

Fact sheet

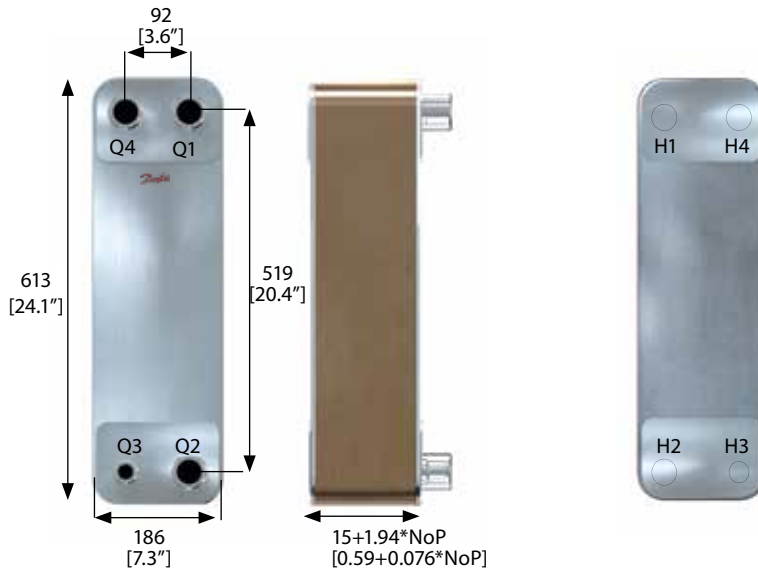
C118L-EZ Evaporator Micro Plate Heat Exchanger



21%

lower hold-up
volume enables
significant reduction
in refrigerant charge

C118L-EZ Evaporator Micro Plate Heat Exchanger



Introduction

The C118L-EZ is an evaporator optimized for R410A for use in high-efficiency chillers with capacities of 70-250 kW. The Z-pattern channel plate technology pushes the 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 features, C118L-EZ reduces the water side pressure drop and the amount of material used. In the reversible mode of the chiller as a condenser, C118L-EZ also has outstanding performance. To meet demands for higher seasonal efficiency, the C118L-EZ is designed to work efficiently and increase comfort in modern buildings without increasing the carbon footprint. Helping chillers perform more efficiently, it reduces both energy costs and environmental impact. The low hold-up volume reduces the system refrigerant charge and offers valuable savings.

Key features

- Improved heat transfer - equals higher efficiency chillers
- Reduced water side pressure drop - equals higher efficiency chillers
- Minimal hold-up volume - equals less refrigerant charge
- Smaller footprint - enables more compact chillers
- High heat transfer and minimal refrigerant charge - equals a reduced CO₂ footprint

Technical data

n = number of plates

Min. working temperature: -196°C
 Max. working temperature: 200°C
 Max. working pressure: 45 bar (refrigerant side) / 25 bar (water side)*
 Hold-up volume: Q1-Q2/ Q3-Q4 (l): 0.193xn/2 / 0.143x(n-2)/2
 Weight (kg): 5.95+0.29xn
 Max. no. of plates: 250

* A lower pressure version (30 bar) also available

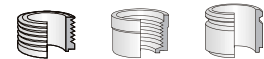
Standard materials

Cover plates: AISI 304L
 Connections: AISI 304L
 Plates: AISI 316L
 Brazing filler: Pure copper
 Other material combinations are available on request. Please contact your Danfoss sales representative for more information.

Standard connections

Standard connections as below are optimized for this product as an evaporator in chiller systems. For other connections, please contact your Danfoss representative, (Internal threaded, R thread (BSPT), NPT and Victaulic are also available).

Q3 (Refrigerant inlet): Soldering 3/8", 1/2", 5/8", 3/4", 7/8" or 1 1/8"
 Q4 (Refrigerant outlet): Soldering 1/2", 5/8", 3/4", 7/8", 1 1/8", 1 3/8", 1 1/2", 2" or 2.5"
 Q1-Q2 (Water side): External threaded G 1/2", G 3/4", G 1", G 1 1/4", G 1 1/2", G 2" or G 2.5"



Third-party approvals

Europe: Pressure Equipment Directive (PED). America: Underwriters Laboratory Inc (UL). The third-party approvals stated are standard for all our products. For details of other existing approvals or to discuss how we can meet your local needs, please contact your Danfoss representative.

Accessories – stud bolts

Stud bolts and feet on front and/or back cover plates for mounting support are available upon request. Contact your Danfoss sales representative for further information.

Corresponding condensers

A corresponding Micro Plate heat exchanger for condenser duties (C118L-C) is also available.