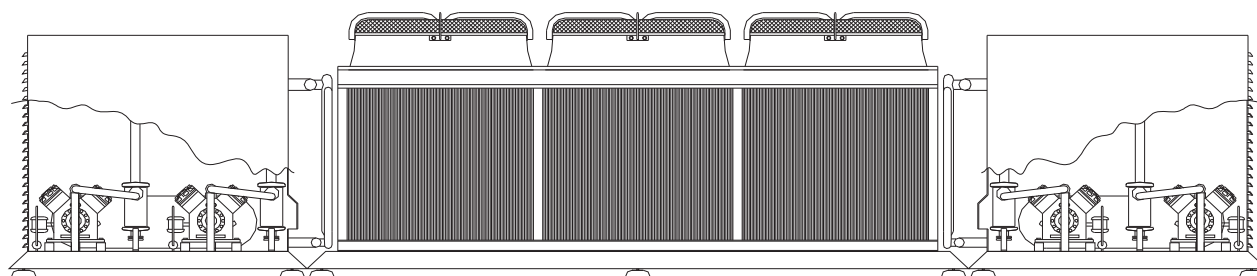




CENTRAIS RACKS / PACKS

PACKS PACKS

PACK com uma central TN, uma central BT, capota e condensador VAC.
Low temperature PACK, Normal temperature PACK, weatherproof housing and VAC condenser.



Considerações Gerais

A Centauro há já vários anos que deu início ao fabrico de Centrais frigoríficas "sob medida", de acordo com as especificações e/ou particularidades de cada cliente ou projecto.

Disponíveis em duas soluções técnicas de base- Rack 1 e Rack 2, as Centrais Centauro podem ser executadas com compressores alternativos, de parafuso ou scroll, usando R134a, R404A entre outros refrigerantes.

Existe uma " folha de especificações " que permite definir exhaustivamente o nível de equipamento e/ou solução técnica de base pretendido pelo cliente Centauro, devidamente suportada por instruções técnicas de instalação, arranque e manutenção.

General Considerations

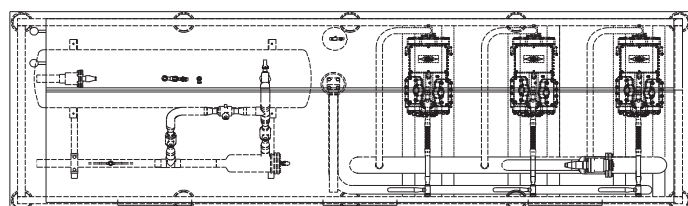
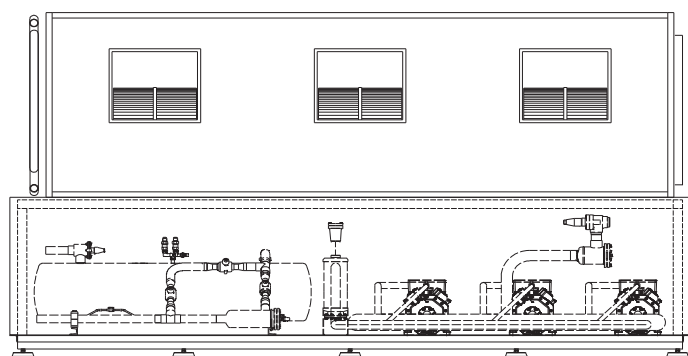
Centauro began building "taylor made" Refrigeration Packs according to the specifications and/or requests of it's customers or given project for many years to date.

Available in two type frames - Rack 1 and Rack 2, Centauro's racks can be produced with reciprocating, screw or scroll compressors using R134a, R404A amongst other refrigerants.

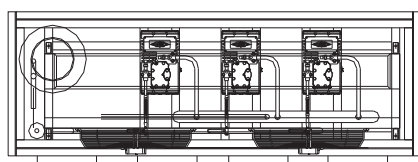
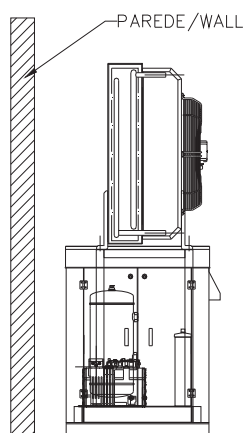
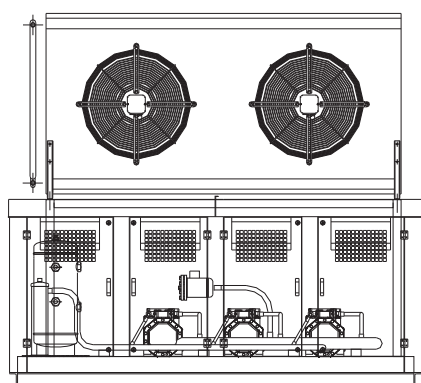
A "specification list" allows Centauro's clients to fully define the level of components and/or solutions needed, properly supported by instalation, start-up and maintenance information.

PACKS PACKS

PACK com central de compressores alternativos, condensadores centrífugos e capota
PACK with reciprocating compressors, centrifugal condensers and protective housing.



PACK com central de compressores alternativos com capota e condensador EC no topo
PACK with reciprocating compressors, weatherproof housing and EC condenser on top

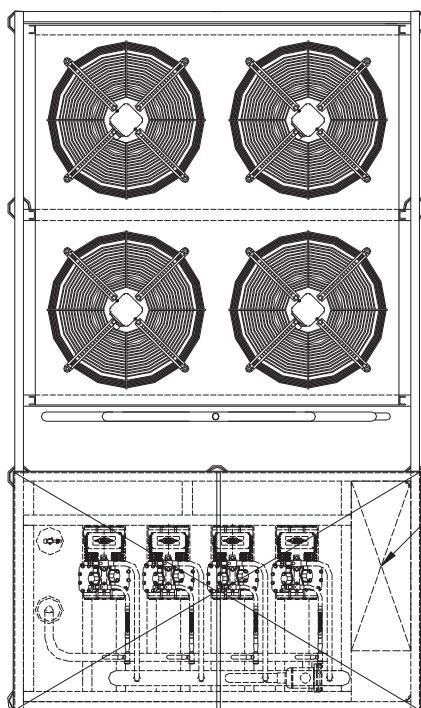
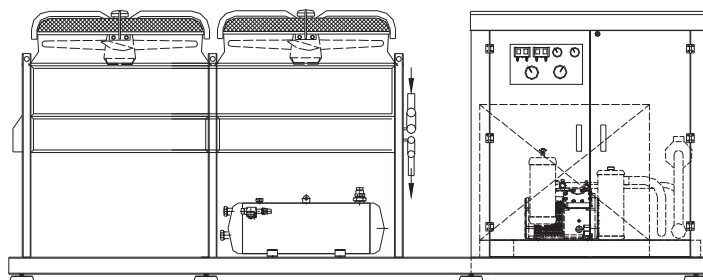
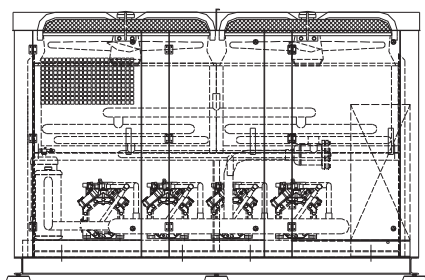




CENTRAIS RACKS / PACKS

PACKS PACKS

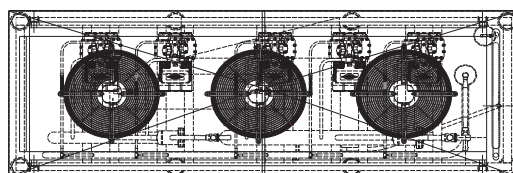
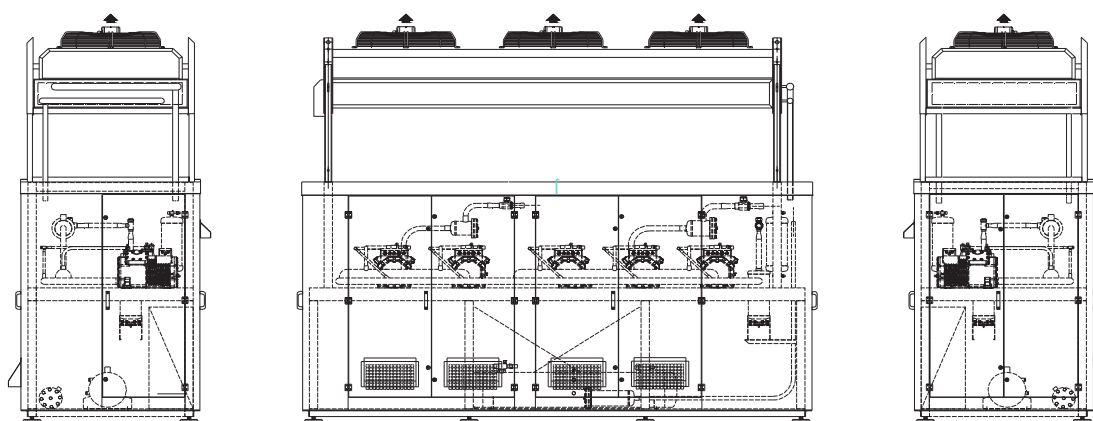
PACK com central de compressores alternativos, capota e condensador ACJ/EC.
PACK with reciprocating compressors, weatherproof housing and ACJ/EC condenser.



QUADRO ELECTRICO
ELECTRICAL BOARD

PACKS PACKS

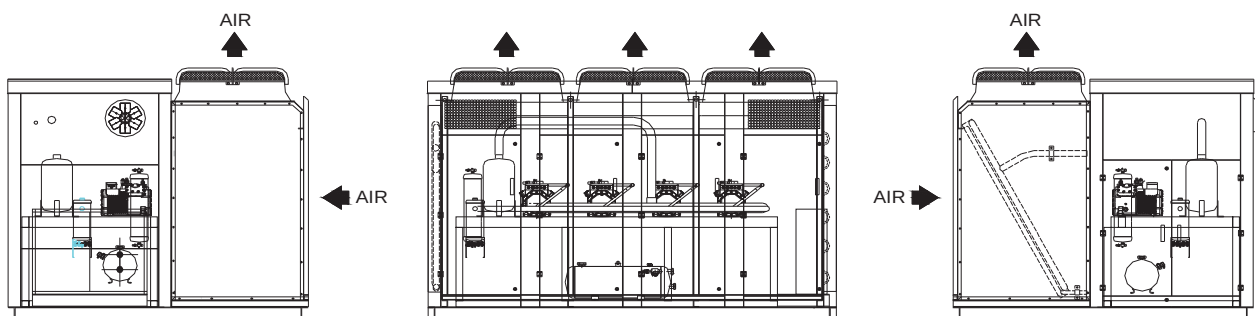
Pack compacta com compressores alternativos, capota e condensador ACI horizontal no topo
Compact PACK with reciprocating compressors, weatherproof housing and horizontal ACI condenser on top.



NOTAS:
Isolada interiormente com espuma auto-extinguível.
Estrado de chão fechado.

NOTES:
Auto-extinguible foam interior insulation .
Closed bottom floor.

Pack compacta com compressores de parafuso, capota e condensador VAC
Compact PACK with screw compressors, weatherproof housing and VAC condenser



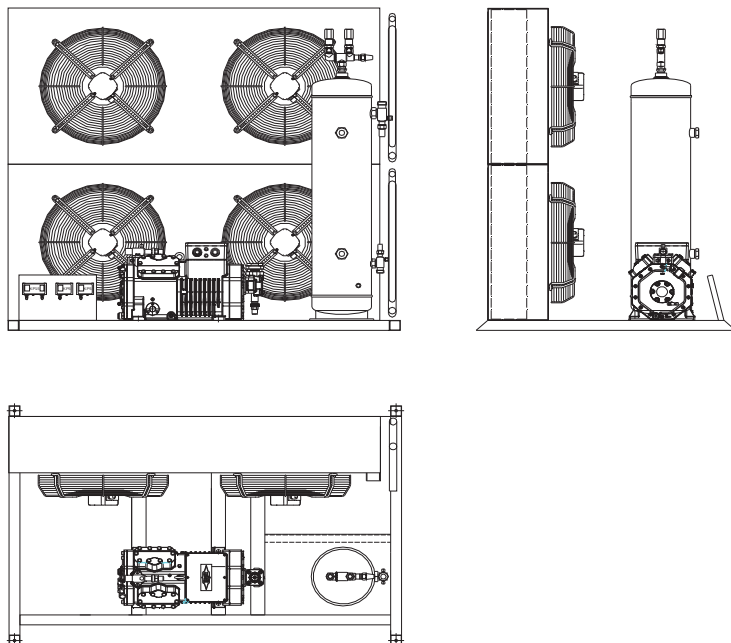
Para mais informação acerca de centrais frigoríficas por favor consulte a Centauro.

For more information about refrigeration racks/packs please contact Centauro.

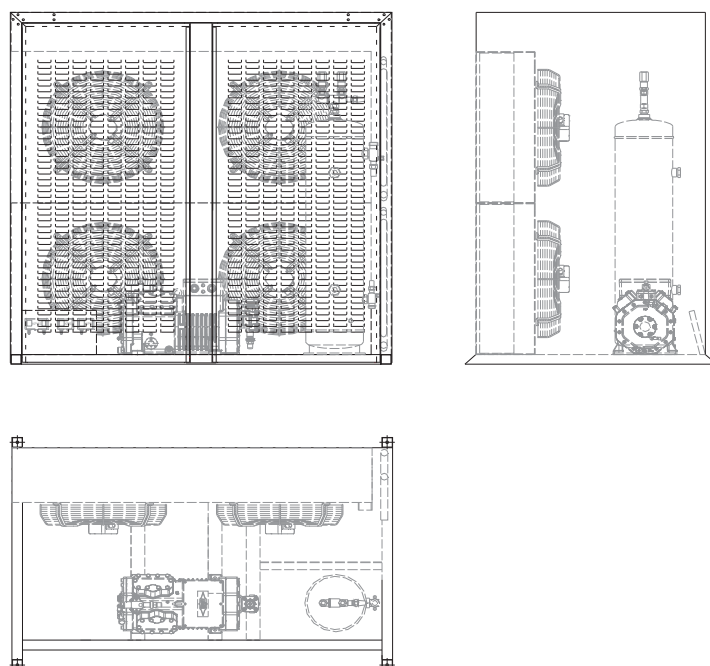


GRUPOS DE CONDENSAÇÃO CONDENSING UNITS

Grupo de Condensação Especial de compressor semi-hermético
Special Condensing Unit with semi-hermetic compressor



Grupo de Condensação Especial de compressor semi-hermético e capota
Special Condensing Unit with semi-hermetic compressor and weatherproof housing



A CENTAURO, à semelhança do que fez com as Centrais, elaborou uma folha de especificações que permite aos clientes definirem o nível de execução/ concepção de grupos de condensação GC.

A solução GC tem vindo a ser apresentada nos Certames Nacionais e Internacionais em que a CENTAURO tem apresentado os seus produtos.

A solução RTU (roof top unit) foi desenvolvida e produzida pela primeira vez, sob consulta, em 1999 e visa responder à crescente problemática do "custo/m²" da construção que na Europa Central e do Norte levou os clientes finais e instaladores a optarem, a nível de refrigeração, por soluções deste tipo já utilizadas em instalações de Climatização e Ar Condicionado (AVAC).

In a similar approach to racks, CENTAURO has created a "specifications list" that allows customers to define the level of components and/or solutions needed in the conception of Condensing Units GC.

GC solutions have been presented by CENTAURO in national and international exhibitions.

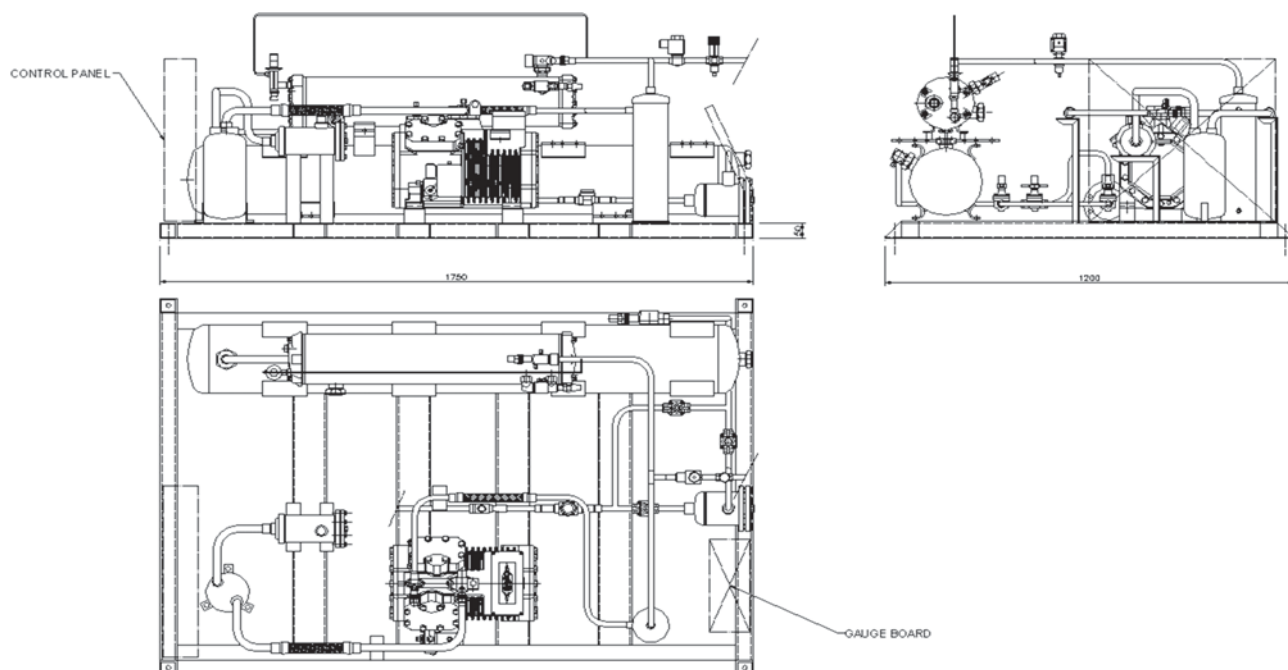
RTU solution (Roof Top Unit) was developed and produced for the first time, as a request, in 1999 and aims to answer the growing problem of surface costs (cost/m²), that led end customers as well as installers in Central and Northern Europe to choose, in Refrigeration, for these type of solutions already in use in HVAC.

Para mais informação acerca de grupos de condensação GC por favor consulte a nossa tabela TGC, informação online ou a Centauro.

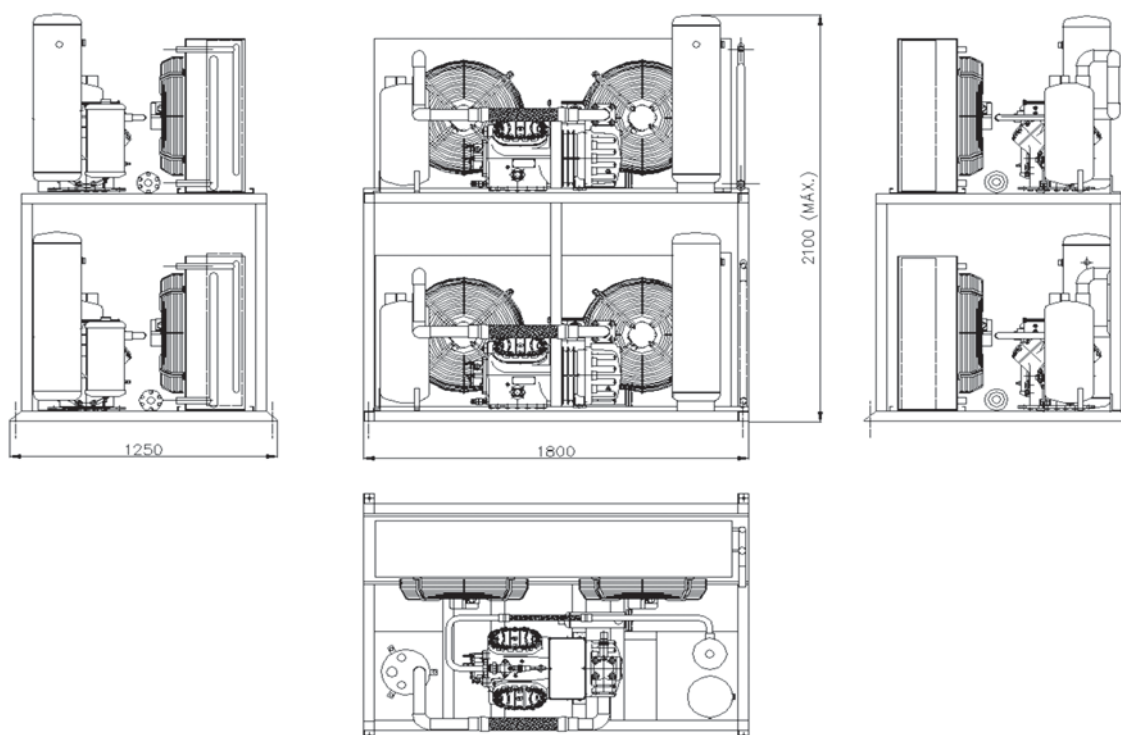
For more information about GC condensing units please see our TGC price table, online information or contact Centauro.

GRUPOS DE CONDENSAÇÃO CONDENSING UNITS

Grupo de Condensação a Água com compressor semi-hermético
Special Water Condensing Unit with semi-hermetic compressor



Grupo de Condensação a Ar especial com compressores semi-herméticos
Special condensing Unit with semi-hermetic compressors





KD / MTAC KD / MTAC

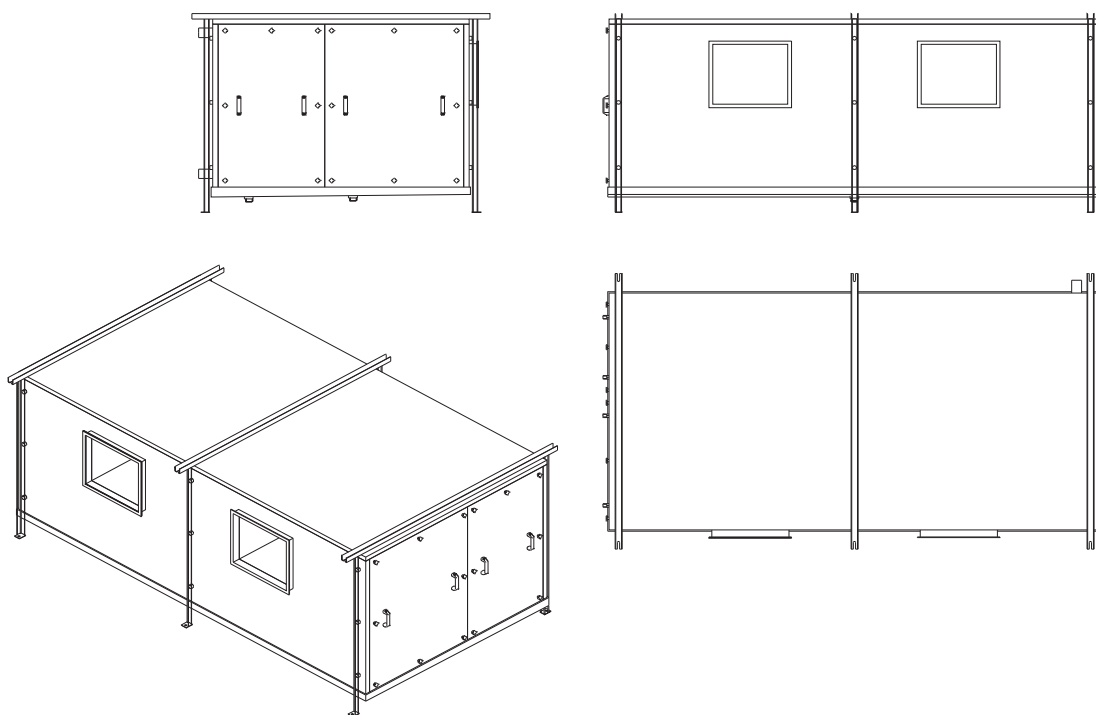
Evaporadores/Frigodifusores para climatização industrial e distribuição de ar por condutas têxteis
Industrial "KLIMAS" centrifugal fan air coolers for air sock system

As unidades de arrefecimento de ar com ventilação centrífuga CENTAURO, são do tipo evaporador / frigidifusor com ventiladores centrífugos concebidos para aplicação de rede de condutas para distribuição de ar em regime de temperatura ambiente (temperatura do ar à entrada) até $+4^{\circ}/+6^{\circ}\text{C}$ (valor inferior), ou mesmo temperaturas inferiores de acordo com a utilização de um sistema de descongelação adicional (água glicolada quente, descongelação eléctrica, descongelação por circulação de ar).

As MTAC para instalação no exterior são isoladas com 50 mm de poliuretano.

CENTAURO's centrifugal fan air coolers, use centrifugal fans designed for air distribution in air sock systems in klimas (processing areas, logistic centers, etc...) applications (air inlet temperature) down to $+4^{\circ}/+6^{\circ}\text{C}$ (lower value), or even lower temperatures together with the use of an additional defrost system (hot glycol, electrical, air circulation).

For outside use MATC's have a 50mm sandwich polyurethane insulation.



NOTA:

Estas unidades, que podem ser desenhadas para NH3, glicol, R404A entre outros refrigerantes, devido às suas dimensões (capacidades até 150 kW ou mesmo mais), se por um lado concentram os controlos num nº reduzido de unidades, por outro lado são normalmente instaladas no exterior do espaço a climatizar.

NOTES:

These units, that can be designed to work with NH3, glycol, R404A amongst other refrigerants, due to their dimensions (Capacities that can reach 150kW or even more), can concentrate controls in a reduced number of units, although usually installed outside the acclimated space.

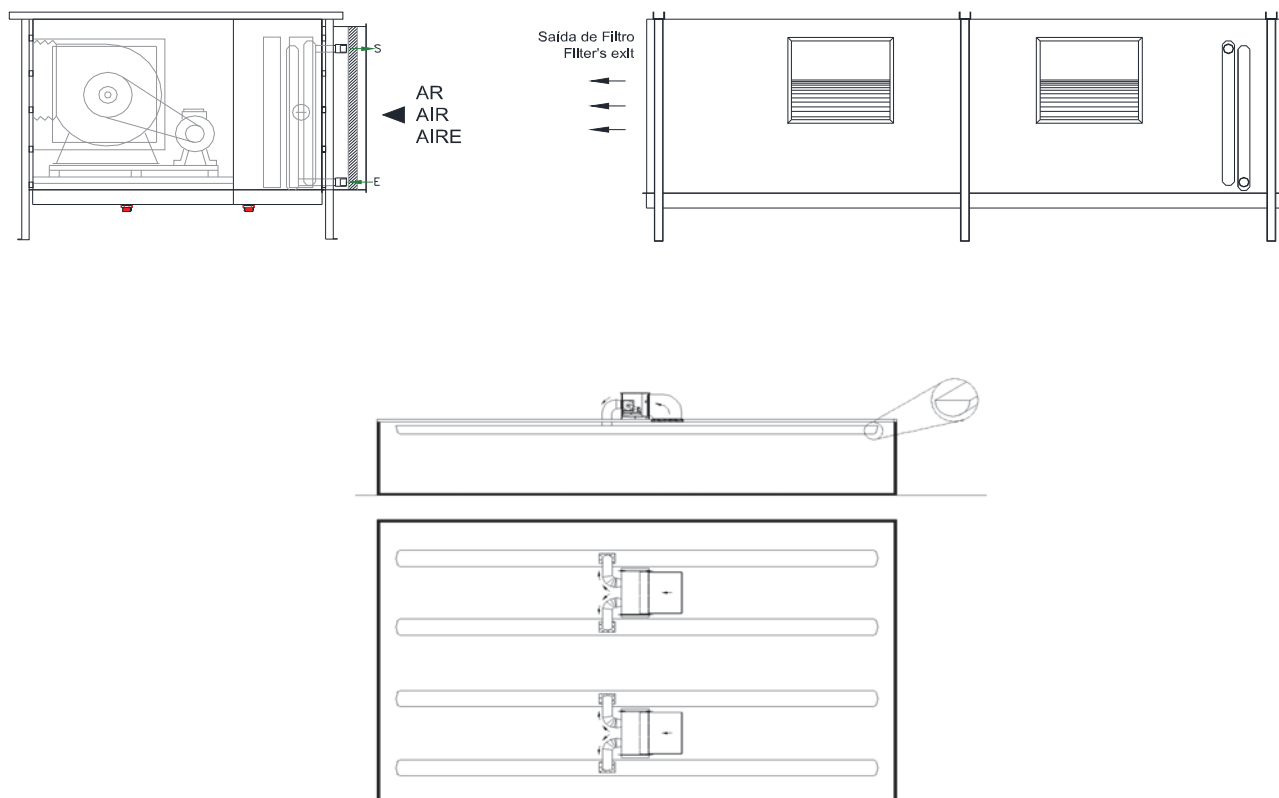
IMPORTANTE:

A optimização da concepção do sistema de condutas têxteis para distribuição de ar e a necessidade de redução de ruído leva a que a gama KD/MTAC seja produzida com ventilador centrífugo.

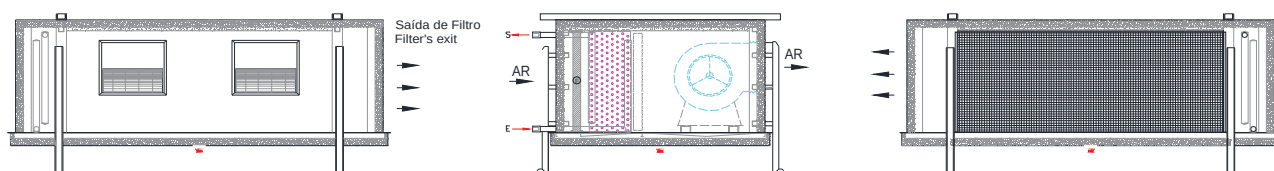
IMPORTANT:

The optimization of the textile ducts for air distribution and the need to reduce noise level, leads to producing the KD/MTAC range with centrifugal fans.

MTAC para instalação no exterior
MTAC for exterior installation



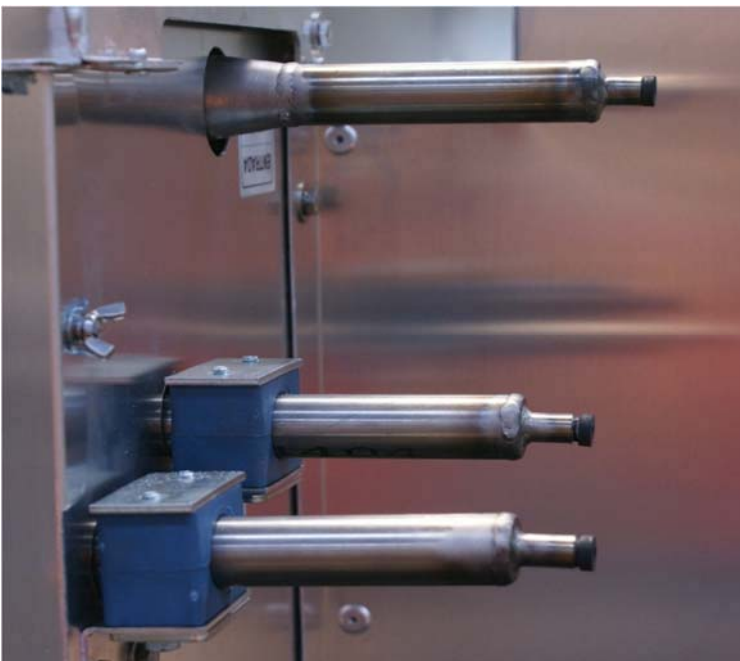
KD (versão reduzida da MTAC para instalação no interior da câmara)
KD (light version of the MTAC to install inside the room)



DADOS TÉCNICOS

TECHNICAL DATA





200 - 224

NOMENCLATURA NOMENCLATURE

AP/APL	AP / E	2 0 4 / 4 3 1 BL - ...	Gama Range	AP APL
	AP / E	2 0 4 / 4 3 1 BL - ...	Descongelação Defrost	- Ar Air E - Eléctrica Electrical
	AP / E	2 0 4 / 4 3 1 BL - ...	Diâmetro ventiladores Fan diameter	20 - Ø200 mm 23 - Ø230 mm
	AP / E	2 0 4 / 4 3 1 BL - ...	Número de pólos Number of poles	
	AP / E	2 0 4 / 4 3 1 BL - ...	Espaçamento Fin spacing	4 - 4,2 mm 6 - 6,3 mm
	AP / E	2 0 4 / 4 3 1 BL - ...	Capacidade [kW] @TC=+2°C; DTm=8K x 100 Capacity [kW] @TC=+2°C; TDm=8K x 100	
	AP / E	2 0 4 / 4 3 1 BL - ...	Opções (Lista na página 205) Options (List on page 205)	
AP/E 204/431 BL-AR				
AP com descongelação eléctrica, ventiladores de Ø200mm, 4 pólos, 4,2mm de espaçamento, 3,7kW de capacidade nominal, bilndagem lacada e alhetas revestidas. AP with electric defrost, Ø200mm fans, 4 poles, 4,2mm fin spacing, 3,7kW nominal capacity, white painted casing and coated fins.				
APD	APD	1 1 1 / 3 0 BL - ...	Gama Range	APD
	APD	1 1 1 / 3 0 BL - ...	Descongelação Defrost	- Ar Air
	APD	1 1 1 / 3 0 BL - ...	Número de ventiladores Number of fans	
	APD	1 1 1 / 3 0 BL - ...	Diâmetro ventiladores Fan diameter	11 - Ø113 mm 12 - Ø121 mm
	APD	1 1 1 / 3 0 BL - ...	Capacidade [kW] @TC=+2°C; DTm=8K x 100 Capacity [kW] @TC=+2°C; TDm=8K x 100	
	APD	1 1 1 / 3 0 BL - ...	Opções (Lista na página 205) Options (List on page 205)	
APD 111/30 BL-AR				
APD com descongelação por ar, 1 ventilador de Ø113 mm, 0,30kW de capacidade nominal, bilndagem lacada e alhetas revestidas. APD with air defrost, one Ø200mm fan, 0,30kW nominal capacity, white painted casing and coated fins.				
BXN/BXL MBX/DBX	BXN / E	1 3 0 / 24 BL - ...	Gama Range	BXN BXL MBX DBX
	BXN / E	1 3 0 / 24 BL - ...	Descongelação Defrost	- Ar Air E - Eléctrica Electrical GE - Gás quente GE GE hot gas GM - Gás quente GM GM hot gas GT - Gás quente GT GT hot gas W - Água Water
	BXN / E	1 3 0 / 24 BL - ...	Número de ventiladores Number of fans	
	BXN / E	1 3 0 / 24 BL - ...	Diâmetro ventiladores Fan diameter	25 - Ø250 mm 30 - Ø300 mm
	BXN / E	1 3 0 / 24 BL - ...	Capacidade [kW] @TC=+2°C; DTm=8K x 10 Capacity [kW] @TC=+2°C; TDm=8K x 10	
	BXN / E	1 3 0 / 24 BL - ...	Opções (Lista na página 205) Options (List on page 205)	
BXN/E 130/24 BL-AP-EC				
BXN com descongelação eléctrica, 2 ventiladores de Ø300mm, 2,4kW de capacidade nominal, lacado branco, alhetas pintadas e motores EC. BXN with electric defrost, 2x Ø300mm fans, 2,4kW nominal capacity, white painted casing, painted fins, and EC motors.				

NOMENCLATURA NOMENCLATURE

ERK ERN	ERK	4 0 6 / 4 3 7	AR - ...	Gama Range	ERK ERN	
	ERK	4 0 6 / 4 3 7	AR - ...	Diâmetro ventiladores Fan diameter	30 - Ø300 mm 40 - Ø400 mm	45 - Ø450 mm 50 - Ø500 mm
	ERK	4 0 6 / 4 3 7	AR - ...	Número de pólos Number of poles		
	ERK	4 0 6 / 4 3 7	AR - ...	Espaçamento Fin spacing	3 - 3,2 mm 4 - 4,2 mm	6 - 6,3 mm
	ERK	4 0 6 / 4 3 7	AR - ...	ERK: Tse=+10°C; DT1=10K x 10 ERN: TC=+2°C; DTm=8K x 10		
	ERK	4 0 6 / 4 3 7	AR - ...	Opções (Lista na página 205) Options (List on page 205)		
ERK 406/437 AR-AP-GI						
ERK com ventilador de Ø400mm, 6 pólos, 4,2mm de espaçamento de alhetas, 3,7kW de capacidade nominal e com alhetas revestidas e pintadas e grelhas em inox. ERK with Ø400mm fan, 4,2mm fin spacing, 6 poles, 3,7kW nominal capacity and with painted and coated fins and stainless steel grills.						

DF/DFL TATATL	TA / E	2	3	0	BL - ...	Gama Range	TA TAL	DF DFL
	TA / E	2	3	0	BL - ...	Descongelação Defrost	- Ar Air E - Eléctrica Electrical	
	TA / E	2	3	0	BL - ...	Diâmetro ventiladores Fan diameter	17 - Ø172 mm 20 - Ø200 mm	23 - Ø230 mm
	TA / E	2	3	0	BL - ...	Número sequencial (par - TA; ímpar - TAL) Sequential number (even - TA; odd - TAL)		
	TA / E	2	3	0	BL - ...	Opções (Lista na página 205) Options (List on page 205)		
	TAE 230 BL-AR-AP							

TA com descongelação eléctrica, ventiladores de Ø230mm, número 0, lacado branco, alhetas revestidas e pintadas.
TA with electric defrost, Ø230mm fans, number 0, white painted, coated and painted fins.

RWK/BWK

RWK / E	4 A 2 / 22 R AR - ...	Gama Range	RWK BWK
RWK / E	4 A 2 / 22 R AR - ...	Descongelação Defrost	- Ar Air E - Eléctrica Electrical GE - Gás quente GE GE hot gas GM - Gás quente GM GM hot gas GT - Gás quente GT GT hot gas
RWK / E	4 A 2 / 22 R AR - ...	Espaçamento Fin spacing	4 - 4,2 mm 6 - 6,3 mm
RWK / E	4 A 2 / 22 R AR - ...	Módulo Modulo	A - Ø300 mm
RWK / E	4 A 2 / 22 R AR - ...	Número de ventiladores Number of fans	
RWK / E	4 A 2 / 22 R AR - ...	Capacidade [kW] @TC=+2°C; DTm=8K x 10 Capacity [kW] @TC=+2°C; TDM=8K x 10	
RWK / E	4 A 2 / 22 R AR - ...	Velocidade Revolutions	- 1300rpm (RWK / BWK) R - 900rpm (RWK -R / BWK -R)
RWK / E	4 A 2 / 22 R AR - ...	Opções (Lista na página 205) Options (List on page 205)	
RWK/E 4A2/22 R AR-EC			
RWK com descongelação eléctrica, 4,2mm de espaçamento, 2 ventiladores de Ø300mm, 2,2kW de capacidade nominal, 900rpm, alhetas revestidas e motores EC. RWK with electric defrost, 4,2mm fin spacing, 2x Ø300mm fans, 2,2kW nominal capacity, 900rpm and with painted and coated fins and EC motors.			

NOMENCLATURA NOMENCLATURE

CBK/CBN/CBL MT/DD TFC MTA/MTB/DDC/DDL/DXL	DD / E	7 G 2 / 13	BL - ...	Gama Range	CBK CBN CBL	MT DD TFC	MTA MTB	DDC DDL DXL
	DD / E	7 G 2 / 13	BL - ...	Descongelação Defrost	- Ar Air E - Eléctrica Electrical GE - Gás quente GE GE hot gas GM - Gás quente GM GM hot gas GT - Gás quente GT GT hot gas W - Água Water			
	DD / E	7 G 2 / 13	BL - ...	Espaçamento Fin spacing	4 - 4,2 mm 7 - 7,0 mm 8 - 8,0 mm		10 - 10,0 mm 12 - 12,0 mm	
	DD / E	7 G 2 / 13	BL - ...	Módulo Modulo	C - Ø300 mm E - Ø350 mm G - Ø400 mm J - Ø450 mm L - Ø500 mm M - Ø500 mm P - Ø560 mm		S - Ø710 mm T - Ø800 mm U - Ø350 mm V - Ø400 mm X - Ø450 mm Y - Ø500 mm Z - Ø560 mm	
	DD / E	7 G 2 / 13	BL - ...	Número de ventiladores Number of fans				
	DD / E	7 G 2 / 13	BL - ...	Capacidade [kW] Capacity [kW]	CBK MTA CBN CBL MT DD MTB DDC DDL DXL	Tse=+10°C; DT1=10K		
						TC=+2°C; DTm=8K		
					TFC	Entrada ar=+1,2°C; HR=90% Temperatura de evaporação: -5°C Air in=+1,2°C; RH=90% Evaporating temperature: -5°C		
DD / E	7 G 2 / 13	BL - ...	Opções (Lista na página 205) Options (List on page 205)					
DD/E 7G2/13 BL-EC								
DD com descongelação eléctrica, 7,0mm de espaçamento de alhetas, 2 ventiladores de Ø400mm, 13kW de capacidade nominal, lacado branco e motores EC. DD with electric defrost, 7,0mm fin spacing, 2x Ø400mm fans, 13kW nominal capacity, white painted and EC motors.								

BSUT/BSUS

BSUT / E	1 9 0 2 .2 XL	BL - ...	Gama Range	BSUT BSUS
BSUT / E	1 9 0 2 .2 XL	BL - ...	Descongelação Defrost	- Ar Air E - Eléctrica Electrical GE - Gás quente GE GE hot gas GM - Gás quente GM GM hot gas GT - Gás quente GT GT hot gas W - Água Water
BSUT / E	1 9 0 2 .2 XL	BL - ...	Espaçamento Fin spacing	1 / 3 - 7,9 x 15,8 mm 2 / 4 - 10,0 x 20,0 mm
BSUT / E	1 9 0 2 .2 XL	BL - ...	Número sequencial Sequential number	
BSUT / E	1 9 0 2 .2 XL	BL - ...	Geração 2 2nd Generation	
BSUT / E	1 9 0 2 .2 XL	BL - ...	Diâmetro ventiladores Fan diameter	- Ø700 mm XL - Ø800 mm
BSUT / E	1 9 0 2 .2 XL	BL - ...	Opções (Lista na página 205) Options (List on page 205)	
BSUT/E 1902.2 XL BL-EC				
BSUT com descongelação eléctrica, duplo espaçamento de alhetas de 7,9 e 15,8mm, 2ª geração, ventiladores de Ø800mm, lacado branco e motores EC. BSUT with electric defrost, double fin spacing of 7.9 and 15.8mm, 2nd generation, Ø800mm fans, white painted and EC motors.				

NOMENCLATURA NOMENCLATURE

CONDENSADORES CONDENSERS

ACP / M	3 8 0 / 2 0 2 T BL - ...	Gama Range	AC ACM ACH	ACI ACP ACPD	ACJ VAC VACD
ACP / M	3 8 0 / 2 0 2 T BL - ...	Número de pólos Number of poles	M - 6-6 pólos poles R - 8-8 pólos poles L - 12-12 pólos poles R - 12-12(S) pólos poles EC - Motor EC EC motor		
ACP / M	3 8 0 / 2 0 2 T BL - ...	Número de ventiladores Number of fans			
ACP / M	3 8 0 / 2 0 2 T BL - ...	Diâmetro ventiladores Fan diameter	15 - Ø154 mm 17 - Ø172 mm 20 - Ø200 mm 23 - Ø230 mm 25 - Ø254 mm 30 - Ø300 mm 31 - Ø315 mm	35 - Ø350 mm 40 - Ø400 mm 45 - Ø450 mm 50 - Ø500 mm 63 - Ø630 mm 80 - Ø800 mm 91 - Ø910 mm	
ACP / M	3 8 0 / 2 0 2 T BL - ...	Capacidade [kW] @DT=15K na velocidade máxima disponível Capacity [kW] @TD=15K at maximum available revolutions			
ACP / M	3 8 0 / 2 0 2 T BL - ...	Alimentação MPS	S - 230V/1F/50Hz T - 400V/3F/50Hz Triângulo/Delta Y - 400V/3F/50Hz Estrela/Star		
ACP / M	3 8 0 / 2 0 2 T BL - ...	Opções (Lista na página 205) Options (List on page 205)			

ACP/M 380/202T AR-AP-IE

ACP de 6 pólos, com 3 ventiladores de Ø800mm, 202kW de capacidade a DT=15K na velocidade máxima disponível, ligado em triângulo e com alhetas revestidas e pintadas e interruptores de corte nos motoventiladores.

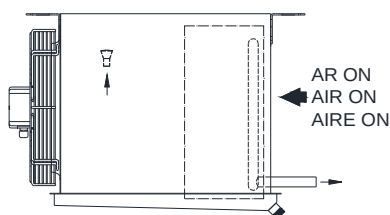
6 poles ACP, with 3 Ø800mm fans, 202kW capacity at TD=15K at maximum available revolutions, delta wired and with painted fins, coated fins and fan motor rotary switches.

OPÇÕES OPTIONS

	Standard Standard	GI	Grelhas em aço inox Stainless steel grills
AC	Alhetas em cobre Copper fins	IE	Interruptor de corte nos motoventiladores Fanmotor rotary switch
AP	Alhetas pintadas Painted fins	FC	Aplicação em tecto falso False ceiling application
AR	Alhetas revestidas Coated fins	MB	Painel de motoventiladores basculante Hinged fanmotor panel
AS	Adaptador de condutas Air sock adaptor	MP	Motores prementes Blow through motors
BA	Blindagem em alumínio liso Aluminium casing	PA	Pleno de aspiração Suction plenum
BI	Blindagem em aço inox Stainless steel casing	RG	Resistências de gola Fan heaters
BL	Blindagem em lacado branco White painted casing	ST	Steamer Steamer
BR	Bateria resistências Heater coil	SU	Shut-Up Shut-Up
CI	Conduta de insuflação Discharge plenum	TB	Tabuleiro de esgoto basculante Hinged drain pan
EC	Motores EC EC motors	TI	Tabuleiro esgoto isolado Insulated drain pan
DT	Apara pingos normal Normal drip tray	DR	Apara pingos reforçado Reinforced drip tray

DESCONGELAÇÃO DEFROST

STANDARD STANDARD

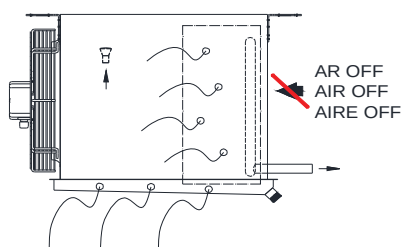


Descongelação a ar.
A descongelação é obtida através da passagem do ar pela bateria.

Air defrost.
Defrost is obtained by the passage of air in the coil.

Exemplo Example
MT ...

ELÉCTRICA ELECTRICAL

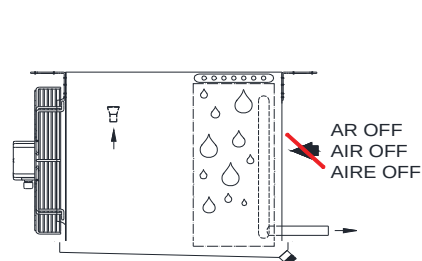


Descongelação eléctrica.
A descongelação é obtida através do calor libertado pelas resistências eléctricas colocadas no interior da bateria e tabuleiro do evaporador.

Electrical defrost.
Defrost is obtained by the heat released from the electrical heaters placed inside the cooler's coil and drain pan.

Exemplo Example
MT/E ...

ÁGUA WATER



Descongelação a água.
A descongelação é obtida através da passagem de água pela bateria.

Water defrost.
Defrost is obtained by the water's draining over the coil.

Exemplo Example
MT/W ...

NOTA: na descongelação a água a dimensão A (altura) do evaporador sofre alteração.

NOTE: in case of water defrost application the dimension A (height) of the evaporator is changed.

IMPORTANTE
Temperatura de água de descongelação $\geq +15^{\circ}\text{C}$.

IMPORTANT
Water defrost temperature $\geq +15^{\circ}\text{C}$.

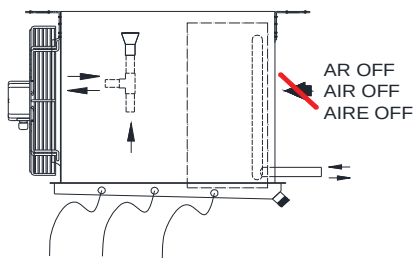
NOTAS

Para mais informação acerca de tipos/soluções de descongelação, por favor consultar a Centauro ou a informação técnica disponível.

NOTES

For more information regarding defrost types/solutions, please contact Centauro or read the available technical information.

GÁS QUENTE HOT GAS SISTEMA GM GM SYSTEM



A descongelação é obtida através da injeção de gás quente na bateria e resistências eléctricas no tabuleiro.

NOTAS:

- Bateria standard;
- Resistências no tabuleiro;
- A conexão em "T" na entrada não está incluída.

Defrost is obtained by the injection of hot gas in the coil and heaters in the drain pan.

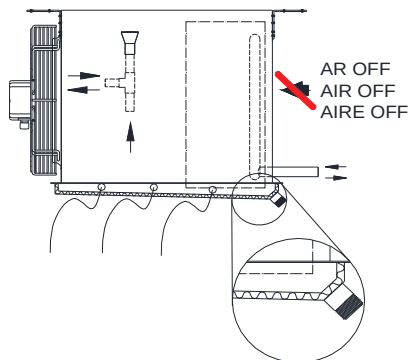
NOTES:

- Standard coil;
- Drain pan heaters;
- The "T" connection at the inlet is not included.

Exemplo Example

MT/GM ...

SISTEMA GE GE SYSTEM



A descongelação é obtida através da injeção de gás quente na bateria e resistências eléctricas no tabuleiro.

NOTAS:

- Igual ao sistema GM mais tabuleiro de esgoto isolado incluído;
- A conexão em "T" na entrada não está incluída.

Defrost is obtained by the injection of hot gas in the coil and heaters in the drain pan.

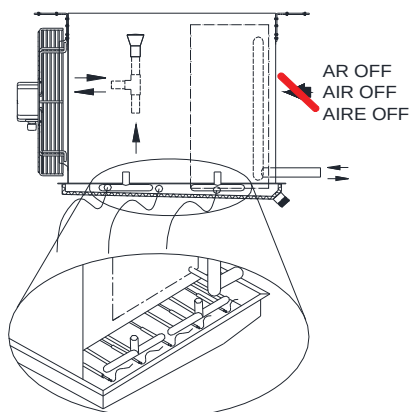
NOTES:

- Same as GM system plus insulated drain pan included;
- The "T" connection at the inlet is not included.

Exemplo Example

MT/GE ...

SISTEMA GT GT SYSTEM



A descongelação é obtida através da injeção de gás quente na bateria e parrilha e resistências eléctricas no tabuleiro.

NOTAS:

- Igual ao sistema GE mas inclui também parrilha de gás quente no tabuleiro;
- A conexão em "T" na entrada não está incluída.

Defrost is obtained by the injection of hot gas in the coil and on the drain pan. Electrical heaters are also placed on the evaporator's drain pan.

NOTES:

- Same as GE system plus hot gas defrost circuit on the drain pan;
- The "T" connection at the inlet is not included.

Exemplo Example

MT/GT ...

PARA INFORMAÇÃO ACERCA DO SISTEMA DE DESCONGELAÇÃO GTB (GAMA SAHE - R717 AMONÍACO) POR FAVOR CONSULTE A CENTAURO.

FOR INFORMATION REGARDING GTB DEFROST SYSTEM (SAHE RANGE - R717 AMMONIA), PLEASE CONTACT CENTAURO.

IMPORTANTE

- R22, R502, R717: considera-se que para cada m² de permutador a descongelar, dever-se-á garantir no mínimo 3m² de permutadores em funcionamento;
- R404A: a experiência aponta para rácios diferentes (1/4 a 1/6).

IMPORTANT

- R22, R502, R717: it's considered that for each m² of heat exchanger defrosting, should be assured at least 3m² of working heat exchangers;
- R404A: experience advises us to use different ratios (1/4 to 1/6).

CAPACIDADES EM DT1 TD1 CAPACITIES

Modelo Type	Capacidade 1,35 x SC1 Capacity 1,35 x SC1 (Tse=+10°C / DT1=10K)
	kW
ERK	
ERK 304/413	1.29
ERK 304/420	2.04
ERK 304/331	3.08
ERK 406/437	3.73
ERK 406/346	4.63
ERK 406/359	5.85
ERK 456/367	6.65
ERK 456/384	8.39
ERK 506/4109	10.91
ERK 506/3128	12.79
ERK 506/3155	15.46
CBK	
CBK 4B1/2 R	2.60
CBK 4B2/4 R	4.25
CBK 4B2/6 R	5.73
CBK 3F1/7 R	6.55
CBK 4B3/9 R	8.63
CBK 4B4/12 R	11.72
CBK 3F2/13 R	12.72
CBK 3F3/19 R	19.48
CBK 3F4/25 R	24.57
CBK 4H3/32 R	32.10
CBK 4K3/39 R	39.00
CBK 4H4/42 R	42.30
CBK 4K4/56 R	56.40
CBK 4K5/69 R	68.50
CBK 4B1/3	3.01
CBK 4B2/5	4.81
CBK 4B2/7	7.00
CBK 4B3/10	10.56
CBK 4B4/14	14.10
MTA	
MTA 4M1/18	17.91
MTA 4P1/26	25.69
MTA 4T1/50	49.86
MTA 4T1/61	60.99
MTA 4S3/84	83.84
MTA 4T2/100	100.24
MTA 4T2/122	122.44
MTA 4T2/134	133.82
MTA 4T3/170	170.33
MTA 4T3/190	189.61
MTA 4M1/18 /AS	14.96
MTA 4P1/26 /AS	20.77
MTA 4T1/50 /AS	41.03
MTA 4T1/61 /AS	47.58
MTA 4S3/84 /AS	63.31
MTA 4T2/100 /AS	82.36
MTA 4T2/122 /AS	95.40
MTA 4T2/134 /AS	100.02
MTA 4T3/170 /AS	136.11
MTA 4T3/190 /AS	144.76

Modelo Type	Capacidade 1,15 x SC2 Capacity 1,15 x SC2 (Tse=0°C / DT1=8K)
	kW
API/APL	
AP 204/431	0.22
AP 204/439	0.27
AP 234/463	0.44
APL 204/626	0.20
APL 204/629	0.22
APL 234/645	0.33
APD	
APD 111/23	0.16
APD 111/30	0.20
APD 211/42	0.28
APD 211/46	0.31
APD 211/25	0.17
APD 211/36	0.24
APD 211/49	0.33
APD 211/58	0.39
APD 211/68	0.46
APD 212/91	0.62
APD 212/97	0.66
DF/DFL	
DF 400	0.29
DF 402	0.41
DF 404	0.47
DF 460	0.59
DF 462	0.71
DF 500	0.83
DF 502	0.99
DF 504	1.15
DF 506	1.82
DF 508	1.99
DF 5010	2.35
DF 5012	3.13
DF 5014	3.56
DFL 401	0.24
DFL 403	0.31
DFL 405	0.36
DFL 461	0.44
DFL 463	0.55
DFL 501	0.68
DFL 503	0.80
DFL 505	1.01
DFL 507	1.40
DFL 509	1.61
DFL 5011	2.04
DFL 5013	2.64
DFL 5015	3.01
BXN/BXL	
BXN 125/16	1.06
BXN 130/24	1.60
BXN 225/32	2.16
BXN 230/49	3.29
BXN 325/50	3.34
BXN 425/64	4.28
BXN 330/74	4.97
BXN 430/99	6.67
BXL 125/12	0.87
BXL 130/19	1.33
BXL 225/24	1.75
BXL 230/38	2.71
BXL 325/38	2.74
BXL 425/48	3.47
BXL 330/57	4.11
BXL 430/76	5.49

Modelo Type	Capacidade 1,15 x SC2 Capacity 1,15 x SC2 (Tse=0°C / DT1=8K)
	kW
ERN	
ERN 204/402	0.14
ERN 204/403	0.22
ERN 234/405	0.34
ERN 234/406	0.47
ERN 304/412	0.91
ERN 304/414	1.08
ERN 406/436	2.79
ERN 406/440	3.00
ERN 404/449	3.68
ERN 404/456	4.26
TA/TAL	
TA 170	0.21
TA 172	0.27
TA 174	0.61
TA 176	0.87
TA 178	1.21
TA 200	0.28
TA 202	0.36
TA 204	0.40
TA 206	0.83
TA 208	0.94
TA 2010	1.32
TA 230	0.47
TA 232	0.59
TA 234	0.73
TA 236	0.77
TA 238	1.13
TA 2310	1.20
TA 2312	1.50
TA 2314	1.92
TA 2316	2.27
TAL 171	0.20
TAL 173	0.24
TAL 175	0.56
TAL 177	0.77
TAL 179	1.04
TAL 201	0.24
TAL 203	0.29
TAL 205	0.33
TAL 207	0.71
TAL 209	0.77
TAL 2011	1.09
TAL 231	0.36
TAL 233	0.46
TAL 235	0.59
TAL 237	0.66
TAL 239	0.77
TAL 2311	0.95
TAL 2313	1.24
TAL 2315	1.58
TAL 2317	1.83

Modelo Type	Capacidade 1,15 x SC2 Capacity 1,15 x SC2 (Tse=0°C / DT1=8K)
	kW
RWK/BWK	
RWK 4A1/20	1.35
RWK 4A1/24	1.58
RWK 4A1/27	1.80
RWK 4A1/29	1.89
RWK 4A2/40	2.70
RWK 4A2/49	3.23
RWK 4A2/53	3.54
RWK 4A3/63	4.20
RWK 4A3/69	4.61
RWK 4A3/76	5.05
RWK 4A1/16 R	1.03
RWK 4A1/18 R	1.20
RWK 4A1/21 R	1.37
RWK 4A1/22 R	1.46
RWK 4A2/32 R	2.11
RWK 4A2/36 R	2.37
RWK 4A2/41 R	2.74
RWK 4A3/48 R	3.19
RWK 4A3/55 R	3.68
RWK 4A3/61 R	4.04
BWK 6A1/16	1.08
BWK 6A1/19	1.29
BWK 6A1/21	1.44
BWK 6A1/22	1.56
BWK 6A2/32	2.21
BWK 6A2/37	2.62
BWK 6A2/41	2.83
BWK 6A3/47	3.27
BWK 6A3/55	3.85
BWK 6A3/61	4.26
BWK 6A1/12 R	0.82
BWK 6A1/14 R	0.95
BWK 6A1/17 R	1.11
BWK 6A1/18 R	1.19
BWK 6A2/25 R	1.65
BWK 6A2/29 R	1.95
BWK 6A2/34 R	2.26
BWK 6A3/37 R	2.47
BWK 6A3/44 R	2.92
BWK 6A3/50 R	3.32

CAPACIDADES EM DT1 TD1 CAPACITIES

Modelo Type	Capacidade 1,15 x SC2 Capacity 1,15 x SC2 (Tse=0°C / DT1=8K)
	kW
CBN	
CBN 4B1/3	2.10
CBN 4B2/5	3.35
CBN 4B2/7	4.88
CBN 4B3/11	7.36
CBN 4B4/15	9.83
CBN 4F2/17	11.16
CBN 4F3/25	16.87
CBN 4F4/34	22.59
CBN 4K2/37	24.24
CBN 4K3/51	33.52
CBN 4K4/79	52.43
CBN 4K5/93	61.47
CBL	
CBL 7B1/2	1.66
CBL 7B2/3	2.33
CBL 7B2/5	3.40
CBL 7B3/7	5.14
CBL 7B4/10	6.87
CBL 7F2/12	8.60
CBL 7F3/19	13.03
CBL 7F4/25	17.57
CBL 7K2/26	18.29
CBL 7K3/36	25.21
CBL 7K4/56	39.36
CBL 7K5/66	46.37

Modelo Type	Capacidade 1,15 x SC2 Capacity 1,15 x SC2 (Tse=0°C / DT1=8K)
	kW
MT	
MT 4C1/3	2.21
MT 4E1/5	3.26
MT 4C2/6	4.27
MT 4C3/8	5.50
MT 4E2/9	5.91
MT 4E2/10	6.46
MT 4C3/10	6.92
MT 4E3/13	8.89
MT 4E3/16	10.31
MT 4E4/18	11.89
MT 4E4/20	13.02
MT 4G2/20	12.91
MT 4G3/23	15.37
MT 4J2/24	15.99
MT 4G3/29	19.21
MT 4L2/36	24.13
MT 4J4/49	32.44
MT 4L3/53	35.32
MT 4L4/68	45.09
MT 4L4/72	48.00
DD	
DD 7C1/2	1.64
DD 7C1/3	2.15
DD 7E1/4	2.54
DD 7C2/5	3.62
DD 7C2/6	4.20
DD 7E2/7	4.98
DD 7E2/8	5.94
DD 7C3/9	6.51
DD 7E3/11	7.41
DD 7E3/12	8.70
DD 7E4/14	10.11
DD 7G2/13	9.13
DD 7G3/17	11.67
DD 7J2/19	13.28
DD 7G3/21	14.78
DD 7J3/25	17.66
DD 7L2/26	18.42
DD 7L2/29	20.47
DD 7J4/34	23.57
DD 7L3/35	24.61
DD 7L3/38	26.51
DD 7L3/42	29.70
DD 7L4/53	37.24
MTB	
MTB 6M1/14	9.60
MTB 6P1/21	13.92
MTB 6P1/25	16.71
MTB 6M2/28	19.34
MTB 6M2/34	23.17
MTB 6P2/41	27.95
MTB 6M3/43	29.10
MTB 6P2/50	33.76
MTB 6P3/59	39.76
MTB 6M4/69	46.69
MTB 6P3/75	50.81
MTB 6T2/79	53.77
MTB 6S3/86	58.77
MTB 6T2/100	67.75
MTB 6T2/114	77.58
MTB 6T3/132	89.97
MTB 6T3/151	102.99

Modelo Type	Capacidade 1,15 x SC2 Capacity 1,15 x SC2 (Tse=0°C / DT1=8K)
	kW
DDC	
DDC 8M1/11	7.92
DDC 8P1/17	12.03
DDC 8P1/19	13.42
DDC 8P1/22	15.44
DDC 8S1/24	16.65
DDC 8M2/30	21.14
DDC 8P2/35	24.31
DDC 8P2/39	27.43
DDC 8S2/40	28.12
DDC 8M3/46	31.91
DDC 8T1/46	32.28
DDC 8P3/59	41.46
DDC 8T2/61	42.67
DDC 8P3/69	48.28
DDC 8T2/80	55.68
DDC 8S3/80	55.73
DDC 8T2/94	65.35
DDL	
DDL 10M1/10	7.11
DDL 10P1/14	10.55
DDL 10P1/17	12.49
DDL 10M2/19	14.42
DDL 10S1/21	15.26
DDL 10M2/26	19.10
DDL 10P2/29	21.25
DDL 10M2/30	22.54
DDL 10P2/34	25.42
DDL 10M3/39	28.78
DDL 10S2/40	29.65
DDL 10P2/41	30.02
DDL 10M3/46	33.98
DDL 10P3/52	38.35
DDL 10T2/54	39.76
DDL 10P3/62	45.79
DDL 10T2/71	52.79
DDL 10S3/72	53.07
DDL 10T2/85	62.79
DXL	
DXL 12M1/8	6.38
DXL 12P1/12	9.39
DXL 12M2/17	12.93
DXL 12P1/18	13.91
DXL 12M2/23	17.40
DXL 12P2/25	18.88
DXL 12M2/28	20.88
DXL 12P2/31	23.58
DXL 12M3/35	26.19
DXL 12P2/37	28.22
DXL 12P3/47	35.54
DXL 12T2/48	36.10
DXL 12P3/57	42.95
DXL 12T2/64	48.65
DXL 12S3/66	50.02
DXL 12T2/77	58.28

Modelo Type	Capacidade 1,15 x SC2 Capacity 1,15 x SC2 (Tse=0°C / DT1=8K)
	kW
BSUT	
BSUT 1102.2	12.76
BSUT 1202.2	24.47
BSUT 1302.2	34.21
BSUT 1402.2	41.11
BSUT 1402.2 XL	49.98
BSUT 1502.2	60.67
BSUT 1502.2 XL	78.16
BSUT 1602.2	41.11
BSUT 1602.2 XL	49.98
BSUT 1702.2	60.67
BSUT 1702.2 XL	78.16
BSUT 1802.2 XL	81.26
BSUT 1902.2 XL	102.90
BSUT 2102.2	13.17
BSUT 2202.2	25.72
BSUT 2302.2	35.58
BSUT 2402.2	38.10
BSUT 2402.2 XL	51.63
BSUT 2502.2	54.23
BSUT 2502.2 XL	38.10
BSUT 2602.2	51.63
BSUT 2602.2 XL	54.23
BSUT 2702.2 XL	72.70
BSUT 2802.2 XL	84.53
BSUT 2902.2 XL	89.60
BSUS	
BSUS 3102.2	12.76
BSUS 3202.2	24.47
BSUS 3302.2	34.21
BSUS 3402.2	41.11
BSUS 3402.2 XL	49.98
BSUS 3502.2	60.67
BSUS 3502.2 XL	78.16
BSUS 3602.2	41.11
BSUS 3602.2 XL	49.98
BSUS 3702.2	60.67
BSUS 3702.2 XL	78.16
BSUS 3802.2 XL	81.26
BSUS 3902.2 XL	102.90
BSUS 4102.2	13.17
BSUS 4202.2	25.72
BSUS 4302.2	35.58
BSUS 4402.2	38.10
BSUS 4402.2 XL	51.63
BSUS 4502.2	54.23
BSUS 4502.2 XL	38.10
BSUS 4602.2	51.63
BSUS 4602.2 XL	54.23
BSUS 4702.2 XL	72.70
BSUS 4802.2 XL	84.53
BSUS 4902.2 XL	89.60

Factores de correcção para DT1 - Ver catálogo técnico correspondente
Corrections factors for DT1 - See correspondent technical catalog

GAMA SAHE SAHE RANGE

CONSIDERANDOS INICIAIS

Após elevados investimentos e testes realizados em condições reais de funcionamento, durante a Climatización Madrid 2003, a CENTAURO lançou uma nova gama completa de evaporadores cúbicos e duplo fluxo executados com tubo inox e alheta de alumínio.

Tendo como principal aplicação instalações que funcionam com amoníaco como fluido primário, não deixa também de se constituir como uma boa solução para sistemas com fluidos secundários ou até com expansão directa de R 404A, R 507 ou outros HFC, face aos crescentes requisitos de resistência à corrosão provocada por produtos químicos usados na indústria.

CARACTERÍSTICAS PRINCIPAIS

Os catálogos de evaporadores cúbicos e duplo fluxo descrevem detalhadamente a solução construtiva, as gamas e os respectivos modelos, permitindo uma rápida selecção da solução pretendida.

Permitimo-nos realçar as seguintes características técnicas:

- Tubo inox liso 316L diâmetro 15,1 e 22,2 mm (304L sob pedido);
- Alhetas de alumínio liso ou revestido;
- Blindagem em alumínio AIMg e, sob pedido, alumínio lacado ou inox;
- Utilização dos permutadores como:
 - evaporadores sistema bombado ou inundado;
 - evaporadores sistema expansão directa;
 - condensadores arrefecidos a ar;
 - frigodifusores;
 - arrefecedores secos;
 - baterias de aquecimento;
 - baterias de arrefecimento;
- Redução de peso até 40% em relação às unidades tubo/alheta aço galvanizado;
- Redução do impacto ambiental na produção dos equipamentos e na sua exploração.

APRESENTAÇÃO DAS GAMAS

- Gama evaporador cúbico industrial com separação de alheta de 6,3, 8,0, 10,0 e 12,0 mm e superfícies de permuta desde 20m² até 600m².
- Gama evaporadores para túnel com separação de alheta 12,0 e 16,0 mm e superfícies de permuta de 125m² a 700m².
- Gama evaporadores duplo fluxo com separação de alheta de 4,2, 6,3, 8,0 e 10,0 mm e superfícies de permuta de 45m² a 512m².
- Gama equipamento especial cobrindo separação de alheta de 4,2 mm a 16 mm e "passo misto".

A comercialização desta gama SAHE teve início em Março 2003, tendo sido vendidos e instalados evaporadores em "instalações de amoníaco" em Portugal mas principalmente em Espanha, Reino Unido, Irlanda e Holanda. Este produto CENTAURO, na certeza merecerá a V/ melhor atenção sobretudo quando ponderarem as vantagens do nosso compromisso Flexibilidade / Serviço / Qualidade / Preço. Como sempre poderão contar com a total disponibilidade da CENTAURO para quaisquer esclarecimentos, informações, projectos especiais ou outro tipo de acções consideradas relevantes por V/ S.as. Tudo faremos para também nesta gama continuarmos a ser merecedores da V/ elevada preferência.

CAPACIDADES FRIGORIFICAS

As capacidades frigoríficas das novas tabelas na gama SAHE estão referidas a R717 (amoníaco) sistema bombado (3 recirculações).

Sob pedido podemos apresentar capacidades para outros refrigerantes e/ou outras condições.

MAIDEN CONSIDERATIONS

During Climatización Madrid 2003, and after large investments and tests performed under actual operation conditions, CENTAURO launched a new and complete range of cubic and double flow coolers with stainless steel tubes and aluminium fins.

These coolers have as main application the use in instalations that run with amonia as a primary fluid, nonetheless are as well a good solution for systems using secondary refrigerants, or even with direct expansion, R404A, R507 or other HFC's, due to the growing need to have a good corrosion resistance caused by chemical products used in the industry.

MAIN FEATURES

This cubic and double flow coolers catalog fully describes their construction, ranges and types and allows for a quick selections of the intended solution.

Bellow you can find their main features:

- 15,1 and 22,2 mm diameter smooth 316L stainless steel tubes (304L under request;
- Plain or epoxy coated aluminium fins;
- AlMg aluminium casing and, under request, white painted or stainless steel casing;
- Heat exchangers can be used as:
 - pumped or flooded air coolers;
 - direct expansion air coolers;
 - air cooled condensers;
 - fluid air coolers;
 - dry-coolers;
 - heating coils;
 - cooling coils;
- 40% weight reduction compared with galvanized stell tube /fin coolers;
- Reduction of the environmental impact during production and subsequent operation.

RANGE PRESENTATION

- Industrial cubic coolers range with 6,3, 8,0, 10,0 and 12,0 mm fin spacing and exchange surfaces from 20m² up to 600m²;
- Industrial tunnel coolers range with 12,0 and 16,0 mm fin spacing and exchange surfaces from 125m² up to 700m²;
- Industrial double flow coolers range with 4,2, 6,3, 8,0 and 10,0 mm fin spacing and exchange surfaces from 45m² up to 512m²;
- Special equipment range with 4,2 up to 16,0 mm fin spacing and multiple fin spacing (double, triple, etc...).

SAHE product range is under application on amonia plants since 2003 in Portugal but mainly in Spain, UK, Ireland and Holland.

This CENTAURO product, will for sure draw your attention when all advantages regarding our Flexibility / Service / Quality / Price comittment shall be considered. As always you can count with CENTAURO's full availability for any explanation, information, special projects or other type of projects considered relevant by its customers. CENTAURO shall do anything in it's power to continue, also on this range, to be worthy of your preference.

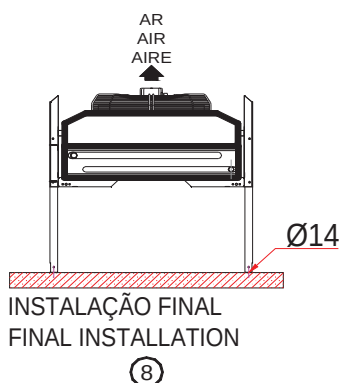
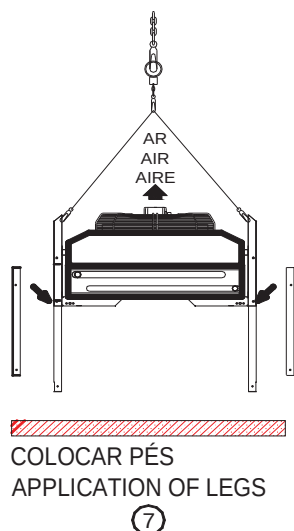
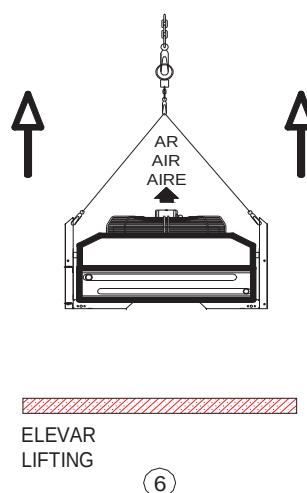
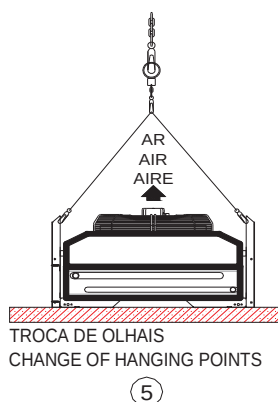
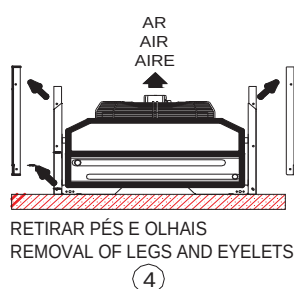
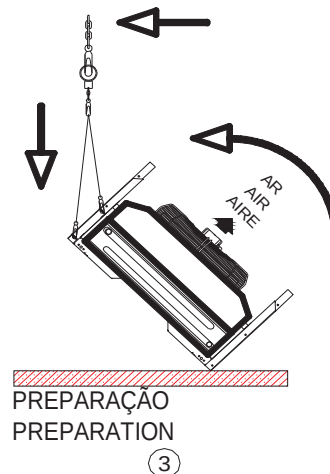
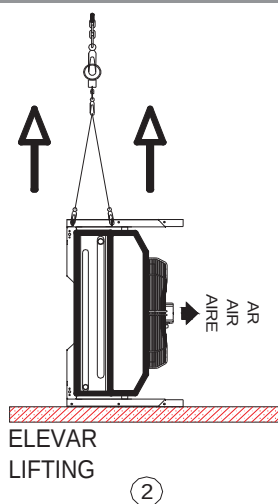
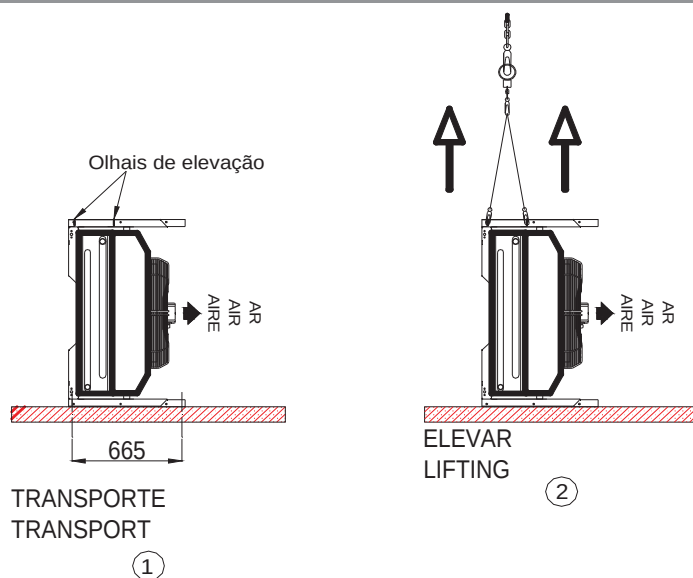
CAPACITIES

All capacities on this SAHE range are referred to R717 (amonia), pumped system (3 recirculations).

Under request we can present capacities for other refrigerants and/or conditions.

MOVIMENTAÇÃO DE CONDENSADORES CONDENSER HANDLING

ACI ACP ACJ ACPD HORIZONTAL



Para montagem na horizontal, ver distâncias de fixação ao solo nas páginas dos condensadores correspondentes.

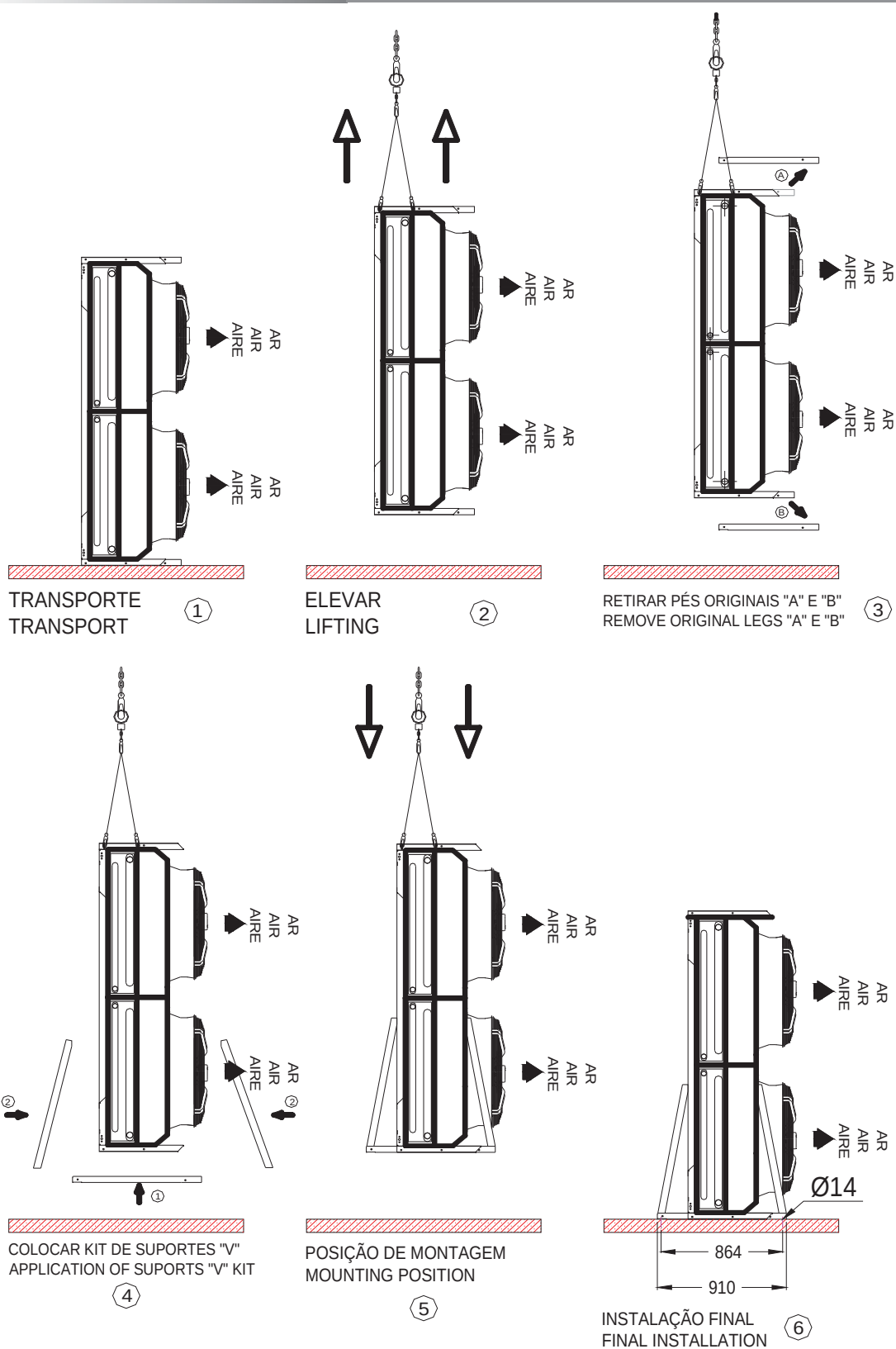
Para montagem na vertical seguir somente os pontos ① e ②. Distância de fixação ao solo única de 665mm.

For horizontal assembly, see ground fixing distances on each correspondent condenser.

For vertical assembly, follow steps ① and ②. Single ground fixing distance of 665mm.

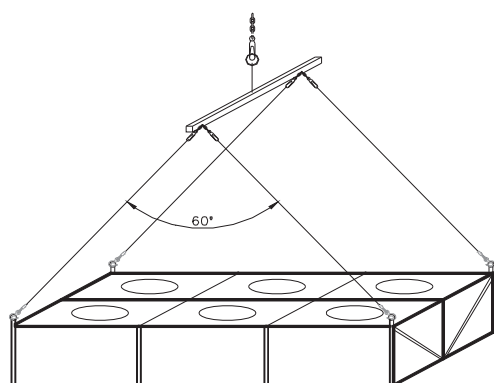
MOVIMENTAÇÃO DE CONDENSADORES CONDENSER HANDLING

ACPD VERTICAL

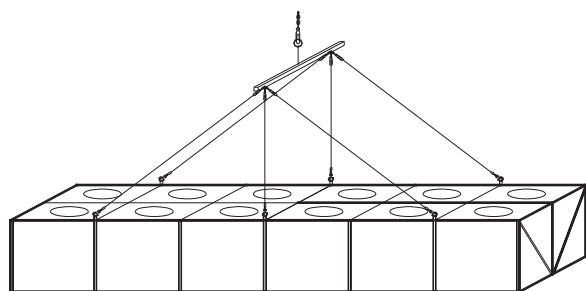


MOVIMENTAÇÃO DE CONDENSADORES CONDENSER HANDLING

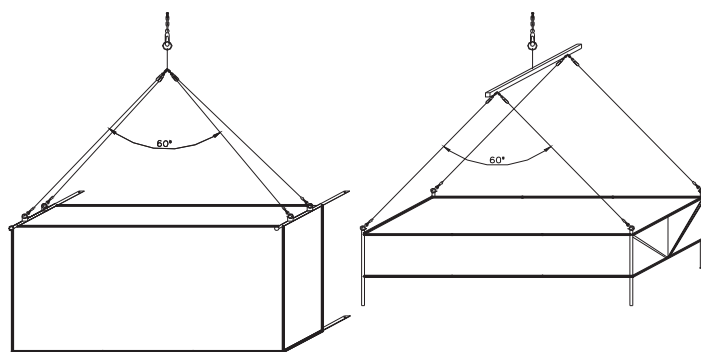
ELEVAÇÃO



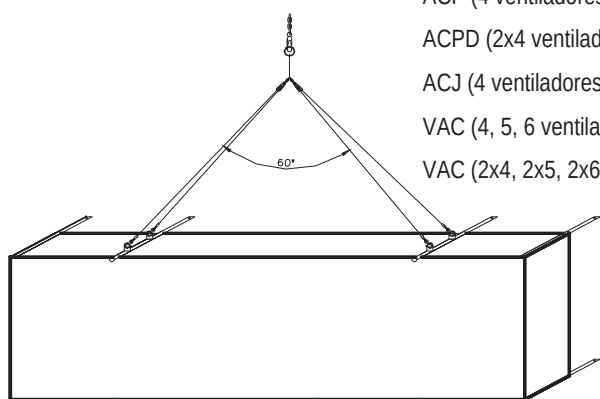
ACH
ACI
ACP
ACPD
ACJ
VAC (2, 3, 4, 5 ventiladores/fans)
VAC (2x2, 2x3, 2x4, 2x5 ventiladores/fans)



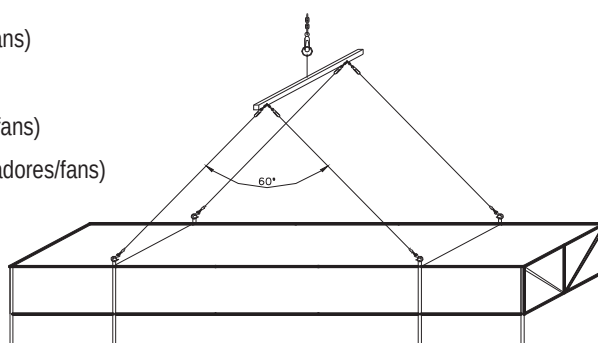
VAC (6 ventiladores/fans)
VAC (2x6 ventiladores/fans)



ACH
ACI (1, 2, 3 ventiladores/fans)
ACP (2, 3 ventiladores/fans)
ACPD (2x2, 2x3 ventiladores/fans)
ACJ (2, 3 ventiladores/fans)
VAC (2, 3 ventiladores/fans)
VAC (2x2, 2x3 ventiladores/fans)

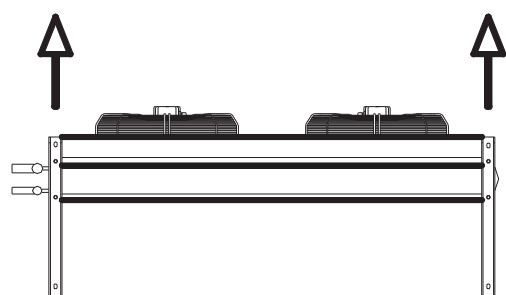
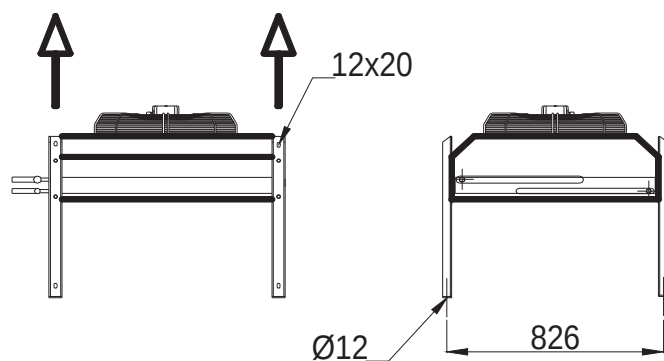


ACI (4, 5 ventiladores/fans)
ACP (4 ventiladores/fans)
ACPD (2x4 ventiladores/fans)
ACJ (4 ventiladores/fans)
VAC (4, 5, 6 ventiladores/fans)
VAC (2x4, 2x5, 2x6 ventiladores/fans)

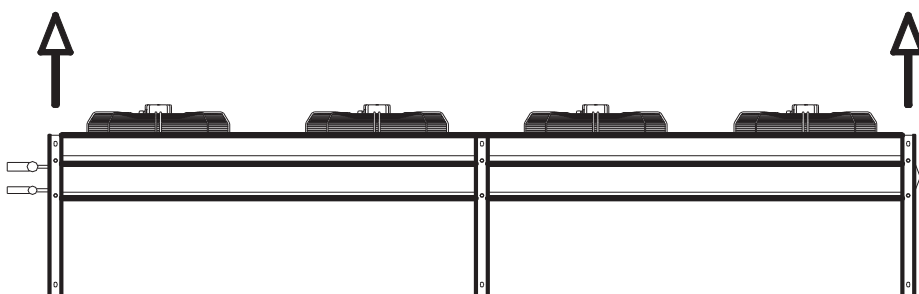
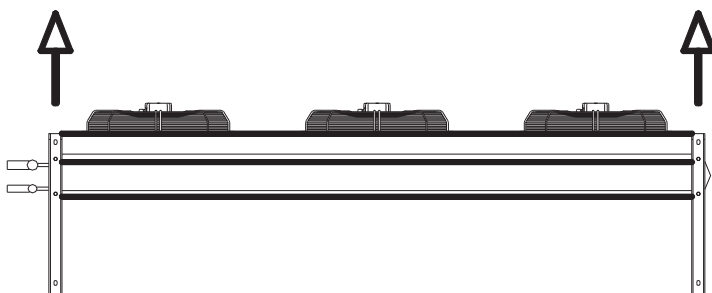


MOVIMENTAÇÃO DE CONDENSADORES CONDENSER HANDLING

ACH

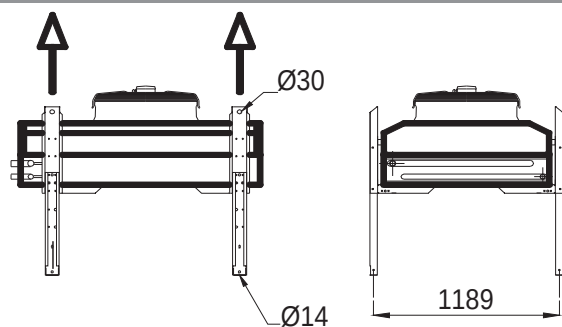


↑ Pontos de Suporte/Elevação
↑ Hanging/Lifting Points

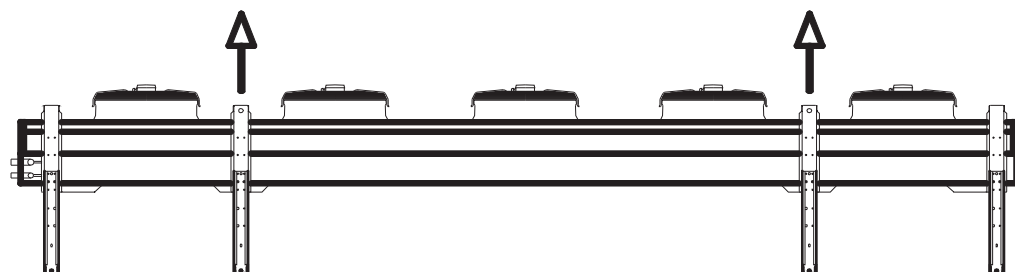
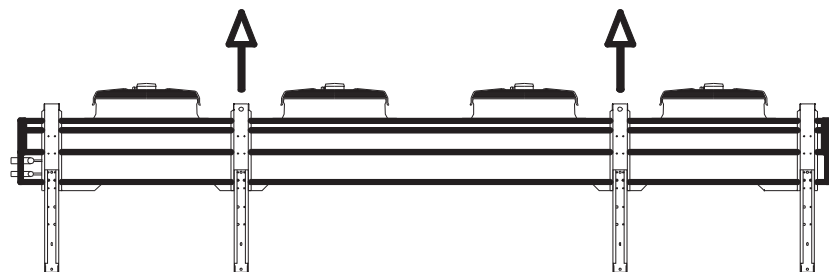
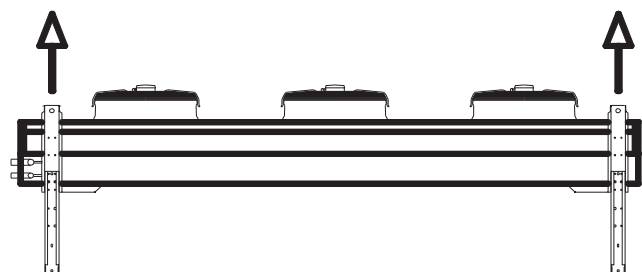
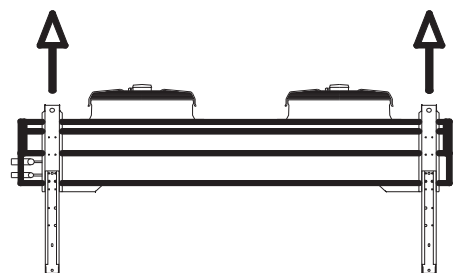


MOVIMENTAÇÃO DE CONDENSADORES CONDENSER HANDLING

ACI



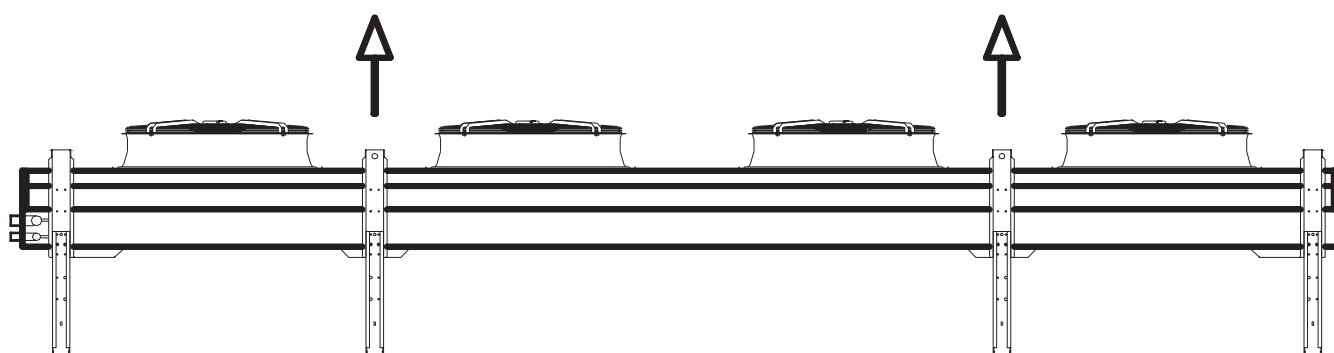
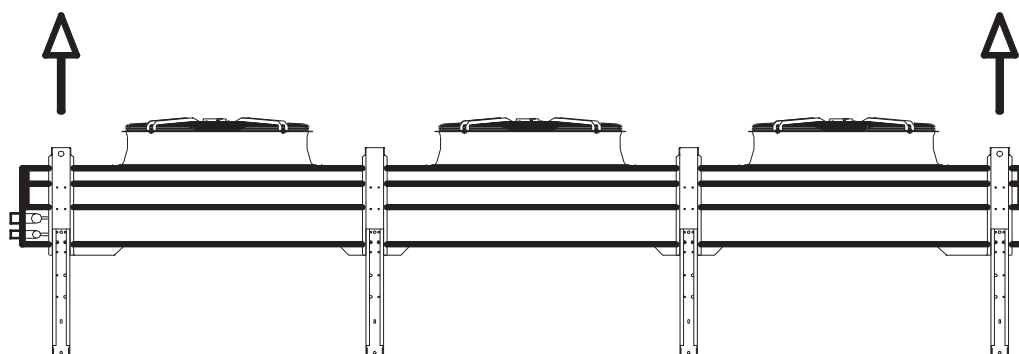
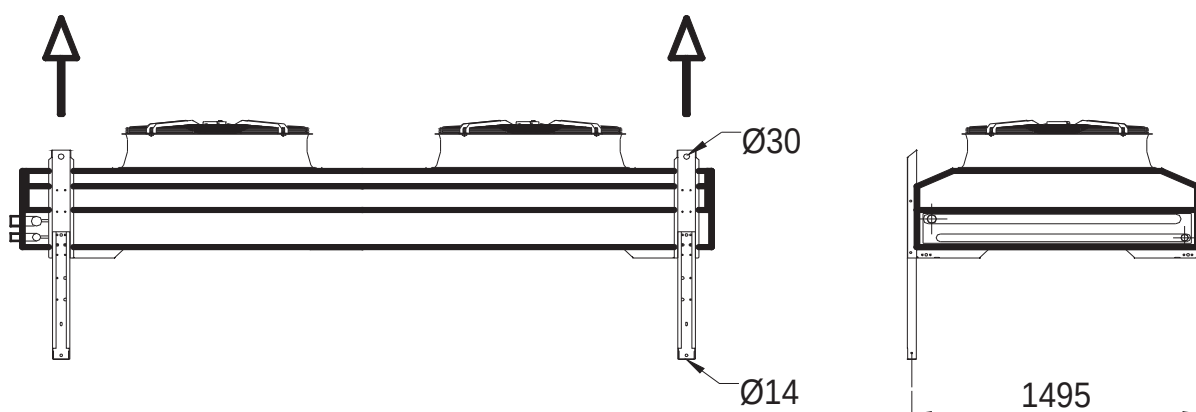
↑ Pontos de Suporte/Elevação
Hanging/Lifting Points



MOVIMENTAÇÃO DE CONDENSADORES CONDENSER HANDLING

ACJ

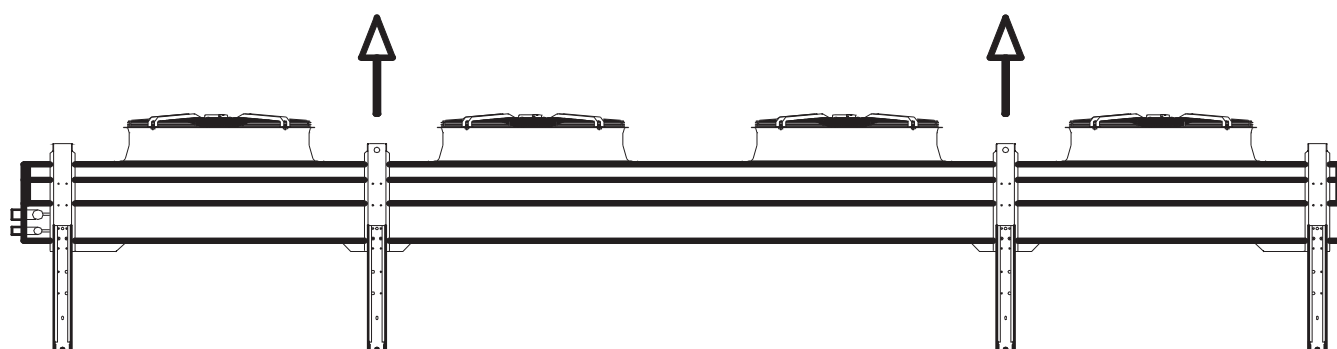
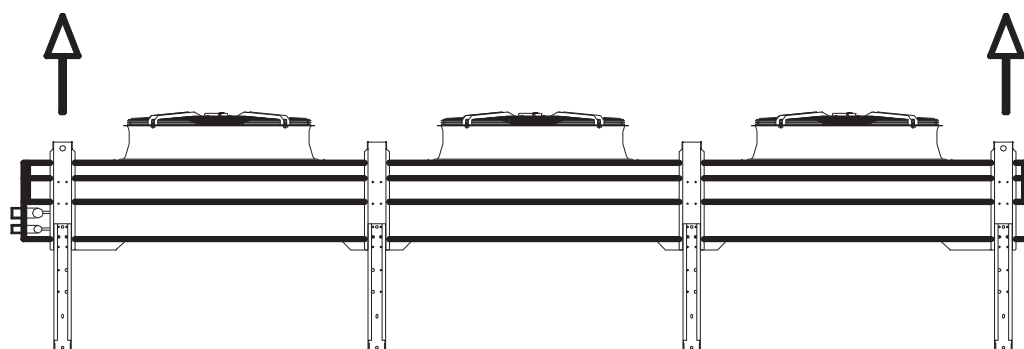
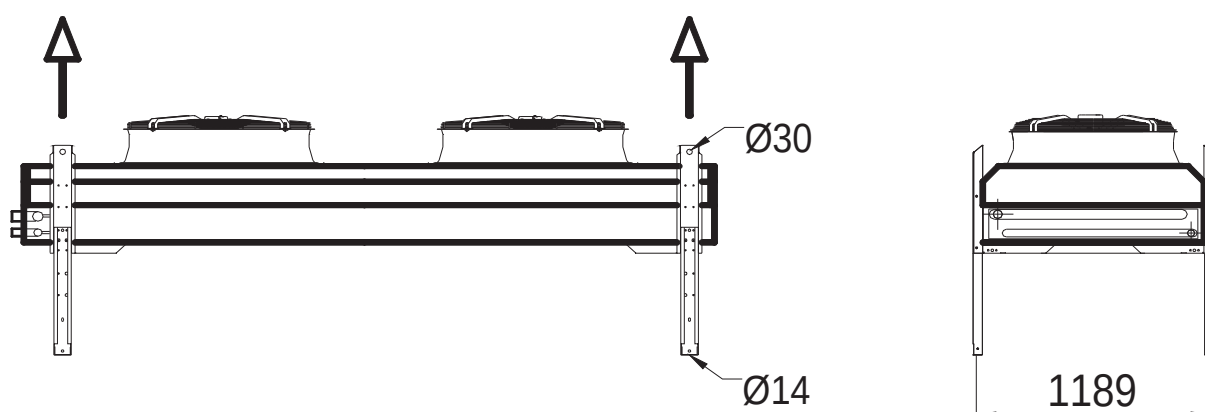
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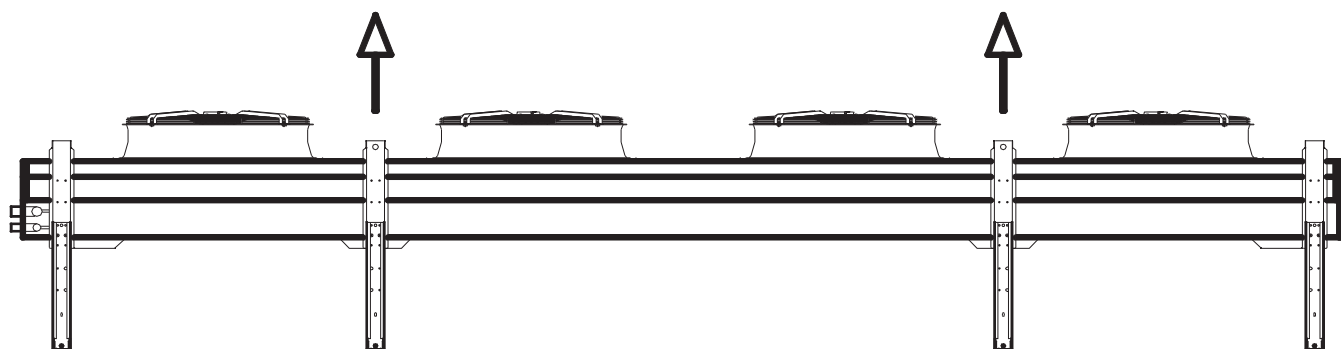
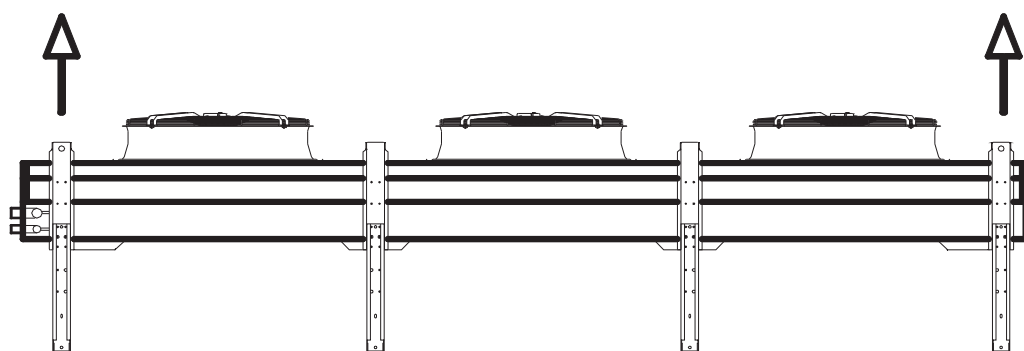
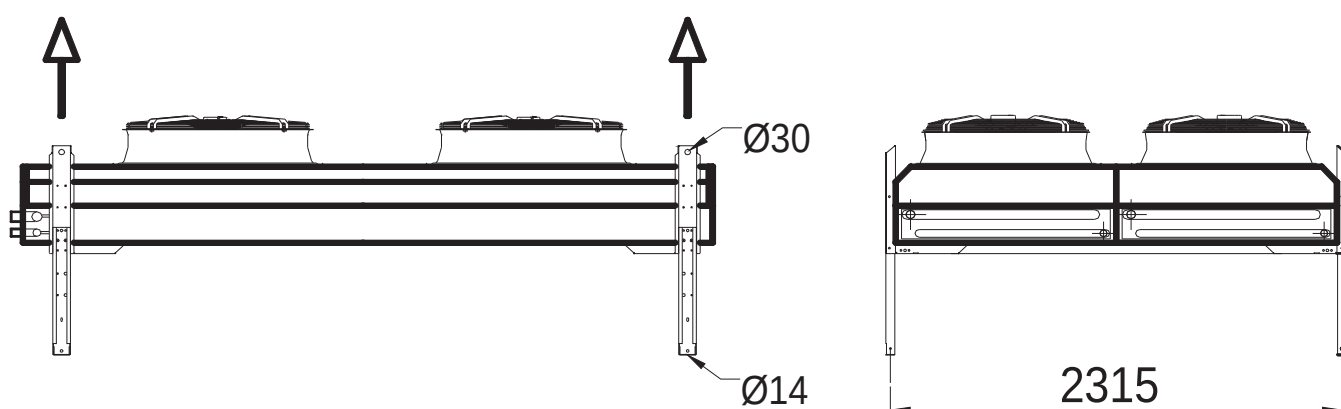
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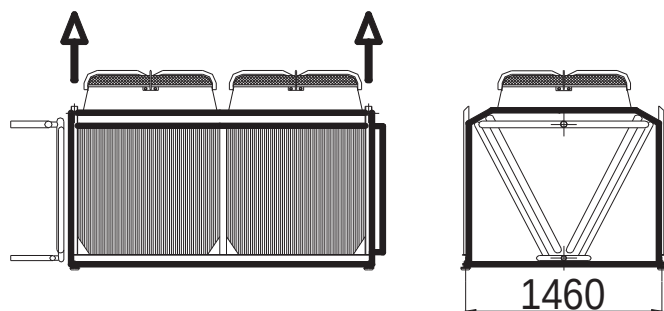


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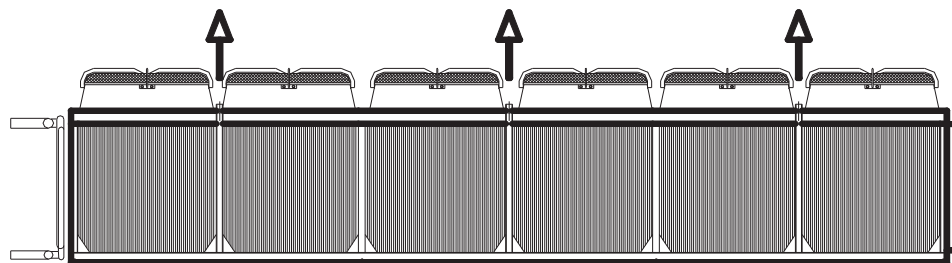
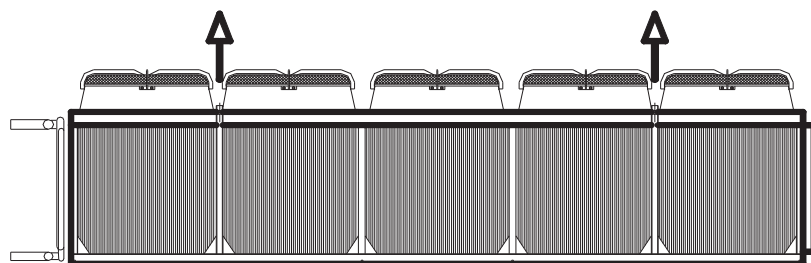
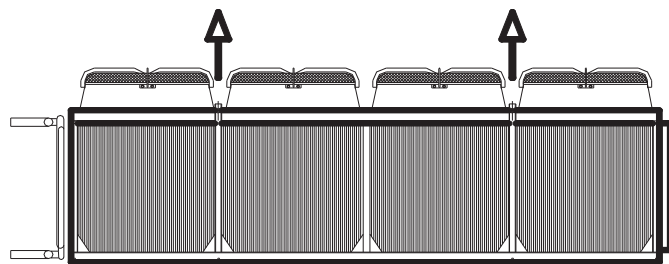
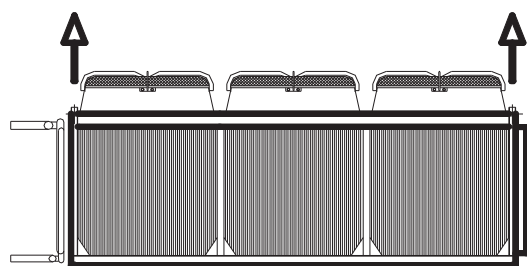


MOVIMENTAÇÃO DE CONDENSADORES CONDENSER HANDLING

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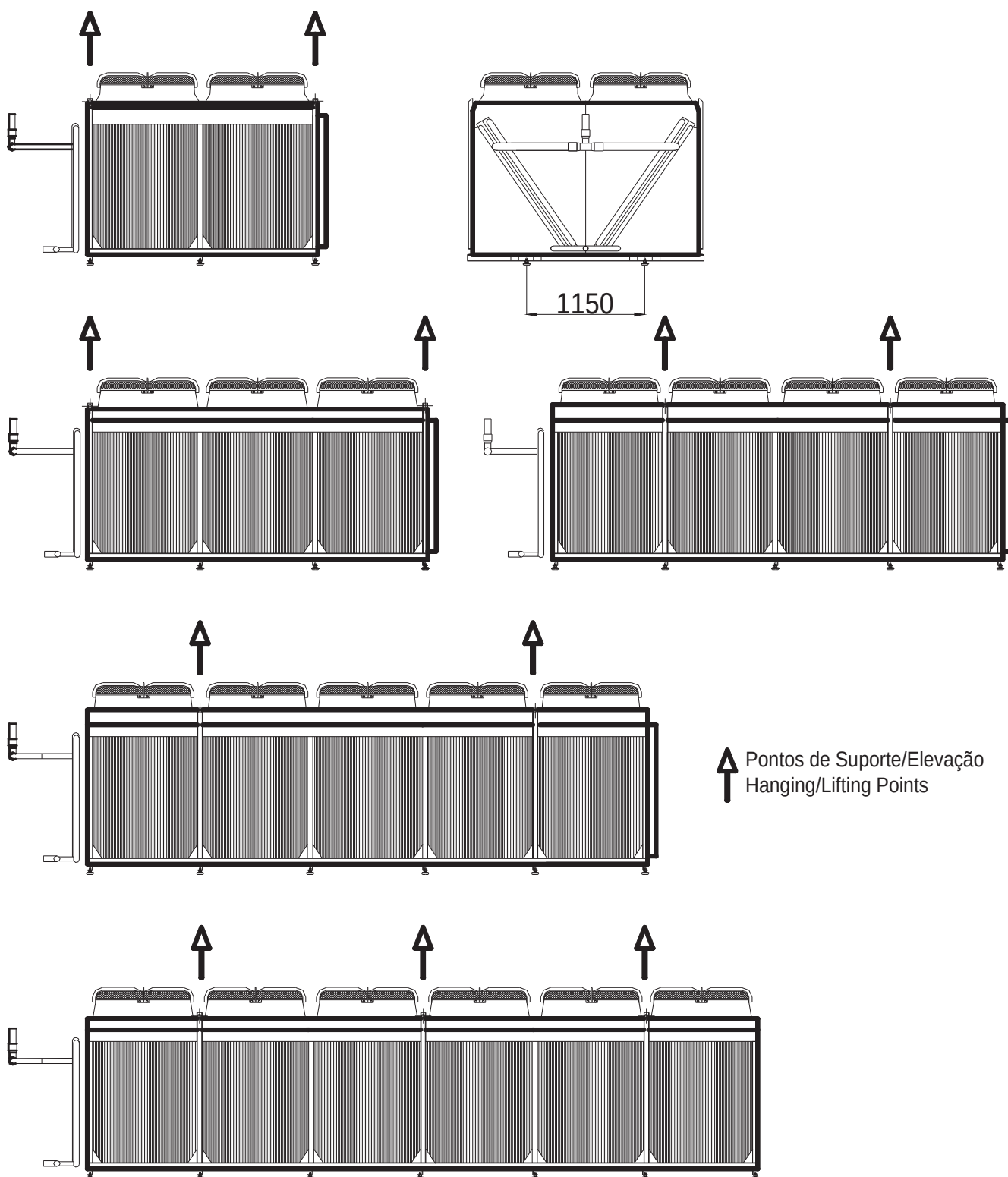


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MOVIMENTAÇÃO DE CONDENSADORES CONDENSER HANDLING

VACD



CONDIÇÕES E TERMOS GERAIS DE FORNECIMENTO

Artigo 1º - Geral

1 - As presentes condições gerais, constantes nas tabelas de preços, aplicam-se a todas as propostas, contratos de venda e serviços prestados pelas Empresas:

CENTAURO (Portugal) - S.G.P.S., S.A - Zona Industrial - Lote Q-9 - Apartado 1001 - 6001-997 Castelo Branco, Portugal. Matriculada na Cons. do Reg. Com. Castelo Branco sob o n.º 1170/920310. Pessoa Colectiva nº 502 842 326.

Castanheira Henriques & C.ª, L.da - Zona Industrial, Lote Q-9, Apartado 181 - 601-997 Castelo Branco, Portugal. Matriculada na Cons. Reg. Com. Castelo Branco sob o n.º 481. Pessoa Colectiva nº 500785317. Produtor Registado n.º 060/76 - CAE N.º 29230.

Centauro Internacional - Trocadores de Calor, L.da, Zona Industrial, Lote Q-9, Apartado 1001. 6001-997 Castelo Branco. Sociedade por quotas - Matriculada na Conservatória do Registo Comercial de Castelo Branco sob o n.º 993/900404. Pessoa Colectiva com o Nume-ro fiscal 502 352 426.

Brisa Nova - Trocadores de Calor, L.da, Rua Heróis do Dembo, D-1 a D-3, Bairro de Angola - Camarate. 2685 - 459 Sacavém - Portugal. Sociedade por quotas. Contribuinte n.º 502 392 185. CAE N.º 51650. Registada na Conservatória do Registo Comercial de Loures, sob o n.º 7860/900411, a seguir genericamente definidas como "Centauro".

2 - As vendas, entregas e outros serviços da Centauro serão executados, exclusivamente, em conformidade com as presentes condições e termos gerais de venda e fornecimento, a seguir designadas por "Condições Fornecimento", aplicando-se ainda a todas as futuras transacções comerciais com o cliente.

3 - Se por decisão judicial alguma(s) das cláusulas das presentes condições de fornecimento ou de algum contrato elaborado com base nas mesmas forem consideradas "não válidas", este facto não afectará as restantes cláusulas desde que tal não conformidade à lei não afecte a essência do contrato e desde que a Centauro aceite a alteração da(s) cláusula(s) em causa por outra(s) enquadra-da(s) no direito aplicável.

4 - As presentes condições de fornecimento são consideradas aceites pelo cliente desde que o mesmo coloque uma encomenda à Centauro ou aceite um seu fornecimento, renunciando a eventuais condições que possam existir da sua parte desde que não formalmente aceites por escrito pela Centauro, aplicando-se assim a todos os contratos.

5 - As alterações a estas "condições gerais de fornecimento" só serão válidas se acordadas previamente, por escrito, entre a Centauro e o cliente, sendo as modificações apenas aplicáveis ao contrato em causa.

Artigo 2º - Propostas e Contratos / Celebração do Contrato

1 - As propostas emitidas pela Centauro não a obrigam a qualquer acção ou compromisso, salvo se expressamente referido nas mesmas. Todas as propostas estarão baseadas na execução das encomendas sob condições normais e no horário normal de laboração.

2 - Todas as encomendas colocadas à Centauro serão consideradas irrevogáveis, a menos que a Centauro se recuse a aceitar as mesmas.

3 - O contrato entra em vigor com a aceitação da encomenda do cliente por parte da Centauro e será regido pelos termos de aceitação da encomenda e pelas presentes condições de fornecimento.

Artigo 3º - Prazo de Entrega

1 - A Centauro fornecerá os produtos ou serviços encomendados no prazo especificado na confirmação da encomenda. A Centauro deverá informar o cliente em caso de atraso no cumprimento do prazo estipulado, não podendo o cliente, a menos que expressamente acordado por escrito entre ambas as partes, reclamar qualquer tipo de indemnização por danos decorrentes do atraso no fornecimento.

2 - Caso o atraso seja superior a 6 meses por motivos imputáveis à Centauro e não referidos no artigo 5º, poderá o cliente rescindir o contrato mediante comunicação escrita à Centauro. O direito de rescisão aludido não abrange a parte da encomenda pronta ou em fase de acabamento, cujo recebimento não pode ser recusado, sendo o seu pagamento devido à Centauro numa base de proporcionalidade.

3 - O prazo de entrega conta a partir da formalização do contrato e depois de serem colocados à disposição da Centauro todos os dados, documentos, licenças ou similares necessários para a execução do trabalho e terem sido efectuados os pagamentos nos prazos acordados.

4 - Caso a Centauro aceite a suspensão temporária de uma encomenda a pedido do cliente, a Centauro indicará outro prazo de acordo com os prazos à data em vigor para produtos similares. Quaisquer custos extras decorrentes da suspensão serão suportados pelo cliente.

5 - O fornecimento considera-se sempre efectuado quando os produtos encomendados forem disponibilizados para embarque.

6 - Se a encomenda referir entregas parciais, então cada entrega será considerada um fornecimento separado para todos os efeitos legais, devendo ser facturado e pago individualmente.

7 - A Centauro está autorizada a suspender o cumprimento das obrigações decorrentes do contrato se, após a sua concretização, receber informações que levem a crer não poder o cliente cumprir as suas obrigações.

Artigo 4º - Local de Entrega

O fornecimento será entregue à porta da fábrica / armazém, a menos que acordado de forma diferente e por escrito por ambas as partes.

Artigo 5º - Força Maior

1 - Se a execução do "contrato de fornecimento" for dificultada por motivos de força maior por parte da Centauro ou dos seus fornecedores, a Centauro pode suspender as suas obrigações contratuais. O prazo de entrega/fornecimento será adiado por tempo igual ao atraso ocasionado pelos motivos de força maior sem que haja lugar ao pagamento de qualquer indemnização ao cliente por parte da Centauro.

2 - Neste contexto entende-se "por força maior" todas as circunstâncias em virtudes das quais não possa exigir-se à Centauro, numa base de razoabilidade e justiça, o cumprimento a tempo do contrato. Entre estas circunstâncias estão consideradas as que decorram da intervenção de terceiros pessoas e que não possibilitem à Centauro conseguir a informação essencial para a execução do contrato, assim como situações tais como guerra, perigo de guerra, desordens públicas, revoluções, pirataria, sabotagem, terrorismo, desastres naturais (tempestades, ciclones, terremotos, inundações) danos causados por água ou raios, explosões, incêndio, desordem laboral, destruição das máquinas ou da fabrica ou outras instalações, boicotes, ocupação da empresa, greves, medidas tomadas pela autoridade, obstruções à importação ou exportação, escassez ou atraso de entrega de matérias-primas, materiais ou componentes encomendados pela Centauro, falhas de energia, falta significativa de empregados ou paralisação do trabalho ocasionado por condições ambientais ou outras não relacionadas com a Centauro. Nesta conformidade e quer estas circunstâncias possam ou não ser previsíveis, não se poderá exigir à Centauro o cumprimento do prazo acordado.

3 - A Centauro poderá rescindir o contrato sempre que constate que, devido a motivos de força maior, não será possível cumprir as suas obrigações para com o cliente, sem que este tenha direito a qualquer tipo de indemnização, apesar de ter a obrigação de comprar e pagar à Centauro as matérias-primas, materiais e componentes da encomenda que se encontrem prontos e/ou sejam susceptíveis de fornecimento autónomo. Caso o cliente não assuma esta responsabilidade a Centauro terá o direito de armazenar ou vender os bens, por conta e risco do primeiro.

Artigo 6º - Preço

1 - Caso não tenham sido acordados e confirmados por escrito outros preços, então o preço vigente será o constante da tabela de preços Centauro à data do fornecimento.

2 - A menos que se indique o contrário na proposta ou na encomenda, os preços serão à porta de fábrica / armazém, a que acrescerão os impostos comerciais (IVA entre outros) bem como custos de embalagem especial, manuseamento de cargas, contentores, transportes ou custos adicionais.

Artigo 8º - Envio

1 - O transporte e seguro são sempre de conta e risco do cliente, a menos que tenham sido acordadas entre as partes, por escrito, outras condições.

2 - Considera-se o fornecimento efectuado mesmo que a Centauro disponibilize ao cliente transporte gratuito, sendo que, em caso de ocorrência de acidente, qualquer indemnização devida ao cliente terá sempre como limite o valor recebido da parte da seguradora da Centauro, apenas lhe sendo exigível após a sua percepção efectiva.

3 - Se o cliente não recolher ou se recusar a receber os produtos encomendados, a Centauro terá liberdade para armazenar os produtos por conta e risco do cliente e exigir-lhe que pague os gastos e danos daí decorrentes.

4 - Sempre que o cliente não proceda à recolha ou mantenha a recusa em receber o material encomendado por um prazo superior a 30 dias, ficará obrigado a indemnizar a Centauro em montante equivalente a uma vez e meia o valor de facturação da mercadoria e de todas as despesas de transporte e armazenagem. Nesta eventualidade, decorrido o prazo de mais 30 dias a Centauro terá direito de comercializar livremente as mercadorias pelo preço e condições que entender, sendo o montante obtido deduzido no montante da indemnização

Artigo 9º - Documentação Técnica

1 - Os desenhos, projectos, modelos protótipos, diagramas, direitos de autor, marcas e patentes, software e similares são propriedade da Centauro e não poderão, sem o seu consentimento escrito, ser copiados, imitados, entregues a terceiros pessoas ou, total ou parcialmente, expostos. O cliente não poderá reclamar qualquer direito sobre eles, a menos que a Centauro tenha acordado explicitamente algo diferente na confirmação de aceitação da encomenda.

2 - A Centauro manterá ainda os direitos de autor de todas as soluções de engenharia de produtos fora de catálogo desenvolvidas a pedido do cliente, excepto se o contrário for convencionado por escrito, apenas podendo ser pedida a sua fabricação a terceiros depois de autorização escrita.

3 - Caso o cliente entregue as suas próprias especificações de fabrico, desenhos ou protótipos juntamente com a encomenda, então assumirá todas as responsabilidades pelo facto de a fabricação e fornecimento dos produtos, respectiva marca e patente, não prejudicar os direitos de terceiros pessoas. Caso uma terceira pessoa se oponha à fabricação pela Centauro dos referidos produtos, a Centauro poderá cancelar imediatamente a produção e fornecimento, sem ficar obrigada a pagar quaisquer indemnizações ao cliente. O cliente libertará a Centauro de eventuais reclamações relativamente a terceiros e respeitará o direito da Centauro em pedir compensação pelos gastos, sem prejuízo do direito de recurso ao pedido de indemnização total, o qual lhe assistirá sempre.

Artigo 10º - Pagamento

1 - A menos que tenham sido acordadas por escrito outras condições de pagamento, contra a entrega do equipamento o cliente deverá pagar total e imediatamente à Centauro os valores em dívida - sem desconto ou qualquer tipo de compensação - tendo todas as facturas vencimento na data da sua emissão.

A Centauro considera que o pagamento está efectuado na data em que o valor do mesmo tenha sido creditado numa das suas contas bancárias.

2 - Os eventuais direitos de garantia não eximem o cliente das suas obrigações em termos de pagamentos à Centauro, apenas sendo relevantes as reclamações do cliente devidamente comunicadas por escrito.

3 - Caso o cliente não pagar no prazo acordado entrará imediatamente em mora sem necessidade de reclamação ou informação por parte da Centauro, pelo que será aplicado ao valor da factura em atraso o juro correspondente à taxa legal em vigor.

4 - Todos os custos de cobrança, judicial ou extra judicial, serão por conta do cliente, incluindo os gastos com entidades a que a Centauro tenha solicitado a cobrança. Estes gastos serão automaticamente debitados ao cliente sem qualquer outra justificação por parte da Centauro se não ultrapassarem 15% do valor em dívida. Poderá ainda a Centauro, em caso de atraso de pagamento, debitar ao cliente os custos cambiais calculados desde a data de vencimento.

5 - Caso o cliente não cumpra as condições de pagamento, a Centauro pode de imediato reclamar o valor total da venda com atraso de pagamento por parte do cliente, independentemente do atraso de fabricação. Poderá também a Centauro reclamar o pagamento imediato e adiar ou cancelar outras encomendas aceites, sem que possa ser-lhe exigido pelo facto qualquer indemnização ou compensação.

6 - Os pagamentos à Centauro destinam-se ao primeiro a cobrir os juros, depois os gastos e só depois o valor da factura de fornecimento.

7 - Em caso de incumprimento das condições de pagamento serão anulados todos os descontos constantes da factura.

Artigo 11º - Rescisão

1 - Se o cliente não cumprir uma ou mais obrigações, não as cumprir no prazo ou não as cumprir completamente, falecer ou for declarado em falência ou em suspensão de pagamentos ou recuperação de empresa, vender a sua empresa, for submetido a controle ou tutela legal, também se todos ou alguns dos seus produtos sejam embargados ou se for declarado insolvente de qualquer forma, a Centauro pode rescindir unilateralmente o contrato na parte ainda não cumprida, sem qualquer intervenção legal. A Centauro poderá ainda retomar os produtos entregues mas não pagos ou suspender a execução do contrato pelo período que entender.

2 - Em todos os casos mencionados no número anterior será obrigatoriamente devida indemnização à Centauro relativamente à parte da encomenda não fornecida, a qual nunca poderá ser inferior a 50% do preço acordado, sem prejuízo de a Centauro poder reclamar indemnização total sempre que a natureza do fornecimento assim o justifique.

3 - O cliente obriga-se, nestas condições, a libertar a Centauro de eventuais reclamações de terceiros por força de rescisão do contrato.

4 - A Centauro apenas é responsável, perante o cliente, pelas indicações, capacidades, prestação e dados técnicos se especificados por escrito. Desvios menores das tolerâncias usuais e razoáveis não dão o direito ao cliente de apresentar reclamações, rejeitar os produtos, solicitar a substituição dos equipamentos, solicitar a rescisão de contrato ou pedir indemnização por danos.

Artigo 12º - Responsabilidade

1 - A Centauro é responsável legal por qualquer defeito existente nos seus produtos à data da transferência de risco ou pelos danos daí decorrentes, a menos que:

a) o produto não tenha sido colocado em circulação (protótipos cedidos ou vendidos nessa qualidade);

b) o defeito seja consequência da observância de requisitos especiais do cliente ou o fornecimento seja feito com reservas, com tal aceites pelo cliente;

c) o estado da técnica não permita descobrir o referido defeito;

d) o cliente tenha recomendado e ou fornecido certos materiais ou instalações que possam causar o referido defeito;

e) - sejam consequência de aplicação sem respeito pelas especificações técnicas do fabricante ou as boas regras da arte.

2 - A Centauro não será considerada responsável por partes ou componentes Centauro incorporados em produtos que não tenham sido comercializados pela Centauro como "produto acabado".

3 - A Centauro não será considerada responsável por danos de qualquer tipo que se produzam nos produtos posse do cliente em resultado da execução de trabalhos que lhe tenham sido encomendados a menos que exista dolo, negligência ou culpa grave. Esta exclusão de responsabilidade aplica-se ao cliente, aos seus empregados e a terceiros, ficando o cliente obrigado a libertar a Centauro de todas as reclamações apresentadas sobre o assunto por terceiros pessoas.

4 - No contexto do referido no ponto anterior a Centauro não pode ser considerada responsável, a qualquer nível, por danos ou perda de material disponibilizado pelo cliente, sendo sempre o transporte dos referidos materiais de conta e risco do cliente.

5 - Quando haja lugar a indemnização a mesma consistirá na reparação do produto fornecido ou em termos financeiros, conforme opção da Centauro, a qual não será responsável por danos de terceiros pessoas ou danos indirectos, incluindo compensação por líquido refrigerante (fluidos frigoríficos primários e secundários). Em nenhum caso a indemnização poderá ser superior ao valor da encomenda correspondente.

6 - São da responsabilidade do cliente todas as reclamações decorrentes do fornecimento pelo cliente dos produtos Centauro a terceiros (tendo a Centauro sempre direito de regresso de todas as quantias pagas), com excepção das responsabilidades decorrentes de normas legais sobre responsabilidade do produto.

7 - Sempre que se verifique qualquer situação potencialmente geradora de dano, o cliente é obrigado a tomar medidas para limitar ao máximo os prejuízos, ficando responsável perante a Centauro e terceiros pelo resultado de qualquer conduta omitida.

Artigo 13º - Garantia

1 - Aplica-se a todos os produtos fornecidos pela Centauro a garantia Centauro, que assegura que os mesmos são entregues sem defeitos de fabrico e com as características acordadas. Não se dará garantia a defeitos imputáveis à natureza ou qualidade dos materiais utilizados, que sejam total ou parcialmente consequência de um qualquer regulamento administrativo. Os defeitos nos produtos fornecidos que sejam consequência directa de um erro de concepção, construção ou montagem da Centauro ou decorram do uso de materiais defeituosos serão reparados e substituídos pela Centauro, se o cliente puder evidenciar que os defeitos se manifestaram no prazo de doze meses posteriores à posta em marcha do equipamento ou no máximo 18 meses depois do fornecimento. O cliente fica obrigado a informar a Centauro imediatamente e por escrito de quaisquer defeitos e de devolver à Centauro com portes pagos os componentes ou produtos defeituosos, comprometendo-se igualmente a tudo fazer para limitar os danos. A garantia considerar-se-á nula caso seja verificada uma das seguintes situações:

- O cliente fizer ou permitir alterações aos equipamentos entregues sem autorização da Centauro;

- O cliente não tiver respeitado as informações ou instruções disponibilizadas pela Centauro;

- Se os equipamentos forem usados para uma finalidade diferente daquela para que foram encomendados.

A garantia considerar-se-á ainda nula se o objecto do fornecimento for entregue pelo cliente a outro país que não o referido na factura de fornecimento.

2 - Caso a pedido do cliente se forneçam materiais ou produtos usados não haverá garantia, a menos que tal seja acordado por escrito. Caso o cliente entregue componentes seus para montagem nos produtos Centauro, a Centauro só dará garantia no que respeita à montagem.

3 - A alegação de não conformidades de cumprimento de obrigações no que concerne a garantias, não exime o cliente do integral cumprimento do contrato celebrado.

4 - A Centauro não será responsável pelos erros, defeitos, deficiências e avarias decorrentes de manuseamento indevido dos equipamentos por parte do cliente, seus empregados ou terceiros, por deficiente instalação, técnica de controlo ou manutenção dos seus produtos, se não forem respeitadas as especificações técnicas fornecidas pelo fabricante, por uso e desgaste normal decorrentes do funcionamento ou por condições deficientes de alimentação de corrente eléctrica, devendo ser fornecidos à Centauro os necessários registos sob pena da sua completa desresponsabilização. O mesmo se aplicará caso o cliente, seus empregados ou terceiros procedam a intervenções nos equipamentos durante a validade da garantia sem autorização escrita da Centauro.

5 - Todas as reclamações relativas a defeitos dos produtos que sejam directamente visíveis ou identificáveis deverão ser comunicadas de imediato (máximo de 5 dias úteis) à Centauro por escrito acto contínuo à recepção dos equipamentos, sem o que não será considerado qualquer direito a reclamação contra a Centauro.

Artigo 14º - Contencioso e Legislação Aplicável

Apesar de o contrato com o cliente aplicar-se exclusivamente à legislação portuguesa. Para a resolução de todos os litígios emergentes do contrato será competente o Tribunal do foro da Comarca de Castelo Branco, com exclusão expressa de qualquer outro.

GENERAL TERMS AND CONDITIONS OF SUPPLY

Article 1 - General

1 – These present general conditions, set out in the price lists, are applicable to all offers, sales contracts and services provided by the following companies:

CENTAURO (Portugal) – S.G.P.S., SA, Zona Industrial – Lte Q9 – Apartado 1001 – 6001-997 Castelo Branco, Portugal, registered at the Castelo Branco Registry of Companies under nº 1170/920310, VAT nº 502 842 326;

Castanheira Henriques & Cª Lda, Zona Industrial – Lte Q9 – Apartado 181 – 6001-997 Castelo Branco, Portugal, registered at the Castelo Branco Registry of Companies under nº 481, VAT nº 500 785 317, Registered Producer nº 060/76 – NACE n.º 29230;

Centauro Internacional – Trocadores de Calor, Lda, Zona Industrial – Lte Q9 – Apartado 1001 – 6001-997 Castelo Branco, Portugal, registered at the Castelo Branco Registry of Companies under nº 993/900404, VAT nº 502 352 426;

Brisa Nova – Trocadores de Calor, Lda, Rua Heróis do Dembo, D1-D3, Bairro de Angola, Camarate, 2685-459 Sacavém, VAT nº 502 392 185, NACE nº 51650, registered at the Loures Registry of Companies under nº 7860/900411, hereunder known generally as "Centauro,

2 – Centauro's sales, deliveries and other services shall be carried out exclusively in accordance with the general terms and conditions of sale and supply, hereinafter known as "Conditions of Supply", which shall also apply to all future commercial transactions with customers.

3 – If by decision of the courts any of the clauses of the present Conditions of Supply or of any contract drawn up on the basis hereof come to be considered "not valid", such a decision shall not affect the remaining conditions, provided that such non-conformity with the law does not affect the essence of the contract, provided always that Centauro accepts the replacement of the clause or clauses in question by others in keeping with applicable law.

4 – These present Conditions of Supply shall be deemed accepted by the customer provided that the customer places an order with Centauro or accepts a supply from Centauro, renouncing such conditions as the customer itself may have that are not formally accepted in writing by Centauro, and shall thus apply to all contracts.

5 – Alterations to these General Conditions of Supply shall be valid only if agreed in writing in advance by Centauro and the customer, such alterations to apply only to the contract in question.

Article 2 – Offers and contracts / closing the contract

1 – Offers made by Centauro do not bind it to any action or commitment unless expressly stated therein. All offers shall be based on execution of orders under normal conditions and during normal working hours.

2 – All orders placed with Centauro shall be considered irrevocable, unless Centauro refuses to accept them.

3 – The contract takes effect on acceptance by Centauro of the customer's order and shall be governed by the terms of acceptance of the order and by these present Conditions of Supply.

Article 3 – Delivery dates

1 – Centauro shall supply the products or services ordered by the deadline specified on the order confirmation. Centauro shall inform the customer in the event of delay to compliance with stipulated delivery date, and unless expressly agreed in writing between both parties, the customer may not claim any kind of indemnity or damages arising from the delay to the supply.

2 – Should the delay be of more than 6 months for reasons attributable to Centauro other than those referred to in Article 5, the customer may terminate the contract by means of written communication addressed to Centauro. The said right to termination does not cover that part of the order ready or at the finishing stage, which cannot be refused, and payment thereof shall be owed to Centauro on a proportional basis.

3 – The delivery date is reckoned as from the moment of formalisation of the contract and after all the data, documents, licences or similar items required to execute the work have been provided to Centauro and after the payments have been made by the agreed dates.

4 – In the event that Centauro accepts temporary suspension of an order at the request of the customer, Centauro shall indicate another delivery date in accordance with delivery dates then current for similar products. Any additional costs arising from the suspension shall be borne by the customer.

5 – The Supply shall be considered as having been made when the products ordered are ready for shipment.

6 – If the order calls for partial deliveries, then each delivery shall be considered as a separate supply for all legal intents and purposes, and shall be invoiced and paid individually.

7 – Centauro is authorised to suspend compliance with the obligations arising from the contract provided that, following its formalisation, it receives information leading it to believe that the customer cannot meet its obligations.

Article 4 – Place of delivery

The Supply shall be made at the factory / warehouse gate unless otherwise agreed in writing by both parties.

Article 5 – Force majeure

1 – In the event that the execution of the supply contract is hindered by force majeure affecting Centauro or its suppliers, Centauro may suspend its contractual obligations. The delivery/supply date shall be postponed by a period of time equal to the delay caused by the force majeure, no payment of any indemnity by Centauro being due to the customer.

2 – In this connection "force majeure" is understood to be any circumstance by virtue of which Centauro cannot reasonably and fairly be required to comply with the contract in due time. Such circumstances are considered to include those arising from third-party intervention preventing Centauro from obtaining information essential to the execution of the contract, as well as situations such as war, danger of war, public disorder, revolutions, piracy, sabotage, terrorism, and natural disasters (storms, cyclones, earthquakes, floods), damage caused by water or lightning, explosions, fire, labour disorder, destruction of machinery, factory or other installations, boycotts, occupation of the company, strikes, measures taken by the authorities, obstruction to imports or exports, scarcity or delays to the delivery of raw materials, materials or components ordered by Centauro, power outages, significant shortage of employees or stoppage of work caused by weather conditions or other conditions not related with Centauro. Accordingly, whether such circumstances may be predictable or not, Centauro cannot be required meet the agreed delivery dates.

3 – Centauro may terminate the contract in the event that it finds that, owing to force majeure, it will be unable to meet its obligations towards the customer, and the latter shall not be entitled to indemnity of any type, despite being obliged to buy from and pay to Centauro the raw materials, materials and components of the order that are ready and/or are capable of being supplied autonomously. Should the customer not assume this responsibility, Centauro shall be entitled to store or to sell the goods for and on behalf of the customer.

Article 6 – Price

1 – In the event that other prices shall not have been agreed and confirmed in writing, the ruling price shall be that set out in the Centauro pricelist on the date of supply.

2 – Unless otherwise indicated in the offer or in the order, prices shall be at the factory / warehouse gate and shall be subject to commercial taxes (VAT, among others) and to costs of special packing, cargo handling, containers and transport or additional costs.

Article 7 – Transmission of risk and ownership reservation

1 – Products supplied by Centauro shall continue to be its property until such time as the customer shall have met all its financial obligations towards Centauro stemming from the contract entered into by the parties, including interest and bank charges.

2 – Transfer of the risk to the customer is automatic, taking place on formal communication to the customer of the readiness for delivery of the object of the supply, or on its delivery to the transportation company or the customer.

3 – Without prejudice to Centauro's other rights, Centauro shall have ownership reservation over all materials and equipment transacted up to the time of their full payment, the customer granting Centauro irrevocable power to repossess, without judicial intervention, the products supplied by it or to dismantle them and repossess them in the event of being installed in immovables or in a movable, provided that customer shall not meet its obligations in terms of timely payment.

4 – In the event that the legislation of the customer's country is contrary to the application of the provisions of number 2 of this article, the customer shall have due regard for the rights indicated by Centauro or that can be claimed under the laws of the country in question.

5 – The customer is obliged to provide such support as may be necessary for Centauro to be able to exercise its rights as stated in number 3 of this article.

6 – Should Centauro so require, the customer shall be obliged to provide sufficient guarantee to ensure compliance with its obligations, in a form acceptable to Centauro. In this case right of ownership of the products shall be transferred to the customer as soon as the guarantee is provided.

7 – In the event of Centauro exercising its ownership reservation right it cannot be required to pay any indemnity for any losses or loss of profits resulting from the repossession measures and from the possible dismantling of the equipment supplied.

Article 8 – Dispatch

1 – Transport and insurance shall be for the account and at the risk of the customer, unless the parties shall have agreed other conditions in writing.

2 – The Supply shall be considered as having been made even if Centauro provides the customer with free transport, and, in the event of any accident, the limit of any indemnity owed to the customer shall be the value received from Centauro's insurer, which can be demanded only following its actual receipt.

3 – In the event that the customer does not pick up refuses to receive the products ordered Centauro shall be free to store the products for the account and at the risk of the customer and to demand that the customer pay the costs and damages arising therefrom.

4 – In the event that the customer does not collect or continues to refuse to receive the material ordered during a period of more than 30 days, it shall be obliged to indemnify Centauro in a sum equivalent to one and a half times the value of the merchandise invoiced and of all transport and storage costs. In this case, after more than 30 days have passed, Centauro shall be entitled to freely sell the merchandise for such price and other conditions as it may deem fit, the amount obtained being deducted from the amount of the indemnity.

Article 9 – Technical documentation

1 – Drawings, designs, prototype models, diagrams, copyright, brands and patents, software and similar items are the property of Centauro and may not, without its written consent, be copied, imitated, delivered to third parties or totally or partially displayed. The customer may not claim any right over them unless Centauro shall have explicitly agreed otherwise in its confirmation of acceptance of the order.

2 – Centauro shall retain copyright over all product engineering solutions not included in its catalogue, developed at the request of the customer, unless otherwise agreed in writing, and manufacture of the items in question may only be requested of third parties after written authorisation has been obtained.

3 – In the event of the customer handing over its own manufacturing specifications, drawings or prototypes together with the order it will be responsible for ensuring that the manufacture and supply of the products, their respective brands and patents, do not affect the rights of third parties. Should a third party oppose the manufacture by Centauro of the said products, Centauro may immediately cancel production and supply without being obliged to pay any indemnity to the customer. The customer shall release Centauro from any claims made by third parties and shall have due regard for Centauro's right to demand compensation for costs incurred, without prejudice to the right of recourse to full indemnity, a right to which it shall be entitled at all times.

Article 10 – Payment

1 – Unless other payment conditions shall have been agreed in writing, the customer shall pay amounts owed to Centauro in full immediately – with no discount or other type of compensation – all invoices falling due on the date of their issue.

Centauro considers that payment has been made on the date on which the respective value has been credited to one of its bank accounts.

2 – Any existing warranty rights shall not exempt the customer from its obligations in terms of payments to Centauro, and only customer complaints duly communicated in writing shall be considered relevant.

3 – In the event of the customer not paying by the agreed deadline it shall immediately be in default with no need for any claim or information by Centauro, and for this reason default interest shall be applied to the value of the outstanding invoice at the legally prevailing rate.

4 – All costs incurred with collection, through the court or otherwise, shall be for the account of the customer, including costs incurred with entities requested by Centauro to make the collection. Such costs shall automatically be debited to the customer with no other justification by Centauro provided they do not exceed 15% of the amount in debt. In the event of late payment, Centauro may also debit the customer for any foreign exchange costs calculated as from the maturity date.

5 – In the event of the customer not meeting the payment conditions, Centauro may immediately claim the full value of the sale in respect of which payment by the customer is overdue, regardless of any manufacturing delay. Centauro may also demand immediate payment and postpone or cancel other orders accepted, and for this fact no indemnity or compensation may be demanded of it.

6 – Payments to Centauro shall in the first place be set off against interest, next against expenses, and only then against the value of the Supply invoice.

7 – In the event of non-compliance with the payment conditions any discounts shown on the invoice shall be cancelled.

Article 11 – Termination

1 – In the event of the customer not meeting one or more obligations, not complying with them by the deadline or not complying with them completely, in the event of his/her decrease or of declaration of bankruptcy, sale of the company, being submitted to legal control or oversight, and also in the event of some or all the products being seized, or if it is declared in any way insolvent, Centauro may unilaterally terminate the contract in that part not yet fulfilled, with no legal proceedings of any sort. Centauro may also repossess those products delivered but not paid for or suspend execution of the contract for such time as it may deem fit.

2 – In all the cases mentioned in the foregoing number indemnity shall be due to Centauro in respect of that part of the order not supplied, though never less than 50% of the agreed price, without prejudice to Centauro are being able to claim full indemnity provided the nature of the supply so warrants.

3 – Under these conditions the customer undertakes to release Centauro from any claims by third parties stemming from termination of the contract.

4 – Centauro is responsible towards the customer only for the indications, capacities, provision and technical data specified in writing. Customary and reasonable minor tolerance deviations shall not entitle the customer to submit claims, reject products, request replacement of equipment, request termination of the contract or request indemnity for damages.

Article 12 – Liability

1 – Centauro is legally liable for any defect existing in its products as of the date of the transfer of the risk and for damages arising therefrom, unless:

the product shall not have yet been put on the market (prototypes assigned or sold as such);

the defect stems from observance of special requirements of the customer or if the supply is made with reservations, accepted as such by the customer;

it is technically impossible to discover the defect in question;

the customer shall have recommended and/or supplied certain materials or installations that could cause the said defect; and they are the consequence of application without due regard for the manufacturer's technical specifications or for good practice.

2 – Centauro shall not be considered liable for Centauro parts or components incorporated into products that have not been marketed by Centauro as a "finished product".

3 – Centauro shall not be considered liable for damages of any type occurring in products in the possession of the customer as a result of execution of works ordered of it, unless there is fraud, negligence, all serious blame. This exclusion of liability is applied to the customer, to its employees and third parties, and the customer shall be obliged to release Centauro from all claims presented in respect of the matter by third parties.

4 – Within the context of the foregoing point, Centauro cannot be considered liable, at any level, for damage to or loss of material provided by the customer, the transport of the said materials be for the account and at the risk of the customer at all times.

5 – In the event of entitlement to indemnity it shall consist of the repair of the products supplied or financial compensation, at the option of Centauro, which shall not be liable for third-party damages or indirect damages, including compensation for liquid coolants (including primary and secondary coolant fluids). In no case may the indemnity be of a value greater than that of the corresponding order.

6 – The customer shall be liable for all claims arising from the supply by the customer of Centauro products to third parties (Centauro being at all times entitled to right of recourse in respect of all sums paid), with the exception of liabilities arising from legal rules on product liability.

7 – In the event of any occurrence that could potentially generate damage, the customer is obliged to take measures to limit losses to the extent possible, and shall be liable to Centauro and third parties for the results of any conduct omitted.

Article 13 – Warranty

1 – The Centauro warranty is applicable to all products supplied by Centauro, the warranty guaranteeing that they are delivered with no manufacturing defects and with the agreed characteristics. No warranty shall be given in respect of defects attributable to the nature or quality of the materials used that may be fully or partially the consequence of an administrative regulation. The defects of products supplied that are the direct consequence of a design, construction or erection error by Centauro arising from the use of defective materials shall be repaired and replaced by Centauro, provided the customer can demonstrate that the defects appeared within twelve months of the commissioning of the equipment or within 18 months of the supply. The customer is obliged to inform Centauro immediately, in writing, of any defects and to return to Centauro, carriage paid, the defective components or products, also undertaking to do everything possible to limit the damage. The warranty shall be considered null in any of the following cases:

if the customer undertakes or allows alterations to the equipment delivered without the consent of Centauro;

if the customer does not have due regard for the information or instructions provided by Centauro; and/or

if the equipment is used for a purpose other than that for which it was ordered.

The warranty shall also be considered null if the object of the supply is delivered by the customer to a country other than that mentioned in the supply invoice.

2 – If at the request of the customer used materials or products are supplied there shall be no warranty unless agreed in writing. In the event that the customer provides its own components be fitted to Centauro products, Centauro shall provide warranty only with regard to the erection.

3 – Allegation of non-conformities in complying with obligations concerning warranties shall not exempt the customer from full compliance with the contract.

4 – Centauro shall not be liable for errors, defects, deficiencies and breakdowns resulting from improper handling of the equipment by the customer, its employees or third parties, for lack of regard for the technical specifications provided by the manufacturer, for normal wear and tear, or for defective electric power supply. Centauro to be provided with the necessary records failing which it is liability shall be waived in full. This shall also apply in the event that the customer, its employees or third parties tamper with the equipment during the warranty period without the written consent of Centauro.

5 – All claims in respect of product defects that are directly visible or identifiable shall immediately be communicated (within 5 working days) to Centauro in writing following reception of the equipment, otherwise no entitlement to a claim against Centauro shall be recognised.

Article 14 – Disputes and applicable legislation

Portuguese legislation shall apply exclusively to the contract with the customer. The Castelo Branco District Court shall be competent to settle all disputes arising from the contract, all others being expressly excluded.



Evaporadores MT/DD com motores AC e EC
MT/DD coolers with AC and EC motors



Evaporador CB industrial
Industrial CB cooler



Evaporador industrial DDC
DDC industrial cooler



Condensadores ACPD e VACD
ACPD and VACD condensers



Evaporador especial açotado de bateria dupla para amoníaco
Special wedge cooler with double coil for ammonia



Condensadores ACI e ACP
ACI and ACP condensers

centauro all the way



EVAPORADORES
COMERCIAIS

COMERCIAL
COOLERS

EVAPORADORES
COMERCIALES

EVAPORADORES
INDUSTRIAIS

INDUSTRIAL
COOLERS

EVAPORADORES
INDUSTRIALES

EVAPORADORES
DE TÚNEL

TUNNEL BLAST
COOLERS

EVAPORADORES
PARA TÚNELES

EVAPORADORES COM
MOTORES CENTRÍFUGOS

UNIT COOLERS WITH
CENTRIFUGAL FANS

EVAPORADORES CON
MOTORES CENTRÍFUGOS

BATERIAS DE INOX
(STANDARD OU EXECUÇÃO
ESPECIAL)

STAINLESS STEEL COILS
(STANDARD OR SPECIAL
EXECUTION)

BATERIAS DE ACERO
INOXIDABLE
(STANDARD O EJECCIÓN
ESPECIAL)

BATERIAS
(STANDARD OU EXECUÇÃO
ESPECIAL)

COILS
(STANDARD OR SPECIAL
EXECUTION)

BATERIAS
(ESTÁNDAR O EJECCIÓN
ESPECIAL)



CONDENSADORES
COMERCIAIS

COMERCIAL
CONDENSERS

CONDENSADORES
COMERCIALES

CONDENSADORES
INDUSTRIAIS

INDUSTRIAL
CONDENSERS

CONDENSADORES
INDUSTRIALES

CONDENSADORES
INDUSTRIAIS EM "V"

"V" SHAPED INDUSTRIAL
CONDENSERS

CONDENSADORES
INDUSTRIALES EN "V"

ARREFECEDORES SECOS

DRY COOLERS

AEROENFRIADORES

GRUPOS DE
CONDENSAÇÃO

CONDENSING UNITS

UNIDADES
CONDENSADORAS

CENTRAIS FRIGORÍFICAS

REFRIGERATION
RACKS/PACKS

CENTRALES
FRIGORIFICAS



www.centauro.pt leva-o ao nosso web site onde poderá aceder e descarregar toda a informação técnica actualizada respeitante aos nossos produtos e serviços. Encontrará também a nossa história e perfil, informação técnica, instruções de instalação, software e as últimas novidades.

CProSelect é uma ferramenta rápida e fiável para a escolha de evaporadores e condensadores Centauro para cada condição de trabalho específica. Fácil de seleccionar e comparar gamas, também é possível aceder aos dados técnicos e opcionais de cada modelo.

O software de cálculo de cargas térmicas e selecção de produtos – CalCam – permite o cálculo das cargas térmicas desde uma sala de trabalho até um túnel de congelação de uma forma precisa e fácil.

www.centauro.pt takes you to our web site where you can access and download all the updated information concerning our products and services. You'll also find our company history and profile, technical information, operating instructions, software and latest news.

CProSelect is a fast and reliable tool to select evaporators and condensers for each specific working condition. Easy to select and compare ranges, you're also able to access the technical data and extras of each model.

Centauro heat load calculation and product selection software – CalCam – allows you to calculate the heat loads from a working area to a blast freezer in a precise and easy way.

www.centauro.pt te llevará a nuestra página web donde se puede acceder y descargar toda la información actualizada sobre nuestros productos y servicios. También encontrará nuestra historia y perfil, información técnica, instrucciones de uso, software y las últimas novedades.

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