H118L-C Heat pump Condenser
For increased heat pump business

Innovative | Optimised | Low hold-up volume | High heat transfer | Compact | Rapid delivery

Save $420
Per heat exchanger
On refrigerant because of the H118L-C’s low hold-up volume.

30%
Reduction in refrigerant
Charge compared with a traditional BPHE. This new condenser is the ideal solution to help you meet the world’s climate and energy aspirations.

www.danfoss.com
H118L-C

INTRODUCTION

Condenser optimised for R410A in high-efficiency commercial heat pumps with capacities between 24-150 kW (82-512 kBTU/hr). 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-C is designed to work efficiently with close temperature approaches. The H118L-C is approved to 48 bar (696 psi) to cope with high water temperature applications such as the renovation market.

The design has been verified with regards to the defrost operation cycle. 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

Min. working temperature: -196 °C (-320 °F)
Max. working temperature: 200 °C (390 °F)
Max. working pressure: 48 bar (696 psi) for PED, 45 bar (650 psi) for UL
Hold-up volume (l): Q1-Q2/ Q3-Q4: 0.13×n/2 / 0.13×(n-2)/2
Hold-up volume (ft³): Q1-Q2/ Q3-Q4: 0.005×n/2 / 0.005×(n-2)/2
Weight: 7.93 kg+0.26×n (17.51lb+0.57×n)
Max. no. of plates: 200

STANDARD MATERIALS

Cover plates: AISI 304
Connections: AISI 304
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 1 1/2", 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 further information.

ACCESSIBILITY

We will help you set up a logistics solution that will meet your needs.

CORRESPONDING CONDENSERS

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

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