

# The AlfaChill 250

## Optimized performance. Compact size.

#### **Applications**

The AlfaChill 250 (AC250) was specifically developed for use in air conditioning and refrigeration applications with chiller capacities from 40 to 120 tons. The system performs as evaporator or condenser in either water chillers or closed-loop water heat pumps.

# Performance advantages of combining two unique systems

Combined within the AC250 are two unique performance systems. The Equalancer System™ optimizes heat transfer by distributing refrigerant more efficiently across the plate and through plate channels, decreasing the need for superheating. This fully integrated, two-chamber, two-orifice design equalizes and balances refrigerant pressure before it enters the plate channels, providing more even and efficient cooling.

The Dualaced System™ consists of two separate refrigerant circuits interlaced with a single water circuit so that constant contact between liquid and refrigerant is maintained. This minimizes risk of freezing, and ensures a balanced thermal load and precise liquid outlet control. Efficiency is improved even when only one circuit is in operation.

### Diagonal flow improves performance

Optimum use of plate surface area and channel distribution is made possible by diagonal flow. Water connections are in the center of one side of the unit while refrigerant connections are placed in the corners diagonal from each other.

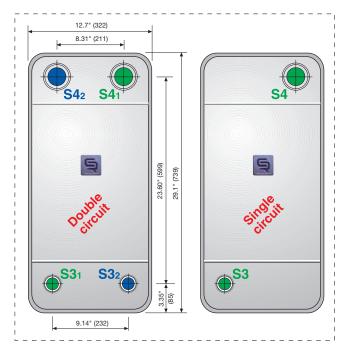
#### The advantages of compactness

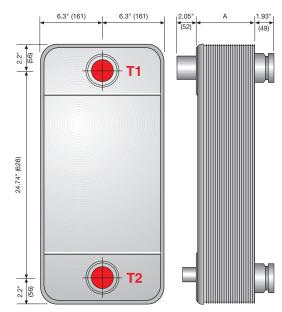
The compact AC250 takes up less space in your system, leaving space for other equipment. It also means less refrigerant (that saves you money), less weight and faster response to changes in operating parameters.











Dimensions in inches (mm)

#### General data

Design temperature (minimum)
Design temperature (maximum)
Design pressure (minimum)
Design pressure (maximum, refrigerant)
Design pressure (maximum, water)
Volume per channel
Maximum flow rate, water side
Plate channels available

-256°F (-160°C) +437°F (+225°C) Vacuum 464 psig (32 bar) 363 psig (25 bar) 0.100 gal (0.4 L) 460 gpm (105 m³h) H (DQ)

#### Standard connections

Water/brine side 2", 3" NPT; 2½", 3" Victaulic Refrigerant side 1½", 13½" in S3 (single circuit) 25½", 3½" in S4

Refrigerant side 1½", 1¾" in S3 (double circuit) 2½", 2½" in S4

#### **Dimensions**

 $A = 0.53 + (n \times 0.111) \text{ (in)} \qquad A = 13.5 + (n \times 2.8) \text{ (mm)}$  Weight = 49.2 + (3.88 x n) (lb) Weight = 22.3 + (1.76 x n) (kg) n = number of plates (maximum = 250)

#### Accessories

• Mounting feet and lifting plates provided as standard



ENSR00008EN 0209

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#### How to contact Alfa Laval

Contact details for all countries are continually updated on our website. Please visit www.alfalaval.com to access the information directly.