

## Efficient refrigeration

**Save energy, time and money**

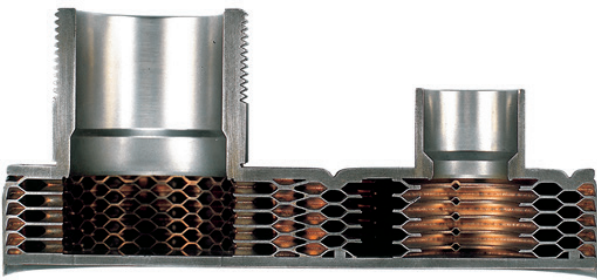
Brazed Plate Heat Exchangers for liquid chillers, condensers, subcoolers, heat pumps, desuperheaters and shell-and-tube replacements

Lower your operational costs with the most efficient, reliable heat exchangers available.



### Alfa Laval Brazed Plate Heat Exchangers

Alfa Laval's high performance, compact Brazed Plate Heat Exchangers (BHEs) offer the highest heat transfer performance, with maximum reliability and cost efficiency. Consisting of thin corrugated stainless steel plates brazed together with copper, the BHE forms a self-contained unit - eliminating the need for a frame, gaskets, bolts and the carrying bar.



### Innovation that boosts performance

Alfa Laval's patented Equalancer System™ provides a substantial savings in heat transfer surface compared to BHEs with traditional distribution systems.



### Brazed Plate Heat Exchanger benefits

- Extremely compact, low weight and easy to install
- Low refrigerant charge
- Safe oil return, even with low loads
- High pressure versions for cascade and transcritical CO<sub>2</sub> duties
- Optimal performance with air liquid coolers in indirect cooling systems
- Available for use with all HCFC and HFC refrigerants



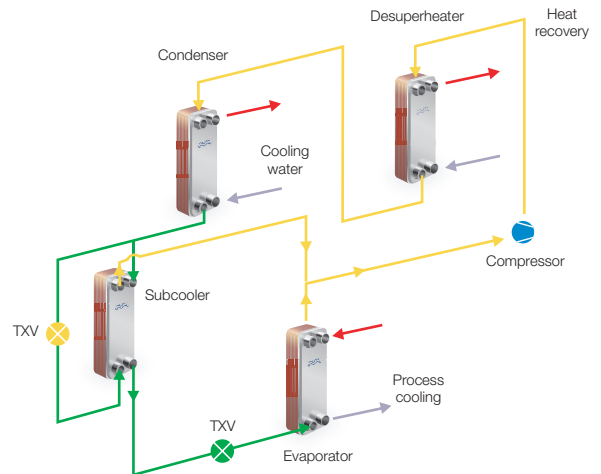
### Refrigeration applications

- Liquid chiller
- Condenser
- Subcooler
- Heat pump
- Desuperheater
- Replacement for shell-and-tube units

Alfa Laval BHEs are available with many different certifications, including UL, ASME, CRN and CE.

### Brazed Plate Heat Exchangers in the refrigeration cycle

Alfa Laval BHEs can be used for any refrigeration application. The figure shows the minimum components necessary in the basic compression refrigeration cycle.

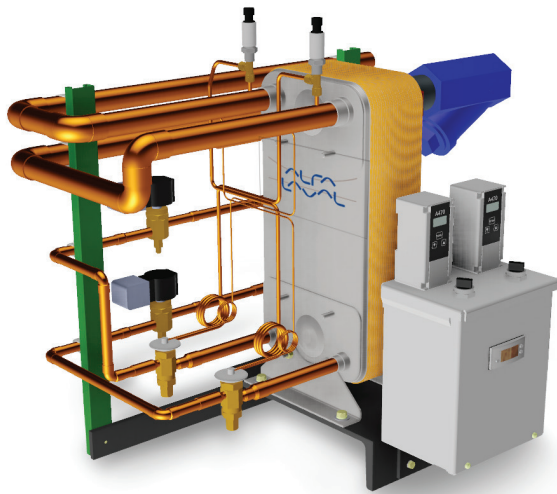


### Space-saving, compact design



Alfa Laval has the tools to get you started.

- **AlfaSelect Selection Tool**  
Free and easy-to-use sizing software
- **ChillerBuilder Kit** allows you to easily assemble a modular chiller solution. Available from 2 to 75 tons, these kits provide all you need to build the low-side of a chiller system.
- Same day/next day shipping



ChillerBuilder Kit

Together with the Standard Refrigeration range, Alfa Laval offers a complete line of products and solutions for refrigeration applications.

**Single Circuit Evaporators**

Primary: 54°F EWT → 44°F LWT Water  
Secondary: 39°F ← 36°F SST, 6°F SuperHeat

R410A TR	R22 TR	Model	Item No.
Size 12.8" H x 3.7" W Working Pressure 650 PSIG			
1	1	ACH-30EQ-10H	3287084893
2	2	ACH-30EQ-20H	3287084894
3.5	3.5	ACH-30EQ-30H	3287084895
5	4	ACH-30EQ-40H	3287084896
6	5	ACH-30EQ-50H	3287084897
7.5	6	ACH-30EQ-60H	3287084898
Frame 20.7" H x 4.4" W Working Pressure 650 PSIG			
5	5	ACH-70X-22M	3287083717
6	6	ACH-70X-26M	3287083718
7.5	7.5	ACH-70X-32M	3287083719
10	9	ACH-70X-42M	3287083720
12	10	ACH-70X-50M	3287083721
15	12	ACH-70X-62M	3287083723
20	15	ACH-70X-78M	3287083725
25	20	ACH-70X-100M	3287083727
Frame 24.3" H x 7.6" W Working Pressure 650 PSIG			
15	12	ACH-120EQ-30H	3287083729
25	15	ACH-120EQ-46H	3287083731
30	20	ACH-120EQ-60H	3287083732
40	25	ACH-120EQ-76H	3287083733
45	40	ACH-120EQ-90H	3287083734
50	45	ACH-120EQ-106H	3287083735
60	50	ACH-120EQ-124H	3287083736
Frame 29" H x 13" W Working Pressure 650 PSIG			
67	58	ACH-500EQ-70H	3287084411
74	60	ACH-500EQ-80H	3287084412
94	75	ACH-500EQ-100H	3287084414
117	117	ACH-500EQ-130H	3287084415

1. Nominal Tons - 12,000 BTU/Hr per Ton. 2.4 GPM per Ton. Water Pressure Drop less than 10 psig
2. For performance with other refrigerants and/or fluids, please contact Customer Service

**Dual Circuit Evaporators**

Primary: 54°F EWT → 44°F LWT Water  
Secondary: 39°F ← 36°F SST, 6°F SuperHeat

R410A TR	R22 TR	Model	Item No.
Frame 19" H x 10" W Working Pressure 650 PSIG			
12.5	8	ACH-230DQ-30H	3287084565
20	12.5	ACH-230DQ-50H	3287084567
30	20	ACH-230DQ-70H	3287084569
40	30	ACH-230DQ-90H	3287084570
50	40	ACH-230DQ-110H	3287084571
60	50	ACH-230DQ-138H	3287084572
70	60	ACH-230DQ-170H	3287084573
80	70	ACH-230DQ-202H	3287084574
Frame 29" H x 13" W Working Pressure 650 PSIG			
100	80	ACH-500DQ-110H	3287084579
120	100	ACH-500DQ-138H	3287084581
140	120	ACH-500DQ-170H	3287084583
150	150	ACH-500DQ-190H	3287084584
160	160	ACH-500DQ-206H	3287084585

1. Nominal Tons - 12,000 BTU/Hr per Ton. 2.4 GPM per Ton. Water Pressure Drop less than 10 psig
2. For performance with other refrigerants and/or fluids, please contact Customer Service
3. Diagonal flow

AlfaNova and AXP models also available.



**AlfaNova** – 100% stainless steel fusion bonded construction for HFC natural refrigerants, such as ammonia



**AXP** – specifically designed copper brazed construction with carbon steel frames for high pressure CO<sub>2</sub> applications

**Single Circuit Condensers**

Primary: 195°F EGT → 105°F SCT, 5°F Subcooling  
Secondary: 95°F ← 85°F LWT Water

R410A HP	R22 HP	Model	Item No.
Frame 12.8" H x 3.7" W Working Pressure 650 PSIG			
1.1	1	ACH-30EQ-10H	3287084893
2.2	2	ACH-30EQ-20H	3287084894
3.3	3.3	ACH-30EQ-30H	3287084895
4.4	4.4	ACH-30EQ-40H	3287084896
5.5	5.5	ACH-30EQ-50H	3287084897
6.7	6.7	ACH-30EQ-60H	3287084898
Frame 20.7" H x 4.4" W Working Pressure 650 PSIG			
5	4.5	ACH-70X-22M	3287083717
6	5.5	ACH-70X-26M	3287083718
7.5	7	ACH-70X-32M	3287083719
10	9	ACH-70X-42M	3287083720
12	11	ACH-70X-50M	3287083721
15	13	ACH-70X-62M	3287083723
20	16.7	ACH-70X-78M	3287083725
24	21	ACH-70X-100M	3287083727
Frame 24.3" H x 7.6" W Working Pressure 650 PSIG			
12.5	12	ACH-120EQ-30H	3287083729
20	15	ACH-120EQ-46H	3287083731
25	20	ACH-120EQ-60H	3287083732
30	25	ACH-120EQ-76H	3287083733
40	40	ACH-120EQ-90H	3287083734
45	45	ACH-120EQ-106H	3287083735
50	50	ACH-120EQ-124H	3287083736
Frame 29" H x 13" W Working Pressure 650 PSIG			
67	67	ACH-500EQ-70H	3287084411
74	74	ACH-500EQ-80H	3287084412
94	94	ACH-500EQ-100H	3287084414
117	117	ACH-500EQ-130H	3287084415

1. Nominal HP - 15,000 BTU/Hr per HP. Water Pressure Drop less than 10 psig
2. For performance with other refrigerants and/or fluids, please contact Customer Service

**Dual Circuit Condensers**

Primary: 195°F EGT → 105°F SCT, 5°F Subcooling  
Secondary: 95°F ← 85°F LWT Water

R410A HP	R22 HP	Model	Item No.
Frame 19" H x 10" W Working Pressure 650 PSIG			
12.5	12.5	ACH-230DQ-30H	3287084565
20	20	ACH-230DQ-50H	3287084567
30	30	ACH-230DQ-70H	3287084569
40	40	ACH-230DQ-90H	3287084570
50	50	ACH-230DQ-110H	3287084571
60	60	ACH-230DQ-138H	3287084572
70	70	ACH-230DQ-170H	3287084573
80	75	ACH-230DQ-202H	3287084574
Frame 29" H x 13" W Working Pressure 650 PSIG			
100	100	ACH-500DQ-110H	3287084579
120	120	ACH-500DQ-138H	3287084581
140	140	ACH-500DQ-170H	3287084583
150	150	ACH-500DQ-190H	3287084584
160	160	ACH-500DQ-206H	3287084585

1. Nominal HP - 15,000 BTU/Hr per HP. Water Pressure Drop less than 10 psig
2. For performance with other refrigerants and/or fluids, please contact Customer Service
3. Diagonal flow

**General Service Single Circuit Condensers**

Primary: 195°F EGT → 105°F SCT, 5°F Subcooling  
Secondary: 95°F ← 85°F LWT Water

R22 HP	Model	Item No.
Frame 8.2" H x 3.1" W Working Pressure 465 PSIG		
0.3	CBH16-11H	3287119952
0.4	CBH16-13H	3287119953
Frame 12.2" H x 4.4" W Working Pressure 450 PSIG		
0.8	CB30-12H	3287099352
1.5	CB30-18H	3287099353
2	CB30-24H	3287099358
3	CB30-34H	3287099359
4	CB30-44H	3287099360
5	CB30-54H	3287099361
6	CB30-64H	3287099363
Frame 20.7" H x 4.4" W Working Pressure 650 PSIG		
4	CBH60-16H	3287103910
6	CBH60-24H	3287103911
7.5	CBH60-30H	3287103912
10	CBH60-40H	3287103913
12.5	CBH60-48H	3287103914
15	CBH60-62H	3287103915
Frame 24.3" H x 7.6" W Working Pressure 450 PSIG		
10	CB76-20H	3287000957
15	CB76-30H	3287000958
20	CB76-40H	3287000959
27	CB76-50H	3287000960
33	CB76-60H	3287050952
46	CB76-80H	3287050953
58	CB76-100H	3287050954

1. Nominal HP - 15,000 BTU/Hr per HP. FF=0.0001 ft<sup>2</sup>/hr, F/BTU. Water Pressure Drop less than 10 psig
2. For performance with other refrigerants and/or fluids, please contact Customer Service

Alfa Laval Brazed Heat Exchangers are available in a variety of sizes and plate configurations with a capacity of ½ to 160+ tons.

## **Alfa Laval in brief**

Alfa Laval is a leading global provider of specialized products and engineered solutions.

Our equipment, systems and services are dedicated to helping customers to optimize the performance of their processes. Time and time again.

We help our customers to heat, cool, separate and transport products such as oil, water, chemicals, beverages, foodstuff, starch and pharmaceuticals.

Our worldwide organization works closely with customers in almost 100 countries to help them stay ahead.

## **How to contact Alfa Laval**

Contact details for all countries are continually updated on our website. Please visit [www.alfalaval.com](http://www.alfalaval.com) to access the information directly.

## **Technical support:**

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