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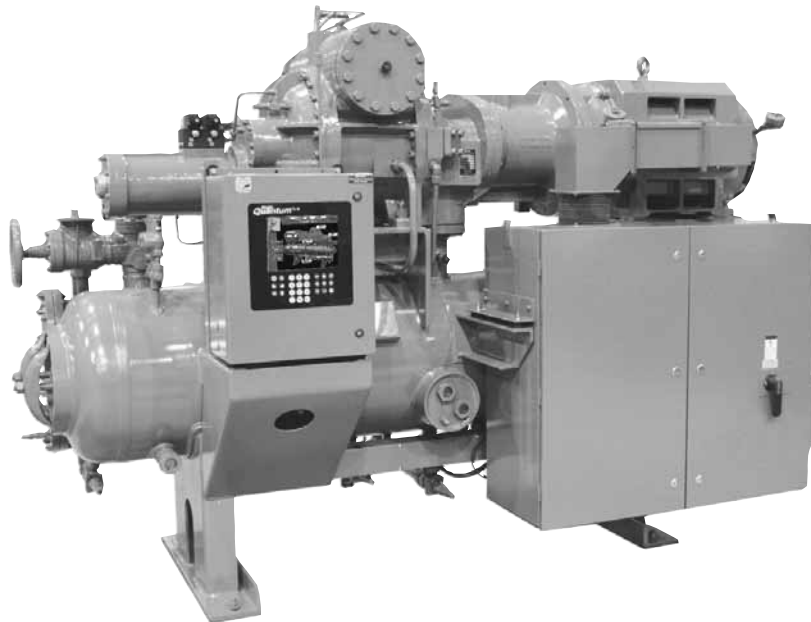
SPECIFICATIONS - ENGINEERING DATA - DIMENSIONS

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RWF II

**ROTARY SCREW COMPRESSOR UNITS
MODELS: 100 through 1080**

**REFRIGERANTS R-717 and R-507
HIGH STAGE and BOOSTER APPLICATIONS**



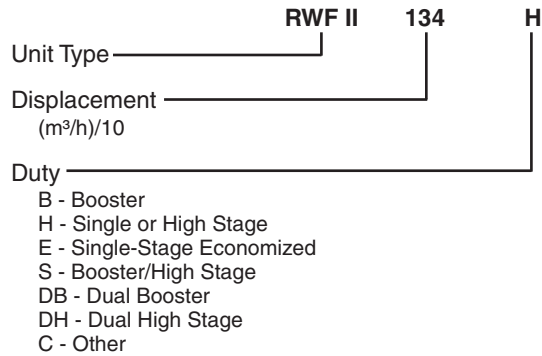
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SPECIFICATIONS

MODEL NUMBER EXPLANATION



DESCRIPTION

The RWF II Rotary Screw Compressor Unit line consists of 13 models ranging in capacity from 592 CFM (1004 m³/h) through 6,394 CFM (10,862 m³/h) at 3550 RPM and 60 Hz. Standard units, models 100 – 1080, are designed for use on ammonia, halocarbon, and hydrocarbon refrigerants for either high stage or booster service.

Standard units consist of the following major components: Frick manufactured SGC Rotary Screw Compressor with patented VOLUMIZER® variable volume ratio control; compressor/motor coupled with D-flange, drive coupling and guard; SBC microprocessor control panel; suction and discharge line stop valves; suction and discharge line check valves; suction strainer; and a three-stage horizontal oil separator/reservoir. All components have been selected for maximum reliability and arranged to ensure accessibility for service. The units are factory packaged, complete with wiring and piping. All piping connecting the various elements of the compressor unit is done in accordance with ANSI B31.5.

MODEL SGC COMPRESSOR

HOUSING: All screw compressor castings are designed and tested to meet the requirements of ASHRAE 15 safety code for 400 PSIG maximum discharge pressure. Castings are close grain, ASTM-A-48 Class 40 cast iron to ensure structural integrity and mechanical and thermal stability under all operating conditions.

ROTORS: The rotors are machined from AISI-1141 steel to the exacting tolerances of the latest SRM asymmetric profile. The four-lobed male rotor is directly connected to the driver. The six-lobed female rotor is driven by the male rotor on a thin oil film.

BEARINGS: Antifriction bearings with an L₁₀ rated bearing life in excess of 100,000 hours, at design conditions, are used for reduced frictional horsepower and superior rotor positioning, resulting in reduced power consumption, particularly at higher pressure ratios. Cylindrical roller bearings are provided to handle the radial loads and the thrust loads are absorbed by angular contact ball bearings. In addition, thrust balance pistons are provided to reduce the thrust load and improve bearing life.

SHAFT SEAL: The compressor shaft seal is a single-face type with a spring-loaded carbon stationary surface riding against a cast iron rotating seat. The seal is capable of sealing up to 350 PSIG, but is vented to low pressure to provide extended seal life.

VOLUMIZER® VARIABLE VOLUME RATIO CONTROL: The Frick compressor includes a patented method of varying the internal volume ratio to match the system pressure ratio. With control of the internal volume ratio, the power penalty associated with overcompression or undercompression is eliminated. The volume ratio control is achieved by the use of a slide stop which is a movable portion of the rotor housing that moves axially with the rotors to control discharge port location. The slide stop is moved by hydraulic actuation of a control piston based on signals from the microprocessor. The range of adjustability is from 2.2 to 5.0 Vi for all models.

CAPACITY CONTROL: Capacity control is achieved by use of a movable slide valve. The slide valve moves axially under the rotors to provide fully modulating capacity control from 100% to minimum load capacity. Minimum load capacity varies slightly with compressor model, pressure ratio, discharge pressure level, and rotor speed. See table below for minimum capacity for all RWF II models.

The slide valve is positioned automatically by hydraulic movement of its control piston based on time-proportional signals from the microprocessor. When in the unloaded position, gas is bypassed back to suction through a recirculation slot before compression begins and any work is expended, providing the most efficient unloading method available for part-load operation of a screw compressor.

Compressor Volume Ratio and Capacity

RWF II MODEL	Standard Slide Valve		Low Vi Slide Valve		Min Cap*	Micro Slide Valve Travel	Micro Slide Stop Travel
	Min Vi	Max Vi	Min Vi	Max Vi			
100	2.2	5.0	1.7	3.0	12%	195.6	76.2
134	2.2	5.0	1.7	3.0	12%	195.6	76.2
177	2.2	5.0	1.7	3.0	12%	195.6	76.2
222	2.2	5.0	1.7	3.0	12%	195.6	76.2
270	2.2	5.0	1.7	3.0	12%	195.6	76.2
316	2.2	5.0	1.7	3.0	12%	195.6	76.2
399	2.2	5.0	1.7	3.0	12%	195.6	76.2
480	2.2	5.0	1.7	3.0	12%	213.9	76.2
546	2.0	4.1	N/A	N/A	18%	185.6	76.2
496	2.2	5.0	1.7	3.0	12%	213.9	76.2
676	2.2	5.0	1.7	3.0	12%	213.9	76.2
856	2.2	5.0	1.7	3.0	18%	184.6	76.2
1080	2.4	4.5	1.7	2.6	26%	141.5	58.0

* Theoretical

LUBRICATION SYSTEM

LUBRICATION SYSTEM: The SGC compressor is designed specifically for operation without an oil pump under normal operating conditions. All oil required for main oil injection and lubrication is provided by positive gas differential pressure. All oil passes through the 5 micron SuperFilter™II furnished with isolation stop valves and drain connections for ease of servicing.

For some low pressure differential applications, an optional demand pump will be required. The demand pump operates only when the suction-discharge differential is not sufficient to provide adequate lubrication and will shut off automatically to conserve pump motor power when not required.

The lubrication system on a unit designed for booster duty includes a demand oil pump. The demand pump is supplied as standard equipment due to the typically low differential pressure across the compressor in booster applications.

OIL SEPARATOR/RESERVOIR: RWF II models 100 through 1080, high stage or booster have a horizontal design oil separator with integral sump. Two sight glasses are located in the reservoir section and one in the coalescing section. The separator is designed and constructed in accordance with ASME Section VIII, Div. 1 for a maximum design working pressure of 300 PSIG and supplied with dual relief valves. 1000 watt heaters maintain oil temperature at an ambient temperature of 67°F minimum, with no wind factor, during compressor shutdown and are replaceable without shutting down the compressor.

Coalescent separator elements are provided for final gas/oil separation of particles down to less than 1 micron. Oil is drained from the coalescer section and returned to the compressor during operation.

OIL FILTERS: All lubrication and injection oil passes through our new Frick SuperFilter™II, specifically designed for increased particle capture and cleaner oil and compressor operation. SuperFilter™II captures 99% of particles 5 microns and larger and has twice the dirt holding capacity of the original filter for maximum bearing life. It is also designed for horizontal filter mounting and furnished with isolation stop valves and drain connections for ease of servicing.

OIL COOLING

LIQUID INJECTION OIL COOLING: The compressor oil is cooled by direct contact with the refrigerant injected through an optimized port location prior to the compressor discharge. Liquid feed arrangements include isolation valves, strainer, solenoid valve, sight glass, a thermal expansion temperature control valve, and a pressure differential control valve. The temperature control valve will maintain the temperature of the oil returning to the compressor between 130°F and 170°F.

WATER-COOLED OIL COOLING: The optional water-cooled oil cooler is a plate and shell design with oil on the plate side. The cooler is designed and constructed according to ASME Section VIII Div. 1 with a Maximum Allowable Working Pressure (MAWP) of 400 PSIG on the shell side. Oil temperature is maintained between 110°F and 130°F for ammonia and halocarbons with a thermally controlled valve. The oil cooler is mounted on the unit with the oil piping connected. Water connections and controls are field installed.

THERMOSYPHON OIL COOLING: The optional thermosyphon cooler is a plate and shell design constructed in accordance with ASME Div. 1 with a MAWP of 400 PSIG on the shell side and 400 PSIG on the plate side. The oil cooler is mounted on the unit with the oil piping connected. Refrigerant connections and controls are field installed.

QUANTUM™LX CONTROL PANEL

HARDWARE: The Quantum™LX control panel is factory mounted, NEMA 4, UL® listed, and completely wired with all the required safety and operating devices. A 10.4" Active Color VGA Graphics Display offers a high contrast, crisp, clear display of compressor information and status. Additional I/O can be easily installed in the field. This feature provides flexibility for future engine room upgrades and changes. Three field-selectable serial communication ports allow you to choose from a combination of RS-422, RS-485, or RS-232

port configurations for both interpanel and external communications. Ethernet communications are also available for direct connection to the internet. Included in the microprocessor is time-proportioning capacity control, first-out annunciation, prealarms, volumizer control, access code protection, lead-lag sequencing, four user-defined capacity control modes, trending, maintenance schedule, and more. The operating conditions at the time of the compressor's last 50 alarms or shutdowns are stored in memory, providing the ultimate in service and troubleshooting convenience.

Additional features include: circuit breaker protection for main power; UL, cUL, CE, and ISO 9001 certifications; flexible analog inputs, making it easy to change setup in the field to accept 0-5 volt, 1-5 volt, 4-20 mA or ICTD sensors and transmitters; long life, easily replaceable, lithium coin cell battery for power backup to the time/date clock; communication activity and diagnostic lamps simplify troubleshooting and provide visual indication of proper component operation; Flash setpoint memory – all setpoints are stored on a Flash chip which requires no battery backup and can be downloaded to flash memory for storage. Setpoints can be field programmed within Johnson Controls-Frick defined limits (a notice is displayed if you attempt to program setpoints outside of the defined ranges); replaceable input and output modules; built-in fuse tester.

SOFTWARE: Quantum™LX control panel screens are user friendly, menu driven, and easy to use and understand. Help screens and prompts are available should you experience difficulties in setup or monitoring of system information. Operation instruction can be accessed on-screen via the Help key.

Numerous diagnostic features have been incorporated to ease troubleshooting and identify component malfunctions. They include: sensor short/open, setpoint input out of sensing range, DC and AC power monitoring, and memory error sensing.

Multiple capacity controllers provide application flexibility for auto setback control and control reset for changes in modes of operation. Override controls are provided to allow all safety and controller functions to be programmed to unload the compressor within maximum safety and control parameters.

On-screen calibrations for sensors, motor current, slide valve, and slide stop can be adjusted with easy to understand graphics. No potentiometer adjustment is required. Display backlight flashes on shutdown to attract attention in noisy engine rooms.

Other features include: selectable pressure and temperature units; industry standard communication protocols; real-time and historical X-Y trending - selected data and selected time periods can be viewed in either an X-Y trending chart or a tabular chart. Ability to add analog inputs with high and low alarm and shutdown setpoints, and any 0-5Vdc, 1-5Vdc, or 4-20mA sensor. A name and unit description can be entered to identify the input. Add digital inputs to monitor input continuously or only when the compressor is running. A name can be entered to identify the input. Either an alarm or shutdown can be selected to occur when the input is de-energized. Other features include: Non-English Language Displays; Selectable Pressure and Temperature Units; Programmed Compressor Sequencing; Optional Condenser Control; and Industry Standard Communication Protocols.



* UL® listing applies to standard panels. Control Panels with special components may also be certified. Contact Johnson Controls-Frick for confirmation.

ACCESSORIES and OPTIONAL ITEMS

DUAL OIL FILTERS: A second oil filter may be furnished mounted on the unit. Isolation valves are included to provide servicing of the primary filter set while the unit is running.

DEMAND PUMP: Lubrication and oil injection may be achieved by using a positive-displacement, direct-driven gear-type oil pump capable of maintaining lube oil supply at low pressure differentials, operating independent of the compressor.

The pump will operate only when required, due to low system differential pressure.

ECONOMIZER: Increased refrigeration capacity with relatively low increase in brake horsepower can be achieved by the use of a Frick economizer system. The economizer consists of a shell and tube liquid subcooler with appropriate controls. The economizer vessel is shipped loose for mounting in the field.

MOTORS: The compressor drive motor can be supplied and mounted by Johnson Controls-Frick. In addition, a customer supplied motor can be factory mounted by Johnson Controls-Frick.

STARTERS: Starter packages complete with all accessories needed to interface with the RWF II, prewired to numbered terminal strips are available.

Unit-mounted Solid-State starters directly interface to the Quantum™LX control panel. Field wiring is drastically reduced because only three-phase incoming power must be connected to the line side of the starter. "Soft Start" feature extends motor life by minimizing electrical and mechanical strain on the motor windings. A microprocessor-based electronic unit provides unsurpassed motor overload protection.

VYPER™ VARIABLE SPEED DRIVE: Responds to changing capacity by changing motor speed instead of moving the slide valve. Vyper™ is faster, more efficient, enhances energy savings, and reduces maintenance costs.

- Goes from 20% to 100% capacity in 8 seconds
- Idles at 0 speed for up to 120 minutes

SPECIAL PACKAGES: For special refrigerant selection, special drivers, or any dual or two stage applications, consult Johnson Controls-Frick.

STANDARD DESIGN DATA

RWF II MODEL NO.	SGC COMPRESSOR			
	MODEL NO.	DIA mm	L/D	DISPLACEMENT CFM (m³/h)
100	1913	193.0	1.35	592 (1005)
134	1918	193.0	1.80	790 (1342)
177	2313	233.0	1.35	1042 (1770)
222	2317	233.0	1.70	1311 (2228)
270	2321	233.0	2.10	1590 (2700)
316	2813	283.0	1.35	1865 (3169)
399	2817	283.0	1.70	2349 (3992)
480	2821	283.0	2.10	2824 (4798)
546	2824	283.0	2.40	3216 (5464)
496	3511	355.0	1.10	2920 (4961)
676	3515	355.0	1.50	3982 (6765)
856	3519	355.0	1.90	5068 (8610)
1080	3524	355.0	2.40	6394 (10,862)

**EQUIPMENT SELECTION
SCREW COMPRESSOR UNIT**

The following information is required for final unit selection:

Refrigerant _____ R-717, R-22
Other - Consult **Frick**

Duty _____ Single Stage, High Stage, Booster
Other - Consult **Frick**

Compressor RPM _____ 3550 (60 Hz) or 2950 (50 Hz)
Other - Consult **Frick**

Lube Oil Pump: Single, High Stage _____ Demand (Opt)
Lube Oil Pump: Booster _____ Demand (Std)

Oil Filters _____ Single (Std), Dual (Opt)

Oil Cooling _____ Liquid Injection (Std)
Water Cooled (Inlet/Outlet Water Temp Req'd) (Opt)
Thermosyphon _____ (Opt)

Saturated Suction Temperature _____ °F

Condensing Temperature _____ °F

Intermediate Temperature (Booster) _____ °F

Suction Superheat _____ °F

Liquid Subcooling _____ °F

Economizer - Kit Only _____ (Opt)

Economizer - Dx Cooler _____ (Opt)

Rating _____ TR _____ BHP ____ (Including Liquid
Subcooling, Suction Superheat, and Liquid
Injection corrections as applicable)



COMPRESSOR DRIVER

The following information is required for proper coordination of the screw compressor unit and the compressor driver.

Driver Type _____ Electric Motor
Other - Consult **Frick**[®]
Motor Speed _____ RPM (See Compressor RPM, above)
Motor Specifications _____ HP _____ Frame
_____ Service Factor _____ Full-Load Amps
_____ Bearings (Ball or Sleeve)
Motor Power _____ Volts, 3 Phase _____ Hz
Motor Supplied By _____ **Frick**, Others
Motor Mounted By _____ **Frick**, Others
Motor Enclosure _____ ODP, TEFC
_____ Explosion Proof _____ Class _____ Group
Motor Starting Method _____ Across-the-line,
_____ Wye-delta, Autotransformer, Solid State

* Motor Rotation _____
*** NOTE: Compressor rotation is clockwise when facing end of compressor shaft. MOTOR ROTATION MUST BE COUNTERCLOCKWISE WHEN FACING END OF MOTOR SHAFT.** Most motors have dual rotation, but some, such as the large TEFC motors, are single rotation only for purposes of fan cooling and must be ordered with the correct rotation. Motors must be D-flanged.

MOTOR SELECTION

Motors for high-stage applications may be selected for the design operating condition, however, motors for booster applications need to be sized for start-up and pull-down duty as well as for the design condition. For booster applications start-up and pull-down will quite often be the more demanding requirement.

For starting torque see Compressor Speed/Torque Curve.

MOTOR STARTER PACKAGES

The following specifications describe a motor starter package, complete with all electrical accessories necessary to interface with the RWF II compressor unit. These starter packages are available from **Frick** with all necessary interlocks prewired to terminals numbered for direct connection to the RWF II Microprocessor.

Specify starting method and overcurrent protection for:
_____ HP, _____ Volt/3 Phase, _____ Hz,
_____ FLA, _____ RPM compressor motor, complete with overload heaters, 2KVA-120 volt control power transformer, _____: 5 amp-15 VA signal current transformer and normally open auxiliary contact. Starter package includes one across-the-line fused oil pump starter for _____ HP, _____ Volt/Phase, _____ Hz, _____ FLA, _____ RPM motor complete with overload heaters and normally open auxiliary contact. All interlocks wired to terminals marked in accordance with the RWF unit single box microprocessor control. Specify _____ NEMA rating for enclosure, NEMA 1 is standard. The maximum starter coil load on terminal 18 shall be one size 3 starter coil or one interposing relay.

The following information must be specified for each application:

STARTING METHOD: Choose Across-the-line, Autotransformer, Wye-delta Open Transition, Wye-delta Closed Transition, or Solid-State starting.

ACROSS-THE-LINE STARTING: Yields full motor starting torque. However, power companies and/or in-house power distribution systems often require other starting methods to achieve reduced starting inrush current. **NOTE: Reducing the inrush current also reduces the starting torque.** A careful analysis of compressor torque requirements versus the available motor starting torque must be made. This can be accomplished by plotting the motor speed-torque curve (obtained from motor vendor) against the compressor speed-torque curve. The available motor torque should exceed the compressor torque requirement by a minimum of 20% at the worst portion of the curve. This usually occurs at approximately half-speed in the region known as the motor pull-up torque (P.U.T.). When plotting these curves please remember that for starting methods other than across-the-line, the motor torque values are reduced as follows:

AUTOTRANSFORMER: The Autotransformer starter has three voltage taps: 50%, 65% and 80%. The starter, unless specified otherwise, is normally shipped connected to the 80% voltage tap. This can be changed in the field as required. The starting torque available is:

- 80% Tap - 64% of normal torque
- 65% Tap - 42% of normal torque
- 50% Tap - 25% of normal torque

WYE-DELTA (OPEN or CLOSED TRANSITION): Starting torque available is 33% of normal. While Wye-delta open transition starters exhibit the same torque characteristics as Wye-delta closed transition starters, closed transition is the more preferred method. This is because open transition allows the motor to get out of sync with the power line during transition. This can result in damaging power spikes that tend to nuisance trip circuit breakers and shorten motor and power distribution equipment life. This is especially true for screw compressors which represent relatively low inertia loads.

SOLID-STATE STARTERS: Starters have complex current and torque relationships. In addition, solid-state starters require careful coordination between the starter and other protective devices to prevent compressor failure due to shorted starter outputs. If a solid-state starter is being considered, consult **Frick** for assistance.

OVERCURRENT PROTECTION: Choose either the Starter package or the Combination starter package with circuit breaker disconnect. For high voltage (2300V, 4160V) applications, specify High voltage fused draw-out starter package.

COMPRESSOR MOTOR DATA: Indicate the motor _____ HP, _____ voltage, _____ Hz, _____ FLA (full load amps), and _____ speed.

CURRENT TRANSFORMER RATIO: Select the appropriate current transformer ratio from the chart on the wiring diagram.

OIL PUMP MOTOR DATA: The oil pump motor data is determined by **Frick** for each application. Standard units with either the optional demand pump system will have an integral horsepower pump.

ENGINEERING DATA

STANDARD CONDITIONS - HIGH STAGE

The RWF II high stage ratings are based on 3550 RPM (60 Hz), 10°F liquid subcooling (except no external liquid subcooling in economizer ratings), 10°F suction superheat (not contributing to the refrigeration effect) and thermosyphon or water-cooled oil cooling.

SELECTION PROCEDURE - HIGH STAGE

The final rating for an RWF II unit at any condition is determined from the standard rating and all of the applicable correction factors.

Capacity (TR) = standard rating (or economized rating) x subcooling correction factor x superheat correction factor x liquid injection correction factor if applicable (see Liquid Injection Oil Cooling) x 0.83 (50 Hz only).

Brake Horsepower (BHP) = standard rating (or economized rating) x 1.01 (liquid injection correction factor if applicable) x 0.83 (50 Hz only).

LIQUID SUBCOOLING CORRECTION FACTORS HIGH STAGE

For liquid subcooling other than 10°F, determine the liquid subcooling capacity correction factor (S.C.C.F.) in the following manner using the actual number of degrees of liquid subcooling (S.C.):

$$\text{For R-717: S.C.C.F.} = 1 + (\text{S.C.} - 10^\circ\text{F})(.0025)$$

$$\text{For R-507: S.C.C.F.} = 1 + (\text{S.C.} - 10^\circ\text{F})(.0079)$$

No brake horsepower correction is required for liquid subcooling.

SUCTION SUPERHEAT CORRECTION FACTORS HIGH STAGE

For suction superheat in excess of 10°F, determine the suction superheat capacity correction factor (S.H.C.F.) in the following manner using the actual number of degrees of suction superheat (S.H.):

For R-717:

$$\text{S.H.C.F.} = \frac{1}{1 + (\text{S.H.} - 10^\circ\text{F})(.0025)}$$

For R-507:

$$\text{S.H.C.F.} = \frac{1}{1 + (\text{S.H.} - 10^\circ\text{F})(.0029)}$$

It is recommended that a minimum of 10°F of suction superheat be maintained to ensure that all refrigerant entering the compressor is in the vapor state.

No brake horsepower correction is required for suction superheat.

STANDARD CONDITIONS - BOOSTER

The RWF II booster ratings are based on 3550 RPM (60 Hz), liquid cooled to intermediate temperature, no suction superheat, and thermosyphon or water-cooled oil cooling.

SELECTION PROCEDURE - BOOSTER

The final rating for an RWF II unit at any condition is determined from the standard rating and all of the applicable correction factors.

Capacity (TR) = standard rating x liquid temperature correction factor x superheat correction factor, if applicable, x 0.83 (50 Hz only).

Brake Horsepower (BHP) = standard rating x 1.01 (liquid injection correction factor, if applicable) x 0.83 (50 Hz only).

LIQUID TEMPERATURE CORRECTION FACTORS BOOSTER

For liquid temperatures greater than the saturated intermediate temperature, determine the liquid temperature derating factor (L.T.D.F.) in the following manner:

$$\text{For R-717: L.T.D.F.} = 1 - (\text{TD})(.0025)$$

$$\text{For R-507: L.T.D.F.} = 1 - (\text{TD})(.0079)$$

Where TD is the temperature difference in degrees between the actual liquid temperature and the saturated intermediate temperature. No brake horsepower correction is required.

SUCTION SUPERHEAT CORRECTION FACTORS BOOSTER

For suction superheat in excess of 0°F, determine the suction superheat capacity correction factor (S.H.C.F.) in the following manner using the actual number of degrees of suction superheat (S.H.):

For R-717:

$$\text{S.H.C.F.} = \frac{1}{1 + (\text{S.H.})(.0025)}$$

For R-507:

$$\text{S.H.C.F.} = \frac{1}{1 + (\text{S.H.})(.0029)}$$

It is recommended that a minimum of 10°F of suction superheat be maintained to ensure that all refrigerant entering the compressor is in the vapor state.

No brake horsepower correction is required for suction superheat.

LIQUID INJECTION OIL COOLING

High Stage compressor units may be supplied with single-port (low Vi) or dual-port (low Vi and high Vi) liquid injection oil cooling. Single port will be furnished for low compression ratio operation and dual port for high compression ratio operation. Booster compressor units use single-port liquid injection oil cooling due to the typically lower compression ratios.

The control system on high stage units with dual-port liquid injection oil cooling automatically switches the liquid refrigerant supply to the high port when the compressor is operating at higher compression ratios (above 3.5 Vi) for best efficiency.

Where low compression ratios are anticipated, thermosyphon or water-cooled oil cooling should be used.

It is **IMPERATIVE** that an uninterrupted supply of high pressure liquid refrigerant be provided to the injection system at all times. Two items are of extreme importance, the design of the receiver/liquid injection supply and the size of the liquid line.

It is recommended that the receiver be oversized sufficiently to retain a five minute supply of refrigerant for oil cooling. The evaporator supply must be secondary to this consideration. Two methods of accomplishing this are shown.

The dual dip tube method (Figure 1) uses two dip tubes in the receiver. The liquid tube is below the evaporator tube to ensure continued oil cooling when the receiver level is low.

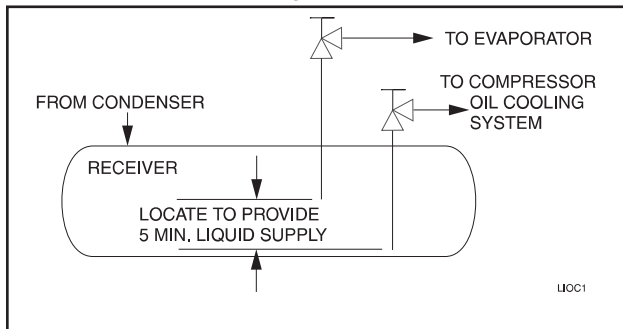


Figure 1

The level control method (Figure 2) utilizes a float level control on the receiver to close a solenoid valve feeding the evaporator when the liquid falls below that amount necessary for five minutes of liquid injection oil cooling.

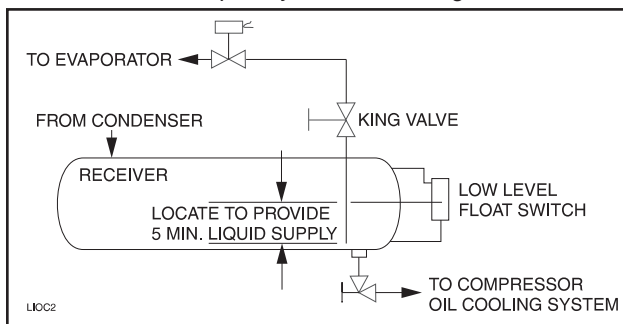


Figure 2

Liquid line sizes and the additional receiver volume (quantity of refrigerant required for 5 minutes of liquid injection oil cooling) are given in the following table.

RWF II MODEL	PIPING LINE SIZE	POUND PER MIN. PER 5 MIN.	LIQUID VOLUME CU FT
R-717 HS*			
100-134	1½	81.0	2.2
177-270	2	132.0	3.6
316-480	3	236.5	6.4
496	3	305.0	8.3
546	3	323.5	8.8
676	4	417.0	11.4
856	4	532.0	14.5
R-717 Booster*			
100-134	¾	11.5	0.3
177-270	1¼	17.0	0.4
316-480	1½	31.0	0.8
496	1½	38.5	0.9
546	1½	42.5	1.0
676	2	54.0	1.3
856	2	69.5	1.7
1080	2	91.5	2.2
R-507 HS*			
100-134	1¼	229.0	3.7
177-270	2	370.5	6.0
316-480	2	664.0	10.7
496	2½	878.5	14.1
546	2½	908.5	14.6
676	3	1200.0	19.3
856	3	1243.0	20.0
R-507 Booster*			
100-134	½	28.5	0.5
177-270	½	38.5	0.6
316-480	¾	69.0	1.1
496	1	103.0	1.7
546	1	94.5	1.5
676	1¼	141.5	2.3
856	1¼	160.0	2.6
1080	2	336.0	5.4

* Based on 100 foot liquid line. For longer runs, increase line size accordingly.

CONDITIONS:

Booster: -40°F Evap, 95°F Cond and 10°F Intermediate
 HI Stage: 0°F Evap, and 95°F Cond

THERMOSYPHON OIL COOLING

Thermosyphon oil coolers, like water (or glycol)-cooled oil coolers, eliminate the capacity and power penalties associated with liquid injection oil cooling. Thermosyphon oil coolers have the further advantages of eliminating water (or glycol) pump power consumption and maintenance, fouling, and potential system contamination.

The principle of operation is as follows (see diagram). A supply of high pressure liquid is maintained in a receiver at a predetermined minimum head above the oil cooler and below the condenser. Gravity causes the liquid refrigerant to flow to the oil cooler where a portion of the liquid is boiled off, thereby cooling the hot oil. New liquid from the receiver displaces the lighter refrigerant liquid/vapor mixture which rises to the receiver, dropping out the remaining liquid before allowing the vapor to return to the condenser, completing the cycle.

**PIPING ARRANGEMENT FOR
THERMOSYPHON OIL COOLING SYSTEMS**

The components and piping of a thermosyphon oil cooling system include a liquid source at condensing pressure, adequate static heads to provide fluid flow, appropriate control valves, safety relief valves, service valves and pump-out

connections. The arrangement of component placement and fluid flow requirements must be designed to suit the individual refrigeration system layout with consideration given to piping safety practices.

The component and piping arrangement shown below is intended only to illustrate the operating principles of thermosyphon oil cooling. Other component layouts may be better suited to a specific installation.

For additional information on Thermosyphon Oil Cooling, refer to Frick publication E70-900 E.

TABLE 2 - OIL COOLER DATA

RWF II MODEL		TYP COOLER		CONNECTION	
		DIA	PLATES	INLET	OUTLET
100 & 134	Hi Stage	14 in.	116	3 in.	3 in.
100 - 270	Booster	14 in.	66	2 in.	2 in.
177 & 222	Hi Stage	14 in.	190	3 in.	3 in.
270	Hi Stage	14 in.	288	3 in.	4 in.
316 & 399	Booster	24 in.	56	3 in.	3 in.
316 & 399	Hi Stage	24 in.	136	4 in.	5 in.
480 - 676	Hi Stage	24 in.	188	4 in.	5 in.
480 - 856	Booster	24 in.	72	3 in.	3 in.
1080	Booster	24 in.	136	4 in.	5 in.

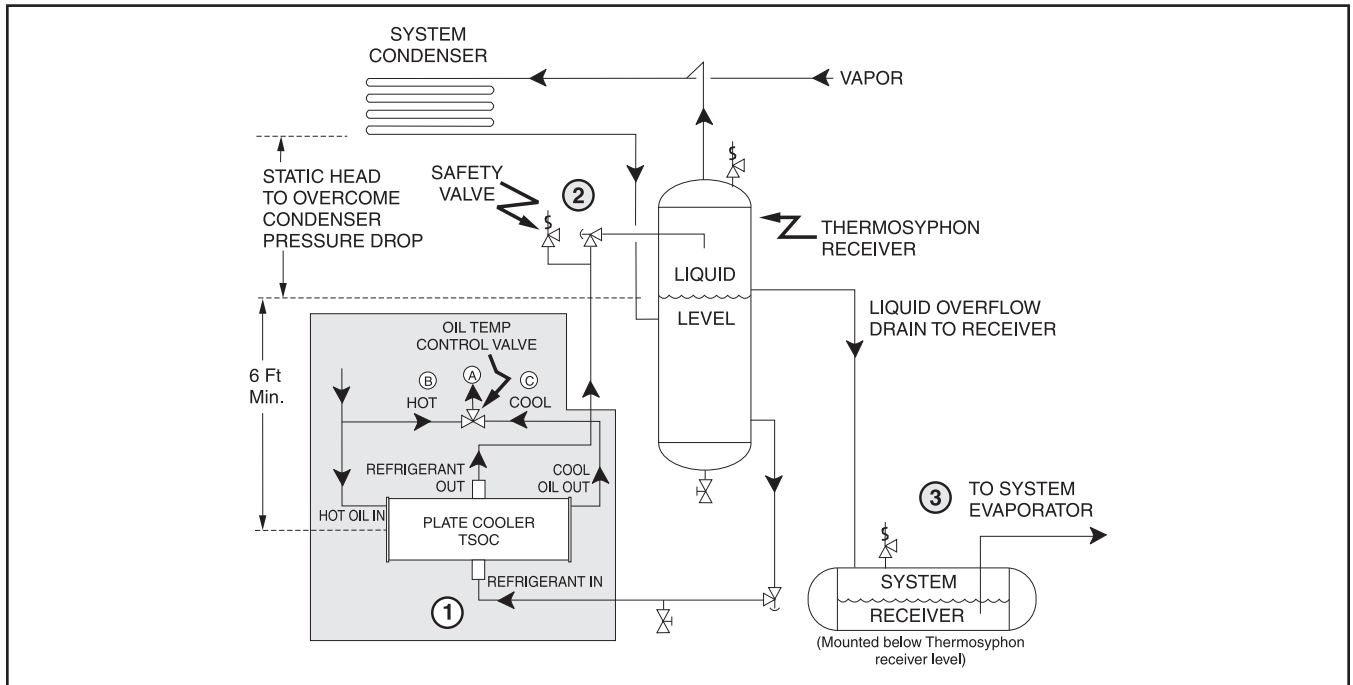


Figure 3

1. The thermosyphon oil cooler is supplied with the oil side piped to the compressor unit and stub ends supplied on the refrigerant side.
2. A refrigerant-side safety valve is required in this location only when refrigerant isolation valves are installed between the cooler and thermosyphon receiver. If no valves are used between the cooler and TSOC receiver, the safety valve on the TSOC receiver must be sized to handle the volume of both vessels. Then, the safety valve on the cooler vent (liquid refrigerant side) can be eliminated.
3. The system receiver must be below the thermosyphon receiver in this arrangement.

ECONOMIZER - HIGH STAGE (OPTIONAL)

The economizer option provides an increase in system capacity and efficiency by subcooling liquid from the condenser through a heat exchanger or flash tank before it goes to the evaporator. The subcooling is provided by flashing liquid in the economizer cooler to an intermediate pressure level. The intermediate pressure is provided by a port located part way down the compression process on the screw compressor.

As the screw compressor unloads, the economizer port will drop in pressure level, eventually being fully open to suction. Because of this, an output from the microprocessor is generally used to turn off the supply of flashing liquid on

a shell and coil or DX economizer when the capacity falls below approximately 45%-60% capacity (85%-90% slide valve position). This is done because the compressor will be more efficient operating at a higher slide valve position with the economizer turned off, than it will at a low slide valve position with the economizer turned on. Please note however that shell and coil and DX economizers can be used at low compressor capacities in cases where efficiency is not as important as assuring that the liquid supply is subcooled. In such cases, the economizer liquid solenoid can be left open whenever the compressor is running.

Due to the tendency of the port pressure to fall with decreasing compressor capacity, a back-pressure regulator valve (BPR) is generally required on a flash economizer system (Figure 6) in order to maintain some preset pressure difference between the subcooled liquid in the flash vessel and the evaporators. If the back-pressure regulator valve is not used on a flash economizer, it is possible that no pressure difference will exist to drive liquid from the flash vessel to the evaporators, since the flash vessel pressure will approach suction pressure at a decreased slide valve position. In cases where wide swings in pressure are anticipated in the flash economizer vessel, it may be necessary to add an outlet pressure regulator to the flash vessel outlet to avoid overpressurizing the economizer port, which could result in motor overload. Example: A system feeding liquid to the flash vessel in batches.

The recommended economizer systems are shown below. Notice that in all systems there should be a strainer (STR) and a check valve (VCK) between the economizer vessel and the economizer port on the compressor. The strainer prevents dirt from passing into the compressor and the check valve prevents oil from flowing from the compressor unit to the economizer vessel during shutdown.

CAUTION Other than the isolation valve needed for strainer cleaning, it is essential that the strainer be the last device in the economizer line before the compressor. Also, piston-type check valves are recommended

for installation in the economizer line, as opposed to disc-type check valves. The latter are more prone to gas-pulsation-induced failure. The isolation and check valves and strainer should be located as closely as possible to the compressor, preferably within three feet.

For refrigeration plants employing multiple compressors on a common economizing vessel, regardless of economizer type, each compressor must have a back-pressure regulating valve in order to balance the economizer load, or gas flow, between compressors. The problem of balancing load becomes most important when one or more compressors run at partial load, exposing the economizer port to suction pressure. In the case of a flash vessel, there is no need for the redundancy of a back-pressure regulating valve on the vessel and each of the multiple compressors. Omit the BPR valve on the flash economizer vessel and use one on each compressor, as shown in Figure 7. It is also recommended that the back-pressure regulating valves, used on economizer lines, should be specified with electric shutoff option. The electric shutoff feature is necessary to prevent flow from the common economizer vessel to the suction side of a stopped compressor, through the suction check valve bypass line, if the other compressors and the common economizer vessel are still operating and the HV2 valve on the suction bypass is open.

For refrigeration plants using a Packaged Refrigerant Recirculation (PRR) unit and a direct expansion (DX) economizer system it is necessary to operate the liquid feed solenoid on the PRR unit and the liquid feed solenoid on the DX vessel off of a common signal to avoid liquid overfeed on the DX economizer system.

If multiple compressors are operated with a common economizer vessel, it is necessary to install a back-pressure regulator valve with an electric shutoff option in the vapor line piped to the compressor's economizer port. If an electric shut-off is not installed in the economizer vapor line, valve HV-2 must remain closed to avoid a gas bypass from the economizer line through the suction check valve bypass, back to the suction line on a compressor that is shut down.

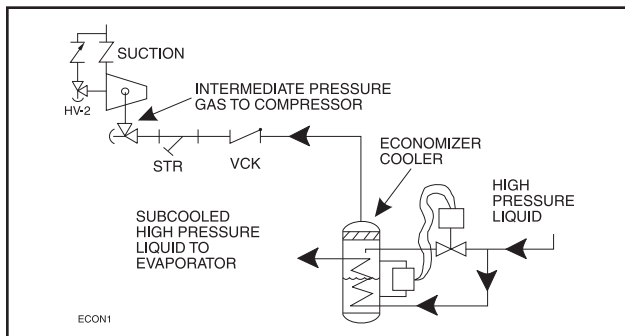


Figure 4 - Shell and Coil Economizer System

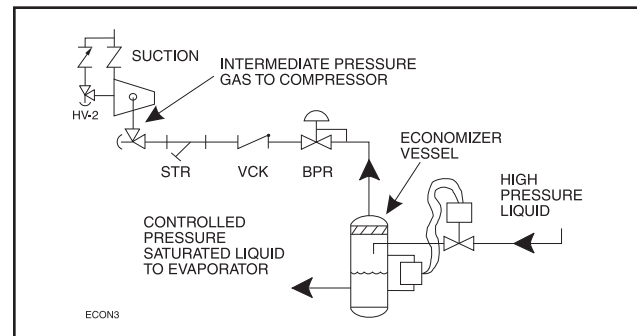


Figure 6 - Flash Economizer System

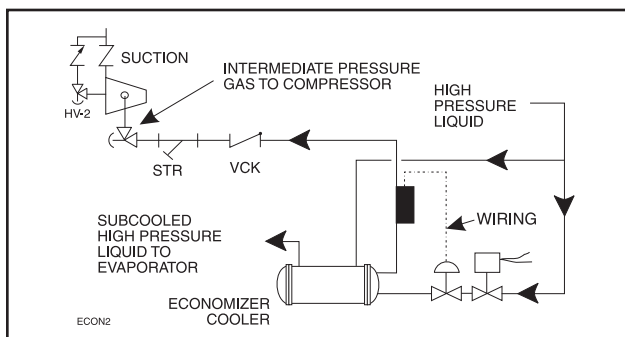


Figure 5 - Direct Expansion Economizer System

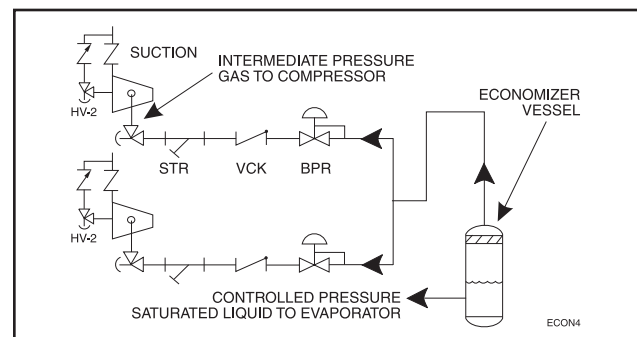


Figure 7 - Multiple Compressor Economizer System

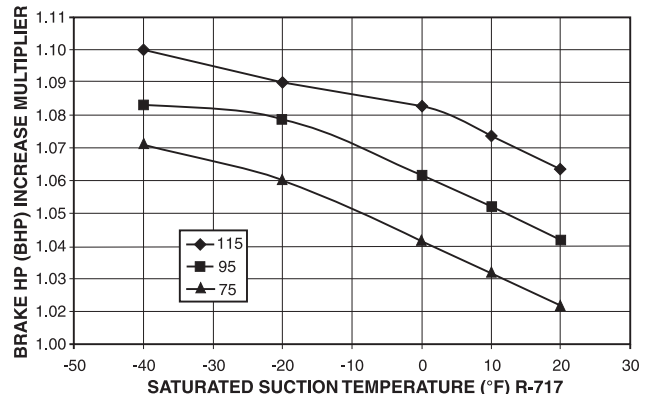
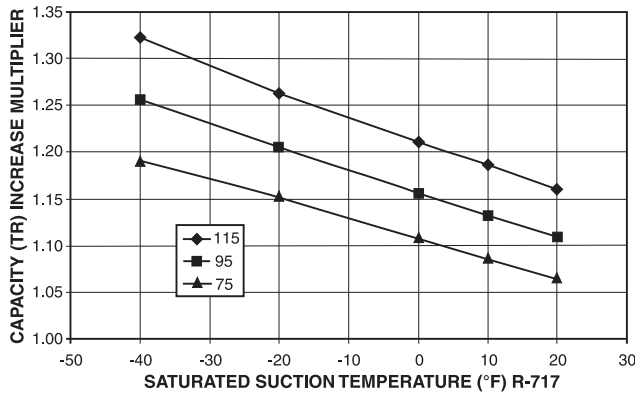
HIGH STAGE - CAPACITY and BRAKE HORSEPOWER RATINGS WITH DIRECT EXPANSION OR SHELL and COIL ECONOMIZERS

PROCEDURE - Determine capacity (TR) and brake horsepower (BHP) from the noneconomized, standard rating tables for the appropriate refrigerant (R-717 or R-507). Multiply these ratings by the capacity and shaft horsepower increase multipliers below for the appropriate refrigerant. Apply any other correction factors (subcooling, superheat, or liquid injection or 50 Hz) using instructions from Page 7.

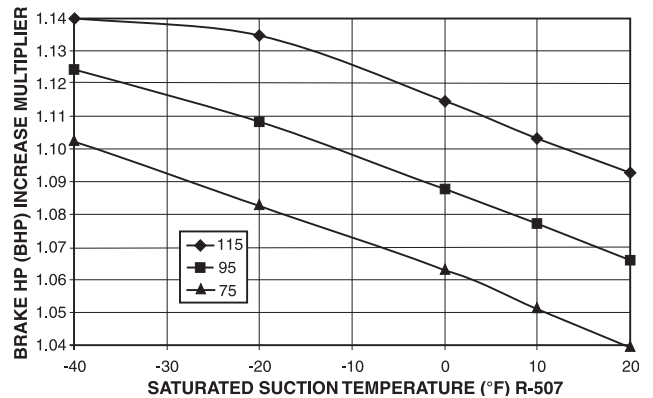
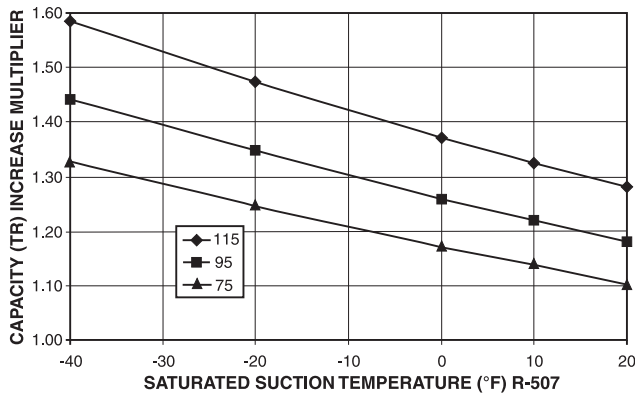
NOTE: Increase multipliers are based on liquid subcooling by either direct expansion or shell and coil economizer. Use of the increase multipliers results in ratings based on 10°F suction superheat with the superheat enthalpy not contributing to the refrigeration effect, no liquid subcooling from condenser or other external source, and 10°F small temperature difference in heat exchanger. No allowance for vapor line pressure drop is included in the resulting ratings.

DIRECT EXPANSION OR SHELL and COIL ECONOMIZER RATING INCREASE MULTIPLIERS

R-717

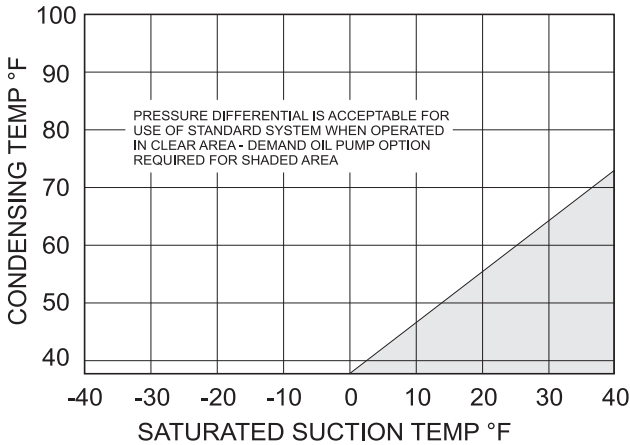


R-507



STANDARD LUBRICATION SYSTEM LIMITS - HIGH STAGE

The standard system for compressor operation without a lube oil pump may be used on high stage applications shown in the clear area of the graph. The optional **demand oil pump** is required only on low differential pressure applications shown in the shaded area of the graph. Where condensing temperatures fluctuate into the shaded area only on an occasional basis in the winter, the **demand pump** avoids unnecessary consumption of pump horsepower.



MINIMUM COMPRESSOR FLOW @ 3550 RPM

The minimum flow capacity for each compressor varies depending upon its geometry and its operating conditions. Typical minimum flow for each of our compressor models is listed below. This table represents minimum suction flow with the slide valve fully unloaded.

UNIT	MINIMUM FLOW*	
	CFM	m ³ /hr
100	71	121
134	95	161
177	125	212
222	157	267
270	365	621
316	224	380
399	282	479
480	650	1,104
546	478	812
496	351	596
676	477	810
856	912	1,550
1080	1,662	2,824

*@3550 rpm

FRICK STARTERS CIRCUIT BREAKER LUG CHART

TERMINAL DATA AND LINE CONNECTIONS - 75° COPPER ONLY

230V MAX HP	380V MAX HP	460V MAX HP	575V MAX HP	BREAKER FRAME SIZE	TRIP AMPS	STANDARD/ OPTIONAL	WIRE RANGE	RAM P/N	MFG P/N
30	50	60	75	S3	150/225	OPTIONAL	(1) #14 - 2 AWG	CB-0290	K3TA
						OPTIONAL	(1) #14 - 1/0 AWG	CB-0291	K4TB
						STANDARD	(1) #2 - 4/0 AWG	CB-0292	K4TC
						OPTIONAL	(1) #4 AWG - 300 KCMIL	CB-0293	K4TD
50	75	100	125	S3	150/225	OPTIONAL	(1) #14 - 2 AWG	CB-0290	K3TA
						OPTIONAL	(1) #14 - 1/0 AWG	CB-0291	K4TB
						OPTIONAL	(1) #2 - 4/0 AWG	CB-0292	K4TC
						STANDARD	(1) #4 AWG - 300 KCMIL	CB-0293	K4TD
75	129	154	175	S4	250	OPTIONAL	(1) #14 - 1/0 AWG	CB-0291	K4TB
						OPTIONAL	(1) #2 - 4/0 AWG	CB-0292	K4TC
						STANDARD	(1) #4 AWG - 300 KCMIL	CB-0293	K4TD
						OPTIONAL	(1) #6 AWG - 350 KCMIL	CB-0294	K4TE
100	172	235	250	S5	400	OPTIONAL	(1) 250 - 500 KCMIL	CB-0295	K5TF
						STANDARD	(2) 3/0 AWG - 250 KCMIL	CB-0296	K5TG
154	250	305	350	S6	600	STANDARD	(2) 250 - 500 KCMIL	CB-0297	K6TH
						OPTIONAL	(3) 2/0 AWG - 400 KCMIL	CB-0298	K6TJ
206	365	437	529	S6	600	OPTIONAL	(2) 250 - 500 KCMIL	CB-0297	K6TH
						STANDARD	(3) 2/0 AWG - 400 KCMIL	CB-0298	K6TJ
300	500	600	700	S6	800	OPTIONAL	(2) 250 - 500 KCMIL	CB-0297	K6TH
						STANDARD	(3) 2/0 AWG - 400 KCMIL	CB-0298	K6TJ
335	572	687	800	S7	1200	STANDARD	(4) 4/0 AWG - 500 KCMIL	CB-0299	K7TK

Lug size has been standardized for each circuit breaker. Above is a Circuit Breaker Lug Chart summarizing the standard and optional lugs.

The Starter Operation Manuals will have this information and it will be added to our submittal data so the electrician is informed. If you know at the time of order entry that an optional set of lugs is needed, add it to your equipment order. The starter will be shipped with the standard lugs installed and the required optional lugs will be shipped loose inside the starter cabinet for installation in the field.

In the event that the electrician realizes his wire and lugs are incompatible after the equipment has arrived at the job site, he should order the needed lugs from Irv Henry at RAM at (800) 999-8183 ext. 156. Freight is not included.

**MOTOR SELECTION
and
STARTING TORQUE**

Motors must be sized adequately for all expected operating conditions since start-up, pull down, and load variations quite often require significantly more horsepower than nominal design.

Motor starting torque capacity must also be considered, especially when other than across-the-line start is employed. Motor starting and pull-up torque must be at least 20% greater than compressor requirements at maximum expected start-up conditions. Refer to the torque data.

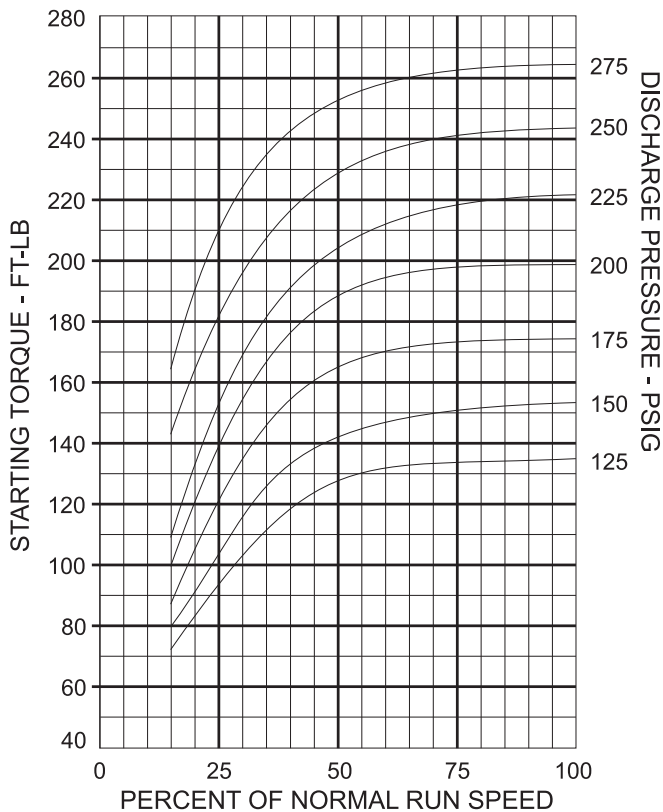
NOTE: Motor starting torque varies considerably with various manufacturers - obtain specific torque data for the motor being used.

RWF II MODEL	STARTING TORQUE ⁽¹⁾ MULTIPLIER	BREAKAWAY TORQUE (ft-lb)	⁽²⁾⁽³⁾ MASS MOMENT OF INERTIA (lb-ft ²)
100	0.75	10	7
134	1.00	10	8
177	1.32	14	14
222	1.66	14	17
270	2.24	14	20
316	2.36	20	35
399	2.98	20	43
480	3.58	20	50
546	4.48	20	58
496	3.71	25	102.7
676	5.08	25	116.5
856	6.45	25	135.1
1080	8.99	25	145.0

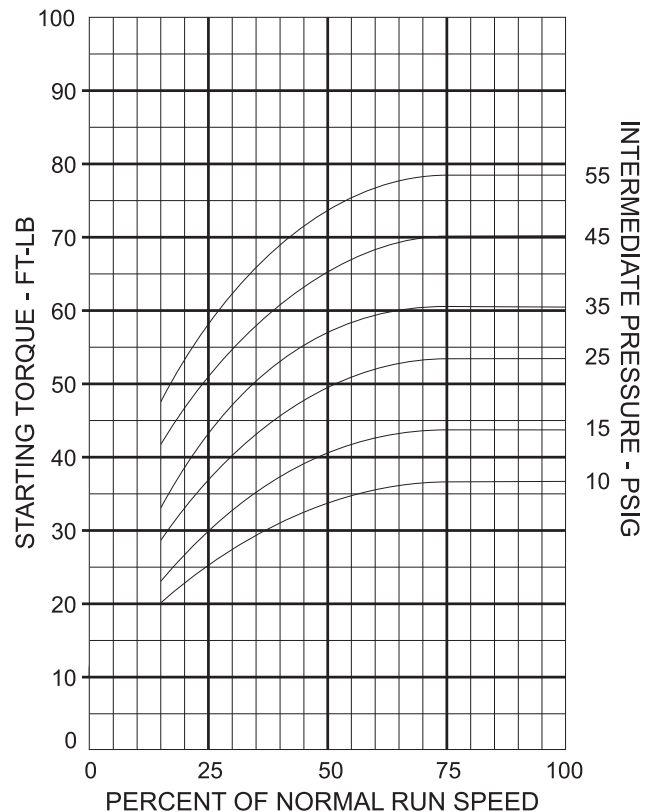
1. High Stage or Booster Application.
2. Including standard compressor coupling half.
3. Inertia resolved to drive shaft.

**RWF II SCREW COMPRESSOR
SPEED vs STARTING TORQUE CURVE
- FULLY UNLOADED -
HIGH STAGE and BOOSTER**

HIGH STAGE



BOOSTER



STARTING TORQUE FOR SPECIFIC COMPRESSOR

Multiply the starting torque value from high stage or booster curves at 100% of normal run speed by starting torque multiplier for appropriate compressor size.

MOTOR/COMPRESSOR TORQUE

Ensure that the motor STARTING and MINIMUM PULL-UP TORQUE capabilities will exceed the compressor requirements at the anticipated condition that will be experienced during normal starting.

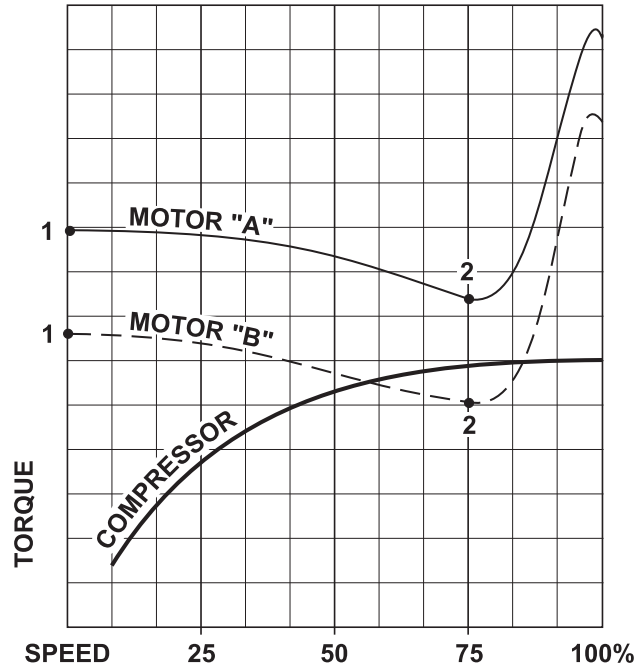
NOTE: Solid-State, Wye-delta and auto transformer (reduced voltage) motor starting methods drastically effect the starting torque available from motors as indicated:

Solid-State	
Across-the-Line	100% Torque
Auto Transformer	25 - 64% Torque
Wye-delta	33% Torque

SUCTION CHECK VALVE BYPASS

Check valve CK-1 is installed on all RWF II packages with suction pressure below atmospheric or when installed with economizer option utilized on multiple compressor plants. Bleeding compressor oil separators slowly to low pressure during shutdown:

- Eliminates liquid refrigerant dilution of the oil from condensing in the discharge line.
- Puts more differential across the discharge check valve.
- Drops compressor starting torque to extremely low levels.
- Motor starts with excess torque so gets up to speed faster, less stress, longer life.



Motor "A": Adequate to start the compressor.

Motor "B": Will not start the compressor

NOTE: Starting torque of both motors (1) is above compressor torque. However, the pull-up torque (2) of motor "B" is below the compressor torque curve and motor "B" will not accelerate the compressor to 100% speed.

STANDARD MOTOR and FRAME SIZES 230, 460, and 575 Volts - 3-Phase - 60 Hertz, 3600 RPM

50 Hz motors or a special drive may require modified package design. When a modified package design is required there may be cost and delivery considerations.

RWF II MODEL NO.	NOM. MOTOR RPM	MOTOR MOUNTING	SMART SERIES™ LOW NOISE (5)		
			HP RANGE (4)		FRAME
			60 HZ	50 HZ	
100-134	3600	C-FACE	75-125	60-100	LN364TSC-LN404TSC
		D-FLANGE	134-529	112-440	LN405TDZ-LN449TDZ
134-1217			112-1014	LN405TDZ-LN5810TDZ	
177-1080					

Compressor Ratings begin on the following page.

NOTE: These tables are only intended to be used as a selection guideline. CoolWare™ should be used to actually configure a unit for your application.

For Temperature/Pressure conversions, see the chart on the inside back cover.

R-717		NONECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz. NOTE: Capacities based on 10°F Liquid Subcooling, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect. * Chiller Ports required, contact the factory.								
Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		100			134			177		
-40	75	48.6	122.8	215	64.8	163.7	277	86.1	212.6	354
	85	47.0	139.1	259	62.7	185.5	335	82.6	238.6	426
	95	45.4	158.1	311	60.6	210.8	403	79.0	267.7	507
	105	43.9	182.5	375	58.6	243.3	488	75.2	301.3	600
	115	42.4	213.0	456	56.6	284.0	600	71.4	342.2	716
-35	75	56.5	128.2	216	75.3	171.0	277	100.5	222.9	354
	85	54.6	144.3	260	72.8	192.4	335	96.7	249.6	428
	95	52.8	162.9	311	70.4	217.1	401	92.7	279.0	510
	105	51.0	184.3	369	68.0	245.7	478	88.6	311.7	602
	115	49.3	211.9	443	65.7	282.5	581	84.4	349.5	712
-30	75	65.2	133.9	216	87.0	178.5	276	116.6	233.5	353
	85	63.2	150.5	261	84.2	200.6	335	112.4	261.4	429
	95	61.1	168.6	312	81.4	224.8	401	108.0	291.5	513
	105	59.1	189.6	370	78.7	252.8	477	103.6	324.5	607
	115	57.0	213.8	437	76.0	285.0	570	98.9	361.2	717
-25	75	75.0	139.8	216	99.9	186.4	274	134.4	244.3	350
	85	72.8	156.9	263	97.0	209.3	335	129.9	273.5	429
	95	70.4	175.6	315	93.9	234.1	403	125.2	304.8	516
	105	68.1	196.0	372	90.8	261.4	479	120.3	338.5	614
	115	65.8	219.5	438	87.7	292.7	571	115.3	375.5	727
-20	75	85.8	145.7	214	114.4	194.2	271	154.3	254.9	345
	85	83.3	163.6	263	111.1	218.2	334	149.3	285.9	428
	95	80.8	182.9	317	107.8	243.9	404	144.2	318.5	518
	105	78.2	203.8	376	104.3	271.7	483	138.9	353.5	622
	115	75.5	226.7	442	100.7	302.3	575	133.4	391.1	738
-15	75	98.0	151.5	211	130.6	202.0	266	176.3	265.0	336
	85	95.1	170.3	263	126.8	227.1	332	170.9	298.1	424
	95	92.3	190.5	319	123.1	254.0	404	165.3	332.6	518
	105	89.5	212.0	380	119.3	282.7	488	159.5	369.0	629
	115	86.5	235.3	447	115.3	313.7	582	153.5	407.9	751
-10	75	111.4	156.9	207	148.6	209.2	258	200.5	274.2	325
	85	108.2	177.1	261	144.3	236.2	328	194.7	309.9	417
	95	105.0	198.1	320	140.0	264.1	403	188.5	346.6	515
	105	101.9	220.5	383	135.8	294.0	491	182.3	384.8	635
	115	98.6	244.5	453	131.5	326.0	591	175.7	425.4	763
-5	75	126.3	161.9	200	168.4	215.8	248	227.2	282.4	311
	85	122.7	183.5	258	163.6	244.7	321	220.8	320.7	406
	95	119.1	205.9	319	158.8	274.5	400	214.2	360.2	510
	105	115.5	229.2	385	154.0	305.6	494	207.3	400.8	639
	115	112.0	254.0	457	149.3	338.7	598	200.3	443.1	774
0	75	142.6	166.1	192	190.2	221.4	235	256.8	289.5	293
	85	138.7	189.4	252	184.9	252.5	312	249.5	330.6	392
	95	134.7	213.3	317	179.6	284.4	394	242.3	372.9	501
	105	130.6	237.9	386	174.2	317.2	496	234.9	416.3	639
	115	126.7	263.8	461	168.9	351.8	606	227.2	461.2	784
5	75	160.5	169.3	180	214.1	225.7	220	289.3	295.0	272
	85	156.2	194.5	244	208.3	259.4	299	281.1	339.2	375
	95	151.8	220.2	312	202.4	293.6	385	273.1	384.5	488
	105	147.3	246.5	385	196.4	328.7	494	265.0	431.1	635
	115	142.8	273.6	464	190.4	364.8	611	256.6	478.8	791
10	75	180.2	171.5	167	240.2	228.7	201	324.6	298.3	247
	85	175.4	198.7	233	233.9	265.0	284	315.9	346.4	354
	95	170.5	226.4	305	227.4	301.9	374	306.9	394.8	471
	105	165.6	254.5	382	220.8	339.3	489	298.0	444.6	626
	115	160.6	283.4	464	214.1	377.9	615	288.9	495.7	794
15	75	201.6	172.5	151	268.8	230.0	181	363.1	299.4	220
	85	196.4	201.8	220	261.8	269.1	266	353.8	351.5	329

R-717

NONECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.
NOTE: Capacities based on 10°F Liquid Subcooling, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect.
*** Chiller Ports required, contact the factory.**

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	
		100			134			177			
15	95	191.0	231.6	295	254.7	308.9	359	344.0	403.8	450	
	105	185.6	261.9	376	247.5	349.1	480	334.0	456.9	611	
	115	180.1	292.6	462	240.1	390.1	615	324.0	511.4	792	
20	75	225.1	173.0	135	300.2	230.7	159	405.2	298.1	190	
	85	219.2	203.7	205	292.3	271.6	244	394.8	353.9	301	
	95	213.4	235.7	282	284.5	314.3	341	384.4	410.8	425	
	105	207.4	268.2	367	276.5	357.7	465	373.3	467.6	590	
25	115	201.3	301.2	459	268.5	401.6	608	362.3	525.7	784	
	75	251.2	173.1	118	335.0	230.8	137	451.6	295.9	160	
	85	244.1	204.4	187	325.5	272.5	221	439.5	353.8	269	
	95	237.7	238.6	267	316.9	318.1	319	428.1	414.9	396	
	105	231.1	273.4	355	308.2	364.6	445	416.3	476.6	560	
30	115	224.5	308.8	452	299.3	411.7	598	404.0	538.4	770	
	75	279.5	171.7	99	372.6	228.9	114	502.0	292.6	131	
	85	271.4	205.0	169	361.9	273.3	198	488.4	351.6	236	
	95	264.0	239.9	249	352.0	319.8	295	475.5	416.4	364	
	105	256.9	277.3	340	342.5	369.7	418	462.8	482.8	522	
35	115	249.6	315.2	441	332.8	420.3	583	449.5	549.4	748	
	75	310.1	168.5	79	413.5	224.7	90	556.9	288.1	103	
	85	301.7	204.3	149	402.2	272.4	172	541.8	349.0	204	
	95	292.7	240.4	229	390.3	320.6	269	526.9	414.9	328	
	105	284.8	279.7	322	379.7	372.9	383	512.9	485.9	474	
40	115	276.9	320.2	425	—	—	—	498.9	558.0	718	
	75	344.0	164.2	58	458.7	219.0	65	615.9	281.7	75	
	85	333.9	202.2	127	445.1	269.5	146	599.8	344.6	170	
	95	324.4	241.0	209	432.5	321.3	242	583.2	412.4	292	
	105	315.0	280.6	301	420.0	374.2	353	567.1	485.9	437	
-40	115	306.3	323.7	407	—	—	—	551.8	563.0	676	
			222			270			316		
	-40	75	108.4	267.7	431	134.0	330.7	529	154.3	380.9	609
		85	104.0	300.4	524	128.5	371.1	647	148.0	427.5	745
		95	99.4	337.1	631	122.8	416.4	779	141.5	479.6	898
105		94.7	379.4	754	117.0	468.7	931	134.8	539.9	1073	
-35	115	89.9	430.9	901	111.1	532.3	1114	128.0	613.1	1283	
	75	126.5	280.7	429	156.3	346.7	526	180.0	399.4	606	
	85	121.7	314.3	525	150.4	388.3	649	173.2	447.3	748	
	95	116.7	351.3	635	144.2	434.0	784	166.1	499.9	903	
	105	111.5	392.6	757	137.8	484.9	935	158.7	558.6	1077	
-30	115	106.2	440.1	896	131.2	543.7	1107	151.2	626.3	1276	
	75	146.8	294.0	426	181.3	363.2	522	208.8	418.3	601	
	85	141.5	329.1	526	174.8	406.6	650	201.3	468.3	749	
	95	136.1	367.1	640	168.1	453.4	790	193.6	522.3	910	
	105	130.4	408.6	764	161.1	504.8	944	185.6	581.4	1087	
-25	115	124.6	454.8	903	153.9	561.8	1115	177.3	647.1	1285	
	75	169.3	307.6	420	209.1	380.0	514	240.9	437.7	592	
	85	163.6	344.4	526	202.1	425.4	650	232.7	490.0	748	
	95	157.6	383.8	645	194.7	474.1	796	224.3	546.1	917	
	105	151.5	426.3	774	187.1	526.6	956	215.5	606.6	1101	
-20	115	145.1	472.8	915	179.3	584.1	1130	206.5	672.7	1300	
	75	194.3	321.0	411	240.0	396.5	502	276.4	456.7	578	
	85	188.1	360.0	523	232.3	444.7	646	267.6	512.2	744	
	95	181.6	401.1	648	224.3	495.5	801	258.4	570.7	922	
	105	174.9	445.1	783	216.0	549.9	968	248.8	633.4	1115	
-15	115	168.0	492.5	930	207.5	608.5	1149	239.0	700.8	1315	
	75	222.0	333.6	399	274.2	412.2	483	315.8	474.7	557	
	85	215.2	375.4	517	265.8	463.7	639	306.1	534.1	736	
	95	208.1	418.8	650	257.1	517.3	803	296.2	595.9	925	

R-717		NONECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.								
		NOTE: Capacities based on 10°F Liquid Subcooling, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect.								
		* Chiller Ports required, contact the factory.								
Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		222			270			316		
-15	105	200.8	464.7	792	248.1	574.0	978	285.8	661.2	1127
	115	193.3	513.7	946	238.8	634.6	1168	275.0	730.9	1330
-10	75	252.5	345.2	383	311.9	426.5	458	359.2	491.3	527
	85	245.1	390.2	506	302.8	482.0	625	348.8	555.2	720
	95	237.4	436.4	649	293.3	539.2	801	337.8	621.0	923
	105	229.5	484.6	799	283.5	598.7	987	326.6	689.6	1135
	115	221.3	535.6	961	273.4	661.7	1187	314.9	762.1	1343
-5	75	286.1	355.6	364	353.5	439.3	424	407.1	506.0	488
	85	278.0	403.9	489	343.5	498.9	605	395.6	574.7	696
	95	269.7	453.5	643	333.2	560.3	794	383.8	645.3	915
	105	261.1	504.7	804	322.5	623.5	993	371.5	718.2	1136
	115	252.2	558.0	975	311.5	689.3	1204	358.8	794.0	1352
0	75	323.3	364.5	341	399.4	450.3	386	460.1	518.7	438
	85	314.2	416.3	466	388.2	514.2	575	447.1	592.3	663
	95	305.1	469.5	631	376.9	580.0	780	434.2	668.1	898
	105	295.7	524.3	805	365.3	647.7	994	420.8	746.0	1131
	115	286.0	580.7	988	353.4	717.4	1220	407.0	826.3	1358
5	75	364.2	371.5	314	450.0	459.0	353	518.3	528.7	375
	85	354.0	427.1	436	437.3	527.6	537	503.7	607.7	618
	95	343.9	484.2	613	424.9	598.1	757	489.4	689.0	872
	105	333.7	542.8	800	412.3	670.6	988	474.9	772.4	1119
	115	323.2	602.9	996	399.2	744.8	1231	459.9	857.9	1357
10	75	408.7	375.7	283	504.9	464.1	316	581.6	534.6	314
	85	397.8	436.2	408	491.4	538.8	488	566.1	620.7	562
	95	386.4	497.2	587	477.4	614.2	725	549.8	707.4	835
	105	375.2	559.9	789	463.5	691.7	974	533.9	796.7	1099
	115	363.8	624.2	1000	449.4	771.1	1235	517.7	888.2	1348
15	75	457.2	377.0	250	564.8	465.7	277	650.5	536.4	271
	85	445.5	442.6	377	550.4	546.7	425	633.9	629.8	490
	95	433.1	508.5	553	535.1	628.1	683	616.3	723.5	787
	105	420.6	575.3	770	519.5	710.7	951	598.4	818.6	1071
	115	408.0	644.0	997	—	—	—	580.6	916.3	1332
20	75	510.2	375.4	214	630.3	463.7	235	726.0	534.1	228
	85	497.2	445.7	342	614.2	550.6	379	707.5	634.2	401
	95	484.1	517.3	508	598.0	639.0	628	688.8	736.0	723
	105	470.1	588.9	743	580.8	727.5	917	668.9	837.9	1035
	115	456.2	662.0	987	—	—	—	649.2	942.0	1306
25	75	568.6	372.7	179	702.4	460.3	195	809.1	530.2	186
	85	553.4	445.5	303	683.6	550.4	334	787.4	633.9	326
	95	539.1	522.5	452	666.0	645.5	558	767.1	743.5	643
	105	524.3	600.1	706	647.6	741.3	872	746.0	853.9	991
	115	508.7	678.0	969	—	—	—	723.8	964.7	1272
30	75	632.1	368.5	145	780.9*	455.2*	156*	899.4	524.3	147
	85	615.1	442.8	264	759.8	547.0	288	875.2	630.0	277
	95	598.7	524.3	410	739.6	647.7	472	851.9	746.0	544
	105	582.8	608.0	657	—	—	—	829.3	865.1	935
	115	566.1	691.8	942	—	—	—	805.5	984.4	1229
35	75	701.3	362.7	112	866.3*	448.1*	120*	997.9	516.2	110
	85	682.2	439.5	225	842.7	542.9	244	970.7	625.3	232
	95	663.5	522.5	367	819.6	645.5	401	944.0	743.5	426
	105	645.9	611.9	595	—	—	—	919.1	870.7	847
	115	628.2	702.6	904	—	—	—	893.9	999.7	1176
40	75	780.2*	330.8*	65*	963.8*	408.6*	69*	1103.5	504.8	76
	85	755.3	433.9	187	933.0*	536.0*	201*	1074.7	617.4	188
	95	734.4	519.3	323	907.3	641.5	351	1045.0	738.9	337
	105	714.2	611.9	519	—	—	—	1016.2	870.7	739
	115	694.8	708.9	852	—	—	—	988.7	1008.7	1113

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NONECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.
NOTE: Capacities based on 10°F Liquid Subcooling, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect.
*** Chiller Ports required, contact the factory.**

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		399			480			546		
-40	75	194.3	479.6	767	233.8	577.1	923	265.7	655.9	1049
	85	186.4	538.3	938	224.3	647.7	1129	254.9	736.1	1283
	95	178.2	603.9	1130	214.4	726.7	1360	243.6	825.8	1541
	105	169.7	679.9	1351	204.2	818.0	1625	232.1	929.6	1825
	115	161.2	772.0	1615	193.9	928.9	1932	220.4	1055.7	2166
-35	75	226.7	502.9	764	272.8	605.1	919	310.0	687.6	1044
	85	218.1	563.3	941	262.4	677.7	1133	298.2	770.2	1287
	95	209.2	629.5	1137	251.6	757.5	1368	286.0	860.8	1547
	105	199.9	703.4	1356	240.5	846.3	1631	273.3	961.8	1826
	115	190.4	788.6	1606	229.0	948.9	1920	260.3	1078.4	2147
-30	75	263.0	526.8	757	316.4	633.8	910	359.6	720.3	1035
	85	253.5	589.7	943	305.1	709.6	1135	346.7	806.4	1290
	95	243.8	657.7	1146	293.3	791.3	1379	333.3	899.3	1554
	105	233.7	732.2	1369	281.2	881.0	1647	319.6	1001.2	1836
	115	223.2	814.9	1617	268.6	980.5	1928	305.2	1114.3	2151
-25	75	303.3	551.2	746	364.9	663.2	897	414.7	753.7	1020
	85	293.1	617.1	942	352.6	742.4	1134	400.8	843.7	1288
	95	282.4	687.7	1155	339.8	827.4	1390	386.2	940.3	1558
	105	271.4	763.8	1386	326.6	919.0	1662	371.1	1044.4	1847
	115	260.1	847.2	1635	312.9	1019.3	1946	355.6	1158.4	2165
-20	75	348.1	575.1	728	418.8	692.0	876	476.0	786.4	995
	85	337.0	645.0	937	405.4	776.0	1128	460.7	881.9	1282
	95	325.4	718.7	1161	391.5	864.7	1397	444.9	982.7	1559
	105	313.3	797.6	1403	377.0	959.7	1675	428.5	1090.7	1856
	115	301.0	882.5	1653	362.1	1061.9	1965	411.6	1206.8	2181
-15	75	397.7	597.8	701	478.5	719.3	844	543.8	817.5	959
	85	385.5	672.6	926	463.9	809.3	1115	527.2	919.7	1267
	95	372.9	750.4	1164	448.7	902.8	1401	510.0	1026.1	1554
	105	359.9	832.6	1419	433.0	1001.8	1685	492.1	1138.5	1861
	115	346.3	920.5	1672	416.7	1107.5	1985	473.6	1258.6	2196
-10	75	452.4	618.6	664	544.3	744.3	799	618.6	845.9	908
	85	439.2	699.1	907	528.5	841.2	1091	600.6	956.0	1240
	95	425.4	782.0	1162	511.9	940.9	1398	581.7	1069.3	1541
	105	411.3	868.3	1427	494.8	1044.8	1689	562.4	1187.4	1860
	115	396.5	959.7	1688	477.1	1154.7	2000	542.2	1312.3	2207
-5	75	512.7	637.1	614	616.9	766.6	739	701.0	871.2	840
	85	498.2	723.6	877	599.4	870.7	1055	681.2	989.5	1199
	95	483.3	812.7	1152	581.5	977.8	1386	660.8	1111.2	1519
	105	467.8	904.4	1428	562.8	1088.1	1688	639.6	1236.6	1852
	115	451.9	999.8	1699	543.7	1202.9	2010	—	—	—
0	75	579.3	653.1	551	697.1	785.8	663	792.2	893.1	754
	85	563.0	745.9	835	677.4	897.4	1004	769.9	1019.9	1141
	95	546.7	841.3	1131	657.8	1012.3	1361	747.6	1150.4	1486
	105	529.9	939.4	1421	637.6	1130.3	1677	724.6	1284.5	1834
	115	512.5	1040.5	1705	616.7	1251.9	2014	—	—	—
5	75	652.7	665.7	472	785.3	801.0	568	892.4	910.3	645
	85	634.3	765.3	779	763.2	920.8	937	867.4	1046.5	1065
	95	616.3	867.6	1098	741.5	1043.9	1322	842.7	1186.3	1441
	105	598.0	972.6	1406	719.5	1170.3	1655	—	—	—
	115	579.1	1080.3	1704	696.7	1299.9	2008	—	—	—
10	75	732.3	673.2	374	881.2	809.9	450	1001.4	920.5	511
	85	712.8	781.6	707	857.7	940.4	851	974.7	1068.7	967
	95	692.4	890.9	1052	833.1	1071.9	1266	946.8	1218.2	1384
	105	672.4	1003.3	1381	809.0	1207.1	1623	—	—	—
	115	651.9	1118.5	1693	—	—	—	—	—	—
15	75	819.2	675.4	295	985.7	812.7	312	1120.2	923.6	349
	85	798.3	793.0	617	960.5	954.2	742	1091.6	1084.4	843

R-717		NONECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.								
		NOTE: Capacities based on 10°F Liquid Subcooling, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect.								
		* Chiller Ports required, contact the factory.								
Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		399			480			546		
15	95	776.1	911.1	991	933.8	1096.2	1192	1061.2	1245.8	1316
	105	753.6	1030.9	1346	906.7	1240.4	1578	—	—	—
	115	731.1	1153.9	1671	—	—	—	—	—	—
20	75	914.3	672.6	245	1100.0	809.3	258	1250.2	919.7	266
	85	890.9	798.6	505	1071.9	960.9	608	1218.2	1092.0	691
	95	867.4	926.9	911	1043.7	1115.2	1096	—	—	—
	105	842.4	1055.2	1300	1013.5	1269.6	1521	—	—	—
	115	817.5	1186.2	1639	—	—	—	—	—	—
25	75	1018.8	667.7	199	1225.9	803.4	208	1393.2	913.0	213
	85	991.6	798.3	371	1193.0	960.5	446	1355.9	1091.6	507
	95	966.0	936.2	810	1162.2	1126.5	974	—	—	—
	105	939.4	1075.3	1244	1130.3	1293.8	1452	—	—	—
	115	911.5	1214.8	1595	—	—	—	—	—	—
30	75	1132.6	660.2	156	1362.8	794.3	162	1548.7	902.7	165
	85	1102.1	793.4	297	1326.0	954.6	311	1507.0	1084.8	320
	95	1072.8	939.4	685	1290.8	1130.3	824	—	—	—
	105	1044.3	1089.4	1176	—	—	—	—	—	—
	115	1014.3	1239.6	1540	—	—	—	—	—	—
35	75	1256.6	650.0	116	1511.9	782.0	120	1718.2*	888.8*	122*
	85	1222.4	787.5	247	1470.7	947.5	257	1671.5	1076.8	263
	95	1188.8	936.2	537	1430.4	1126.4	646	—	—	—
	105	1157.4	1096.4	1066	—	—	—	—	—	—
	115	1125.6	1259.0	1474	—	—	—	—	—	—
40	75	1389.6	635.7	79	1682.0*	713.1*	66*	1907.0*	838.0*	74*
	85	1353.3	777.5	198	1628.3	935.5	205	1850.5*	1063.2*	209*
	95	1316.0	930.5	371	1583.4	1119.6	447	—	—	—
	105	1279.6	1096.5	930	—	—	—	—	—	—
	115	1245.0	1270.3	1394	—	—	—	—	—	—
		496			676			856		
-40	75	237.4	612.0	1003	323.7	834.6	1368	412.0	1062.3	1742
	85	228.0	692.7	1235	310.9	944.6	1684	395.7	1202.2	2143
	95	218.0	785.5	1501	297.2	1071.1	2047	378.3	1363.2	2606
	105	207.9	897.1	1801	283.5	1223.3	2467	360.8	1556.9	3142
	115	197.5	1037.3	2172	269.3	1414.5	2974	342.8	1800.3	3786
-35	75	277.0	640.5	999	377.7	873.4	1363	480.7	1111.7	1735
	85	266.5	719.4	1230	363.4	981.1	1677	462.5	1248.7	2134
	95	255.8	810.8	1493	348.9	1105.6	2038	444.0	1407.2	2594
	105	244.5	915.5	1779	333.4	1248.5	2440	424.3	1589.0	3107
	115	233.2	1041.1	2118	318.0	1419.7	2901	404.7	1806.9	3694
-30	75	321.3	670.8	993	438.2	914.7	1355	557.7	1164.2	1724
	85	309.7	751.2	1231	422.4	1024.4	1678	537.5	1303.7	2136
	95	297.9	840.8	1491	406.2	1146.6	2039	517.0	1459.3	2595
	105	285.9	943.7	1773	389.9	1286.9	2434	496.2	1637.9	3100
	115	273.1	1061.3	2096	372.4	1447.3	2874	474.0	1842.0	3660
-25	75	371.0	701.2	981	505.9	956.2	1337	643.9	1217.0	1702
	85	358.1	785.7	1232	488.3	1071.5	1680	621.5	1363.7	2138
	95	345.0	876.0	1494	470.4	1194.6	2049	598.7	1520.4	2608
	105	331.7	977.3	1774	452.3	1332.7	2437	575.7	1696.2	3105
	115	318.2	1092.7	2093	433.9	1490.1	2872	552.3	1896.5	3657
-20	75	426.2	731.0	960	581.2	996.9	1308	739.7	1268.8	1665
	85	412.0	820.6	1228	561.9	1119.1	1674	715.1	1424.3	2131
	95	397.6	915.2	1498	542.1	1248.0	2063	690.0	1588.4	2626
	105	382.8	1016.1	1779	522.0	1385.6	2447	664.3	1763.5	3117
	115	367.9	1130.0	2098	501.7	1541.0	2880	638.5	1961.3	3668
-15	75	487.4	759.1	927	664.7	1035.2	1263	846.0	1317.5	1608
	85	471.9	855.1	1215	643.5	1166.1	1657	819.0	1484.1	2109
	95	455.9	955.0	1496	621.8	1302.3	2063	791.3	1657.5	2630

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NONECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.
NOTE: Capacities based on 10°F Liquid Subcooling, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect.
*** Chiller Ports required, contact the factory.**

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		496			676			856		
-15	105	439.7	1060.3	1789	599.6	1445.9	2462	763.1	1840.3	3137
	115	423.1	1172.6	2106	576.9	1599.1	2895	734.3	2035.2	3687
-10	75	555.2	784.2	878	757.2	1069.3	1197	963.7	1361.0	1524
	85	538.1	888.3	1192	733.7	1211.3	1625	933.9	1541.7	2069
	95	520.6	994.4	1486	710.0	1356.1	2052	903.6	1725.9	2617
	105	502.7	1105.3	1792	685.5	1507.3	2469	872.5	1918.4	3146
	115	484.5	1222.3	2121	660.7	1666.8	2918	840.8	2121.4	3717
-5	75	630.0	806.5	815	859.1	1099.8	1111	1093.4	1399.8	1414
	85	611.2	917.8	1152	833.5	1251.6	1571	1060.8	1592.9	2000
	95	591.9	1032.7	1468	807.2	1408.2	2029	1027.3	1792.3	2588
	105	572.3	1150.2	1787	780.5	1568.5	2465	993.3	1996.3	3142
	115	552.2	1272.9	2130	753.0	1735.9	2933	958.4	2209.3	3737
0	75	712.2	825.5	735	971.2	1125.7	1002	1236.1	1432.7	1276
	85	691.6	944.6	1098	943.1	1288.2	1497	1200.3	1639.5	1905
	95	670.5	1067.7	1437	914.3	1455.9	1989	1163.6	1853.0	2538
	105	648.9	1194.0	1772	884.9	1628.2	2448	1126.2	2072.2	3121
	115	627.0	1323.6	2130	855.0	1805.0	2937	1088.1	2297.3	3742
5	75	802.4	840.1	636	1094.2	1145.7	867	1392.6	1458.2	1103
	85	779.8	967.9	1026	1063.4	1319.9	1399	1353.4	1679.9	1781
	95	756.7	1099.3	1394	1031.9	1499.1	1933	1313.3	1908.0	2467
	105	733.0	1234.9	1745	999.6	1684.0	2414	1272.2	2143.3	3078
	115	709.0	1373.3	2121	966.8	1872.8	2927	1230.5	2383.5	3729
10	75	901.1	851.3	518	1228.8	1160.9	707	1563.9	1477.5	900
	85	876.3	987.0	936	1195.0	1346.0	1276	1521.0	1713.0	1624
	95	851.1	1127.4	1340	1160.6	1537.4	1861	1477.1	1956.7	2376
	105	825.2	1271.9	1705	1125.3	1734.4	2361	1432.2	2207.4	3011
	115	798.7	1420.8	2099	1089.2	1937.5	2900	—	—	—
15	75	1008.8	856.4	377	1375.7	1167.9	514	1750.9	1486.4	654
	85	981.7	1001.5	825	1338.8	1365.7	1125	1703.9	1738.2	1432
	95	954.1	1151.3	1275	1301.1	1569.9	1769	1656.0	1998.1	2251
	105	925.9	1305.2	1652	1262.6	1779.9	2291	1607.0	2265.3	2923
	115	897.0	1463.4	2062	1223.2	1995.7	2852	—	—	—
20	75	1126.5	854.7	255	1536.2	1165.6	283	1955.2	1483.5	360
	85	1096.6	1011.3	694	1495.4	1379.0	946	1903.3	1755.2	1204
	95	1066.4	1169.6	1197	1454.2	1595.0	1632	1850.9	2030.0	2077
	105	1035.6	1334.1	1588	1412.2	1819.3	2205	—	—	—
	115	1004.1	1502.5	2011	1369.3	2048.9	2786	—	—	—
25	75	1255.4	850.1	205	1712.0	1159.3	217	2178.9	1475.5	224
	85	1221.5	1013.3	533	1665.7	1381.8	727	2120.0	1758.7	925
	95	1188.5	1184.1	1078	1620.8	1614.7	1470	2062.8	2055.0	1870
	105	1154.9	1357.7	1511	1574.9	1851.4	2101	—	—	—
	115	1120.6	1536.9	1947	1528.1	2095.8	2701	—	—	—
30	75	1395.3	839.9	158	1902.7	1145.4	165	2421.7	1457.7	170
	85	1358.0	1009.0	345	1851.8	1375.9	471	2356.9	1751.2	599
	95	1321.0	1191.0	931	1801.5	1624.1	1269	2292.8	2067.1	1615
	105	1284.4	1376.0	1423	1751.5	1876.4	1983	—	—	—
	115	1247.0	1566.1	1870	1700.4	2135.6	2597	—	—	—
35	75	1546.8	828.0	116	2109.3	1129.1	121	2684.6*	1437.1*	123*
	85	1506.2	1002.3	253	2054.0	1366.8	266	2614.2	1739.6	275
	95	1464.8	1189.4	752	1997.5	1622.0	1026	2542.3	2064.4	1306
	105	1424.6	1388.4	1325	1942.7	1893.3	1849	—	—	—
	115	1383.9	1588.5	1779	1887.2	2166.2	2474	—	—	—
40	75	1712.1	814.9	78	2334.8	1111.3	81	2989.4*	1318.7*	68*
	85	1666.5	989.4	200	2272.6	1349.2	209	2892.4	1717.2	215
	95	1621.5	1184.3	554	2211.3	1615.0	755	2814.4	2055.5	961
	105	1576.3	1391.5	1214	2149.6	1897.6	1697	—	—	—
	115	1532.0	1606.7	1679	2089.1	2191.0	2338	—	—	—

R-717		NONECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.		
		NOTE: Capacities based on 10°F Liquid Subcooling, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect. * Chiller Ports required, contact the factory.		
Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)
		1080		
-40	75	520.4	1341.8	2139
	85	499.9	1518.6	2602
	95	477.9	1722.0	3137
	105	455.8	1966.7	3777
	115	433.0	2274.1	4571
-35	75	607.2	1404.2	2119
	85	584.2	1577.3	2574
	95	560.9	1777.5	3100
	105	536.0	2007.1	3707
	115	511.2	2282.4	4427
-30	75	704.5	1470.6	2094
	85	679.0	1646.9	2554
	95	653.1	1843.4	3072
	105	626.8	2069.0	3668
	115	598.7	2326.8	4352
-25	75	813.3	1537.3	2056
	85	785.1	1722.6	2532
	95	756.3	1920.5	3053
	105	727.2	2142.6	3641
	115	697.6	2395.6	4313
-20	75	934.4	1602.7	2003
	85	903.4	1799.2	2497
	95	871.6	2006.5	3035
	105	839.2	2227.6	3623
	115	806.6	2477.5	4288
-15	75	1068.6	1664.2	1932
	85	1034.6	1874.7	2446
	95	999.6	2093.7	3004
	105	964.0	2324.6	3610
	115	—	—	—
-10	75	1217.3	1719.2	1840
	85	1179.6	1947.4	2378
	95	1141.4	2180.2	2956
	105	1102.1	2423.3	3583
	115	—	—	—
-5	75	1381.2	1768.2	1731
	85	1339.9	2012.2	2285
	95	1297.7	2264.0	2890
	105	—	—	—
	115	—	—	—
0	75	1561.4	1809.8	1606
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)
		1080		
5	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
10	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
15	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
20	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
25	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
30	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
35	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
40	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—

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NONECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.
NOTE: Capacities based on 10°F Liquid Subcooling, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect.
*** Chiller Ports required, contact the factory.**

Unit with higher than standard 300 PSIG DWP required for some tabulated conditions shown.

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		100			134			177		
-40	75	60.8	163.1	30	81.1	217.4	36	107.9	284.9	41
	85	55.7	178.1	71	74.3	237.5	85	98.7	310.5	103
	95	50.5	194.4	117	67.4	259.2	142	89.4	338.0	176
	105	45.2	212.2	171	60.3	283.0	208	79.8	368.0	261
-35	115	39.8	232.4	235	53.0	309.9	287	70.1	401.8	361
	75	69.8	170.1	19	93.1	226.9	22	123.9	297.4	23
	85	64.1	185.9	59	85.4	247.8	70	113.6	324.2	84
	95	58.2	202.4	106	77.6	269.9	127	103.1	352.3	156
-30	105	52.3	220.4	160	69.7	293.8	193	92.4	382.5	240
	115	46.2	240.2	222	61.5	320.3	269	81.4	415.6	339
	75	79.8	177.1	7	106.4	236.2	8	141.7	309.4	5
	85	73.4	193.6	48	97.8	258.2	56	130.1	338.1	66
-25	95	66.8	210.8	95	89.1	281.1	113	118.3	367.2	138
	105	60.2	229.1	149	80.2	305.4	178	106.3	397.9	221
	115	53.3	248.9	211	71.1	331.8	254	94.0	431.0	319
	75	90.8	182.9	0	121.1	243.8	0	161.3	319.5	0
-20	85	83.6	201.4	37	111.5	268.5	43	148.4	351.6	49
	95	76.3	219.4	84	101.8	292.5	99	135.3	382.3	120
	105	68.9	238.1	138	91.9	317.5	164	121.9	414.0	203
	115	61.2	258.1	201	81.6	344.1	240	108.1	447.5	300
-15	75	103.0	187.8	0	137.3	250.3	0	182.9	328.1	0
	85	95.0	208.2	25	126.6	277.6	29	168.6	363.5	31
	95	86.9	227.8	74	115.8	303.8	86	154.0	397.4	104
	105	78.6	247.4	129	104.8	329.8	151	139.1	430.4	187
-10	115	70.0	267.8	192	93.3	357.1	227	123.7	464.6	283
	75	116.4	192.0	0	155.2	256.0	0	206.7	335.4	0
	85	107.5	214.2	14	143.3	285.6	16	190.9	373.7	14
	95	98.5	235.8	63	131.3	314.4	73	174.7	411.4	87
-5	105	89.3	256.6	119	119.0	342.2	139	158.1	447.0	171
	115	79.7	277.8	183	106.3	370.4	215	141.0	482.3	268
	75	131.1	195.0	0	174.8	260.0	0	232.8	340.9	0
	85	121.3	219.2	2	161.7	292.2	2	215.3	382.2	0
0	95	111.3	243.1	53	148.3	324.1	61	197.4	423.6	70
	105	101.0	265.7	110	134.7	354.2	127	179.1	463.1	156
	115	90.5	287.8	175	120.6	383.8	203	160.1	500.3	253
	75	147.2	197.5	0	196.3	263.3	0	261.4	345.3	0
5	85	136.4	223.0	0	181.8	297.4	0	242.1	388.9	0
	95	125.3	248.9	41	167.1	331.9	47	222.3	433.1	53
	105	114.0	274.2	101	152.0	365.6	115	202.1	477.3	140
	115	102.3	297.7	167	136.4	397.0	192	181.1	518.9	240
10	75	164.9	199.6	0	219.9	266.2	0	292.6	348.2	0
	85	152.9	226.0	0	203.9	301.4	0	271.4	394.2	0
	95	140.7	253.8	31	187.7	338.4	35	249.6	441.3	37
	105	128.2	281.2	90	171.0	375.0	103	227.3	488.5	123
15	115	115.2	307.6	159	153.7	410.2	182	204.2	534.9	225
	75	184.2	201.0	0	245.6	268.0	0	326.9*	350.6*	0*
	85	171.0	228.5	0	228.0	304.7	0	303.3	398.2	0
	95	157.6	257.3	20	210.1	343.1	23	279.4	447.6	22
20	105	143.8	287.5	80	191.8	383.3	91	254.9	498.3	108
	115	129.5	316.3	150	172.7	421.7	171	229.5	548.4	210
	75	205.1	201.4	0	273.5	268.5	0	364.2*	351.5*	0*
	85	190.7	230.4	0	254.3	307.2	0	338.2*	400.8*	0*
25	95	175.9	260.2	11	234.6	347.0	12	312.0	452.7	9
	105	160.8	291.6	70	214.4	388.8	78	285.0	505.6	92
	115	145.2	323.5	141	193.5	431.4	159	257.0	559.4	194
	75	228.1	201.2	0	304.1*	268.2*	0*	404.7*	350.9*	0*
85	212.1	231.4	0	282.9	308.5	0	376.4*	403.1*	0*	

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NONECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.
NOTE: Capacities based on 10°F Liquid Subcooling, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect.
*** Chiller Ports required, contact the factory.**

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		100			134			177		
15	95	196.0	262.7	2	261.4	350.2	2	347.4	456.1	0
	105	179.4	295.0	60	239.2	393.4	67	317.8	511.7	78
	115	162.2	329.0	131	—	—	—	287.1	568.3	178
20	75	252.9	199.3	0	337.3*	265.7*	0*	448.9*	348.2*	0*
	85	235.5	231.5	0	314.0	308.6	0	417.8*	403.4*	0*
	95	217.8	264.2	0	290.4	352.3	0	386.0*	459.1*	0*
	105	199.6	297.9	51	266.2	397.2	57	353.5	516.3	66
	115	180.7	333.0	121	—	—	—	320.0	575.6	164
25	75	279.9	196.2	0	373.2*	261.6*	0*	496.7*	342.3*	0*
	85	260.9	230.4	0	347.9*	307.2*	0*	462.8*	401.8*	0*
	95	241.4	264.6	0	321.9	352.7	0	428.1*	460.4*	0*
	105	221.6	300.0	43	295.5	400.0	48	392.4	519.5	54
	115	201.0	336.4	112	—	—	—	355.7	581.3	151
30	75	309.2*	191.7*	0*	412.2*	255.6*	0*	548.6*	332.9*	0*
	85	288.4	227.8	0	384.6*	303.8*	0*	511.6*	397.6*	0*
	95	267.3	264.2	0	356.3	352.2	0	473.7*	459.8*	0*
	105	245.4	301.0	36	327.3	401.4	40	434.8*	522.4*	45*
	115	223.0	339.0	104	—	—	—	394.4	585.3	138
35	75	342.9*	176.8*	0*	457.3*	235.7*	0*	608.7*	307.0*	0*
	85	318.2	224.1	0	424.3*	298.8*	0*	564.4*	389.8*	0*
	95	295.2	262.2	0	393.5*	349.6*	0*	523.2*	457.3*	0*
	105	271.4	300.9	30	—	—	—	480.8*	522.9*	37*
	115	246.8	340.7	96	—	—	—	436.6*	589.0*	127*
40	75	—	—	—	—	—	—	—	—	—
	85	350.5*	218.4*	0*	467.3*	291.2*	0*	621.7*	378.8*	0*
	95	325.4	259.0	0	433.8*	345.3*	0*	576.7*	451.4*	0*
	105	299.5	299.6	25	—	—	—	530.6*	521.3*	30*
	115	272.6	340.9	89	—	—	—	482.5*	590.9*	117*
		222			270			316		
-40	75	135.9	358.7	47	167.9	443.2	52	193.4	510.5	52
	85	124.3	391.0	118	153.6	483.1	131	176.9	556.4	132
	95	112.5	425.6	202	139.0	525.7	226	160.1	605.6	230
	105	100.5	463.4	301	124.2	572.5	339	143.0	659.4	348
	115	88.2	505.9	419	109.0	625.0	473	125.5	719.9	491
-35	75	156.0	374.5	26	192.7	462.7	28	222.0	532.9	28
	85	143.0	408.3	96	176.7	504.4	106	203.5	581.0	106
	95	129.8	443.7	178	160.3	548.1	198	184.7	631.3	200
	105	116.3	481.6	275	143.7	595.0	308	165.5	685.3	314
	115	102.5	523.3	390	126.6	646.4	437	145.8	744.6	450
-30	75	178.4	389.7	5	220.4	481.4	6	253.9	554.5	6
	85	163.8	425.7	75	202.3	525.9	82	233.1	605.7	82
	95	149.0	462.4	156	184.1	571.2	172	212.0	658.0	173
	105	133.9	501.1	252	165.4	619.0	279	190.5	713.0	283
	115	118.4	542.7	364	146.2	670.5	406	168.4	772.3	415
-25	75	203.1	402.3	0	250.9	497.0	0	289.0	572.5	0
	85	186.9	442.8	55	230.9	547.0	60	265.9	630.0	59
	95	170.3	481.4	135	210.4	594.7	149	242.4	685.0	148
	105	153.5	521.3	230	189.6	644.0	254	218.4	741.7	255
	115	136.1	563.5	341	168.1	696.0	378	193.6	801.7	383
-20	75	230.3	413.1	0	284.5	510.3	0	327.7	587.8	0
	85	212.3	457.7	35	262.3	565.5	38	302.1	651.3	37
	95	194.0	500.5	116	239.6	618.3	127	276.0	712.1	125
	105	175.1	541.9	210	216.3	669.4	230	249.2	771.1	229
	115	155.8	585.1	320	192.4	722.8	352	221.6	832.5	354
-15	75	260.3	422.4	0	322.5*	541.3*	0*	370.3	601.0	0
	85	240.3	470.6	15	296.9	581.4	16	342.0	669.6	16
	95	220.0	518.0	97	271.8	639.9	105	313.0	737.1	103

Unit with higher than standard 300 PSIG DWP required for some tabulated conditions shown.

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NONECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.
NOTE: Capacities based on 10°F Liquid Subcooling, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect.
*** Chiller Ports required, contact the factory.**

Unit with higher than standard 300 PSIG DWP required for some tabulated conditions shown.

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		222			270			316		
-15	105	199.1	562.9	191	245.9	695.3	208	283.3	800.9	206
	115	177.5	607.3	300	219.3	750.2	328	252.6	864.1	328
-10	75	293.1	429.2	0	362.9*	539.2*	0*	417.1	610.7	0
	85	271.1	481.2	0	335.9*	621.0*	13*	385.7	684.7	0
	95	248.6	533.4	78	307.1	659.0	84	353.8	759.0	82
	105	225.5	583.2	173	278.6	720.4	187	320.9	829.8	184
	115	201.6	630.0	282	249.0	778.2	307	286.8	896.4	305
-5	75	329.6*	436.7*	0*	407.2*	539.5*	0*	468.4	618.6	0
	85	304.8	489.7	0	377.5*	618.6*	0*	433.7	696.8	0
	95	280.0	545.4	58	345.9	673.7	63	398.4	776.0	61
	105	254.5	601.0	154	314.4	742.5	166	362.2	855.2	163
	115	228.0	653.4	265	281.7	807.2	287	324.5	929.7	284
0	75	368.5*	438.4*	0*	455.2*	541.6*	0*	524.4	623.9	0
	85	342.3*	500.4*	0*	422.8*	618.1*	0*	486.2	706.3	0
	95	314.3	555.7	41	389.3*	706.0*	54*	447.2	790.7	42
	105	286.2	615.1	135	353.6	759.8	145	407.3	875.2	141
	115	257.2	673.6	248	—	—	—	365.9	958.4	262
5	75	411.6*	441.4*	0*	508.5*	545.3*	0*	585.7	628.1	0
	85	382.1*	501.8*	0*	472.1*	619.9*	0*	543.5	713.5	0
	95	351.9	563.6	24	435.5*	704.7*	30*	500.7	802.0	25
	105	320.9	627.4	117	397.6*	802.0*	140*	456.7	892.8	121
	115	289.0	690.6	229	—	—	—	411.2	982.7	240
10	75	458.7*	442.6*	0*	566.6*	546.8*	0*	652.6*	629.8*	0*
	85	425.9*	504.8*	0*	526.1*	623.5*	0*	606.0	718.2	0
	95	393.2*	571.5*	10*	485.7*	706.0*	11*	559.0	811.1	10
	105	358.9	636.6	100	444.2*	799.5*	112*	510.6	905.9	102
	115	323.7	704.4	211	—	—	—	460.6	1002.3	218
15	75	509.6*	441.8*	0*	629.5*	545.8*	0*	725.1*	628.6*	0*
	85	474.0*	507.6*	0*	585.5*	627.0*	0*	674.4	722.2	0
	95	437.4*	574.3*	0*	540.3*	709.4*	0*	622.4	817.2	0
	105	400.7*	647.7*	86*	—	—	—	569.5	916.9	85
	115	361.6	715.7	193	—	—	—	514.5	1018.3	198
20	75	565.3*	438.5*	0*	698.3*	541.7*	0*	804.3*	624.0*	0*
	85	526.1*	508.0*	0*	649.9*	627.5*	0*	748.6*	722.8*	0*
	95	486.1*	578.1*	0*	600.5*	714.1*	0*	691.7	822.6	0
	105	445.2*	650.2*	70*	—	—	—	633.4	925.1	71
	115	402.9	724.8	177	—	—	—	573.3	1031.3	179
25	75	625.5*	431.0*	0*	772.7*	532.5*	0*	890.0*	613.3*	0*
	85	582.7*	506.0*	0*	719.8*	625.1*	0*	829.1*	720.0*	0*
	95	539.1*	579.7*	0*	—	—	—	767.1	824.9	0
	105	494.1*	654.2*	58*	—	—	—	703.0	930.9	58
	115	448.1*	732.9*	162*	—	—	—	637.3	1041.6	163
30	75	690.8*	419.2*	0*	853.4*	517.8*	0*	983.0*	596.4*	0*
	85	644.2*	500.7*	0*	795.8*	618.6*	0*	916.7*	712.5*	0*
	95	596.6*	579.0*	0*	—	—	—	848.8*	823.9*	0*
	105	547.5*	657.8*	48*	—	—	—	779.0	936.0	47
	115	496.6*	737.0*	148*	—	—	—	706.6	1048.7	147
35	75	766.5*	386.6*	0*	946.9*	477.6*	0*	1090.7*	550.1*	0*
	85	710.7*	490.8*	0*	877.9*	606.3*	0*	1011.3*	698.4*	0*
	95	658.8*	575.9*	0*	—	—	—	937.4*	819.4*	0*
	105	605.4*	658.5*	39*	—	—	—	861.5*	937.0*	38*
	115	549.8*	741.7*	136*	—	—	—	782.3	1055.4	134
40	75	—	—	—	—	—	—	—	—	—
	85	782.9*	477.0*	0*	967.1*	589.3*	0*	1113.9*	678.8*	0*
	95	726.2*	568.4*	0*	—	—	—	1033.3*	808.8*	0*
	105	668.2*	656.4*	32*	—	—	—	950.8*	934.0*	30*
	115	—	—	—	—	—	—	864.6	1058.8	122

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NONECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.
NOTE: Capacities based on 10°F Liquid Subcooling, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect.
*** Chiller Ports required, contact the factory.**

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		399			480			546		
-40	75	243.5	642.8	56	293.0	773.4	60	333.0	879.0	62
	85	222.7	700.7	145	268.0	843.0	154	304.6	958.1	160
	95	201.6	762.6	254	242.6	917.5	271	275.7	1042.7	283
	105	180.1	830.4	386	216.7	999.1	415	246.3	1135.5	434
	115	158.1	906.5	547	190.2	1090.7	591	216.1	1239.6	620
-35	75	279.6	671.1	30	336.4	807.5	32	382.3	917.7	33
	85	256.3	731.6	115	308.3	880.2	122	350.4	1000.4	126
	95	232.6	795.0	219	279.8	956.5	233	318.0	1087.0	242
	105	208.4	863.0	345	250.7	1038.4	369	284.9	1180.1	384
	115	183.6	937.6	498	220.9	1128.2	534	251.0	1282.1	558
-30	75	319.7	698.2	6	384.7	840.1	7	437.2	954.7	7
	85	293.5	762.8	88	353.1	917.8	93	401.3	1043.0	96
	95	267.0	828.5	188	321.3	996.9	199	365.1	1132.9	205
	105	239.9	897.8	309	288.7	1080.2	328	328.1	1227.7	340
	115	212.1	972.5	455	255.1	1170.1	486	290.0	1329.8	505
-25	75	363.9	720.9	0	437.9	867.4	0	497.6	985.8	0
	85	334.9	793.4	63	402.9	954.6	66	457.9	1084.8	68
	95	305.2	862.6	160	367.2	1037.9	168	417.3	1179.6	173
	105	275.0	934.1	276	330.8	1123.8	292	376.0	1277.2	302
	115	243.8	1009.6	417	293.4	1214.7	443	—	—	—
-20	75	412.7	740.2	0	496.5	890.6	0	564.3	1012.2	0
	85	380.5	820.2	39	457.8	986.8	41	520.3	1121.5	42
	95	347.5	896.8	134	418.1	1079.0	140	475.2	1226.2	144
	105	313.8	971.0	247	377.5	1168.3	260	429.1	1327.7	267
	115	279.1	1048.4	384	335.8	1261.4	405	—	—	—
-15	75	466.3	756.9	0	561.1	910.7	0	637.6	1034.9	0
	85	430.6	843.3	17	518.1	1014.6	18	588.8	1153.1	18
	95	394.2	928.1	110	474.3	1116.7	114	539.0	1269.1	117
	105	356.7	1008.6	221	429.2	1213.5	231	—	—	—
	115	318.1	1088.2	353	382.7	1309.3	371	—	—	—
-10	75	525.3	769.1	0	632.0	925.4	0	719.8*	1069.5*	0*
	85	485.7	862.3	0	584.4	1037.5	0	664.2	1179.0	0
	95	445.5	955.8	87	536.0	1150.1	90	609.2	1307.0	92
	105	404.1	1045.0	196	486.1	1257.3	205	—	—	—
	115	361.1	1128.8	326	434.5	1358.2	341	—	—	—
-5	75	589.9	779.0	0	710.6*	941.5*	0*	807.5*	1070.0*	0*
	85	546.1	877.4	0	657.1	1055.7	0	748.6*	1226.9*	0*
	95	501.7	977.2	64	603.6	1175.7	66	—	—	—
	105	456.1	1076.9	172	548.7	1295.8	179	—	—	—
	115	408.6	1170.8	302	491.6	1408.7	315	—	—	—
0	75	660.3*	785.6*	0*	794.5*	945.2*	0*	902.9*	1074.2*	0*
	85	612.3	889.5	0	737.9*	1078.8*	0*	838.6*	1226.0*	0*
	95	563.2	995.7	44	677.6	1198.0	45	—	—	—
	105	512.9	1102.1	149	617.1	1326.0	154	—	—	—
	115	460.8	1206.9	277	—	—	—	—	—	—
5	75	737.5*	791.0*	0*	887.4*	951.7*	0*	1008.5*	1081.6*	0*
	85	684.5	898.4	0	823.9*	1081.8*	0*	936.3*	1229.5*	0*
	95	630.5	1009.9	26	758.6	1215.1	26	—	—	—
	105	575.1	1124.3	127	—	—	—	—	—	—
	115	517.8	1237.5	253	—	—	—	—	—	—
10	75	821.9*	793.1*	0*	988.8*	954.3*	0*	1123.8*	1084.5*	0*
	85	763.1*	904.4*	0*	918.2*	1088.2*	0*	—	—	—
	95	703.9	1021.4	10	847.7*	1232.0*	11*	—	—	—
	105	643.0	1140.7	107	—	—	—	—	—	—
	115	580.0	1262.2	229	—	—	—	—	—	—
15	75	913.1*	791.6*	0*	1098.6*	952.5*	0*	1248.5*	1082.5*	0*
	85	849.2*	909.5*	0*	1021.8*	1094.3*	0*	—	—	—

Unit with higher than standard 300 PSIG DWP required for some tabulated conditions shown.

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NONECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.
NOTE: Capacities based on 10°F Liquid Subcooling, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect.
*** Chiller Ports required, contact the factory.**

Unit with higher than standard 300 PSIG DWP required for some tabulated conditions shown.

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		399			480			546		
15	95	783.7	1029.0	0	943.0*	1238.1*	0*	—	—	—
	105	717.1	1154.6	89	—	—	—	—	—	—
	115	647.9	1282.4	207	—	—	—	—	—	—
20	75	1012.9*	785.8*	0*	1218.7*	945.4*	0*	1385.0*	1074.4*	0*
	85	942.7*	910.2*	0*	1134.2*	1095.2*	0*	—	—	—
	95	871.0*	1035.8*	0*	—	—	—	—	—	—
	105	797.7	1164.9	73	—	—	—	—	—	—
	115	721.9	1298.6	187	—	—	—	—	—	—
25	75	1120.8*	772.3*	0*	1348.5*	929.3*	0*	1532.6*	1056.1*	0*
	85	1044.1*	906.6*	0*	1256.3*	1090.9*	0*	—	—	—
	95	966.0*	1038.8*	0*	—	—	—	—	—	—
	105	885.3*	1172.2*	60*	—	—	—	—	—	—
	115	802.5	1311.7	169	—	—	—	—	—	—
30	75	1237.8*	751.1*	0*	1489.4*	903.7*	0*	1692.6*	1027.0*	0*
	85	1154.3*	897.2*	0*	1388.9*	1079.5*	0*	—	—	—
	95	1068.9*	1037.5*	0*	—	—	—	—	—	—
	105	981.0*	1178.7*	49*	—	—	—	—	—	—
	115	889.8	1320.6	153	—	—	—	—	—	—
35	75	1373.4*	692.7*	0*	1652.5*	833.5*	0*	1873.4*	971.3*	0*
	85	1273.4*	879.5*	0*	1532.2*	1058.2*	0*	—	—	—
	95	1180.4*	1031.8*	0*	—	—	—	—	—	—
	105	1084.8*	1179.9*	39*	—	—	—	—	—	—
	115	985.2*	1329.1*	139*	—	—	—	—	—	—
40	75	—	—	—	—	—	—	—	—	—
	85	1402.7*	854.8*	0*	1687.8*	1028.5*	0*	—	—	—
	95	1301.2*	1018.5*	0*	—	—	—	—	—	—
	105	1197.3*	1176.2*	31*	—	—	—	—	—	—
	115	—	—	—	—	—	—	—	—	—
		496			676			856		
-40	75	299.7	822.6	80	408.7	1121.8	86	520.1	1427.7	91
	85	274.0	896.5	178	373.7	1222.5	194	475.6	1555.9	205
	95	248.0	975.4	301	338.2	1330.2	331	430.4	1693.0	352
	105	221.5	1061.9	454	302.0	1448.1	504	384.4	1843.0	538
	115	194.3	1158.8	643	264.9	1580.3	805	337.2	2011.2	1025
-35	75	344.0	858.9	52	469.1	1171.2	55	597.1	1490.7	58
	85	315.3	936.1	144	430.0	1276.5	156	547.2	1624.7	164
	95	286.1	1017.0	261	390.1	1386.8	284	496.5	1765.0	300
	105	256.3	1103.7	405	349.5	1505.1	445	444.8	1915.6	472
	115	225.7	1198.8	583	307.8	1634.8	645	391.7	2080.6	730
-30	75	393.5	893.6	25	536.6	1218.6	27	682.9	1551.0	28
	85	361.1	976.1	114	492.4	1331.1	122	626.8	1694.1	128
	95	328.5	1060.0	225	447.9	1445.5	243	570.1	1839.8	255
	105	295.1	1148.4	362	402.4	1566.0	394	512.2	1993.1	415
	115	260.7	1243.5	531	355.6	1695.7	582	452.5	2158.2	617
-25	75	447.9	922.8	0	610.8	1258.3	0	777.4	1601.5	0
	85	412.1	1015.3	86	562.0	1384.5	92	715.2	1762.2	96
	95	375.5	1103.7	192	512.0	1505.1	206	651.7	1915.6	215
	105	338.2	1194.8	323	461.2	1629.3	349	587.0	2073.7	366
	115	299.8	1291.1	485	408.9	1760.7	527	520.4	2240.8	555
-20	75	507.9	947.5	0	692.6	1292.1	0	881.5	1644.5	0
	85	468.2	1049.7	60	638.5	1431.4	64	812.7	1821.8	66
	95	427.6	1147.5	163	583.1	1564.8	174	742.1	1991.6	181
	105	386.0	1242.2	289	526.4	1693.9	309	669.9	2155.9	323
	115	343.2	1340.8	444	468.0	1828.5	479	595.7	2327.2	502
-15	75	574.0	968.8	0	782.7	1321.2	0	996.2	1682.7	0
	85	530.0	1079.3	35	722.7	1471.8	37	919.8	1873.2	38
	95	485.1	1187.7	135	661.5	1619.6	143	841.9	2061.4	148

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NONECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.
NOTE: Capacities based on 10°F Liquid Subcooling, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect.
* Chiller Ports required, contact the factory.

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		496			676			856		
-15	105	438.8	1290.3	258	598.4	1759.6	275	761.6	2239.5	285
	115	391.2	1391.8	407	533.5	1898.0	436	679.0	2415.7	455
-10	75	646.5	984.5	0	881.7	1342.5	0	1124.6*	1780.4*	0*
	85	597.8	1103.6	13	815.2	1505.0	13	1037.5	1915.4	14
	95	548.2	1223.2	109	747.6	1668.0	115	951.5	2123.0	119
	105	497.1	1337.0	229	677.9	1823.3	243	862.8	2320.5	251
	115	444.2	1443.9	374	605.7	1969.0	398	771.0	2506.0	414
-5	75	726.1	997.2	0	990.1	1359.9	0	1261.7*	1817.7*	0*
	85	672.2	1123.1	0	916.6	1531.5	0	1166.6	1980.7	0
	95	617.3	1250.5	84	841.8	1705.3	88	1071.4	2170.4	91
	105	561.1	1377.9	202	765.2	1879.1	212	973.9	2391.6	219
	115	502.6	1497.7	345	685.4	2042.4	365	—	—	—
0	75	812.8	1005.7	0	1108.4	1371.4	0	1410.7*	1856.9*	0*
	85	753.6	1138.5	0	1027.7	1552.6	0	1310.0*	2066.3*	0*
	95	693.1	1274.3	62	945.1	1737.7	64	1202.9	2229.1	70
	105	631.1	1410.2	174	860.6	1923.1	183	—	—	—
	115	566.8	1544.0	315	773.0	2105.5	332	—	—	—
5	75	907.9	1012.6	0	1238.0*	1380.8*	0*	1575.7*	1898.0*	0*
	85	842.4	1150.0	0	1148.8	1568.3	0	1462.7*	2109.6*	0*
	95	775.9	1292.5	41	1058.1	1762.6	43	1349.2*	2337.0*	61*
	105	707.6	1438.6	149	964.9	1961.8	156	—	—	—
	115	637.0	1583.2	287	868.6	2158.9	300	—	—	—
10	75	1011.7	1015.4	0	1379.6*	1384.6*	0*	1755.9*	1927.6*	0*
	85	939.3	1157.7	0	1280.8*	1578.7*	0*	1630.2*	2155.2*	0*
	95	866.3	1307.2	24	1181.4	1782.6	25	1504.9*	2384.7*	45*
	105	791.2	1459.7	126	1078.9	1990.6	131	—	—	—
	115	713.5	1614.8	259	973.0	2202.1	270	—	—	—
15	75	1124.0*	1013.5*	0*	1532.8*	1382.0*	0*	1950.8*	1934.5*	0*
	85	1045.3	1164.2	0	1425.5*	1587.6*	0*	1814.2*	2196.9*	0*
	95	964.5	1317.0	10	1315.3	1796.0	10	—	—	—
	105	882.4	1477.5	106	1203.3	2014.9	110	—	—	—
	115	797.1	1640.7	233	1086.9	2237.4	242	—	—	—
20	75	1246.9*	1006.0*	0*	1700.4*	1371.8*	0*	2164.1*	1920.5*	0*
	85	1160.3	1165.2	0	1582.3*	1588.9*	0*	2013.9*	2217.7*	0*
	95	1071.9	1325.8	0	1461.8*	1807.9*	0*	—	—	—
	105	981.5	1490.7	88	1338.5	2032.9	91	—	—	—
	115	888.2	1661.6	210	1211.2	2265.9	217	—	—	—
25	75	1379.7*	988.8*	0*	1881.5*	1348.4*	0*	2394.7*	1887.7*	0*
	85	1285.2*	1160.6*	0*	1752.6*	1582.7*	0*	2230.6*	2215.8*	0*
	95	1188.9	1329.6	0	1621.3*	1813.1*	0*	—	—	—
	105	1089.4	1500.1	73	1485.5*	2045.7*	75*	—	—	—
	115	987.3	1678.3	188	1346.4	2288.7	195	—	—	—
30	75	1523.8*	961.6*	0*	2078.0*	1311.3*	0*	2644.8*	1835.8*	0*
	85	1420.9*	1148.5*	0*	1937.6*	1566.2*	0*	2466.1*	2192.7*	0*
	95	1315.6	1327.9	0	1794.0*	1810.9*	0*	—	—	—
	105	1207.1	1508.4	60	1646.1*	2057.0*	62*	—	—	—
	115	1094.8	1689.7	169	—	—	—	—	—	—
35	75	1690.8*	886.9*	0*	2305.7*	1209.4*	0*	2934.5*	1693.1*	0*
	85	1567.5*	1125.8*	0*	2137.6*	1535.3*	0*	2720.6*	2149.4*	0*
	95	1452.8*	1320.7*	0*	1981.2*	1801.0*	0*	—	—	—
	105	1335.0	1510.1	49	1820.5*	2059.2*	50*	—	—	—
	115	1212.1	1700.6	153	—	—	—	—	—	—
40	75	—	—	—	—	—	—	—	—	—
	85	1726.7*	1094.2*	0*	2354.6*	1492.2*	0*	2996.8*	2089.1*	0*
	95	1601.5*	1303.6*	0*	2184.0*	1777.7*	0*	—	—	—
	105	1473.4*	1505.3*	40*	2009.2*	2052.8*	41*	—	—	—
	115	1339.6	1706.0	138	—	—	—	—	—	—

Unit with higher than standard 300 PSIG DWP required for some tabulated conditions shown.

R-507

NONECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.
NOTE: Capacities based on 10°F Liquid Subcooling, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect.
*** Chiller Ports required, contact the factory.**

Unit with higher than standard 300 PSIG DWP required for some tabulated conditions shown.

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)
1080				
-40	75	657.0	1803.5	94
	85	600.8	1965.4	214
	95	543.7	2138.5	369
	105	485.6	2328.0	566
	115	—	—	—
-35	75	754.2	1883.0	60
	85	691.2	2052.3	170
	95	627.2	2229.6	312
	105	561.8	2419.8	494
	115	—	—	—
-30	75	862.7	1959.2	29
	85	791.7	2140.0	132
	95	720.1	2324.0	264
	105	647.0	2517.6	432
	115	—	—	—
-25	75	982.0	2023.0	0
	85	903.4	2225.9	99
	95	823.2	2419.8	222
	105	—	—	—
	115	—	—	—
-20	75	1113.5	2077.3	0
	85	1026.5	2301.3	68
	95	937.4	2515.7	186
	105	—	—	—
	115	—	—	—
-15	75	1258.4	2125.6	0
	85	1161.9	2366.1	39
	95	—	—	—
	105	—	—	—
	115	—	—	—
-10	75	1420.6*	2248.9*	0*
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
-5	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
0	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)
1080				
5	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
10	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
15	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
20	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
25	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
30	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
35	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
40	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—

R-717		ECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz with flash-type economizer (See Economizer Operation section for selections based on direct expansion or shell and coil economizers). NOTE: Ratings based on liquid subcooling by flash-type economizer, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect, no liquid subcooling from condenser or external source. No allowance for vapor line pressure drop or economizing vessel temperature split is included in the above ratings. * Chiller Ports required, contact the factory.								
		Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR
		100			134			177		
-40	75	57.0	131.6	219	76.1	175.6	281	101.0	228.5	359
	85	56.4	149.9	266	75.2	200.0	342	99.1	258.0	435
	95	55.7	171.0	321	74.3	228.1	414	96.9	290.8	522
	105	55.2	197.7	389	73.6	263.6	506	94.5	328.3	623
	115	54.6	230.3	473	72.8	307.1	624	92.0	372.9	749
-35	75	65.5	137.2	219	87.4	183.0	279	116.7	239.0	357
	85	64.8	155.4	266	86.4	207.3	341	114.7	269.6	436
	95	64.1	176.4	321	85.5	235.3	412	112.6	303.2	524
	105	63.3	200.3	383	84.5	267.2	495	110.1	340.4	626
	115	62.8	230.5	462	83.7	307.4	606	107.5	382.7	747
-30	75	75.0	142.8	218	100.0	190.5	277	134.0	249.6	354
	85	74.2	161.7	267	99.0	215.8	340	132.0	281.7	435
	95	73.4	182.5	321	97.9	243.5	411	129.8	316.4	525
	105	72.6	206.3	384	96.8	275.2	494	127.4	354.4	631
	115	71.8	233.5	456	95.7	311.4	596	124.7	396.3	753
-25	75	85.3	148.5	216	113.8	198.2	274	153.0	260.2	349
	85	84.6	168.2	267	112.8	224.4	338	151.1	293.9	433
	95	83.7	189.7	323	111.7	253.0	411	148.8	330.2	526
	105	82.8	213.2	385	110.4	284.5	495	146.4	369.4	637
	115	81.9	240.1	457	109.3	320.3	597	143.6	412.2	762
-20	75	96.7	154.2	214	129.0	205.7	269	173.9	270.4	342
	85	95.9	174.8	266	127.9	233.2	336	171.9	306.1	429
	95	95.1	197.0	324	126.8	262.9	410	169.7	344.1	525
	105	94.1	221.3	388	125.5	295.2	498	167.2	384.9	642
	115	93.1	247.9	460	124.2	330.6	601	164.4	429.0	773
-15	75	109.3	159.7	210	145.8	213.0	262	196.7	279.9	332
	85	108.3	181.2	264	144.5	241.8	331	194.7	317.9	422
	95	107.5	204.5	324	143.4	272.9	408	192.5	358.1	522
	105	106.5	229.6	390	142.1	306.3	500	190.0	400.7	646
	115	105.5	256.8	464	140.6	342.5	606	187.2	446.6	783
-10	75	123.0	164.6	204	164.1	219.7	253	221.5	288.3	319
	85	122.0	187.6	261	162.8	250.4	325	219.6	329.1	413
	95	121.0	211.9	323	161.4	282.7	404	217.4	371.7	517
	105	120.1	238.1	391	160.1	317.6	502	214.9	416.5	649
	115	119.0	266.3	467	158.7	355.1	613	212.0	464.4	793
-5	75	138.0	169.0	197	184.1	225.5	242	248.5	295.6	303
	85	137.0	193.5	256	182.7	258.2	317	246.6	339.1	401
	95	135.8	219.2	321	181.2	292.5	399	244.4	384.6	508
	105	134.7	246.5	392	179.7	328.8	502	241.8	432.1	649
	115	133.7	275.8	470	178.3	367.8	618	239.1	482.1	800
0	75	154.4	172.6	187	205.9	230.3	228	278.0	301.5	284
	85	153.2	198.8	249	204.4	265.3	306	275.9	347.8	385
	95	152.0	226.1	316	202.8	301.7	391	273.7	396.4	496
	105	150.8	254.8	390	201.1	339.9	500	271.1	446.9	645
	115	149.6	285.3	471	199.5	380.5	622	268.3	499.8	806
5	75	172.0	175.1	175	229.5	233.7	212	310.1	305.8	262
	85	170.9	203.2	240	227.9	271.2	292	307.6	355.2	366
	95	169.6	232.3	310	226.2	310.0	380	305.3	406.8	481
	105	168.3	262.8	387	224.4	350.5	495	302.8	460.6	636
	115	166.9	294.6	471	222.5	392.9	624	299.9	516.7	808
10	75	191.1	176.6	161	255.0	235.6	194	344.5	307.8	238
	85	189.9	206.6	228	253.3	275.7	276	342.2	360.9	344
	95	188.6	237.7	301	251.6	317.2	367	339.5	415.7	462
	105	187.2	270.0	382	249.6	360.2	486	336.9	472.8	622
	115	185.7	303.8	469	247.6	405.1	624	334.0	532.5	806
15	75	211.8	176.8	146	282.5	235.9	173	381.6	307.3	210
	85	210.5	208.8	214	280.7	278.6	257	379.4	364.4	318
	95	209.1	242.0	290	278.9	323.0	351	376.7	423.0	440

R-717

ECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz with flash-type economizer (See Economizer Operation section for selections based on direct expansion or shell and coil economizers). NOTE: Ratings based on liquid subcooling by flash-type economizer, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect, no liquid subcooling from condenser or external source. No allowance for vapor line pressure drop or economizing vessel temperature split is included in the above ratings. * Chiller Ports required, contact the factory.

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		100			134			177		
15	105	207.6	276.5	374	276.9	368.8	473	373.7	483.5	602
	115	206.0	312.2	465	274.7	416.3	618	370.7	546.7	798
20	75	234.1	176.4	129	312.3	235.3	152	421.6	304.5	181
	85	232.6	209.7	198	310.2	279.8	236	419.1	365.1	290
	95	231.1	245.1	277	308.3	327.1	331	416.7	428.1	414
	105	229.6	281.8	363	306.2	375.9	454	413.4	492.4	575
	115	228.0	319.8	459	303.9	426.4	608	410.1	559.2	784
25	75	258.6	175.7	113	344.9	234.4	131	465.1	300.9	153
	85	256.4	209.4	181	342.0	279.4	213	461.8	363.2	259
	95	254.8	246.8	260	339.9	329.3	310	459.2	430.3	384
	105	253.2	285.8	350	337.7	381.3	430	456.2	499.3	540
	115	251.5	326.2	448	335.3	435.0	594	452.5	569.8	763
30	75	284.8	173.5	95	379.8	231.4	109	511.8	296.0	125
	85	282.1	209.0	163	376.3	278.8	190	508.0	359.1	226
	95	280.2	247.0	242	373.7	329.5	285	504.8	429.5	351
	105	278.5	288.4	333	371.4	384.8	399	501.9	503.3	497
	115	276.7	331.3	435	368.9	441.7	577	498.2	578.5	736
35	75	312.7	169.6	75	417.1	226.2	86	561.9	290.2	98
	85	310.3	207.3	143	413.9	276.5	165	557.6	354.7	195
	95	307.4	246.3	222	410.0	328.6	259	553.5	425.9	316
	105	305.5	289.4	315	407.5	386.1	370	550.4	503.9	461
	115	303.6	334.8	419	404.8	446.4	553	547.1	584.5	699
40	75	343.3	164.7	56	457.8	219.7	62	614.9	282.7	72
	85	339.9	204.2	123	453.3	272.3	140	610.9	348.5	164
	95	337.1	245.6	202	449.5	327.6	234	606.3	421.1	281
	105	334.4	288.9	294	445.9	385.4	343	602.1	501.3	424
	115	332.3	336.7	400	—	—	—	598.7	586.7	652
		222			270			316		
-40	75	127.3	287.8	435	157.2	355.6	534	181.1	409.5	615
	85	124.8	324.9	535	154.2	401.4	661	177.6	462.3	762
	95	122.0	366.2	651	150.8	452.4	805	173.7	521.1	927
	105	119.0	413.4	785	147.0	510.7	970	169.4	588.2	1117
	115	115.8	469.6	944	143.1	580.1	1166	164.8	668.2	1339
-35	75	147.0	301.1	431	181.6	372.0	528	209.2	428.5	608
	85	144.5	339.6	535	178.5	419.5	661	205.6	483.2	761
	95	141.8	381.8	654	175.1	471.7	808	201.7	543.3	931
	105	138.7	428.6	788	171.3	529.4	973	197.3	609.8	1121
	115	135.3	481.9	941	167.2	595.3	1162	192.6	685.7	1334
-30	75	168.8	314.5	425	208.6	388.5	520	240.2	447.5	599
	85	166.3	354.8	533	205.4	438.3	659	236.6	504.9	759
	95	163.5	398.5	657	202.0	492.2	812	232.6	567.0	935
	105	160.4	446.3	794	198.2	551.3	981	228.2	635.0	1130
	115	157.0	499.1	948	193.9	616.5	1171	223.4	710.2	1341
-25	75	192.7	327.9	417	238.1	405.1	508	274.3	466.6	585
	85	190.3	370.2	529	235.1	457.3	654	270.7	526.8	753
	95	187.4	415.8	659	231.5	513.7	814	266.7	591.6	938
	105	184.3	465.1	802	227.7	574.6	991	262.3	661.8	1141
	115	180.9	519.0	960	223.4	641.1	1186	257.4	738.6	1352
-20	75	219.0	340.8	406	270.6	421.0	491	311.7	485.0	566
	85	216.5	385.6	523	267.5	476.3	646	308.1	548.7	744
	95	213.7	433.3	659	264.0	535.3	814	304.1	616.6	938
	105	210.5	484.7	809	260.1	598.8	999	299.6	689.7	1151
	115	207.1	540.2	973	255.8	667.4	1202	294.7	768.9	1363
-15	75	247.7	352.7	391	306.1	435.8	468	352.6	502.0	539
	85	245.2	400.5	513	302.9	494.8	633	349.0	569.9	729
	95	242.4	450.9	657	299.5	557.0	811	344.9	641.6	935

Sat Suct Temp °F		Sat Cond Temp °F		ECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz with flash-type economizer (See Economizer Operation section for selections based on direct expansion or shell and coil economizers). NOTE: Ratings based on liquid subcooling by flash-type economizer, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect, no liquid subcooling from condenser or external source. No allowance for vapor line pressure drop or economizing vessel temperature split is included in the above ratings. * Chiller Ports required, contact the factory.						
				Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR
		222			270			316		
-15	105	239.3	504.6	814	295.6	623.4	1006	340.5	718.1	1154
	115	235.7	562.4	986	291.2	694.7	1219	335.5	800.4	1373
-10	75	279.0	363.3	374	344.8	449.1	437	397.1	517.2	504
	85	276.6	414.6	497	341.7	512.1	614	393.5	589.9	708
	95	273.7	468.0	651	338.1	578.2	804	389.4	666.0	926
	105	270.6	524.5	817	334.2	647.9	1009	385.0	746.4	1153
	115	267.0	584.8	998	329.8	722.4	1233	380.0	832.4	1379
-5	75	313.1	372.5	353	386.9	460.4	401	445.6	530.4	459
	85	310.6	427.2	476	383.7	527.8	588	441.9	607.9	677
	95	307.7	484.3	640	380.2	598.3	791	437.9	689.1	911
	105	304.5	544.1	817	376.2	672.1	1009	433.3	774.3	1148
	115	301.0	607.1	1008	371.9	750.0	1245	428.4	864.4	1381
0	75	350.2	380.0	329	432.8	469.7	371	498.7	541.3	403
	85	347.5	438.3	448	429.3	541.5	553	494.5	623.7	637
	95	344.6	499.1	623	425.7	616.6	770	490.3	710.2	887
	105	341.4	562.7	812	421.7	695.1	1003	485.8	800.9	1136
	115	337.8	629.4	1015	417.3	777.5	1254	480.8	896.1	1379
5	75	390.7	385.4	301	482.8	476.4	338	556.3	549.3	337
	85	387.6	447.6	423	478.8	553.0	509	551.5	637.0	586
	95	384.5	512.3	599	475.0	632.9	740	547.1	729.0	853
	105	381.3	580.0	801	471.0	716.5	989	542.5	825.4	1118
	115	377.6	650.6	1018	466.5	803.7	1257	537.5	926.4	1370
10	75	434.0	387.8	271	536.3	479.4	301	618.0	552.6	298
	85	431.1	454.8	395	532.7	562.2	454	613.6	647.5	523
	95	427.6	523.6	568	528.2	646.8	702	608.4	745.0	808
	105	424.2	595.4	783	524.0	735.5	967	603.7	847.4	1092
	115	420.6	670.5	1015	519.6	828.3	1254	598.7	954.8	1354
15	75	480.6	387.2	238	593.9	478.6	263	684.4	551.7	257
	85	477.9	459.2	363	590.6	567.6	404	680.3	654.0	445
	95	474.4	532.9	528	586.0	658.3	652	675.0	758.2	751
	105	470.5	608.8	758	581.3	752.1	936	669.6	866.5	1059
	115	466.8	688.4	1005	—	—	—	664.5	980.3	1330
20	75	531.0	383.7	204	656.2	474.2	223	756.1	546.5	215
	85	527.9	460.1	328	652.4	568.7	362	751.7	655.5	356
	95	524.8	539.5	479	648.3	666.4	591	746.7	767.6	681
	105	520.6	620.1	724	643.0	766.0	894	740.7	882.4	1019
	115	516.5	704.2	987	—	—	—	735.1	1002.8	1298
25	75	585.8	379.0	170	723.8	468.3	185	834.0	539.7	176
	85	581.6	457.6	291	718.7	565.5	319	828.1	651.8	310
	95	578.4	542.2	435	714.6	669.9	515	823.1	771.6	594
	105	574.5	628.8	680	709.7	776.7	841	817.4	894.7	968
	115	569.8	717.5	961	—	—	—	811.0	1021.8	1257
30	75	644.6	372.9	137	796.4*	460.7*	148*	917.5	530.9	139
	85	639.8	452.4	252	790.6	559.1	275	910.8	644.3	264
	95	635.7	541.2	395	785.5	668.9	433	904.8	770.5	489
	105	632.0	633.8	626	780.7	783.0	773	899.3	901.8	890
	115	627.4	728.5	926	—	—	—	892.9	1037.3	1209
35	75	707.7	365.4	107	874.4*	451.5*	114*	1007.3	520.2	105
	85	702.3	446.7	215	867.7*	552.0*	233*	999.6	636.1	221
	95	697.2	536.5	353	861.4	663.0	384	992.3	764.1	372
	105	693.1	634.7	558	—	—	—	986.3	903.1	794
	115	688.9	736.0	880	—	—	—	980.4	1047.9	1153
40	75	779.5*	332.2*	62*	963.0*	410.4*	65*	1102.0	506.7	73
	85	769.4	438.9	179	950.5*	542.3*	192*	1095.0	624.7	179
	95	763.6	530.4	311	943.4	655.4	336	1086.8	755.2	322
	105	758.3	631.5	478	—	—	—	1079.0	898.6	680
	115	753.9	738.8	821	—	—	—	1072.8	1051.7	1087

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ECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz with flash-type economizer (See Economizer Operation section for selections based on direct expansion or shell and coil economizers). NOTE: Ratings based on liquid subcooling by flash-type economizer, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect, no liquid subcooling from condenser or external source. No allowance for vapor line pressure drop or economizing vessel temperature split is included in the above ratings. * Chiller Ports required, contact the factory.

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		399			480			546		
-40	75	228.1	515.7	774	274.4	620.5	932	311.8	705.2	1059
	85	223.6	582.2	959	269.1	700.5	1154	305.8	796.1	1312
	95	218.7	656.2	1167	263.1	789.5	1405	299.0	897.3	1583
	105	213.3	740.7	1406	256.6	891.2	1689	291.7	1013.0	1885
	115	207.6	841.4	1684	249.8	1012.5	2008	283.9	1150.9	2243
-35	75	263.4	539.5	766	317.0	649.2	922	360.2	737.8	1048
	85	258.9	608.5	959	311.6	732.1	1153	354.1	832.0	1311
	95	254.0	684.1	1172	305.6	823.1	1410	347.3	935.6	1584
	105	248.4	767.9	1411	298.9	924.0	1692	339.8	1050.4	1883
	115	242.5	863.5	1677	291.8	1039.1	1998	331.6	1181.2	2226
-30	75	302.5	563.6	754	364.0	678.1	907	413.6	770.6	1031
	85	298.0	635.8	956	358.5	764.9	1150	407.4	869.3	1307
	95	292.9	714.0	1177	352.5	859.1	1417	400.6	976.5	1585
	105	287.4	799.6	1423	345.8	962.2	1701	393.1	1093.8	1888
	115	281.3	894.3	1685	338.4	1076.2	2005	384.7	1223.4	2228
-25	75	345.4	587.6	737	415.6	707.0	887	472.3	803.5	1008
	85	340.9	663.3	949	410.2	798.1	1141	466.2	907.0	1297
	95	335.8	745.0	1181	404.1	896.4	1421	459.3	1019.0	1583
	105	330.2	833.4	1437	397.4	1002.9	1710	451.7	1140.1	1892
	115	324.1	930.1	1699	390.0	1119.3	2018	443.3	1272.5	2237
-20	75	392.5	610.7	712	472.2	734.8	857	536.7	835.1	974
	85	388.0	690.9	937	466.8	831.3	1127	530.5	944.7	1281
	95	382.9	776.5	1181	460.7	934.2	1421	523.7	1062.0	1575
	105	377.2	868.6	1447	453.9	1045.3	1716	516.0	1188.4	1894
	115	371.1	968.2	1713	446.5	1165.2	2032	507.6	1324.7	2245
-15	75	444.0	632.2	679	534.2	760.6	817	607.1	864.4	928
	85	439.4	717.7	919	528.7	863.5	1105	600.8	981.3	1256
	95	434.4	807.9	1177	522.6	972.0	1416	594.1	1105.1	1561
	105	428.7	904.2	1451	515.9	1088.2	1717	586.4	1237.2	1889
	115	422.4	1008.0	1725	508.3	1213.1	2043	577.8	1379.2	2251
-10	75	500.1	651.4	634	601.7	783.7	763	683.8	890.6	867
	85	495.6	742.8	891	596.3	893.8	1072	677.6	1015.7	1218
	95	490.4	838.6	1166	590.1	1009.0	1403	670.7	1147.2	1540
	105	484.8	939.9	1449	583.4	1131.1	1712	663.1	1286.1	1878
	115	478.5	1048.3	1733	575.8	1261.6	2048	654.5	1434.4	2250
-5	75	561.2	667.9	578	675.2	803.6	695	767.3	913.3	790
	85	556.5	765.5	853	669.6	921.0	1026	760.9	1046.7	1166
	95	551.4	867.8	1147	663.4	1044.1	1380	754.1	1187.1	1509
	105	545.7	975.1	1442	656.6	1173.5	1701	746.4	1334.3	1859
	115	539.5	1088.5	1735	649.2	1310.0	2047	—	—	—
0	75	628.0	681.6	508	755.6	820.1	611	858.7	932.1	695
	85	622.7	785.4	802	749.2	945.0	965	851.4	1074.0	1097
	95	617.5	894.4	1117	742.9	1076.1	1344	844.5	1223.4	1468
	105	611.8	1008.5	1428	736.2	1213.8	1681	836.8	1380.1	1831
	115	605.5	1128.5	1732	728.6	1358.1	2040	—	—	—
5	75	700.6	691.7	423	842.9	832.2	509	958.0	945.8	578
	85	694.5	802.2	738	835.6	965.1	888	949.6	1096.9	1009
	95	688.9	918.0	1074	828.9	1104.5	1292	942.1	1255.7	1416
	105	683.2	1039.5	1404	822.1	1251.0	1650	—	—	—
	115	676.9	1166.7	1720	814.5	1404.1	2023	—	—	—
10	75	778.5	696.4	325	936.8	838.0	384	1064.6	952.3	437
	85	772.7	815.4	658	929.7	981.1	792	1056.5	1115.0	900
	95	766.1	938.1	1018	921.8	1128.7	1224	1047.7	1283.1	1354
	105	760.2	1067.2	1372	914.8	1284.3	1608	—	—	—
	115	754.0	1202.4	1699	907.3	1447.1	1995	—	—	—
15	75	862.1	695.1	278	1037.5	836.7	294	1179.3	951.2	304
	85	856.7	823.5	561	1030.8	990.8	675	1171.5	1126.1	767
	95	850.0	954.8	946	1022.7	1148.8	1139	1162.3	1305.6	1281

R-717		ECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz with flash-type economizer (See Economizer Operation section for selections based on direct expansion or shell and coil economizers). NOTE: Ratings based on liquid subcooling by flash-type economizer, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect, no liquid subcooling from condenser or external source. No allowance for vapor line pressure drop or economizing vessel temperature split is included in the above ratings. * Chiller Ports required, contact the factory.								
Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		399			480			546		
15	105	843.2	1091.2	1330	1014.6	1313.2	1556	—	—	—
	115	836.7	1234.6	1669	—	—	—	—	—	—
20	75	952.4	688.6	231	1146.1	828.8	243	1302.7	942.1	250
	85	946.6	825.5	443	1138.9	993.2	533	1294.4	1128.7	606
	95	940.3	966.6	857	1131.4	1163.0	1032	—	—	—
	105	932.8	1111.2	1279	1122.4	1337.4	1493	—	—	—
	115	925.7	1262.9	1628	—	—	—	—	—	—
25	75	1050.5	679.9	187	1264.1	818.2	196	1436.8	930.1	200
	85	1043.0	821.2	334	1255.0	988.3	367	1426.3	1123.2	417
	95	1036.5	971.7	748	1247.1	1169.1	899	—	—	—
	105	1029.4	1126.6	1218	1238.6	1355.9	1419	—	—	—
	115	1021.3	1286.8	1577	—	—	—	—	—	—
30	75	1155.6	668.7	147	1390.6	804.7	152	1580.5*	914.6*	156*
	85	1147.2	811.7	282	1380.5	976.9	295	1569.0	1110.4	302
	95	1139.4	970.2	617	1370.9	1167.4	742	—	—	—
	105	1132.4	1135.7	1121	1362.6	1366.5	1334	—	—	—
	115	1124.4	1306.3	1516	—	—	—	—	—	—
35	75	1268.6	655.1	110	1526.5*	788.3*	113*	1734.9*	895.9*	115*
	85	1259.0	801.2	234	1514.9	964.2	243	1721.8	1095.9	249
	95	1249.6	962.2	463	1503.5	1157.7	557	—	—	—
	105	1242.0	1137.3	1000	—	—	—	—	—	—
	115	1234.6	1319.6	1444	—	—	—	—	—	—
40	75	1387.8	638.1	76	1681.1*	716.3*	63*	1905.3*	841.5*	71*
	85	1379.0	786.8	189	1659.3	946.8	195	1885.8*	1076.1*	199*
	95	1368.7	951.3	342	1646.9	1144.9	356	—	—	—
	105	1358.8	1131.6	856	—	—	—	—	—	—
	115	1351.0	1324.4	1361	—	—	—	—	—	—
		496			676			856		
-40	75	278.6	655.7	1011	380.0	894.1	1379	483.6	1138.0	1755
	85	273.6	745.6	1259	373.0	1016.8	1716	474.8	1294.1	2184
	95	267.5	848.2	1537	364.8	1156.6	2105	464.3	1472.0	2679
	105	261.3	969.7	1850	356.3	1322.3	2538	453.5	1682.9	3233
	115	254.4	1119.3	2235	346.9	1526.3	3063	441.5	1942.5	3900
-35	75	321.8	684.9	1002	438.9	933.9	1366	558.6	1188.6	1738
	85	316.4	774.2	1249	431.5	1055.7	1703	549.2	1343.6	2168
	95	310.7	876.7	1526	423.7	1195.4	2093	539.3	1521.5	2664
	105	304.0	993.1	1829	414.5	1354.2	2511	527.6	1723.5	3198
	115	297.1	1130.6	2185	405.2	1541.7	2997	515.6	1962.1	3816
-30	75	369.6	715.3	989	504.1	975.4	1348	641.5	1241.4	1716
	85	364.0	806.9	1244	496.4	1100.3	1697	631.8	1400.4	2159
	95	358.0	909.0	1520	488.2	1239.5	2088	621.4	1577.5	2658
	105	351.7	1025.3	1820	479.6	1398.1	2501	610.4	1779.4	3187
	115	344.2	1156.9	2164	469.3	1577.5	2971	597.3	2007.7	3783
-25	75	422.5	745.3	969	576.1	1016.3	1321	733.2	1293.5	1681
	85	416.6	841.7	1238	568.1	1147.9	1689	723.0	1460.9	2149
	95	410.3	945.6	1516	559.5	1289.3	2089	712.1	1640.9	2660
	105	403.8	1061.8	1816	550.5	1447.8	2498	700.7	1842.6	3183
	115	396.7	1193.2	2158	541.0	1626.9	2965	688.5	2070.6	3776
-20	75	480.5	774.2	939	655.3	1055.7	1281	834.0	1343.6	1631
	85	474.5	876.3	1226	647.0	1195.0	1671	823.4	1520.9	2127
	95	468.0	985.3	1513	638.1	1343.5	2086	812.1	1709.9	2660
	105	461.0	1102.5	1815	628.6	1503.2	2498	800.0	1913.2	3184
	115	453.8	1234.1	2157	618.7	1682.8	2966	787.4	2141.7	3778
-15	75	544.1	800.7	898	742.0	1092.0	1224	944.3	1389.8	1558
	85	537.9	909.7	1204	733.5	1240.6	1642	933.5	1578.9	2090
	95	531.2	1024.9	1503	724.3	1397.4	2075	921.8	1778.5	2647

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ECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz with flash-type economizer (See Economizer Operation section for selections based on direct expansion or shell and coil economizers). NOTE: Ratings based on liquid subcooling by flash-type economizer, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect, no liquid subcooling from condenser or external source. No allowance for vapor line pressure drop or economizing vessel temperature split is included in the above ratings. * Chiller Ports required, contact the factory.

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		496			676			856		
-15	105	524.0	1147.6	1815	714.5	1564.8	2502	909.3	1991.5	3188
	115	516.2	1279.2	2158	703.9	1744.2	2970	895.8	2219.9	3783
-10	75	613.7	823.9	841	836.9	1123.5	1147	1065.1	1429.9	1460
	85	607.1	941.3	1171	827.9	1283.6	1597	1053.6	1633.6	2033
	95	600.3	1063.4	1485	818.5	1449.9	2054	1041.7	1845.3	2620
	105	592.8	1192.6	1809	808.3	1626.1	2496	1028.7	2069.6	3181
	115	584.9	1330.2	2163	797.5	1813.7	2979	1015.0	2308.3	3795
-5	75	689.5	843.9	769	940.3	1150.8	1049	1196.7	1464.6	1335
	85	682.7	968.6	1121	930.9	1320.9	1529	1184.8	1681.2	1946
	95	675.5	1099.9	1459	921.0	1499.6	2019	1172.2	1908.6	2577
	105	667.9	1236.6	1794	910.7	1686.1	2478	1159.0	2145.9	3160
	115	659.6	1381.1	2161	899.3	1883.1	2979	1144.6	2396.6	3796
0	75	771.9	860.1	681	1052.6	1172.9	929	1339.6	1492.7	1182
	85	764.7	992.7	1056	1042.9	1353.7	1440	1327.3	1722.9	1833
	95	757.3	1132.4	1420	1032.6	1544.0	1969	1314.1	1965.0	2513
	105	749.4	1278.6	1770	1021.8	1743.3	2448	1300.4	2218.7	3121
	115	740.9	1431.1	2149	1010.3	1951.2	2967	1285.8	2483.3	3781
5	75	861.1	871.6	574	1174.3	1188.6	783	1494.6	1512.8	997
	85	853.7	1012.8	975	1164.1	1381.1	1329	1481.6	1757.7	1692
	95	845.9	1160.9	1371	1153.4	1582.8	1904	1468.0	2014.4	2430
	105	837.7	1316.9	1734	1142.2	1795.5	2401	1453.7	2285.1	3062
	115	829.0	1479.0	2128	1130.3	2016.5	2941	1438.6	2566.4	3748
10	75	957.7	879.4	451	1306.0	1199.2	615	1662.1	1526.2	783
	85	949.8	1028.1	875	1295.2	1402.0	1193	1648.4	1784.4	1518
	95	941.7	1185.1	1312	1284.0	1615.9	1817	1634.2	2056.6	2312
	105	933.3	1350.4	1685	1272.5	1841.2	2336	1619.6	2343.2	2981
	115	924.1	1523.7	2095	1260.0	2077.4	2898	—	—	—
15	75	1061.8	880.9	305	1448.0	1201.3	415	1842.9	1528.9	529
	85	1053.4	1038.5	756	1436.5	1416.1	1030	1828.3	1802.4	1311
	95	1044.9	1204.5	1242	1424.9	1642.5	1693	1813.5	2090.4	2155
	105	1036.2	1379.4	1625	1413.0	1880.8	2257	1798.3	2393.6	2880
	115	1026.8	1562.5	2047	1400.1	2130.4	2835	—	—	—
20	75	1173.7	874.6	240	1600.9	1193.3	255	2037.9	1519.3	265
	85	1164.9	1043.8	617	1588.6	1423.3	841	2021.8	1811.5	1070
	95	1156.0	1218.0	1130	1576.4	1660.9	1541	2006.3	2113.9	1961
	105	1146.9	1403.3	1554	1563.9	1913.3	2162	1990.4	2435.1	2759
	115	1137.2	1596.8	1987	1550.7	2177.2	2756	—	—	—
25	75	1294.4	865.2	192	1765.5	1180.3	203	2247.3	1502.6	210
	85	1284.6	1041.1	451	1751.7	1419.7	615	2229.5	1806.9	782
	95	1275.2	1227.1	1000	1738.9	1673.3	1364	2213.1	2129.7	1736
	105	1265.7	1421.0	1473	1725.9	1937.5	2052	—	—	—
	115	1255.7	1625.6	1915	1712.3	2216.4	2660	—	—	—
30	75	1423.6	850.4	149	1941.6	1159.9	156	2471.3	1476.5	160
	85	1413.5	1031.7	292	1927.7	1407.2	354	2453.5	1790.9	451
	95	1402.8	1228.3	845	1913.0	1675.0	1152	2434.7	2131.9	1466
	105	1392.9	1432.9	1383	1899.3	1953.7	1929	—	—	—
	115	1382.5	1648.2	1832	1885.2	2247.3	2547	—	—	—
35	75	1561.3	834.3	110	2129.3	1137.8	114	2710.2*	1448.2*	117*
	85	1551.2	1019.2	239	2115.5	1390.2	252	2692.7	1769.7	259
	95	1539.3	1220.8	661	2099.2	1664.8	900	2671.7	2118.8	1146
	105	1528.7	1438.3	1284	2084.6	1961.1	1793	—	—	—
	115	1518.0	1663.3	1737	2070.0	2267.9	2418	—	—	—
40	75	1709.2	817.7	75	2330.9	1115.2	77	2987.0*	1324.3*	65*
	85	1697.8	1000.8	190	2315.3	1365.0	199	2946.9	1737.5	204
	95	1686.1	1209.5	458	2299.3	1649.4	625	2926.3	2099.2	795
	105	1673.5	1434.1	1157	2282.2	1955.7	1578	—	—	—
	115	1662.4	1673.4	1634	2266.9	2281.7	2277	—	—	—

R-717

ECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz with flash-type economizer (See Economizer Operation section for selections based on direct expansion or shell and coil economizers). NOTE: Ratings based on liquid subcooling by flash-type economizer, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect, no liquid subcooling from condenser or external source. No allowance for vapor line pressure drop or economizing vessel temperature split is included in the above ratings. * Chiller Ports required, contact the factory.

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)
1080				
-40	75	611.0	1438.0	2144
	85	599.9	1635.5	2625
	95	586.8	1860.5	3182
	105	573.1	2127.0	3843
-35	115	558.0	2454.9	4654
	75	705.7	1502.1	2113
	85	694.0	1698.3	2588
	95	681.5	1923.3	3137
-30	105	666.8	2178.7	3771
	115	651.6	2480.1	4518
	75	810.6	1568.8	2077
	85	798.4	1770.3	2556
-25	95	785.3	1994.5	3099
	105	771.4	2249.7	3724
	115	754.9	2538.2	4441
	75	926.5	1634.7	2028
-20	85	913.7	1847.0	2521
	95	900.0	2074.9	3067
	105	885.6	2330.0	3686
	115	870.1	2618.1	4393
-15	75	1053.7	1698.1	1964
	85	1040.7	1923.0	2473
	95	1026.5	2162.5	3033
	105	1011.1	2419.5	3651
-10	115	995.2	2708.4	4354
	75	1193.2	1756.3	1884
	85	1179.8	1996.5	2409
	95	1165.1	2249.5	2986
-5	105	1149.4	2518.9	3620
	115	—	—	—
	75	1345.7	1806.8	1785
	85	1331.6	2065.7	2330
0	95	1316.7	2334.1	2923
	105	1300.3	2617.9	3574
	115	—	—	—
	75	1511.7	1850.2	1671
0	85	1497.3	2125.6	2227
	95	1481.7	2414.4	2842
	105	—	—	—
	115	—	—	—
0	75	1692.2	1885.6	1493
	85	1677.2	2178.2	2109
	95	—	—	—
	105	—	—	—
115	—	—	—	

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)
1080				
5	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
10	115	—	—	—
	75	—	—	—
	85	—	—	—
	95	—	—	—
15	105	—	—	—
	115	—	—	—
	75	—	—	—
	85	—	—	—
20	95	—	—	—
	105	—	—	—
	115	—	—	—
	75	—	—	—
25	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
30	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
35	115	—	—	—
	75	—	—	—
	85	—	—	—
	95	—	—	—
40	105	—	—	—
	115	—	—	—
	75	—	—	—
	85	—	—	—
40	95	—	—	—
	105	—	—	—
	115	—	—	—
	75	—	—	—

R-507

ECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz with flash-type economizer (See Economizer Operation section for selections based on direct expansion or shell and coil economizers). NOTE: Ratings based on liquid subcooling by flash-type economizer, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect, no liquid subcooling from condenser or external source. No allowance for vapor line pressure drop or economizing vessel temperature split is included in the above ratings. * Chiller Ports required, contact the factory.

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Unit with higher than standard 300 PSIG DWP required for some tabulated conditions shown.
		100			134			177			
-40	75	86.8	193.0	0	115.9	258.3	0	154.6	339.8	0	
	85	84.2	214.7	26	112.5	287.4	30	149.7	377.3	33	
	95	81.5	238.8	69	108.8	319.7	81	144.7	418.9	97	
	105	78.5	265.7	120	104.8	355.5	142	139.1	465.0	174	
	115	75.1	296.1	182	100.3	396.3	214	133.0	517.2	267	
-35	75	97.2	199.8	0	129.9	267.4	0	173.2	352.1	0	
	85	94.3	222.1	15	126.0	297.4	18	167.8	390.7	18	
	95	91.3	247.0	58	122.0	330.7	68	162.3	433.7	81	
	105	88.1	274.4	110	117.6	367.4	128	156.2	480.8	158	
	115	84.5	305.1	171	112.8	408.5	200	149.6	533.5	249	
-30	75	108.5	206.2	0	145.0	276.1	0	193.5	363.3	0	
	85	105.2	229.4	6	140.6	307.2	7	187.3	403.8	4	
	95	102.0	255.2	49	136.3	341.7	57	181.4	448.4	67	
	105	98.5	283.3	100	131.5	379.4	117	174.8	496.9	142	
	115	94.5	314.5	161	126.2	421.4	187	167.5	550.7	233	
-25	75	120.7	211.2	0	161.2	282.8	0	215.1	372.1	0	
	85	117.0	236.4	0	156.4	316.6	0	208.5	416.4	0	
	95	113.5	263.1	40	151.6	352.5	47	201.8	462.8	53	
	105	109.6	292.1	91	146.4	391.4	106	194.7	513.0	129	
	115	105.3	324.1	153	140.6	434.4	177	186.7	568.1	219	
-20	75	133.7	215.1	0	178.7	288.0	0	238.4	378.9	0	
	85	129.8	242.4	0	173.4	324.7	0	231.3	426.9	0	
	95	125.8	270.7	32	168.1	362.8	37	223.9	476.5	41	
	105	121.6	300.9	83	162.4	403.2	96	216.0	528.7	116	
	115	116.9	333.7	145	156.1	447.4	167	207.4	585.4	206	
-15	75	147.7	218.0	0	197.4	291.9	0	263.3	383.9	0	
	85	143.4	247.3	0	191.6	331.3	0	255.6	435.3	0	
	95	139.0	277.6	24	185.7	372.0	28	247.5	488.5	29	
	105	134.4	309.2	76	179.5	414.5	87	239.0	543.9	105	
	115	129.3	343.2	138	172.7	460.1	158	229.6	602.4	195	
-10	75	162.7	219.6	0	217.4	293.9	0	289.9	386.5	0	
	85	158.1	250.9	0	211.2	336.1	0	281.6	441.2	0	
	95	153.1	283.4	16	204.6	379.8	19	272.7	498.3	18	
	105	148.1	317.0	69	197.8	425.0	79	263.5	558.0	94	
	115	142.6	352.3	131	190.4	472.4	149	253.2	619.0	185	
-5	75	178.7	220.2	0	238.7	294.7	0	318.7*	389.1*	0*	
	85	173.7	253.1	0	232.0	339.0	0	309.3	445.0	0	
	95	168.2	287.5	8	224.8	385.2	9	299.5	504.8	6	
	105	162.7	324.0	62	217.3	434.3	71	289.6	569.4	84	
	115	156.7	360.9	125	209.2	484.0	142	278.5	635.3	175	
0	75	195.9	220.4	0	261.6	294.7	0	348.5*	386.7*	0*	
	85	190.3	254.2	0	254.2	340.3	0	339.3*	449.8*	0*	
	95	184.3	290.4	0	246.3	389.1	1	328.1	509.6	0	
	105	178.3	329.2	55	238.2	441.2	62	317.3	577.3	72	
	115	171.7	369.1	120	229.3	494.9	135	305.4	648.5	165	
5	75	214.0	219.5	0	285.7	293.5	0	380.7*	384.9*	0*	
	85	208.0	254.6	0	277.8	340.6	0	370.3*	446.9*	0*	
	95	201.5	291.9	0	269.2	391.0	0	359.2*	517.3*	0*	
	105	195.0	333.2	48	260.5	446.5	54	346.8	583.2	62	
	115	187.8	375.7	113	250.7	503.7	127	333.9	658.4	155	
10	75	233.2	217.5	0	311.4*	290.7*	0*	415.0*	381.4*	0*	
	85	226.9	254.0	0	303.0	339.7	0	403.4*	444.7*	0*	
	95	219.8	292.5	0	293.6	391.6	0	391.3*	513.9*	0*	
	105	212.6	334.9	40	284.0	448.6	45	378.0	586.0	51	
	115	204.9	380.6	107	273.6	510.1	119	364.1	665.0	144	
15	75	253.8	214.8	0	338.7*	287.0*	0*	451.1*	376.1*	0*	
	85	246.7	252.3	0	329.5*	337.4*	0*	438.9*	441.9*	0*	
	95	239.3	292.2	0	319.5	391.1	0	425.2*	511.1*	0*	

R-507

ECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz with flash-type economizer (See Economizer Operation section for selections based on direct expansion or shell and coil economizers). NOTE: Ratings based on liquid subcooling by flash-type economizer, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect, no liquid subcooling from condenser or external source. No allowance for vapor line pressure drop or economizing vessel temperature split is included in the above ratings. * Chiller Ports required, contact the factory.

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		100			134			177		
15	105	231.3	335.5	34	308.9	449.4	38	411.6*	589.5*	43*
	115	222.9	383.3	100	297.7	513.6	111	396.0	669.0	134
20	75	275.4	210.4	0	367.6*	281.0*	0*	489.6*	368.8*	0*
	85	267.9	249.6	0	357.6*	333.6*	0*	476.3*	437.0*	0*
	95	259.7	290.9	0	346.9	389.1	0	461.6*	508.7*	0*
	105	251.2	335.4	28	335.4	449.0	31	446.2*	585.9*	34*
	115	242.0	384.2	93	—	—	—	430.4*	675.1*	126*
25	75	298.3*	204.8*	0*	398.1*	273.4*	0*	530.1*	358.2*	0*
	85	290.3	245.6	0	387.5*	328.1*	0*	515.8*	430.0*	0*
	95	281.3	288.1	0	375.7*	385.3*	0*	500.2*	504.1*	0*
	105	272.1	334.1	23	363.4	447.2	25	483.2*	582.8*	27*
	115	262.2	384.2	87	—	—	—	465.7*	670.6*	115*
30	75	322.5*	197.9*	0*	430.3*	264.1*	0*	572.9*	344.4*	0*
	85	313.8*	240.1*	0*	418.9*	320.7*	0*	557.6*	420.4*	0*
	95	304.4	284.4	0	406.4*	380.2*	0*	540.8*	497.5*	0*
	105	294.2	331.6	18	392.8*	443.6*	20*	522.4*	579.0*	21*
	115	283.6	383.1	81	—	—	—	503.0*	666.8*	106*
35	75	350.3*	181.0*	0*	467.3*	241.5*	0*	622.3*	314.7*	0*
	85	338.7*	233.6*	0*	452.0*	311.8*	0*	601.6*	407.3*	0*
	95	328.6	279.2	0	438.6*	373.0*	0*	583.5*	488.7*	0*
	105	317.5	327.7	14	423.9*	438.2*	16*	563.9*	572.6*	16*
	115	306.0	380.7	76	—	—	—	542.8*	663.0*	99*
40	75	—	—	—	—	—	—	—	—	—
	85	364.9*	225.2*	0*	486.9*	300.5*	0*	648.0*	391.4*	0*
	95	354.0*	272.6*	0*	472.5*	364.1*	0*	628.5*	476.6*	0*
	105	342.2	322.6	11	456.8*	431.2*	12*	607.4*	563.8*	12*
	115	329.5	376.7	71	—	—	—	584.7*	656.9*	92*
		222			270			316		
-40	75	195.0	429.5	0	241.2	532.5	0	278.8	616.8	0
	85	188.9	476.9	37	233.7	591.4	42	270.2	685.0	41
	95	182.5	529.5	110	225.7	656.7	121	261.0	760.5	120
	105	175.5	587.8	196	217.0	729.0	216	250.9	844.3	215
	115	167.7	653.7	300	207.3	810.8	330	239.8	938.9	330
-35	75	218.5	445.0	0	270.3	551.7	0	312.4	639.0	0
	85	211.7	494.0	20	262.0	612.7	23	302.8	709.6	23
	95	204.8	548.4	91	253.3	680.2	100	292.8	787.9	99
	105	197.1	608.0	176	243.8	754.3	193	281.8	873.7	192
	115	188.6	674.7	278	233.3	837.0	304	269.7	969.7	303
-30	75	244.0	459.2	0	302.1*	633.6*	0*	348.8	659.2	0
	85	236.4	510.5	5	292.4	633.3	6	338.0	733.4	6
	95	228.8	567.1	75	283.0	703.5	82	327.2	815.0	80
	105	220.5	628.5	159	272.7	779.9	173	315.2	903.5	171
	115	211.2	696.6	259	261.2	864.5	283	302.0	1001.6	280
-25	75	271.3	470.2	0	336.3*	630.4*	0*	387.7	674.9	0
	85	263.1	526.5	0	326.1*	731.6*	44*	376.1	756.1	0
	95	254.6	585.3	60	315.0	726.1	65	364.1	841.1	64
	105	245.6	648.9	143	303.7	805.3	156	351.1	932.9	153
	115	235.5	718.8	243	291.2	892.1	264	336.7	1033.7	260
-20	75	301.3*	504.4*	0*	372.7*	625.0*	0*	429.4	686.7	0
	85	291.7	539.8	0	361.7*	728.4*	12*	417.0	775.0	0
	95	282.4	602.7	46	350.0*	841.1*	111*	403.8	866.0	49
	105	272.5	668.8	129	337.0	829.9	140	389.6	961.4	136
	115	261.6	740.8	228	323.5	919.6	247	374.0	1065.5	242
-15	75	332.8*	500.1*	0*	411.6*	619.6*	0*	474.1	695.3	0
	85	323.1*	583.0*	0*	399.7*	722.7*	0*	460.6	789.6	0
	95	312.2	617.9	33	387.3*	839.6*	79*	446.2	887.4	35

Unit with higher than standard 300 PSIG DWP required for some tabulated conditions shown.

R-507

ECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz with flash-type economizer (See Economizer Operation section for selections based on direct expansion or shell and coil economizers). NOTE: Ratings based on liquid subcooling by flash-type economizer, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect, no liquid subcooling from condenser or external source. No allowance for vapor line pressure drop or economizing vessel temperature split is included in the above ratings. * Chiller Ports required, contact the factory.

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
			222			270			316	
-15	105	301.4	688.1	116	373.3*	962.9*	192*	430.8	988.9	122
	115	289.5	762.4	214	358.0	946.3	231	413.8	1096.4	226
-10	75	366.3*	495.2*	0*	452.9*	613.4*	0*	521.9	699.3	0
	85	355.9*	578.0*	0*	440.2*	716.4*	0*	507.2	799.8	0
	95	344.0	630.2	20	426.7*	833.7*	50*	491.6	904.7	22
	105	332.3	705.8	104	412.0*	963.3*	161*	474.9	1014.1	108
	115	319.4	783.3	202	394.8	972.2	217	456.4	1126.2	211
-5	75	401.8*	491.3*	0*	496.8*	608.4*	0*	572.8	700.5	0
	85	390.8*	572.8*	0*	483.3*	709.8*	0*	556.9	805.8	0
	95	378.8*	665.5*	22*	468.5*	825.2*	25*	539.7	915.9	8
	105	365.3	720.3	91	453.0*	957.6*	131*	521.9	1034.3	95
	115	351.2	803.9	191	435.1*	1101.0*	259*	501.8	1155.3	199
0	75	439.3*	488.2*	0*	543.2*	604.3*	0*	626.8	698.2	0
	85	427.8*	568.1*	0*	529.0*	703.8*	0*	609.9	808.1	0
	95	414.8*	659.3*	3*	513.0*	817.3*	4*	591.1	923.7	0
	105	401.3*	765.1*	98*	496.3*	948.7*	104*	571.7	1047.9	81
	115	385.1	820.4	180	—	—	—	550.2	1178.4	185
5	75	479.9*	485.7*	0*	593.3*	601.1*	0*	684.5*	694.1*	0*
	85	466.9*	564.3*	0*	577.2*	698.8*	0*	666.0	807.0	0
	95	453.0*	653.6*	0*	560.2*	810.0*	0*	645.8	927.3	0
	105	438.4*	758.4*	77*	542.1*	940.2*	82*	624.6	1057.7	69
	115	422.2*	876.7*	190*	—	—	—	601.4	1195.6	171
10	75	523.1*	481.1*	0*	646.6*	595.2*	0*	745.9*	687.1*	0*
	85	508.5*	561.3*	0*	628.7*	694.8*	0*	725.5*	802.6*	0*
	95	493.5*	649.1*	0*	610.2*	804.1*	0*	703.9	927.5	0
	105	477.6*	751.0*	60*	590.5*	930.8*	64*	680.7	1061.7	56
	115	460.2*	868.7*	168*	—	—	—	655.5	1206.6	158
15	75	568.5*	474.2*	0*	702.7*	586.5*	0*	810.4*	676.8*	0*
	85	553.2*	557.6*	0*	683.8*	690.1*	0*	789.0*	796.8*	0*
	95	536.2*	645.5*	0*	662.9*	799.3*	0*	765.1*	923.6*	0*
	105	519.1*	745.0*	46*	—	—	—	740.1	1062.5	46
	115	500.3*	860.6*	150*	—	—	—	712.8	1212.6	145
20	75	616.9*	464.9*	0*	762.5*	574.8*	0*	879.2*	662.9*	0*
	85	600.3*	551.2*	0*	742.0*	681.9*	0*	855.9*	787.1*	0*
	95	582.0*	642.1*	0*	719.5*	794.9*	0*	830.3*	918.1*	0*
	105	562.6*	740.1*	36*	—	—	—	802.9	1059.2	36
	115	542.6*	853.2*	135*	—	—	—	773.4	1214.0	133
25	75	667.9*	451.4*	0*	825.4*	558.0*	0*	951.6*	643.4*	0*
	85	650.0*	542.2*	0*	803.4*	670.6*	0*	926.6*	773.6*	0*
	95	630.5*	636.2*	0*	779.4*	787.3*	0*	899.3*	908.9*	0*
	105	609.1*	736.0*	29*	—	—	—	869.1*	1052.7*	28*
	115	587.1*	847.2*	123*	—	—	—	837.4	1211.6	122
30	75	721.8*	433.9*	0*	892.0*	536.3*	0*	1028.1*	618.1*	0*
	85	702.6*	529.9*	0*	868.4*	655.2*	0*	1001.3*	755.7*	0*
	95	681.6*	627.5*	0*	842.5*	776.3*	0*	971.9*	895.9*	0*
	105	658.6*	730.9*	22*	—	—	—	939.5*	1044.7*	22*
	115	634.0*	842.1*	113*	—	—	—	904.6*	1204.8*	112*
35	75	784.0*	396.5*	0*	968.7*	489.9*	0*	1116.4*	564.6*	0*
	85	758.0*	513.3*	0*	936.7*	634.5*	0*	1079.9*	731.5*	0*
	95	735.4*	616.3*	0*	—	—	—	1048.3*	879.3*	0*
	105	710.8*	722.5*	17*	—	—	—	1013.7*	1032.0*	16*
	115	684.1*	837.0*	105*	—	—	—	975.8*	1196.6*	103*
40	75	—	—	—	—	—	—	—	—	—
	85	816.4*	493.1*	0*	1008.9*	609.4*	0*	1162.9*	702.4*	0*
	95	792.0*	600.8*	0*	—	—	—	1128.8*	856.7*	0*
	105	765.6*	711.2*	12*	—	—	—	1091.7*	1015.1*	12*
	115	736.9*	829.0*	98*	—	—	—	1050.9*	1184.3*	95*

Unit with higher than standard 300 PSIG DWP required for some tabulated conditions shown.

R-507

ECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz with flash-type economizer (See Economizer Operation section for selections based on direct expansion or shell and coil economizers). NOTE: Ratings based on liquid subcooling by flash-type economizer, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect, no liquid subcooling from condenser or external source. No allowance for vapor line pressure drop or economizing vessel temperature split is included in the above ratings. * Chiller Ports required, contact the factory.

Sat Suct Temp °F	Sat Cond Temp °F	Capacity	Power	OCHR	Capacity	Power	OCHR	Capacity	Power	OCHR
		TR	BHP	(kBtu/hr)	TR	BHP	(kBtu/hr)	TR	BHP	(kBtu/hr)
		399			480			546		
-40	75	351.6	780.2	0	423.4	942.1	0	481.4	1073.3	0
	85	340.7	866.8	45	410.3	1047.2	49	466.4	1193.4	52
	95	329.1	962.6	130	396.2	1163.1	139	450.4	1325.7	144
	105	316.4	1068.8	234	380.9	1291.7	248	432.8	1472.4	257
-35	75	393.9	808.2	0	474.3	975.7	0	539.2	1111.3	0
	85	381.9	898.0	25	459.8	1084.8	28	522.7	1236.1	30
	95	369.3	997.3	107	444.6	1205.0	114	505.3	1373.3	119
	105	355.3	1106.2	207	427.7	1336.9	219	486.0	1523.9	227
-30	75	439.8	833.5	0	529.5	1006.0	0	601.9	1145.6	0
	85	426.2	928.0	8	513.2	1120.8	10	583.4	1276.9	11
	95	412.5	1031.5	87	496.6	1246.1	93	564.4	1420.0	96
	105	397.4	1143.9	184	478.3	1382.3	195	543.5	1575.5	201
-25	75	488.8	853.0	0	588.4	1029.2	0	669.5*	1255.3*	0*
	85	474.2	956.4	0	571.0	1154.7	0	649.0	1315.2	0
	95	459.0	1064.4	69	552.6	1285.6	74	628.0	1464.8	77
	105	442.6	1181.0	164	532.7	1426.9	173	605.3	1626.1	178
-20	75	541.3	867.6	0	653.3*	1102.2*	0*	742.1*	1252.5*	0*
	85	525.7	979.9	0	632.9	1182.7	0	720.0*	1448.1*	12*
	95	509.0	1095.7	53	612.8	1323.0	57	696.4	1507.1	59
	105	491.1	1216.9	146	591.1	1470.0	153	671.6	1674.9	158
-15	75	597.6	878.1	0	721.0*	1091.5*	0*	819.5*	1242.2*	0*
	85	580.7	998.1	0	700.7*	1275.4*	0*	795.8*	1447.8*	0*
	95	562.6	1122.5	38	677.2	1355.1	41	770.5*	1665.8*	82*
	105	543.1	1251.4	130	653.5	1511.2	136	—	—	—
-10	75	659.0*	895.6*	0*	793.1*	1079.5*	0*	901.4*	1228.2*	0*
	85	639.3	1010.5	0	771.4*	1263.2*	0*	876.8*	1437.8*	0*
	95	619.7	1144.0	24	748.0*	1471.8*	54*	849.2*	1668.3*	54*
	105	598.6	1282.8	115	720.4	1548.8	120	—	—	—
-5	75	722.6*	887.5*	0*	869.7*	1069.5*	0*	988.4*	1216.6*	0*
	85	703.4*	1036.8*	0*	846.6*	1250.2*	0*	962.2*	1422.6*	0*
	95	680.4	1157.7	10	821.1*	1455.9*	27*	—	—	—
	105	657.8	1308.0	100	791.6	1578.7	105	—	—	—
0	75	789.8*	880.8*	0*	950.5*	1061.1*	0*	1080.2*	1206.9*	0*
	85	769.6*	1027.2*	0*	926.3*	1238.2*	0*	1052.7*	1408.7*	0*
	95	745.0	1167.1	0	898.8*	1440.8*	6*	—	—	—
	105	720.5	1324.7	86	869.4*	1674.1*	110*	—	—	—
5	75	862.4*	875.4*	0*	1037.8*	1054.4*	0*	1179.5*	1199.0*	0*
	85	839.5*	1019.1*	0*	1010.3*	1228.1*	0*	1148.2*	1396.9*	0*
	95	815.3*	1183.0*	0*	981.2*	1426.4*	0*	—	—	—
	105	787.1	1336.6	72	949.4*	1657.7*	86*	—	—	—
10	75	939.6*	866.2*	0*	1130.8*	1043.1*	0*	1285.1*	1186.0*	0*
	85	914.1*	1012.5*	0*	1100.1*	1219.8*	0*	—	—	—
	95	887.7*	1173.5*	0*	1068.3*	1414.5*	0*	—	—	—
	105	859.4*	1359.7*	64*	—	—	—	—	—	—
15	75	1020.8*	853.0*	0*	1228.5*	1027.0*	0*	1396.1*	1167.6*	0*
	85	994.0*	1004.9*	0*	1196.2*	1210.3*	0*	—	—	—
	95	964.1*	1165.5*	0*	1160.2*	1404.5*	0*	—	—	—

Unit with higher than standard 300 PSIG DWP required for some tabulated conditions shown.

R-507

ECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz with flash-type economizer (See Economizer Operation section for selections based on direct expansion or shell and coil economizers). NOTE: Ratings based on liquid subcooling by flash-type economizer, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect, no liquid subcooling from condenser or external source. No allowance for vapor line pressure drop or economizing vessel temperature split is included in the above ratings. * Chiller Ports required, contact the factory.

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		399			480			546		
15	105	933.6*	1347.5*	49*	—	—	—	—	—	—
	115	899.8*	1558.7*	158*	—	—	—	—	—	—
20	75	1107.5*	835.4*	0*	1332.7*	1005.6*	0*	1514.6*	1143.2*	0*
	85	1078.3*	992.3*	0*	1297.6*	1194.9*	0*	—	—	—
	95	1046.1*	1158.2*	0*	1258.9*	1395.3*	0*	—	—	—
	105	1011.7*	1337.3*	38*	—	—	—	—	—	—
	115	975.6*	1543.7*	140*	—	—	—	—	—	—
25	75	1198.6*	810.6*	0*	1442.4*	975.6*	0*	1639.2*	1109.0*	0*
	85	1167.3*	975.1*	0*	1404.6*	1174.0*	0*	—	—	—
	95	1133.0*	1146.2*	0*	—	—	—	—	—	—
	105	1095.0*	1328.4*	30*	—	—	—	—	—	—
	115	1055.3*	1531.2*	127*	—	—	—	—	—	—
30	75	1294.9*	778.7*	0*	1558.2*	937.1*	0*	1770.9*	1065.1*	0*
	85	1261.3*	952.3*	0*	1517.8*	1146.3*	0*	—	—	—
	95	1224.4*	1129.5*	0*	—	—	—	—	—	—
	105	1183.7*	1317.9*	23*	—	—	—	—	—	—
	115	1139.4*	1520.4*	116*	—	—	—	—	—	—
35	75	1406.1*	711.1*	0*	1691.9*	855.8*	0*	1917.7*	996.4*	0*
	85	1360.2*	921.6*	0*	1636.8*	1109.2*	0*	—	—	—
	95	1320.6*	1108.2*	0*	—	—	—	—	—	—
	105	1277.1*	1301.5*	17*	—	—	—	—	—	—
	115	1229.1*	1509.6*	106*	—	—	—	—	—	—
40	75	—	—	—	—	—	—	—	—	—
	85	1464.7*	884.9*	0*	1762.5*	1064.9*	0*	—	—	—
	95	1421.9*	1079.6*	0*	—	—	—	—	—	—
	105	1375.2*	1279.8*	12*	—	—	—	—	—	—
	115	1323.6*	1493.6*	98*	—	—	—	—	—	—
		496			676			856		
-40	75	433.8	995.6	0	592.2	1365.4	0	753.5	1744.6	0
	85	420.5	1106.4	65	574.0	1518.5	72	730.2	1941.3	78
	95	406.1	1227.5	157	554.1	1685.5	171	704.7	2155.5	183
	105	390.3	1361.5	269	532.5	1870.2	293	676.9	2392.6	312
	115	372.8	1512.7	407	508.3	2078.7	443	645.8	2660.2	470
-35	75	486.0	1031.7	0	663.3	1414.2	0	843.9	1806.1	0
	85	471.3	1146.5	44	643.2	1573.0	49	818.3	2010.3	54
	95	455.6	1272.2	131	621.7	1746.3	143	790.6	2232.6	152
	105	438.4	1409.7	240	597.9	1935.9	260	760.1	2476.0	275
	115	419.3	1563.1	372	571.8	2147.7	403	726.4	2747.9	426
-30	75	542.5	1064.4	0	740.3	1458.1	0	941.9	1861.2	0
	85	526.0	1185.0	25	717.8	1625.2	28	913.1	2076.2	32
	95	509.0	1316.0	109	694.4	1805.8	118	883.1	2307.9	126
	105	490.3	1458.1	214	668.7	2001.8	231	850.0	2559.4	244
	115	469.5	1615.2	342	640.1	2218.7	368	813.2	2838.0	388
-25	75	602.9	1089.5	0	822.6	1491.6	0	1046.5	1903.1	0
	85	585.0	1220.8	8	798.3	1673.5	10	1015.6	2137.0	12
	95	566.3	1358.3	89	772.6	1863.0	97	982.5	2380.0	103
	105	546.0	1505.7	191	744.7	2066.4	205	946.6	2641.1	216
	115	523.5	1667.4	315	713.6	2289.6	338	906.6	2927.6	355
-20	75	667.6	1108.2	0	910.8	1516.4	0	1161.8*	2037.3*	0*
	85	648.3	1250.5	0	884.6	1713.1	0	1125.3	2186.6	0
	95	628.0	1398.3	72	856.7	1917.0	78	1089.4	2448.1	82
	105	605.8	1551.7	170	826.1	2128.6	182	1050.1	2719.5	191
	115	581.3	1718.8	292	792.4	2359.2	312	1006.7	3015.4	326
-15	75	736.9	1121.7	0	1005.2	1534.0	0	1281.9*	2017.5*	0*
	85	716.1	1274.0	0	976.9	1744.1	0	1245.8*	2357.5*	3*
	95	693.9	1432.7	55	946.6	1963.2	60	1203.8	2506.1	63

Unit with higher than standard 300 PSIG DWP required for some tabulated conditions shown.

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ECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz with flash-type economizer (See Economizer Operation section for selections based on direct expansion or shell and coil economizers). NOTE: Ratings based on liquid subcooling by flash-type economizer, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect, no liquid subcooling from condenser or external source. No allowance for vapor line pressure drop or economizing vessel temperature split is included in the above ratings. * Chiller Ports required, contact the factory.

Unit with higher than standard 300 PSIG DWP required for some tabulated conditions shown.	Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	
				496			676			856		
-15	105	105	669.8	1595.9	152	913.4	2188.1	162	1161.0	2794.5	170	
	115	115	643.2	1768.5	271	876.7	2426.3	288	1113.7	3100.0	301	
-10	75	75	810.9	1127.8	0	1108.2*	1563.8*	0*	1409.5*	2034.0*	0*	
	85	85	788.3	1290.1	0	1075.4	1765.2	0	1371.3*	2333.2*	0*	
	95	95	764.3	1460.3	39	1042.5	2000.0	43	1329.5*	2720.8*	77*	
	105	105	738.3	1636.2	135	1006.7	2242.2	144	1279.6	2862.4	150	
	115	115	709.3	1816.3	252	966.7	2490.7	267	1228.1	3180.9	278	
-5	75	75	889.9	1129.3	0	1215.0*	1549.1*	0*	1544.9*	2050.2*	0*	
	85	85	865.4	1299.3	0	1180.4	1776.9	0	1504.4*	2338.8*	0*	
	95	95	839.1	1477.8	24	1144.5	2023.0	26	1459.3*	2689.9*	46*	
	105	105	811.2	1668.4	119	1106.1	2285.3	126	1409.8*	3124.3*	168*	
	115	115	779.7	1863.0	235	1062.7	2553.3	248	—	—	—	
0	75	75	973.5	1125.2	0	1327.7*	1536.8*	0*	1688.0*	2065.7*	0*	
	85	85	947.4	1302.7	0	1294.0*	1792.8*	0*	1645.3*	2356.5*	0*	
	95	95	918.6	1489.7	10	1253.0	2038.3	11	1597.1*	2678.2*	25*	
	105	105	888.4	1689.8	102	1211.4	2313.4	108	1544.0*	3091.3*	135*	
	115	115	854.8	1899.7	218	1164.9	2602.3	229	—	—	—	
5	75	75	1062.8	1118.5	0	1449.5*	1527.0*	0*	1842.6*	2081.5*	0*	
	85	85	1034.4	1300.5	0	1411.2*	1778.0*	0*	1794.1*	2373.6*	0*	
	95	95	1003.3	1494.5	0	1370.6*	2064.6*	1*	1742.8*	2696.5*	12*	
	105	105	970.4	1705.1	87	1323.1	2333.2	92	—	—	—	
	115	115	934.2	1926.8	201	1273.1	2638.1	210	—	—	—	
10	75	75	1157.8*	1106.8*	0*	1579.0*	1510.8*	0*	2007.0*	2085.1*	0*	
	85	85	1126.6	1293.1	0	1536.4*	1766.1*	0*	1952.9*	2391.0*	0*	
	95	95	1093.2	1494.4	0	1492.1*	2047.2*	0*	1896.7*	2715.1*	2*	
	105	105	1057.4	1711.1	73	1444.4*	2372.7*	81*	—	—	—	
	115	115	1018.0	1944.0	184	1387.4	2660.3	192	—	—	—	
15	75	75	1257.6*	1090.1*	0*	1715.1*	1487.6*	0*	2180.0*	2065.8*	0*	
	85	85	1224.8*	1283.5*	0*	1670.3*	1752.3*	0*	2123.0*	2403.1*	0*	
	95	95	1188.1	1487.7	0	1620.3*	2032.7*	0*	2059.3*	2733.8*	0*	
	105	105	1149.5	1711.8	60	1569.1*	2350.6*	64*	—	—	—	
	115	115	1106.8	1953.0	168	1511.5*	2718.2*	182*	—	—	—	
20	75	75	1364.2*	1067.8*	0*	1860.4*	1456.9*	0*	2364.8*	2026.0*	0*	
	85	85	1328.5*	1267.6*	0*	1811.7*	1730.2*	0*	2302.5*	2393.8*	0*	
	95	95	1289.0	1478.6	0	1757.8*	2019.5*	0*	—	—	—	
	105	105	1246.7	1706.2	49	1700.0*	2332.1*	51*	—	—	—	
	115	115	1200.8	1954.8	153	1638.7*	2691.2*	161*	—	—	—	
25	75	75	1476.2*	1036.3*	0*	2013.2*	1413.7*	0*	2559.1*	1968.4*	0*	
	85	85	1437.8*	1245.9*	0*	1960.8*	1700.2*	0*	2492.1*	2361.8*	0*	
	95	95	1395.8*	1463.6*	0*	1903.5*	1998.3*	0*	—	—	—	
	105	105	1349.4	1695.3	39	1839.8*	2316.1*	41*	—	—	—	
	115	115	1299.8	1950.5	140	1772.4*	2668.6*	144*	—	—	—	
30	75	75	1594.6*	995.8*	0*	2174.6*	1358.2*	0*	2764.3*	1893.5*	0*	
	85	85	1553.5*	1217.0*	0*	2118.5*	1660.4*	0*	2692.6*	2309.4*	0*	
	95	95	1508.2*	1442.5*	0*	2056.8*	1969.0*	0*	—	—	—	
	105	105	1458.4*	1682.2*	32*	1988.5*	2297.4*	33*	—	—	—	
	115	115	1403.9	1939.0	127	1913.4*	2649.2*	131*	—	—	—	
35	75	75	1731.2*	909.6*	0*	2360.9*	1240.6*	0*	3001.2*	1731.3*	0*	
	85	85	1675.0*	1178.1*	0*	2284.3*	1607.1*	0*	2903.4*	2238.0*	0*	
	95	95	1626.5*	1415.7*	0*	2218.0*	1932.0*	0*	—	—	—	
	105	105	1573.2*	1661.6*	25*	2145.1*	2268.6*	26*	—	—	—	
	115	115	1514.2*	1925.6*	117*	2063.8*	2630.0*	120*	—	—	—	
40	75	75	—	—	—	—	—	—	—	—	—	
	85	85	1803.3*	1131.4*	0*	2459.3*	1543.3*	0*	3125.9*	2151.7*	0*	
	95	95	1750.9*	1379.4*	0*	2387.8*	1882.1*	0*	—	—	—	
	105	105	1693.9*	1634.3*	19*	2309.7*	2230.7*	20*	—	—	—	
	115	115	1630.4*	1905.6*	107*	—	—	—	—	—	—	

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ECONOMIZED, HIGH STAGE - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz with flash-type economizer (See Economizer Operation section for selections based on direct expansion or shell and coil economizers). NOTE: Ratings based on liquid subcooling by flash-type economizer, 10°F Suction Superheat with Superheat not contributing to the refrigeration effect, no liquid subcooling from condenser or external source. No allowance for vapor line pressure drop or economizing vessel temperature split is included in the above ratings. * Chiller Ports required, contact the factory.

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)
1080				
-40	75	950.6	2210.7	0
	85	920.8	2461.2	85
	95	888.2	2733.7	194
	105	852.6	3035.4	329
	115	—	—	—
-35	75	1064.6	2287.4	0
	85	1031.8	2547.7	58
	95	996.4	2830.4	161
	105	957.4	3140.2	290
	115	—	—	—
-30	75	1188.1	2356.2	0
	85	1151.5	2630.2	36
	95	1113.0	2924.8	133
	105	1070.6	3244.7	256
	115	—	—	—
-25	75	1322.6*	2599.5*	0*
	85	1280.8	2706.3	15
	95	1238.3	3015.1	109
	105	—	—	—
	115	—	—	—
-20	75	1465.6*	2577.4*	0*
	85	1421.9*	3004.3*	38*
	95	1373.1	3100.2	87
	105	—	—	—
	115	—	—	—
-15	75	1617.3*	2551.5*	0*
	85	1571.3*	2983.5*	5*
	95	—	—	—
	105	—	—	—
	115	—	—	—
-10	75	1778.4*	2571.7*	0*
	85	1729.6*	2951.5*	0*
	95	—	—	—
	105	—	—	—
	115	—	—	—
-5	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
0	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)
1080				
5	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
10	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
15	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
20	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
25	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
30	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
35	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—
40	75	—	—	—
	85	—	—	—
	95	—	—	—
	105	—	—	—
	115	—	—	—

Unit with higher than standard 300 PSIG DWP required for some tabulated conditions shown.

R-717		BOOSTER - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.								
		NOTE: Capacities based on Liquid Intermediate Temperature and no Suction Superheat.								
		* Chiller Ports required, contact the factory.								
Sat Suct Temp °F	Sat Intrmed Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		100			134			177		
-80	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—
-75	-20	20.0	34.1	43	26.6	45.5	56	35.5	58.2	69
	-10	19.3	39.1	56	25.8	52.2	73	34.4	66.8	91
	0	18.6	43.7	68	24.8	58.3	89	33.2	74.7	112
	10	17.9	47.7	79	23.8	63.6	103	31.8	81.6	131
	20	17.1	54.8	97	22.7	73.1	127	30.4	93.7	162
	30	16.2	64.5	122	21.6	86.0	160	28.9	109.8	201
-70	-20	23.9	35.0	38	31.9	46.7	50	42.6	59.8	60
	-10	23.2	40.4	52	31.0	53.9	68	41.3	69.1	84
	0	22.5	45.3	65	30.0	60.4	84	40.0	77.6	106
	10	21.7	49.5	76	28.9	66.0	98	38.6	84.9	125
	20	20.8	56.1	93	27.8	74.8	120	37.1	96.1	154
	30	19.9	64.1	113	26.6	85.4	148	35.5	109.6	186
-65	-20	28.5	35.8	33	38.0	47.8	43	50.7	60.5	49
	-10	27.7	41.8	48	37.0	55.7	62	49.3	71.6	76
	0	26.9	47.0	61	35.9	62.7	79	47.9	80.7	99
	10	26.1	51.5	72	34.8	68.6	93	46.4	88.4	119
	20	25.1	57.9	89	33.5	77.2	115	44.7	99.5	147
	30	24.2	65.1	107	32.2	86.7	139	43.0	111.7	175
-60	-20	33.7	36.3	26	44.9	48.4	33	60.0	60.8	36
	-10	32.9	42.9	42	43.8	57.2	54	58.5	73.2	65
	0	32.0	48.7	56	42.7	64.9	72	57.0	83.6	90
	10	31.1	53.5	68	41.5	71.3	88	55.4	92.0	112
	20	30.1	60.0	85	40.1	80.1	109	53.5	103.3	140
	30	29.0	66.9	102	38.7	89.1	132	51.7	115.1	165
-55	-20	39.6	36.2	17	52.9	48.3	22	70.5	60.7	21
	-10	38.7	43.6	35	51.6	58.2	45	68.9	73.6	50
	0	37.8	50.2	50	50.4	66.9	65	67.2	86.2	80
	10	36.8	55.6	64	49.1	74.1	82	65.5	95.7	103
	20	35.7	62.2	80	47.6	83.0	103	63.5	107.2	132
	30	34.6	69.1	97	46.1	92.1	125	61.6	119.1	156
-50	-20	46.4	36.4	9	61.8	48.5	11	82.5	60.8	7
	-10	45.4	43.9	26	60.5	58.6	33	80.7	74.0	35
	0	44.4	51.3	43	59.1	68.4	55	78.9	87.4	65
	10	43.3	57.4	58	57.8	76.5	74	77.1	98.9	93
	20	42.1	64.4	75	56.1	85.9	95	74.9	111.1	123
	30	40.9	71.5	92	54.5	95.3	117	72.7	123.4	146
-45	-20	53.9	37.4	2	71.9	49.9	2	95.9	62.3	0
	-10	52.9	43.8	16	70.5	58.4	20	94.1	73.7	18
	0	51.8	51.9	35	69.0	69.2	44	92.1	87.7	49
	10	50.6	59.0	51	67.5	78.7	64	90.1	101.4	80
	20	49.3	66.6	69	65.7	88.7	87	87.7	114.9	112
	30	47.9	73.7	85	63.9	98.3	108	85.3	127.4	134
-40	-20	62.5	37.1	0	83.4	49.5	0	111.2	61.4	0
	-10	61.3	44.3	7	81.8	59.1	9	109.1	74.4	3
	0	60.1	51.9	24	80.1	69.2	30	106.9	87.8	31
	10	58.9	59.9	42	78.5	79.9	53	104.8	102.1	62

R-717

BOOSTER - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.

NOTE: Capacities based on Liquid Intermediate Temperature and no Suction Superheat.

*** Chiller Ports required, contact the factory.**

Sat Suct Temp °F	Sat Intrmed Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		100			134			177		
-40	20	57.4	68.5	62	76.5	91.3	77	102.1	118.2	99
	30	55.9	76.0	79	74.5	101.3	100	99.4	131.3	130
	40	54.4	84.6	101	72.6	112.8	128	96.8	146.3	160
-35	-20	72.3	34.1	0	96.4	45.5	0	128.6	56.1	0
	-10	70.7	45.3	0	94.3	60.4	0	125.8	75.7	0
	0	69.5	51.9	13	92.6	69.2	17	123.6	87.7	13
	10	68.1	60.2	32	90.8	80.3	39	121.2	102.3	43
	20	66.5	69.9	53	88.7	93.2	66	118.3	119.8	82
	30	64.9	78.3	72	86.5	104.4	90	115.4	135.4	117
	40	63.1	86.7	93	84.2	115.6	117	112.3	150.2	145
-30	-20	83.2	27.6	0	110.9	36.8	0	—	—	—
	-10	81.4	44.0	0	108.6	58.7	0	144.8	73.1	0
	0	79.9	53.0	4	106.6	70.7	6	142.1	89.3	0
	10	78.5	60.3	20	104.6	80.4	25	139.5	102.4	24
	20	76.7	70.7	43	102.2	94.2	53	136.4	120.4	62
	30	74.9	79.9	63	99.8	106.6	78	133.2	137.9	100
	40	73.0	89.5	85	97.4	119.3	106	129.9	155.0	131
-25	-20	—	—	—	—	—	—	—	—	—
	-10	93.4	39.6	0	124.5	52.8	0	166.1	65.5	0
	0	91.6	53.3	0	122.1	71.1	0	162.9	89.5	0
	10	90.0	60.8	10	120.0	81.0	12	160.1	103.0	7
	20	88.0	70.8	31	117.3	94.4	38	156.5	120.5	42
	30	86.0	81.3	53	114.7	108.4	65	153.0	139.3	81
	40	84.0	91.5	75	112.0	121.9	93	149.4	158.5	114
-20	-20	—	—	—	—	—	—	—	—	—
	-10	106.6	31.4	0	142.2	41.8	0	—	—	—
	0	104.6	50.7	0	139.5	67.6	0	186.1	84.7	0
	10	102.8	61.8	0	137.1	82.4	0	182.9	104.5	0
	20	100.6	70.7	19	134.1	94.2	23	178.9	120.3	21
	30	98.4	81.9	42	131.2	109.1	51	175.0	139.8	61
	40	96.2	93.3	66	128.2	124.4	80	171.1	160.7	103
-15	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	119.1	44.8	0	158.8	59.7	0	211.8	74.5	0
	10	117.0	61.1	0	156.1	81.5	0	208.2	102.9	0
	20	114.6	71.0	7	152.8	94.6	8	203.8	120.7	2
	30	112.2	81.7	29	149.5	108.9	35	199.5	139.5	39
	40	109.7	94.4	55	146.2	125.9	66	195.0	161.7	82
-10	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	132.8	57.0	0	177.0	76.0	0	236.1	95.7	0
	20	130.0	72.0	0	—	—	—	231.2	122.1	0
	30	127.4	81.2	16	169.9	108.2	19	226.6	138.6	17
	40	124.5	94.6	42	166.1	126.1	50	221.5	161.9	61
-5	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	150.1	49.4	0	200.1	65.9	0	269.2*	73.4*	0*
	20	147.1	71.0	0	196.2	94.6	0	261.6	119.9	0
	30	144.1	81.6	4	192.2	108.9	5	256.4	139.2	0
	40	141.1	93.9	28	188.1	125.2	33	250.9	160.8	38
0	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	166.0	66.6	0	221.3	88.9	0	295.1	112.2	0
	30	162.5	82.4	0	—	—	—	289.0	140.1	0
	40	159.2	93.3	15	212.3	124.3	17	283.1	159.6	16

R-717

BOOSTER - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.

NOTE: Capacities based on Liquid Intermediate Temperature and no Suction Superheat.

*** Chiller Ports required, contact the factory.**

Sat Suct Temp °F	Sat Intrmed Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		222			270			316		
-80	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—
-75	-20	44.7	73.3	85	55.2	90.5	103	63.6	104.3	113
	-10	43.3	84.1	112	53.5	103.9	135	61.7	119.7	150
	0	41.8	94.1	138	51.6	116.2	167	59.4	133.9	186
	10	40.1	102.8	162	49.5	127.0	197	57.0	146.3	219
	20	38.2	118.0	200	47.2	145.8	246	—	—	—
	30	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—
-70	-20	53.6	75.3	74	66.2	93.0	89	76.3	107.2	98
	-10	52.0	87.0	103	64.3	107.5	124	74.1	123.8	136
	0	50.4	97.7	130	62.3	120.7	157	71.7	139.1	173
	10	48.6	106.9	154	60.1	132.0	187	69.2	152.0	207
	20	46.7	121.0	190	57.7	149.5	232	66.4	172.2	259
	30	44.7	138.1	229	55.2	170.6	278	63.6	196.4	320
	40	42.4	162.1	292	52.4	200.2	360	60.3	230.6	415
-65	-20	63.8	76.2	60	78.8	94.2	72	90.8	108.5	78
	-10	62.1	90.1	93	76.7	111.3	111	88.4	128.2	121
	0	60.4	101.6	121	74.6	125.5	145	85.9	144.5	159
	10	58.5	111.3	146	72.2	137.5	176	83.2	158.4	194
	20	56.3	125.3	181	69.6	154.7	221	80.2	178.2	244
	30	54.2	140.7	214	67.0	173.8	257	77.1	200.2	296
	40	51.8	160.9	269	64.0	198.8	327	73.7	229.0	377
-60	-20	75.5	76.6	44	93.3	94.7	52	107.4	109.0	56
	-10	73.6	92.2	79	91.0	113.8	94	104.8	131.1	102
	0	71.7	105.3	110	88.6	130.1	132	102.0	149.8	143
	10	69.7	115.8	137	86.1	143.1	164	99.2	164.8	179
	20	67.4	130.1	171	83.3	160.7	208	95.9	185.1	229
	30	65.1	144.9	202	80.4	179.0	241	92.6	206.2	274
	40	62.5	163.3	251	77.3	201.7	302	89.0	232.4	348
-55	-20	88.8	76.4	26	109.7	94.4	30	126.4	108.7	32
	-10	86.8	92.7	61	107.2	114.5	72	123.4	131.9	78
	0	84.7	108.5	97	104.6	134.1	115	120.5	154.4	124
	10	82.5	120.5	126	101.9	148.9	150	117.4	171.5	163
	20	80.0	135.0	161	98.8	166.8	194	113.9	192.1	212
	30	77.5	150.0	189	95.8	185.3	225	110.3	213.4	251
	40	74.8	167.7	237	92.4	207.1	283	106.4	238.6	323
-50	-20	103.9	76.6	8	128.3	94.6	10	147.8	109.0	10
	-10	101.6	93.1	42	125.5	115.1	50	144.6	132.5	53
	0	99.4	110.0	79	122.7	135.9	93	141.4	156.5	100
	10	97.0	124.5	113	119.9	153.8	133	138.1	177.2	144
	20	94.3	139.9	149	116.4	172.9	179	134.1	199.1	193
	30	91.6	155.4	176	113.1	191.9	208	130.3	221.1	225
	40	88.7	173.1	223	109.6	213.9	265	126.2	246.3	297
-45	-20	120.8	78.4	0	149.2	96.9	0	171.8	111.6	0
	-10	118.4	92.7	22	146.3	114.6	26	168.5	132.0	27
	0	116.0	110.4	58	143.2	136.4	69	165.0	157.1	73
	10	113.5	127.6	96	140.2	157.7	113	161.4	181.6	121
	20	110.4	144.6	135	136.4	178.7	161	157.1	205.8	172
	30	107.4	160.4	161	132.7	198.1	188	152.8	228.2	197
	40	104.4	179.1	209	129.0	221.3	246	148.5	254.9	269
-40	-20	140.1	77.3	0	174.2*	87.9*	0*	199.3	110.1	0
	-10	137.4	93.7	4	169.7	115.8	5	195.5	133.3	5
	0	134.6	110.5	37	166.3	136.5	43	191.5	157.2	45
	10	131.9	128.5	74	163.0	158.8	87	187.7	182.9	92

R-717

BOOSTER - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.
NOTE: Capacities based on Liquid Intermediate Temperature and no Suction Superheat.
*** Chiller Ports required, contact the factory.**

Sat Suct Temp °F	Sat Intrmed Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		222			270			316		
-40	20	128.6	148.8	119	158.8	183.8	140	183.0	211.8	149
	30	125.2	165.4	155	154.7	204.3	188	178.2	235.3	201
	40	121.9	184.2	192	150.6	227.6	224	173.5	262.2	236
-35	-20	161.9	70.7	0	201.5*	78.1*	0*	230.3	100.5	0
	-10	158.5	95.3	0	196.9*	111.4*	0*	225.5	135.6	0
	0	155.6	110.5	16	192.2	136.5	18	221.4	157.2	19
	10	152.6	128.8	52	188.5	159.1	60	217.1	183.3	63
	20	149.0	150.9	98	184.0	186.4	115	212.0	214.7	121
	30	145.4	170.5	139	179.6	210.6	167	206.8	242.6	177
	40	141.4	189.1	173	174.7	233.6	201	201.2	269.1	209
-30	-20	—	—	—	—	—	—	—	—	—
	-10	182.4	92.1	0	226.9*	103.9*	0*	259.5	131.0	0
	0	179.0	112.5	0	221.1	138.9	0	254.7	160.0	0
	10	175.7	128.9	29	217.1	159.2	33	250.0	183.4	34
	20	171.8	151.6	74	212.2	187.2	86	244.4	215.7	89
	30	167.7	173.7	118	207.2	214.6	142	238.6	247.1	149
	40	163.6	195.2	155	202.1	241.1	179	232.7	277.7	183
-25	-20	—	—	—	—	—	—	—	—	—
	-10	210.8*	73.5*	0*	260.4*	90.8*	0*	297.6	117.3	0
	0	205.1	112.6	0	254.9*	130.4*	0*	291.8	160.3	0
	10	201.5	129.8	8	249.0	160.3	9	286.8	184.6	9
	20	197.0	151.8	50	243.4	187.5	57	280.4	216.0	59
	30	192.7	175.4	95	238.0	216.6	113	274.2	249.5	117
	40	188.2	199.6	134	232.4	246.5	153	267.7	284.0	155
-20	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	236.0*	96.9*	0*	291.5*	119.7*	0*	333.4	151.8	0
	10	230.3	131.6	0	284.5*	162.5*	0*	327.7	187.2	0
	20	225.3	151.5	25	278.4	187.2	29	320.6	215.6	29
	30	220.4	176.1	71	272.3	217.5	83	313.6	250.5	85
	40	215.4	202.4	120	266.1	250.0	146	306.5	287.9	151
-15	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	268.9*	83.3*	0*	332.2*	102.9*	0*	379.5	133.5	0
	10	262.1	129.6	0	325.8*	148.7*	0*	373.0	184.4	0
	20	256.7	151.9	3	317.1	187.7	3	365.2	216.2	3
	30	251.2	175.7	46	310.3	217.0	52	357.4	250.0	53
	40	245.6	203.6	95	303.4	251.5	114	349.4	289.7	117
-10	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	299.5*	108.9*	0*	370.0*	134.6*	0*	423.0	171.6	0
	20	291.2	153.7	0	361.7*	180.7*	0*	414.3	218.8	0
	30	285.3	174.5	19	352.5	215.6	22	406.0	248.4	22
	40	278.9	203.9	70	344.5	251.9	83	396.9	290.2	84
-5	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	338.9*	92.4*	0*	418.7*	114.1*	0*	478.2	148.4	0
	20	331.6*	139.2*	0*	409.6*	171.9*	0*	468.8	214.8	0
	30	322.8	175.3	0	398.8*	216.5*	0*	459.3	249.4	0
	40	315.9	202.5	43	390.3	250.1	50	449.6	288.1	50
0	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	374.4*	127.1*	0*	462.6*	157.0*	0*	528.8	201.1	0
	30	363.9	176.5	0	452.2*	205.4*	0*	517.9	251.1	0
	40	356.5	201.0	18	440.4	248.3	20	507.3	286.0	20

R-717		BOOSTER - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.								
		NOTE: Capacities based on Liquid Intermediate Temperature and no Suction Superheat.								
		* Chiller Ports required, contact the factory.								
Sat Suct Temp °F	Sat Intrmed Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		399			480			546		
-80	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—
-75	-20	80.1	131.3	137	96.4	158.0	159	109.6	179.6	175
	-10	77.6	150.7	182	93.4	181.4	211	—	—	—
	0	74.8	168.6	226	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—
-70	-20	96.0	134.9	118	115.6	162.4	135	131.3	184.5	148
	-10	93.3	155.9	164	112.2	187.6	190	127.5	213.2	209
	0	90.3	175.1	210	108.7	210.7	243	123.5	239.5	273
	10	87.1	191.5	252	104.8	230.4	297	119.1	261.8	337
	20	83.6	216.9	318	100.6	260.9	383	114.3	296.5	435
	30	80.0	247.4	403	—	—	—	—	—	—
-65	-20	114.3	136.6	93	137.6	164.3	106	156.3	186.7	116
	-10	111.3	161.5	145	133.9	194.3	166	152.2	220.8	182
	0	108.1	182.0	191	130.1	219.0	220	147.9	248.9	242
	10	104.7	199.5	234	126.0	240.0	271	143.2	272.8	307
	20	101.0	224.4	295	121.5	270.1	355	138.1	306.9	403
	30	97.1	252.1	373	116.9	303.3	449	132.8	344.7	510
-60	-20	135.3	137.3	66	162.8	165.2	75	185.0	187.7	82
	-10	131.9	165.1	121	158.7	198.7	138	180.4	225.8	150
	0	128.5	188.7	171	154.6	227.0	195	175.7	258.0	213
	10	124.9	207.5	215	150.3	249.7	246	170.8	283.7	270
	20	120.8	233.1	275	145.3	280.5	324	165.2	318.8	369
	30	116.7	259.7	345	140.4	312.4	415	159.5	355.0	472
-55	-20	159.1	136.9	38	191.4	164.7	43	217.6	187.2	46
	-10	155.4	166.1	91	187.0	199.9	103	212.5	227.1	112
	0	151.7	194.5	147	182.5	234.0	167	207.4	265.9	181
	10	147.8	215.9	194	177.9	259.8	221	202.2	295.3	241
	20	143.4	241.9	253	172.5	291.1	290	196.0	330.8	328
	30	138.9	268.8	316	167.1	323.4	380	189.9	367.5	432
-50	-20	186.1	137.3	12	224.0	165.2	13	254.5	187.7	14
	-10	182.1	166.9	62	219.1	200.8	69	249.0	228.2	75
	0	178.0	197.1	117	214.2	237.2	132	243.4	269.6	142
	10	173.9	223.1	169	209.2	268.4	191	237.8	305.0	207
	20	168.9	250.8	229	203.2	301.7	260	230.9	342.9	283
	30	164.1	278.4	283	197.4	334.9	341	224.4	380.6	387
-45	-20	216.4	140.5	0	260.3	169.1	0	295.9	192.2	0
	-10	212.2	166.2	31	255.4	200.0	35	290.2	227.2	37
	0	207.8	197.8	84	250.0	238.0	94	284.1	270.5	101
	10	203.3	228.7	141	244.6	275.2	158	278.0	312.7	170
	20	197.8	259.1	203	238.0	311.8	229	270.5	354.3	247
	30	192.5	287.4	243	231.6	345.8	292	263.2	392.9	332
-40	-20	251.0	138.6	0	302.0	166.8	0	343.2	189.5	0
	-10	246.1	167.9	5	296.2	202.0	6	336.6	229.6	6
	0	241.2	198.0	52	290.2	238.2	58	329.8	270.7	62
	10	236.4	230.3	106	284.5	277.1	118	323.3	314.9	127

R-717

BOOSTER - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.

NOTE: Capacities based on Liquid Intermediate Temperature and no Suction Superheat.

* Chiller Ports required, contact the factory.

Sat Suct Temp °F	Sat Intrmed Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		399			480			546		
-40	20	230.4	266.7	174	277.2	320.9	195	315.0	364.6	209
	30	224.4	296.3	236	269.9	356.6	265	306.8	405.2	286
	40	218.4	330.1	294	262.8	397.2	353	298.7	451.4	401
-35	-20	290.1	126.6	0	349.0	152.3	0	398.5*	161.9*	0*
	-10	283.9	170.7	0	341.6	205.4	0	388.2	233.4	0
	0	278.8	198.0	21	335.4	238.2	23	381.2	270.7	25
	10	273.4	230.8	72	328.9	277.7	79	373.8	315.6	85
	20	266.9	270.4	139	321.2	325.4	155	365.0	369.8	165
	30	260.5	305.5	206	313.4	367.6	230	356.1	417.8	247
-30	40	253.3	338.8	242	304.8	407.7	291	346.4	463.3	331
	-20	—	—	—	—	—	—	—	—	—
	-10	326.8	165.0	0	393.2	198.5	0	448.7*	214.3*	0*
	0	320.7	201.5	0	385.9	242.4	0	438.5	275.5	0
	10	314.8	231.0	39	378.8	277.9	43	430.5	315.8	45
	20	307.8	271.6	102	370.3	326.8	112	420.8	371.3	120
-25	30	300.5	311.2	171	361.5	374.5	190	410.9	425.6	202
	40	293.1	349.7	209	352.6	420.8	229	400.7	478.2	257
	-20	—	—	—	—	—	—	—	—	—
	-10	374.7	147.7	0	454.5*	158.4*	0*	514.9*	188.5*	0*
	0	367.5	201.8	0	442.1	242.9	0	504.3*	267.0*	0*
	10	361.1	232.5	10	434.5	279.7	11	493.8	317.9	12
-20	20	353.1	272.0	66	424.8	327.2	73	482.8	371.9	77
	30	345.3	314.2	133	415.4	378.0	147	472.1	429.6	156
	40	337.1	357.6	174	405.6	430.3	190	461.0	489.0	200
	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	419.8	191.1	0	508.7*	208.9*	0*	576.5*	247.2*	0*
-15	10	412.6	235.7	0	496.4	283.6	0	564.2	322.3	0
	20	403.7	271.5	33	485.8	326.6	35	552.1	371.2	37
	30	394.9	315.5	96	475.1	379.6	105	540.0	431.4	110
	40	385.9	362.6	172	464.4	436.3	189	527.7	495.8	200
	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
-10	0	481.8*	149.3*	0*	579.7*	179.6*	0*	656.6*	214.0*	0*
	10	469.7	232.3	0	565.1	279.5	0	644.6*	305.3*	0*
	20	459.9	272.2	4	553.4	327.6	4	628.9	372.3	4
	30	450.1	314.8	59	541.5	378.7	64	615.4	430.4	67
	40	440.0	364.9	132	529.5	439.0	144	601.7	498.9	152
	-5	-20	—	—	—	—	—	—	—	—
-10		—	—	—	—	—	—	—	—	—
0		—	—	—	—	—	—	—	—	—
10		532.7	216.0	0	645.6*	234.8*	0*	731.6*	278.4*	0*
20		521.8	275.5	0	627.8	331.5	0	715.8*	368.4*	0*
30		511.2	312.7	24	615.1	376.3	26	699.0	427.6	27
0	40	499.8	365.4	94	601.3	439.6	101	683.4	499.6	106
	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	607.3*	165.5*	0*	730.7*	199.1*	0*	827.6*	237.4*	0*
	20	590.3	270.5	0	714.9*	300.0*	0*	810.4*	353.7*	0*
0	30	578.4	314.1	0	695.9	377.9	0	790.9	429.4	0
	40	566.1	362.8	55	681.1	436.5	59	774.1	496.1	62
	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
0	20	670.9*	227.7*	0*	807.2*	273.9*	0*	914.7*	325.2*	0*
	30	652.1	316.2	0	789.2*	358.4*	0*	894.8*	419.9*	0*
	40	638.8	360.2	22	768.6	433.3	23	873.5	492.5	24

R-717		BOOSTER - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.								
		NOTE: Capacities based on Liquid Intermediate Temperature and no Suction Superheat.								
		* Chiller Ports required, contact the factory.								
Sat Suct Temp °F	Sat Intrmed Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		496			676			856		
-80	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—
-75	-20	99.7	163.4	158	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	40	—	—	—	—	—	—	—	—	—
-70	-20	119.5	167.9	134	162.9	228.9	166	207.4	291.3	192
	-10	116.0	194.0	189	—	—	—	201.4	336.7	316
	0	112.4	217.9	248	—	—	—	—	—	—
	10	108.4	238.2	307	—	—	—	—	—	—
	20	104.0	269.8	396	—	—	—	180.5	468.2	687
	40	99.6	307.7	502	135.8	419.7	684	—	—	—
-65	-20	142.2	169.9	105	194.0	231.7	128	246.8	294.9	146
	-10	138.5	200.9	165	188.8	273.9	202	240.3	348.6	255
	0	134.5	226.4	219	183.5	308.8	296	233.5	393.0	377
	10	130.3	248.2	279	177.7	338.4	381	226.2	430.7	484
	20	125.6	279.2	367	171.3	380.8	500	218.0	484.6	637
	40	120.8	313.6	464	164.8	427.7	632	209.7	544.3	805
-60	-20	168.3	170.8	74	229.5	232.9	88	292.1	296.4	100
	-10	164.1	205.4	135	223.8	280.1	164	284.9	356.5	187
	0	159.9	234.7	193	218.0	320.1	245	277.4	407.3	312
	10	155.4	258.1	246	211.9	352.0	335	269.7	448.0	426
	20	150.3	290.0	335	204.9	395.5	457	260.8	503.4	582
	40	145.1	323.0	429	197.9	440.5	585	251.9	560.6	745
-55	-20	198.0	170.3	41	269.9	232.3	49	343.6	295.6	55
	-10	193.4	206.6	101	263.7	281.8	120	335.6	358.6	136
	0	188.7	241.9	164	257.4	329.9	197	327.6	419.9	230
	10	183.9	268.6	218	250.8	366.3	282	319.2	466.2	359
	20	178.4	301.0	298	243.2	410.4	407	309.6	522.4	518
	40	172.8	334.3	393	235.6	455.9	536	299.9	580.3	682
-50	-20	231.6	170.8	12	315.8	232.9	15	401.9	296.4	16
	-10	226.5	207.6	67	308.9	283.1	79	393.2	360.3	88
	0	221.5	245.2	129	302.0	334.4	153	384.4	425.6	172
	10	216.3	277.5	188	295.0	378.4	225	375.4	481.7	273
	20	210.1	311.9	258	286.5	425.4	347	364.7	541.4	442
	40	204.2	346.3	352	278.4	472.3	480	354.3	601.0	611
-45	-20	269.2	174.8	0	367.1	238.4	0	467.2	303.4	0
	-10	264.0	206.7	33	360.1	281.9	38	458.3	358.8	42
	0	258.5	246.1	91	352.5	335.6	107	448.6	427.2	119
	10	252.9	284.5	154	344.9	388.0	182	438.9	493.8	204
	20	246.1	322.4	225	335.6	439.6	276	427.2	559.5	351
	40	239.4	357.5	302	326.5	487.5	412	415.6	620.5	525
-40	-20	232.7	399.3	421	317.3	544.5	574	403.9	693.0	731
	-20	312.2	172.4	0	425.8	235.1	0	541.9	299.2	0
	-10	306.2	208.9	6	417.6	284.9	7	531.5	362.6	7
	0	300.1	246.3	55	409.2	335.9	64	520.8	427.5	70
	10	294.1	286.5	115	401.1	390.7	134	510.5	497.2	148

R-717

BOOSTER - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.

NOTE: Capacities based on Liquid Intermediate Temperature and no Suction Superheat.

*** Chiller Ports required, contact the factory.**

Sat Suct Temp °F	Sat Intrmed Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		496			676			856		
-40	20	286.6	331.7	190	390.9	452.4	224	497.5	575.8	250
	30	279.1	368.7	262	380.6	502.7	334	484.4	639.8	426
	40	271.8	410.7	365	370.6	560.0	498	471.6	712.8	634
-35	-20	360.9	157.5	0	492.1	214.8	0	631.2*	244.4*	0*
	-10	353.2	212.4	0	481.7	289.6	0	613.1	368.6	0
	0	346.8	246.3	22	472.9	335.8	25	601.9	427.4	28
	10	340.1	287.1	76	463.8	391.5	88	590.2	498.3	96
	20	332.1	336.4	150	452.8	458.7	174	576.3	583.8	192
	30	324.0	380.1	226	441.9	518.3	264	562.4	659.7	312
	40	315.2	421.5	301	429.8	574.8	411	547.0	731.6	523
-30	-20	—	—	—	—	—	—	—	—	—
	-10	406.6	205.2	0	554.4	279.9	0	705.6	356.2	0
	0	399.0	250.7	0	544.1	341.8	0	692.5	435.1	0
	10	391.7	287.3	41	534.1	391.8	46	679.8	498.7	50
	20	382.9	337.8	109	522.1	460.7	124	664.5	586.4	136
	30	373.8	387.2	185	509.8	528.0	214	648.8	672.0	235
	40	364.6	435.1	234	497.2	593.3	319	632.8	755.1	406
-25	-20	—	—	—	—	—	—	—	—	—
	-10	466.2	183.8	0	635.7	250.6	0	815.6*	284.2*	0*
	0	457.2	251.1	0	623.4	342.4	0	793.4	435.8	0
	10	449.3	289.2	11	612.7	394.4	12	779.8	502.0	13
	20	439.2	338.4	70	599.0	461.4	79	762.3	587.3	85
	30	429.5	390.9	142	585.8	533.0	162	745.5	678.4	177
	40	419.4	444.9	176	572.0	606.7	203	728.0	772.1	258
-20	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	522.3	237.8	0	712.2	324.2	0	912.9*	374.8*	0*
	10	513.3	293.3	0	700.0	399.9	0	890.9	509.0	0
	20	502.3	337.7	34	685.0	460.6	37	871.8	586.2	40
	30	491.3	392.4	101	670.0	535.2	113	852.7	681.1	122
	40	480.1	451.1	183	654.8	615.1	209	833.3	782.9	227
-15	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	594.5	209.1	0	810.7	285.2	0	1040.3*	322.3*	0*
	10	584.3	288.9	0	796.8	394.0	0	1020.5*	465.8*	0*
	20	572.2	338.7	4	780.3	461.9	4	993.1	587.8	4
	30	559.9	391.6	61	763.5	534.0	68	971.8	679.7	73
	40	547.4	453.9	139	746.5	619.0	157	950.1	787.8	169
-10	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	662.7	268.7	0	903.8	366.5	0	1158.6*	421.4*	0*
	20	649.1	342.7	0	885.2	467.3	0	1126.6	594.8	0
	30	636.0	389.1	25	867.3	530.6	27	1103.8	675.3	29
	40	621.7	454.6	97	847.8	619.9	108	1079.1	788.9	115
-5	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	749.2	232.5	0	1030.3*	280.8*	0*	1311.3*	357.4*	0*
	20	734.4	336.5	0	1001.5	458.9	0	1282.9*	538.4*	0*
	30	719.6	390.7	0	981.3	532.8	0	1248.9	678.1	0
	40	704.3	451.3	57	960.4	615.4	62	1222.4	783.3	66
0	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	828.5	315.0	0	1138.2*	386.3*	0*	1448.6*	491.6*	0*
	30	811.3	393.4	0	1106.3	536.4	0	1416.3*	643.2*	0*
	40	795.1	448.3	22	1084.2	611.3	24	1379.9	778.0	25

R-717

BOOSTER - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.

NOTE: Capacities based on Liquid Intermediate Temperature and no Suction Superheat.

*** Chiller Ports required, contact the factory.**

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)
1030				
-80	-20	—	—	—
	-10	—	—	—
	0	—	—	—
	10	—	—	—
	20	—	—	—
	30	—	—	—
-75	-20	—	—	—
	-10	—	—	—
	0	—	—	—
	10	—	—	—
	20	—	—	—
	30	—	—	—
-70	-20	—	—	—
	-10	—	—	—
	0	246.4	477.6	544
	10	—	—	—
	20	228.1	591.5	867
	30	218.3	674.7	1100
-65	-20	—	—	—
	-10	—	—	—
	0	295.0	496.4	476
	10	285.7	544.1	612
	20	275.4	612.1	804
	30	264.9	687.6	1017
-60	-20	—	—	—
	-10	—	—	—
	0	350.5	514.5	393
	10	340.6	565.9	538
	20	329.5	635.9	735
	30	318.2	708.2	941
-55	-20	—	—	—
	-10	—	—	—
	0	413.8	530.4	291
	10	403.2	588.9	454
	20	391.0	659.8	654
	30	378.8	733.0	862
-50	-20	—	—	—
	-10	—	—	—
	0	485.6	537.7	189
	10	474.2	608.4	345
	20	460.7	683.9	558
	30	447.6	759.2	772
-45	-20	—	—	—
	-10	—	—	—
	0	566.7	539.6	130
	10	554.5	623.7	224
	20	539.6	706.8	443
	30	524.9	783.7	663
-40	-20	—	—	—
	-10	—	—	—
	0	657.8	540.0	76
	10	644.8	628.1	161

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)
1030				
-40	20	628.4	727.3	305
	30	611.9	808.2	538
	40	595.8	900.4	801
-35	-20	797.3*	308.8*	0*
	-10	774.4	465.6	0
	0	760.4	539.9	30
	10	745.6	629.4	104
	20	728.0	737.5	209
	30	710.4	833.3	394
-30	-20	—	—	—
	-10	897.5*	411.2*	0*
	0	874.7	549.6	0
	10	858.7	630.0	54
	20	839.4	740.7	146
	30	819.6	848.8	255
-25	-20	—	—	—
	-10	1030.3*	359.0*	0*
	0	1002.3	550.5	0
	10	985.0	634.1	14
	20	963.0	741.8	91
	30	941.7	857.0	190
-20	-20	—	—	—
	-10	—	—	—
	0	1153.2*	473.5*	0*
	10	1125.4	643.0	0
	20	1101.2	740.4	42
	30	1077.1	860.4	130
-15	-20	—	—	—
	-10	—	—	—
	0	1314.1*	407.1*	0*
	10	1289.0*	588.4*	0*
	20	1254.4	742.5	4
	30	1227.5	858.6	77
-10	-20	—	—	—
	-10	—	—	—
	0	—	—	—
	10	1463.6*	532.3*	0*
	20	1431.1*	715.0*	0*
	30	1394.4	853.0	30
-5	-20	—	—	—
	-10	—	—	—
	0	—	—	—
	10	1656.4*	451.4*	0*
	20	1620.6*	680.1*	0*
	30	1577.6	856.6	0
0	-20	—	—	—
	-10	—	—	—
	0	—	—	—
	10	—	—	—
	20	1829.9*	621.0*	0*
	30	1789.0*	812.5*	0*
0	40	1743.1	982.8	26

R-507

BOOSTER - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.

NOTE: Capacities based on Liquid Intermediate Temperature and no Suction Superheat.

*** Chiller Ports required, contact the factory.**

Sat Suct Temp °F	Sat Intrmed Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		100			134			177		
-40	20	84.0	97.7	0	112.0	130.2	0	147.6	164.3	0
	30	79.7	107.9	0	106.2	143.9	0	139.6	182.6	0
	40	74.8	118.8	0	99.7	158.4	0	131.6	204.2	0
-35	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
-30	30	91.4	110.6	0	121.8	147.4	0	160.1	186.3	0
	40	85.8	122.3	0	114.4	163.1	0	151.0	209.6	0
	-20	—	—	—	—	—	—	—	—	—
-25	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	104.2	111.7	0	139.0	149.0	0	182.7*	188.4*	0*
-20	40	98.1	125.4	0	130.7	167.2	0	172.5	214.0	0
	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
-15	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	118.6	112.1	0	158.1	149.5	0	207.8*	189.1*	0*
	40	111.5	127.2	0	148.6	169.6	0	196.1	216.9	0
-10	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
-5	30	126.3	128.1	0	168.5	170.8	0	222.3*	218.4*	0*
	40	—	—	—	—	—	—	—	—	—
	-20	—	—	—	—	—	—	—	—	—
0	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—
0	40	160.5	127.2	0	214.0*	169.5*	0*	282.6*	217.0*	0*
	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
0	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—
	40	180.4	126.1	0	240.5*	168.1*	0*	317.2*	214.9*	0*
0	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
0	30	—	—	—	—	—	—	—	—	—
	40	201.8*	124.3*	0*	269.0*	165.8*	0*	354.8*	211.5*	0*

Unit with higher than standard 300 PSIG DWP required for some tabulated conditions shown.

R-507		BOOSTER - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.								
		NOTE: Capacities based on Liquid Intermediate Temperature and no Suction Superheat.								
		* Chiller Ports required, contact the factory.								
Sat Suct Temp °F	Sat Intrmed Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		222			270			316		
-40	20	185.9*	207.0*	0*	229.7*	255.7*	0*	264.5	294.5	0
	30	175.8	229.9	0	217.7*	288.1*	0*	250.2	327.1	0
	40	165.7	257.1	0	205.4*	332.6*	0*	235.8	365.8	0
-35	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	201.8*	235.1*	0*	249.3*	290.4*	0*	286.9	333.8	0
40	190.1	264.0	0	235.4*	333.1*	0*	270.5	375.6	0	
-30	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	230.0*	237.2*	0*	284.2*	293.0*	0*	327.3	337.5	0
40	217.6*	271.0*	0*	268.8*	334.8*	0*	309.1	383.5	0	
-25	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	261.7*	238.2*	0*	323.3*	294.2*	0*	372.3	338.9	0
40	247.0*	273.1*	0*	305.1*	337.4*	0*	351.4	388.6	0	
-20	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—
40	279.9*	275.1*	0*	345.8*	339.8*	0*	398.3	391.4	0	
-15	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—
40	316.0*	274.9*	0*	390.4*	339.6*	0*	449.7*	391.1*	0*	
-10	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—
40	355.8*	273.2*	0*	439.5*	337.5*	0*	506.3*	388.8*	0*	
-5	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—
40	399.5*	270.6*	0*	493.5*	334.3*	0*	568.4*	385.1*	0*	
0	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—
40	446.8*	266.3*	0*	551.9*	329.0*	0*	635.7*	379.0*	0*	

Unit with higher than standard 300 PSIG DWP required for some tabulated conditions shown.

R-507		BOOSTER - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.								
		NOTE: Capacities based on Liquid Intermediate Temperature and no Suction Superheat.								
		* Chiller Ports required, contact the factory.								
Sat Suct Temp °F	Sat Intrmed Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		399			480			546		
-40	20	333.1	370.8	0	400.8*	446.2*	0*	455.5*	507.1*	0*
	30	315.1	411.9	0	379.1	495.6	0	431.7*	571.5*	0*
	40	296.9	460.7	0	357.2	554.3	0	406.0	629.9	0
-35	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	361.3	420.3	0	435.1*	506.9*	0*	494.4*	576.0*	0*
	40	340.7	473.0	0	409.9	569.1	0	467.0*	660.6*	0*
-30	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	412.2*	425.0*	0*	495.9*	511.4*	0*	563.6*	581.2*	0*
	40	389.3	482.9	0	469.0*	584.3*	0*	533.0*	664.0*	0*
-25	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	468.9*	426.8*	0*	564.2*	513.5*	0*	641.1*	583.6*	0*
	40	442.6*	489.4*	0*	532.5*	588.8*	0*	605.1*	669.2*	0*
-20	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—
	40	501.6*	492.9*	0*	603.5*	593.0*	0*	685.9*	673.9*	0*
-15	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—
	40	566.2*	492.6*	0*	681.3*	592.6*	0*	774.3*	673.5*	0*
-10	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—
	40	637.6*	489.5*	0*	767.1*	589.0*	0*	871.8*	669.4*	0*
-5	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—
	40	715.8*	484.9*	0*	861.3*	583.4*	0*	978.8*	663.0*	0*
0	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—
	40	800.6*	477.2*	0*	963.2*	574.2*	0*	1094.7*	652.5*	0*

Unit with higher than standard 300 PSIG DWP required for some tabulated conditions shown.

R-507		BOOSTER - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.								
		NOTE: Capacities based on Liquid Intermediate Temperature and no Suction Superheat.								
		* Chiller Ports required, contact the factory.								
Sat Suct Temp °F	Sat Intrmed Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)	Capacity TR	Power BHP	OCHR (kBtu/hr)
		496			676			856		
-40	20	414.4	479.8	0	565.1	654.2	0	—	—	—
	30	391.6	532.5	0	534.1	726.2	0	—	—	—
	40	368.0	593.9	0	501.9	809.8	0	638.7	838.1	0
-35	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	449.1	543.4	0	612.5	741.0	0	—	—	—
40	422.3	609.7	0	575.9	831.5	0	732.9	871.3	0	
-30	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	512.4	549.5	0	698.7*	749.3*	0*	—	—	—
40	482.6	622.6	0	658.1	849.0	0	838.7*	905.8*	0*	
-25	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	582.9	551.7	0	794.8*	752.4*	0*	—	—	—
40	548.6	630.9	0	748.2*	860.4*	0*	952.2*	924.3*	0*	
-20	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—
40	621.8	635.4	0	848.0*	866.5*	0*	1079.3*	940.1*	0*	
-15	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—
40	702.0	635.0	0	957.3*	866.0*	0*	1218.4*	946.8*	0*	
-10	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—
40	790.4*	631.2*	0*	1077.9*	860.7*	0*	1371.8*	942.8*	0*	
-5	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—
40	887.4*	625.2*	0*	1210.2*	852.6*	0*	—	—	—	
0	-20	—	—	—	—	—	—	—	—	—
	-10	—	—	—	—	—	—	—	—	—
	0	—	—	—	—	—	—	—	—	—
	10	—	—	—	—	—	—	—	—	—
	20	—	—	—	—	—	—	—	—	—
	30	—	—	—	—	—	—	—	—	—
40	992.5*	615.3*	0*	1353.5*	839.0*	0*	—	—	—	

Unit with higher than standard 300 PSIG DWP required for some tabulated conditions shown.

R-507

BOOSTER - Capacity and Brake Horsepower Rating @ 3550 RPM 60 Hz.
NOTE: Capacities based on Liquid Intermediate Temperature and no Suction Superheat.
*** Chiller Ports required, contact the factory.**

Unit with higher than standard 300 PSIG DWP required for some tabulated conditions shown.

Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)
		1080		
-80	-20	—	—	—
	-10	—	—	—
	0	—	—	—
	10	—	—	—
	20	—	—	—
-75	-20	388.2	617.7	0
	-10	372.3	659.1	0
	0	355.3	713.4	0
	10	334.4	769.9	0
	20	314.6	720.6	0
-70	-20	455.8*	654.9*	0*
	-10	436.3	693.8	0
	0	417.8	743.6	0
	10	393.9	805.5	0
	20	370.4	762.6	0
-65	-20	509.7*	738.4*	0*
	-10	487.6	772.2	0
	0	461.9	840.5	0
	10	434.3	803.6	0
	20	408.7	689.9	0
-60	-20	592.7*	771.5*	0*
	-10	567.8*	829.2*	0*
	0	538.4	870.1	0
	10	507.3	843.3	0
	20	477.2	736.2	0
-55	-20	656.9*	861.5*	0*
	-10	626.6*	937.0*	0*
	0	590.4	879.6	0
	10	555.1	780.4	0
	20	524.1	919.7	0
-50	-20	723.2*	969.4*	0*
	-10	684.6	919.4	0
	0	643.8	821.3	0
	10	607.3	970.7	0
	20	—	—	—
-45	-20	832.0*	1004.3*	0*
	-10	792.1*	971.3*	0*
	0	—	—	—
	10	—	—	—
	20	—	—	—
-40	-20	—	—	—
	-10	—	—	—
	0	—	—	—

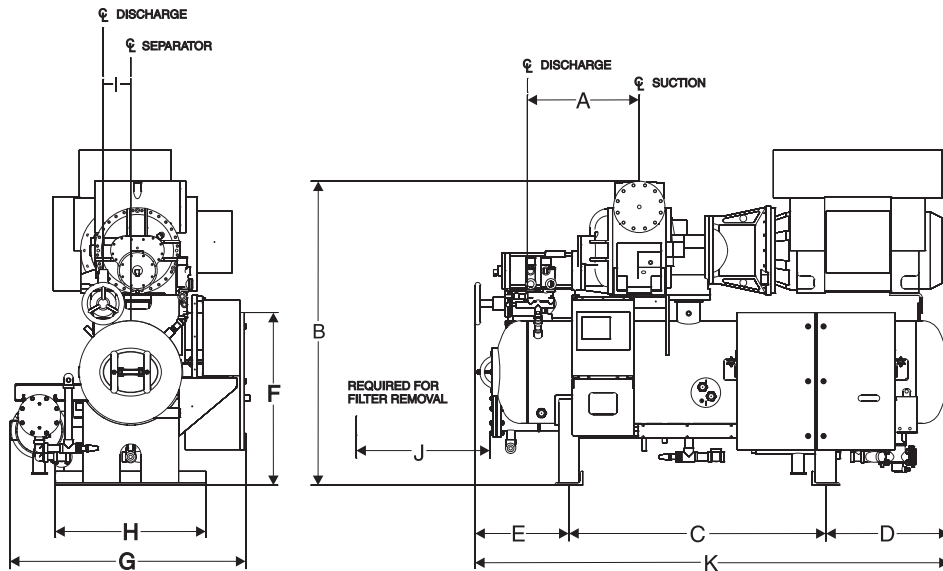
Sat Suct Temp °F	Sat Cond Temp °F	Capacity TR	Power BHP	OCHR (kBtu/hr)
		1080		
-40	20	—	—	—
	30	—	—	—
	40	806.8	1058.6	0
-35	-20	—	—	—
	-10	—	—	—
	0	—	—	—
	10	—	—	—
	20	—	—	—
-30	30	—	—	—
	40	928.1*	1124.3*	0*
	-20	—	—	—
	-10	—	—	—
-25	0	—	—	—
	10	—	—	—
	20	—	—	—
	30	—	—	—
-20	40	1059.5*	1144.2*	0*
	-20	—	—	—
	-10	—	—	—
	0	—	—	—
-15	10	—	—	—
	20	—	—	—
	30	—	—	—
	40	1202.8*	1167.5*	0*
-10	-20	—	—	—
	-10	—	—	—
	0	—	—	—
	10	—	—	—
-5	20	—	—	—
	30	—	—	—
	40	1363.3*	1187.5*	0*
	-20	—	—	—
0	-10	—	—	—
	0	—	—	—
	10	—	—	—
	20	—	—	—
-5	30	—	—	—
	40	1539.0*	1196.0*	0*
	-20	—	—	—
	-10	—	—	—
-10	0	—	—	—
	10	—	—	—
	20	—	—	—
	30	—	—	—
-5	40	1732.9*	1191.0*	0*
	-20	—	—	—
	-10	—	—	—
	0	—	—	—
0	10	—	—	—
	20	—	—	—
	30	—	—	—
	40	—	—	—

DIMENSIONS

STANDARD DESIGN DATA Models 100 – 546 (w/Metric equivalents) - NOMINAL @ 3550 RPM

MODEL NO.	COMPRESSOR DISPLACEMENT		RATINGS R-717 ⁽¹⁾⁽²⁾				RATINGS R-507 ⁽¹⁾⁽²⁾				UNIT WEIGHT ⁽³⁾	
			CAPACITY		POWER		CAPACITY		POWER			
	CFM	M3/hr	TR	kw	BHP	kw	TR	kw	BHP	kw	lb	kg
100B	592	1,005	59	207	60	45	—	—	—	—	5,400	2,449
100H	592	1,005	213	749	235	175	217.8	766	264.2	197	5,400	2,449
134B	790	1,342	79	276	80	60	—	—	—	—	5,600	2,540
134H	790	1,342	284	999	314	234	290.4	1021	352.3	263	5,600	2,540
177B	1,042	1,770	105	369	102	76	—	—	—	—	7,300	3,311
177H	1,042	1,770	384	1,351	410	306	386.0	1358	459.1	342	7,300	3,311
222B	1,311	2,228	132	464	129	96	—	—	—	—	7,600	3,447
222H	1,311	2,228	483	1,699	517	386	486.1	1710	578.1	431	7,600	3,447
270B	1,589	2,700	163	573	159	119	—	—	—	—	10,000	4,536
270H	1,589	2,700	598	2,103	638	476	600.5	2112	714.1	533	10,000	4,536
316B	1,865	3,169	188	660	183	137	—	—	—	—	12,500	5,670
316H	1,865	3,169	688	2,420	736	549	691.7	2433	822.6	613	12,500	5,670
399B	2,349	3,992	236	831	230	172	—	—	—	—	12,800	5,806
399H	2,349	3,992	866	3,046	926	691	871.0	3063	1035.8	772	12,800	5,806
480B	2,824	4,798	284	1,000	277	207	—	—	—	—	16,800	7,620
480H	2,824	4,798	1,018	3,581	1,127	841	—	—	—	—	16,800	7,620
546B	3,216	5,464	314	1,104	290	216	—	—	—	—	19,700	8,936
546H	3,216	5,464	1,169	4,110	1,280	955	—	—	—	—	NA	NA

1. Booster conditions are based on -40°F (-40°C) suction and 10°F (-12.2°C) intermediate temperature with liquid at interstage saturation and no superheat.
 2. High stage conditions are based on 20°F (-6.7°C) suction and 95°F (35°C) condensing with 10°F (5.5°C) liquid subcooling and 10°F (5.5°C) superheat.
 3. Unit weight does not include motor.
- NOTE:** All packages with motors larger than 1250 hp will require a vertical oil separator



MODEL NO.	APPROXIMATE DIMENSIONS Inches/Millimeters										
	A	B	C	D	E	F	G	H	I	J	K
100	30/766	76/1937	66/1676	32/818	27/695	50/1280	62/1582	30/762	7.5/191	39/991	125/3189
134	29/728	78/1975	66/1676	32/818	27/695	50/1280	62/1582	30/762	7.5/191	39/991	125/3189
177	35/892	87/2229	75/1905	36/912	27/683	50/1280	69/1750	44/1118	8/203	39/991	138/3500
222	34/853	89/2254	75/1905	36/912	27/683	50/1280	69/1750	44/1118	8/203	39/991	138/3500
270	37/940	96/2438	88/2235	42/1067	35/892	50/1280	76/1930	60/1524	23/588	39/991	166/4216
316	37/940	99/2515	88/2235	42/1067	35/892	50/1280	81/2057	60/1524	23/588	39/991	166/4216
399	35/892	101/2565	88/2235	42/1067	35/892	50/1280	81/2057	60/1524	23/588	39/991	166/4216
480	Contact Factory										
546	43/1081	107/2725	84/2146	45/1130	51/1306	61/1544	89/2258	68/1727	23/588	39/991	180/4582

NOTE: Graphic above for reference only. Other unit sizes vary slightly. Use only certified drawings for erection.

MODEL NO.	STANDARD CONNECTIONS in./mm			
	R-717		R-507	
	SUCTION	DISCHARGE	SUCTION	DISCHARGE
100	5/127.0	4/101.6	5/127.0	4/101.6
134	6/152.4	4/101.6	6/152.4	4/101.6
177	6/152.4	5/127.0	6/152.4	5/127.0
222	6/152.4	5/127.0	8/203.2	5/127.0
270	8/203.2	6/152.4	10/254.0	6/152.4

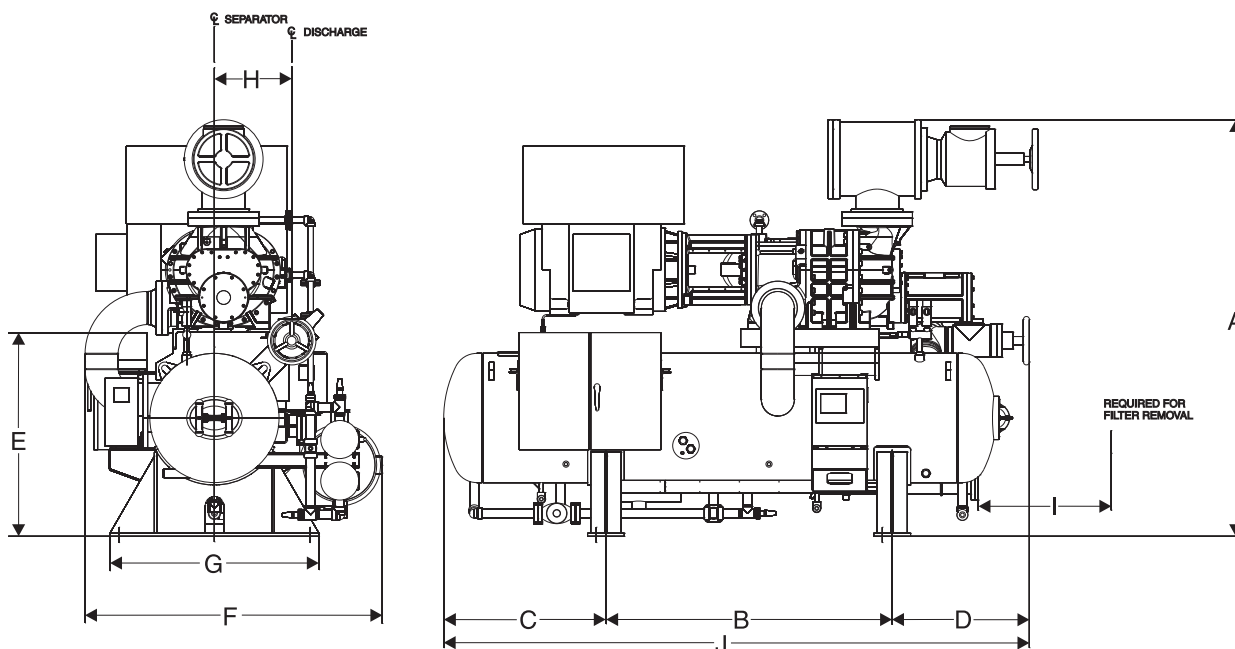
MODEL NO.	STANDARD CONNECTIONS in./mm			
	R-717		R-507	
	SUCTION	DISCHARGE	SUCTION	DISCHARGE
316	8/203.2	6/152.4	10/254.0	6/152.4
399	8/203.2	6/152.4	10/254.0	6/152.4
480	8/203.2	8/203.2	10/254.0	8/203.2
546	10/254.0	8/203.2	10/254.0	8/203.2

STANDARD DESIGN DATA MODELS 496 – 1080 (w/Metric equivalents) - NOMINAL @ 3550 RPM

MODEL NO.	COMPRESSOR DISPLACEMENT		RATINGS R-717 ⁽¹⁾⁽²⁾				RATINGS R-507 ⁽¹⁾⁽²⁾				UNIT WEIGHT ⁽³⁾	
			CAPACITY		POWER		CAPACITY		POWER			
	CFM	M3/hr	TR	kw	BHP	kw	TR	kw	BHP	kw	lb	kg
496B	2,920	4,961	295	1,037	286	213	—	—	—	—	20,500	9,299
496H	2,920	4,961	1,054	3,706	1,182	881	1071.9	3,770	1,325.8	989	NA	NA
676B	3,982	6,765	402	1,414	391	292	—	—	—	—	20,800	9,435
676H	3,982	6,765	1,422	5,002	1,612	1,202	1,461.8	5,141	1,807.9	1348	NA	NA
856B	5,068	8,610	512	1,801	497	371	—	—	—	—	22,500	10,206
856H	5,068	8,610	1,807	6,354	2,056	1,533	—	—	—	—	NA	NA
1080B	6,394	10,862	645	2,268	629	469	—	—	—	—	23,100	10,478

- Booster conditions are based on -40°F (-40°C) suction and 10°F (-12.2°C) intermediate temperature with liquid at interstage saturation and no superheat.
- High stage conditions are based on 20°F (-6.7°C) suction and 95°F (35°C) condensing with 10°F (5.5°C) liquid subcooling and 10°F (5.5°C) superheat.
- Unit weight does not include motor.

NOTE: All packages with motors larger than 1250 hp will require a vertical oil separator



MODEL NO.	APPROXIMATE DIMENSIONS Inches/Millimeters									
	A	B	C	D	E	F	G	H	I	J
496	135/3440	93/2362	53/1340	45/1130	60/1524	102/2591	68/1727	25/638	39/991	191/4832
676	145/3675	96/2438	51/1302	49/1254	70/1778	108/2743	77/1956	26/666	39/991	196/4994
856	151/3834	96/2438	62/1572	50/1261	70/1778	111/2819	82/2083	28/720	39/991	208/5271
1080	151/3834	96/2438	62/1572	50/1261	70/1778	111/2819	82/2083	28/720	39/991	208/5271

NOTE: Graphic above for reference only. Other unit sizes vary slightly. Use only certified drawings for erection.

MODEL NO.	STANDARD CONNECTIONS in./mm			
	R-717		R-507	
	SUCTION	DISCHARGE	SUCTION	DISCHARGE
496	12/304.8	8/203.2	12/304.8	8/203.2
676	12/304.8	8/203.2	12/304.8	8/203.2
856	14/355.6	8/203.2	14/355.6	8/203.2
1080	14/355.6	8/203.2	14/355.6	8/203.2

TEMPERATURE/PRESSURE CONVERSION CHART

Temp °F	Refrigerant Code/Pressure	
	R-717	R-507
-60	18.7"	5.8"
-55	16.7"	2.2"
-50	14.4"	0.9
-45	11.8"	3.1
-40	8.8"	5.5
-35	5.5"	8.2
-30	1.7"	11.1
-25	1.2	14.3
-20	3.5	17.8
-18	4.5	19.3
-16	5.6	20.9
-14	6.7	22.5
-12	7.8	24.1
-10	9.0	25.8
-8	10.2	27.6
-6	11.5	29.4
-4	12.8	31.3
-2	14.2	33.2
0	15.6	35.2
1	16.4	36.2
2	17.1	37.3
3	17.9	38.3
4	18.7	39.4
5	19.5	40.5
6	20.3	41.6
7	21.1	42.7
8	22.0	43.8
9	22.8	45.0
10	23.7	46.2
11	24.6	47.3
12	25.5	48.5
13	26.4	49.8
14	27.4	51.0
15	28.3	52.2
16	29.3	53.5
17	30.3	54.8
18	31.3	56.1
19	32.4	57.4
20	33.4	58.8
21	34.5	60.1
22	35.5	61.5
23	36.6	62.9
24	37.7	64.3
25	38.8	65.8
26	40.0	67.2

Temp °F	Refrigerant Code/Pressure	
	R-717	R-507
27	41.2	68.7
28	42.4	70.2
29	43.7	71.7
30	44.9	73.3
31	46.1	74.8
32	47.4	76.4
33	48.7	78.0
34	50.0	79.6
35	51.4	81.3
36	52.7	82.9
37	54.1	84.6
38	55.5	86.3
39	57.0	88.1
40	58.4	89.8
41	59.2	91.6
42	61.4	93.4
43	62.9	95.2
44	64.5	97.0
45	66.1	98.9
46	67.6	100.8
47	69.3	102.7
48	70.9	104.6
49	72.6	106.6
50	74.3	108.6
55	83.2	118.8
60	92.6	129.7
65	102.8	141.3
70	113.8	153.6
75	125.5	166.6
80	138.0	180.3
85	151.4	194.8
90	165.5	210.2
95	180.6	226.4
100	196.7	243.5
105	213.9	261.6
110	231.8	280.6
115	251.0	300.7
120	271.1	321.9
125	292.5	344.3
130	314.9	367.8
135	338.8	392.6
140	363.5	418.7
145	390.2	446.3
150	417.4	475.3
155	447.0	505.8

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