



AC120EQ / ACH120EQ

Brazed plate heat exchanger

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 AlfaChill (AC) brazed plate heat exchangers are specifically designed for heat transfer in air conditioning, refrigeration and heat pump applications.

Innovative features for this single circuit heat exchanger include the patented Equalancer System™ for efficient distribution of the refrigerant throughout the plate pack.

Typical applications

- Evaporator and condenser in chillers and heat pumps
- Economizer in chillers and heat pumps

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

AC120EQ / ACH120EQ cover capacities from 20 up to 200 kW. Based on standard components and a modular concept, each unit is custom-designed for each specific installation.

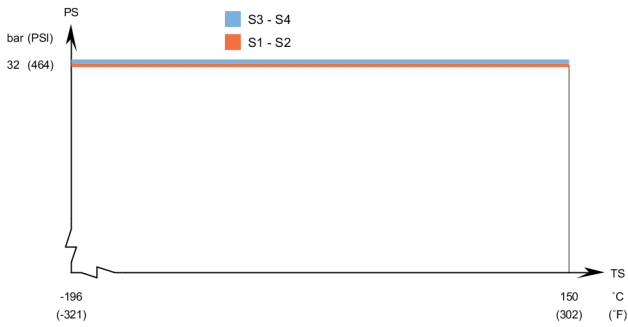
Request for quotation

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

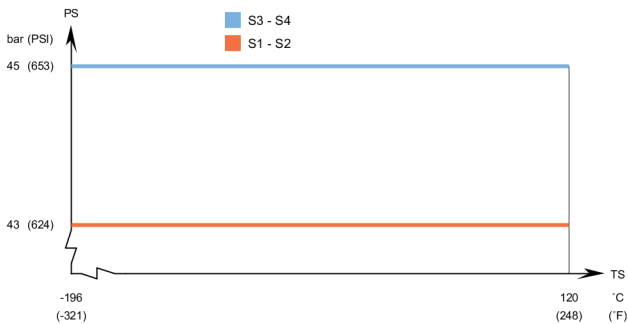
- Required flow rates or heat load
- Temperature program (inlet and outlet)
- Brine and refrigerant type
- Desired working pressure
- Maximum permitted water/brine pressure drop
- Connection types



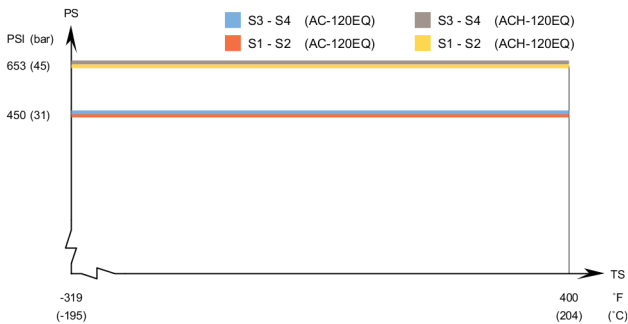
AC120EQ - PED approval pressure/temperature graph



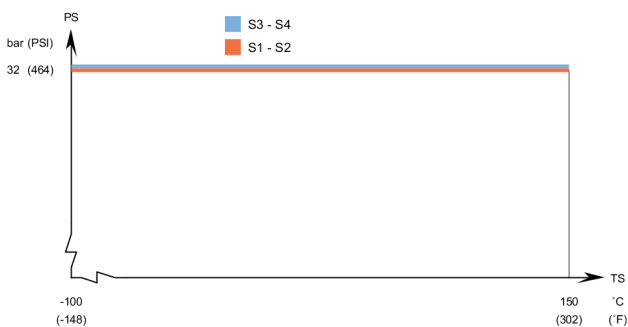
ACH120EQ - PED approval pressure/temperature graph



AC120EQ / ACH120EQ - UL approval pressure/temperature graph



AC120EQ - KHK and KRA approval pressure/temperature graph



Standard dimensions and weight*

A measure mm = (2.35 * n) + 11
 A measure inch = (0.09 * n) + 0.43
 Weight** kg = 5.4 + (0.44 * n)
 Weight** lb = 11.9 + (0.97 * n)

(n = number of plates)
 * Excluding connections

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)	0.21 (0.054)
Max. particle size mm (inch)	1 (0.04)
Max. flowrate* m ³ /h (gpm)	37 (163)
Min. nbr of plates	10
Max. nbr of plates	230

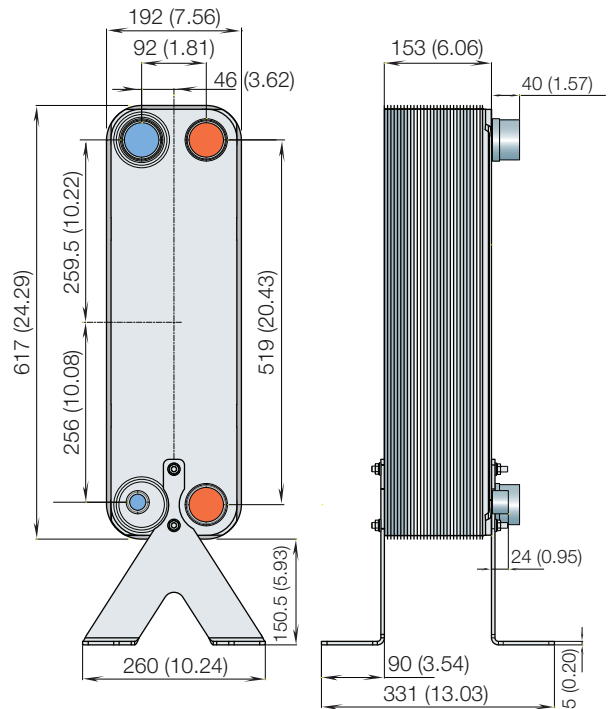
* Water at 5 m/s (16.4 ft/s) (connection velocity)

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

How to contact Alfa Laval

Up-to-date AlfaLaval contact details for all countries are always available on our website on www.alfalaval.com