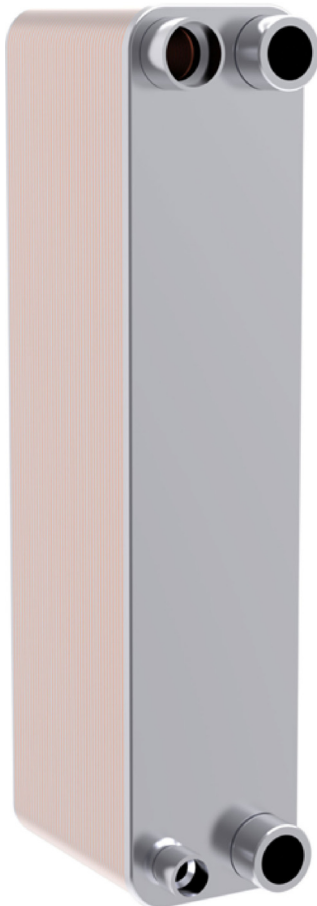


Data Sheet

Micro Plate Heat Exchanger Type **H62L-CZ**

For more efficient Heat Pumps



The H62L-CZ are condensers with asymmetric design optimized for use in R290 heat pumps and chillers with capacities of 20-70 kW. The innovative Micro Plate technology and the asymmetric channel geometries, with different designs on the refrigerant and water sides, improve heat transfer, reduce the amount of material used and minimize pressure losses on the water side.

To meet demands for higher seasonal efficiency, the H62L-CZ is designed to work efficiently and increase comfort in modern buildings without increasing the carbon footprint. Helping heat pumps and water-cooled chillers perform more efficiently, it reduces both energy consumption and environmental impact. The low hold-up volume reduces the system refrigerant charge and offers valuable savings.

Features

- Minimal refrigerant hold-up volume: Optimized for R290 low charge systems
- High heat transfer: For a more efficient heat pumps
- Minimal pressure losses on secondary side: Less pump power
- Smaller footprint: Enabling more compact heat pump and chillers
- Reduced CO₂ footprint: Environmentally friendly with high heat transfer and minimal refrigerant charge

Portfolio overview

H62L-CZ: High efficiency condenser optimized for R290, and other high-density refrigerants, heat pump and chillers application. Could be used in reversible systems.

Table 1: Designation

<p>a Applications C: chiller D: universal H: heat pump HDW: heat pump double wall</p>	<p>d Specific duty E= evaporator C= condenser Plate design Omit</p>	<p>e Distributor version Omit B F </p>
<p>b Platform* 22,30,39,44,55,62,118... *heat exchanging surface per plate 1/1000 m²</p>	<p>L: L-type M: M-type H: H-type W: W-type</p>	<p>Plate stacking sequence Omit: a-b-a... R: b-a-b...</p>
<p>c Pressure Service Omit: 30bar L: 45/49bar</p>	<p>X: Asymmetric Z: Z flow Configuration Omit: single D: Dual circuit U: Mixing chamber</p>	<p>f Number of plates** **Rule: -Single: even number -Dual: even number not multiple of 4</p>

Application

H62L-CZ are condensers applicable in different applications like heat pump and chiller systems. The H62L-CZ can operate also in evaporating mode and/or de-frost mode, so it can be applicable in reversable systems.

Media

Refrigerants

- R290, R410A, R452B, R454B, R32
- For other refrigerants please contact your Danfoss Sales representative.

Product specification

Operating conditions

Preconditions:

N= number of plates
 Maxnumber of plates: 140

Pressure and temperature data:⁽¹⁾

Min. working temperature: -196 °C (-320 °F)
 Max. working temperature: 200 °C (390 °F)

Max. working pressure:

PED/UL Primary side: 49bar (711psi)
 PED/UL Secondary side: 25bar (363psi)

Weight

H62L-CZ: $1.9 + 0.14 \times N$ [kg] / $4.2 + 0.3 \times N$ [lb]

N: Number of Plate

NOTE:

Weight excluding connections and accessories.

Material specification

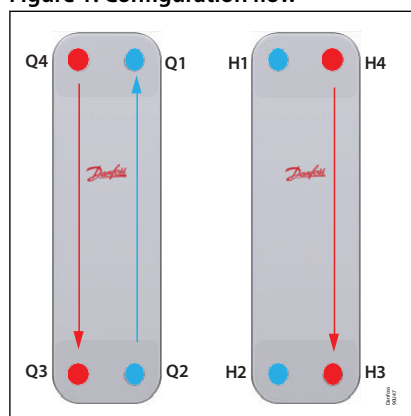
Table 2: Standard materials

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 1: Configuration flow



Q1 - Q2 [H1 - H2]: brine/secondary side
 Q3 - Q4 [H3 - H4]: refrigerant/primary side

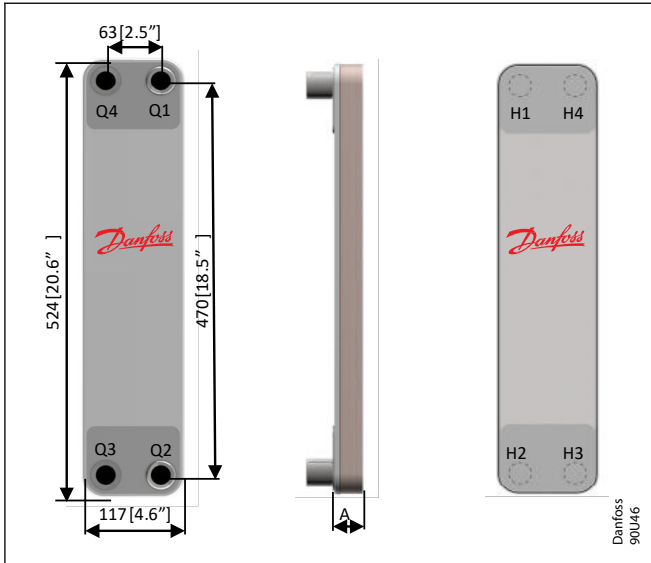
Hold up volume

Q1 - Q2 (l): $0.075 \times N/2$ [l]
 Q3 - Q4 (l): $0.041 \times (N-2)/2$ [l]
 N: Number of Plate

¹ *For details, refer to the Third party approvals chapter.

Dimensions

Figure 2: Dimensions



A:
H62L-CZ: $10 + 1.25 \times N$ [mm] / $0.4 + 0.049 \times N$ [inch]
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 H62L-CZ can be easily customized based on the application needs; model size can be evaluated using HEX Selectoract 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 [in.]
Q1 - Q2 (water-brine side)	G/R/NPT male thread	1/2, 3/4, 1, 1 1/4, 1 1/2
	G/R/NPT female thread	1/2, 3/4, 1
	Victaulic	3/4, 1, 1 1/4, 1 1/2
Q3 - Q4 (Refrigerant outlet)	Soldering	3/8, 1/2, 5/8, 3/4, 7/8, 1 1/8, 1 3/8, 1 5/8

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

Studbolt position	Underwriters Laboratory Inc (UL)
327 mm, middle	M8x20mm M8x25mm M8x30mm

Contact your Danfoss sales representative for further information.

Affected products

Customers can calculate the optimal plate combination based on their specific operating conditions with our selection software(HEXSelector), and customize various connections according to their needs. At the same time, we offer a series of standard products listed in the table below for customers to order directly.

Table 5: Affected products

SAP Code	Drawing	Product	Connections and bolts
111B8362	T24020-916	H62L-CZ-20	Q1Q2(G1 1/4"-1 1/8")/Q3(H1/4B)Q4(H5/8")/2-M8*25
111B8363	T24020-917	H62L-CZ-30	Q1Q2(G1 1/4"-1 1/8")/Q3(H1/4B)Q4(H5/8")/2-M8*25
111B8364	T24020-918	H62L-CZ-36	Q1Q2(G1 1/4"-1 1/8")/Q3(H3/8T)Q4(H5/8")/2-M8*25
111B8365	T24020-919	H62L-CZ-40	Q1Q2(G1 1/4"-1 1/8")/Q3(H3/8T)Q4(H5/8")/2-M8*25
111B8366	T24020-920	H62L-CZ-46	Q1Q2(G1 1/4"-1 1/8")/Q3(H3/8T)Q4(H5/8")/2-M8*25
111B8367	T24020-921	H62L-CZ-50	Q1Q2(G1 1/4"-1 1/8")/Q3(H3/8T)Q4(H7/8E)/2-M8*25
111B8368	T24020-922	H62L-CZ-56	Q1Q2(G1 1/4"-1 1/8")/Q3(H3/8T)Q4(H7/8E)/2-M8*25
111B8369	T24020-923	H62L-CZ-60	Q1Q2(G1 1/4"-1 1/8")/Q3(H3/8T)Q4(H7/8E)/2-M8*25
111B8370	T24020-924	H62L-CZ-70	Q1Q2(G1 1/4"-1 1/8")/Q3(H1/2R)Q4(H7/8E)/2-M8*25
111B8371	T24020-925	H62L-CZ-80	Q1Q2(G1 1/4"-1 1/8")/Q3(H1/2R)Q4(H1"1/8J)/2-M8*25
111B8372	T24020-926	H62L-CZ-90	Q1Q2(G1 1/4"-1 1/8")/Q3(H1/2R)Q4(H1"1/8J)/2-M8*25
111B8373	T24020-927	H62L-CZ-100	Q1Q2(G1 1/4"-1 1/8")/Q3(H1/2R)Q4(H1"1/8J)/2-M8*25
111B8374	T24020-928	H62L-CZ-110	Q1Q2(G1"1/2B-1"3/8)/Q3(H5/8")Q4(H1"1/8J)/2-M8*25

Micro Plate Heat Exchanger , Type H62L-CZ

SAP Code	Drawing	Product	Connections and bolts
111B8375	T24020-929	H62L-CZ-120	Q1Q2(G1"1/2B-1"3/8)/Q3(H5/8")Q4(H1"1/8J)/2-M8*25
111B8376	T24020-930	H62L-CZ-130	Q1Q2(G1"1/2B-1"3/8)/Q3(H5/8")Q4(H1"3/8H)/2-M8*25
111B8377	T24020-931	H62L-CZ-140	Q1Q2(G1"1/2B-1"3/8)/Q3(H5/8")Q4(H1"3/8H)/2-M8*25

Certificates, declarations and approvals

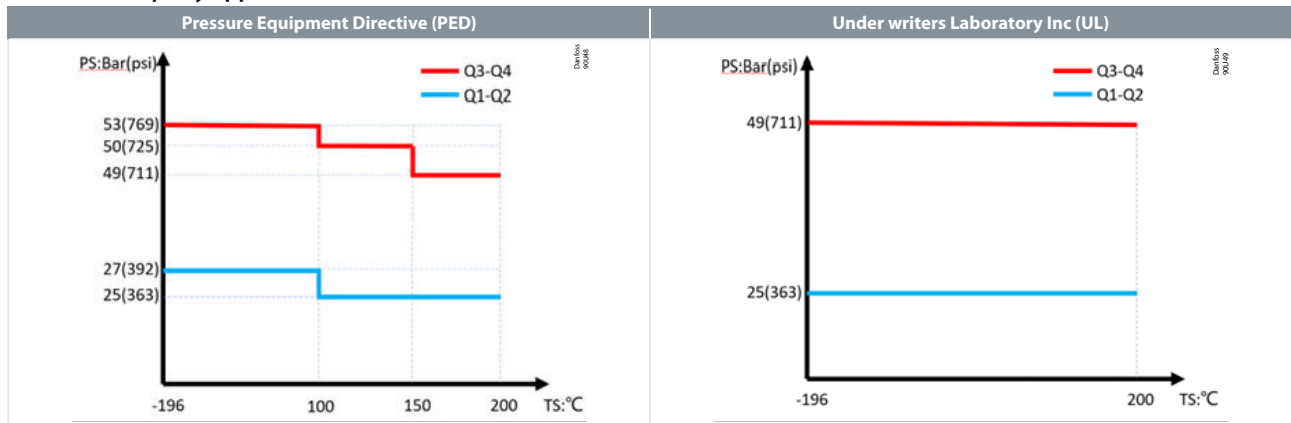
The list contains all certificates, declarations, and approvals for this product type. Individual code number may have some or all of these approvals, and certain local approvals may not appear on the list.

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 Under writers Laboratories (UL).

Table 6: Third party approvals



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

Online support

Danfoss offers a wide range of support along with our products, including digital product information, software, mobile apps, and expert guidance. See the possibilities below.

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