

Data sheet

Micro Plate Heat Exchanger For increased heat pump business

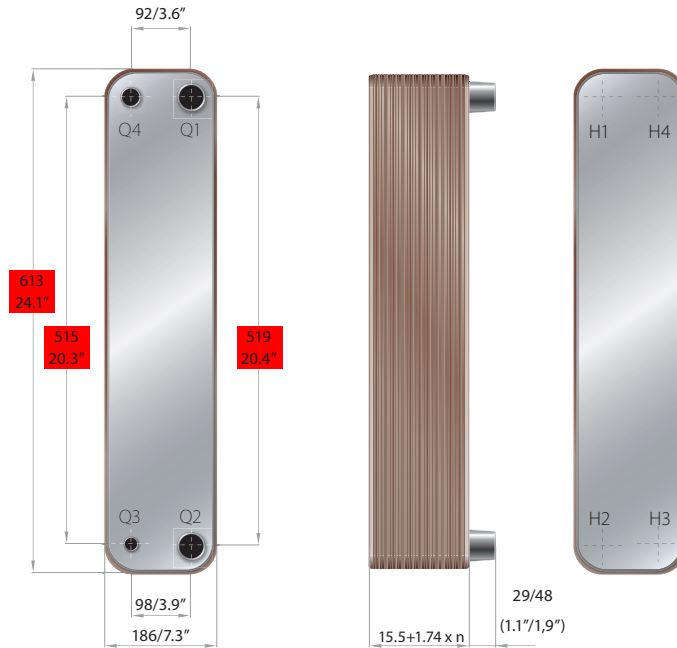
H118L-E Heat pump Evaporator



20%

charge compared with a traditional BPHE. The ideal solution to meet the world's climate and energy aspirations.

H118L-E Heat pump Evaporator Micro Plate Heat Exchanger



Introduction Evaporator optimised for R410A in high-efficiency commercial ground source heat pumps with capacities between 20-120 kW. The heat exchanger features innovative Micro Plate technology that improves heat transfer and reduces the amount of material used. To meet demands for higher COPs in heat pumps, the H118L-E is designed to work efficiently with close temperature approaches, while a low pressure drop on the brine side reduces the pump power and keeps the overall COP high. The low hold-up volume reduces the refrigerant charge and offers valuable savings.

- Key features**
- Minimal hold-up volume: Less refrigerant charge
 - Reduced pressure drop: For a more efficient heat pump
 - Smaller footprint: Enabling more compact heat pumps
 - Reduced CO2 footprint: Environmentally friendly with high heat transfer and minimal refrigerant charge.

Technical data
n = number of plates

Min. working temperature: -196 °C
 Max. working temperature: 200 °C
 Max. working pressure: 45 bar
 Hold-up volume Q1-Q2/ Q3-Q4 (l): $0.151 \times n / 2$ / $0.151 \times (n-2) / 2$
 Weight (kg): $7.94 + 0.26 \times n$

Standard materials

Cover plates: AISI 304
 Connections: AISI 304
 Plates: AISI 316
 Brazing filler: Pure copper
 Other material combinations can be provided upon request. Please contact your Danfoss sales representative for more information.

Standard connections

Standard connections as per below are optimised for this product as condenser in heat pump system. For other connections, please contact your Danfoss representative.

Q3 (Refrigerant inlet): soldering 5/8", 7/8" or 1 1/8"
 Q4 (Refrigerant outlet): soldering 1 3/8", 1 5/8" or 2 1/8"
 Q1-Q2 (Brine side): External threaded G 1 1/2", G 2" or Victaulic 2"

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 on front and/or back plates for mounting support are available upon request. Please contact your Danfoss sales representative for more information.

Corresponding condensers

A corresponding Micro Plate heat exchanger for condenser duties (H118L-C) is also available, fully tested and ready for heat pump applications.

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