

CD300

Brazed Plate Heat Exchanger - CombiDryer

General information

Alfa Laval introduced its first brazed plate heat exchanger in 1977 and has since continuously developed and optimized its performance and reliability.

Brazing the stainless steel plates together eliminates the need for gaskets and thick frame plates, which makes the heat exchanger compact and saves material. The brazing material seals and holds the plates together at the contact points ensuring optimal heat transfer efficiency and pressure resistance. Using advanced design technologies and extensive verification guarantees the highest performance and longest possible service lifetime.

The CombiDryer (CD) brazed plate heat exchangers are specifically designed with a unique double circuit configuration for separation of humidity in compressed air. The CombiDryer can be used for air to air as well as air to refrigerant applications.

Typical applications

Compressed air dryer

The standard design supports a wide variety of HFC refrigerants such as R407C, R404A, R507, R134a. The high-pressure version is suitable for R410A and natural refrigerants (CO2 - propane).

Capacity range

CD300 cover capacities from 425 up to 1400 Nm/h or 250 up to 825 scfm. Based on standard components and a modular concept, each unit is custom-designed for each specific installation.

Request for quotation

To receive a quotation for brazed plate heat exchangers that meet your requirements, please provide Alfa Laval representatives with:

- Required flow rates or heat load
- Temperature program (inlet and outlet)
- Air and refrigerant type
- Desired working pressure
- Maximum permitted pressure drop
- Connection types



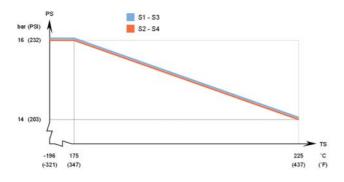
Examples of connections



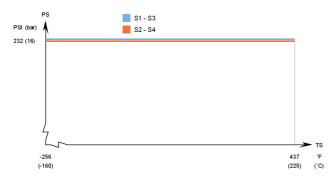


Welding

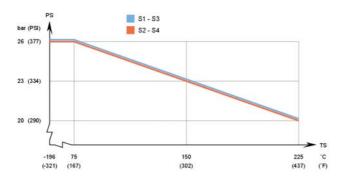
CD300 - PED approval pressure/temperature graph*



CD300 - UL approval pressure/temperature graph*



CD300 - CRN approval pressure/temperature graph*



Standard dimensions and weight*

A measure mm = $10 + (2.72 * n) \pm 5 mm$ A measure inch = $0.39 + (0.11 * n) \pm 0.2$ inch

Weight** kg = 4 + (0.37 * n)Weight** lb = 8.82 + (0.82 * n)

(n = number of plates)

Standard data

Min. working temperature	see graph
Max. working temperature	see graph
Min. working pressure	vacuum
Max. working pressure	see graph
Volume per channel, litres (ga)	0.24 (0.062)
Max. flowrate* m ³ /h (gpm)	93 (408)
Min. nbr of plates	10
Max. nbr of plates	200

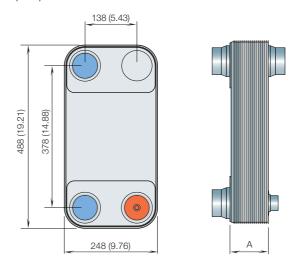
^{*} Water at 5 m/s (16.4 ft/s) (connection velocity)

Standard materials

Cover plates	Stainless steel
Connections	Stainless steel
Plates	Stainless steel
Brazing filler	Copper

Standard dimensions

mm (inch)



For exact values please contact your local Alfa Laval representative

^{*} Excluding connections