

ENGINEERING
TOMORROW

Danfoss

Data sheet

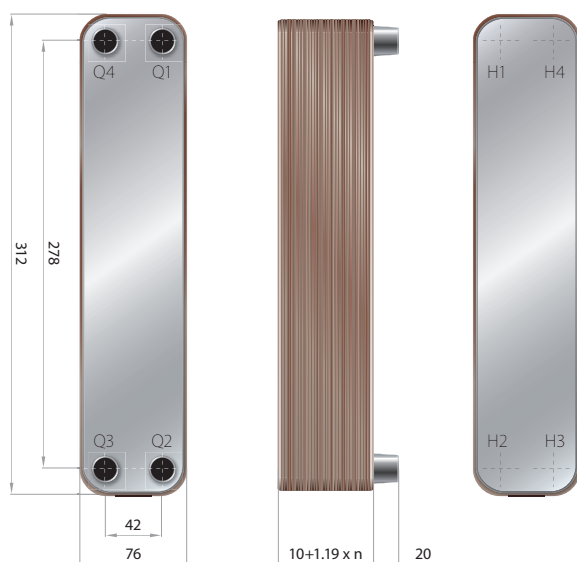
Micro Plate Heat Exchanger **For increased heat pump business**

H22L-C Heat pump Condenser

40%

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

H22L-C Heat pump Condenser Micro Plate Heat Exchanger



Introduction

The H22L-C is a condenser optimised for R410A in small high-efficiency residential heat pumps with capacities between 2-10 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 H22L-C is designed to work efficiently with close temperature approaches. The H22L-C is approved to 45 bar 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

n = number of plates

Min. working temperature: -196 °C
 Max. working temperature: 200 °C
 Max. working pressure: 48 bar
 Hold-up volume Q1-Q2/ Q3-Q4 (l): $0.021 \times n/2 / 0.021 \times (n-2)/2$
 Weight (kg): $0.77 + 0.045 \times n$
 Max. no. of plates: 60

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

The standard connections below are optimised for this product in condenser duties in heat pump systems. For other connections, please contact your Danfoss representative.

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



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.

Corresponding evaporator

A corresponding Micro Plate heat exchanger for evaporator duties (H22L-E) is also available, fully tested and ready for heat pump applications.

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without consequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logo are trademarks of Danfoss A/S. All rights reserved.