

ENGINEERING
TOMORROW

Danfoss

Data sheet

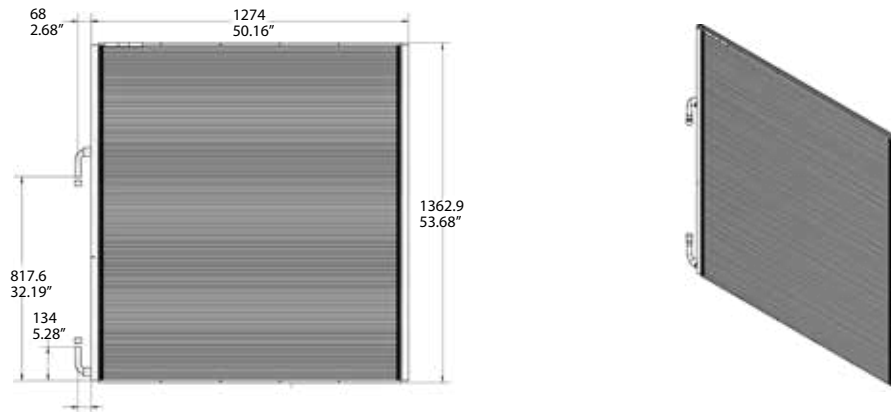
MicroChannel Heat Exchanger For increased savings

D1900-C MCHE Condenser

60%

Lower weight than a
copper fin and tube
coil - for easy
handling and reduced
shipping costs

D1900-C Condenser coil MicroChannel Heat Exchanger



Introduction

This product is ideal for use in many different applications, such as chillers and commercial split/roof tops. MCHEs have an ingeniously simple all-aluminum design that is not only lightweight but also prevents galvanic corrosion. The refrigerant-carrying tubes are formed to optimize heat transfer, enabling the production of more compact, but equally effective, cooling solutions. The smart louvered fin design maximizes surface contact, reducing the air-side pressure loss, improving efficiency and reducing noise levels.

Key features

- Reduce refrigerant system charge
- Improve efficiency – More compact/better COP/increased capacity
- Cost - Less sensitive to fluctuations in raw material prices
- Better corrosion characteristics due to all-aluminum design

Technical data

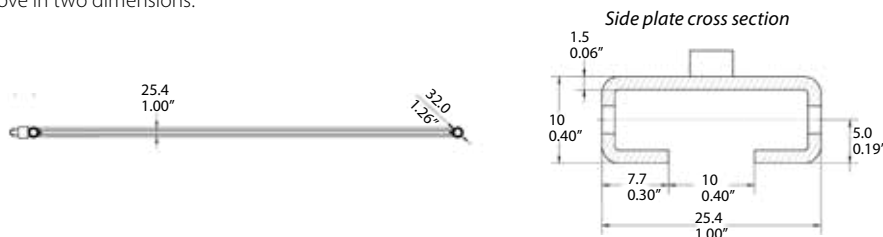
Model	Coil length	Coil height	Core depth	Fin pitch	Inlet ID diameter	Outlet ID diameter	Continuous operating temperature	Max. working pressure	Internal volume	Coil weight
D1900-C	1274 (mm) 50.2 (in)	1363 (mm) 53.7 (in)	25.4 (mm) 1.0 (in)	1.1 (mm) 23 (FPI)	22.4 (mm) 0.88 (in)	22.4 (mm) 0.88 (in)	-40 °C / 121 °C -40 °F / 250 °F	45 (bar) 650 (psi)	3.49 (l) 212.97 (in ³)	19.8 (kg) 43.8 (lb)

Material

Tube: AA3102
 Fins: AA3003Mod clad with AA4343
 Manifold: AA3003 clad with AA4045
 Inlet/Outlet tubes: Cu
 Side plate: AA3003

Mounting

Aluminum MCHEs expand and contract when exposed to big temperature changes. Installation supports/brackets must allow the MCHC to move in two dimensions.



Standard connections

The product is equipped with standard copper pipe connections for easy mounting. Never bend or stress the inlet/outlet connections during mounting, and design installations to avoid vibration in operation.

Bending

MicroChannel Heat Exchangers can easily be bent to fit in any application. Ask your local Danfoss Sales representative for advice.

Availability

Our local stocking and distribution network allows standard MCHEs to be delivered globally with short delivery times. Contact your local Danfoss sales representative for the standard lead times in your region.

Third-party approvals

PED Cat I
 UL 207

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