Table of Contents

Menu

Table of Contents

Condensers

Table of Contents

Evaporators

Table of Contents

Refrigerant Subcoolers

Table of Contents

Liquid Receivers

Table of Contents

Valves, Brackets and Accessories

Menu

Commercial Refrigeration Product Catalog 2009

Edition 2

Standard Refrigeration

Table of Contents

The information contained herein is correct at the time of issue but may be subject to change without prior notice.

Table of Contents Continued

The information contained herein is correct at the time of issue but may be subject to change without prior notice.

Pressure Vessel Construction and Certification Information

Size of Vessel	Construction and Certification generally acceptable, furnished unless otherwise specified
Under six inches ID	UL Listing
Six inches or greater ID, but less than 1.5 cubic feet net internal volume	ASME Code Construction with UM Certification and UL Recognition
Six inches or greater ID, with over 1.5 cubic feet net internal volume	ASME Code Construction with U Certification and National Board Registration

Notes

UL Listing may be obtained for a vessel, typical samples of which can withstand five times the marked working pressure without failure for the gas side and three times the marked working pressure without failure for the fluid side. Initial tests are made at Underwriters Laboratory and re-examination tests are made under UL supervision, at the manufacturer's plant.

ASME Code Construction is the same whether UM or U certified. Essentially, the vessel must have a calculated design strength capable of withstanding the maximum allowable working pressure (MAWP) and tested pneumatically to 1.1 times the MAWP or hydrostatically to 1.3 times the MAWP. Certain details of construction must be observed, and chemical and physical test certification for all material must be on file. Welding procedures, equipment, and personnel must be qualified by performance tests. UM Certification means that the manufacturer's personnel have performed the necessary inspection and tests. The letters UM appear in the ASME cloverleaf stamp on the tag. Only when requested, a certificate (Form U–3) is furnished, signed by the manufacturer.

UL Recognition of UM vessels. Their testing and re-examination procedure is identical to that for listing. This recognition requirement is because UL takes the position that someone other than the manufacturer should check the construction. The recognition list is not published —as is the listing— the records are kept by UL and generally used only when granting listing to an assembly that includes the vessel.

National Board Registration means that in addition to the ASME construction, an independent, licensed inspector has monitored the procedures, fabrication and testing of the vessel. The letter U appears in the ASME cloverleaf stamp on the tag.

We recommend referring to Nat. Bd., rather than U–stamp, to avoid confusion between U and UM.

Underwriters Laboratory will automatically accept a National Board registered vessel when listing an assembly, because it has been inspected by an independent agent, to specifications stricter than their own.

A National Board certified vessel is accepted by all states and municipal codes in the United States. Most other countries will accept them also.

Certain government or military requirements essentially parallel the ASME code, but may specify approval and/or certification by inspectors from a government agency in addition to, or in place of ASME code, or UL requirements.

International Code Stamps

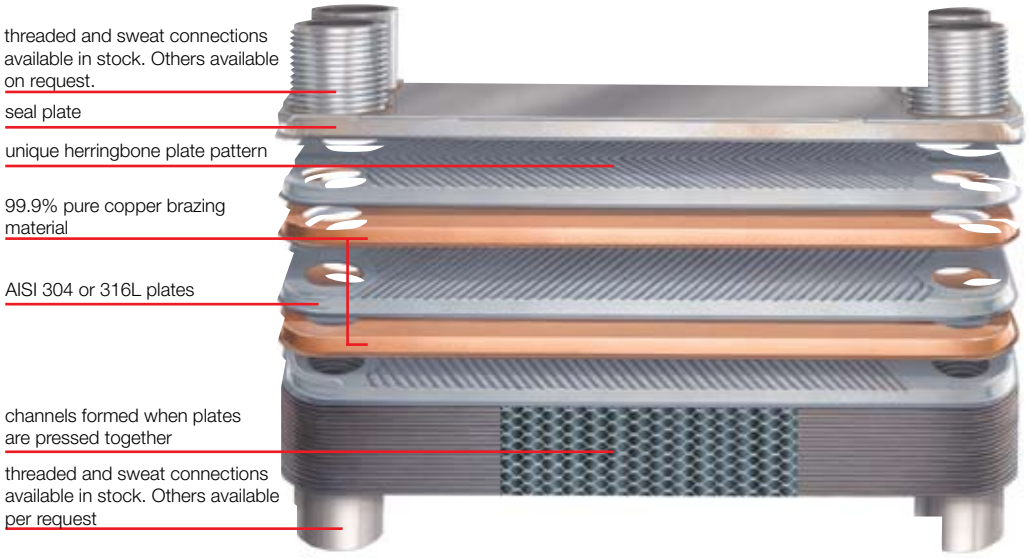
CRN Canadian registration is available on cataloged and custom models. CRN or special code requests must be made at time of order.

Other international codes possibly available upon request include New Zealand, Australia, Japan, China and Europe (CE).

The Brazed Heat Exchanger – less is more

The brazed plate heat exchanger is the most compact heat exchanger on the market today. Its high heat transfer efficiency in combination with its compact design equals a compact heat exchanger for a wide range of heating, cooling, evaporating and condensing duties.The brazed heat exchanger consists of thin corrugated stainless steel plates brazed together with copper to form a self-contained unit. Brazing the plates together eliminates the need for a frame, gaskets, bolts and the carrying bar. The result is a heat exchanger that costs less, weighs less, holds less refrigerant and takes up less space.

Brazed Heat Exchangers



How to Read Alfa Laval Part Numbers

Example: Part # CB27-44HX2 S52

Model Series	# of Plates	Channel Type	Special Features	# of Passes or Circuits	Connection Types	Connection Combinations
CB27	44	H	X	2	S	52

Brazing Material:
"AC" = Copper-Brazed (AlfaChill™)
"CB" = Copper-Brazed
"AN" = Alfa Nova

Model type indicated by the numbers 14, 27, 52, 70, 76, 80, 120, 130, 250

A = Combination Extra High and High Theta
E = Extra High Theta
H = High Theta
L = Low Theta
M = Medium Theta (combination High and Low Theta)

A = ASME "UM" certification (DB52 and CB76 models only)
B = Frame and Press Plate Stud Bolt Mounting with Integral Distributor
C = Frame and Press Plate Stud Bolt Mounting without Integral Distributor
EQ = Equalancer™ Refrigerant Distribution System
S = Frame Plate Stud Bolt Mounting without Integral Distributor
T = Pressure Plate Stud Bolt Mounting without Integral Distributor
U = Without Integral Distributor and without Mounting Feet
X = Integral Distributor for Evaporative Duties
Y = Frame Plate Stud Bolt Mounting with Integral Distributor
Z = Pressure Plate Stud Bolt Mounting with Integral Distributor

# of Passes:
(Denoted by Letters)

DQ = Dual Pass
M = Multi-pass (3 or more)

# of Circuits:
(Denoted by Numbers)

2 = Two Refrigerant Circuits with plate packs equally split between circuits
3 = Two Refrigerant Circuits with plate packs unequally split between circuits

	Side S3, S4	Side S1, S2
C =	Sweat	MNPT
D =	MNPT	Sweat
S =	Sweat	Sweat
T =	MNPT	MNPT
V =	Sweat	Victaulic®

*Customer-specific connections available including flange, Roto Lock™, weld neck, FNPT.

This number refers to a specific combination of connections. See the connection pages of this catalog for detailed information.

Sizing a Condenser

A condenser is properly sized when its capacity to transfer heat from the system is equal to the cooling load, plus the extra heat generated by the work of compressing the gas. This total is called the Total Heat of Rejection.

There are some proven rules of thumb for sizing that can get you in the ball park. For air-conditioning or a high back pressure system, it's safe and convenient to size by nominal horsepower.

High Back Pressure System (air conditioning)

Size by nominal horsepower

1 HP = 12,000 Btu per ton plus 3,000 Btu for heat compression = 15,000 Btu

Sizing by Nominal hp

In the condenser specification section of the catalog, note that most Standard condensers are rated by nominal horsepower in a fouled condition. An SST-750A for example will provide 7.5 hp after being in use for some time and fouled. It will provide 12 hp when new. This means that there is additional condensing or total heat rejection capacity, available when new.

It is often possible to size a condenser by matching nominal horsepower to compressor horsepower in commercial or high temperature systems when manufacturer's information is not available. You can estimate the total heat of rejection by multiplying motor horsepower by (3000) to find the heat of compression, and then adding the load. In the following example, the nominal horsepower of the compressor will match the nominal tonnage of the air-conditioning system and the Total Heat of Rejection.

A 15 hp compressor in a 15 ton system, produces 225,000 Btu per hour total heat of rejection, That's 3,000 Btu for heat of compression, plus 12,000 Btu of load for each ton.

Heat of Compression: 15 hp x 3000 Btu/hp = 45,000 Btu

Evaporating Capacity: 15 ton x 12,000 Btu/hr = 180,000 Btu

Estimated Total Heat Rejection: (45,000) + (180,000) =225,000 Btu

Once you have determined the total heat of rejection and the corresponding condenser capacity, you are ready to refer to the Standard performance data to make the proper selection.

In looking at the capacity data for the SST you will note that total heat of rejection, gpm, and pressure drop in psi are provided for various Initial Temperature Differentials from 15°F to 40°F. You can now look for a Total Heat of Rejection that exceeds the 225,000 Btu requirement, and read the corresponding flows and gpm. An SST-1500A (2 pass) will provide the desired performance with 44 gpm and an ITD of 20°F or, 24 gpm and an ITD of 30°F. You will notice that models through an SST-4505A would also perform well. However, they will cost much more. An SST-1500A, 15 hp condenser, is the ideal choice since the Total Heat of Rejection required falls in the middle of its performance window.

City Water = 75°

Condensing Temp. = 105°

However, matching nominal horsepower can result in over-sizing for low and very low temperature applications, and over-sizing costs more. While sizing by matching nominal compresser horsepower to condenser horsepower is often accurate, the best practice is to begin by calculating the actual total heat of rejection.

Sizing by Total Heat of Rejection

For example, total heat of rejection for a system with the following performance characteristics would be calculated like this:

Compressor Performance from manufactures published data.

110°F condensing temperature
10°F evaporating temperature
75°F incoming water temperature
Refrigerant R-22
Evaporating Watts = 6500
Evaporating Load: 40,200 Btu

Watts x 3.4 = Heat of Compression
Heat of Compression + Evaporating Load = Total Heat of Rejection

6500 watts x 3.4 = 22,100 Btu
Heat of Compression = 22,100 Btu
Evaporating Load = 40,200 Btu
Total Heat of Rejection = 62,300 Btu

Tower Water = 85°

Condensing Temp. = 105°

Although the refrigerant is R–22, the condensing temperature is not the same as the ARI standard of 105°F which means that the Standard catalog cannot be used to make your selection. In this case, you can call your local representative or one of Standard's sales engineers for a computer generated selection. In this case, a SST–200A (4 Pass) will perform with 7.27 gpm and a pressure drop of 1.75 psi. The 62,300 Btu load would normally require a 5 hp (SST–500A) at the usual ARI rating point of 85°F, 105°F condensing, and R–22. The SST–500A would work in this application although it is three times larger than necessary.

Heat of Rejection
Air Conditioning or
Refrigeration Load
+
Heat of Compression
=
Total Heat of Rejection

You should always compare performance data when your application conditions vary from normal operating conditions, in order to arrive at the best match for your application.

Other Considerations

Remember to consider all of the factors that affect performance; not just flow rates, TD, fouling, pressure drop, and types of fluid, but also the pull–down factor and pumpdown capacity. Higher loads under pull–down conditions call for an additional ten percent capacity if a very short pull–down time is required, or if slight increases in head pressure or water flow are unacceptable. In a 66,000 Btu system, you must add an additional 6,600 Btu for a total condenser sizing requirement of 72,600 Btu. Pumpdown requirements relate to the amount of refrigerant storage available in a condenser during operation or servicing. A pumpdown capacity of three pounds of refrigerant per ton of capacity will be sufficient for most systems. However, commercial refrigeration systems may require up to seven pounds per ton because of long refrigerant lines. Standard rates its condenser pumpdown capacities at 80% of the total volume.

In addition to selection tables, you can also utilize Standard's computerized selection service. Just complete the information in our heat exchanger specification form and mail or fax it to our sales engineering department, or sales representative's office.

We are happy to build customized condensers if an application calls for a modified condenser with additional valves, water or refrigerant fittings, special mounting brackets, or other accessories.

Design Features and Ratings

Nominal Horsepower Rating Basis

15,000 Btu per hour @ 85°F. inlet water, 0.00025 additive fouling factor and 105°F. condensing temperature, with a three gallon per minute (gpm) water flow and refrigerant 22.

Sizing by Nominal Horsepower

A condenser is properly sized when its capacity to transfer heat from the system is equal to the cooling load, plus the extra heat generated by the work of compressing the gas. This total is called the Total Heat of Rejection. For air–conditioning or a high back pressure system, it's safe and convenient to size by nominal horsepower. However, matching nominal HP can result in over-sizing for low and very low temperature applications. When your application varies from nominal-air conditioning or normal operating conditions utilize Standard Refrigeration's condenser selection software or condenser performance tables, which can be obtained at www. stanref.com or from customer service.

Pumpdown Capacity

Pumpdown figures have been compensated to provide capacity for R-22 based on 80% of condenser volume filled with liquid at 90°F.

Pumpdown requirements relate to the amount of refrigerant storage available in a condenser during operation or servicing. A pumpdown capacity of three pounds of refrigerant per ton will be sufficient for high back-pressure air conditioning, five pounds per ton for medium back- pressure air conditioning and up to seven pounds per ton for commercial refrigeration/low back-pressure systems.

Operating Charge

Approximately 10% of the pumpdown capacity is required for shell & tube models and 5% for shell & coil models for proper operation.

Nominal Water Pressure Drop

Nominal pressure drops (psi) given are at nominal flow rates. To determine nominal flow rates multiply nominal horsepower (hp) by 3.0. Water pressure drops provided do not include any external fittings or valves.

Pressure drop is defined as the loss of pressure due to friction and is the pressure difference between entering and leaving water sides.

Water Flow

Velocities of eight feet per second or higher risk premature impingement corrosion and tube failure. Operation below minimum flow rates may result in excessive fouling and poor heat transfer. All values in this catalog section are limited to flows below eight feet per second.

Custom Designs

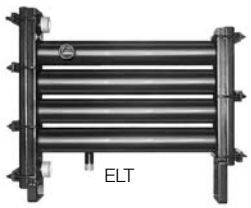
Standard Refrigeration is always happy to design and build customized condensers if an application calls for special materials, additional valves, water or refrigerant fittings, mounting brackets or other accessories. Contact customer service for a quotation.transfer.

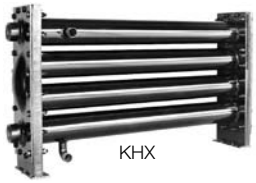
Note on Refrigerant R410a Applications

Due to the high working pressures of Refrigerant R410a, any condenser product in our catalog must be customized to conform to ASME construction. Please contact customer service for quotation.


VSE


HSE SST HP CA MSE


ELT


KHX


SCH/SCS


Copper-Brazed (CND-CB)


AlfaChill (CND-AC)


AlfaNova (CND-AN)

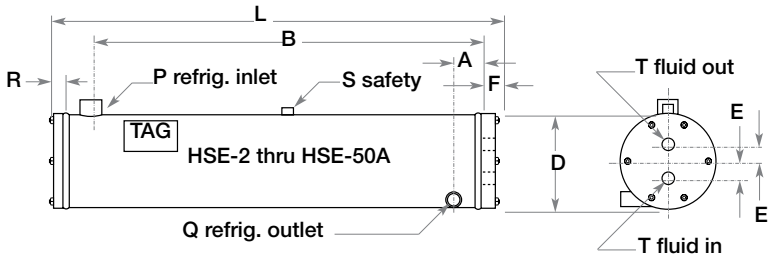
Shell-and-Tube Super Efficient Condensers

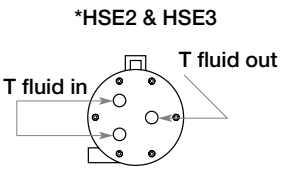
Cleanable, for general applications

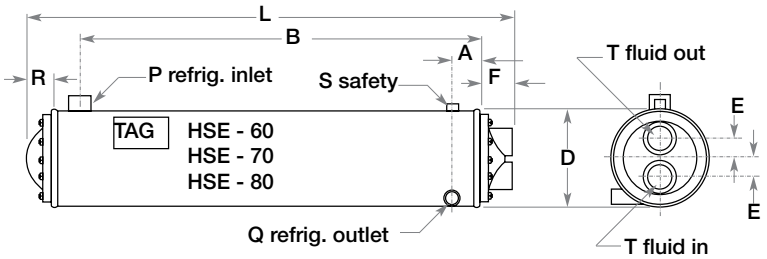
Design Features and Ratings

Models	Nominal HP		Dimensions							Connections (inches)			
	Clean	Fouled	D	L	A	B	E	F	R	P (ids)	Q (ids)	S (fpt)	T (fpt)
HSE-2*	3.3	2.1	5	27 1/8	2	22	1 5/8	1 3/4	1 3/8	5/8	1/2	3/8	3/4*
HSE-3*	4.3	3.7	6	27 1/8	2	22	1 7/8	1 3/4	1 3/8	7/8	5/8	3/8	3/8*
HSE-5	8.3	5.1	6 5/8	27 7/8	2 1/2	21 1/2	2	2 1/8	1 3/4	1 1/8	5/8	1/2	1
HSE-7	8.8	7.4	6 5/8	33 3/8	2 1/2	27 1/2	2	2 1/8	1 3/4	1 3/8	7/8	1/2	1 1/4
HSE-10	11.4	9.8	6 5/8	33 3/8	2 1/2	27 1/2	2	2 1/8	1 3/4	1 3/8	7/8	1/2	1 1/4
HSE-15	17.6	14.8	8 5/8	33 3/8	3	27	2 1/8	1 3/4	1 3/8	1 5/8	1 1/8	1/2	2
HSE-20A	33.0	20.2	8 5/8	51 1/8	3	45	2 1/8	1 3/4	1 3/8	1 5/8	1 1/8	1/2	2
HSE-25A	34.5	2.1	8 5/8	51 1/8	3	45	2 1/8	1 3/4	1 3/8	2 1/8	1 3/8	1/2	2
HSE-30A	41.7	29.0	10 3/4	53 3/8	3	45	2 1/8	2 1/8	1 3/4	2 1/8	1 3/8	1/2	2 1/2
HSE-40A	48.1	40.2	10 3/4	64 3/8	3	57	2 1/8	2 1/8	1 3/4	2 1/8	1 3/8	1/2	3
HSE-50A	63.2	52.4	10 3/4	64 3/8	3	57	2 1/8	2 1/8	1 3/4	2 5/8	1 5/8	1/2	3
HSE-60	82.5	60.3	12 3/4	66 3/4	3 1/2	56 1/2	2 3/4	4 1/4	2 3/8	2 5/8	1 5/8	1/2	4
HSE-70	95.1	70.3	12 3/4	66 3/4	3 1/2	56 1/2	2 3/4	4 1/4	2 3/8	3 1/8	2 1/8	1/2	4
HSE-80	110.1	82.2	12 3/4	66 3/4	3 1/2	56 1/2	2 3/4	4 1/4	2 3/8	3 1/8	2 1/8	1/2	4
HSE-100	151.7	99.0	12 3/4	109 5/8	3 1/2	92 1/2	5 1/16	—	6 5/8	3 1/8	2 1/8	3/4	5
HSE-125	162.8	124.2	12 3/4	109 5/8	3 1/2	92 1/2	5 1/16	—	6 5/8	3 5/8	2 1/8	3/4	5
HSE-150	231.7	162.6	14	113 3/4	5 3/8	90 5/8	10 7/8	—	8 7/8	3 5/8	2 5/8	3/4	6 flange
HSE-200	280.7	203.7	16	114	5 3/8	90 5/8	11 7/8	—	9	4 1/8	3 1/8	3/4	8 flange
HSE-250	393.1	265.1	18	116	5 3/8	90 5/8	12 7/8	—	10	4 1/8	3 1/8	3/4	8 flange
HSE-300	463.4	325.3	20	116	5 3/4	90 1/4	13 7/8	—	10	4 1/8	3 5/8	3/4	10 flange
HSE-350	529.6	344.0	20	116	5 3/4	90 1/4	13 7/8	—	10	5 1/8	3 5/8	3/4	10 flange
HSE-400	594.7	418.2	24	123	5 5/8	90 1/8	15 7/8	—	13 1/2	5 1/8	4 1/8	3/4	12 flange
HSE-500	805.4	510.7	24	123	5 7/8	90 1/8	15 7/8	—	13 1/2	6 1/8	4 1/8	3/4	12 flange

*HSE-2 and HSE-3 have ½" center fitting.
Clean ratings: As tested per ARI Standard 450-99 † Tubing has high performance extended surface
Fouled ratings: Include a additive fouling coefficient of 0.00025 as calculated per ARI Standard 450-99 *Constructed with three water fittings. Parallel outer fittings for nominal flow.
HSE-3 has 1⁄2" center fitting

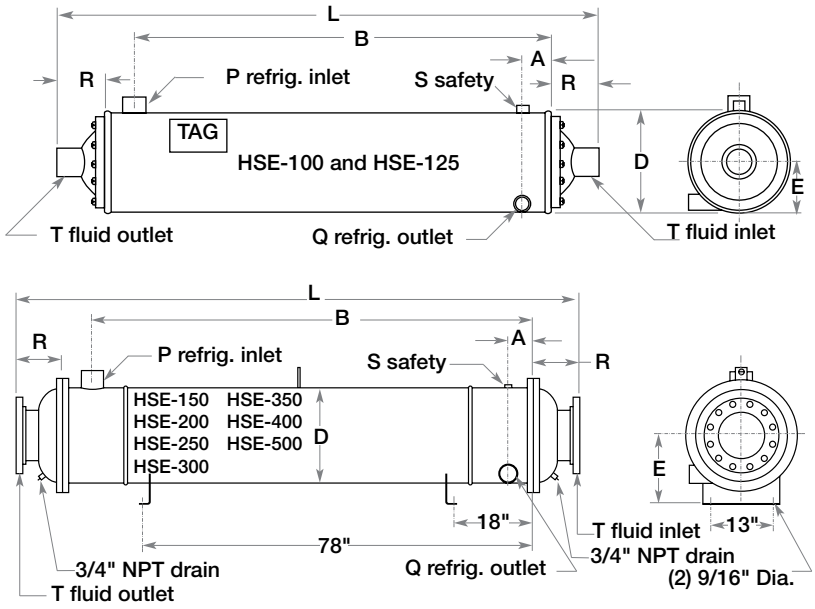






Models	Pumpdown Capacity (lbs. R22)	Waterflow (gpm)		Water Pressure Drop (psi)	Shipping Weight (lbs)	Working Pressure (psi)	
		Min.	Max.			Shell Side	Tube Side
HSE-2	12	1.3	13	2.0	36	400	150
HSE-3	16	1.3	13	6.7	48	400	150
HSE-5	20	2.7	27	3.1	66	400	150
HSE-7	24	2.4	23	6.8	96	400	150
HSE-10	23	3.4	34	6.6	89	400	150
HSE-15	40	4.7	47	8.3	123	400	150
HSE-20A	63	10.7	107	3.2	184	400	150
HSE-25A	61	12.1	121	4.6	193	400	150
HSE-30A	102	15	154	4.0	291	400	150
HSE-40A	127	15	154	6.5	348	400	150
HSE-50A	118	19	188	7.0	355	400	150
HSE-60	176	22	221	4.6	461	400	150
HSE-70	167	25	255	4.4	480	400	150
HSE-80	157	29	295	4.6	518	400	150
HSE-100	268	51	509	1.8	751	400	150
HSE-125	239	64	643	1.6	812	400	150
HSE-150	271	86	858	1.3	1300	400	150
HSE-200	356	114	1139	1.3	1600	400	150
HSE-250	449	143	1434	1.35	2000	400	150
HSE-300	601	170	1702	1.25	2600	350	150
HSE-350	550	194	1944	1.36	2800	350	150
HSE-400	914	228	2279	1.34	3300	350	150
HSE-500	791	286	2855	1.34	3700	350	150

- Horizontal, cleanable shell and tube design
- New high tech enhanced copper tube geometry
- Smaller footprint equals less space requirement
- Removable, epoxy coated, water plates to facilitate cleaning
- Epoxy coated tube sheets to prevent pitting caused by galvanic action
- Custom models available through 800 horsepower
- 23 HSE models, 2 thru 500 horsepower



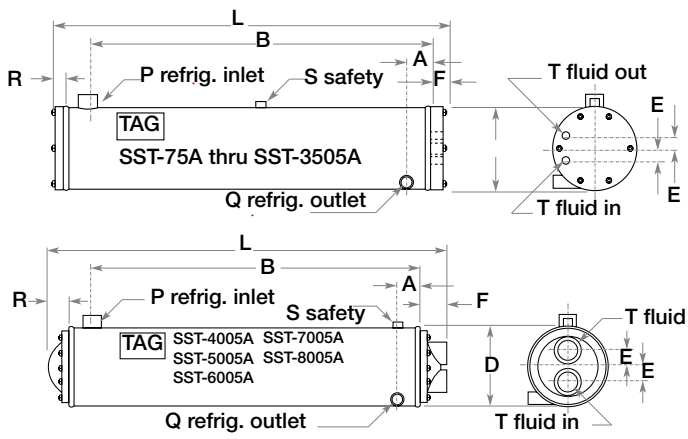
Shell-and-Tube Condensers

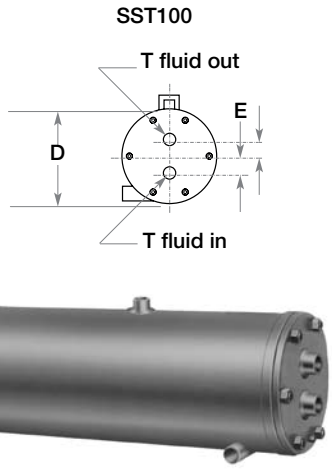
High pumpdown. General service applications

Design Features and Ratings

Models	Nominal hp		Dimensions (inches)							Connections (inches)			
	Clean	Fouled	D	L	A	B	E	F	R	P (ids)	Q (ids)	S (fpt)	T (fpt)
SST-75A	1.2	0.8	5	21 1/8	2	18	1 1/2	1 3/4	1 3/4	1/2	1/2	3/8	3/8
SST-100A	1.7	1.6	6	21 1/2	2 1/8	18	1 5/8	1 3/4	1 3/4	5/8	1/2	1/2	1/2
SST-200A	3.5	2.3	6 5/8	21 3/8	2 1/16	16	1	2	5/8	78	5/8	3/8	3/4
SST-300A	5.6	3.9	6 5/8	27 3/8	2 1/16	22	1	2	5/8	78	5/8	3/8	3/4
SST-500A	7.2	5.2	8 5/8	28	2 5/8	21 1/2	1 1/2	2 1/4	1	1 1/8	5/8	1/2	1 1/4
SST-750A	10.8	7.8	8 5/8	28 1/2	2 1/2	21 1/2	1 1/2	2 1/4	1	1 3/8	78	1/2	1 1/4
SST-755A	9.7	8.5	8 5/8	40 1/2	2 9/16	33 1/2	1 1/2	2 1/4	1	1 3/8	78	1/2	1 1/4
SST-1000A	16.0	10.3	8 5/8	46 1/2	2 9/16	39 1/2	2 1/8	2 1/4	1	1 3/8	78	1/2	1 1/4
SST-1500A	24.5	15.5	8 5/8	52	2 9/16	45 1/2	2 1/8	2 1/4	1	1 3/8	1 1/8	1/2	1 1/2
SST-1555A	24.5	15.5	10 3/4	53 1/4	3	44 3/4	2 1/2	3	1 3/8	1 5/8	1 1/8	1/2	1 1/2
SST-2005A	30.0	22.1	10 3/4	65 1/4	3	56 1/2	2 1/2	3	1 3/8	2 1/8	1 1/8	1/2	2
SST-2026A	30.0	22.1	12 3/4	65 1/4	3 1/4	56 1/2	2 1/2	3	1 3/8	2 1/8	1 1/8	1/2	2
SST-2505A	37.5	27.7	10 3/4	65 1/2	3	56 1/2	2 1/8	3 1/4	1 3/8	2 1/8	1 3/8	1/2	2 1/2
SST-2527A	37.5	27.7	12 3/4	65 1/2	3 1/4	56 1/2	2 1/8	3 1/4	1 3/8	2 1/8	1 3/8	1/2	2 1/2
SST-3005A	45.0	33.2	10 3/4	65 1/4	3	56 1/2	2 1/8	3 1/4	1 3/8	2 5/8	1 3/8	1/2	2 1/2
SST-3028A	45.0	33.2	12 3/4	65 1/2	3 1/4	56 1/2	2 1/8	3 1/4	1 3/8	2 5/8	1 3/8	1/2	2 1/2
SST-3505A	50.0	36.9	12 3/4	65 1/2	3 1/4	56 1/2	2 1/8	3 1/4	1 3/8	2 5/8	1 3/8	1/2	2 1/2
SST-4005A	55.0	40.6	14	66 7/8	3 1/4	56 1/2	2 3/4	4 1/4	2 3/8	2 5/8	1 3/8	1/2	3
SST-4505A	65.0	48.0	14	66 7/8	3 1/4	56 1/2	2 3/4	4 1/4	2 3/8	2 5/8	1 5/8	1/2	3
SST-5005A	70.0	51.7	14	66 7/8	3 1/4	56 1/2	2 3/4	4 1/4	2 3/8	2 5/8	1 5/8	1/2	4
SST-5505A	75.0	55.4	14	66 7/8	3 1/4	56	2 3/4	4 1/4	2 3/8	3 1/8	1 5/8	1/2	4
SST-6005A	82.5	60.9	14	66 7/8	3 1/4	56 3/4	2 3/4	4 1/4	2 3/8	3 1/8	2 1/8	1/2	4
SST-7005A	97.6	72.0	14	66 3/4	3 1/4	56	2 3/4	4 1/4	2 3/8	3 1/8	2 1/8	1/2	4
SST-8005A	110.1	81.2	14	66 3/4	3 1/4	56	2 3/4	4 1/4	2 3/8	3 1/8	2 1/8	1/2	4
SST-100-1408A	159.5	100.9	14	107 3/4	3 1/2	92	5 9/16	5 3/4	–	3 1/8	2 5/8	3/4	5
SST-120-1408A	196.4	124.2	14	107 3/4	3 1/2	92	5 9/16	5 3/4	–	3 5/8	2 5/8	3/4	5
SST-150-1410A	210.1	155.0	14	131 3/4	3 1/2	115 1/2	5 9/16	5 3/4	–	3 5/8	2 5/8	3/4	5
SST-200-1412A	268.6	222.1	14	159	4	139	5 9/16	7 1/2	–	4 1/8	3 1/8	3/4	6 flange

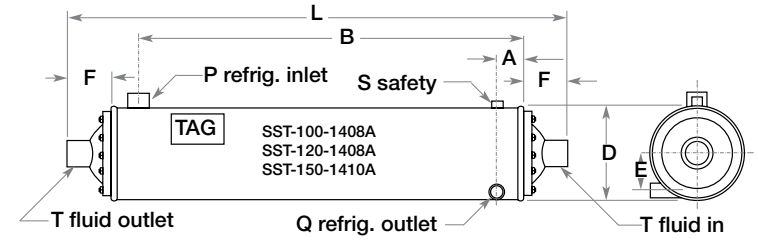
Clean ratings: As tested per ARI Standard 450-99 † Tubing has high performance extended surface
Fouled ratings: Include a additive fouling coefficient of 0.00025 as calculated per ARI Standard 450-99

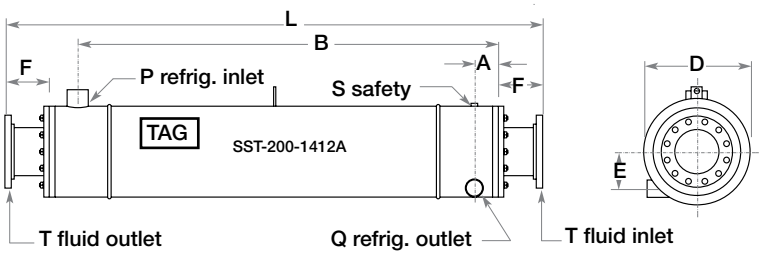




Models	Pumpdown Capacity (lbs. R22)	Waterflow (gpm)		Water Pressure Drop (psi)	Shipping Weight (lbs)	Working Pressure (psi)	
		Min.	Max.			Shell Side	Tube Side
SST-75A	9	0.7	2.3	3.4	28	450	150
SST-100A	17	0.7	4.7	2.7	39	450	150
SST-200A	15	2.0	18.0	1.7	52	450	150
SST-300A	21	2.0	16.0	1.7	71	450	150
SST-500A	35	2.7	26.8	3.5	90	450	150
SST-750A	32	4.0	30.0	2.4	109	450	150
SST-755A	53	3.4	20.0	3.3	144	450	150
SST-1000A	59	6.7	67.0	0.9	159	450	150
SST-1500A	65	8.0	70.0	1.5	180	450	150
SST-1555A	111	8.0	80.4	2.0	272	450	150
SST-2005A	138	8.0	80.4	3.5	313	450	150
SST-2026A	208	8.0	80.4	2.8	428	450	150
SST-2505A	135	10.1	100.5	4.0	345	450	150
SST-2527A	205	10.1	100.5	3.2	413	450	150
SST-3005A	128	12.1	100.1	4.0	350	450	150
SST-3028A	198	12.1	100.1	3.1	448	450	150
SST-3505A	199	13.4	111.2	5.5	400	450	150
SST-4005A	244	14.8	122.3	4.7	489	450	150
SST-4505A	237	17.4	144.6	4.3	519	450	150
SST-5005A	233	18.8	187.7	4.7	527	450	150
SST-5505A	230	20.1	201.1	4.8	521	450	150
SST-6005A	224	22.1	221.2	4.6	542	450	150
SST-7005A	214	26.1	261.4	4.7	548	450	150
SST-8005A	205	29.5	294.9	4.8	596	450	150
SST-100-1408A	342	52.3	522.8	4.7	1136	450	150
SST-120-1408A	316	64.3	643.4	4.7	1176	450	150
SST-150-1410A	416	56.3	563.0	6.7	1298	450	150
SST-200-1412A	474	64.3	643.4	4.8	1505	450	150

- Industry's most widely used and trusted model
- Heavy duty, horizontal, shell and tube design
- Nominal ratings and sizes to handle the most demanding requirements
- Removable, epoxy-coated, water plates to facilitate cleaning
- All copper, heavy wall, straight tube water channels
- Epoxy-coated tube sheets to prevent pitting caused by galvanic action
- Generous pumpdown capacities
- Custom models available through 800 horsepower
- 28 SST models, 3⁄4 through 200 horsepower

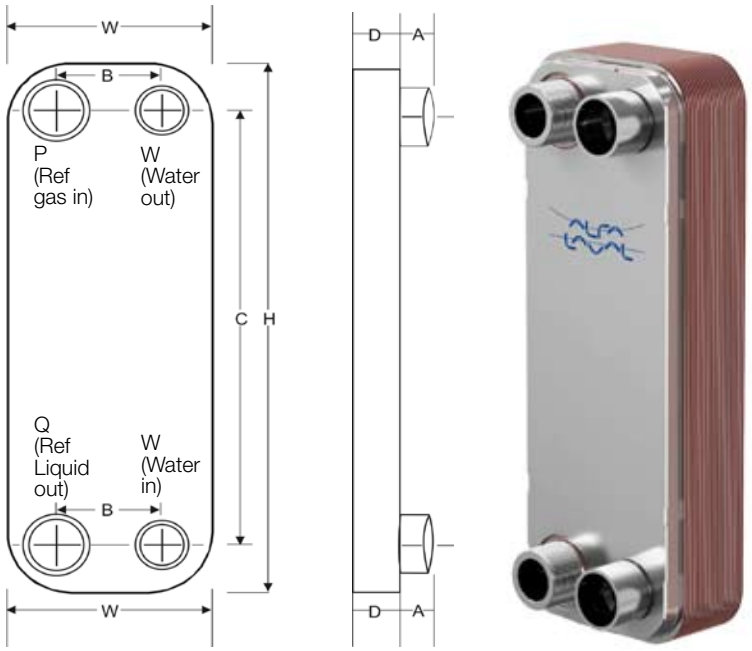




CND-CB Single-Circuit Condensers are copper-brazed. Four Frame Sizes

Model	Nominal HP*	Description	Part Number	Connections (ids)		Dry Wt. (lbs.)	Dimensions (in.)			
				Refrigerant Inlet/Outlet (P/Q)	Water Inlet/ Outlet (W)		"D"	"A"	"B"	"C"
	Frame Size 8.2" H x 3.1" W				**Working Pressure 500 PSIG**					
CND-03S-CB	0.3	CB14-12H S15	32870 5256 7	5/8"	5/8"	2.5	1.4	0.95	1.65	6.78
CND-05S-CB	0.4	CB14-14H S15	32870 0075 5	5/8"	5/8"	3.3	1.7	0.95	1.65	6.78
	Frame Size 12.2" H x 4.4" W				**Working Pressure 450 PSIG**					
CND-1M-CB	0.8	CB27-12H S15	32870 0075 4	5/8"	5/8"	6.1	1.5	0.95	1.97	9.84
CND-1.5M-CB	1.3	CB27-18H S33	32870 0071 2	7/8"	7/8"	7.8	2	0.95	1.97	9.84
CND-2M-CB	1.8	CB27-24H S33	32870 0071 3	7/8"	7/8"	9.6	2.6	0.95	1.97	9.84
CND-3M-CB	3.4	CB27-44H S52	32870 0056 2	1-1/8"	1-1/8"	15.4	4.5	0.95	1.97	9.84
CND-5M-CB	5	CB27-64H S52	32870 0056 4	1-1/8"	1-1/8"	21.2	6.4	0.95	1.97	9.84
	Frame Size 20.7" H x 4.4" W				**Working Pressure 450 PSIG**					
CND-4L-CB	4	CB52-20H S52	32870 7552 0	1-1/8"	1-1/8"	14.37	2.28	0.95	1.97	20.71
CND-6L-CB	6	CB52-30H S52	32870 7552 1	1-1/8"	1-1/8"	19.26	3.23	0.95	1.97	20.71
CND-7.5L-CB	7.5	CB52-40H S52	32870 7552 2	1-1/8"	1-1/8"	20.05	4.17	0.95	1.97	20.71
CND-10L-CB	9.5	CB52-50H S52	32870 7552 3	1-1/8"	1-1/8"	24.16	5.12	0.95	1.97	20.71
CND-15L-CB	14	CB52-80H S52	32870 7552 5	1-1/8"	1-1/8"	43.77	7.95	0.95	1.97	20.71
	Frame Size 24.3" H x 7.6" W				**Working Pressure 435 PSIG**					
CND-10XL-CB	10	CB76-20H S89	32870 0095 7	2-1/8"	2-1/8"	36.2	2.61	1.58	3.62	20.43
CND-15XL-CB	15	CB76-30H S89	32870 0095 8	2-1/8"	2-1/8"	45.9	3.72	1.58	3.62	20.43
CND-20XL-CB	20	CB76-40H S89	32870 0095 9	2-1/8"	2-1/8"	55.6	4.83	1.58	3.62	20.43
CND-25XL-CB	27	CB76-50H S89	32870 0096 0	2-1/8"	2-1/8"	65.3	5.94	1.58	3.62	20.43
CND-30XL-CB	33	CB76-60H S89	32870 5095 2	2-1/8"	2-1/8"	75	7.05	1.58	3.62	20.43
CND-45XL-CB	46	CB76-80H S89	32870 5095 3	2-1/8"	2-1/8"	94.4	9.27	1.58	3.62	20.43
CND-60XL-CB	58	CB76-100H S89	32870 5095 4	2-1/8"	2-1/8"	113.8	11.49	1.58	3.62	20.43

*Nominal HP - 15K BTUH per HP, 195°F EGT, 105°F SCT R22, 5°F Subcooling, 85°F EWT, 95°F LWT
FF=0.0001 Ft²/hr,°F/BTU Water pressure drop less than 10 Psig
For performance with other refrigerants and/or fluids other than water, please contact Customer Service.



CND-AC - AlfaChill Copper-Brazed Plate Heat Exchangers - High Efficiency Single-Circuit Condensers

CND-AC Single-Circuit Condensers are copper-brazed and feature a built-in distributor. Three Frame Sizes

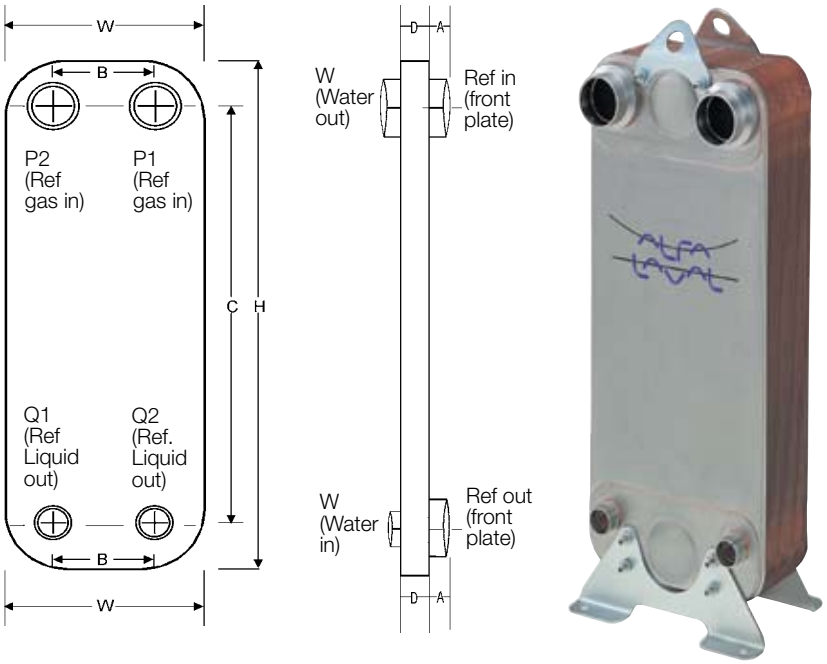
Model	Nominal HP*	Description	Part Number	Connections (ids)		Dry Wt. (lbs.)	Dimensions (in.)			
				Refrigerant Inlet/Outlet (P/Q)	Water Inlet/ Outlet (W)		"D"	"A"	"B"	"C"
	Frame Size 12.8" H x 3.7" W				**Working Pressure 450 PSIG**					
CND-1M-AC	1	AC-30-10EQ R52	32870 6134 6	7/8", 3/8"	7/8"	4.2	0.9	0.95	1.54	10.56
CND-2M-AC	2.2	AC-30-20EQ R52	32870 6134 7	7/8", 3/8"	7/8"	6.2	1.5	0.95	1.54	10.56
CND-3M-AC	3.3	AC-30-30EQ S09	32870 6134 8	7/8", 1/2"	7/8"	8.2	2.1	0.95	1.54	10.56
CND-5M-AC	5.6	AC-30-50EQ S21	32870 6135 0	1-1/8", 5/8"	1-1/8"	12.2	3.3	0.95	1.54	10.56
CND-7.5M-AC	7.6	AC-30-70EQ S21	32870 6135 2	1-1/8", 5/8"	1-1/8"	16.2	4.5	0.95	1.54	10.56
CND-10M-AC	10.4	AC-30-100EQ S21	32870 6135 4	1-1/8", 5/8"	1-1/8"	22.2	6.3	0.95	1.54	10.56
	Frame Size 20.7" H x 4.4" W				**Working Pressure 450 PSIG**					
CND-2L-AC	2	AC-70-14MY S21	32870 6720 4	1-1/8", 5/8"	1-1/8"	8.2	2.6	0.95	1.97	18.35
CND-3L-AC	3	AC-70-18MY S21	32870 6720 6	1-1/8", 5/8"	1-1/8"	9.7	3	0.95	1.97	18.35
CND-5L-AC	5	AC-70-26MY S21	32870 6720 8	1-1/8", 5/8"	1-1/8"	12.9	3.7	0.95	1.97	18.35
CND-8L-AC	9	AC-70-42MY S24	32870 6721 0	1-3/8", 5/8"	1-1/8"	19.3	4.2	0.95	1.97	18.35
CND-10L-AC	11	AC-70-50MY S24	32870 6721 1	1-3/8", 5/8"	1-1/8"	22.5	5.1	0.95	1.97	18.35
CND-12L-AC	13	AC-70-58MY S24	32870 6721 2	1-3/8", 5/8"	1-1/8"	25.7	6.6	0.95	1.97	18.35
CND-15L-AC	15	AC-70-68MY S25	32870 6721 4	1-3/8", 5/8"	1-3/8"	29.7	7.5	0.95	1.97	18.35
CND-20L-AC	20	AC-70-90MY R49	32870 6721 6	1-3/8", 7/8"	1-3/8"	38.5	9.5	0.95	1.97	18.35
CND-25L-AC	27	AC-70-118MY R49	32870 6721 8	1-3/8", 7/8"	1-3/8"	49.6	12	0.95	1.97	18.35
	Frame Size 24.3" H x 7.6" W				**Working Pressure 450 PSIG**					
CND-10XL-AC	11	AC-120-30EQ S46	32870 6145 1	2-1/8", 7/8"	2-1/8"	45.9	3.3	1.58, 0.95	3.62	20.43
CND-15XL-AC	15	AC-120-40EQ S46	32881 0214 0	2-1/8", 7/8"	2-1/8"	55.6	4.2	1.58, 0.95	3.62	20.43
CND-20XL-AC	18	AC-120-46EQ S46	32870 6145 2	2-1/8", 1-1/8"	2-1/8"	61.4	6.1	1.58, 0.95	3.62	20.43
CND-25XL-AC	23	AC-120-60EQ S62	32870 6145 3	2-1/8", 1-1/8"	2-1/8"	75	6.1	1.58, 0.95	3.62	20.43
CND-30XL-AC	29	AC-120-76EQ S62	32870 6145 4	2-1/8", 1-1/8"	2-1/8"	90.5	7.6	1.58, 0.95	3.62	20.43
CND-35XL-AC	35	AC-120-90EQ S62	32870 6145 5	2-1/8", 1-1/8"	2-1/8"	104.1	8.9	1.58, 0.95	3.62	20.43
CND-40XL-AC	40	AC-120-106EQ S62	32870 6145 6	2-1/8", 1-1/8"	2-1/8"	119.6	10.4	1.58, 0.95	3.62	20.43
CND-45XL-AC	46	AC-120-124EQ S62	32870 6145 7	2-1/8", 1-1/8"	2-1/8"	137.1	12.1	1.58, 0.95	3.62	20.43
CND-55XL-AC	56	AC-120-150EQ S76	32870 6145 8	2-1/8", 1-3/8"	2-1/8"	162.3	14.6	1.58, 0.95	3.62	20.43
CND-65XL-AC	66	AC-120-180EQ S76	32870 5589 6	2-1/8", 1-3/8"	2-1/8"	191.4	17.4	1.58, 0.95	3.62	20.43
	Frame Size 33.5" H x 12.7" W				**Working Pressure 450 PSIG**					
CND-50XXL-AC	47.3	AC-250-60EQ Y51	32870 6199 0	2-5/8", 1-1/8"	3" Victaulic	127.9	7.2	2.05, 1.18	4.13	23.58
CND-65XXL-AC	64.1	AC-250-80EQ Y55	32870 6199 1	2-5/8", 1-3/8"	3" Victaulic	163.1	9.4	2.05, 1.18	4.13	23.58
CND-80XXL-AC	80.9	AC-250-100EQ Y55	32870 6199 2	2-5/8", 1-3/8"	3" Victaulic	198.3	11.6	2.05, 1.18	4.13	23.58
CND-100XXL-AC	96	AC-250-120EQ Y57	32870 6199 3	2-5/8", 1-3/8"	3" Victaulic	233.5	13.9	2.05, 1.18	4.13	23.58

*Nominal HP - 15K BTUH per HP, 195°F EGT, 105°F SCT R22, 5°F Subcooling, 85°F EWT, 95°F LWT
FF=0.0001 Ft²/hr,°F/BTU Water pressure drop less than 10 Psig
For performance with other refrigerants and/or fluids other than water, please contact Customer Service.

CND-AC2 Two Circuit Condensers are copper-brazed and feature a built-in distributor. Three Frame Sizes

Model	Nominal HP*	Description	Part Number	Connections (ids)		Dry Wt. (lbs.)	Dimensions (in.)			
				Front Plate Ref. In/ Out P2,P1/ Q1,Q2**	Rear Plate Water In/ Out W		"D"	"A" P, Q, W	"B" front	"C" front/rear
	Frame Size 15.35" H x 7.67" W					Working Pressure 450 PSIG				
CND-7MW-AC2	6.5	AC-80-30DQ Q18	32870 6758 0	1-1/8",5/8"	1-3/8"	19.3	3.2	1.18, 0.95, 1.58	4.72	11.65/12.16
CND-9MW-AC2	9.3	AC-80-42DQ Q18	32870 6508 5	1-1/8",5/8"	1-3/8"	25.4	4.3	1.18, 0.95, 1.58	4.72	11.65/12.16
CND-10MW-AC2	12	AC-80-54DQ Q18	32870 6508 7	1-1/8",5/8"	1-3/8"	31.5	5.5	1.18, 0.95, 1.58	4.72	11.65/12.16
CND-15MW-AC2	15	AC-80-66DQ Q18	32870 6509 5	1-1/8",5/8"	1-3/8"	37.7	6.6	1.18, 0.95, 1.58	4.72	11.65/12.16
CND-20MW-AC2	18.5	AC-80-82DQ Q18	32870 6508 6	1-1/8",5/8"	1-3/8"	45.8	8.1	1.18, 0.95, 1.58	4.72	11.65/12.16
CND-22MW-AC2	22	AC-80-98DQ Q19	32870 6758 1	1-3/8", 7/8"	1-3/8"	54	9.6	1.18, 0.95, 1.58	4.72	11.65/12.16
CND-25MW-AC2	25	AC-80-118DQ Q19	32870 6758 2	1-3/8", 7/8"	1-3/8"	64.2	11.5	1.18, 0.95, 1.58	4.72	11.65/12.16
	Frame Size 19.2" H x 9.7" W					Working Pressure 450 PSIG				
CND-25LW-AC2	24	AC-130-70DQ Y97	32870 6209 7	1-5/8", 7/8"	2-1/2" Victaulic	73.1	6.5	1.18, 0.95, 1.89	6.2	15.42, 15.65
CND-30LW-AC2	28	AC-130-82DQ Y97	32870 6209 8	1-5/8", 7/8"	2-1/2" Victaulic	83.3	7.5	1.18, 0.95, 1.89	6.2	15.42, 15.65
CND-35LW-AC2	35	AC-130-102DQ Y97	32870 6209 9	1-5/8", 7/8"	2-1/2" Victaulic	100	9.3	1.18, 0.95, 1.89	6.2	15.42, 15.65
CND-40LW-AC2	42	AC-130-122DQ Y74	32870 6210 0	2-1/8", 1-1/8"	2-1/2" Victaulic	116.8	11	1.98, 0.95, 1.89	6.2	15.42, 15.65
CND-50LW-AC2	48	AC-130-142DQ Y74	32870 6210 1	2-1/8", 1-1/8"	2-1/2" Victaulic	134.4	12.9	1.98, 0.95, 1.89	6.2	15.42, 15.65
CND-55LW-AC2	54	AC-130-162DQ Y74	32870 6210 2	2-1/8", 1-1/8"	2-1/2" Victaulic	150.4	14.6	1.98, 0.95, 1.89	6.2	15.42, 15.65
CND-60LW-AC2	60	AC-130-182DQ Y74	32870 6210 3	2-1/8", 1-1/8"	2-1/2" Victaulic	167,2	16.3	1.98, 0.95, 1.89	6.2	15.42, 15.65
CND-70LW-AC2	68	AC-130-202DQ Y74	32870 6210 4	2-1/8", 1-1/8"	2-1/2" Victaulic	184	18.1	1.98, 0.95, 1.89	6.2	15.42, 15.65
	Frame Size 33.5" H x 12.7" W					Working Pressure 450 PSIG				
CND-80XXL-AC2	80	AC-250-102DQ Y77	32870 6199 4	2-5/8", 1-1/8"	3" Victaulic	201.8	11.9	2.05, 1.18, 2.05	6.31	23.58, 24.72
CND-100XXL-AC2	97	AC-250-122DQ Y77	32870 6199 5	2-5/8", 1-1/8"	3" Victaulic	237	14.1	2.05, 1.18, 2.05	6.31	23.58, 24.73
CND-110XXL-AC2	110	AC-250-142DQ Y81	32870 5600 9	2-5/8", 1-3/8"	3" Victaulic	279	16.32	2.05, 1.18, 2.05	6.31	23.58, 24.74
CND-120XXL-AC2	120	AC-250-162DQ Y81	32870 5583 3	2-5/8", 1-3/8"	3" Victaulic	315.1	18.54	2.05, 1.18, 2.05	6.31	23.58, 24.75
CND-130XXL-AC2	133	AC-250-182DQ Y81	32870 5601 1	2-5/8", 1-3/8"	3" Victaulic	351.3	20.76	2.05, 1.18, 2.05	6.31	23.58, 24.76
CND-145XXL-AC2	143	AC-250-202DQ Y81	32870 0073 0	2-5/8", 1-3/8"	3" Victaulic	387.4	22.98	2.05, 1.18, 2.05	6.31	23.58, 24.76

*Nominal HP - 15K BTUH per HP, 195°F EGT, 105°F SCT R22, 5°F Subcooling, 85°F EWT, 95°F LWT
FF=0.0001 Ft²/hr,°F/BTU Water pressure drop less than 10 Psig
For performance with other refrigerants and/or fluids other than water, please contact Customer Service.

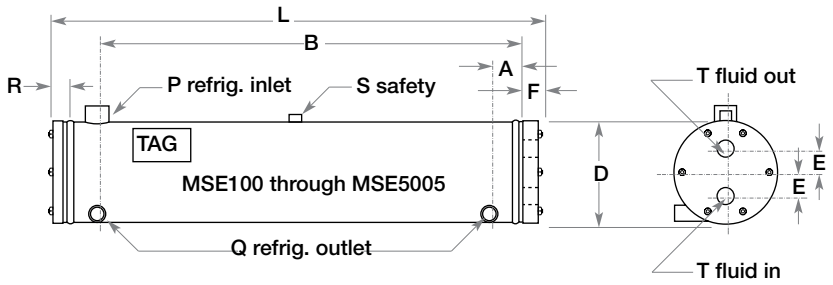


Cupronickel Marine Service Condensers

Design Features and Ratings

Models	Nominal hp		Dimensions (inches)							Connections (inches)			
	Clean	Fouled	D	L	A	B	E	F	R	P (ids)	Q (ids)	S (fpt)	T (fpt)
MSE-100	1.3	1.0	6	21 5/8	1 5/8	16 3/8	1 7/8	2	1 5/8	5/8	1/2	3/8	1/2
MSE-200	2.6	2.0	6	21 5/8	1 5/8	16 3/8	1 7/8	2	1 5/8	7/8	5/8	3/8	1/2
MSE-300	4.6	3.3	6 5/8	21 3/4	2	16	1	2	1 3/4	7/8	5/8	3/8	3/4
MSE-500	6.0	4.6	6 5/8	21 3/4	2 1/8	16	1	2	1 3/4	1 1/8	5/8	3/8	3/4
MSE-750	9.5	6.7	6 5/8	34 1/4	2	28	2	2 1/4	2	1 3/8	7/8	3/8	1 1/4
MSE-1005	11.7	9.5	6 5/8	40 1/4	2	33	2	2 1/4	2	1 3/8	7/8	3/8	1 1/4
MSE-1500	19.9	15.8	8 5/8	40 1/4	2 1/2	33 1/2	2 1/8	2	2 1/4	1 5/8	1 1/8	1/2	2
MSE-2005	26.7	20.2	8 5/8	64 1/2	3	57	2 1/8	2 1/4	2 1/4	2 1/8	1 1/8	1/2	2
MSE-2505	33.1	25.9	8 5/8	64 1/2	3	57	2 1/8	2 1/4	2 1/4	2 1/8	1 3/8	1/2	2
MSE-3006	39.7	31.6	8 5/8	76 1/2	3	69	2	2 1/4	2 1/4	2 5/8	1 3/8	1/2	2 1/2
MSE-3305	44.4	32.6	10 3/4	65	3	56 1/2	2 1/8	2 3/4	2 1/4	2 5/8	1 3/8	1/2	2 1/2
MSE-4005	45.8	33.6	10 3/4	65	3	56 1/2	2 1/8	2 3/4	2 1/4	2 5/8	1 5/8	1/2	2 1/2
MSE-4505	57.7	44.2	10 3/4	77	3	68 1/2	2 1/8	2 3/4	2 1/4	2 5/8	1 5/8	1/2	2 1/2
MSE-5005	59.6	45.7	10 3/4	77	3	68 1/2	2 1/8	2 3/4	2 1/4	2 5/8	1 5/8	1/2	2 1/2
MSE-6505	71.0	58.2	12 3/4	78 3/4	3 1/2	68 1/2	2 3/4	4 1/4	2 3/8	3 1/8	2 1/8	1/2	4
MSE-7505	84.8	66.1	12 3/4	78 3/4	3 1/2	68 1/2	2 3/4	4 1/4	2 3/8	3 1/8	2 1/8	1/2	4
MSE-100HP	132.2	99.8	12 3/4	133 1/2	3 1/2	116 1/2	—	6 5/8	6 5/8	3 1/8	2 1/8	1/2	5 mpt
MSE-120HP	137.2	103.6	12 3/4	133 1/2	3 1/2	115 3/4	—	6 5/8	6 5/8	3 5/8	2 1/8	1/2	5 mpt

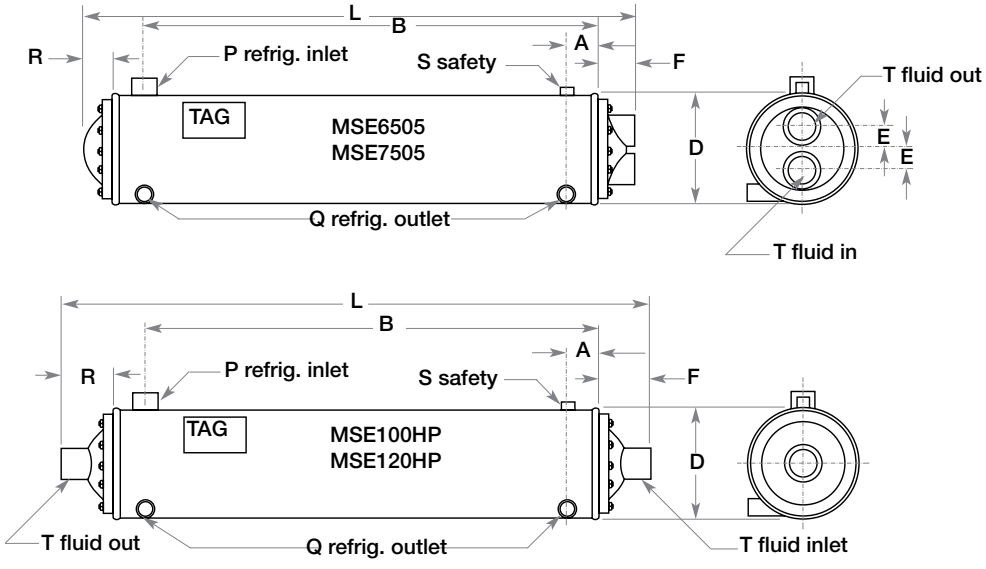
†Tubing has high performance extended surface
Zinc plates are available for all MSE models. Indicate by adding "Z"after model number (MSE-750Z)
Clean ratings:As tested per ARI standard 450-99.
Fouled ratings: Include fouling factor coefficient of 0.00025 as calculated per ARI standard 450-99.



Models	Pumpdown Capacity (lbs. R22)	Waterflow (gpm)		Water Pressure Drop (psi)	Shipping Weight (lbs)	Working Pressure (psi)	
		Min.	Max.			Shell Side	Tube Side
MSE-100	14	0.74	7.38	3.0	35	400	150
MSE-200	12	1.48	14.77	3.0	49	400	150
MSE-300	14	1.66	16.61	6.9	58	400	150
MSE-500	15	2.22	22.15	7.6	77	400	150
MSE-750	24	4.43	44.30	2.3	107	400	150
MSE-1005	29	4.43	44.30	5.4	121	400	150
MSE-1500	49	7.38	73.84	5.4	181	400	150
MSE-2005	86	13.29	123.90	2.5	254	400	150
MSE-2505	79	16.24	162.44	2.9	265	400	150
MSE-3006	99	14.77	147.67	5.7	286	400	150
MSE-3305	133	20.67	206.74	2.8	338	400	150
MSE-4005	129	22.15	221.51	2.5	343	400	150
MSE-4505	160	20.67	206.74	5.7	388	400	150
MSE-5005	155	22.15	221.51	5.0	394	400	150
MSE-6505	225	28.80	287.96	3.1	517	400	125
MSE-7505	215	32.49	324.88	3.2	533	400	125
MSE-100HP	358	64.98	500.00	1.3	1133	400	125
MSE-120HP	344	70.88	708.82	1.1	1158	400	125

† Tubing has high performance extended surface
Zinc plates are available for all MSE models. Indicate by adding "Z" after model number (MSE-750Z)

- Marine service
- Heavy duty, horizontal, shell-and-tube design
- Nominal ratings and sizes to handle the most demanding requirements
- Solid cupronickel tube sheets to prevent pitting caused by galvanic action
- Removable, solid cupronickel or solid brass water plates to facilitate cleaning
- All 90/10 cupronickel, heavy wall, straight tube water channels
- Sacrificial zinc anode available upon request
- Generous pumpdown capacities
- Dual refrigerant outlets, provides liquid seal in heavy seas
- Custom designs to 500 horsepower on request
- 18 MSE stock models, 1 to 125 horsepower



Shell-and-Tube Condensers

high pumpdown, high water pressure application

Design Features and Ratings

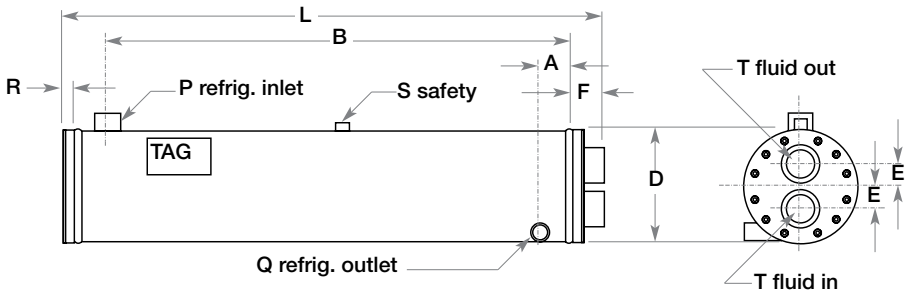
Models	Nominal hp		Dimensions (inches)							Connections (inches)			
	Clean	Fouled	D	L	A	B	E	F	R	P (ids)	Q (ids)	S (fpt)	T (fpt)
HP-10	13	11	8 5/8	40 5/8	3 1/4	32 5/8	1 3/8	2 1/2	1 3/8	1 3/8	7/8	1/2	1 1/2*
HP-15	16 1/2	14 1/2	8 5/8	52 5/8	3 1/4	44 5/8	1 5/8	2 1/2	1 3/8	1 3/8	7/8	1/2	1 1/2
HP-20	23	20	8 5/8	64 5/8	3 1/4	56 5/8	1 5/8	2 1/2	1 3/8	1 3/8	7/8	1/2	1 1/2
HP-30A	39	33	10 3/4	77	3 1/2	68 5/8	2 3/8	2 1/2	2 3/8	2 5/8	1 5/8	1/2	2
HP-40A	51	44	10 3/4	77	3 1/2	68 5/8	2 3/8	2 1/2	2 3/8	2 5/8	1 5/8	1/2	2
HP-50A	64	55	12 3/4	77 5/8	3 1/2	68 5/8	2 5/8	3 1/8	2 3/8	2 5/8	1 5/8	1/2	3
HP-60A	74	63	12 3/4	77 5/8	3 1/2	68 5/8	2 5/8	3 1/8	2 3/8	2 5/8	1 5/8	1/2	3
HP-80A	100	85	14	77 3/8	3 1/2	68 5/8	2 7/8	2 3/4	2 1/2	3 1/8	2 1/8	1/2	4

Clean ratings: As tested per ARI Standard 450-99 *Centerline on fittings is located 13⁄8" to the left of centerline on vessel
Fouled ratings: Include a additive fouling coefficient of 0.00025 as calculated per ARI Standard 450-99
† Tubing has high performance extended surface

Models	Pumpdown Capacity (lbs. R22)	Waterflow (gpm)		Water Pressure Drop (psi)	Shipping Weight (lbs)	Working Pressure (psi)	
		Min.	Max.			Shell Side	Tube Side
HP-10	51	4	40	6.3	125	350	300
HP-15	68	8	80	2.6	145	350	300
HP-20	86	8	80	4.0	205	350	300
HP-30A	160	12	121	4.4	375	350	300
HP-40A	148	16	161	4.4	435	350	300
HP-50A	217	20	201	4.4	555	350	300
HP-60A	213	21	214	5.5	575	350	300
HP-80A	243	29	295	5.2	755	350	300

400 psi.shell side on request

- Ideal for high-rise building applications
- High Performance, horizontal, shell and tube design
- High Pressure, specially designed removable water plates and gaskets provide for a 300 psi waterside working pressure
- High Pumpdown, for containment of greater refrigerant charges
- New high tech enhanced heat transfer tube surface
- Epoxy-coated tube sheets and water plates to prevent pitting caused by galvanic action
- 8 HP models, 10 through 80 horsepower



Shell-and-Tube condensers

for high sulfur content water and corrosive fluid applications

Design Features and Ratings

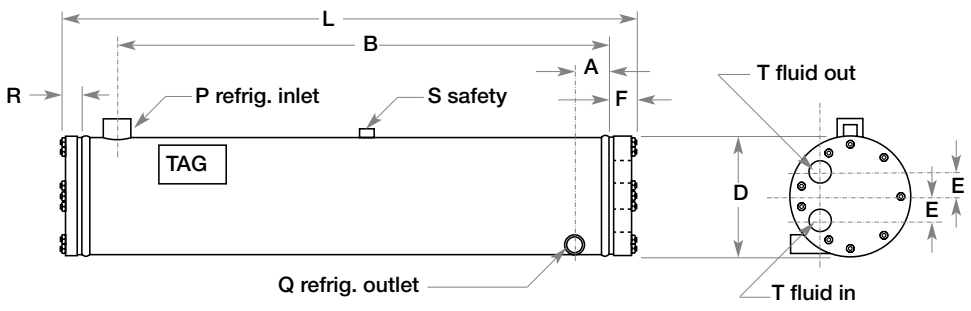
Models	Nominal hp		Dimensions (inches)							Connections (inches)			
	Clean	Fouled	D	L	A	B	E	F	R	P (ids)	Q (ids)	S (fpt)	T (fpt)
CA-050	5 1/2	5	6 5/8	39 1/4	4	32	1 1/8	2 3/8	7/8	1 1/8	7/8	1/2	3/4
CA-075	7 1/2	7	8 5/8	39 5/8	4	32	1 1/2	2 5/8	1	1 3/8	7/8	1/2	1 1/4
CA-100	10	9	8 5/8	39 5/8	4	32	1 1/2	2 5/8	1	1 3/8	7/8	1/2	1 1/4
CA-150	15	14	10 3/4	40 1/8	4	32	2 1/2	3 1/8	7/8	1 5/8	1 1/8	1/2	1 1/2
CA-200	20	18	8 5/8	76 1/8	4	68	2 1/8	3 1/8	1	2 1/8	1 1/8	1/2	1 1/2
CA-300	29	27	10 3/4	76 3/4	4	68	2 1/2	3 3/4	7/8	2 5/8	1 3/8	1/2	2 1/2

Clean ratings:As tested per ARI Standard 450-87
Fouled ratings: Include a additive fouling coefficient of 0.00025 as calculated per ARI Standard 450-87 (.0005 total)
† Tubing has high performance extended surface

Models	Pumpdown Capacity (lbs)	Waterflow (gpm)		Water Pressure Drop (psi)	Shipping Weight (lbs)	Working Pressure (psi)	
		Min.	Max.			Shell Side	Tube Side
CA-050	23	2.2	32.8	7.9	115	350	150
CA-075	44	2.9	43.7	9.2	175	350	150
CA-100	40	3.6	54.7	10.0	190	350	150
CA-150	63	5.5	82.0	10.0	265	350	150
CA-200	83	7.3	109.3	6.9	305	350	150
CA-300	131	10.9	164.0	6.9	450	350	150

400 psi.shell side on request

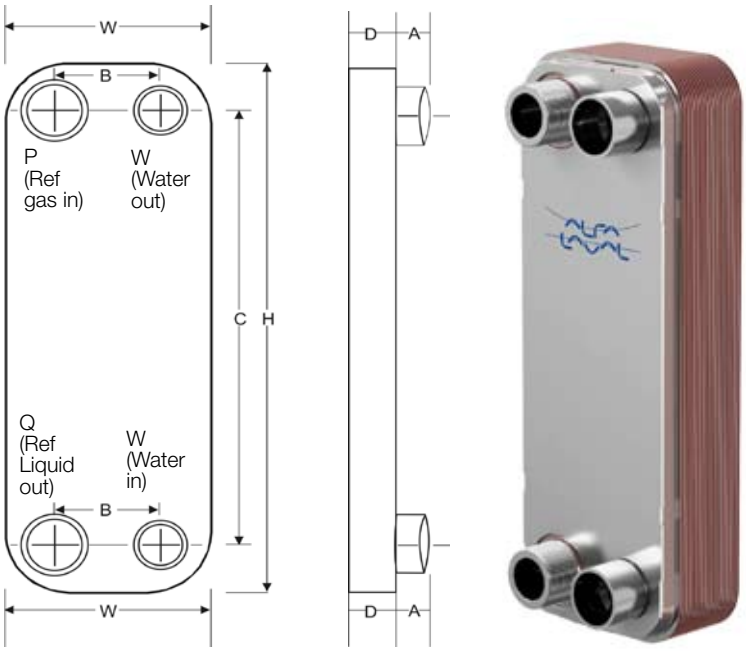
- 316 stainless steel tubes
- 304 stainless tubesheets, water plates and waterside fittings for use with corrosive fluids. Especially suitable for pulp and paper mill applications
- Heavy duty, horizontal, shell-and-tube design
- Rolled tube to tube sheet joints
- Removable water plates to facilitate cleaning
- 6 CA models, 5 through 30 horsepower



The AlfaNova is a copper-free, 100-percent stainless steel, corrosion-resistant design. Three Frame Sizes

Model	Nominal HP*	Description	Part Number	Connections (ids)		Dry Wt. (lbs.)	Dimensions (in.)			
				Ref. In/Out P/Q	Water In/ Out W		"D"	"A"	"B"	"C"
	Frame Size 12.2" H x 4.4" W				**Working Pressure 435 PSIG**					
CND-2M-AN	2	AN27-20H S52	3287000880	1-1/8"	1-1/8"	8.5	2.34	0.95	1.97	9.4
CND-3M-AN	3.2	AN27-30H S52	3287000882	1-1/8"	1-1/8"	11.36	3.29	0.95	1.97	9.4
CND-5M-AN	5.5	AN27-50H S52	3287000884	1-1/8"	1-1/8"	17.09	5.19	0.95	1.97	9.4
CND-7M-AN	6.7	AN27-60H S53	3287000998	1-1/8"	1-1/8"	19.96	6.15	0.95	1.97	9.4
CND-8M-AN	7.9	AN27-70H S52	3287000999	1-1/8"	1-1/8"	22.83	7.10	0.95	1.97	9.4
CND-10M-AN	9	AN27-80H S52	3287001000	1-1/8"	1-1/8"	25.69	8.05	0.95	1.97	9.4
	Frame Size 20.7" H x 4.4" W				**Working Pressure 435 PSIG**					
CND-6L-AN	6.4	AN52-20H S52	3287000902	1-1/8"	1-1/8"	14.22	2.35	0.95	1.97	18.35
CND-10L-AN	10.1	AN52-30H S52	3287000904	1-1/8"	1-1/8"	18.98	3.32	0.95	1.97	18.35
CND-14L-AN	13.8	AN52-40H S52	3287000906	1-1/8"	1-1/8"	23.74	4.3	0.95	1.97	18.35
CND-15L-AN	14.6	AN52-50H S52	3287000907	1-1/8"	1-1/8"	28.51	5.2	0.95	1.97	18.35
	Frame Size 24.4" H x 7.5" W				**Working Pressure 450 PSIG**					
CND-15XL-AN	16.3	AN76-30H W16	3287055757	2" weld	2" weld	51.8	3.7	1.57	3.62	20.43
CND-20XL-AN	22.1	AN76-40H W16	3287055026	2" weld	2" weld	63.09	4.83	1.57	3.62	20.43
CND-30XL-AN	28.2	AN76-50H W16	3287000910	2" weld	2" weld	73.83	5.96	1.57	3.62	20.43
CND-35XL-AN	34.2	AN76-60H W16	3287000911	2" weld	2" weld	84.52	7.09	1.57	3.62	20.43
CND-40XL-AN	40.2	AN76-70H W16	3287000912	2" weld	2" weld	95.22	8.22	1.57	3.62	20.43
CND-45XL-AN	46.2	AN76-80H W16	3287000853	2" weld	2" weld	95.22	9.35	1.57	3.62	20.43
CND-50XL-AN	52.2	AN76-90H W16	3287000854	2" weld	2" weld	95.22	10.48	1.57	3.62	20.43
CND-60XL-AN	58.2	AN76-100H W16	3287000855	2" weld	2" weld	95.22	11.61	1.57	3.62	20.43

*Nominal HP - 15K BTUH per HP, 195°F EGT, 105°F SCT R22, 5°F Subcooling, 85°F EWT, 95°F LWT
FF=0.0001 Ft²/hr,°F/BTU Water pressure drop less than 10 Psig
For performance with other refrigerants and/or fluids other than water, please contact Customer Service.



Vertical Super Efficient Condensers

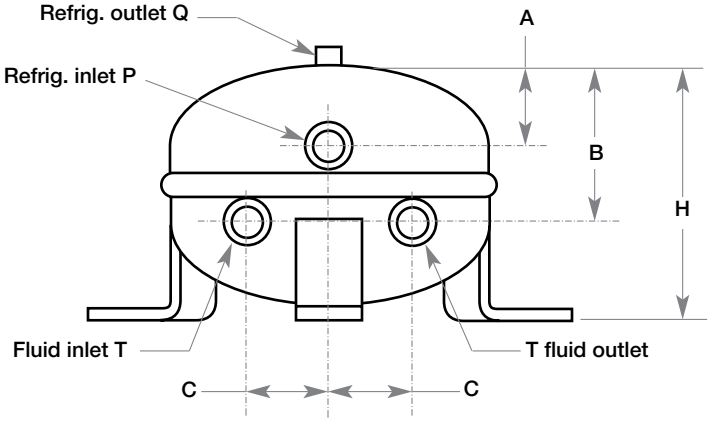
compact design, generous pumpdown. Small package applications

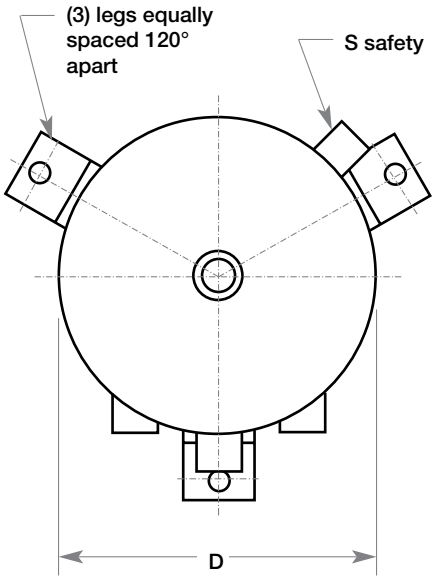
Design Features and Ratings

Models	Nominal hp		Dimensions (inches)					Connections (inches)				
	Clean	Fouled	D	H	A	B	C	P (ids)	Q (ids)	S (fpt)	W (fpt)	T (fpt)
VSE 1/2	–	1/2	6	5	1 1/4	3 1/4	1 1/2	1/2	1/2	3/8	–	1/2
VSE 1	–	1	6	5 1/2	1 1/2	3 5/8	1 1/2	5/8	1/2	3/8	–	1/2
VSE 1 1/2	–	1 1/2	8 5/8	6 3/8	2	4 3/8	2	5/8	1/2	3/8	–	3/4
VSE 2	–	2	9 3/4	7 1/4	2 1/8	4 3/4	2	5/8	5/8	1/2	–	3/4
VSE 3	3 1/2	3	6 5/8	13	1 5/8	1 5/8	11 1/8	78	5/8	3/8	3/4	–
VSE 5	6	5	8 5/8	13 1/2	1 3/4	4 5/8	11 1/2	1 1/8	5/8	1/2	1	–
VSE 7	9	8	10 3/4	16 1/4	2 5/8	6 1/2	13 3/8	1 3/8	7/8	1/2	1 1/4	–
VSE 10	13	11	16	18 3/4	4 1/2	9	13 3/4	1 3/8	78	1/2	1 1/4	–
VSE 10T	12	10	8 5/8	19 1/2	1 3/4	4 5/8	17 1/2	1 3/8	78	1/2	1	1 1/2
VSE 15T	19	16	10 3/4	22 1/4	2 5/8	6 1/2	19 3/8	1 5/8	1 1/8	1/2	1 1/4	1 1/2
VSE 20T	26	22	16	23 1/4	4 1/2	9	18 1/4	2 1/8	1 3/8	1/2	1 1/2	2

Clean ratings: As tested per ARI Standard 450-99
Fouled ratings: Include a additive fouling coefficient of 0.00025 as calculated per ARI Standard 450-99
† Tubing has high performance extended surface.

VSE 1/2 through VSE 2



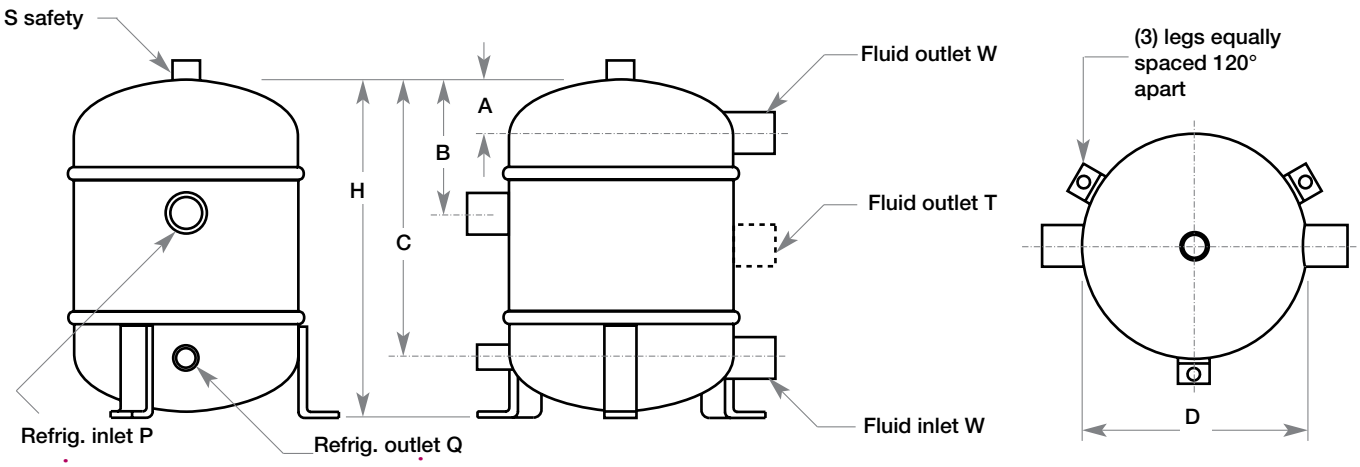


Models	Pumpdown Capacity (lbs. R22)	Waterflow (gpm)		Water Pressure Drop (psi)	Shipping Weight (lbs)	Working Pressure (psi)	
		Min.	Max.			Shell Side	Tube Side
VSE 1/2	3	0.4	3.7	0.6	10	350	250
VSE 1	3.5	0.4	3.7	2.7	12	350	250
VSE 1 1/2	9	0.6	5.9	3.4	28	350	250
VSE 2	11	0.6	5.9	7.0	29	350	250
VSE 3	9	1.2	12	3.3	26	350	250
VSE 5	15	1.8	18	4.5	45	350	250
VSE 7	29	2.4	24	5.6	83	350	250
VSE 10	80	3.0	30	7.6	146	350	250
VSE 10T	20	3.6	36	3.9	69	350	250
VSE 15T	36	4.7	47	5.9	130	350	250
VSE 20T	96	5.9	60	7.1	204	350	250

400 psi.shell side on request

- Sealed construction, vertical, shell and coil design
- Greatest refrigerant pumpdown capacity in a upright compact package
- Special "T" models have auxiliary connection for tower applications or to reduce pressure drops
- Size and efficiency make it ideal for use in small package units; ice makers, vending machines, self contained refrigeration cases
- 11 VSE models, 1⁄2 through 20 horsepower

VSE 3 through VSE 20T



Tube-In-Tube Condensers
compact, cleanable

Design Features and Ratings

Models	Nominal hp	Dimensions (inches)						Connections (inches)		
		D	L	H	A	B	C	P (ids)	Q (ids)	T (ids)
ELT-100A	1	2 7/8	21 1/2	11	16	4 1/4	5	5/8	1/2	7/8
ELT-150A	1 1/2	2 7/8	27 1/2	11	21 1/2	4 1/4	5	7/8	1/2	7/8
ELT-200A	2	2 7/8	27	12 5/8	21 1/2	4 1/4	5	7/8	1/2	7/8
ELT-300A	3	4 1/4	27	17 3/4	21 1/2	4 1/4	6	7/8	5/8	1 3/8
ELT-500A	5	4 1/4	27	17 3/4	21 1/2	4 1/4	6	7/8	7/8	1 3/8
ELT-800A	8	5 1/2	27 1/2	22 1/4	21 1/2	4 1/4	6	1 3/8	7/8	1 3/8
ELT-1000A	10	5 1/2	27 1/2	22 1/4	21 1/2	4 1/4	6 1/4	1 3/8	7/8	1 5/8

Nominal HP: As tested per ARI standard 450-99

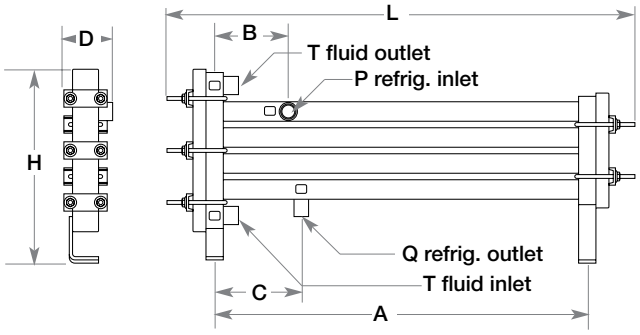
Models	Waterflow (gpm)		Nom'l. Water Pressure Drop (psi)	Shipping Weight (lbs)	Working Pressure (psi)	
	Min.	Max.			Shell Side	Tube Side
ELT-100A	0.7	6.7	1.25	21	380	200
ELT-150A	0.7	6.7	2.99	23	380	200
ELT-200A	0.7	6.7	6.40	27	380	200
ELT-300A	1.3	13.4	4.34	48	380	200
ELT-500A	2.0	20.1	5.49	50	380	200
ELT-800A	3.4	33.5	5.09	85	380	200
ELT-1000A	4.0	40.2	5.46	90	380	200

Consult customer service for performance data not shown.

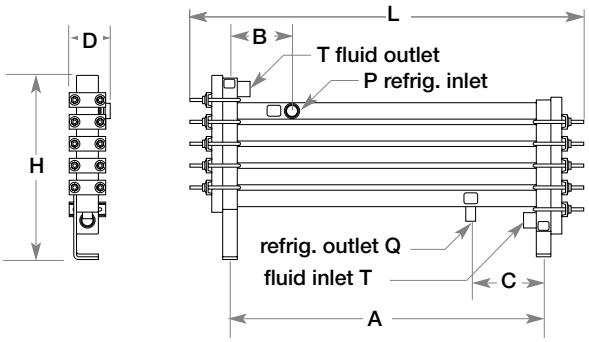
400 psi.shell side on request

- Specially designed removable water plates and gaskets allow unsurpassed ease of servicing or cleaning without disconnecting water or refrigerant lines
- All copper water channels
- Rugged steel construction to resist tubing damage
- Our smallest horizontal, tube-in-tube design
- Exceptional heat transfer utilizing enhanced tube surfaces
- Highest water pressure ratings, and lowest water pressure drop offered in a cleanable tube-in-tube condenser design
- 7 ELT models, up to 10 horsepower

ELT 100A/ELT 150A/ ELT 300A
ELT 500A/ ELT 800A/ ELT 1000A



ELT 200A



Counterflow Condensers
compact, cleanable

Design Features and Ratings

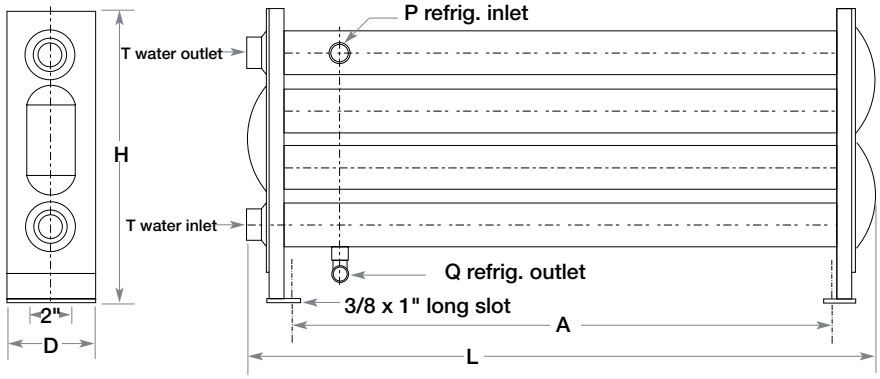
Models	Nominal hp	Dimensions (inches)				Connections (inches)		
		D	L	H	A	P (ids)	Q (ids)	T (fpt)
KH-1 1/2X	1 1/2	4 3/8	21 1/4	13 1/2	16 5/8	1/2	3/8	1/2
KH-2X	2	4 3/8	26 3/8	13 1/2	21	1/2	3/8	3/4
KH-3X	3	4 3/8	32 3/4	13 1/2	27	5/8	1/2	3/4
KH-5X	5 1/2	5	32 3/8	16 1/4	27	7/8	5/8	1
KH-7 1/2X	8	5 1/2	35 5/8	17 3/4	27	7/8	7/8	1 1/4
KH-10X	10 1/2	5 1/2	38 5/8	17 3/4	33	1 1/8	7/8	1 1/4

Nominal horsepower per ARI Standard 450-99
Tubing has high performance extended surface

Models	Water Pressure Drop (psi)	Waterflow (gpm)		Shipping Weight (lbs)	Working Pressure (psi)	
		Min.	Max.		Shell Side	Tube Side
KH-1 1/2X	1.0	2.5	13	45	420	150
KH-2X	2.0	2.5	13	50	420	150
KH-3X	5.0	5.5	13	60	420	150
KH-5X	7.0	6.0	20	90	420	150
KH-7 1/2X	5.0	5.2	33	124	420	150
KH-10X	5.0	5.0	33	135	420	150

Consult customer service for performance data not shown.

- Enhanced copper water tubes inside a series of four steel refrigerant tubes
- Ideal for replacement usage in narrow packages
- Threaded water connections for easy pipe fit-up
- Removable end plates allows access to remove mineral scale and sludge deposits
- 6 models, 1 1⁄2 through 10 horsepower



Coaxial Condensers
Compact Heat pump and water cooler applications

Design Features and Ratings

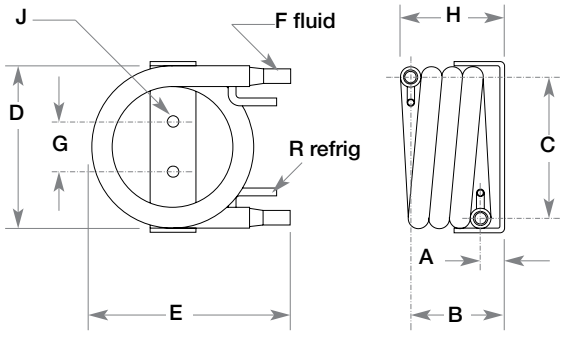
Models	Nom'l HP	Dimensions (inches)								Connections		Ship Wt. (lbs)
		A	B	C	D	E	G	H	J	Refrig. R (ods)	Fluid F (ods)	
SCH-04	.33	1.25	4.00	5.75	6.75	9.25	2.50	5.63	.375	.375	.625	5
SCH-06	.50	1.31	5.06	5.75	6.75	9.25	2.50	5.63	.375	.375	.625	8
SCH-09	.75	1.31	6.19	5.88	6.75	9.25	2.50	6.75	.375	.375	.625	9
SCH-12	1.00	1.41	7.28	5.88	6.75	9.25	2.50	7.94	.375	.375	.625	12
SCH-18	1.50	1.31	5.19	11.50	12.50	13.00	6.00	5.88	.500	.500	.625	16
SCH-24	2.00	4.75	3.38	10.00	12.75	14.00	6.00	5.50	.500	.500	.750	25
SCS-30	2.50	4.56	4.00	10.00	12.75	14.00	6.00	5.38	.500	.500	.750	31
SCS-36	3.00	5.00	4.75	11.25	14.50	15.38	6.00	6.50	.500	.625	.875	35
SCS-42	3.50	4.75	4.63	12.50	15.50	16.00	6.00	5.75	.500	.625	.875	37
SCS-48	4.00	6.00	5.13	14.50	17.75	18.50	6.00	6.88	.500	.875	1.125	55
SCS-60	5.00	6.75	5.75	14.63	18.00	19.00	6.00	7.63	.500	.875	1.125	59
SCS-84	7.00	8.13	6.00	15.50	20.50	22.50	6.00	9.63	.500	.875	1.375	75

Cupronickel Models	Nom'l HP	Dimensions (inches)								Connections		Ship Wt. (lbs)	Working Pressure (psi)	
		A	B	C	D	E	G	H	J	Refrig. R (ods)	Fluid F (ods)		Shell	Tube
SCH-12CN	1.00	1.41	7.28	5.88	6.75	9.25	2.50	7.94	.375	.375	.625	12	450	350
SCH-18CN	1.50	1.31	5.19	11.50	12.50	13.00	6.00	5.88	.500	.500	.750	16	450	350
SCS-24CN	2.00	4.75	3.38	10.00	12.75	14.00	6.00	5.50	.500	.500	.750	25	450	350
SCS-36CN	3.00	5.00	4.75	11.25	14.50	15.38	6.00	6.50	.500	.625	.875	35	450	350
SCS-48CN	4.00	6.00	5.13	14.50	17.75	18.50	6.00	6.88	.500	.875	1.125	55	450	350
SCS-60CN	5.00	6.75	5.75	14.63	18.00	19.00	6.00	7.63	.500	.875	1.125	59	450	350

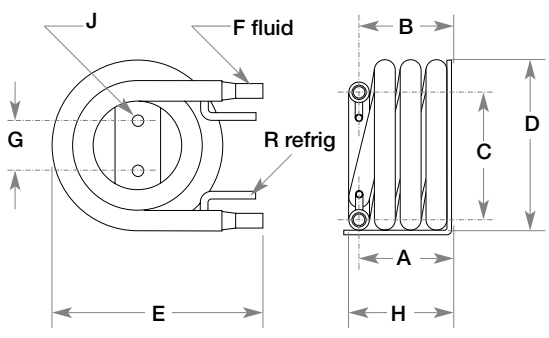
Nominal HP ratings as per ARI standard 450-99

- High efficiency counterflow design
- Ideal for domestic heat pumps, and water coolers
- Replacement models for most manufactures
- Copper and 90/10 Cupronickel tube models stocked
- UL and CSA listed
- 18 coaxial models from, 1⁄3 to 7 hp

Helix SCH models



Spiral SCS models



Condenser Specification Data

Fax to: 708-345-3513
or e-mail: stanref.customerservice@alfalaval.com

Customer Information

Company _____

Contact Name _____ Date _____

Phone _____ Fax _____

E-Mail: _____

Performance

inlet fluid temperature _____°F

condensing refrigerant temperature_____°F

fouling factor (.00025 ARI standard)_____

THR _____Btu/hr

refrigerant _____

pressure drop _____psi

Fluid Circulated

- ☐ water _____%
- ☐ propylene glycol_____%
- ☐ sodium chloride (NaCl)_____%
- ☐ ethylene glycol _____%
- ☐ calcium chloride (CaCl2)_____%
- ☐ other_____%

Type

- ☐ Brazed Plate
- ☐ Shell-and-Tube

If other, specify properties at inlet temperature

specific gravity _____

thermal conductivity _____

viscosity (centipose) _____

specific heat _____

Construction

size: width _____ length_____ height _____

materials: shell _____ tube _____

connections: refrigerant inlet _____ refrigerant outlet _____

specify ids, fpt, flange or flare: fluid inlet _____ fluid outlet _____

Application

_____

_____

_____

_____

_____

_____

_____

Condensers	Front Gasket GASKE-	Rear Gasket GASKE-	Front Endplate ENDPL-	Rear Endplate ENDPL-
SST 75A	3156	346	4304	30
*SST 75	337	346	49	30
SST 100A	3163	3149	5040	5026
*SST 100	175	184	67	58
*SST 150	175	184	67	58
SST 200A	3101	3170	5819	76
*SST 200	193	201	85	76
SST 300A	3101	3170	5819	76
*SST 300	193	201	85	76
SST 500A	3118	2584	5938	4047
*SST 500	210	229	120	21
SST 750A	3118	2584	5938	4047
SST 750	210	229	12	21
*SST 755A	3118	2584	5938	4047
SST 755	238	247	12	21
SST 1000A	1723	2953	6605	4047
*SST 1000	238	247	12	21
SST 1500A	1723	2953	5576	4047
*SST 1501	2977	2584	175	4047
SST 1555A	2591	2984	5907	4180
*SST 1555	256	265	193	184
SST 2005A	2591	2984	5914	4180
*SST 2005	256	265	148	184
SST 2026A	2591	2984	5914	4180
*SST 2026	256	265	148	184
SST 2505A	2591	2984	6205	4180
*SST 2505	256	265	148	184
SST 2527A	2591	2984	6205	4180
*SST 2527	256	265	148	184
SST 3005A	2591	2984	6205	4180
*SST 3005	256	265	148	184
SST 3028A	2591	2984	6205	4180

Condensers	Front Gasket GASKE-	Rear Gasket GASKE-	Front Endplate ENDPL-	Rear Endplate ENDPL-
*SST 3028	256	265	148	184
*SST 30-460M	166	111	166	157
SST 3505A	2591	2984	6205	4180
*SST 35-520M	166	111	201	157
SST 4005A	111	120	210	238
*SST 40-610M	111	120	210	238
SST 4505A	111	120	210	238
*SST 45-680M	111	120	210	238
SST 5005A	111	120	247	238
*SST 50-760M	111	120	210	238
SST 5505A	111	120	247	238
*SST 55-850M	111	120	210	238
SST 6005A	111	120	247	238
*SST 60-940M	111	120	247	238
SST 7005A	111	120	247	238
*SST 70-1060M	111	120	247	238
SST 8005A	111	120	247	238
*SST 80-1200M	111	120	247	238
SST 100-1408A	120	120	2245	2245
*SST 100-1500M	111	120	247	238
SST 120-1408A	120	120	2245	2245
*SST 126-1905M	120	120	3994	3994
SST 150-1410A	120	120	2245	2245
*SST 150-2250M	2254	2254	'H1039	'H1039
SST 200-1412A	120	120	4335	4335
*SST 200-3000M	2263	2263	'H1048	'H1048
*SST 250-3750M	1679	1679	'H1057	'H1057
*SST 300-4500M	1688	1688	'H1066	'H1066
*SST 350-5250M	1688	1688	'H1066	'H1066
*SST 400-6000M	2290	2290	'H1921	'H1921
*SST 500-7500M	2290	2290	'H1921	'H1921

These chart is to be used for reference purposes only.
For replacement parts contact customer service with your condenser model and serial numbers.
* Indicates that model is obsolete and no longer manufactured.

HSE/HP/CA/MSE - Gasket and Endplates Cross Reference

Condensers	Front Gasket GASKE-	Rear Gasket GASKE-	Front Endplate ENDPL-	Rear Endplate ENDPL-
HSE 2	337	346	6412	30
HSE 3	175	184	6717	5026
HSE 5	3718	3170	6229	76
HSE 7	3718	3170	5552	76
HSE 10	3718	3170	5552	76
HSE 15	445	247	5495	21
HSE 20A	2953	2584	5707	4047
*HSE 20	1723	1732	2227	21
HSE 25A	2953	2584	5707	4047
*HSE 25	1723	1732	2227	21
HSE 30A	1741	2984	5583	4180
*HSE 30	1741	1750	2236	4180
HSE 40A	1741	2984	6900	4180
*HSE 40	1741	1750	2236	4180
HSE 50A	1741	2984	6900	4180
*HSE 50	1741	1750	2236	4180
HSE 60	111	120	247	238
HSE 70	111	120	247	238
HSE 80	111	120	247	238
HSE 100	120	120	2245	2245
HSE 125	120	120	2245	2245
HSE 150	2254	2254	'H1039	'H1039
HSE 200	2263	2263	'H1048	'H1048
HSE 250	1679	1679	'H1057	'H1057
HSE 300	1688	1688	'H1066	'H1066
HSE 350	1688	1688	'H1066	'H1066
HSE 400	2290	2290	'H1921	'H1921
HSE 450	2290	2290	'H1921	'H1921
HSE 500	2290	2290	'H1921	'H1921

These chart is to be used for reference purposes only.
For replacement parts contact customer service with your condenser model and serial numbers.
* Indicates that model is obsolete and no longer manufactured.

Condensers	Front Gasket GASKE-	Rear Gasket GASKE-	Front Endplate ENDPL-	Rear Endplate ENDPL-
HP 10	Call Factory			
HP 15	Call Factory			
HP 20	Call Factory			
HP 30	Call Factory			
HP 40	Call Factory			
HP 50	Call Factory			
HP 60	Call Factory			
HP 80	Call Factory			

Condensers	Front Gasket GASKE-	Rear Gasket GASKE-	Front Endplate ENDPL-	Rear Endplate ENDPL-
°CA 050	355	364	2876	2885
°CA 075	238	247	2911	2902
°CA 100	238	247	2911	2902
CA 150	256	265	2920	2948
CA 200	445	247	2894	2902
CA 300	373	265	2939	2948

Condensers	Front Gasket GASKE-	Rear Gasket GASKE-	Front Endplate ENDPL-	Rear Endplate ENDPL-
MSE 100	3163	3149	6436	300
MSE 200	3163	3149	6436	300
MSE 300	355	364	6386	337
MSE 500	355	364	6386	337
MSE 750	436	364	6281	4461
MSE 1005	436	364	6281	4461
*MSE 1500	445	2584	5752	4104
*MSE 2005	1723	2953	5752	4104
*MSE 2505	1723	2953	5752	4104
*MSE 3006	1723	2953	6467	4104
*MSE 3305	1741	2984	6481	5114
*MSE 4005	1741	2984	6481	5114
*MSE 4505	1741	2984	6481	5114
*MSE 5005	1741	2984	6481	5114
*MSE 6505	111	120	2542	5233
*MSE 7505	111	120	2542	5233
*MSE 100Hp	4092	4092	120	120
*MSE 120Hp	4092	4092	120	120

MSE models with zinc anode may require a special rear endplate.
Please consult with factory.

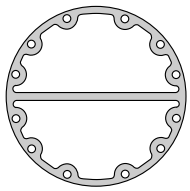
Condensers	Front Gasket GASKE-	Rear Gasket GASKE-	Front Endplate ENDPL-	Rear Endplate ENDPL-
ELT 100A	5057	5064	3055	3073
ELT 150A	5057	5064	3055	3073
ELT 200A	5057	5057	3055	3154
ELT 300A	2191	2209	3253	3280
ELT 500A	2191	2209	3253	3280
ELT 800A	2461	2470	3451	3482
ELT 1000A	2461	2470	3451	3482
*ELT 50	2092	2100	3046	3064
*ELT 75	2092	2100	3046	3064
*ELT 100	2092	2100	3046	3064
*ELT 150	2092	2100	3046	3064
*ELT 200	2092	2092	3424	3424
*ELT 300	2191	2209	3262	3280
*ELT 500	2191	2209	3262	3280
*ELT 800	2461	2470	3475	3482
*ELT 1000	2461	2470	3475	3482

Condensers	Front Gasket GASKE-	Rear Gasket GASKE-	Front Endplate ENDPL-	Rear Endplate ENDPL-
KH 11/2X	698A	698B	1840	1796
KH 2X	698A	698B	1840	1796
KH 3X	698A	698B	1840	1796
KH 5X	706A	706B	1859	1813
KH 71/2X	724A	724B	1868	1831
KH 10X	724A	724B	1868	1831

These chart is to be used for reference purposes only.
For replacement parts contact customer service with your condenser model and serial numbers.
* Indicates that model is obsolete and no longer manufactured.

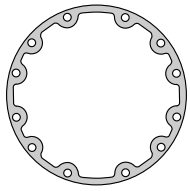
111

12 3/4" Dia.
12 Studs



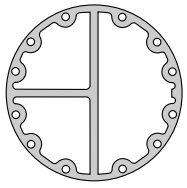
120

12 3/4" Dia.
12 Studs



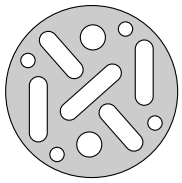
166

12 3/4" Dia.
12 Studs



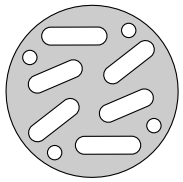
175

6" Dia.
4 Studs



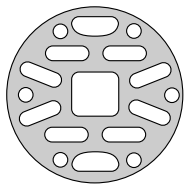
184

6" Dia.
4 Studs



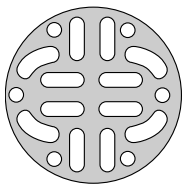
193

6 5/8" Dia.
6 Studs



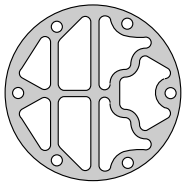
201

6 5/8" Dia.
6 Studs



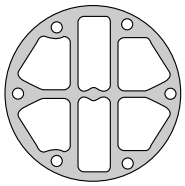
210

8 5/8" Dia.
6 Studs



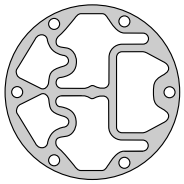
229

8 5/8" Dia.
6 Studs



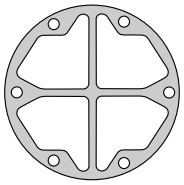
238

8 5/8" Dia.
6 Studs



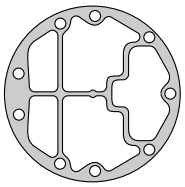
247

8 5/8" Dia.
6 Studs



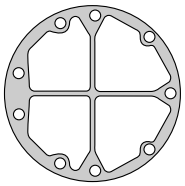
256

10 3/4" Dia.
9 Studs



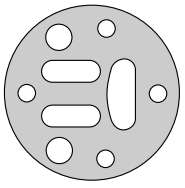
265

10 3/4" Dia.
9 Studs



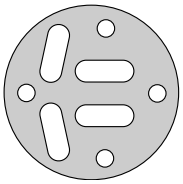
337

5" Dia.
4 Studs



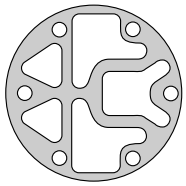
346

5" Dia.
4 Studs



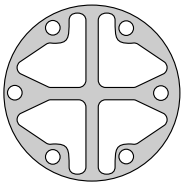
355

6 5/8" Dia.
12 Studs



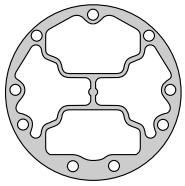
364

6 5/8" Dia.
6 Studs



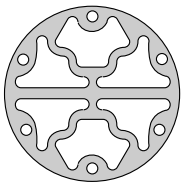
373

10 3/4" Dia.
9 Studs



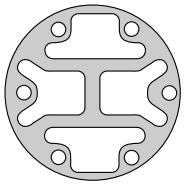
382

6 5/8" Dia.
6 Studs



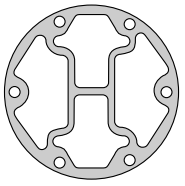
436

6 5/8" Dia.
6 Studs

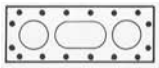


445

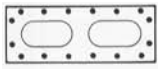
8 5/8" Dia.
12 Studs



698A

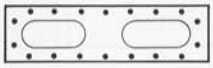


698B



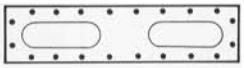
706A

706B



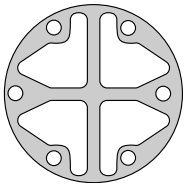
724A

724B



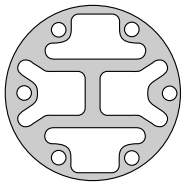
1057

6 5/8" Dia.
6 Studs



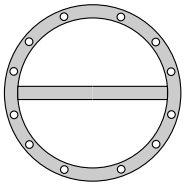
1066

6 5/8" Dia.
6 Studs



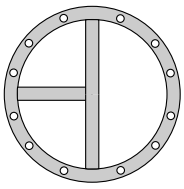
1462

10 3/4" Dia.
12 Studs



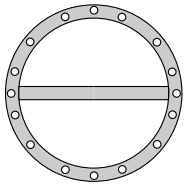
1471

8 5/8" Dia.
12 Studs



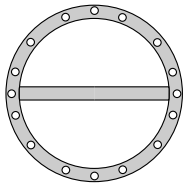
1480

12 3/4" Dia.
12 Studs



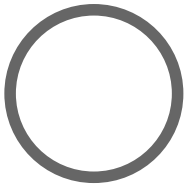
1499

14" Dia.
12 Studs



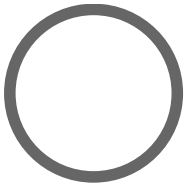
1679

19 11/16"
Dia.



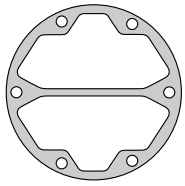
1688

21 11/16"
Dia.



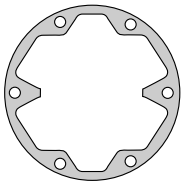
1723

8 5/8" Dia.
6 Studs



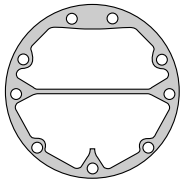
1732

8 5/8" Dia.
6 Studs



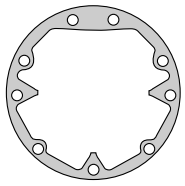
1741

10 3/4" Dia.
9 Studs



1750

10 3/4" Dia.
9 Studs



2074

Tube-in-tube gasket
no picture available

2083

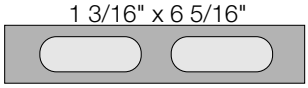
Tube-in-tube gasket
no picture available

2092

1 3/16" x 9 1/16"

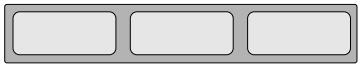
2100

1 3/16" x 6 5/16"



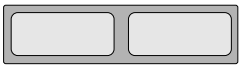
2191

2 9/16" x 15 3/4"



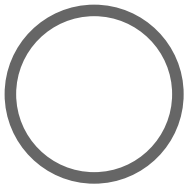
2209

2 9/16" x 15 3/4"



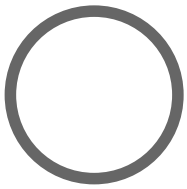
2254

14 11/16"
Dia.



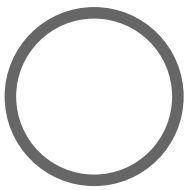
2263

16 11/16"
Dia.



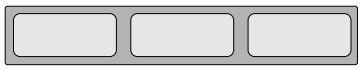
2290

25" Dia.



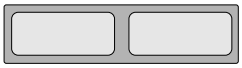
2461

3 1/4" x 20 1/4"



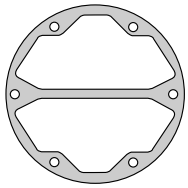
2470

3 1/4" x 13 1/2"



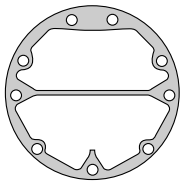
2584

8 5/8" Dia.
6 Studs



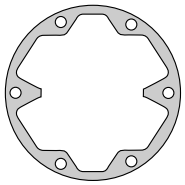
2591

8 5/8" Dia.
6 Studs



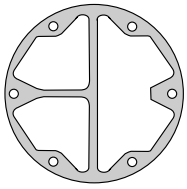
2953

8 5/8" Dia.
6 Studs



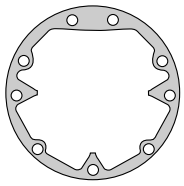
2977

8 5/8" Dia.
6 Studs



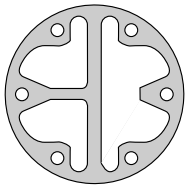
2984

10 3/4" Dia.
9 Studs



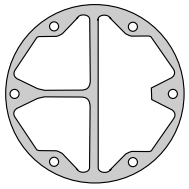
3101

6 5/8" Dia.
6 Studs



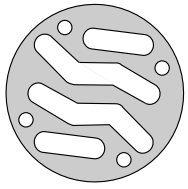
3118

8 5/8" Dia.
6 Studs



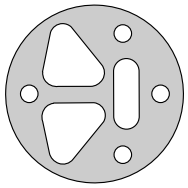
3149

6" Dia.
4 Studs



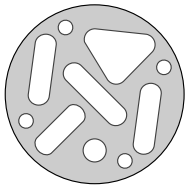
3156

5" Dia.
4 Studs



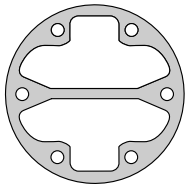
3163

6" Dia.
4 Studs



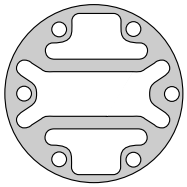
3170

6 5/8" Dia.
6 Studs



3718

6 5/8" Dia.
6 Studs

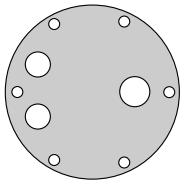


5057

1 3/16" x 9 1/16"

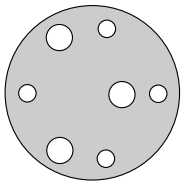
12

8 1/2" Dia.
6 Studs



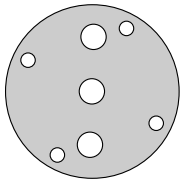
49

5" Dia.
14 Studs



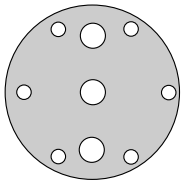
67

6" Dia.
4 Studs



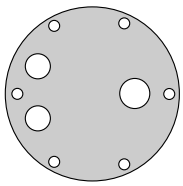
85

6 5/8" Dia.
6 Studs



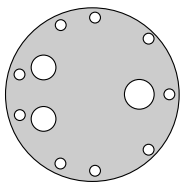
120

8 5/8" Dia.
6 Studs



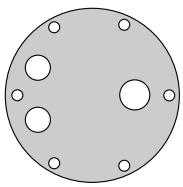
148

10 3/4" Dia.
9 Studs



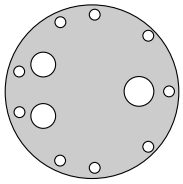
175

8 5/8" Dia.
6 Studs



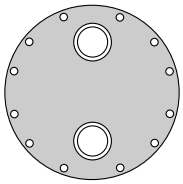
193

10 3/4" Dia.
9 Studs



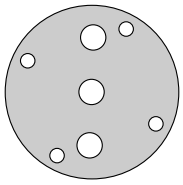
247

12 3/4" Dia.
12 Studs



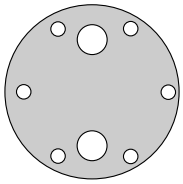
328

6" Dia.
4 Studs



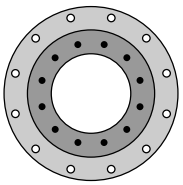
706

8 5/8" Dia.
6 Studs



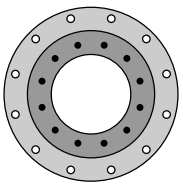
H1039

17 7/8" Dia



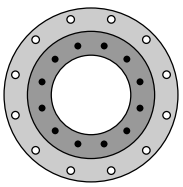
H1048

19 7/8" Dia.



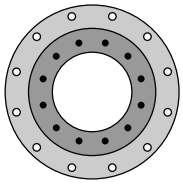
H1057

22" Dia.



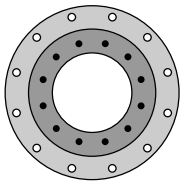
H1066

24" Dia.



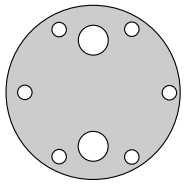
H1921

28" Dia.



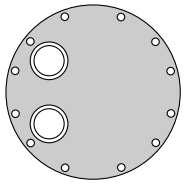
1499

6 5/8" Dia.
6 Studs



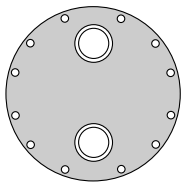
2065

8 5/8" Dia.
12 Studs



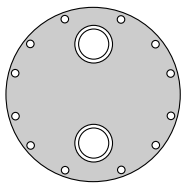
2092

8 5/8" Dia.
12 Studs



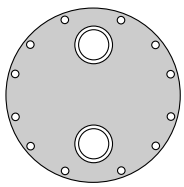
2119

10 3/4" Dia.
12 Studs



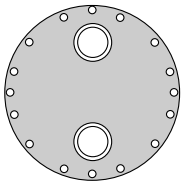
2137

12 3/4" Dia.
12 Studs



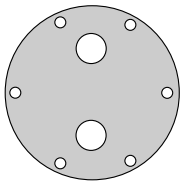
2155

14" Dia.
16 Studs



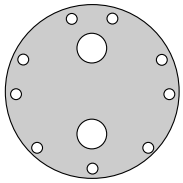
2227

8 5/8" Dia.
6 Studs



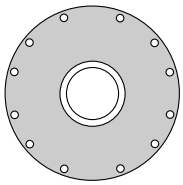
2236

10 3/4" Dia.
9 Studs



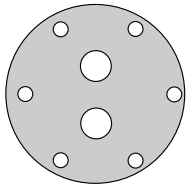
2245

12 3/4" Dia.
12 Studs



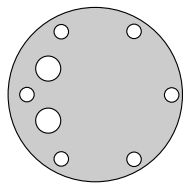
2263

8 5/8" Dia.
6 Studs



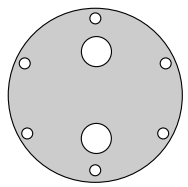
2452

6 5/8" Dia.
6 Studs



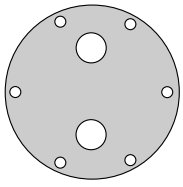
2461

8 5/8" Dia.
6 Studs



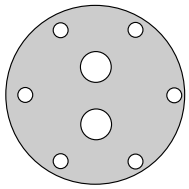
2470

8 5/8" Dia.
6 Studs



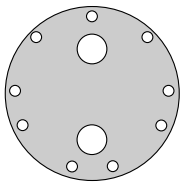
2489

8 5/8" Dia.
6 Studs
OBSOLETE



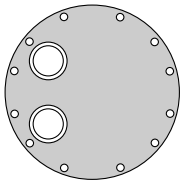
2506

10 3/4" Dia.
9 Studs



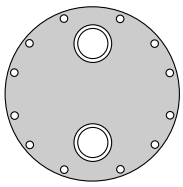
2524

12 3/4" Dia.
12 Studs



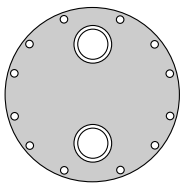
2533

12 3/4" Dia.
12 Studs



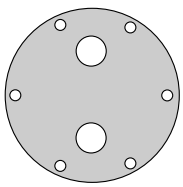
2542

12 3/4" Dia.
12 Studs



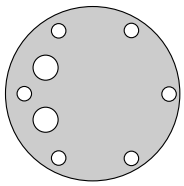
2678

8 5/8" Dia.
6 Studs



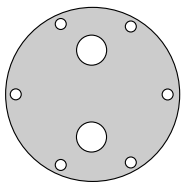
2876

8 5/8" Dia.
6 Studs



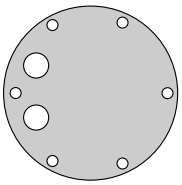
2894

8 5/8" Dia.
6 Studs



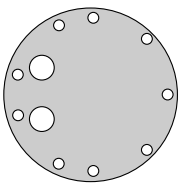
2911

8 5/8" Dia.
6 Studs



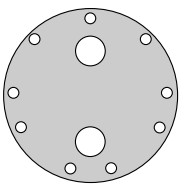
2920

10 3/4" Dia.
9 Studs



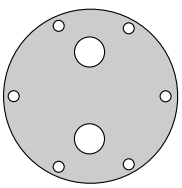
2939

10 3/4" Dia.
9 Studs



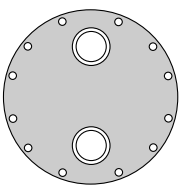
3334

8 5/8" Dia.
6 Studs



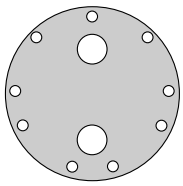
3868

12 3/4" Dia.
12 Studs



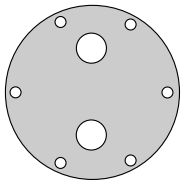
3901

8 5/8" Dia.
9" Studs



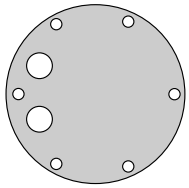
3918

8 5/8" Dia.
6" Studs



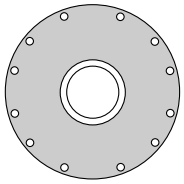
3956

8 5/8" Dia.
6 Studs



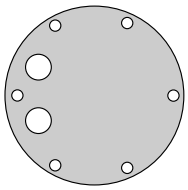
4092

12 3/4" Dia.
12 Studs



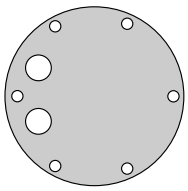
4230

6 5/8" Dia.
6 Studs



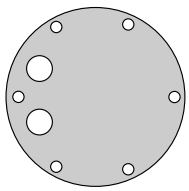
4247

8 5/8" Dia.
6 Studs



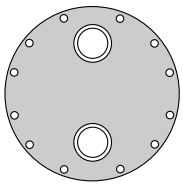
4254

8 5/8" Dia.
6 Studs



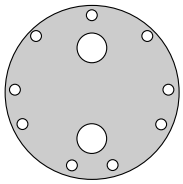
4261

10 3/4" Dia.
9 Studs



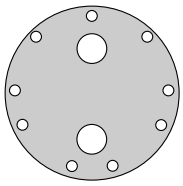
4278

10 3/4" Dia.
9 Studs



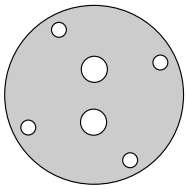
4292

10 3/4" Dia.
9 Studs



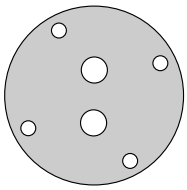
4328

6" Dia.
4 Studs



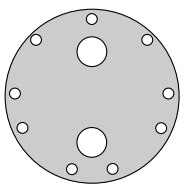
5040

6" Dia.
4 Studs



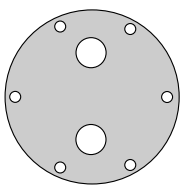
5464

10 3/4" Dia.
9 Studs



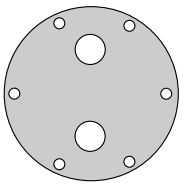
5495

8 5/8" Dia.
6 Studs



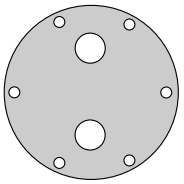
5552

6 5/8" Dia.
6 Studs



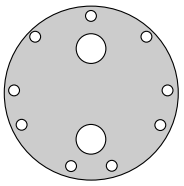
5576

8 5/8" Dia.
6 Studs



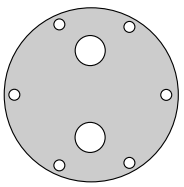
5583

10 3/4" Dia.
9 Studs



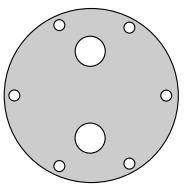
5707

8 5/8" Dia.
6 Studs



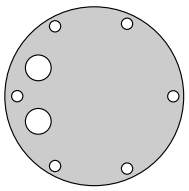
5727

8 5/8" Dia.
6 Studs



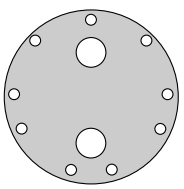
5819

6 3/4" Dia.
6 Studs

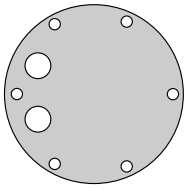


5907

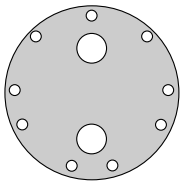
10 3/4" Dia.
9 Studs



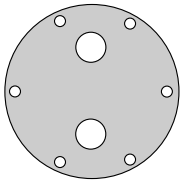
5938
8 5/8" Dia. 6 Studs



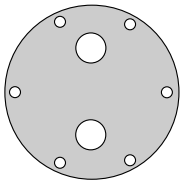
6205
10 3/4" Dia. 9 Studs



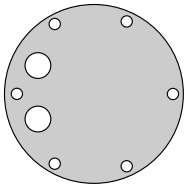
6229
6 3/4" Dia. 6 Studs



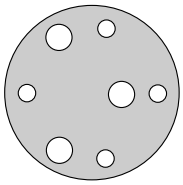
6281
6 5/8" Dia. 6 Studs



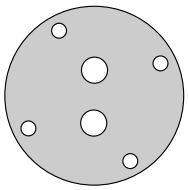
6389
6 5/8" Dia. 6 Studs



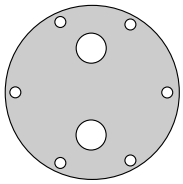
6412
5 1/4" Dia. 4 Studs



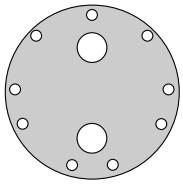
6436
6" Dia. 4 Studs



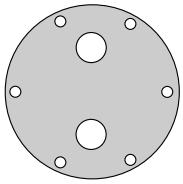
6487
8 5/8" Dia. 6 Studs



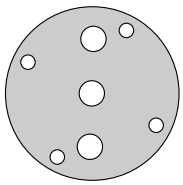
6481
10 3/4" Dia. 9 Studs



6605
8 5/8" Dia. 6 Studs

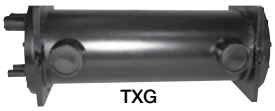


6717
6" Dia. 4 Studs



TX/TXC

ERS/ERD



TXG

Copper-Brazed
(EVP-CB)

AlfaChill
(EVP-AC)

AlfaNova
(EVP-AN)

Design Features and Ratings

Conformance

Standard chiller barrels 6" and smaller OD shell are U.L. listed.

Models with 6 5/8" and larger shell are constructed to ASME Boiler and Pressure Vessel Code Section VIII, Div. 1.

ERS/ERD Models are rated at 300 psi tube side and 200 psi shell side (non-code). Each model is tested before shipment and ratings are developed through extensive laboratory testing and computer modeling.

Nominal Tonnage Rating Basis

Nominal ratings are based on ARI standard 480, specific conditions being:

1 ton = 12,000 Btu/hr 100° F. liquid entering TXV

54° F. inlet water 7° superheat

44° F. outlet water 35°F R22 Saturated Suction

0.0001 ft2 hr°F/Btu fouling factor

Sizing by Nominal Tons

Sizing by nominal tons is done according to ARI standards. Chillers can be selected on a nominal system tons basis, as shown in the catalog, or reflected in the model name. For example, a TXC50–2 is a nominal 50 ton dual–circuit barrel. This method is reasonably accurate for sizing air–conditioning systems. However, it is not recommended for evaporating temperature below 34° F, or when the fluids used are other than water and R–22. All heat exchangers have capacity limits and careless sizing of chiller barrels leads to needless performance problems. Undersizing can lead to insufficient cooling and inefficient compressor operation. Oversizing can lead to control valve hunting, poor performance, oil logging, and refrigerant slugging. When your application varies from nominal air-conditioning conditions, such as brine, low-temperature and process cooling applications, utilize StanrefPro selection software or evaporator performance tables, which can be obtained at www.stanref.com or from customer service.

Limitations

1. For cooling water applications a minimum evaporating temperature of 32°F. should be maintained in the evaporator to prevent freezing.
2. Maximum water entering temperature of 70°F.
3. Minimum outgoing water temperature of 36°F.
4. Minimum approach 5° (for approaches 6° or less, system should be designed to insure proper oil return).

Note: For brine, low temperature and special design applications, please consult factory.

Note: Do not exceed maximum stated flow rate.

Technical Assistance and Custom Designs

Standard offers custom design services and computer performance projections on all heat exchange products to help you match product and application accurately. You are invited to contact your nearest sales representative or our office headquarters for prompt assistance.

Selecting the proper chiller barrel for your application depends on four basic sizing considerations:

Range

The desired temperature drop of the fluid measured as the difference between incoming and outgoing fluid temperatures.

Approach

The desired temperature difference between outgoing fluid and the refrigerant evaporating temperature.

Pressure Drop

Acceptable level of fluid pressure drop through the chiller barrel at computed gallons per minute (gpm) flow rate.

Capacity

Necessary heat removal (tonnage) at maximum operating load

Determine the range and approach then obtain the StanrefPro selection and rating software at our website www.stanref.com.

Chiller barrels may be sized by other methods as well. Where the desired temperature range is known (difference between incoming and outgoing fluid), determine the Btu/hr capacity needed by multiplying the temperature range by gpm flow and convert to pounds of water per hour using the multiplier 500.

Range x gpm x 500 = Btu/hr

Another sizing method is by compressor capacity. Manufacturer curves showing compressor Btu/hr values serve as a simple guideline for selecting chiller barrels for a given system.

Also, Standard chiller barrels are rated to ARI standards and can be selected on a nominal system tons basis using the capacity charts in this catalog. This method, however, is recommended only for high temperature (air conditioning) systems.

Fluid Nozzle Location (Shell and Tube only)

The standard fluid nozzle location is on the right as you are facing the refrigerant connections. Special top, and left side connections can be ordered.

TX2 through TX20 have top side nozzle location as standard.

Technical Assistance and Custom Designs

Standard offers custom design services and computer performance projections on all heat exchange products to help you match product and application accurately. You are invited to contact your nearest sales representative or our office headquarters for prompt assistance.

Note on Refrigerant R410a Applications

Due to the high working pressures of Refrigerant R410a. Any Chiller Barrel product in our catalog must be customized to conform to ASME construction. Please contact customer service for quotation.

Sizing the Right Evaporator (Chiller Barrel)

Sizing by Nominal Tons

There are three basic selection methods you can use to size a chiller barrel. The first and easiest is to size by nominal system tons. The second method is to use compressor capacity. The third and recommended method is sizing by range, flow and approach.

Sizing by nominal tons is done according to ARI standards. Chiller barrels can be selected on a nominal system ton basis, as shown in the catalog model specifications, or it can be reflected in the model name. For example, a TXC50-2 is a nominal 50 ton dual-circuit chiller barrel.

Nominal ton ratings are based on the conditions of ARI Standard 480 utilizing R-22, which are:

54 degrees F water in

44 degrees F water out

35 degrees F refrigerant evaporating temperature 7 degrees superheat

0.0001 additive fouling factor

100 degrees F liquid refrigerant entering the flow control

This method is reasonably accurate for sizing air conditioning systems, or high back pressure systems. However, it is not recommended for evaporating temperatures below 34 degrees F, or when the fluids used are other than water and R-22.

ARI standard

· 54°F water inlet

· 44°F water outlet

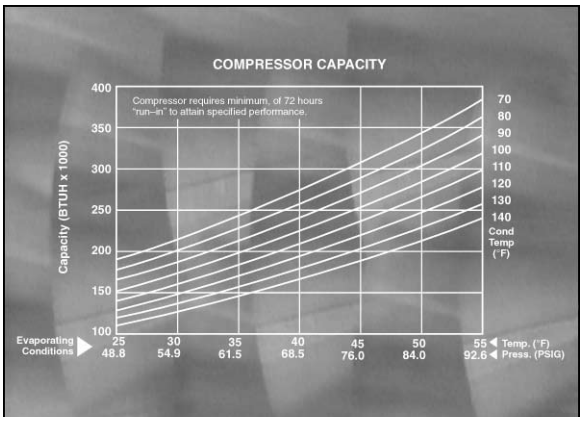
· 35°F water inlet

· 7°F superheat

· 0.0001 additive fouling

· 100°F liquid refrigerant

Sizing by Compressor Capacity



You may also size by compressor capacity. Compressor manufacturer performance data of Btu per hour can be used to select chiller barrels for a given system. By reading the performance curves of the compressor at the conditions that you require, you can determine the maximum capacity chiller barrel you will need.

Sizing by Range and Flow

The most precise way to size a chiller barrel when water is used is by the range and flow rate as seen in the formula:

Btu/hr capacity = Range x gpm x 500

Btu/hr capacity

=

Range x gpm x 500

To obtain the Btu per hour capacity, just multiply the Range or Temperature Drop by gpm flow, and convert to pounds of water per hour by multiplying by 500. The Btu's can then be divided by 12,000 to yield the tons of load.

With an incoming water temperature of 55° F., outgoing water temperature of 45° F., and a 479 gpm water flow. Btu capacity can be calculated like this:

(55° - 45°) x 479 gpm x 500 = 2,395,000 Btu/hr

2,395,000 Btu/hr (divided by)
12,000 Btu/ton = 199.5 tons

In cases where the fluid being cooled is other than water, capacity can be determined by adding the

specific heat and specific gravity into the equation: Btu/hr = Range x gpm x 500 x Sp Heat x Sp Gravity

This equation will give you the capacity required, but chiller selection should be made by your factory representative since the fluid is not water.

All of the Standard rating data is based on ARI standards, a suction temperature 35° F, using water as the fluid. Contact an Alfa Laval representative for special fluid conditions.

All heat exchangers have capacity limits. Careless sizing of chiller barrels leads to needless performance problems.

Undersizing can lead to insufficient cooling and inefficient compressor operation.

Oversizing can lead to control valve hunting, poor performance, oil logging, and refrigerant slugging.

Compact Servicable Chiller Barrels, Design Features and Ratings

Models	Circuits	Nominal Tons**		Connections				Fluid Volume	Specifications			Working Pressure (psig)	
		Clean	Fouled	Ref. In (ids)	Ref. Out (ids)	W. Fluid Conn.	T (fpt)	(gal)	Tube Length (inches)	Shell Diameter (inches)	Shipping Weight (lbs)	Shell Side	Tube Side
1-Circuit													
TX2 -1	1	2.8	2.2	5⁄8	7⁄8	1FPT	3⁄8	0.4	24	2 3⁄4	46	225	225
TX3 -1	1	3.8	2.9	5⁄8	7⁄8	1FPT	3⁄8	0.4	24	2 3⁄4	50	225	225
TX5 -1	1	6.0	4.8	5⁄8	1 1⁄8	1 1⁄4FPT	1⁄2	1.6	36	4	62	225	225
TX6 -1	1	8.7	7.1	5⁄8	1 1⁄8	1 1⁄2FPT	1⁄2	1.5	36	4	64	225	225
TX7 1/2 -1	1	9.5	7.8	7⁄8	1 5⁄8	1 1⁄2FPT	1⁄2	1.4	36	4	66	225	225
TX10 -1	1	11.9	11.0	7⁄8	1 5⁄8	2FPT	1⁄2	1.2	36	4	70	225	225
TX12 -1	1	15.8	13.0	7⁄8	1 5⁄8	2FPT	1⁄2	3.4	36	6	120	225	225
TX15-1	1	20.2	16.5	1 1⁄8	2 1⁄8	2 1⁄2FPT	1⁄2	3.2	36	6	128	225	225
TX20-1	1	23.9	19.7	1 1⁄8	2 1⁄8	3FPT	1⁄2	2.9	36	6	136	225	225
TX25 -1	1	26.9	22.3	1 1⁄8	2 5⁄8	3FPT	1⁄2	2.6	36	6	142	225	150
TXC30 -1	1	32.1	30.0	1 1⁄8	2 5⁄8	3 MPT	3⁄4	9.3	72	6 5⁄8	414	300	150
TXC40 -1	1	42.8	40.0	1 3⁄8	2 5⁄8	3 MPT	3⁄4	17.5	72	8 5⁄8	563	150	300
TXC50 -1	1	53.7	50.0	1 3⁄8	3 1⁄8	4"FLANGE	3⁄4	17.1	72	8 5⁄8	594	150	300
TXC60 -1	1	64.3	60.0	1 5⁄8	3 1⁄8	4"FLANGE	3⁄4	19.8	84	8 5⁄8	642	150	300
TXC75 -1	1	80.7	75.0	2 1⁄8	3 1⁄8	5"FLANGE	3⁄4	19.5	84	8 5⁄8	587	150	300
TXC100-1	1	124.7	110.0	2 1⁄8	3 5⁄8	5"FLANGE	3⁄4	28.4	84	10 3⁄4	1070	150	225
TXC120-1	1	136.8	120.0	2 1⁄8	3 5⁄8	6"FLANGE	3⁄4	26.9	84	12 3⁄4	1080	150	225
2-Circuit													
TX10-2	2	11.9	11.0	5⁄8	1 1⁄8	2 FPT	1⁄2	1.2	36	4	70	225	225
TX12-2	2	15.8	13.0	5⁄8	1 1⁄8	2 FPT	1⁄2	3.4	36	6	120	225	225
TX15-2	2	20.2	16.5	7⁄8	1 5⁄8	2 1⁄2 FPT	1⁄2	3.2	36	6	128	225	225
TX20-2	2	23.9	19.7	7⁄8	1 5⁄8	3 FPT	1⁄2	2.9	36	6	136	225	225
TX25-2	2	26.9	22.3	7⁄8	1 5⁄8	3 FPT	1⁄2	2.6	36	6	142	225	225
TXC30-2	2	32.1	30.0	7⁄8	1 5⁄8	3 MPT	3⁄4	9.3	72	6 5⁄8	404	150	300
TXC40-2	2	42.8	40.0	1 1⁄8	2 1⁄8	3 MPT	3⁄4	17.5	72	8 5⁄8	556	150	300
TXC50-2	2	53.7	50.0	1 1⁄8	2 1⁄8	4" FLANGE	3⁄4	17.1	72	8 5⁄8	581	150	300
TXC60-2	2	64.3	60.0	1 1⁄8	2 5⁄8	4" FLANGE	3⁄4	19.8	84	8 5⁄8	634	150	300
TXC75-2	2	80.7	75.0	1 3⁄8	2 5⁄8	5" FLANGE	3⁄4	19.5	84	8 5⁄8	587	150	300
TXC100-2	2	124.7	110.0	1 3⁄8	3 1⁄8	5" FLANGE	3⁄4	28.4	84	10 3⁄4	1070	150	225
TXC120-2	2	136.8	120.0	1 3⁄8	3 1⁄8	6" FLANGE	3⁄4	26.9	84	12 3⁄4	1080	150	225
TXC150-2	2	173.0	152.3	1 3⁄8	2 5⁄8	6" FLANGE	3⁄4	34.0	84	14	1600	150	225
TXC175-2	2	198.0	174.5	1 3⁄8	2 5⁄8	6" FLANGE	3⁄4	31.0	84	14	1700	150	225
TXC200-2	2	242.0	212.9	1 3⁄8	3 1⁄8	8" FLANGE	3⁄4	42.0	84	16	2100	150	225
TXC250-2	2	284.0	251.1	1 3⁄8	3 1⁄8	8" FLANGE	3⁄4	39.0	84	16	2200	150	225
TXC275-2	2	309.0	273.5	2 1⁄8	4 1⁄8	8" FLANGE	3⁄4	54.0	84	18	2600	150	225
TXC300-2	2	361.0	319.7	2 1⁄8	3 5⁄8	8" FLANGE	3⁄4	73.0	84	20	2800	150	225
TXC500-2	2	573.0	505.5	2 1⁄8	4 1⁄8	10" FLANGE	3⁄4	101.0	84	24	3600	150	225
Multi-Circuit													
TX15-3	3	22.1	18.1	5⁄8	1 1⁄8	2 1⁄2 FPT	1⁄2	8.4	72	6	145	225	225
TX20-4	4	26.7	24.6	5⁄8	1 1⁄8	3 FPT	1⁄2	8.1	72	6	155	225	225

**Clean ratings: As tested per ARI standard 480-01
Fouled ratings: Include a additive fouling coefficient of 0.0001 ft2 hr°F/Btu over clean rating per ARI standard 480-01

- Serviceable
- 30% - 50% smaller than comparable models
- Easier to handle and position
- New advanced design
- UL listed or ASME
- 3/4" insulation
- Single and dual-circuit designs
- 3 and 4 circuit designs available
- 21 TX/TXC models from 2 thru 500 tons
- Ideal for OEM replacements

Models	Dimensions (inches)															
	D	H	L	A	B	C	E	F	G	I	J	K	M	N	O	Fig.
1-Circuit																
TX2-1	4	6 1/16	28 1/4	2 1/8	21 7/8	3 1/2	23 5/8	3/8	2 1/2	2 1/2	3 7/8	3/4	11/16	–	–	A
TX3-1	4	6 1/16	28 1/4	2 1/8	21 7/8	3 1/2	23 5/8	3/8	2 1/2	2 1/2	3 7/8	3/4	11/16	–	–	A
TX5-1	5 1/2	8	40 1/4	2 5/16	33 11/16	3 1/2	35 5/8	3/8	3	3 1/2	5	15/16	3/4	–	–	A
TX6-1	5 1/2	8	40 1/4	2 7/16	33 9/16	3 1/2	35 5/8	3/8	3	3 1/2	5	15/16	3/4	–	–	A
TX7 1/2-1	5 1/2	8	40 1/4	2 7/16	33 9/16	3 1/2	35 5/8	3/8	3	3 1/2	5	1 1/16	15/16	–	–	A
TX10-1	5 1/2	8	40 1/4	2 13/16	33 3/16	3 1/2	35 5/8	3/8	3	3 1/2	5	1 1/16	15/16	–	–	A
TX12-1	7 3/4	10	41 1/4	2 15/16	33 1/16	4 1/2	35 1/2	1/2	3	5 3/4	6	1 3/16	15/16	–	–	A
TX15-1	7 3/4	11	41 1/4	3 3/16	32 13/16	4 1/2	35 1/2	1/2	3	5 3/4	6	1 1/2	1	–	–	A
TX20-1	7 3/4	11	41 1/4	3 1/2	32 1/2	4 1/2	35 1/2	1/2	3	5 3/4	6	1 1/2	1	–	–	A
TX25-1	7 3/4	11	41 1/4	3 1/2	32 1/2	4 1/2	35 1/2	1/2	3	5 3/4	6	1 1/2	1 1/4	–	–	A
TXC30-1	10 3/8	13 1/2	81 3/4	4 1/4	67 3/4	8	54	18	3	5 1/4	–	1 3/4	1 3/4	–	–	B
TXC40-1	11 5/8	15 1/2	81 3/4	4 1/2	67 1/2	8	54	18	3	7 1/8	–	2 1/8	1 2/3	–	–	B
TXC50-1	11 5/8	15 1/2	81 3/4	4 3/4	67 1/4	8	54	18	3	7 1/8	–	2 1/4	2 3/8	–	–	B
TXC60-1	11 5/8	15 1/2	93 3/4	4 3/4	79 1/4	8	63	21	3	7 1/8	–	2 1/4	2 3/8	–	–	B
TXC75-1	11 5/8	15 1/2	93 3/4	5 1/2	78 1/2	8	63	21	3	7 1/8	–	2 1/4	2 3/8	–	–	B
TXC100-1	16 5/8	19 5/8	94 7/8	5 3/4	78 1/4	8 3/8	63	21	5	11 1/4	–	2 4/9	2 3/4	–	–	B
TXC120-1	16 5/8	19 5/8	94 7/8	6 3/8	77 5/8	8 3/8	63	21	5	11 1/4	–	2 4/9	2 3/4	–	–	B
2-Circuit																
TX10-2	5 1/2	8	40 1/2	2 13/16	33 3/16	3 1/2	35 5/8	3/8	3	3 1/2	5	11/16	15/16	3/4	1	C
TX12-2	7 3/4	10	41 1/4	2 15/16	33 1/16	4 1/2	35 1/2	1/2	3	5 3/4	6	1	3/4	1 1/8	1 1/8	C
TX15-2	7 3/4	11	41 1/4	3 3/16	32 13/16	4 1/2	35 1/2	1/2	3	5 3/4	6	1 3/16	7/8	1 1/4	1 1/4	C
TX20-2	7 3/4	11	41 1/4	3 1/2	32 1/2	4 1/2	35 1/2	1/2	3	5 3/4	6	1 3/16	7/8	1 1/4	1 1/4	C
TX25-2	7 3/4	11	41 1/4	3 1/2	32 1/2	4 1/2	35 1/2	1/2	3	5 3/4	6	1 3/16	7/8	1 1/4	1 1/4	C
TXC30-2	10 3/8	13 1/2	81 3/4	4 1/4	67 3/4	8	54	18	3	5 1/4	–	1 1/2	1 1/2	1 3/4	1 3/4	D
TXC40-2	11 5/8	15 1/2	81 3/4	4 1/2	67 1/2	8	54	18	3	7 1/8	–	1 3/4	1 5/8	2	2	D
TXC50-2	11 5/8	15 1/2	81 3/4	4 3/4	67 1/4	8	54	18	3	7 1/8	–	1 3/4	1 5/8	2	2	D
TXC60-2	11 5/8	15 1/2	93 3/4	4 3/4	79 1/4	8	63	21	3	7 1/8	–	1 3/4	1 5/8	2	2	D
TXC75-2	11 5/8	15 1/2	93 3/4	5 1/2	78 1/2	8	63	21	3	7 1/8	–	1 3/4	1 5/8	2	2	D
TXC100-2	16 5/8	19 5/8	94 7/8	5 3/4	78 1/4	8 3/8	63	21	3	11 1/4	–	2 3/8	2 2/3	2 1/4	3 1/8	D
TXC120-2	16 5/8	19 5/8	94 7/8	6 3/8	77 5/8	8 3/8	63	21	3	11 1/4	–	2 3/8	2 2/3	2 1/4	3 1/2	D
TXC150-2	18 5/8	20 7/8	96 5/8	6 3/8	77 5/8	9 3/8	63	21	5 1/2	12	–	2 5/8	2 5/8	3	3	D
TXC175-2	18 5/8	20 7/8	96 5/8	6 3/8	77 5/8	9 3/8	63	21	5 1/2	12	–	2 5/8	2 5/8	3	3	D
TXC200-2	21	24 1/8	96 5/8	7 1/2	76 1/2	9 3/8	63	21	5 1/2	12	–	2 5/8	2 5/8	3 1/3	3 1/3	D
TXC250-2	21	24 1/8	96 5/8	7 1/2	76 1/2	9 3/8	63	21	5 1/2	12	–	2 5/8	2 5/8	3 1/3	3 1/3	D
TXC275-2	23	24 7/8	96 7/8	7 1/2	76 1/2	9 3/8	63	21	5 1/2	12	–	3	3	4	4	D
TXC300-2	25	26 7/8	96 7/8	7 1/2	76 1/2	9 3/8	63	21	5 1/2	12	–	3 3/4	3 3/4	4 1/4	4 1/4	D
TXC400-2	25	26 7/8	96 7/8	8 5/8	75 3/8	9 3/8	63	21	5 1/2	12	–	3 3/4	3 3/4	4 1/4	4 1/4	D
TXC500-2	29	31 1/8	97 1/8	8 5/8	75 3/8	9 3/8	63	21	5 1/2	12	–	3 1/2	3 1/2	4 5/8	4 5/8	D
Multi-Circuit																
TX15-3	7 3/4	9 7/8	81	3 13/16	68 13/16	4 1/2	72	1/2	3	5 3/4	6	2 1/8	1 5/8	na	na	E
TX20-4	7 3/4	9 7/8	81	3 3/8	68 5/8	4 1/2	72	1/2	3	5 3/4	6	1 5/8	1	13/16	7/8	F

Figure A
1-Circuit

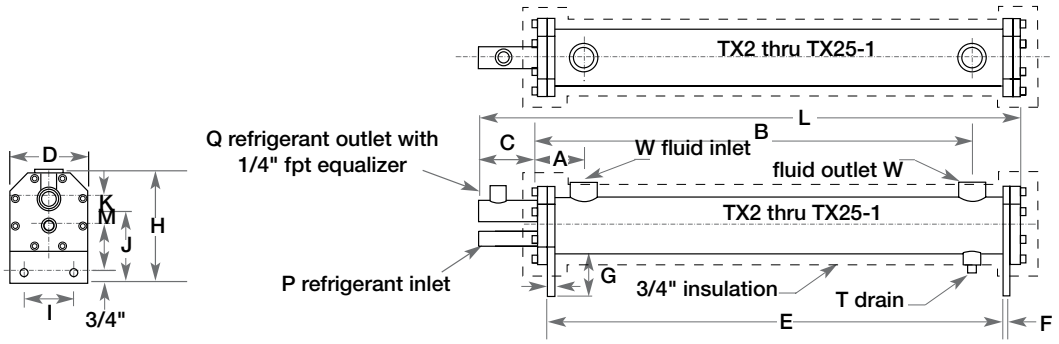


Figure B
1-Circuit

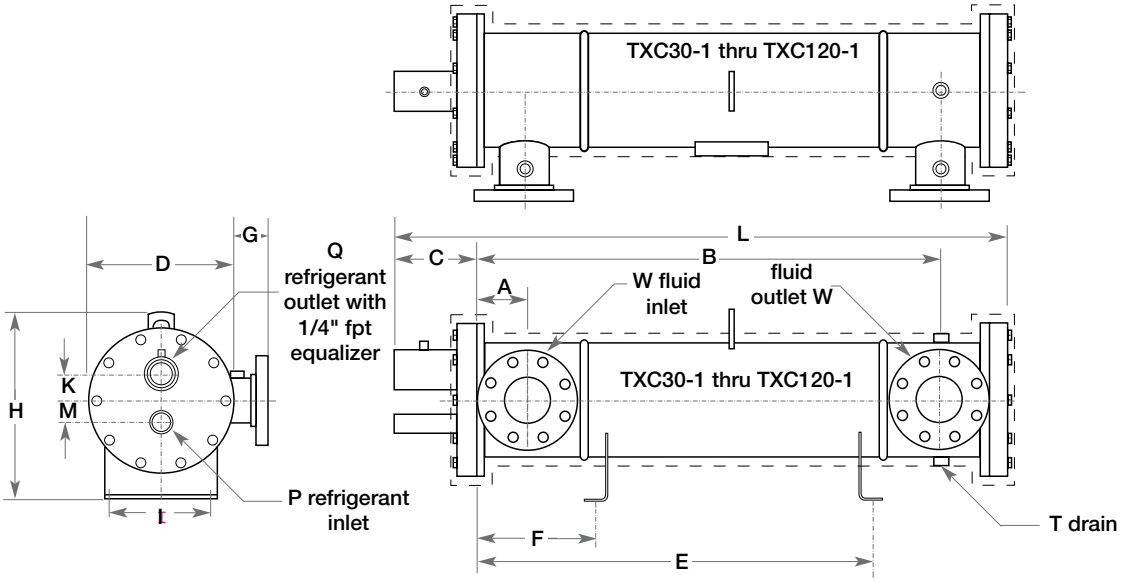
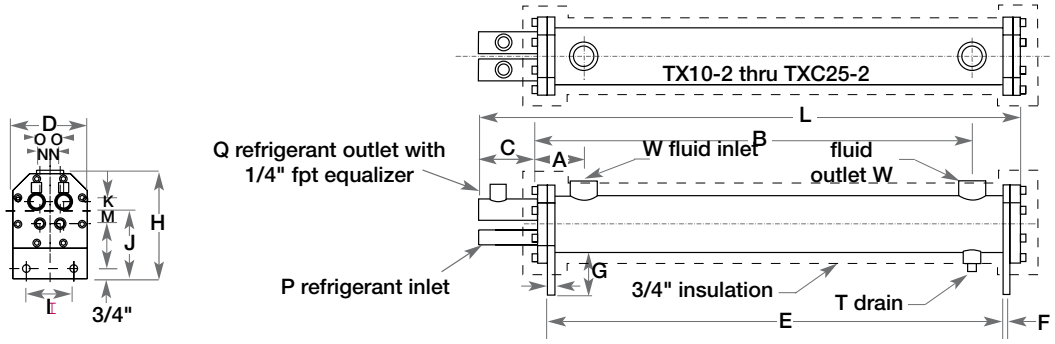


Figure C
2-Circuit



Other multi-circuit models available, consult with factory.
Dimensions do not include the 3/4" factory insulation.

Figure D
2-Circuit

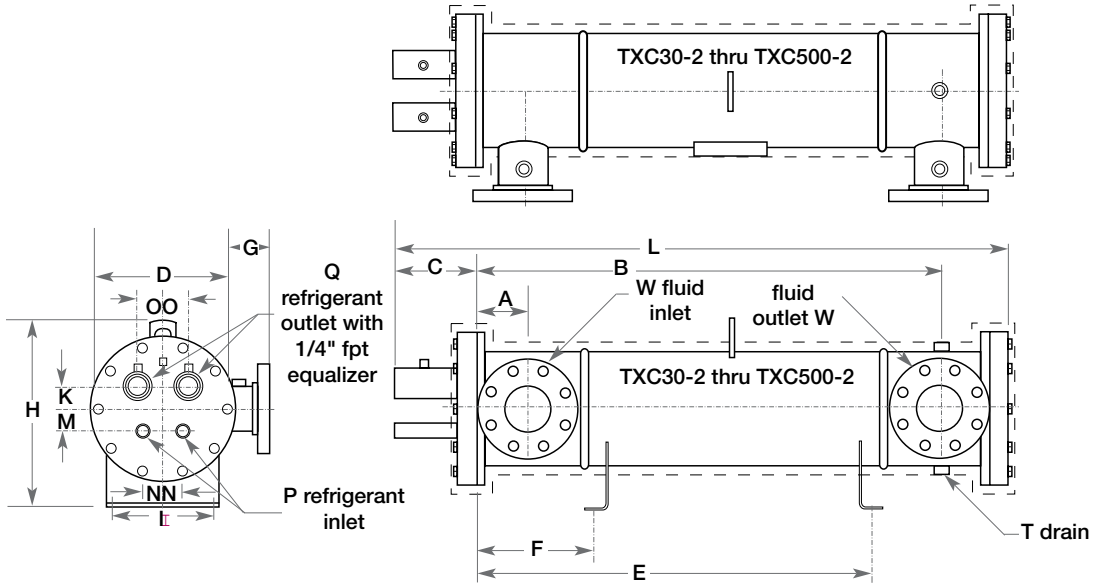


Figure E
3-Circuit

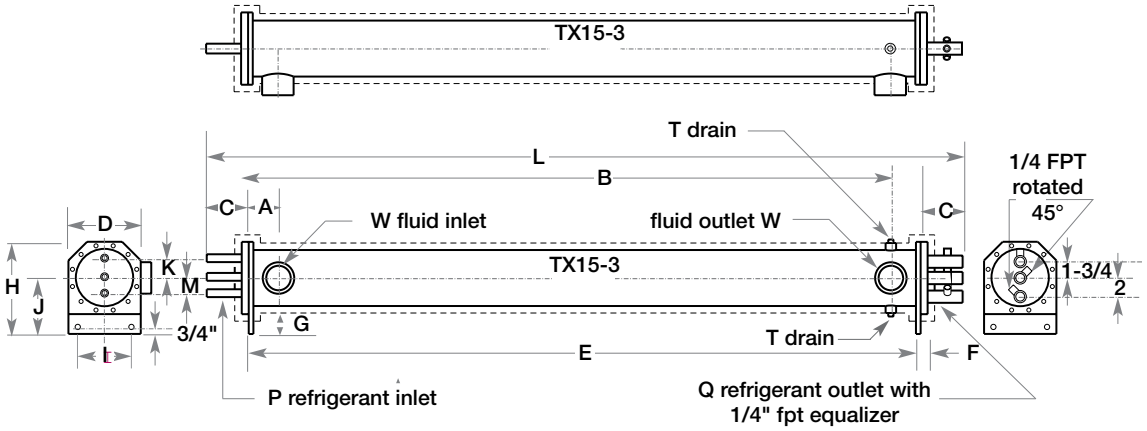
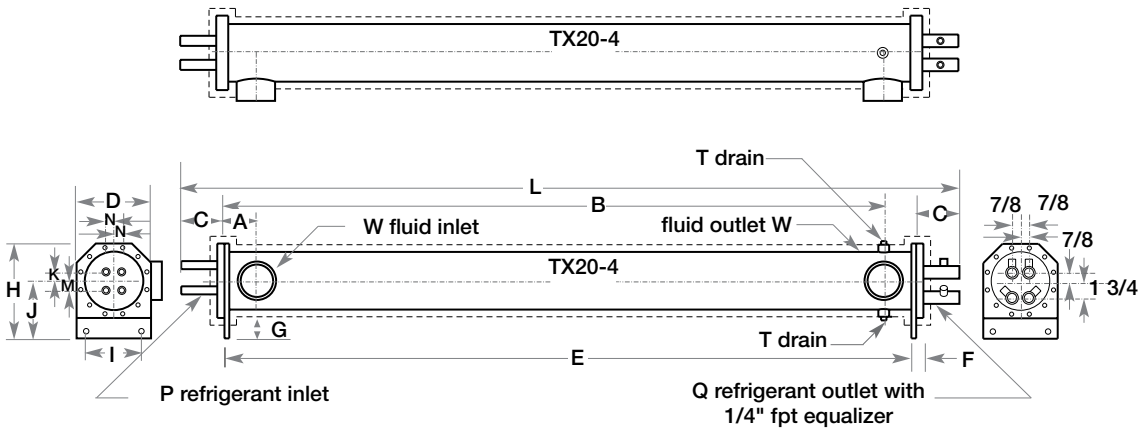


Figure F
4-Circuit



Dimensions do not include the 3/4" factory insulation.

The TXG is the industry's most compact shell-and-tube evaporator.

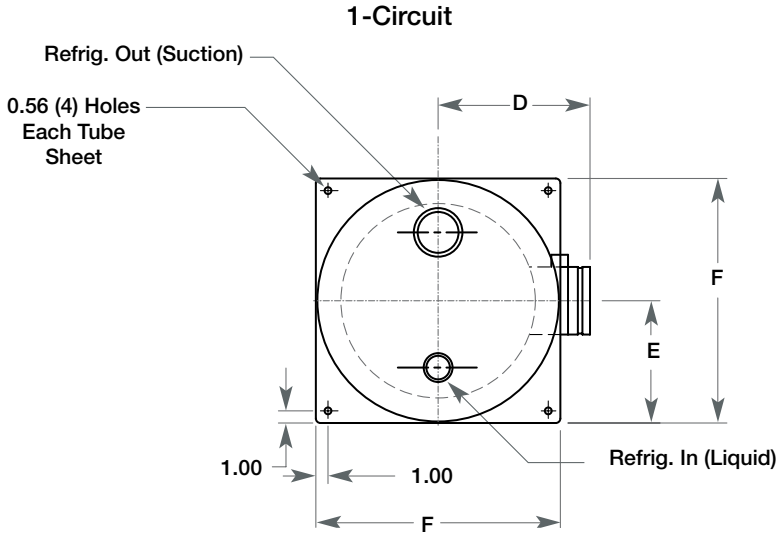
Design Features and Ratings

Models	Nom'l Cap. Tons	Press. Drop (psi)	Shell Dia. (in)	Dimensions (inches)						Water In & Out (grooved)	Refrig. Inlet (ids)	Refrig. Outlet (ids)	Shipping Weight (lbs)	Working Pressure (psi)	
				A	B	C	D	E	F					Shell Side	Tube Side
1-Circuit															
TXG30-1	30	6.0	8.625	42.69	27.50	7.81	7.81	5.94	11.88	3(fpt)	1.125	2.125	320	150	225
TXG40-1	40	5.8	10.75	42.94	27.50	8.88	8.88	7.13	14.25	3(fpt)	1.375	2.625	440	150	225
TXG50-1	50	6.9	10.75	42.56	26.50	8.88	8.88	7.13	14.25	4	1.375	2.625	460	150	225
TXG60-1	60	5.8	12.75	43.50	26.50	9.88	9.88	8.44	16.88	4	1.625	3.125	610	150	225
TXG70-1	70	6.3	12.75	43.19	26.00	9.88	9.88	8.44	16.88	5	1.625	3.125	620	150	225
TXG85-1	85	4.9	14	43.25	26.00	11.50	11.50	8.94	17.88	5	1.625	3.125	840	150	225
TXG100-1	100	5.5	16	43.94	25.50	12.50	12.50	10.06	20.12	5	2.125	3.625	1190	150	225
TXG115-1	115	5.9	16	43.31	24.38	12.50	12.50	10.06	20.12	6	2.125	3.625	1210	150	225
TXG130-1	130	6.4	18	43.87	24.38	13.50	13.50	11.13	22.25	6	1.625	3.625	1540	150	225
TXG150-1	150	6.4	18	50.94	30.38	13.50	13.50	11.12	22.25	6	1.625	3.625	1610	150	225
TXG190-1	190	4.0	20	51.69	35.19	14.50	14.50	12.13	24.25	8	1.625	4.125	1920	150	225
2-Circuit															
TXG30-2	30	6.0	8.625	42.69	27.50	7.81	7.81	5.94	11.88	3 (fpt)	0.875	1.625	323	150	225
TXG40-2	40	5.8	10.75	42.94	27.50	8.88	8.88	7.13	14.25	3 (fpt)	0.875	1.625	444	150	225
TXG50-2	50	6.9	10.75	42.56	26.50	8.88	8.88	7.13	14.25	4	1.125	2.125	464	150	225
TXG60-2	60	5.8	12.75	43.50	26.50	9.88	9.88	8.44	16.88	4	1.125	2.125	616	150	225
TXG70-2	70	6.3	12.75	43.19	26.00	9.88	9.88	8.44	16.88	5	1.125	2.625	626	150	225
TXG85-2	85	4.9	14	43.25	26.00	11.50	11.50	8.94	17.88	5	1.375	2.625	848	150	225
TXG100-2	100	5.5	16	43.94	25.50	12.50	12.50	10.06	20.12	5	1.375	2.625	1201	150	225
TXG115-2	115	5.9	16	43.31	24.38	12.50	12.50	10.06	20.12	6	1.375	3.125	1221	150	225
TXG130-2	130	6.4	18	43.87	24.38	13.50	13.50	11.13	22.25	6	1.625	3.125	1555	150	225
TXG150-2	150	6.4	18	50.94	30.38	13.50	13.50	11.12	22.25	6	1.625	3.125	1625	150	225
TXG190-2	190	4.0	20	51.69	35.19	14.50	14.50	12.13	24.25	8	1.625	3.625	1938	150	225

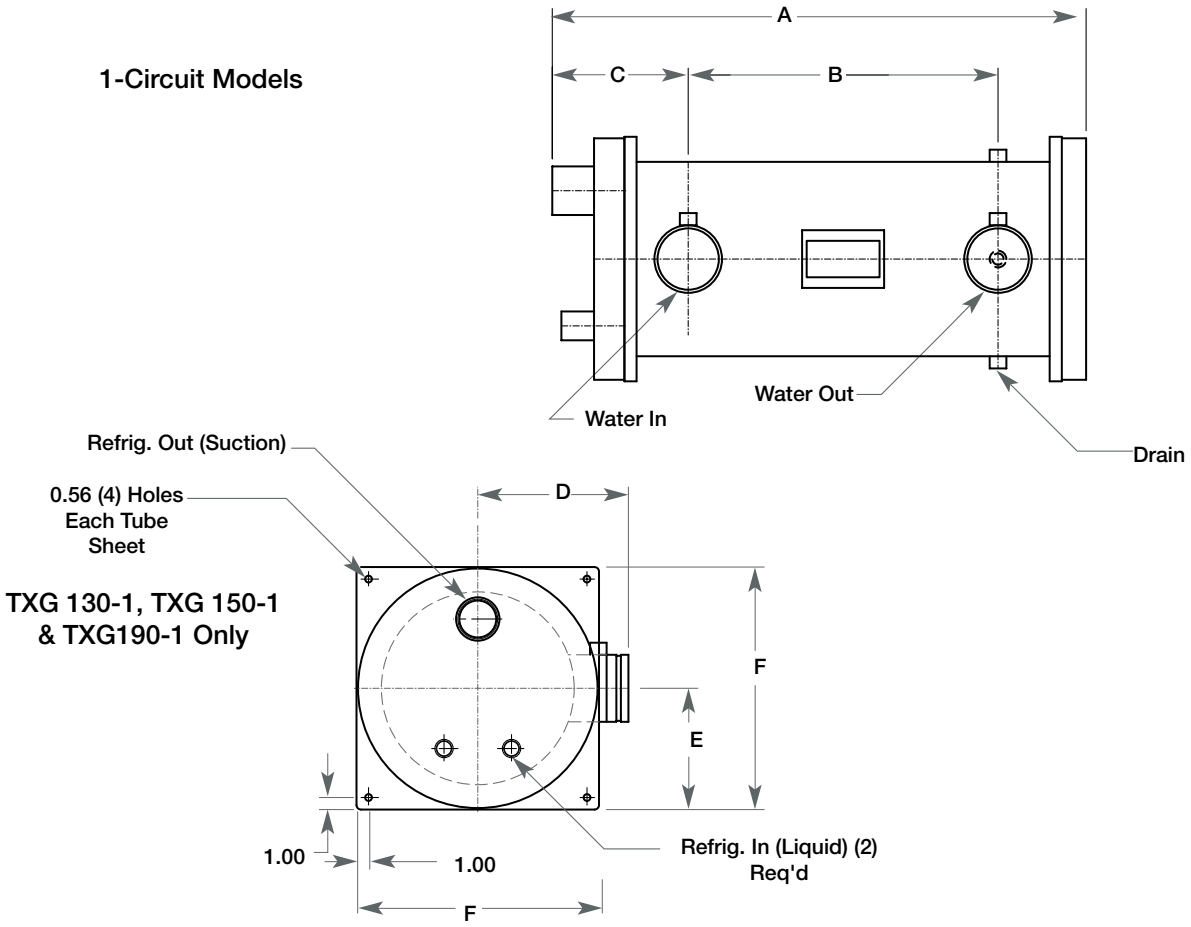
*Flanged Connections Available Upon Request
Insulation Available Upon Request
Ratings in accordance with ARI standard 480-95

- Rivals Brazed Plates for compactness
- Single and dual-circuit designs
- Accurate ratings to ARI 480-95
- 22 TXG models from 30 to 190 tons
- More resistant to localized freeze-ups
- Ideal for OEM replacements
- Design resists clogging and premature failure
- Serviceable

1-Circuit

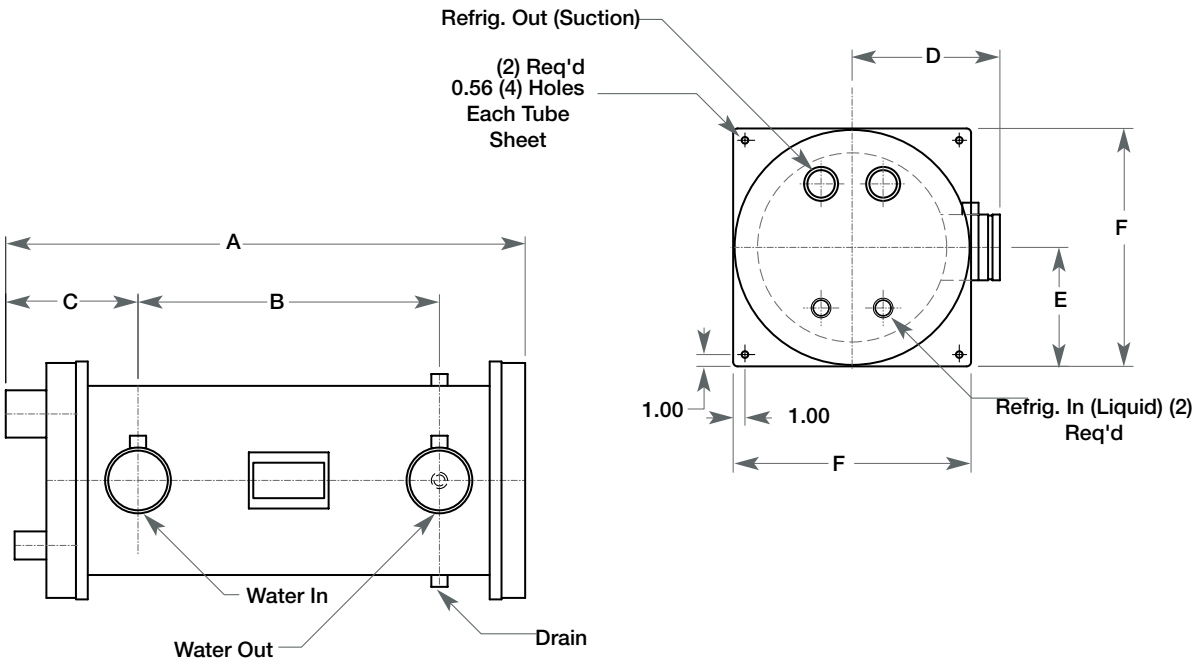


1-Circuit Models



TXG 130-1, TXG 150-1 & TXG190-1 Only

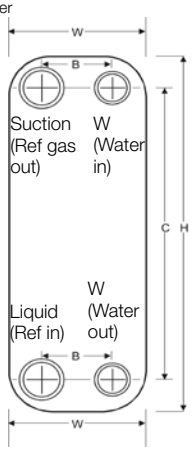
2-Circuit



The EVP-AC Single-Circuit Evaporators are copper-brazed and feature a built-in distributor. Four Frame Sizes

Model	Nominal HP*	¾" Insulation Kit	Description	Part Number	Connections (ids)		Dry Wt. (lbs.)	Dimensions (in.)			
					Ref. Liq/ Suction in/out	Water In/ Out		"D"	"A" liq,Suc, Water	"B"	"C"
	Frame Size 12.8" H x 3.7" W					**Working Pressure 450 PSIG**					
EVP-1M-AC	1.1	672-01	AC-30-10EQ R52	32870 6134 6	3/8", 7/8"	7/8"	4.2	0.9	0.95	1.54	10.56
EVP-2M-AC	2.3	672-01	AC-30-20EQ R52	32870 6134 7	3/8", 7/8"	7/8"	6.2	1.5	0.95	1.54	10.56
EVP-3.5M-AC	3.5	672-01	AC-30-30EQ S09	32870 6134 8	1/2", 7/8"	7/8"	8.2	2.1	0.95	1.54	10.56
EVP-5M-AC	4.8	672-02	AC-30-40EQ S09	32870 6134 9	1/2", 7/8"	7/8"	10.2	2.7	0.95	1.54	10.56
EVP-6M-AC	6	672-02	AC-30-50EQ S21	32870 6135 0	5/8", 1-/8"	1-1/8"	12.2	3.3	0.95	1.54	10.56
EVP-7M-AC	7	672-02	AC-30-60EQ S21	32870 6135 1	5/8", 1-/8"	1-1/8"	14.2	3.9	0.95	1.54	10.56
EVP-8M-AC	8	672-03	AC-30-70EQ S21	32870 6135 2	5/8", 1-/8"	1-1/8"	16.2	4.5	0.95	1.54	10.56
EVP-10M-AC	10	672-03	AC-30-100EQ S21	32870 6135 4	5/8", 1-/8"	1-1/8"	22.2	6.3	0.95	1.54	10.56
	Frame Size 20.7" H x 4.4" W					**Working Pressure 450 PSIG**					
EVP-3L-AC	3	674-01	AC-70-14MY-S21	32870 6720 4	5/8", 1-1/8"	1-1/8"	8.2	2.6	0.95	1.97	18.35
EVP-4L-AC	4	674-01	AC-70-18MY-S21	32870 6720 6	5/8", 1-1/8"	1-1/8"	9.7	3	0.95	1.97	18.35
EVP-5L-AC	5	674-01	AC-70-22MY-S21	32870 6720 7	5/8", 1-1/8"	1-1/8"	11.3	3.3	0.95	1.97	18.35
EVP-6L-AC	6	674-01	AC-70-26MY-S21	32870 6720 8	5/8", 1-1/8"	1-1/8"	12.9	3.7	0.95	1.97	18.35
EVP-7L-AC	7	674-01	AC-70-32MY-S21	32870 6720 9	5/8", 1-1/8"	1-1/8"	15.3	4.2	0.95	1.97	18.35
EVP-10L-AC	10	674-02	AC-70-42MY-S24	32870 6721 0	5/8", 1-3/8"	1-1/8"	19.3	5.1	0.95	1.97	18.35
EVP-12L-AC	12	674-03	AC-70-50MY-S24	32870 6721 1	5/8", 1-3/8"	1-1/8"	22.5	5.9	0.95	1.97	18.35
EVP-15L-AC	15	674-03	AC-70-62MY-S25	32870 6721 3	5/8", 1-3/8"	1-1/8"	27.3	7	0.95	1.97	18.35
EVP-20L-AC	21	674-03	AC-70-100MY-S49	32870 6721 7	7/8", 1-3/8"	1-3/8"	42.4	10.4	0.95	1.97	18.35
EVP-23L-AC	23	674-03	AC-70-118MY-S49	32870 6721 8	7/8", 1-3/8"	1-3/8"	49.6	12	0.95	1.97	18.35
	Frame Size 24.3" H x 7.6" W					**Working Pressure 450 PSIG**					
EVP-10XL-AC	11	675-01	AC-120-30EQ S46	32870 6145 1	7/8", 2-1/8"	2-1/8"	45.9	3.3	0.95,1.58,1.58	3.62	20.43
EVP-15XL-AC	15	675-01	AC-120-40EQ S46	32881 0214 0	7/8", 2-1/8"	2-1/8"	55.6	4.2	0.95,1.58,1.58	3.62	20.43
EVP-20XL-AC	23	675-01	AC-120-60EQ S62	32870 6145 3	1-1/8", 2-1/8"	2-1/8"	75	6.1	0.95,1.58,1.58	3.62	20.43
EVP-25XL-AC	28	675-02	AC-120-76EQ S62	32870 6145 4	1-1/8", 2-1/8"	2-1/8"	90.5	7.6	0.95,1.58,1.58	3.62	20.43
EVP-30XL-AC	33	675-02	AC-120-90EQ S62	32870 6145 5	1-1/8", 2-1/8"	2-1/8"	104.1	8.9	0.95,1.58,1.58	3.62	20.43
EVP-35XL-AC	38	675-02	AC-120-106EQ S62	32870 6145 6	1-1/8", 2-1/8"	2-1/8"	119.6	10.4	0.95,1.58,1.58	3.62	20.43
EVP-40XL-AC	42	675-03	AC-120-124EQ S62	32870 6145 7	1-1/8", 2-1/8"	2-1/8"	137.1	12.1	0.95,1.58,1.58	3.62	20.43
EVP-45XL-AC	48	675-03	AC-120-150EQ S76	32870 6145 8	1-3/8", 2-1/8"	2-1/8"	162.3	14.6	0.95,1.58,1.58	3.62	20.43
EVP-50XL-AC	52	675-03	AC-120-180EQ S76	32870 5589 6	1-3/8", 2-1/8"	2-1/8"	191.4	17.4	0.95,1.58,1.58	3.62	20.43
	Frame Size 33.5" H x 12.7" W					**Working Pressure 435 PSIG**					
EVP-45XXL-AC	44	676-01	AC-250-60EQ Y51	32870 6199 0	1-1/8", 2-5/8"	3" Victaulic	127.9	7.2	1.18,2.05,2.05	4.13	23.58
EVP-60XXL-AC	58	676-02	AC-250-80EQ Y55	32870 6199 1	1-3/8", 2-5/8"	3" Victaulic	163.1	9.4	1.18,2.05,2.05	4.13	23.58
EVP-75XXL-AC	72	676-02	AC-250-100EQ Y55	32870 6199 2	1-3/8", 2-5/8"	3" Victaulic	198.3	11.6	1.18,2.05,2.05	4.13	23.58
EVP-85XXL-AC	84	676-02	AC-250-120EQ Y57	32870 6199 3	1-3/8", 3-1/8"	3" Victaulic	233.5	13.9	1.18,2.05,2.05	4.13	23.58

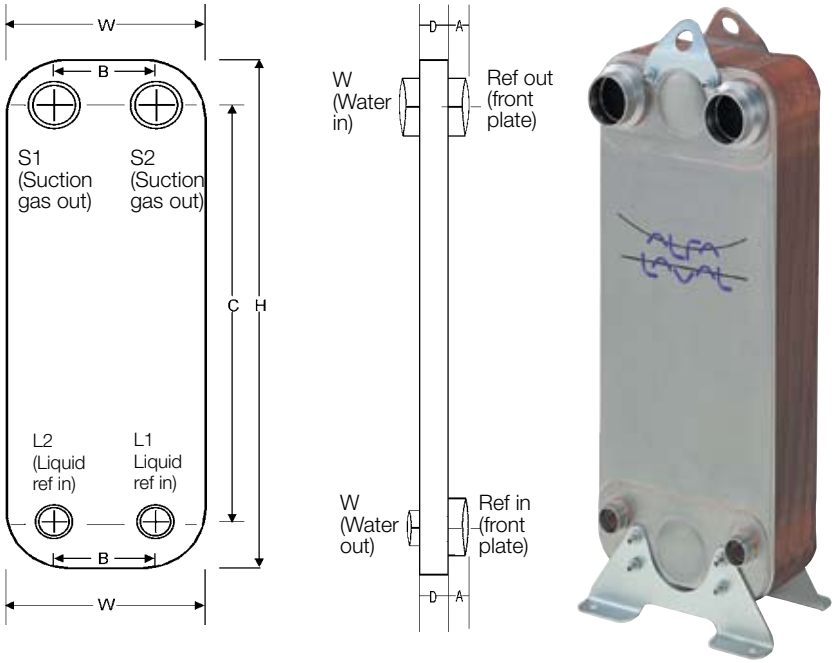
**Nominal Tons - 54°F EWT, 44°F LWT, 35°F SST R22, 6°F SH, 0.0001 Ft²/hr, °F/Btu Water pressure drop less than 10 psig
For performance with other refrigerants and/or fluids other than water, please contact Customer Service.



The EVP-AC2 Dual Circuit Evaporators are copper-brazed and feature a built-in distributor. Three Frame Sizes

Model	Nominal HP*	¾" Insulation Kit	Description	Part Number	Connections (ids)		Dry Wt. (lbs.)	Dimensions (in.)			
					Front Plate Ref. In/ Out L2,L1/ S1,S2**	Rear Plate Water In/Out**		"D"	"A" L,S,W	"B" front	"C" front/rear
Frame Size 15.4" H x 7.67" W						**Working Pressure 450 PSIG**					
EVP-6MW-AC2	6.0	677-01	AC-80-30DQ Q18	32870 6758 0	5/8", 1-1/8"	1-3/8"	19.3	3.2	0.95,1.18,1.58	4.72	11.65/12.16
EVP-8MW-AC2	8	677-01	AC-80-42DQ Q18	32870 6508 5	5/8", 1-1/8"	1-3/8"	25.4	4.3	0.95,1.18,1.58	4.72	11.65/12.16
EVP-10MW-AC2	11	677-02	AC-80-54DQ Q18	32870 6508 7	5/8", 1-1/8"	1-3/8"	31.5	5.5	0.95,1.18,1.58	4.72	11.65/12.16
EVP-15MW-AC2	14	677-02	AC-80-66DQ Q18	32870 6509 5	5/8", 1-1/8"	1-3/8"	37.7	6.6	0.95,1.18,1.58	4.72	11.65/12.16
EVP-17MW-AC2	17	677-02	AC-80-82DQ Q18	32870 6508 6	5/8", 1-1/8"	1-3/8"	45.8	8.1	0.95,1.18,1.58	4.72	11.65/12.16
EVP-20MW-AC2	20	677-03	AC-80-98DQ Q19	32870 6758 1	7/8", 1-3/8"	1-3/8"	54	9.6	0.95,1.18,1.58	4.72	11.65/12.16
EVP-22MW-AC2	22	677-03	AC-80-118DQ Q19	32870 6758 2	7/8", 1-3/8"	1-3/8"	64.2	11.5	0.95,1.18,1.58	4.72	11.65/12.16
Frame Size 19.2" H x 9.7" W						**Working Pressure 450 PSIG**					
EVP-20LW-AC2	21	678-01	AC-130-70DQ Y97	32870 6209 7	7/8", 1-5/8"	2-1/2" Victaulic	73.1	6.5	0.95,1.18,1.89	6.2	15.42, 15.65
EVP-25LW-AC2	24	678-01	AC-130-82DQ Y97	32870 6209 8	7/8", 1-5/8"	2-1/2" Victaulic	83.3	7.5	0.95,1.18,1.89	6.2	15.42, 15.65
EVP-30LW-AC2	30	678-01	AC-130-102DQ Y97	32870 6209 9	7/8", 1-5/8"	2-1/2" Victaulic	100	9.3	0.95,1.18,1.89	6.2	15.42, 15.65
EVP-35LW-AC2	36	678-02	AC-130-122DQ Y74	32870 6210 0	1-1/8", 2-1/8"	2-1/2" Victaulic	116.8	11	0.95,1.18,1.89	6.2	15.42, 15.65
EVP-40LW-AC2	42	678-02	AC-130-142DQ Y74	32870 6210 1	1-1/8", 2-1/8"	2-1/2" Victaulic	134.4	12.9	0.95,1.18,1.89	6.2	15.42, 15.65
EVP-45LW-AC2	47	678-02	AC-130-162DQ Y74	32870 6210 2	1-1/8", 2-1/8"	2-1/2" Victaulic	150.4	14.6	0.95,1.18,1.89	6.2	15.42, 15.65
EVP-50LW-AC2	52	678-03	AC-130-182DQ Y74	32870 6210 3	1-1/8", 2-1/8"	2-1/2" Victaulic	167,2	16.3	0.95,1.18,1.89	6.2	15.42, 15.65
EVP-60LW-AC2	57	678-03	AC-130-202DQ Y74	32870 6210 4	1-1/8", 2-1/8"	2-1/2" Victaulic	184	18.1	0.95,1.18,1.89	6.2	15.42, 15.65
Frame Size 33.5" H x 12.7" W						**Working Pressure 450 PSIG**					
EVP-75XXL-AC2	74	679-01	AC-250-102DQ Y77	32870 6199 4	1-1/8", 2-5/8"	3" Victaulic	201.8	11.9	1.18,2.05,2.05	6.31	23.58, 24.72
EVP-90XXL-AC2	88	679-02	AC-250-122DQ Y77	32870 6199 5	1-1/8", 2-5/8"	3" Victaulic	237	14.1	1.18,2.05,2.05	6.31	23.58, 24.73
EVP-100XXL-AC2	98	679-02	AC-250-142DQ Y81	32870 5600 9	1-3/8", 2-5/8"	3" Victaulic	279	16.32	1.18,2.05,2.05	6.31	23.58, 24.74
EVP-110XXL-AC2	110	679-02	AC-250-162DQ Y81	32870 5583 3	1-3/8", 2-5/8"	3" Victaulic	315.1	18.54	1.18,2.05,2.05	6.31	23.58, 24.75
EVP-125XXL-AC2	125	679-02	AC-250-182DQ Y81	32870 5601 1	1-3/8", 2-5/8"	3" Victaulic	351.3	20.76	1.18,2.05,2.05	6.31	23.58, 24.76
EVP-135XXL-AC2	135	679-03	AC-250-202DQ Y81	32870 0073 0	1-3/8", 2-5/8"	3" Victaulic	387.4	22.98	1.18,2.05,2.05	6.31	23.58, 24.76

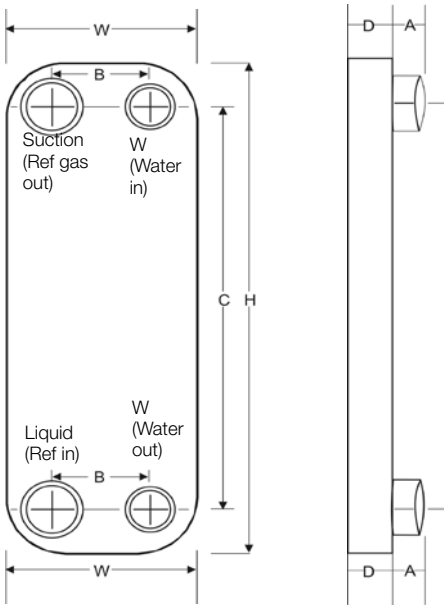
**Nominal Tons - 54°F EWT, 44°F LWT, 35°F SST R22, 6°F SH, 0.0001 Ft²/hr, °F/Btu Water pressure drop less than 10 psig
For performance with other refrigerants and/or fluids other than water, please contact Customer Service.



The AlfaNova is a copper-free, 100-percent, stainless steel, corrosion-resistant design. Three Frame Sizes

Model	Nominal HP*	¾" Insulation Kit	Description	Part Number	Connections (ids)		Dry Wt. (lbs.)	Dimensions (in.)			
					Ref. Liq/ Suction in/out	Water In/ Out		"D"	"A" liq,Suc, Water	"B"	"C"
Frame Size 12.2" H x 4.4" W						**Working Pressure 435 PSIG**					
EVP-1.5M-AN	1.6	673-01	AN27-20H S52	3287000880	1-1/8"	1-1/8"	8.5	2.36	0.95,0.95,0.95	1.97	9.84
EVP-2M-AN	2.3	673-02	AN27-30H S52	3287000882	1-1/8"	1-1/8"	11.36	3.29	0.95,0.95,0.95	1.97	9.84
EVP-3M-AN	3.3	673-02	AN27-40H S52	3287000885	1-1/8"	1-1/8"	17.09	5.19	0.95,0.95,0.95	1.97	9.84
EVP-4M-AN	4.0	673-03	AN27-70H S52	3287000999	1-1/8"	1-1/8"	22.83	7.1	0.95,0.95,0.95	1.97	9.84
EVP-5M-AN	4.4	673-03	AN27-80H S52	3287001000	1-1/8"	1-1/8"	22.69	8.05	0.95,0.95,0.95	1.97	9.84
Frame Size 20.7" H x 4.4" W						**Working Pressure 435 PSIG**					
EVP-4L-AN	4	674-01	AN52-20H S52	3287000902	1-1/8"	1-1/8"	14.22	2.35	0.95,0.95,0.95	1.97	18.35
EVP-6L-AN	6	674-01	AN52-30H S52	3287000904	1-1/8"	1-1/8"	18.98	3.32	0.95,0.95,0.95	1.97	18.35
EVP-8L-AN	8	674-02	AN52-40H S52	3287000906	1-1/8"	1-1/8"	23.74	4.3	0.95,0.95,0.95	1.97	18.35
EVP-10L-AN	9.8	674-03	AN52-52H S52	3287000907	1-1/8"	1-1/8"	28.51	5.2	0.95,0.95,0.95	1.97	18.35
EVP-12L-AN	11.4	674-03	AN52-60H S52	3287001003	1-1/8"	1-1/8"	33.27	6.3	0.95,0.95,0.95	1.97	18.35
EVP-13L-AN	12.9	674-03	AN52-70H S52	3287001004	1-1/8"	1-1/8"	38.03	7.3	0.95,0.95,0.95	1.97	18.35
EVP-15L-AN	14.2	674-03	AN52-80H S52	3287001005	1-1/8"	1-1/8"	42.79	8.2	0.95,0.95,0.95	1.97	18.35
Frame Size 24.3" H x 7.6" W						**Working Pressure 435 PSIG**					
EVP-10XL-AN	9.5	675-01	AN76-30H W16	3287055757	2" weld	2" weld	51.8	3.7	1.57,1.57,1.57	3.62	20.43
EVP-13XL-AN	13	675-01	AN76-40H W16	3287055026	2" weld	2" weld	63.09	4.83	1.57,1.57,1.57	3.62	20.43
EVP-15XL-AN	16.4	675-01	AN76-50H W16	3287000910	2" weld	2" weld	73.83	5.96	1.57,1.57,1.57	3.62	20.43
EVP-20XL-AN	19.7	675-01	AN76-60H W16	3287000911	2" weld	2" weld	84.52	7.09	1.57,1.57,1.57	3.62	20.43
EVP-25XL-AN	23	675-02	AN76-70H W16	3287000912	2" weld	2" weld	95.22	8.22	1.57,1.57,1.57	3.62	20.43

**Nominal Tons - 54°F EWT, 44°F LWT, 35°F SST R22, 6°F SH, 0.0001 Ft²/hr, °F/Btu Water pressure drop less than 10 psig
For performance with other refrigerants and/or fluids other than water, please contact Customer Service.



Design Features and Ratings

Models	Nom. Cap. Tons	Pressure Drop (psi)	A	B	D	E	K	Water In & Out (mpt)	Refrig. Inlet (ids)	Refrig. Outlet (ids)	Working Pressure (psi)	
											Shell Side	Tube Side
1-Circuit												
ERS00336	4.0	2.1	4	49.13	34.63	10.50	8.50	1 1/8* (ids)	5/8	1 1/8	225	225
ERS00424	3.9	3.5	4	37.13	22.12	10.88	8.88	1 3/8* (ids)	7/8	1 3/8	225	225
ERS00436	7.1	2.4	4	49.13	34.13	10.88	8.88	1 3/8* (ids)	7/8	1 3/8	225	225
ERS00448	9.7	4.6	4	61.13	46.13	10.88	8.88	1 3/8* (ids)	7/8	1 3/8	225	225
ERS00536	9.8	2.7	6	49.13	33.63	12.06	9.06	1 5/8* (ids)	7/8	2 1/8	225	225
ERS00548	14.0	2.7	5	60.94	45.62	12.06	9.06	1 5/8* (ids)	7/8	2 1/8	225	225
ERS00560	18.2	3.8	6 5/8	73.13	57.63	12.69	9.38	1 5/8* (ids)	7/8	2 1/8	200	300
ERS00636	16.0	5.1	6 5/8	45.63	32.00	11.38	8.06	3	1 1/8	2 1/8	200	300
ERS00648	21.4	2.7	6 5/8	57.63	44.00	11.38	8.06	3	1 1/8	2 1/8	200	300
ERS00660	27.7	4.8	8 5/8	69.63	56.00	11.38	8.06	3	1 1/8	2 1/8	200	300
ERS00736	27.5	4.3	8 5/8	47.13	32.13	14.06	10.13	3	1 1/8	2 5/8	200	300
ERS00748	34.6	3.7	8 5/8	59.13	44.13	14.06	10.13	3	1 1/8	2 5/8	200	300
ERS00760	40.9	3.8	8 5/8	71.13	56.13	14.06	10.13	3	1 1/8	2 5/8	200	300
ERS00848	44.9	5.9	10 3/4	59.88	41.50	15.19	10.69	3	1 1/8	2 5/8	200	300
ERS00860	53.9	4.2	10 3/4	71.88	53.50	15.19	10.69	3	1 1/8	2 5/8	200	300
ERS01048	54.2	3.6	10 3/4	60.50	41.50	16.56	11.50	4	1 3/8	3 1/8	200	300
ERS01060	68.4	4.5	10 3/4	72.50	53.50	16.56	11.50	4	1 3/8	3 1/8	200	300
ERS01160	84.6	4.9	12 3/4	73.00	53.50	17.69	12.06	4	1 3/8	3 1/8	200	300
ERS01260	93.3	6.0	12 3/4	73.63	53.50	18.94	12.75	4	1 5/8	3 1/8	200	300
ERS01360	111.4	5.9	14	74.25	53.50	20.06	13.31	4	1 5/8	3 1/8	200	300
2-Circuit												
ERD00636	16.0	5.1	6 5/8	47.50	32.00	11.38	8.06	3	7/8	1 5/8	200	300
ERD00648	21.4	2.7	6 5/8	59.50	44.00	11.38	8.06	3	7/8	1 5/8	200	300
ERD00660	27.7	4.8	8 5/8	71.50	56.00	11.38	8.06	3	7/8	1 5/8	200	300
ERD00736	27.5	4.3	8 5/8	50.50	32.13	14.06	10.13	3	7/8	1 5/8	200	300
ERD00748	34.6	3.7	8 5/8	62.50	44.13	14.06	10.13	3	7/8	1 5/8	200	300
ERD00760	40.9	3.8	8 5/8	74.50	56.13	14.06	10.13	3	7/8	1 5/8	200	300
ERD00848	44.9	5.9	10 3/4	63.13	41.50	15.19	10.69	3	1 1/8	2 1/8	200	300
ERD00860	53.9	4.2	10 3/4	75.13	53.50	15.19	10.69	3	1 1/8	2 1/8	200	300
ERD01048	54.2	3.6	10 3/4	65.13	41.50	16.56	11.50	4	1 1/8	2 1/8	200	300
ERD01060	68.4	4.5	10 3/4	77.13	53.50	16.56	11.50	4	1 1/8	2 1/8	200	300
ERD01160	84.6	4.9	12 3/4	77.63	53.50	17.69	12.06	4	1 3/8	2 5/8	200	300
ERD01260	93.3	6.0	12 3/4	78.25	53.50	18.94	12.75	4	1 3/8	2 5/8	200	300
ERD01360	111.4	5.9	14	78.88	53.50	20.06	13.31	4	1 5/8	3 1/8	200	300

Insulation available upon request.

Water Flow Rates

There is one baffle configuration per ER model. As a result, the water flow rate at the job site will need to be adjusted to obtain the design water flow rate. At a range of 10°F, the water flow rate should be 2.4 gpm/ton.

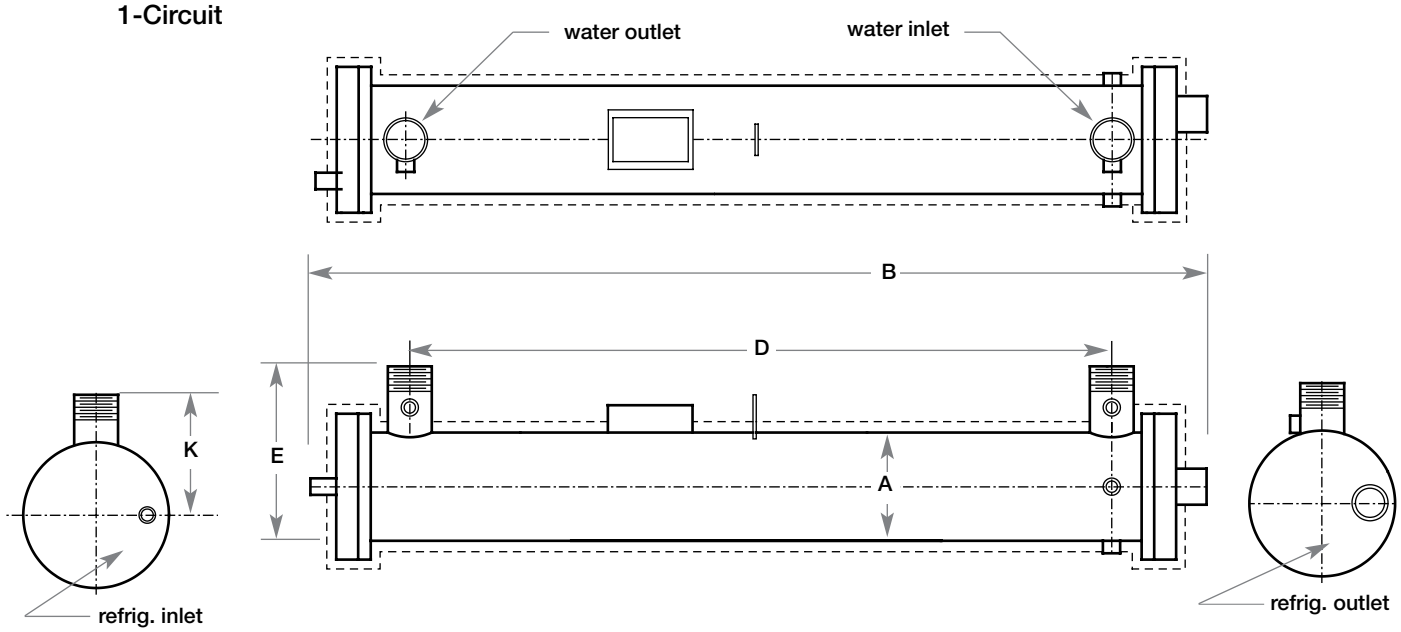
Construction Materials

ER evaporator shells are constructed with ASME grade carbon steel. Enhanced copper tubing is mechanically expanded for a superior seal into machined carbon steel tubesheets. Tubing wall thickness is 0.018". Removable endplates, refrigerant and water connections are constructed from carbon steel. All baffles are made from corrosion-resistant materials.

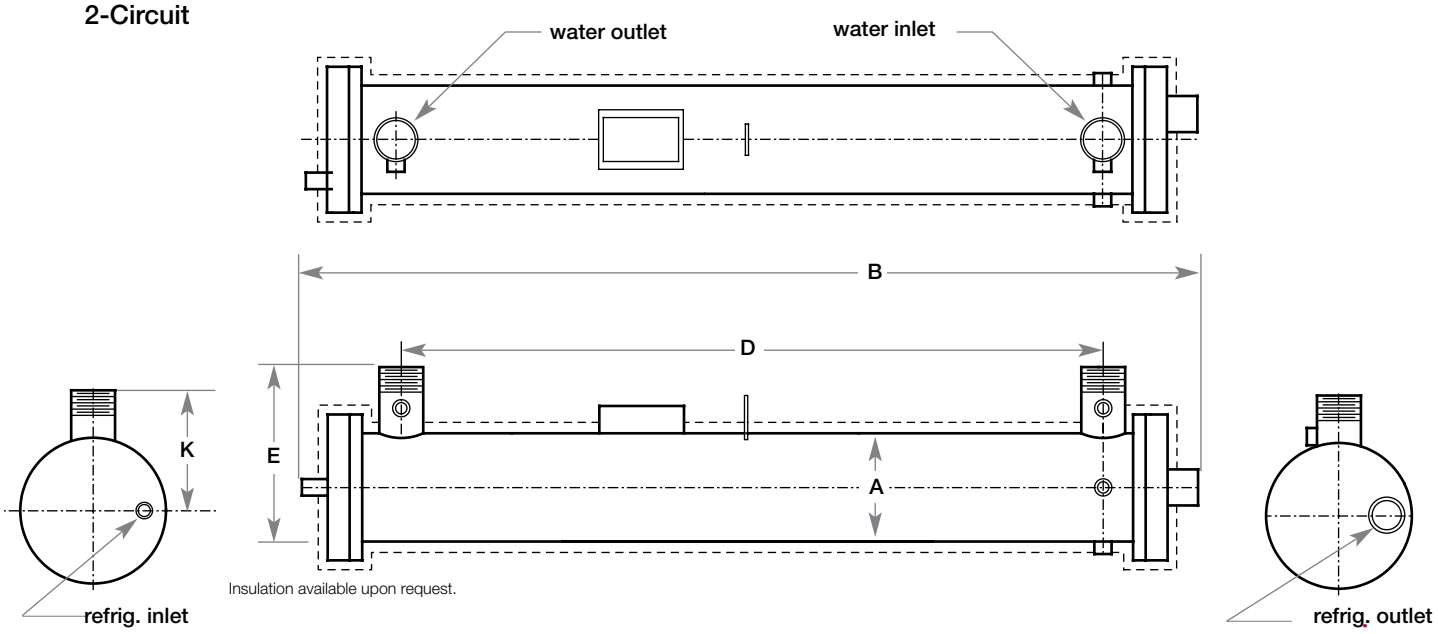
Refrigerant Connections

The refrigerant side configuration for the ER evaporators is 3-Pass with nozzles at opposite ends. As a result, the refrigerant nozzles are on the same ends, but may not be in the same locations as the other OEM Single Pass evaporators.

ERS
1-Circuit



ERD
2-Circuit



Insulation available upon request.

Custom Design Evaporator Specification Data

Fax: 708-345-3513
or e-mail: stanref.customerservice@alfalaval.com

Customer Information

Company _____

Contact Name _____ Date _____

Phone _____ Fax _____

E-Mail: _____

Evaporator Type

☐ Brazed Plate

☐ Shell-and-Tube

Evaporator Design

☐ DX serviceable, no. circuits _____

☐ Flooded serviceable

Performance

inlet fluid temperature _____°F

outlet fluid temperature _____°F

net load _____tons

pressure drop _____psi

fouling factor _____(0.0001 ARI standard)

refrigerant _____

suction temperature _____°F of refrigerant at evaporator

Fluid Circulated

☐ water _____%

☐ ethylene glycol_____%

☐ propylene glycol_____%

☐ calcium chloride (CaCl2) _____%

☐ sodium chloride (NaCl)_____%

☐ other_____ _____%

specify properties at outlet temperature

specific gravity _____

thermal conductivity _____

viscosity (centipose) _____

specific heat _____

Construction

size: width _____ length_____ height _____

materials: shell _____ tube _____

connections: refrigerant inlet _____ refrigerant outlet _____

specify ids, fpt, flange or flare: fluid inlet _____ fluid outlet _____

Application

_____

_____

_____

_____

_____

Evaporators - Gasket Cross Reference

Models	Front (GASKE-)	Rear (GASKE-)	Single Circuit	Dual Circuit	Quad Circuit
TX2	2865	2865	Fig. A	NA	NA
TX3	2865	2865	Fig. A	NA	NA
TX5	2872	2872	Fig. A	NA	NA
TX6	2872	2872	Fig. A	NA	NA
TX7.5	2872	2872	Fig. A	NA	NA
TX10	2872	2872	Fig. A	Fig. C	NA
TX12	2889	2889	Fig. A	Fig. C	NA
TX15	2889	2889	Fig. A	Fig. C	NA
TX20	2889	2889	Fig. A	Fig. C	NA
TX25	2889	2889	Fig. A	Fig. C	NA
TXC30	2218	2218	Fig. B	Fig. D	NA
TXC40	2227	2227	Fig. B	Fig. D	NA
TXC50	2227	2227	Fig. B	Fig. D	NA
TXC60	2227	2227	Fig. B	Fig. D	NA
TXC75	2227	2227	Fig. B	Fig. D	NA
TXC100	4892	4804	Fig. A	Fig. C	NA
TXC120	4892	4804	Fig. A	Fig. C	NA
TXC120	3549	3549	NA	Fig. C	NA
TXC150	3549	3549	NA	Fig. C	NA
TXC175	5169	5169	NA	Fig. D	NA
TXC200	5169	5169	NA	Fig.D	NA
TXC250	3675	3675	NA	Fig. C	NA
TXC300	3637	3637	NA	Fig. C	NA
TXC400	3637	4878	NA	Fig. C	NA
TXC500	3532	3532	NA	Fig. D	NA

Figure A
Single Circuit
Dual Pass

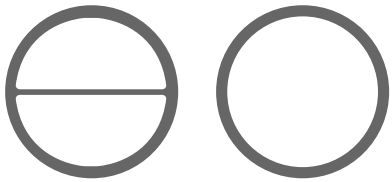


Figure B
Single Circuit
Four Pass

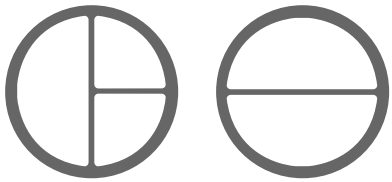


Figure C
Dual Circuit
Dual Pass

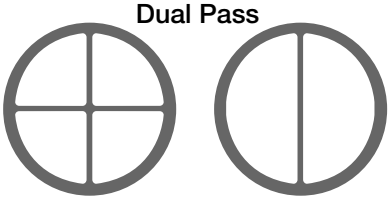
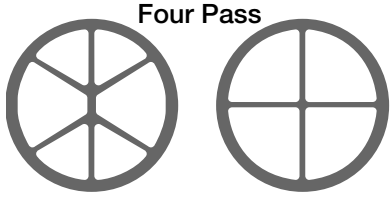


Figure D
Dual Circuit
Four Pass



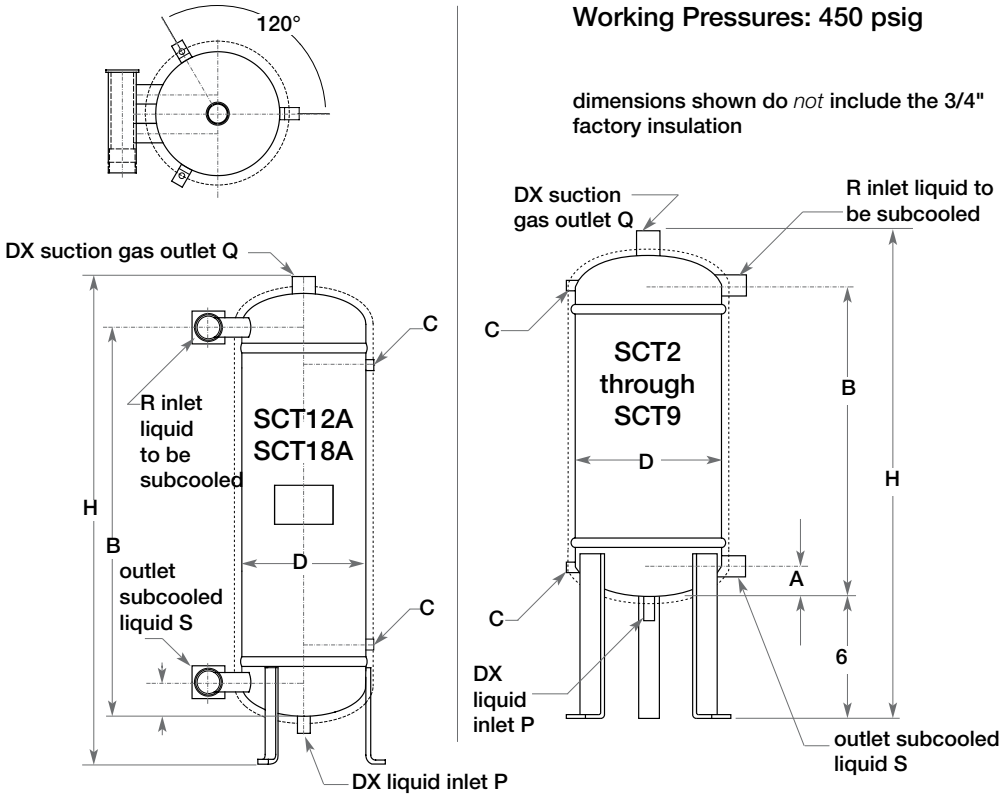
Design Features and Ratings

Models	Nominal Tons*	Dimensions			Connections†						Shipping Weight (lbs)
		D	H	A	B	P (ids)	Q (ids)	R (ids)	S (ids)	C (fpt)	
SCT2	2	6 5⁄8	23 7⁄8	1 3⁄4	14 3⁄8	5⁄8	1 3⁄8	7⁄8	7⁄8	3⁄8	63
SCT4	3.9	8 5⁄8	25	2 1⁄4	15 3⁄8	5⁄8	1 3⁄8	1 1⁄8	1 1⁄8	3⁄8	73
SCT6	5.9	8 5⁄8	29 1⁄2	1 7⁄8	19 7⁄8	5⁄8	1 3⁄8	1 3⁄8	1 3⁄8	3⁄8	108
SCT9	8.9	10 3⁄4	31 1⁄2	2 9/16	21 3/16	7⁄8	1 5⁄8	2 1⁄8	2 1⁄8	1⁄2	148
SCT12A	11.8	12 3⁄4	40 1⁄4	3 1⁄2	30	1 1⁄8	2 1⁄8	2 1⁄8	2 1⁄8	1⁄2	240
SCT18A	17.7	12 3⁄4	50 1⁄4	3 1⁄2	40	1 1⁄8	2 1⁄8	2 5⁄8	2 5⁄8	1⁄2	280

* based on R-22 liquid inlet at 100°F. and 50°F. outlet temperature with R-22 evaporating at 40°F.

† Refrigerant fittings 13⁄4" length

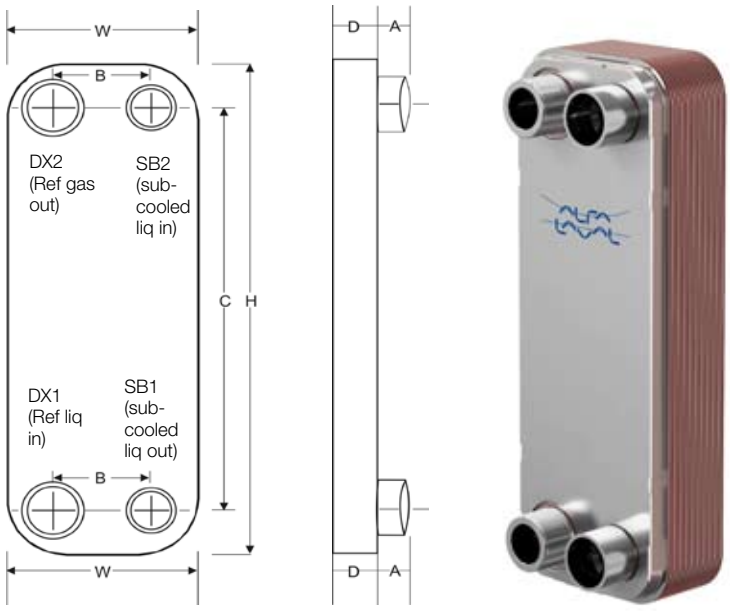
- Shell-and-coil resists thermal stress fatigue
- Vertical installation for smaller footprint
- Welded and sealed construction
- Conforms to ASME or UL requirements
- 3⁄4" insulation
- Rugged shell and coil design
- 6 SCT models from 2 thru 18 tons
- Increase BTU Loading
- Decrease Electrical Usage



Subcooling cools liquid refrigerant adding more Btu's per pound - Ideal for low temperature applications. Four Frame Sizes

Model	Nominal HP*	¾" Insulation Kit	Description	Part Number	Connections (ids)		Dry Wt. (lbs.)	Dimensions (in.)			
					Ref. Liq/ Suction DX1 in/ DX2 out	Subcooled Ref liq In/ Out		"D"	"A" liq,Suc, Water	"B"	"C"
Frame Size 8.2" H x 3.1" W						**Working Pressure 500 PSIG**					
SBC-03S-CB	0.3	671-01	CB14-12H S15	32870 5256 7	5/8"	5/8"	2.5	1.4	0.95	1.65	6.78
SBC-05S-CB	0.4	671-01	CB14-14H S15	32870 0075 5	5/8"	5/8"	3.3	1.7	0.95	1.65	6.78
Frame Size 12.2" H x 4.4" W						**Working Pressure 450 PSIG**					
SBC-1.5M-SB	1.5	673-01	CB27-12H S15	32870 0075 4	5/8"	5/8"	6.1	1.5	0.95	1.97	9.84
SBC-2M-CB	2.4	673-01	CB27-18H S33	32870 0071 2	7/8"	7/8"	7.8	2	0.95	1.97	9.84
SBC-3M-CB	3.2	673-01	CB27-24H S33	32870 0071 3	7/8"	7/8"	9.6	2.6	0.95	1.97	9.84
SBC-4M-CB	4.2	673-02	CB27-34H S33	32870 0071 4	1-1/8"	1-1/8"	12.5	4.5	0.95	1.97	9.84
SBC-5M-CB	5	673-02	CB27-44H S52	32870 0056 2	1-1/8"	1-1/8"	15.4	4.5	0.95	1.97	9.84
SBC-5.5M-CB	5.6	673-03	CB27-54H S52	32870 0056 3	1-1/8"	1-1/8"	18.3	4.5	0.95	1.97	9.84
SBC-6M-CB	6.3	673-03	CB27-64H S52	32870 0056 4	1-1/8"	1-1/8"	21.2	6.4	0.95	1.97	9.84
Frame Size 20.7" H x 4.4" W											
SBC-7.5L-CB	7.5	674-01	CB52-20H S52	32870 7552 0	1-1/8"	1-1/8"	14.37	2.28	0.95	1.97	20.71
SBC-10L-CB	11	674-01	CB52-30H S52	32870 7552 1	1-1/8"	1-1/8"	19.26	3.23	0.95	1.97	20.71
SBC-15L-CB	14	674-02	CB52-40H S52	32870 7552 2	1-1/8"	1-1/8"	20.05	4.17	0.95	1.97	20.71
SBC-17L-CB	17	674-03	CB52-50H S52	32870 7552 3	1-1/8"	1-1/8"	24.16	5.12	0.95	1.97	20.71
SBC-20L-CB	20	674-03	CB52-80H S52	32870 7552 5	1-1/8"	1-1/8"	43.77	7.95	0.95	1.97	20.71
Frame Size 24.3" H x 7.6" W						**Working Pressure 435 PSIG**					
SBC-10XL-CB	11	675-01	CB76-20H S89	32870 0095 7	2-1/8"	2-1/8"	36.2	2.61	1.58	3.62	20.43
SBC-10XL-CB	11	675-01	CB76-30H S89	32870 0095 8	2-1/8"	2-1/8"	45.9	3.72	1.58	3.62	20.43
SBC-20XL-CB	18	675-01	CB76-40H S89	32870 0095 9	2-1/8"	2-1/8"	55.6	4.83	1.58	3.62	20.43
SBC-25XL-CB	25	675-01	CB76-50H S89	32870 0096 0	2-1/8"	2-1/8"	65.3	5.94	1.58	3.62	20.43
SBC-30XL-CB	32	675-01	CB76-60H S89	32870 5095 2	2-1/8"	2-1/8"	75	7.05	1.58	3.62	20.43

Nominal Tons - Liquid Ref to be subcooled from 110°F to 50°F, R-22, 40°F SST, 6°F Superheat
For performance with other refrigerants and/or fluids other than water, please contact Customer Service.



SBC-AC - AlfaChill Copper-Brazed Plate Heat Exchangers - High Efficiency

Designed to cool liquid refrigerant adding more Btu's per pound - Ideal for low temperature applications.
The SBC-AC Subcoolers are copper-brazed and feature a built-in distributor. Three Frame Sizes

Model	Nominal HP*	¾" Insulation Kit	Description	Part Number	Connections (ids)		Dry Wt. (lbs.)	Dimensions (in.)			
					Ref. Liq/ Suction DX1 in/DX2 out	Subcooled Ref liq In/ Out		"D"	"A" liq,Suc, Water	"B"	"C"
Frame Size 12.8" H x 3.7" W					**Working Pressure 450 PSIG**						
SBC-2M-AC	1.5	672-01	AC-30-10EQ R52	32870 6134 6	3/8, 7/8	7/8	4.2	0.9	0.95	1.54	10.6
SBC-3M-AC	3	672-01	AC-30-20EQ R52	32870 6134 7	3/8, 7/8	7/8	6.2	1.5	0.95	1.54	10.6
SBC-4M-AC	4	672-01	AC-30-30EQ S09	32870 6134 8	1/2, 7/8	7/8	8.2	2.1	0.95	1.54	10.6
SBC-6M-AC	6	672-02	AC-30-40EQ S09	32870 6134 9	1/2, 7/8	7/8	10.2	2.7	0.95	1.54	10.6
SBC-7M-AC	7	672-02	AC-30-50EQ S21	32870 6135 0	5/8, 1-1/8	1-1/8	12.2	3.3	0.95	1.54	10.6
SBC-9M-AC	9	672-02	AC-30-60EQ S21	32870 6135 1	5/8, 1-1/8	1-1/8	14.2	3.9	0.95	1.54	10.6
SBC-10M-AC	10	672-03	AC-30-70EQ S21	32870 6135 2	5/8, 1-1/8	1-1/8	16.2	4.5	0.95	1.54	10.6
SBC-12M-AC	12	672-03	AC-30-80EQ S21	32870 6135 3	5/8, 1-1/8	1-1/8	18.2	5.1	0.95	1.54	10.6
SBC-15M-AC	15	672-03	AC-30-100EQ S21	32870 6135 4	5/8, 1-1/8	1-1/8	22.2	6.3	0.95	1.54	10.6
Frame Size 20.7" H x 4.4" W					**Working Pressure 450 PSIG**						
SBC-4L-AC	4	674-01	AC-70-14MY S21	32870 6720 4	5/8, 1-1/8	1-1/8	8.2	2.6	0.95	1.97	18.35
SBC-5L-AC	5	674-01	AC-70-18MY S21	32870 6720 6	5/8, 1-1/8	1-1/8	9.7	3	0.95	1.97	18.35
SBC-6L-AC	6	674-01	AC-70-22MY S21	32870 6720 7	5/8, 1-1/8	1-1/8	11.3	3.3	0.95	1.97	18.35
SBC-8L-AC	8	674-01	AC-70-26MY S21	32870 6720 8	5/8, 1-1/8	1-1/8	12.9	3.7	0.95	1.97	18.35
SBC-10L-AC	10	674-01	AC-70-32MY S21	32870 6720 9	5/8, 1-1/8	1-1/8	15.3	4.2	0.95	1.97	18.35
SBC-12L-AC	13	674-02	AC-70-42MY S24	32870 6721 0	5/8, 1-3/8	1-1/8	19.3	5.1	0.95	1.97	18.35
SBC-15L-AC	16	674-03	AC-70-50MY S24	32870 6721 1	5/8, 1-3/8	1-1/8	22.5	5.9	0.95	1.97	18.35
SBC-18L-AC	18	674-03	AC-70-58MY S24	32870 6721 2	5/8, 1-3/8	1-1/8	25.7	6.6	0.95	1.97	18.35
SBC-20L-AC	19	674-03	AC-70-62MY S25	32870 6721 3	5/8, 1-3/8	1-3/8	27.3	7	0.95	1.97	18.35
SBC-21L-AC	21	674-03	AC-70-78MY R49	32870 6721 4	5/8, 1-1/8	1-3/8	29.7	7.5	0.95	1.97	18.35
SBC-23L-AC	23	674-03	AC-70-78MY R49	32870 6721 5	7/8, 1-3/8	1-3/8	33.7	8.4	0.95	1.97	18.35
SBC-25L-AC	25	674-03	AC-70-90MY R49	32870 6721 6	7/8, 1-3/8	1-3/8	38.5	9.5	0.95	1.97	18.35
SBC-30L-AC	31	674-03	AC-70-100MY R49	32870 6721 7	7/8, 1-3/8	1-3/8	42.4	10.4	0.95	1.97	18.35
SBC-35L-AC	37	674-03	AC-70-118MY R49	32870 6721 8	7/8, 1-3/8	1-3/8	49.6	12	0.95	1.97	18.35
Frame Size 33.5" H x 12.7" W					**Working Pressure 435 PSIG**						
SBC-15XL-AC	14	675-01	AC-120-30EQ S46	32870 6145 1	7/8, 2-1/8	2-1/8	45.9	3.3	1.58*	3.62	20.43
SBC-20XL-AC	19	675-01	AC-120-40EQ S46	32881 0214 0	7/8, 2-1/8	2-1/8	55.6	4.2	1.58*	3.62	20.43
SBC-25XL-AC	23	675-01	AC-120-46EQ S62	32870 6145 2	1-1/8, 2-1/8	2-1/8	61.4	4.8	1.58*	3.62	20.43
SBC-30XL-AC	30	675-01	AC-120-60EQ S62	32870 6145 3	1-1/8, 2-1/8	2-1/8	75	6.1	1.58*	3.62	20.43
SBC-40XL-AC	38	675-02	AC-120-76EQ S62	32870 6145 4	1-1/8, 2-1/8	2-1/8	90.5	7.6	1.58*	3.62	20.43
SBC-45XL-AC	45	675-02	AC-120-90EQ S62	32870 6145 5	1-1/8, 2-1/8	2-1/8	104.1	8.9	1.58*	3.62	20.43
SBC-50XL-AC	53	675-02	AC-120-106EQ S62	32870 6145 6	1-1/8, 2-1/8	2-1/8	119.6	10.4	1.58*	3.62	20.43
SBC-60XL-AC	62	675-03	AC-120-124EQ S62	32870 6145 7	1-1/8, 2-1/8	2-1/8	137.1	12.1	1.58*	3.62	20.43
SBC-75XL-AC	74	675-03	AC-120-150EQ S76	32870 6145 8	1-3/8, 2-1/8	2-1/8	162.3	14.6	1.58*	3.62	20.43
SBC-85XL-AC	85	675-03	AC-120-180EQ S76	32870 5589 6	1-3/8, 2-1/8	2-1/8	191.4	17.4	1.58*	3.62	20.43

Nominal Tons - Liquid Ref to be subcooled from 110°F to 50°F, R-22, 40°F SST, 6°F Superheat
For performance with other refrigerants and/or fluids other than water, please contact Customer Service.

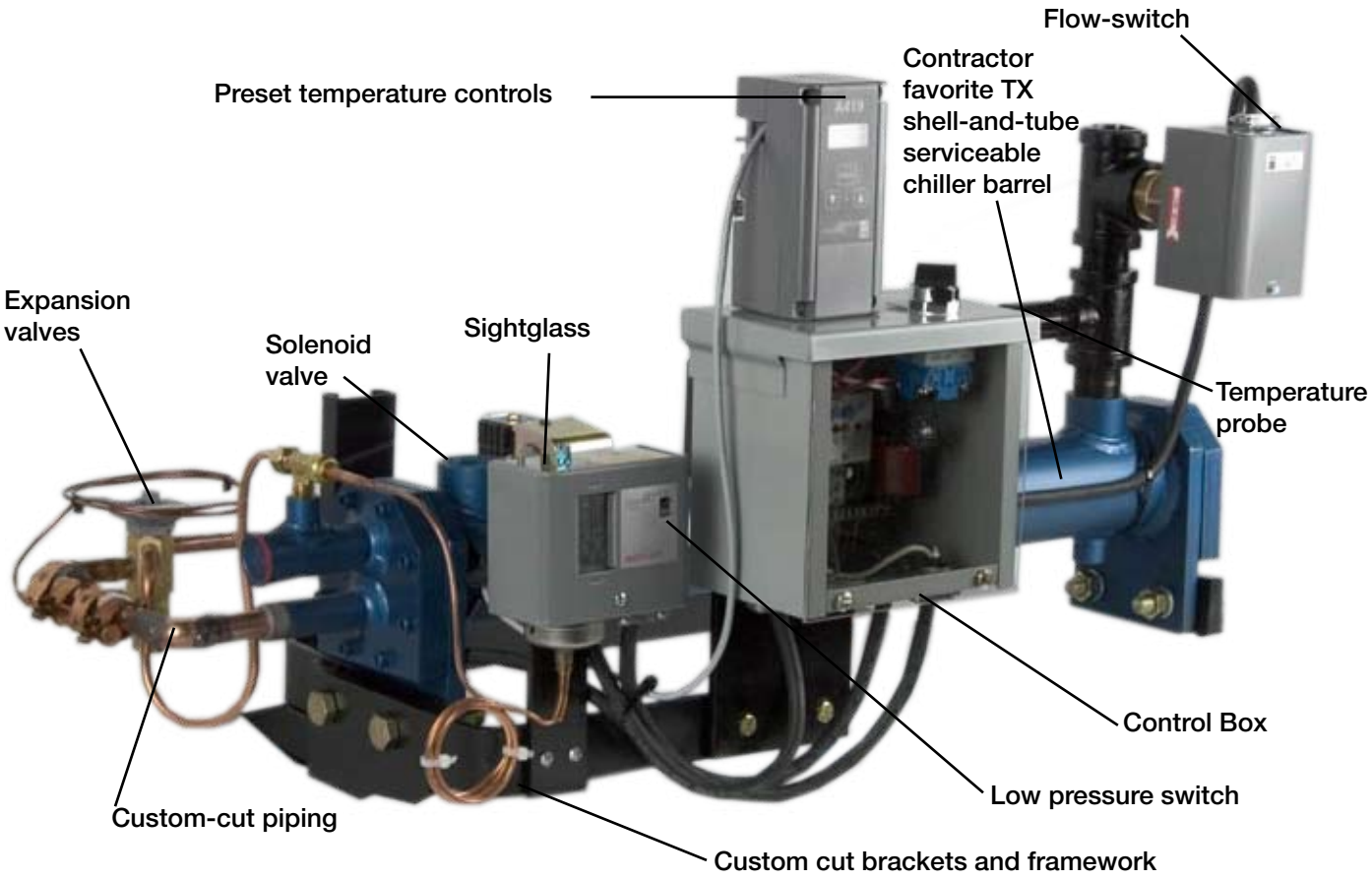
Chiller Builder Kits from Standard Refrigeration

Our ChillerBuilder Kits allow you to assemble a modular chiller solution in under an hour. Available from 2 to 75 tons, these kits provide all you need to build the low-side of a chiller system. You get the reliable TX evaporator, brand-name controls and components and custom-cut piping and framework.

Select a condensing unit and you've got a modular chiller perfect for spacetight commercial AC applications or boosting existing system capabilities.

Why let some OEM limit your capabilities?

With Standard: You design, You spec. You Profit.



*Chiller Builder Kits can be custom ordered for use with R410A - Consult factory.

Lowside ChillerBuilder Kits with digital controls

Kits now available up to 75 Tons

Design Features and Ratings

ChillerBuilder Kit Dimensions											W	P	Q
Kit	Nominal Tons*	Circuits	Chiller Barrel	TX-Kit	A	B	C	D	H	L	Water Conn. (fpt)	Liquid Conn. (ids)	Suction Conn. (ids)
1-Circuit													
CBKIT2 - 1	2	1	TX2-1	TXKIT1	21	18 1/4	19 3/4	14	14	30 1/4	1	5/8	7/8
CBKIT3 - 1	3	1	TX 3-1	TXKIT2	26	18 1/4	19 3/4	18	14	30 1/4	1	5/8	7/8
CBKIT5 - 1	5	1	TX 5-1	TXKIT2	26	18 1/4	31 3/8	18	16	42 1/4	1 1/4	5/8	1 1/8
CBKIT6 - 1	6	1	TX 6-1	TXKIT3	27	18 1/4	31 1/8	18	19	42 1/4	1 1/2	5/8	1 1/8
CBKIT7.5 - 1	7 1/2	1	TX 7 1/2-1	TXKIT3	27	18 1/4	31 1/8	18	19	42 1/4	1 1/2	5/8	1 5/8
CBKIT10 - 1	10	1	TX10-1	TXKIT3	27	18 1/4	30 3/8	18	19	42 1/4	2	5/8	1 5/81
CBKIT12 - 1	12	1	TX12-1	TXKIT3	27	19 3/8	30 1/8	18	21	43 1/4	2	5/8	1 5/8
CBKIT15 - 1**	15	1	TX15-1	TXKIT4	32	20 3/8	29 5/8	18	21	44 1/4	2 1/2	7/8	2 1/8
CBKIT20 - 1**	20	1	TX20-1	TXKIT4	32	20 3/8	29	18	21	44 1/4	3	7/8	2 1/8
CBKIT25 - 1**	25	1	TX25-1	TXKIT4	32	20 3/8	29	18	21	44 1/4	3	7/8	2 5/8
CBKIT30 - 1***	30	1	TXC30-1	TXCKIT5	–	–	63	22	16	90	3	1 1/8	2 5/8
CBKIT40 - 1***	40	1	TXC40-1	TXCKIT6	–	–	63	24	17	90	3	1 3/8	2 5/8
2-Circuit													
CBKIT10-2	10	2	TX10-2	DTXKIT 10-12	29	18 1/4	30 3/8	20	17	45 1/4	2	5/8	1 5/8
CBKIT12-2	12	2	TX12-2	DTXKIT 10-12	29	19 3/8	30 1/8	20	19	46 1/4	2	5/8	1 5/8
CBKIT15-2	15	2	TX15-2	DTXKIT 15-20	29	19 3/8	29 5/8	20	21	46 1/4	2 1/2	5/8	2 1/8
CBKIT20-2	20	2	TX20-2	DTXKIT 15-20	29	19 3/8	29	20	21	46 1/4	3	5/8	2 1/8
CBKIT25-2	25	2	TX25-2	DTXKIT 15-20	29	19 3/8	29	20	21	46 1/4	3	5/8	2 5/8
CBKIT30-2***	30	2	TXC30-2	DTXCKIT 30	–	–	63	22	19	90	3	7/8	1 5/8
CBKIT40-2***	40	2	TXC40-2	DTXCKIT 40	–	–	63	24	20	90	3	1 1/8	1 5/8
CBKIT50-2***	50	2	TXC50-2	DTXCKIT 50	–	–	63	24	20	90	4	1 1/8	2 1/8
CBKIT60-2***	60	2	TXC60-2	DTXCKIT 60	–	–	73	24	22	104	4	1 1/8	2 1/8
CBKIT75-2***	75	2	TXC75-2	DTXCKIT 75	–	–	73	24	22	104	5	1 3/8	2 5/8
Multi Circuit													
CBKIT15-3	15	3	TX15-3	TXKIT15-3	30.3/4	–	–	–	23 1/4	80	2 1/2	3/8	1 1/8
CBKIT20-4	20	4	TX20-4	TXKIT20-4	30.3/4	–	–	–	23 1/4	80	3	3/8	1 1/8

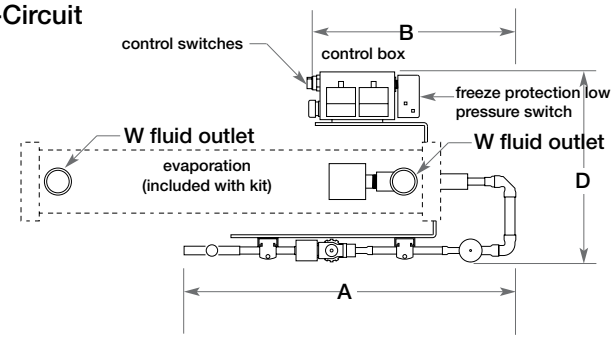
120 volts required to operate Chiller Builder Kits.
* Tonnage capacities based on TXV capacities at 35 F suction, 115 F condensing temperature, 54 F inlet water, and 44 F outlet water using R-22
** Pumpdown cycle included with CBKIT15-1, CBKIT20-1, and CBKIT25-1
*** Kits 30 through 75 tons include unloading feature. Kits with no unloading feature are also available.
All Chiller Builder Kits include chiller barrel. Chiller Builder kits without chiller barrel are available. Call the factory for more information.
All Chiller Builder Kits can be special ordered for use with refrigerant R410a.

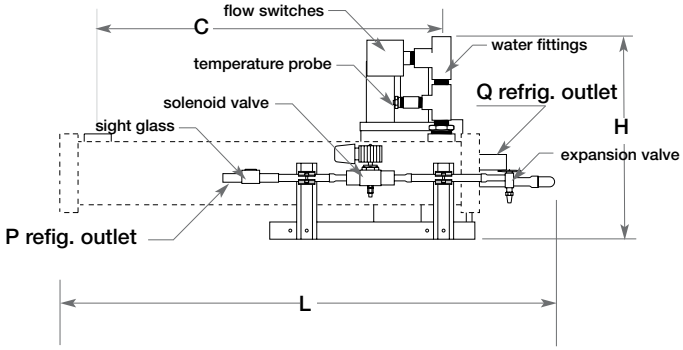
- Uses compact TX/TXC chiller barrel
- Brand name components
- One, two, three and four circuit options
- NEW three and four circuit models available, ideal for achieving up to 20 tons with single-phase compressors
- Available in ranges from two to 75 tons
- Entire kit can be assembled in less than one hour
- Chiller barrel included
- NEW-includes Digital Controls
- Can be special ordered for R410a applications

Included components

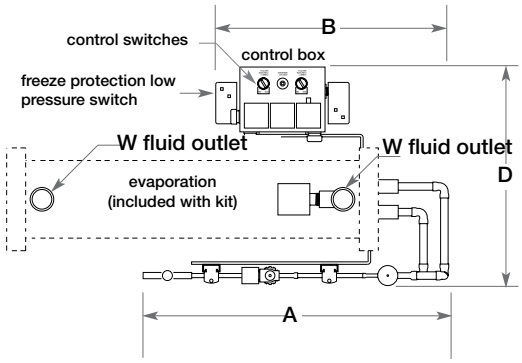
- Framework
- Temperature controls
- Low pressure switch
- Expansion valve
- Solenoids
- Control power supplies
- Freezestat
- Flow switch
- Sight glasses
- NEW-Includes Digital Controls

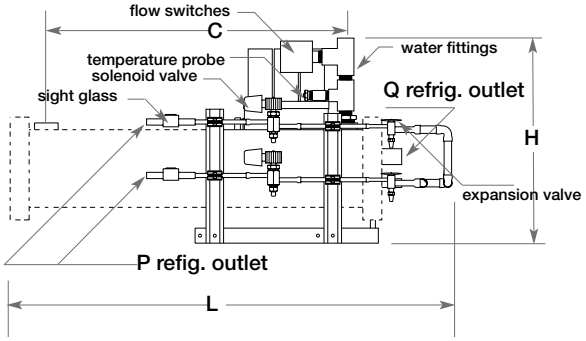
1-Circuit





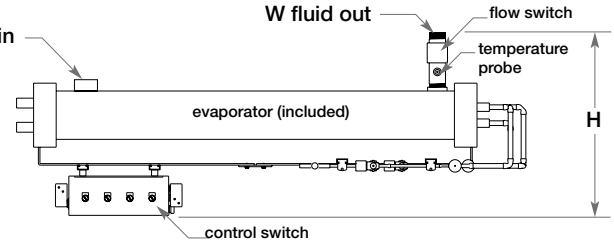
2-Circuit



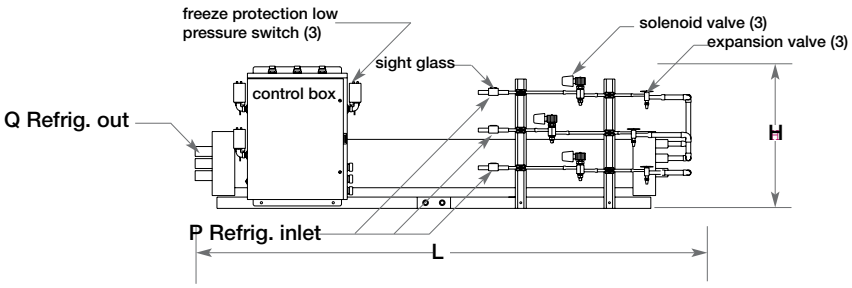


3 & 4 Circuit

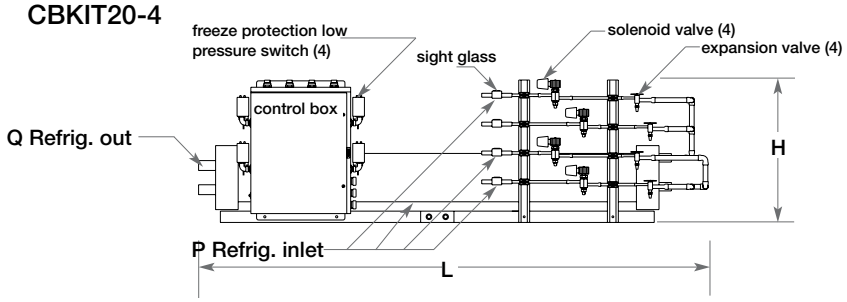
NOTE: Connection locations vary between 3&4 circuit models



CBKIT15-3



CBKIT20-4



Design Features and Ratings

Conformance
Each Standard stock receiver conforms to UL, CSA or ASME requirements for 450 psi maximum working pressure. Models with an internal diameter under six inches are UL listed; all larger models are made according to ASME code and tagged appropriately.

Pumpdown and Refrigerant Charge
All pumpdowns are calculated at 80% capacity of liquid.

Approximately 10% of pumpdown capacity is required to operate receiver properly.

Custom and Ammonia Construction
Custom receivers for halocarbons and ammonia can be built based on application and construction criteria. Receivers may be ordered with or without extra features such as mounting brackets, fusible plugs, special fittings, liquid level indicators and alarm switches, to assure reliable service on virtually any application involving halocarbon type refrigerants.

Note on Refrigerant R410a Applications
Due to the high working pressures of Refrigerant R410a. Any Receivers product in our catalog must be customized to conform to ASME construction. Please contact customer service for quotation.

Selection

Pumpdown Calculation Procedure
Refer to table for calculating pumpdown capacity of any Standard receiver design with elliptical ends. Pumpdown figures shown have been compensated to directly give capacity on 80% of the receiver volume filled with liquid at 90°F.

To figure pumpdown capacity, locate the receiver OD in the first column and read across to find the values for length correction and pounds of pumpdown for refrigerant used. Substitute those values in this formula:

Pumpdown =
(overall length - length correction) x (pumpdown per inch)

To calculate overall length required for the given OD and specified pumpdown capacity, follow the same procedure given above, using thisformula:

Overall length =
(pumpdown required ÷ pumpdown per inch) + (length correction

Receiver OD (inches)	Length Correction (inches)	Pumpdown Capacity pounds per inch effective length				End to Weld (inches)
		R-22	R-134A	R404A	R410A	
4	0.9	0.38	0.38	0.33	0.39	1 7/8
5	1.1	0.60	0.61	0.52	0.62	1 7/8
6	1.2	0.88	0.89	0.76	0.91	2 3/8
6 5/8	1.4	1.06	1.08	0.92	1.10	2 7/8
8 5/8	1.8	1.82	1.84	1.58	1.88	3 1/8
10 3/4	2.3	2.80	2.84	2.44	2.89	4 1/2
12 3/4	2.6	3.96	4.01	3.45	4.09	5 1/2
14	2.9	4.77	4.83	4.15	4.93	5 7/8
16	3.2	6.31	6.38	5.49	6.52	6 3/8
18	3.7	7.94	8.03	6.90	8.20	6 3/4
20	4.0	9.89	10.01	8.60	10.22	7 1/4
24	4.9	14.11	14.28	12.28	14.58	8 1/2
30	5.2	22.44	22.71	19.52	23.19	10
36	5.6	32.68	33.07	28.43	33.77	11 1/2


L


UR


HR


RBV


UV

Design Features and Ratings

Models	Pumpdown* (lbs)		Dimensions (inches)				Connections (inches)			Shipping Weight (lbs)
	R-22	R-134A	D	L	A	B	P (ids)	Q (ids)	S (fpt)	
285	16	16	5	28	3	25	5/8	5/8	3/8	19
306	25	26	6	30	3 5/8	26 3/8	5/8	5/8	3/8	24
366	31	31	6	36	3 5/8	32 3/8	5/8	5/8	3/8	31
3865	39	40	6 5/8	38	4 3/8	33 5/8	7/8	5/8	1/2	42
2885	48	48	8 5/8	28	4 5/8	23 3/8	1 1/8	7/8	1/2	45
3685	62	63	8 5/8	36	4 5/8	31 3/8	1 1/8	7/8	1/2	65
4285	73	74	8 5/8	42	4 5/8	37 3/8	1 1/8	7/8	1/2	71
4885	84	85	8 5/8	48	4 5/8	43 3/8	1 1/8	1 1/8	1/2	77
6085	106	107	8 5/8	60	4 5/8	55 3/8	1 1/8	1 1/8	1/2	108
36105	94	96	10 3/4	36	6 1/2	29 1/2	1 3/8	1 3/8	1/2	115
48105	128	130	10 3/4	48	6 1/2	41 1/2	1 3/8	1 3/8	1/2	138
60105	162	164	10 3/4	60	6 1/2	53 1/2	1 3/8	1 3/8	1/2	166
72105	195	198	10 3/4	72	6 1/2	65 1/2	1 3/8	1 3/8	1/2	196
96105	262	266	10 3/4	96	6 1/2	89 1/2	1 5/8	1 3/8	1/2	285
48122	180	182	12 3/4	48	8	40	1 5/8	1 3/8	1/2	182
60122	227	230	12 3/4	60	8	52	1 5/8	1 3/8	1/2	218
72122	275	278	12 3/4	72	8	64	2 1/8	1 3/8	1/2	260
96122	370	375	12 3/4	96	8	88	2 1/8	1 3/8	1/2†	360
72145	330	334	14	72	8 3/8	63 5/8	2 1/8	1 5/8	1/2†	316
96145	444	450	14	96	8 3/8	87 5/8	2 5/8	2 1/8	1/2†	425
60166	358	362	16	60	8 7/8	51 1/8	2 5/8	2 1/8	1/2†	306
72166	434	439	16	72	8 7/8	63 1/8	2 5/8	2 1/8	1/2†	380
96166	586	592	16	96	8 7/8	87 1/8	2 5/8	2 1/8	1/2†	486
72188	542	548	18	72	9 7/8	62 1/8	3 1/8	2 1/8	1/2†	510
72201	673	681	20	72	10 1/2	61 1/2	3 1/8	2 5/8	1/2†	570
84201	791	801	20	84	10 1/2	73 1/2	3 1/8	2 5/8	1/2†	639
96201	910	921	20	96	10 1/2	85 1/2	3 1/8	2 5/8	1/2†	756
96241	1,285	1,301	24	96	12 1/2	83 1/2	3 5/8	3 1/8	3/4†	1000
12241	1,624	1,644	24	120	13	107	4 1/8	3 5/8	3/4†	1250
12301	2,576	2,607	30	120	15	105	4 1/8	3 5/8	3/4†	1800

* All pumpdowns are calculated at 80% of receiver volume
† Safety fitting located 30° above centerline below refrigerant outlet
Use the following multipliers for refrigerants other than shown above:

R-12= R-22 capacity X 1.10
R-502= R-22 capacity X 1.01
R-404A= R-22 capacity X 0.89
R-507= R-22 capacity X 0.88

Working Pressure: 450 psi

Tag location may vary per model.

RBV - Horizontal Receivers with Brackets and Valves

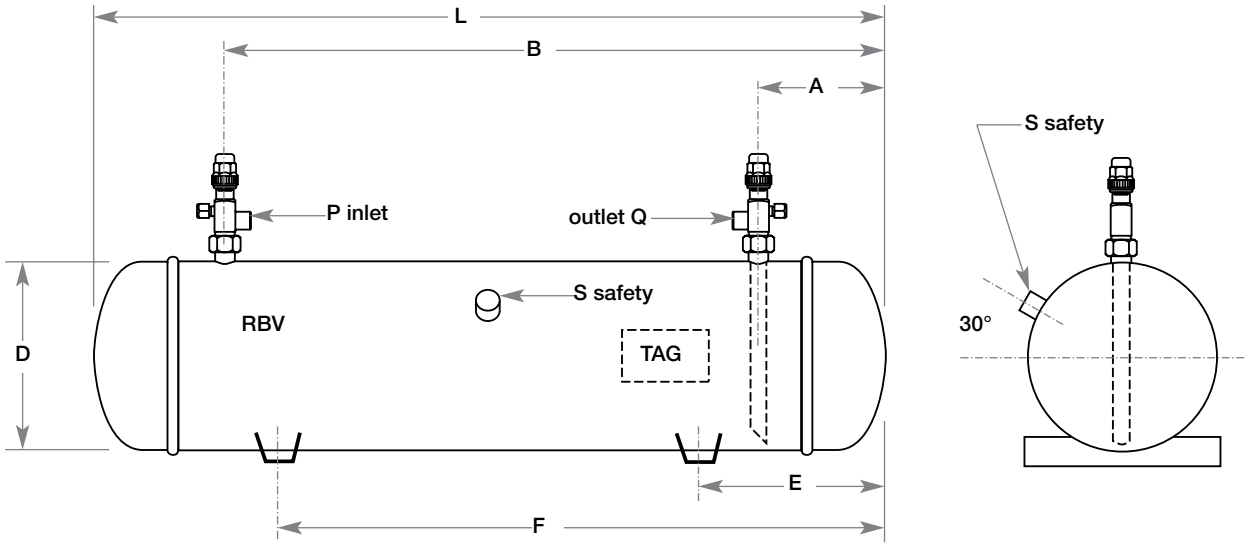
Design Features and Ratings

Model	Pumpdown* (lbs)		Dimensions (inches)						Connections		Valve Part Number	Ship Wt (lbs)
	R-22	R-134A	D	L	A	B	E	F	P & Q (ids)	S (fpt)		
RBV-285	16	16	5	28	3	25	7	21	1/2	3/8	V04ST	24
RBV-366	31	31	6	36	3 5/8	32 3/8	9	27	1/2	3/8	V04ST	35
RBV-3865	39	40	6 5/8	38	4 5/8	33 5/8	9 1/2	28 1/2	5/8	1/2	V05ST	45
RBV-3685	62	63	8 5/8	36	4 5/8	31 3/8	9	27	7/8	1/2	V07ST	69
RBV-4285	73	74	8 5/8	42	4 5/8	37 3/8	10 1/2	31 1/2	1 1/8	1/2	V09ST	75
RBV-36105	94	96	10 3/4	36	6 1/2	29 1/2	9	27	1 1/8	1/2	V09ST	117
RBV-48105	128	130	10 3/4	48	6 1/2	41 1/2	12	36	1 1/8	1/2	V09ST	145
RBV-60105	162	164	10 3/4	60	6 1/2	53 1/2	15	45	1 1/8	1/2	V09ST	170
RBV-48122	180	182	12 3/4	48	8	40	12	36	1 3/8	1/2	V11ST	186
RBV-60122	227	230	12 3/4	60	8	52	15	45	1 3/8	1/2	V11ST	224
RBV-72145	330	334	14	72	8 3/8	63 5/8	18	54	1 5/8	1/2†	valve-85A	339
RBV-96145	444	450	14	96	8 3/8	87 5/8	24	72	1 5/8	1/2†	valve-85A	448
RBV-96166	586	592	16	96	8 7/8	87 1/8	24	72	2 1/8	1/2†	valve-621A	510

* All pumpdowns are calculated at 80% of receiver volume
† Safety fitting located 30° above centerline below refrigerant outlet
Use the following multipliers for refrigerants other than shown above:

R-12= R-22 capacity X 1.10
R-502= R-22 capacity X 1.01
R-404A= R-22 capacity X 0.89
R-507= R-22 capacity X 0.88

Working Pressure: 450 psi



Tag location may vary per model.

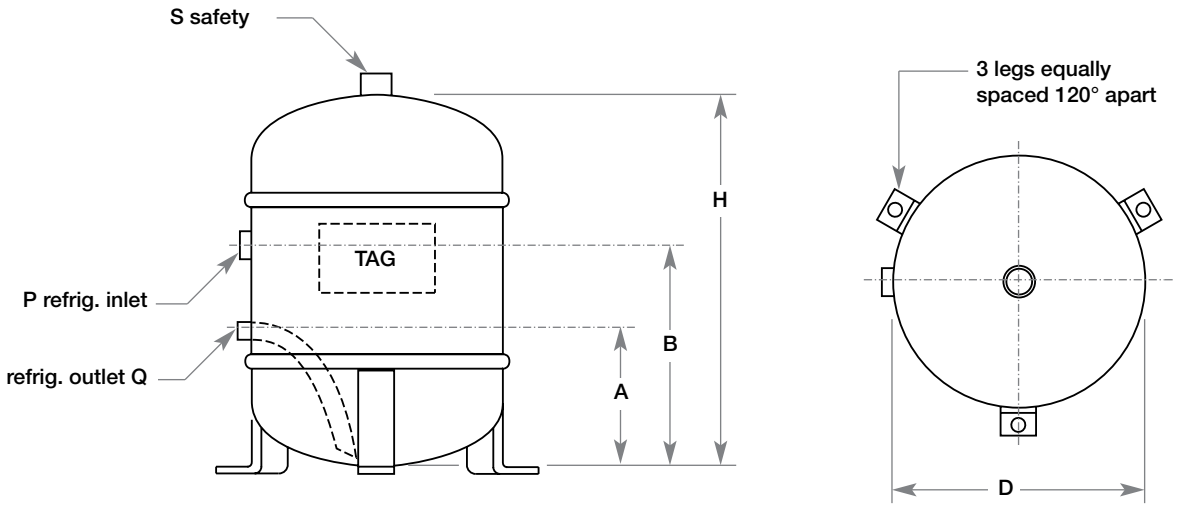
Design Features and Ratings

Model	Pumpdown* (lbs)		Dimensions (inches)				Connections			Ship Wt (lbs)
	R-22	R-134A	D	H	A	B	P (ids)	Q (ids)	S (fpt)	
UR-20	18	19	8 5/8	12	5	7	5/8	5/8	3/8	29
UR-28	26	26	8 5/8	16	5	11	5/8	5/8	3/8	35
UR-48	44	45	10 3/4	18	6	11 1/2	1 1/8	7/8	1/2	60
UR-66	61	62	12 3/4	18	6 5/8	11 3/8	1 1/8	1 1/8	1/2	80
UR-72	67	68	12 3/4	20	6 5/8	13 3/8	1 1/8	1 1/8	1/2	88
UR-84	85	85	12 3/4	24	6 5/8	17 3/8	1 1/8	1 1/8	1/2	98
UR-108	101	102	14	24	7 1/2	16 1/2	1 3/8	1 3/8	1/2	111
UR-137	131	133	16	24	8	16	1 3/8	1 3/8	1/2	140
UR-151	156	158	12 3/4	42	6 7/8	34 1/2	1 3/8	1 3/8	1/2	170
UR-174	161	163	18	24	8 3/4	12 1/4	1 5/8	1 5/8	1/2	175
UR-201	206	208	14	46	7 5/8	37 1/2	1 5/8	1 5/8	1/2	210
UR-276	283	286	16	48	8 1/8	39	2 1/8	1 5/8	1/2	245
UR-351	358	362	16	60	8 3/8	51	2 5/8	2 1/8	1/2	300
UR-451	463	468	18	62	9	52 1/2	2 5/8	2 1/8	1/2	435

* All pumpdowns are calculated at 80% of receiver volume
† Safety fitting located 30° above centerline below refrigerant outlet
Use the following multipliers for refrigerants other than shown above:

R-12= R-22 capacity X 1.10
R-502= R-22 capacity X 1.01
R-404A= R-22 capacity X 0.89
R-507= R-22 capacity X 0.88

Working Pressure: 450 psi



Tag location may vary per model.

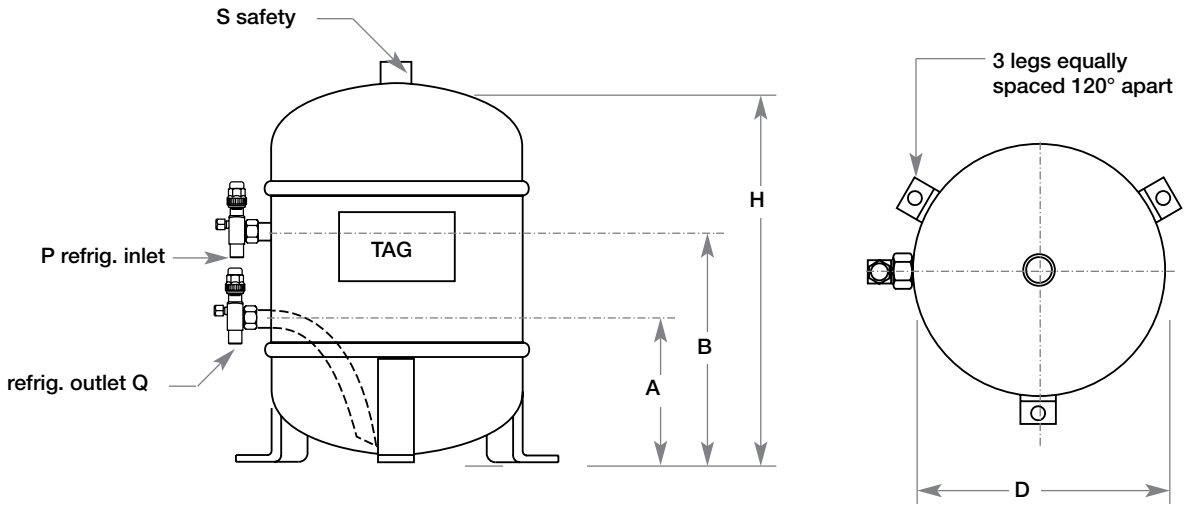
Design Features and Ratings

Model	Pumpdown* (lbs)		Dimensions (inches)				Connections		Valve Part Number	Ship Wt (lbs)
	R-22	R-134A	D	H	A	B	P & Q (ids)	S (fpt)		
UV-30	29	30	8 5/8	18	5 1/8	12 7/8	1/2	3/8	H04ST	40
UV-40	40	41	8 5/8	24	5 1/8	19 3/8	5/8	3/8	H05ST	47
UV-50	55	56	8 5/8	32	5 1/4	26 3/4	7/8	3/8	H07ST	60
UV-70	72	73	10 3/4	28	6	21 1/2	1 1/8	1/2	H09ST	90
UV-100	100	101	10 3/4	38	6	31 1/2	1 1/8	1/2	H09ST	120
UV-125	132	134	12 3/4	36	6 5/8	29 3/8	1 1/8	1/2	H09ST	160
UV-150	156	158	12 3/4	42	6 5/8	34 1/2	1 1/8	1/2	H09ST	175
UV-200	206	208	14	46	7 1/2	37 1/2	1 3/8	1/2	H11ST	215
UV-275	283	286	16	48	8 1/8	39	1 5/8	1/2	valve-85A	250
UV-350	358	362	16	60	8 1/8	51	1 5/8	1/2	valve-85A	305
UV-450	463	468	18	62	8 3/4	52 1/2	1 5/8	1/2	valve-85A	440

* All pumpdowns are calculated at 80% of receiver volume
† Safety fitting located 30° above centerline below refrigerant outlet
Use the following multipliers for refrigerants other than shown above:

R-12= R-22 capacity X 1.10
R-502= R-22 capacity X 1.01
R-404A= R-22 capacity X 0.89
R-507= R-22 capacity X 0.88

Working Pressure: 450 psi



Tag location may vary per model.

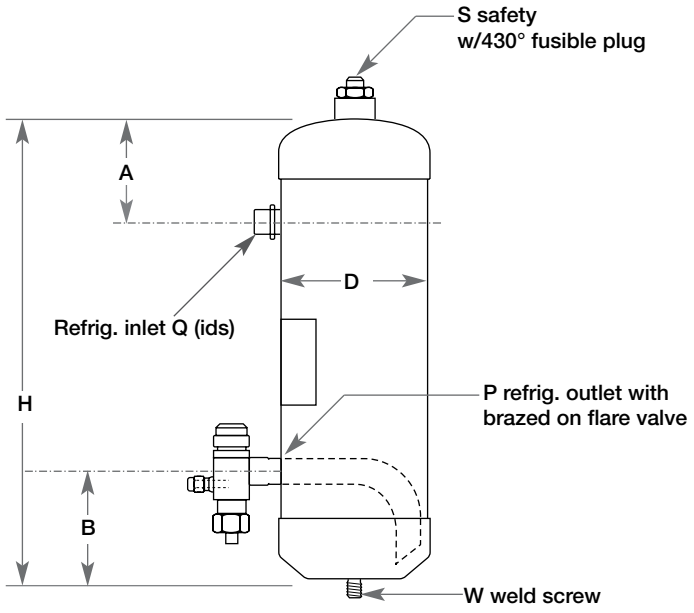
Design Features and Ratings

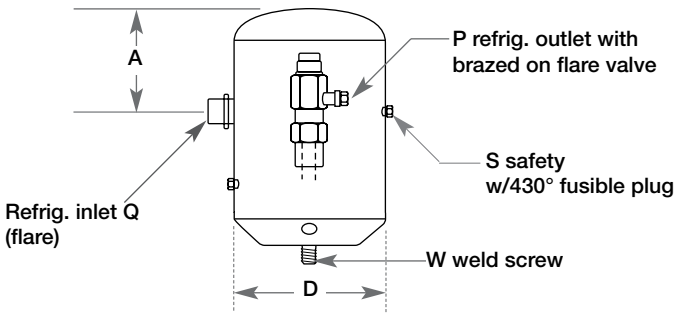
Model	Pumpdown* (lbs)		Dimensions (inches)				Connections			W Weld Screw	Ship Wt (lbs)
	R-22	R-134A	B	D	H	A	P (ids)	Q (flare)	S (fpt)		
L-408C	2.9	2.95	na	4	8	2 11⁄16	3⁄8	3⁄8	1⁄8	3⁄8”-16 x 1	7
L-413C	5.0	5.10	3 1⁄2	4	13 1⁄2	2 1⁄2	3⁄8	3⁄8	3⁄8	3⁄8”-16 x 1	10
L-516C	9.3	9.45	3 1⁄2	5	16	2 1⁄2	1⁄2	1/2	3⁄8	3⁄8”-16 x 1	14
L-618C	15.3	15.56	3 1⁄2	6	18	2 1⁄2	1⁄2	1/2	3⁄8	1⁄2”-13 x 1	19
L-623C	19.7	20.03	3 1⁄2	6	23	2 1⁄2	1⁄2	1/2	3⁄8	1⁄2”-13 x 1	24
L-630C	25.3	25.7	3 5⁄8	6	30	2 1⁄2	5/8	5/8	3⁄8	1⁄2”-13 x 1	29

* All pumpdowns are calculated at 80% of receiver volume
Use the following multipliers for refrigerants other than shown above:

R-12= R-22 capacity X 1.10
R-502= R-22 capacity X 1.01
R-404A= R-22 capacity X 0.89
R-507= R-22 capacity X 0.88

Working Pressure: 500 psi





A - Suction Accumulators with or without boil-out coil

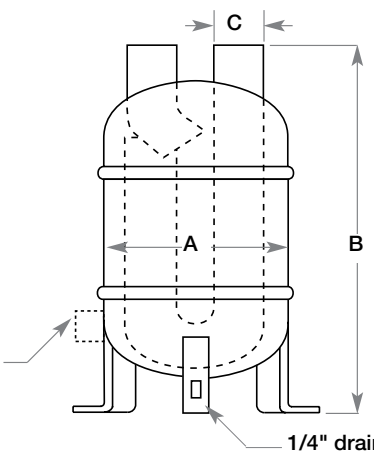
Design Features and Ratings

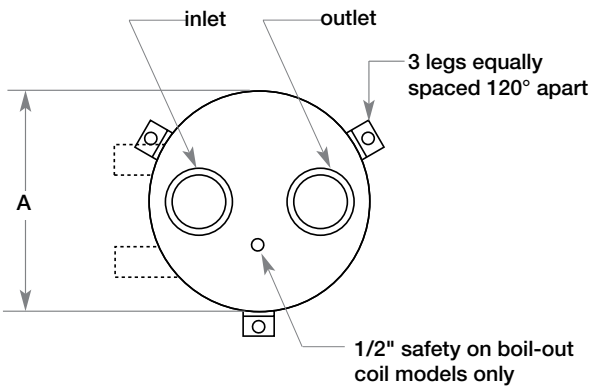
Models	Refrig. Cap. (lbs)	Dimensions				Shipping Weight (lbs)		Recommended Tons of Refrigeration Suction Evaporator Temp. (°F) R-22				
	R-22	A	B	C (ids)	E (ids)			+40°	+20°	0°	-20°	-40°
A-6118			23 1/2		NA	26	MAX	9.1	6.5	4.2	2.8	1.8
A-6118C	21.8	6 5/8	27 1/2	1 1/8	7/8	31	MIN	0.9	0.8	0.7	0.5	0.4
A-6138			23 1/2		NA	26	MAX	15.6	10.8	6.8	4.5	2.9
A-6138C	21.0	6 5/8	27 1/2	1 3/8	1 1/8	31	MIN	1.8	1.5	1.3	1.1	0.9
A-6158			23 1/2		NA	27						
A-6158C	20.1	6 5/8	27 1/2	1 5/8	1 1/8	32	MAX	27.6	19.5	12.0	7.8	5.0
A-8158			25 3/4		NA	42	MIN	3.2	2.4	2.0	1.6	1.5
A-8158C	31.0	8 5/8	29 1/2	1 5/8	1 3/8	47						
A-8218			22 3/4		NA	43						
A-8218C	30.0	8 5/8	29 1/2	2 1/8	1 3/8	48	MAX	58.1	40.1	26.1	18.2	12.3
A-10218			22 1/22		NA	65	MIN	6.1	5.6	4.6	4.1	3.2
A-10218C	45.0	10 3/4	25 1/2	2 1/8	1 5/8	70						
A-10258			22 1/22		NA	66	MAX	89.1	61.2	41.1	28.1	18.0
A-10258C	44.0	10 3/4	25 1/2	2 5/8	1 5/8	71	MIN	9.1	8.6	7.1	6.6	4.5
A-10318			24 15/16		NA	72						
A-10318C	49.0	10 3/4	25 1/2	3 1/8	1 5/8	77	MAX	132.2	92.1	61.3	40.4	28.0
A-12318			25 1/2		NA	92	MIN	15.6	13.2	11.6	9.6	7.5
A-12318C	73.0	12 3/4	28 1/2	3 1/8	2 1/8	97						
A-14418			33 1/2		NA	157	MAX	250.0	175.0	116.0	76.0	54.0
A-14418C	125.0	14	36 3/4	4 1/8	2 1/8	162	MIN	33.0	28.0	25.0	20.0	16.0

Use the following multipliers for refrigerants other than shown above: R-404A= R-22 capacity x 0.89
Models with 'C' suffix include boil-out coil heat exchanger for additional protection
R-507= R-22 capacity x 0.88

Working Pressure: 450 psi.

- Vertical installation for smaller footprint
- Prevents compressor damage due to slugging of refrigerant and oil
- Positive oil return at all rated conditions
- Designed for low temperature application
- Low pressure drop
- Acts as a suction muffler
- Corrosion resistant paint
- A.S.M.E. Coded Construction



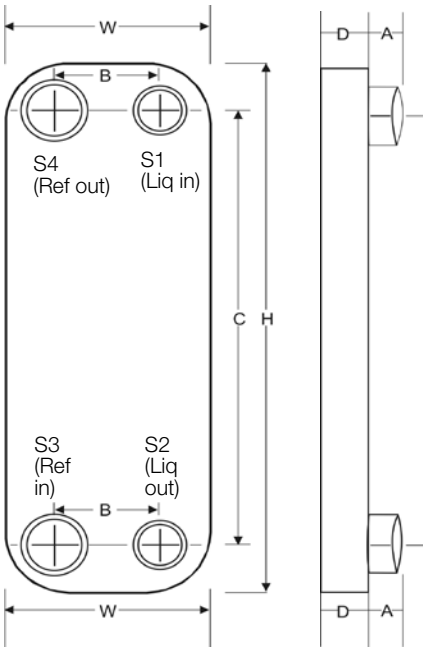


Heat Reclaim

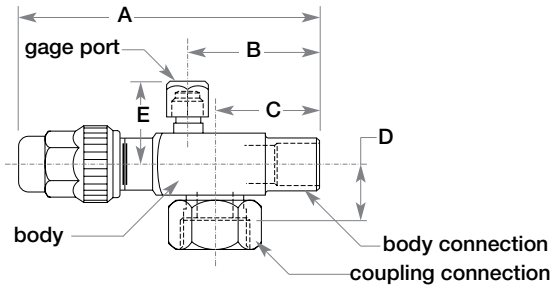
Two Frame Sizes

Model	Nominal HP*	Description	Part Number	Connections (ids)		Dry Wt. (lbs.)	Dimensions (in.)			
				Hot Gas In/Out S3/ S4	Liq. In/Out S1/S2		"D"	"A"	"B"	"C"
	Frame Size 8.2" H x 3.1" W				**Working Pressure 500 PSIG**					
DSP-05S-CB	0.5	CB14-14H S15	3287 0007 55	5/8"	5/8"	3.3	1.7	0.95	1.65	6.78
	Frame Size 12.2" H x 4.4" W				**Working Pressure 450 PSIG**					
DSP-05M-CB	0.5	CB27-12H S15	3287 0007 54	5/8"	5/8"	6.1	1.5	0.95	1.97	9.84
DSP-1M-CB	1	CB27-18H S33	3287 0007 12	7/8"	7/8"	7.8	2	0.95	1.97	9.84
DSP-1.5M-CB	1.5	CB27-24H S33	3287 0007 13	7/8"	7/8"	9.6	2.6	0.95	1.97	9.84
DSP-2M-CB	1.8	CB27-34H S52	3287 0007 14	1-1/8"	1-1/8"	12.5	3.6	0.95	1.97	9.84
DSP-2.5M-CB	2.3	CB27-44H S52	3287 0005 62	1-1/8"	1-1/8"	15.4	4.5	0.95	1.97	9.84
DSP-3M-CB	2.5	CB27-54H S52	3287 0005 63	1-1/8"	1-1/8"	18.3	5.5	0.95	1.97	9.84
DSP-3.5M-CB	3.3	CB27-64H S52	3287 0005 64	1-1/8"	1-1/8"	21.2	6.4	0.95	1.97	9.84

* Nominal Operating Conditions: 180°F EGT, 90°F EWT, 140°F LWT FF=0.0001 Ft²/hr/Btu
Pressure drop: Water side less than 2 psi; Refrigerant side less than 10 psi
For larger capacities or additional information, contact Customer Service

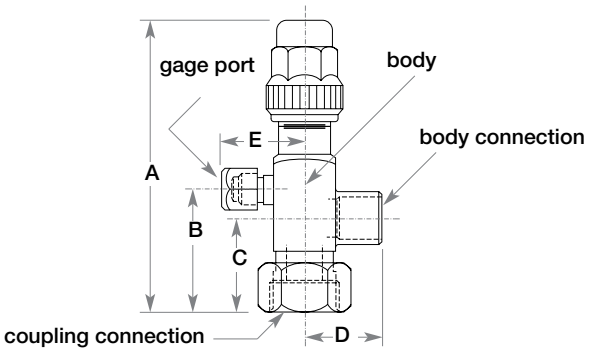


Design Features and Ratings



Connections		*Top* Gage Port	*Left* Gage Port	*Right* Gage Port	Body Size	Dimensions (inches)				
Body	Coupling					A	B	C	D	E
3/8 flare	3/4–16	H03FT	H03FL	H03FR	3/4 hex	3 23/32	1 17/32	1 3/16	25/32	1
1/2 flare	1–14	H04FT	H04FL	H04FR	7/8 sq	4 1/8	1 23/32	1 5/16	3/4	1 1/16
5/8 flare	1–14	H05FT	H05FL	H05FR	7/8 sq	4 3/8	1 31/32	1 9/16	3/4	1 1/16
1/2 ids	1–14	H04ST	H04SL	H04SR	7/8 sq	4 1/32	1 5/8	1 7/32	3/4	1 1/16
5/8 ids	1–14	H05ST	H05SL	H05SR	7/8 sq	4 9/32	1 7/8	1 15/32	3/4	1 1/16
7/8 ids	1 1/4–12	H07ST	H07SL	H07SR	1 1/8 sq	5 3/8	2 11/32	1 11/16	31/32	1 3/16
1 1/8 ids	1 1/4–12	H09ST	H09SL	H09SR	1 1/8 sq	5 5/8	2 19/32	1 15/32	31/32	1 3/16
1 3/8 ids	1 3/4–12	H11ST	H11SL	n/a	1 3/8 sq	7 3/16	3 5/16	2 15/32	1 3/16	1 5/16

Use stem end of valve & coupling connection as reference when determining gage port position



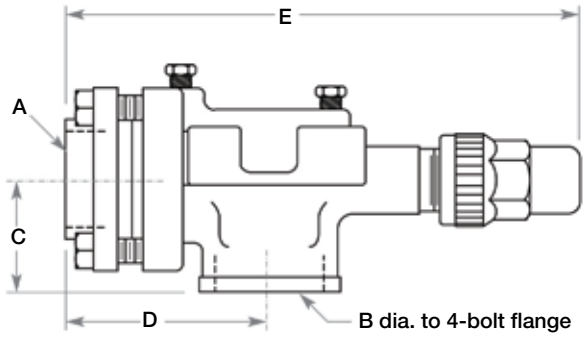
Connections		*Top* Gage Port	*Left* Gage Port	*Right* Gage Port	Body Size	Dimensions (inches)				
Body	Coupling					A	B	C	D	E
3/8 flare	3/4–16	V03FT	V03FL	V03FR	3/4 hex	3 1/16	1 5/32	13/16	1 1/8	1
1/2 flare	1–14	V04FT	V04FL	V04FR	7/8 sq	3 5/16	1 9/32	7/8	1 9/32	1 1/16
5/8 flare	1–14	V05FT	V05FL	V05FR	7/8 sq	3 5/16	1 9/32	7/8	1 17/32	1 1/16
1/2 ids	1–14	V04ST	V04SL	V04SR	7/8 sq	3 11/16	1 9/32	7/8	1 1/32	1 1/16
5/8 ids	1–14	V05ST	V05SL	V05SR	7/8 sq	3 11/16	1 9/32	7/8	1 1/32	1 1/16
7/8 ids	1 1/4–12	V07ST	V07SL	V07SR	1 1/8 sq	4 25/32	1 3/4	1 3/32	1 9/16	1 3/16
1 1/8 ids	1 1/4–12	V09ST	V09SL	V09SR	1 1/8 sq	4 25/32	1 3/4	1 3/32	1 13/16	1 3/16
1 3/8 ids	1 3/4–12	V11ST	V11SL	n/a	1 3/8 sq	6 3/16	2 5/16	1 15/32	2 3/16	1 5/16

Use stem end of valve & coupling connection as reference when determining gage port position

Horizontal Refrigerant Valves

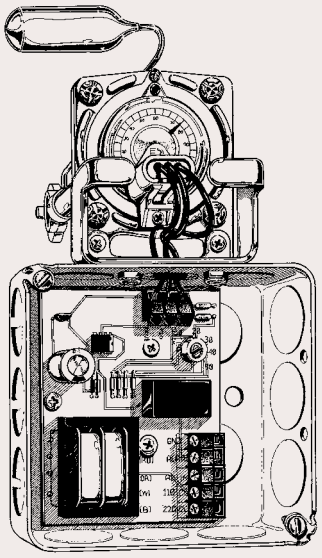
part number valve-85A
used on RBV-72145 & RBV-96145 UV 275, UV350, UV 450

part number valve-621A used on RBV-96166
Both valves utilize the four (4) bolt mating flanges installed on these receivers

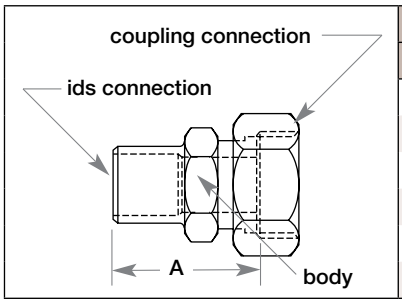


Part number	Dimensions (inches)				
	A	B	C	D	E
valve-85A	1.5/8	2.1/8	1.13⁄16	3.15⁄16	9.1/2
valve-621A	2.1/8	2.17⁄32	2.3/8	5.1⁄16	12

LLI / LLH components		
Part number		
GASKE 995	Neoprene flat gasket. Fits current indicator and alarm adaptor on units manufactured after 1972	
INDIC 21	Replacement dial for LLI indicators	
INDIC 49	Replacement switch for LLH alarms	

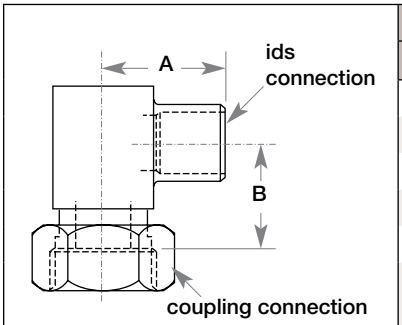
Part number		
LLI	**Liquid Level** Magnetic liquid level indicators are an inexpensive, effective means of gauging the refrigerant level in a horizontal receiver. The dial reads percent of pumpdown capacity of the receiver: when the pointer indicates 100%, the receiver is 80% full of liquid. Pounds of refrigerant can be determined by taking the indicated percentage of the specified pumpdown capacity of the receiver. Normal location is on the side of the receiver, centered between the liquid inlet and outlet connections. Other locations may be provided if specified. Note that at least six inches are required between centers of adjacent liquid level indicator flanges, and also between a unit and the liquid outlet pickup tube. These can be mounted in the center of either end, provided the respective inlet or outlet fitting is moved to 1 1/2 tank diameters from that end. Float and assembly dial are included.	
INDIC 58A	**Liquid Level Alarm** A liquid-level indicator is a single pole, single throw switch on which contacts close upon the decrease of the liquid level at 20% pumpdown. Movement of the seamless aluminum float rotates a magnet on the inner side of the solid alu¬minum alloy head. The indicator pointer, or switch contacts, are on the outer side and are oper¬ated by a small magnet which follows the position of the inner magnet. There is no connection, except the magnetic field, between the inside and outside. Internal gears and bearings are stainless steel. In case of external damage, the indicator dial or switch cartridge may be replaced from outside— the refrigerant charge is not disturbed. Switch Duty . . . . . AC Max. Volts . . . . . 120/240 Max. Amps. . . . . 1 (inductive) Max. Watts 75/150	
INDIC 210A	**Liquid Level Indicator - Alarm** This indicator–alarm with selectable low–level point is designed for use in applications where low liquid level protection is desirable. It provides a relay circuit that closes at one of five user selectable levels of from 10 to 50%. The relay circuit can be used to drive a variety of applications from alarms to pumps. The indicator–alarm also provides a direct, visual indication of the liquid level in the tank. Each indicator–alarm uses highly reliable and accurate, three wire, voltage divider technology to send the level signal to the level alarm, relay circuitry. The voltage divider uses thick film element in conjunction with a multi–fingered contact to ensure accuracy and reliability. The connector built into the indicator–alarm mates with a standard Packard automotive type, rubber sealed connector for easy installation and reliable connections. Temperature . . . . . -20°C to 70°C (-4°F to 185°F), operating Working Pressuer . . . 410 PSIG Power Rating . . . . . 5 amps, 240 VAC max. Voltage Input . . . . . 110 or 220 VAC Gauge Mounting. . . . Rochester SeniorTM Adapter UL Status UL recognized for refrigeration All indicators require a factory installed flange and are available for 85⁄8 OD and larger horizontal receivers, only. Flange cost is not included in cost of indicator alarm.	

Straight Adapter



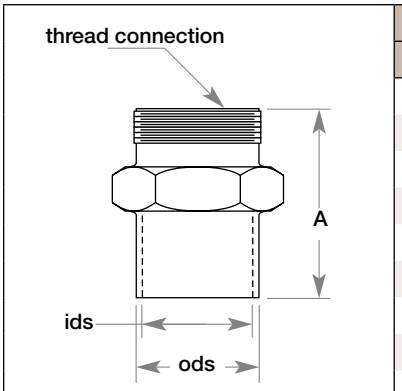
Connections		part number	Body	A (inches)
ids	coupling			
3/8	3/4–16	SA03	7/8 hex	1 9/32
1/2	1–14	SA04	7/8 hex	1 7/32
5/8	1–14	SA05	7/8 hex	1 9/32
7/8	1 1/4–12	SA07	1 1/8 hex	1 23/32
1 1/8	1 1/4–12	SA09	1 1/8 hex	1 31/32
1 3/8	1 3/4–12	SA11	1 3/4 hex	2 7/16

Angle Adapter



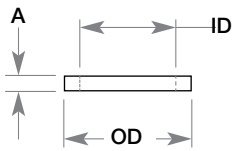
Connections		part number	A (inches)	B (inches)
ids	coupling			
3/8	3/4–16	AA03	1 5/16	1/2
1/2	1–14	AA04	1 3/32	17/32
5/8	1–14	AA05	1 3/32	19/32
7/8	1 1/4–12	AA07	1 9/16	5/8
1 1/8	1 1/4–12	AA09	1 13/16	1
1 3/8	1 3/4–12	AA11	2 3/16	1

Brass Adapter



Connections			part number	A (inches)
ids	ods	thread		
3/8	1/2	3/4–16	BA03x06	1 5/16
3/8	1/2	1–14	BA03x08	1 5/16
1/2	5/8	1–14	BA04x08	1 5/16
5/8	7/8	1–14	BA05x08	1 5/16
5/8	7/8	1 1/4–12	BA05x10	1 9/16
7/8	1 1/8	1 1/4–12	BA07x10	1 9/16
1 1/8	1 3/8	1 1/4–12	BA09x10	1 9/16
1 1/8	1 3/8	1 3/4–12	BA09x14	1 11/16
1 3/8	1 5/8	1 3/4–12	BA11x14	1 11/16

Teflon Fiber Seal



Dimensions (inches)			use with thread	part number
ID	OD	A		
7/16	9/16	1/16	3/4–16	TS-24590
5/8	3/4	1/16	1–14	TS-24591
7/8	1	1/16	1 1/4–12	TS-24592
1 3/8	1 1/2	1/16	1 3/4–12	TS-24593

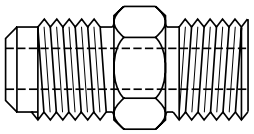
valve and component notes

Steel valves and adapters with ids connections are electrotin plated and can be silver soldered. The valve stem packing can withstand considerable heat, but should be kept as cool as possible. Valves should be slightly open while soldering.

Teflon seals should be installed only after all soldering is completed. A seal is furnished with each valve, adapter or connection supplied on a vessel. Order additional seals for replacement only.

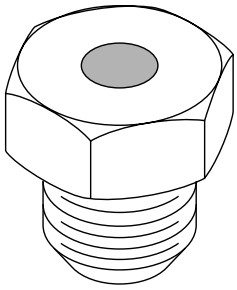
Steel valves with flare connections are cadmium plated. The stem packing will not withstand soldering temperatures, and the valve body must be protected if soldering is done near the valve.

Fusible Unions



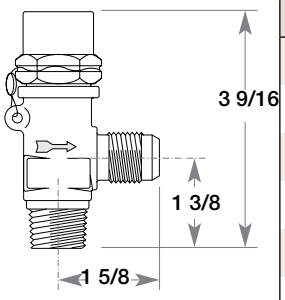
Part number	Connections		temperature setting
	flare	mpt	
union-184	3/8	3/8	212° F
union-58	3/8	1/2	212° F
union-319	3/8	5/8-18UNF	212° F
union-67	3/8	1/2	275° F
union-76	3/8	3/8	283° F

Fusible Plugs



Part number	thread size (mpt)	temperature setting
plug-148	1/8	212° F
plug-175	3/8	212° F
plug-265	5/8-18UNF	212° F
plug-166	1/8	283° F
plug-337	3/8	283° F
plug-364	5/8-18UNF	283° F

Relief Valves



Part number	Connections		pressure setting
	mpt	flare	
valve-58	3/8	3/8	350 psi
valve-67	3/8	3/8	400 psi
valve-94	1/2	5/8	350 psi
valve-102	1/2	5/8	400 psi
valve-764	1/2	5/8	450 psi
valve-771	3/8	3/8	450 psi

protection notes

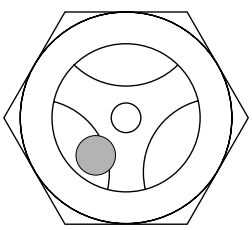
Relief valves are installed in a refrigeration system primarily to protect the vessel in the event of fire or other emergency high pressure condition.

Fusible unions and plugs protect only in the event of fire.

The 5/8–18UNF union or plug seats in a special 3/8" coupling with a copper zinc coated flare gasket, exactly as an SAE flare fitting. A conventional 3/8" mpt pipe threaded union, plug, or safety valve will also seal on the dryseal pipe thread of the coupling if ever necessary.

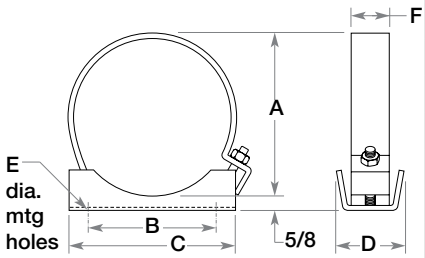
All systems must have a relief valve or fuse plug installed in order to comply with the ANSI B9.1 code.

Sightglass



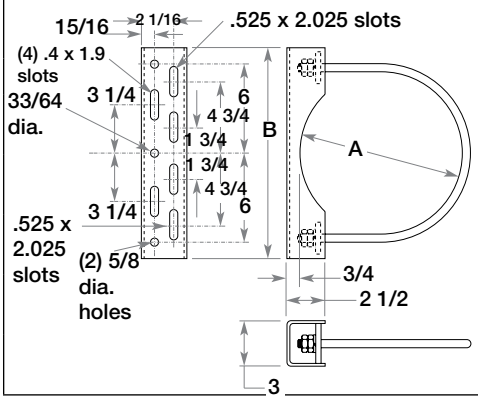
Part number	thread size	bulls–eye type
SG04	1/2 mpt	float ball
SG06	3/4 mpt	float ball
SG08	1 3/4 mpt	float ball
SG10	1 1/4 mpt	float ball
SG11	2 3/4 mpt	float ball
SG12	3/4 Rotalock	float ball
	1 1/4 -12	

Universal



Part number	Dimensions (inches)					
	A	B	C	D	E	F
5A	5	5 1/2	7	2 9/16	7/16	1 1/16
6A	6	5 1/2	7	2 9/16	7/16	1 1/16
6B	6 5/8	5 1/2	7	2 9/16	7/16	1 1/16
8B	8 5/8	8	9	2 78	7/16	1 1/16
10B	10 3/4	10	11	3 5/16	7/16	1 1/16
12B	12 3/4	11 5/8	13	4 1/8	9/16	1 1/2
14B	14	13 1/4	14 1/2	4 1/8	9/16	1 1/2
16B	16	15 3/4	17	4 1/8	9/16	1 1/2

Compressor/Condenser



Part number	Dimensions (inches)		part number	Dimensions (inches)	
	A	B		A	B
BR1	6	14	BR10	14	24
BR3	6 5/8	14	BR11	16	24
BR5	8 5/8	14	BR12	18	24
BR7	10 3/4	14	BR13	20	24
BR9	12 3/4	14			

www.alfalaval.us
+1 866 ALFA LAVAL

Standard Refrigeration

www.stanref.com
+1 708 345 5400

ERC00261ENUS 0909