

Data sheet

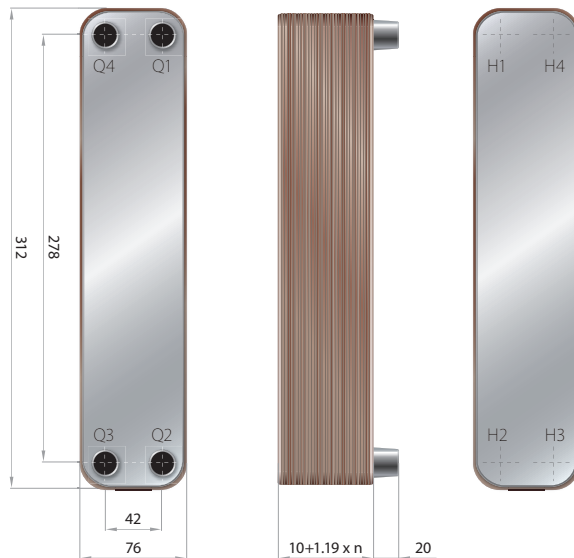
# Micro Plate Heat Exchanger For increased heat pump business

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 CO<sub>2</sub> 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.

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