

Data Sheet

Micro Plate Heat Exchanger Type **C262L-EZD & C262L-CZD**

For more efficient Chillers

**15% lower weight with highly efficient Z design technology for dual circuits**

The C262L-EZD is a true dual circuit evaporator optimized for high density refrigerants such as R410A, R32, R452B and the R454B for use in high-efficiency chillers with capacities from 200 to 800 kW. It's available in refrigerant-optimized versions to meet the best performance based on the refrigerant used. Corresponding model for condenser duties is the C262L-CZD.

The Z-pattern channel plate technology enhances performance of heat exchangers to the limits by fully mixing the liquid and gas refrigerant through a "zigzag" flow, which increases the heat transfer coefficient. At the same time, inheriting from the dimple plate pattern of the previous generation of MPHE, C262L-EZD reduces the water side pressure drop and the amount of material used. In the reversible mode of the chiller as a condenser, C262L-EZD also delivers outstanding performance.

C262L-EZD is designed to deliver high seasonal efficiency and increase comfort in modern commercial buildings while reducing both energy cost and environmental impact.

The low hold-up volume reduces the system refrigerant charge and offers also valuable savings.

Features

- High and improved heat transfer - equals higher system efficiency
- Reduced water side pressure drop – equals higher system efficiency
- Minimal hold-up volume - equals less refrigerant charge
- Smaller footprint - enables more compact chillers
- Higher efficiency, lower refrigerant charge and less raw material contribute to a reduced CO₂ footprint

Portfolio overview

C262L-EZD: Evaporator optimized for R410A, R452B and R454B

C262L-EZD-F: Evaporator optimized for R32

C262L-CZD: Condenser optimized for High Density refrigerants

Table 1: Designation

a Applications C: chiller H: heat pump HDW: heat pump double wall	d Specific duty E= evaporator C= condenser Plate design Omit L: L-type M: M-type H: H-type W: W-type X: Asymmetric Z: Z flow Configuration Omit: single D: Dual circuit U: Mixing chamber	e Distributor version Omit B F Plate stacking sequence Omit: a-b-a... R: b-a-b...
b Platform⁽¹⁾ 22,30,55,62,118...		
c Pressure Service Omit: 30bar L: 45/49bar		f Number of plates⁽²⁾

⁽¹⁾ Heat exchanging surface per plate 1/1000 m².

⁽²⁾ Rule:

- Single: even number
- Dual: even number not multiple of 4

Application

The C262L-EZD(-F) are evaporators specifically designed for highly efficient chiller systems dedicated to comfort applications, cooling-industrial process, data centers. The evaporators are design to operate also in reversible systems in condenser mode, in co or counter current flow configuration. The models are characterized by different distributor systems the make the evaporator optimized for the high-density refrigerants.

The C262L-CZD is condenser for high density refrigerants that operate in high pressure level.

Media

Refrigerants

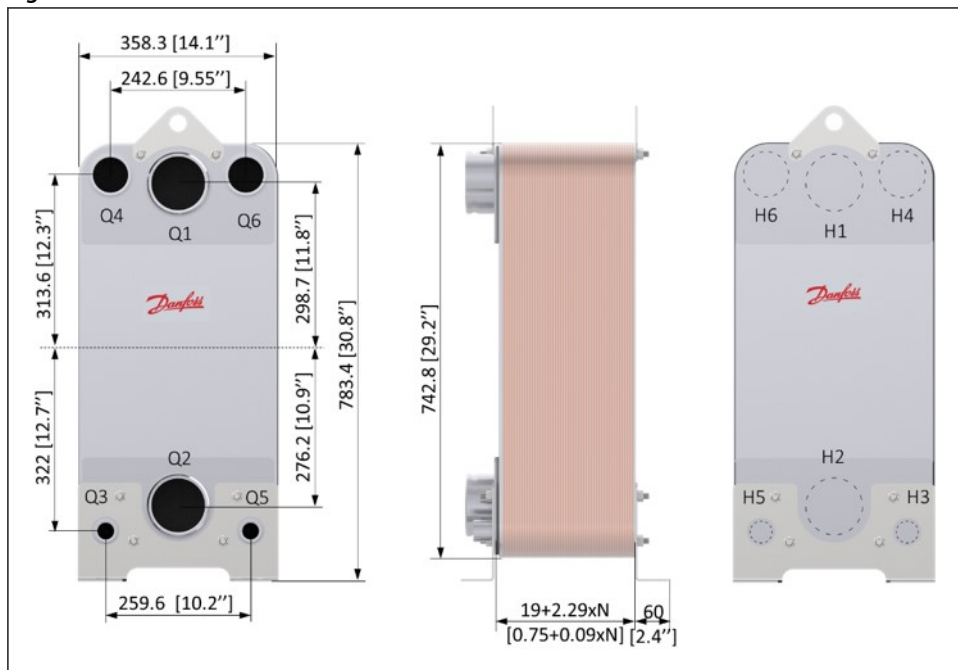
R410A, R452B, R454B, R32, R290

For other refrigerants please contact your Danfoss Sales representative.

Product specification

Dimensions

Figure 1: Dimensions



N: Number of Plate

Operating conditions

Preconditions:

N = number of plates

Max number of plates: 346

Pressure and temperature data*:

Min. working temperature: -196 °C (-320 °F)

Max. working temperature: 200 °C (390 °F)

Max. working pressure: 49 bar (711psi) refrigerant side / 16 bar (232psi) water side

*For details, refer to the [Third party approvals](#) chapter.

Weight*

C262L-EZD(-F): $20.731 + 0.794 \times N$ [kg] / $45.7 + 1.75 \times N$ [lb]

C262L-CZD: $20.897 + 0.763 \times N$ [kg] / $46.07 + 1.68 \times N$ [lb]

N: Number of Plate

*Connections considered: Q1Q2: 1/4", Q3: 1 3/8", Q4-Q6: 2 5/8", excluding accessories.

Material specification

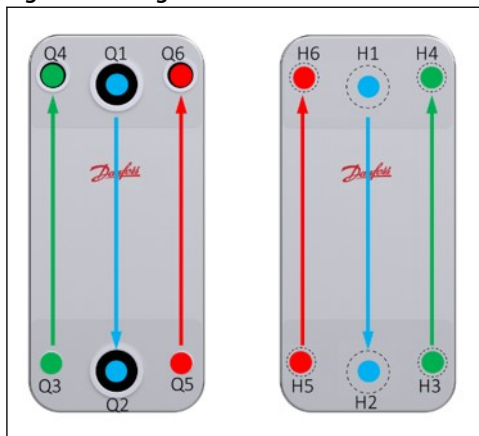
Table 2: Standard materials

Item	Material	Specification
Cover plates	Stainless steel	AISI 304L
Plates	Stainless steel	AISI 316L
Connections	Stainless steel	AISI 304L
Brazing filler	Pure copper	Cu

Other material combinations are available on request. Please contact your Danfoss sales representative for more information.

Configuration flow

Figure 2: Configuration flow



Parallel flow:

Q1-Q2 [H1-H2]: brine/secondary side

Q3-Q4 [H3-H4]: primary, first circuit

Q5-Q6 [H5-H6]: primary, second circuit

Hold up volume

Q1-Q2: $0.470 \times N/2$ [l]

Q3-Q4: $0.459 \times (N-2)/4$ [l]

Q5-Q6: $0.459 \times (N-2)/4$ [l]

N: Number of Plate

Ordering

Global or local standard code numbers can be accessed via Store.Danfoss.com on local subsites, with full set of technical data as well as relevant assets such as documentation and drawings. Since the portfolio may contain different types depending on country, this document contains only a summarized list of standard code numbers with a few data relevant for the product selection.

Configuring and calculating products

The C262L-EZD(-F) & C262L-CZD can be easily customized based on the application needs; model size can be evaluated using Hexact software.

For details, product configuration and code creation please contact your Danfoss Sales representative.

Mechanical connections

Table 3: Mechanical connections

Circuits	Connection type options	Connection size option
Q1-Q2 (water-brine side)	BSP Gas male	½", ¾", 1", 1 ¼", 1 ½", 2", 2 ½"
	BSP Gas female	½", ¾", 1"
	DIN R male	1", 1 ¼", 1 ½", 2"
	NPT	2", 2 ½"
	Victaulic	4", 5"
Q3-Q5 (Refrigerant side)	Soldering	¾", 7/8", 1 ⅛", 1 ⅜"
Q4-Q6 (Refrigerant side)	Soldering	1 ⅜", 1 ⅝", 2 ⅛", 2 ⅝", 3 ⅛"

Accessories and spare parts

MPHE products are not serviceable, i.e. cannot be taken apart and repaired, and there are no spare parts program. As for accessories, stud bolts, feet on front and/or back cover plates for mounting support and handling are available upon request.

Table 4: Stud bolts

Stud bolt position	Bolt sizes
160 x 160 mm, middle	M12x30mm
160 x 260 mm, middle	M12x40mm

Contact your Danfoss sales representative for further information.

Certificates, declarations, and approvals

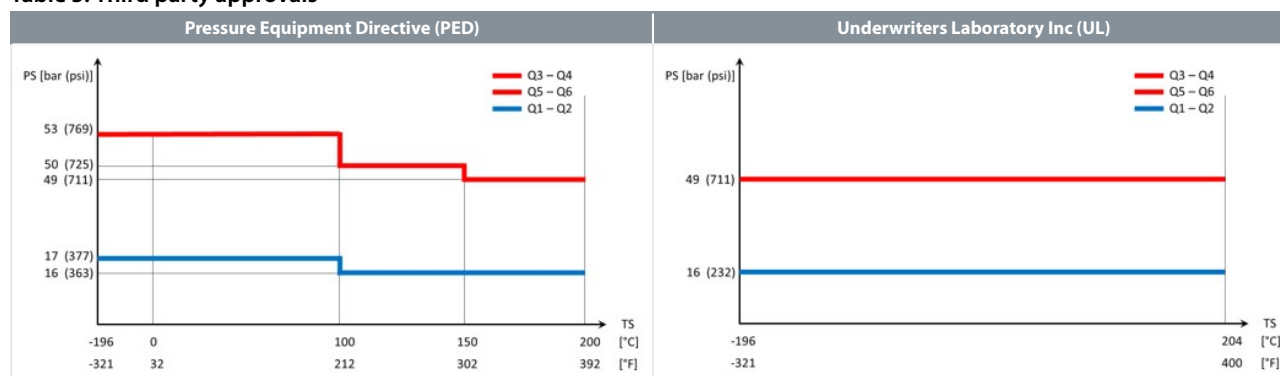
The list contains all certificates, declarations, and approvals for this product type. Individual code number may have some or all of these approvals, and certain local approvals may not appear on the list.

Some approvals may change over time. You can check the most current status at danfoss.com or contact your local Danfoss representative if you have any questions.

Third party approvals

All MPHE and BPHE are certified to European Pressure Equipment Directive (PED) and are approved by Underwriters Laboratories (UL).

Table 5: Third party approvals



Other certifications are available upon request: Kraia, EAC, UA, AS; for others and more details please contact your local Danfoss representative.

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