



# AC1000DQ / ACH1000DQ

## Brazed plate heat exchangers for high-capacity air conditioning applications

### General information

A brazed plate heat exchanger consists solely of surfaces that actively contribute to heat transfer, which gives the unit a more compact and economical footprint with high heat transfer efficiency.

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

### Standard design and benefits

- True dual-circuit design guarantees the best performance in both full- and partial-load conditions.
- Designed for high-efficiency applications, which means applications with high evaporation temperature and low water/brine pressure drop. This results in reduced environmental impact and lower costs.
- Innovative plate design and optional large plate package enable very high capacities of up to 1200 kW with R410A.
- Asymmetric channels provide optimal efficiency in the most compact design. This results in low refrigerant charge or lower pressure drop on the water/brine side, reducing the CO<sub>2</sub> footprint.
- A distribution system ensures uniform distribution of the refrigerant throughout the plate package.
- Based on standard components and a modular concept, each unit is custom-built to meet the specific requirements of each individual installation.

### Typical applications

- Especially suitable for evaporation and condensation duties within air conditioning applications.

### Capacity range

From 600 kW up to 1200 kW.

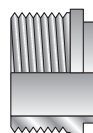


### Selection

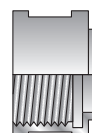
To receive a quotation for brazed plate heat exchangers that meet your specific requirements, please provide your Alfa Laval representative with:

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

### Examples of connections\*



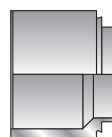
External threaded



Internal threaded



Soldering



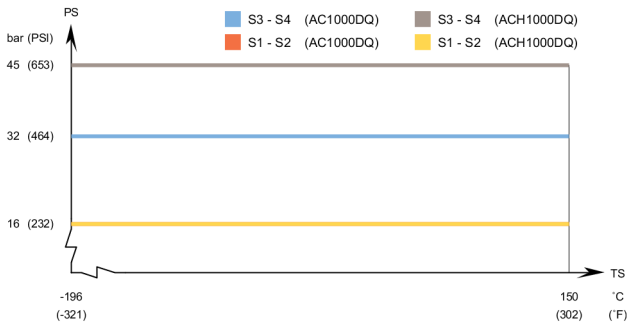
Welding



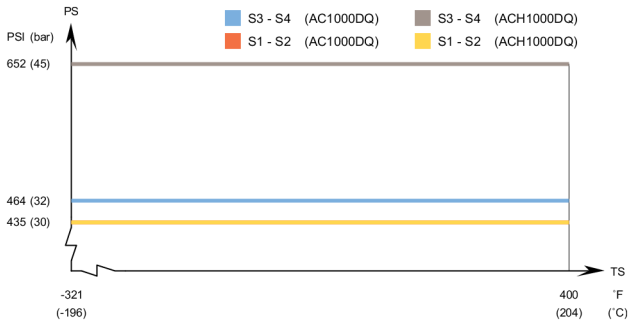
Vitaulic

\* More connections are available on request.

**AC1000DQ / ACH1000DQ - PED approval pressure/temperature graph**



**AC1000DQ / ACH1000DQ - UL approval pressure/temperature graph**



**Standard materials**

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

**Standard dimensions and weight\***

A measure mm =  $(2.41 * n) + 18$   
 A measure inch =  $(0.09 * n) + 0.71$   
 Weight\*\* kg =  $31.5 + (1.41 * n)$   
 Weight\*\* lb =  $69.45 + (3.11 * n)$   
 (n = number of plates)

\* Excluding connections

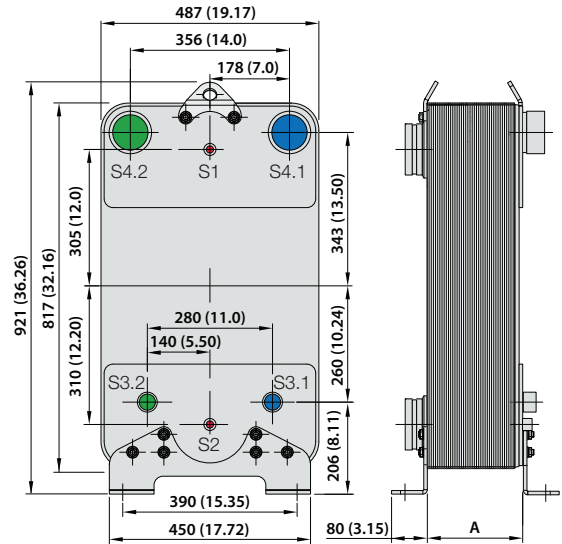
**Standard data**

Min. working temperature	See graph
Max. working temperature	See graph
Min. working pressure	Vacuum
Max. working pressure	See graph
Volume per channel, litres (ga)	0.97 (0.25)
Max. flowrate* m <sup>3</sup> /h (gpm)	200 (880)
Flow direction	Parallel
Min. nbr of plates	10
Max. nbr of plates	298

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

**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](http://www.alfalaval.com)