Micro Plate Heat Exchanger
For increased heat pump business

H55-C Heat Pump Condenser

40% charge compared with a traditional BPHE. The ideal solution to meet the world’s climate and energy aspirations.
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Micro Plate Heat Exchanger

Introduction
Condenser optimised for R407C in high efficiency residential heat pumps with capacities between 4-40 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 H55-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>n = number of plates</th>
<th>Min. working temperature: -190 °C</th>
<th>Max. working temperature: 200 °C</th>
<th>Max. working pressure: 30 bar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hold up volume Q1-Q2/Q3-Q4 (l)</td>
<td>0.061×n/2</td>
<td>0.061×(n-2)/2</td>
<td></td>
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<tr>
<td>Weight (kg)</td>
<td>2.32+0.135xn</td>
<td>Max. no. of plates: 150</td>
<td></td>
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</tbody>
</table>

Standard materials
Cover plates: AISI 304
Connections: AISI 304
Plates: AISI 316
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 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 1/2", 5/8" or 7/8"
• Q4 (Refrigerant inlet): soldering 1/4", 3/8" or 5/8"
• Q1-Q2 (Brine side): External threaded G 1"

Third part 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 further information.

Corresponding evaporator
A corresponding MPHE for evaporator duties (H55-E) is also available, fully tested and ready for heat pump applications.