Micro Plate Heat Exchanger

For increased heat pump business

H118-C Heat pump Condenser

30% charge compared with a traditional BPHE. The ideal solution to meet the world’s climate and energy aspirations.

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H118-C Heat pump Condenser
Micro Plate Heat Exchanger

Introduction
Condeser optimised for R407C in high-efficiency commercial heat pumps with capacities between 24-150 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 H118-C is designed to work efficiently with close temperature approaches. The low hold-up volume reduces the refrigerant charge and offers valuable savings.

Key features
- Minimal hold-up volume: Less refrigerant charge
- High heat transfer: 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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min. working temperature</td>
<td>-196 °C</td>
</tr>
<tr>
<td>Max. working temperature</td>
<td>200 °C</td>
</tr>
<tr>
<td>Max. working pressure</td>
<td>30 bar</td>
</tr>
<tr>
<td>Hold-up volume Q1-Q2/Q3-Q4</td>
<td>0.13×n/2 / 0.13×(n-2)/2</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>5.94+0.26×n</td>
</tr>
<tr>
<td>Max. no. of plates</td>
<td>200</td>
</tr>
</tbody>
</table>

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 outlet): soldering 5/8", 7/8" or 1 1/8"
- Q4 (Refrigerant inlet): 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 evaporator
A corresponding Micro Plate heat exchanger for evaporator duties (H118-E) is also available, fully tested and ready for heat pump applications.

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