



AIR-COOLED SCROLL CHILLERS STYLE C



29302A

YCAL0043 – YCAL0377
10-110 Tons
35 – 390 kW
50 Hz

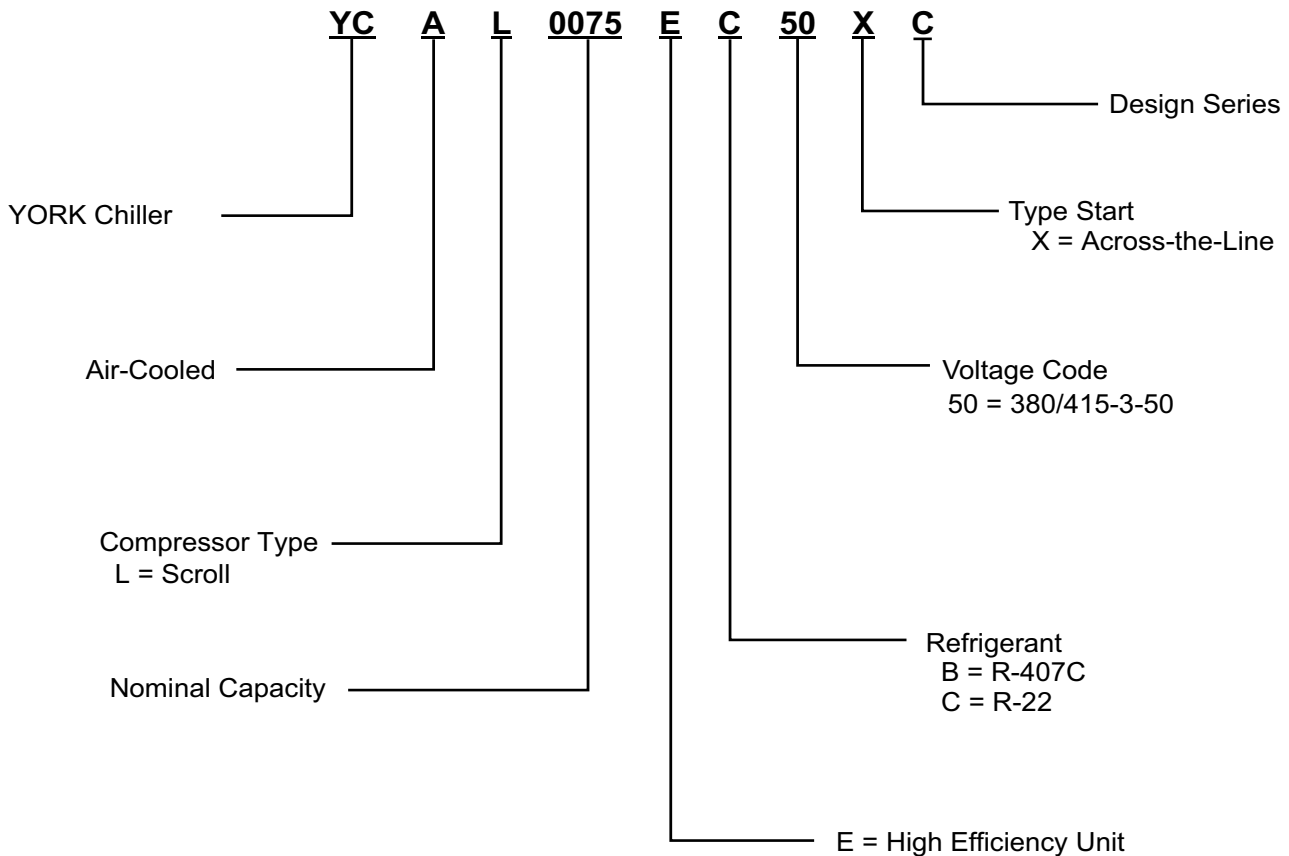
R-22

R-407C



TABLE OF CONTENTS

INTRODUCTION.....	3
SPECIFICATION.....	4
OPTIONS AND ACCESSORIES.....	7
SELECTION DATA.....	11
DESIGN PARAMETERS.....	13
WATER PRESSURE DROP.....	14
RATINGS – R-22 (ENGLISH UNITS).....	16
RATINGS – R-22 (SI UNITS).....	26
RATINGS – R-407C (ENGLISH UNITS).....	32
RATINGS – R-407C (SI UNITS).....	42
PART LOAD RATINGS – R-22 (ENGLISH UNITS).....	48
PART LOAD RATINGS – R-22 (SI UNITS).....	50
PART LOAD RATINGS – R-407C (ENGLISH UNITS).....	52
PART LOAD RATINGS – R-407C (SI UNITS).....	54
PHYSICAL DATA – (ENGLISH UNITS).....	56
PHYSICAL DATA – (SI UNITS).....	58
DIMENSIONS – YCAL0014 - YCAL0124 (ENGLISH UNITS).....	60
DIMENSIONS – YCAL0014 - YCAL0124 (SI UNITS).....	74
WEIGHT DISTRIBUTION.....	88
ISOLATOR SELECTIONS.....	90
ELECTRICAL DATA.....	94
POWER WIRING.....	104
CONTROL WIRING.....	106
APPLICATION DATA.....	108
GUIDE SPECIFICATIONS.....	109



Introduction



29302A

YORK Millennium® Air-Cooled Scroll Chillers provide chilled water for all air conditioning applications using central station air handling or terminal units. They are completely self-contained and are designed for outdoor (roof or ground level) installation. Each unit includes hermetic scroll compressors, a liquid cooler, air cooled condenser, and a weather resistant microprocessor control center, all mounted on a formed steel base.

Specification

GENERAL

The 35 - 440 kW YCAL models are shipped complete from the factory ready for installation and use.

The unit is pressure-tested, evacuated, and fully charged with either Refrigerant-22 (HCFC-22) or Chlorine-free Refrigerant-407C (HFC-407C) and includes an initial oil charge. After assembly, a complete operational test is performed with water flowing through the cooler to assure that the refrigeration circuit operates correctly.

The unit structure is heavy-gauge, galvanized steel. This galvanized steel is coated with baked-on powder paint, which, when subjected to ASTM B117 500 hour, salt spray testing, yields a minimum ASTM 1654 rating of "6". Units are designed in accordance with NFPA 70 (National Electric Code), ASHRAE/ANSI 15 Safety code for mechanical refrigeration, ASME and rated in accordance with ARI Standard 550/590-98.

COMPRESSORS

The chiller has suction-gas cooled, hermetic, scroll compressors. The YCAL compressors incorporate a compliant scroll design in both the axial and radial direction. All rotating parts are statically and dynamically balanced. A large internal volume and oil reservoir provides greater liquid tolerance. Compressor crankcase heaters are also included for extra protection against liquid migration.

COOLER

The cooler is equipped with a heater controlled by a separate thermostat. The heater provides freeze

protection for the cooler down to -20°F (-29°C) ambient. The cooler is covered with 3/4" flexible, closed-cell, foam insulation (K=0.25).

The water baffles are constructed of galvanized steel to resist corrosion. The removable heads allow access to the internally enhanced, seamless, copper tubes. Vent and drain connections are included.

Water inlet and outlet connections are grooved for compatibility with field supplied victaulic connections.

CONDENSER

Coils – Fin and tube condenser coils of seamless, internally-enhanced, high-condensing-coefficient, corrosion resistant copper tubes are arranged in staggered rows, mechanically expanded into aluminum fins. Integral subcooling is included. The design working pressure of the coil is 450 PSIG (31 bar).

Fans – The condenser fans are composed of corrosion-resistant aluminum hub and glass-fiber-reinforced polypropylene composite blades molded into a low noise airfoil section. They are designed for maximum efficiency and are statically and dynamically balanced for vibration free operation. They are directly driven by independent motors, and positioned for vertical air discharge. The fan guards are constructed of heavy-gauge, rust-resistant, coated steel. All blades are statically and dynamically balanced for vibration-free operation.

Motors – The fan motors are Totally Enclosed Air-Over, squirrel-cage type, current protected. They feature ball bearings that are double-sealed and permanently lubricated.

MILLENNIUM CONTROL CENTER

All controls are contained in a NEMA 3R/12 (and equivalent to IP55*) cabinet with hinged outer door and includes:

Liquid Crystal Display with Light Emitting Diode backlighting for outdoor viewing:

Two display lines

Twenty characters per line

Color coded 12-button non-tactile keypad with sections for:

DISPLAY/PRINT of typical information:

Chilled liquid temperatures

Ambient temperature

System pressures (each circuit)

Operating hours and starts (each compressor)

Print calls up to the liquid crystal display:

Operating data for the systems

History of fault shutdown data for up to the last six fault shutdown conditions

An RS-232 port, in conjunction with this press-to-print button, is provided to permit the capability of hard copy print-outs via a separate printer (by others).

ENTRY section to:

ENTER setpoints or modify system values

SETPOINTS updating can be performed to:

Chilled liquid temperature setpoint and range

Remote reset temperature range

Set daily schedule/holiday for start/stop

Manual override for servicing

Low and high ambient cutouts

Number of compressors

Low liquid temperature cutout

Low suction pressure cutout

High discharge pressure cutout

Anti-recycle timer (compressor start cycle time)

Anti-coincident timer (delay compressor starts)

UNIT section to:

Set time

Set unit options

UNIT ON/OFF switch

The microprocessor control center is capable of displaying the following:

- Return and leaving liquid temperature
- Low leaving liquid temperature cutout setting
- Low ambient temperature cutout setting
- Outdoor air temperature
- English or Metric data
- Suction pressure cutout setting
- Each system suction pressure (optional on 0014 - 0060 models and standard on 0064 - 0124 models)
- Discharge pressure (optional)
- Liquid Temperature Reset via a YORK ISN DDC or Building Automation System (by others) via:
 - a pulse width modulated (PWM) input as standard
 - a 4-20 milliamp or 0 -10 VDC input, or contact closure with the optional B.A.S. interface option
- Anti-recycle timer status for each system
- Anti-coincident system start timer condition
- Compressor run status
- No cooling load condition
- Day, date and time
- Daily start/stop times
- Holiday status
- Automatic or manual system lead/lag control
- Lead system definition
- Compressor starts & operating hours (each compressor)
- Status of hot gas valves, evaporator heater and fan operation
- Run permissive status
- Number of compressors running
- Liquid solenoid valve status
- Load & unload timer status
- Water pump status

Provisions are included for: pumpdown at shutdown; optional remote chilled water temperature reset and two steps of demand load limiting from an external building automation system. Unit alarm contacts are standard.

The operating program is stored in non-volatile memory (EPROM) to eliminate chiller failure due to AC powered failure/battery discharge. Programmed setpoints are retained in lithium battery-backed RTC memory for 5 years minimum.

POWER PANEL

Each panel contains:

- Compressor power terminals
- Compressor motor starting contactors per I.E.C.**
- Control power terminals to accept incoming for 115-1-60 control power
- Fan contactors & overload current protection

The power wiring is routed through liquid-tight conduit to the compressors and fans.

* Intensity of Protection European Standard

** International Electrotechnical Commission

Options and Accessories

POWER OPTIONS:

COMPRESSOR POWER CONNECTIONS – Single-point (YCAL0043-0087) or multiple-point (YCAL0107-0377) terminal block connection(s) are provided as standard. The following power connections are available as options. (See electrical data for specific voltage and options availability.) (Factory-mounted.)

SINGLE-POINT SUPPLY TERMINAL BLOCK

– (Available on YCAL0087 - 0253 models (standard on YCAL0043 - 0087 models)). Includes enclosure, terminal-block and interconnecting wiring to the compressors. Separate external protection must be supplied, by others, in the incoming compressor-power wiring. (Do not include this option if either the Single-Point Non-Fused Disconnect Switch or Single-Point Circuit Breaker options have been included.)

SINGLE-POINT OR MULTIPLE-POINT SUPPLY TERMINAL BLOCK(S) WITH INDIVIDUAL SYSTEM BREAKERS

– (Available on YCAL0287-0377 models) Includes single- or dual-point terminal block connection(s) with factory interconnecting wiring from the terminal block to factory supplied system circuit breakers.

SINGLE-POINT NON-FUSED DISCONNECT SWITCH (Available on YCAL0043-0253 models) OR MULTIPLE-POINT NON-FUSED DISCONNECT SWITCHES (Available on YCAL0287-0377 models)

– Unit-mounted disconnect switch(es) with external, lockable handle (in compliance with Article 440-14 of N.E.C.), can be supplied to isolate the unit power voltage for servicing. Separate external fusing must be supplied, by others in the power wiring, which must comply with the National Electrical Code and/or local codes.

SINGLE-POINT NON-FUSED DISCONNECT SWITCH WITH INDIVIDUAL SYSTEM BREAKERS

– (Available on YCAL0287-0377 models) Includes unit-mounted disconnect switch with external, lockable handles (in compliance with Article 440-14 of N.E.C.) to isolate unit power voltage for servicing. Factory interconnecting wiring is provided from the disconnect switch to factory supplied system circuit breakers.

SINGLE-POINT CIRCUIT BREAKER – (Available on YCAL0043-0253 models) – A unit mounted circuit breaker with external, lockable handle (in compliance with N.E.C. Article 440-14), can be supplied to isolate the power voltage for servicing. (This option includes the Single-Point Power connection.)

CONTROL TRANSFORMER – Converts unit power voltage to 115-1-60 (0.5 or 1.0 KVA capacity). Factory mounting includes primary and secondary wiring between the transformer and the control panel. (Factory-mounted.)

POWER FACTOR CORRECTION CAPACITORS – Will correct unit compressor power factors to a 0.90-0.95. (Factory-mounted.)

CONTROL OPTIONS:

AMBIENT KIT (LOW)

– (Available on YCAL0043-0253 models only [standard on YCAL0287-0377 models]) Units will operate to 25°F (-4°C). This accessory includes all necessary components to permit chiller operation to 0°F (-18°C). (This option includes the Discharge Pressure Transducer / Readout Capability option.) For proper head pressure control in applications below 25°F (-4°C) where wind gusts may exceed 5 mph, it is recommended that Optional Condenser Louvered Enclosure Panels also be included. (Factory-mounted.)

AMBIENT KIT (HIGH) – Required if units are to operate when the ambient temperature is above 115°F (46°C). Includes sun shield panels and discharge pressure transducers. (This option includes the Discharge Pressure Transducer / Readout Capability option.) (Field-mounted.)

BUILDING AUTOMATION SYSTEM INTERFACE

– The factory addition of a Printed Circuit Board to accept a 4-20 milliamp, 0-10VDC or contact closure input to reset the leaving chiller liquid temperature from a Building Automation System. (Only one of following options can be offered on a unit at a time: BAS, Remote Control Panel or Multi-unit Sequence Control.) (Factory-mounted.)

- (The standard unit capabilities include remote start-stop, remote water temperature reset via a PWM input signal or up to two steps of demand (load) limiting depending on model.)
- (The standard control panel can be directly connected to a YORK Building Automated System via the standard on-board RS485 communication port.)

LANGUAGE LCD AND KEYPAD DISPLAY – Spanish, French, German, and Italian unit LCD controls and keypad display available. Standard language is English.

DISCHARGE PRESSURE TRANSDUCERS AND READ-OUT CAPABILITY

– (Available on YCAL0043-0253 models only [standard on YCAL0287-0377 models]) The addition of pressure transducers allows models to sense and display

Options and Accessories (Cont.)

discharge pressure. This is recommended for brine chilling applications. (*This option is included with either the low or high ambient kits.*) (Factory-mounted.)

SUCTION PRESSURE TRANSDUCERS AND READOUT CAPABILITY – (*Available on YCAL0043-0217 models only [standard on YCAL0237-377 models.]*) The addition of suction transducers allows models to sense and display suction pressure. (Factory-mounted.)

MOTOR CURRENT MODULE – Capable of monitoring compressor motor current. Provides extra protection against compressor reverse rotation, phase-loss and phase imbalance. Option consists of one module per electrical system. (Factory-mounted.)

REMOTE CONTROL PANEL AND WALL ADAPTOR – (*Available on YCAL0043-0253 models only*) (*Only one of following options can be offered on a unit at a time: BAS, Remote Control Panel, Optiview Remote Graphic Panel or Multi-unit Sequence Control.*) (Field-mounted.)

OPTIVIEW REMOTE CONTROL PANEL - Graphical interface panel to remotely control and monitor up to 8 different units. (*Refer to form 201.18-SG4 for detailed information*)

MULTI-UNIT SEQUENCING – A separate Sequencing Control Center is provided to handle sequencing control of up to eight chillers in parallel based on mixed liquid temperature (interconnecting wiring by others). (*Only one of following options can be offered on a unit at a time: BAS, Remote Control Panel or Multi-unit Sequence Control.*) (Factory-mounted.)

COMPRESSOR, PIPING, EVAPORATOR OPTIONS:

LOW TEMPERATURE BRINE – (*For brine chilling applications below 30°F (-1°C) LCWT. Standard units will operate down to 30°F (-1°C).*) Option includes resized thermal expansion valves. (Factory-mounted)

CHICAGO CODE RELIEF VALVES – Unit will be provided with relief valves to meet Chicago code requirements. (Factory-mounted.)

SERVICE ISOLATION VALVE – Service suction and discharge (ball type) isolation valves are added to unit per system. This option also includes a system high pressure relief valve in compliance with ASHRAE 15. (Factory-mounted.)

HOT GAS BY-PASS – Permits continuous, stable operation at capacities below the minimum step of compressor unloading to as low as 5% capacity (depending on both

the unit and operating conditions) by introducing an artificial load on the cooler. Hot gas by-pass is installed on only refrigerant system #1 on two-circuited units. (Factory-mounted.)

DX COOLER 300 (21 bar) PSIG DWP WATERSIDE – The waterside will be of 300 PSIG (21 bar) instead of the standard 150 PSIG DWP. 300 PSIG R.F. flanges are included on the DX cooler nozzles. (Factory-mounted.) The companion flanges will be field-supplied by others.

FLANGES (WELD TYPE) – Consists of 150 lb. (standard 150 psi [10.5 bar] cooler) R.F. flanges to convert to flanged cooler-connections and includes companion flanges. (*300 lb. flanges included on optional DX cooler 300 PSIG DWP waterside*) (Field-mounted.)

FLANGES (VICTAULIC TYPE) – Consists of (2) Flange adapter for grooved end pipe (standard 150 psi [10.5 bar] cooler). (*Not available on optional DX cooler 300 PSIG DWP waterside.*) (Field-mounted.)

FLOW SWITCH – The flow switch or its equivalent must be furnished with each unit.

150 psig (10.5 bar) DWP – For standard units. Johnson Controls model F61MG-1C Vapor-proof SPDT, NEMA 4X switch (150 PSIG [10.5 bar] DWP), -20°F to 250°F (-29°C to 121°C), with 1" NPT connection for upright mounting in horizontal pipe. (Field-mounted.)

300 psig (21 bar) DWP – For units with optional 300 PSIG (21 bar) DX cooler. McDonnell & Miller model FS7-4W Vapor-proof SPDT, NEMA 4X switch (300 PSIG (21 bar) DWP), -20°F to 300°F (-29°C to 149°C), with 1¼ inch MPT connection for upright mounting in horizontal pipe. (Field-mounted.)

DIFFERENTIAL PRESSURE SWITCH – Alternative to an above mentioned flow switch. Pretempco model DPS300A-P40PF-82582-5 (300 psi max. working pressure), SPDT 5 amp 125/250VAC switch, Range 0 - 40 PSID, deadband 0.5 - 0.8 psi, with 1/4" NPTE Pressure Connections.

REMOTE DX COOLER – A split system arrangement with the cooler, leaving & return water sensors, liquid line solenoid valves, filter driers, sightglasses & TXVs shipped loose for field connection to the air-cooled condensing section. The DX cooler and outdoor section will have a nitrogen holding charge. Interconnecting rigid piping, wiring and refrigerant are by others. Includes YORK Service start-up. See Form 150.62-NM1.1 (200) for other application information. (*This option includes the Crankcase Heater option.*)(Field-mounted.)

CONDENSER AND CABINET OPTIONS:

Condenser coil protection against corrosive environments is available by choosing any of the following options. For additional application recommendations, refer to FORM 150.12-ES1. (Factory-mounted.)

PRE-COATED CONDENSER COILS – The air-cooled condenser coils are constructed of black epoxy-coated aluminum fins. This can provide corrosion resistance comparable to copper-fin coils in typical seashore locations. Either these or the post-coated coils (below), are recommended for units being installed at the seashore or where salt spray may hit the unit.

POST-COATED CONDENSER COILS – The unit is built with dipped-cured coated condenser coils. This is another choice for seashore and other corrosive applications (with the exception of strong alkalis, oxidizers and wet bromine, chlorine and fluorine in concentrations greater than 100 ppm).

COPPER FIN CONDENSER COILS – The unit constructed with condenser coils which have copper fins. (This is not recommended for units in areas where they may be exposed to acid rain.)

ENCLOSURE PANELS (UNIT) – Tamperproof Enclosure Panels prevent unauthorized access to units. Enclosure Panels can provide an aesthetically pleasing alternative to expensive fencing. Additionally, for proper head pressure control, YORK recommends the use of Condenser Louvered Panels for winter applications where wind gusts may exceed five miles per hour. The following types of enclosure panels are available:

WIRE PANELS (Full Unit) – Consists of welded wire-mesh guards mounted on the exterior of the unit.

Prevents unauthorized access, yet provides free air flow. (Factory-mounted.)

WIRE/LOUVERED PANELS – Consists of welded wire-mesh panels on the bottom part of unit and louvered panels on the condenser section of the unit. (Factory-mounted.)

LOUVERED PANELS (Condenser Coil Only) – Louvered panels are mounted on the sides and ends of the condenser coils for protection. (Factory-mounted.)

LOUVERED PANELS (Full Unit) – Louvered panels surround the front, back, and sides of the unit. They prevent unauthorized access and visually screen unit components. Unrestricted air flow is permitted through generously sized louvered openings. This option is applicable for any outdoor design ambient temperature up to 115°F (46°). (Factory-mounted.)

SOUND ATTENUATION – One or both of the following sound attenuation options are recommended for residential or other similar sound sensitive locations:

COMPRESSOR ACOUSTIC SOUND BLANKET – Each compressor is individually enclosed by an acoustic sound blanket. The sound blankets are made with one layer of acoustical absorbent textile fiber of 5/8" (15mm) thickness; one layer of anti-vibrating heavy material thickness of 1/8" (3mm). Both are closed by two sheets of welded PVC, reinforced for temperature and UV resistance. (Factory-mounted.)

LOW SOUND FANS – Lower RPM, 8-pole fan motors are used with steeper-pitch fans. (Factory-mounted.)

VIBRATION ISOLATORS – Level adjusting, spring type 1" (25.4mm) or seismic deflection or neoprene pad isolators for mounting under unit base rails. (Field-mounted.)



This page intentionally left blank.

Selection Data

GUIDE TO SELECTION

Capacity ratings for YORK YCAL Packaged Air-Cooled Liquid Chillers, shown on pages 16 through 39 cover the majority of design applications for these units. For unusual applications or uses beyond the scope of this catalog, please consult your nearest YORK Office or representative.

SELECTION RULES

- Ratings** – Ratings may be interpolated, but must not be extrapolated. The Ratings given on pages 16 through 39 and the DESIGN PARAMETERS given on page 11 indicate the limits of application for these chillers.
- Cooler Water** – Ratings are based upon 2.4 GPM per ton which is equal to a 10°F chilled water range and a 0.0001 fouling factor for the cooler at sea level. Tables on pages 16 through 39 give capacity, compressor kW required, cooler GPM and unit EER.
- Condenser** – Ratings are given in terms of air on condenser in degrees Fahrenheit.
- Copper Fin Condenser Ratings** – Since the thermal conductivity of copper is slightly higher than aluminum, apply the following corrections to the standard ratings. Tons x 0.97 and compressor kW x 0.99.
- Performance Data Correction Factors** – Ratings are based on 0.0001 cooler fouling factor, 10°F chilled water range and at sea level. For operation at different conditions, apply the appropriate

FOULING FACTOR					
		0.0001		0.00025	
ALTITUDE	TEMP SPLIT	TONS	COMPR kW	TONS	COMPR kW
SEA LEVEL	8	0.994	0.999	0.991	0.998
	10	1.000	1.000	0.993	0.999
	12	1.005	1.001	0.999	0.999
	14	1.008	1.002	1.005	1.000
2000 FT.	8	0.990	1.010	0.984	1.009
	10	0.995	1.010	0.990	1.009
	12	0.999	1.011	0.995	1.010
	14	1.004	1.015	0.998	1.011
4000 FT.	8	0.983	1.021	0.977	1.020
	10	0.989	1.024	0.983	1.021
	12	0.994	1.025	0.988	1.024
	14	0.997	1.026	0.993	1.025
6000 FT.	8	0.978	1.035	0.973	1.034
	10	0.982	1.037	0.978	1.035
	12	0.987	1.037	0.980	1.036
	14	0.992	1.038	0.986	1.037

correction factor from the following table.

- Ethylene Glycol Correction Factors** – The following factors are to be applied to the standard ratings for units cooling ethylene glycol.

ETHYLENE GLYCOL					
% WEIGHT	TONS kW	COMPR	GPM°F/TON	PRESS DROP	FREEZE PT
10	0.985	0.997	24.1	1.034	26
20	0.981	0.996	24.9	1.062	16
30	0.974	0.995	26.1	1.096	5
40	0.966	0.991	27.5	1.134	-10
50	0.957	0.989	29.1	1.172	-32

- Propylene Glycol Correction Factors** – The following factors are to be applied to the standard

PROPYLENE GLYCOL					
% WEIGHT	TONS kW	COMPR	GPM°F/TON	PRESS DROP	FREEZE PT
10	0.983	0.996	24.2	1.048	27
20	0.974	0.995	24.4	1.086	19
30	0.961	0.990	25.1	1.134	8
40	0.946	0.98	26.0	1.186	-5
50	0.928	0.984	27.2	1.247	-25

METHOD OF SELECTION

To select of YORK Packaged Air-Cooled Liquid Chiller, the following data must be known:

- Design Capacity in tons refrigeration (TR).
- Entering and Leaving Liquid Temperatures.
- Outside ambient air temperature in degrees F.
- GPM of chilled liquid.

Determine capacity requirements from the following formula:

$$\text{GPM} = \frac{\text{TR} \times 24}{\text{RANGE } (^\circ\text{F})}$$

EXAMPLE – WATER CHILLING

- GIVEN:** Provide a capacity of 50 Tons at 42°F leaving water 10°F range, 0.0001FF, 85°F air on the condenser, at sea level and 50 Hz.
- FIND:** Unit Size
Compressor kW Input
Unit EER

3. From the Ratings on pages 16 - 46:

SELECT: YCAL0197 (English Units)
54.3 Tons
49.0 Compressor kW
11.7 Unit EER

4. Calculate Compressor kW at 50 Tons:

$$\text{kW} = \frac{50}{54.3} \times 49.0 \text{ kW} = 45.1 \text{ kW}$$

5. Calculate GPM:

$$\text{GPM} = \frac{50 \text{ Tons} \times 24}{10^\circ\text{F Range}} = 120 \text{ GPM}$$

6. From Page 14, read 4.9 ft of water cooler pressure drop for GPM:

7. A YCAL0197 is suitable.

5. From RATINGS on pages 16 - 46:

SELECT: YCAL0147 (English Units)
37.0 Tons
38.8 Compressor kW

6. Determine YCAL0147 brine cooling capacity and Compressor kW requirement:

A. Tons = 37.0 x .974 x .983 = 35.4

B. Compr. kW = 38.8 x .995 x 1.021 = 39.4

7. Determine average full load Compressor kW at 35 tons:

$$\frac{35 \text{ tons} \times (39.4 \text{ kW})}{35.4 \text{ tons}} = 39.0 \text{ Compressor kW}$$

8. Determine Ethylene Glycol GPM:

EXAMPLE – Brine Chilling

1. **GIVEN:** Provide a capacity of 35 tons cooling 30% by weight Ethylene Glycol from 50°F to 40°F, 0.00025FF, 95°F air on the condenser, 50 Hz and 4000 ft. altitude.

2. **DETERMINE:**
Unit Size
kW Input
Ethylene Glycol GPM
Cooler Pressure Drop

3. See Ethylene Glycol correction factors, for 30% by weight Ethylene Glycol.

READ: .974 Tons factor
.995 Compr. kW factor
26.1 Gal./°F/Tons factor

4. See Performance Data Correction Factors for 0.00025 fouling factor and 4000 ft. altitude.

READ: .983 Tons factor
1.021 kW factor

$$\text{GPM} = \frac{\text{Tons} \times \text{Gal. } ^\circ\text{F}/\text{min}/\text{Ton factor}}{\text{Range}}$$

$$\text{GPM} = \frac{35.0 \times 26.1}{10}$$

$$\text{GPM} = 91.4$$

9. Determine Cooler Pressure Drop:

A. See Ethylene Glycol correction factors for 30% by weight Ethylene Glycol.

READ: 1.096 Pressure Drop Factor

B. See page 14 at 91.4 GPM for the YCAL0147.

READ: 6.8 Ft. H₂O Pressure Drop

C. Cooler Pressure Drop = 6.8 x 1.096 or 7.5 Ft. H₂O

10. YCAL0147 is suitable.

Design Parameters

ENGLISH UNITS

YCAL	LEAVING WATER					
	TEMPERATURE (°F)		COOLER FLOW (GPM ³)		AIR ON CONDENSER (°F)	
	MIN ¹	MAX ²	MIN	MAX	MIN ⁴	MAX ⁵
0043	40	55	25	60	0	125
0057	40	55	25	60	0	125
0073	40	55	30	70	0	125
0087	40	55	35	170	0	125
0107	40	55	35	170	0	125
0117	40	55	60	325	0	125
0133	40	55	60	325	0	125
0147	40	55	60	325	0	125
0157	40	55	60	325	0	125
0173	40	55	60	325	0	125
0197	40	55	100	350	0	125
0217	40	55	100	350	0	125
0237	40	55	100	350	0	125
0253	40	55	100	400	0	125
0287	40	55	100	350	0	125
0317	40	55	100	400	0	125
0347	40	55	100	400	0	125
0377	40	55	138	525	0	125

SI UNITS

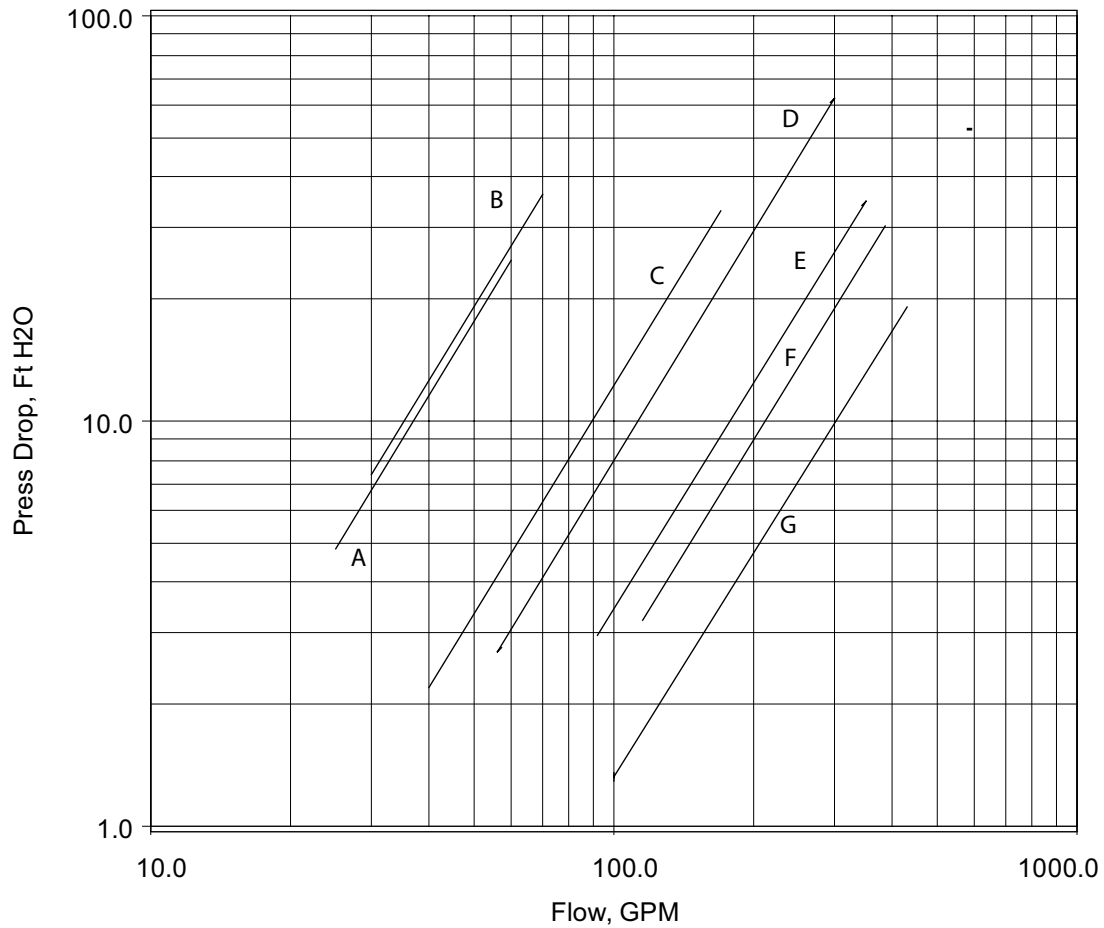
YCAL	LEAVING WATER					
	TEMPERATURE (°C)		COOLER FLOW (l/s ³)		AIR ON CONDENSER (°C)	
	MIN ¹	MAX ²	MIN	MAX	MIN ⁴	MAX ⁵
0043	4.4	12.8	1.6	3.8	-17.7	51.7
0057	4.4	12.8	1.6	3.8	-17.7	51.7
0073	4.4	12.8	1.9	4.4	-17.7	51.7
0087	4.4	12.8	2.2	10.7	-17.7	51.7
0107	4.4	12.8	2.2	10.7	-17.7	51.7
0117	4.4	12.8	3.8	20.5	-17.7	51.7
0133	4.4	12.8	3.8	20.5	-17.7	51.7
0147	4.4	12.8	3.8	20.5	-17.7	51.7
0157	4.4	12.8	3.8	20.5	-17.7	51.7
0173	4.4	12.8	3.8	20.5	-17.7	51.7
0197	4.4	12.8	6.3	22.1	-17.7	51.7
0217	4.4	12.8	6.3	22.1	-17.7	51.7
0237	4.4	12.8	6.3	22.1	-17.7	51.7
0253	4.4	12.8	6.3	25.2	-17.7	51.7
0287	4.4	12.8	6.3	22.1	-17.7	51.7
0317	4.4	12.8	6.3	25.2	-17.7	51.7
0347	4.4	12.8	6.3	25.2	-17.7	51.7
0377	4.4	12.8	8.7	33.1	-17.7	51.7

NOTES:

1. For leaving brine temperature below 40°F (4.4°C), contact your nearest YORK Office for application requirements.
2. For leaving water temperature higher than 55°F (12.8°C), contact the nearest YORK Office for application guidelines.
3. The evaporator is protected against freezing to -20°F (-28.8°C) with an electric heater as standard.
4. For operation at temperatures below 25°F (-3.9°C), the optional Low Ambient Kit will need to be installed on the system (for YCAL0043-0253 models only).
5. For operation at temperatures above 115°F (46.1°C), the optional High Ambient Kit will need to be installed on the system.

Water Pressure Drop

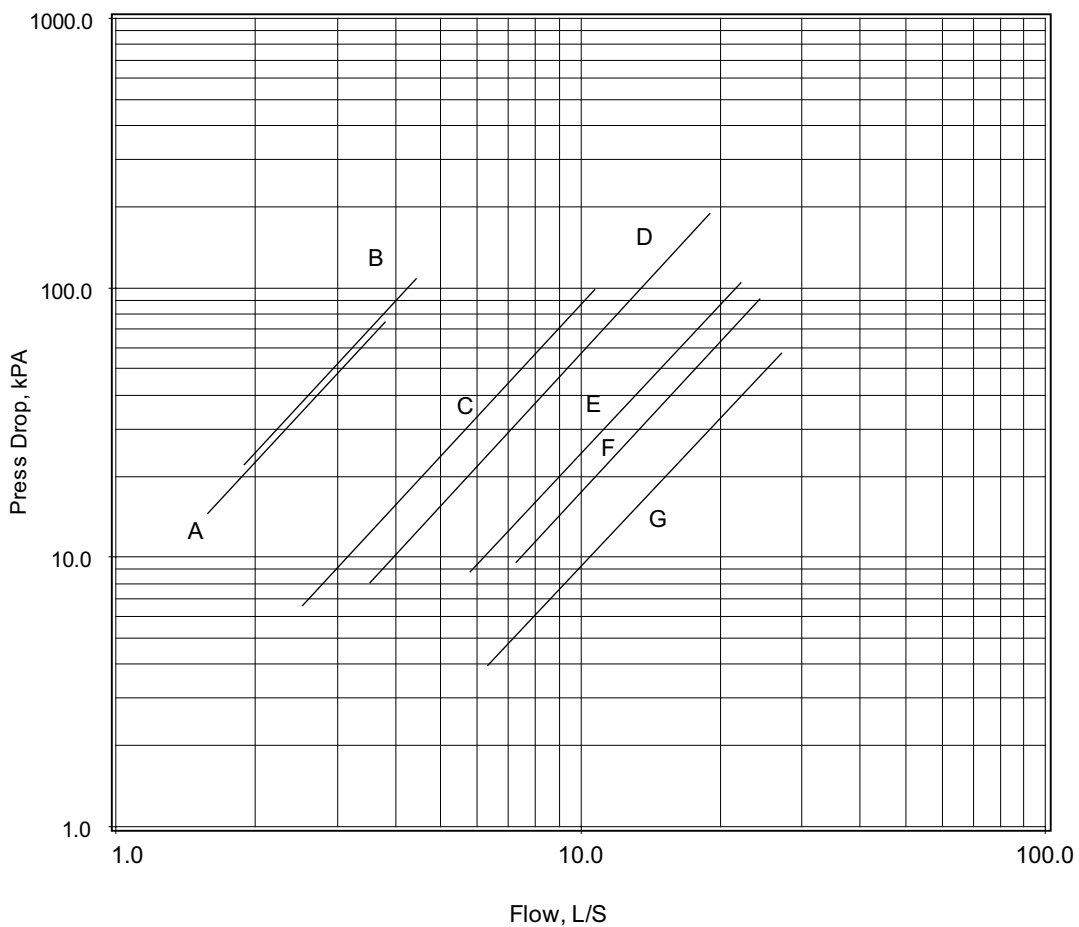
ENGLISH



MODEL YCAL	COOLER CURVE
0043, 0057	A
0073	B
0087, 0107	C
0117, 0133 0147, 0157, 0173	D
0197, 0217, 0237, 0287	E
0253, 0317, 0347	F
0377	G

Note: Water Pressure Drop Curves may extend past the minimum and maximum water flow ranges. See page 13 for minimum and maximum flow points.

SI



MODEL YCAL	COOLER CURVE
0043, 0057	A
0073	B
0087, 0107	C
0117, 0133 0147, 0157, 0173	D
0197, 0217, 0237, 0287	E
0253, 0317, 0347	F
0377	G

Note: Water Pressure Drop Curves may extend past the minimum and maximum water flow ranges. See page 13 for minimum and maximum flow points.

Ratings - R-22 (English Units)

YCAL0043EC

IPLV= 12.9

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	11.3	8.7	11.8	11.0	9.2	11.0	10.8	9.7	10.3	10.5	10.3	9.6	10.2	10.9	9.0	10.0	11.5	8.4
42.0	11.8	8.8	12.2	11.4	9.2	11.4	11.2	9.7	10.7	10.9	10.3	10.0	10.6	10.9	9.3	10.4	11.5	8.7
44.0	12.2	8.8	12.6	11.9	9.3	11.8	11.6	9.8	11.0	11.3	10.3	10.3	11.0	10.9	9.6	10.8	11.6	9.0
45.0	12.4	8.8	12.8	12.1	9.3	12.0	11.8	9.8	11.2	11.5	10.4	10.5	11.2	11.0	9.8	11.0	11.6	9.1
46.0	12.6	8.8	13.0	12.3	9.3	12.2	12.0	9.8	11.4	11.7	10.4	10.7	11.5	11.0	10.0	11.2	11.6	9.3
48.0	13.1	8.9	13.5	12.8	9.3	12.6	12.4	9.9	11.8	12.1	10.4	11.0	11.9	11.0	10.3	11.6	11.7	9.6
50.0	13.6	8.9	13.9	13.2	9.4	13.0	12.9	9.9	12.2	12.6	10.5	11.4	12.3	11.1	10.6	12.0	11.7	9.9

YCAL0057EC

IPLV= 13.5

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75.0			80.0			85.0			90.0			95.0			100.0		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	15.6	12.5	12.2	15.2	13.2	11.4	14.9	14.0	10.6	14.4	14.9	9.8	14.1	15.8	9.1	13.7	16.7	8.4
42.0	16.1	12.6	12.6	15.8	13.3	11.7	15.4	14.1	10.9	15.0	15.0	10.1	14.6	15.9	9.4	14.2	16.8	8.7
44.0	16.6	12.6	12.9	16.3	13.4	12.1	15.9	14.2	11.2	15.5	15.1	10.4	15.1	16.0	9.7	14.7	16.9	8.9
45.0	16.9	12.7	13.1	16.6	13.4	12.3	16.2	14.3	11.4	15.8	15.1	10.6	15.4	16.0	9.8	14.9	16.9	9.1
46.0	17.3	12.7	13.4	16.8	13.5	12.4	16.5	14.3	11.6	16.1	15.2	10.7	15.6	16.1	9.9	15.2	17.0	9.2
48.0	17.9	12.8	13.7	17.4	13.6	12.7	17.0	14.4	11.9	16.6	15.2	11.0	16.2	16.1	10.2	15.7	17.1	9.5
50.0	18.5	12.9	14.1	18.1	13.7	13.2	17.6	14.5	12.2	17.2	15.3	11.4	16.7	16.2	10.5	16.3	17.2	9.8

YCAL0073EC

IPLV= 13.7

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	19.3	15.6	12.6	18.9	16.4	11.8	18.5	17.3	11.0	18.0	18.2	10.3	17.6	19.3	9.6	17.1	20.4	8.9
42.0	20.0	15.7	12.9	19.6	16.5	12.1	19.1	17.4	11.4	18.7	18.3	10.6	18.2	19.4	9.9	17.7	20.5	9.1
44.0	20.7	15.8	13.3	20.3	16.6	12.5	19.8	17.5	11.7	19.4	18.4	10.9	18.9	19.5	10.2	18.4	20.6	9.4
45.0	21.1	15.9	13.5	20.6	16.7	12.7	20.2	17.6	11.9	19.7	18.5	11.1	19.2	19.5	10.3	18.7	20.6	9.6
46.0	21.4	15.9	13.7	21.0	16.7	12.9	20.5	17.6	12.1	20.1	18.5	11.3	19.6	19.6	10.5	19.0	20.7	9.7
48.0	22.2	16.0	14.1	21.7	16.8	13.3	21.2	17.7	12.4	20.8	18.7	11.6	20.2	19.7	10.8	19.7	20.8	10.0
50.0	23.0	16.2	14.5	22.5	17.0	13.6	22.0	17.8	12.8	21.5	18.8	11.9	20.9	19.8	11.1	20.4	20.9	10.3

YCAL0087EC

IPLV= 14.8

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	24.7	18.9	13.6	24.1	20.1	12.6	23.6	21.3	11.7	23.0	22.6	10.9	22.5	24.0	10.1	21.9	25.5	9.3
42.0	25.6	19.1	14.0	25.0	20.2	13.0	24.4	21.5	12.1	23.9	22.8	11.2	23.3	24.1	10.4	22.7	25.6	9.6
44.0	26.5	19.2	14.4	25.9	20.4	13.4	25.3	21.6	12.4	24.7	22.9	11.5	24.1	24.3	10.7	23.5	25.8	9.9
45.0	26.9	19.3	14.6	26.3	20.4	13.6	25.7	21.7	12.6	25.2	23.0	11.7	24.6	24.4	10.8	23.9	25.8	10.0
46.0	27.4	19.4	14.8	26.8	20.5	13.8	26.2	21.7	12.8	25.6	23.0	11.9	25.0	24.4	11.0	24.4	25.9	10.2
48.0	28.3	19.5	15.2	27.7	20.7	14.2	27.1	21.9	13.2	26.5	23.2	12.2	25.9	24.6	11.3	25.2	26.1	10.5
50.0	29.3	19.7	15.6	28.7	20.8	14.6	28.0	22.0	13.5	27.4	23.3	12.6	26.7	24.7	11.7	26.1	26.2	10.8

NOTES:

1. kW = Compressor Input Power
2. EER = Chiller EER (includes power from compressors, fans, and the control panels 0.8 kW)
3. LCWT = Leaving Chilled Water Temperature
4. Ratings are based upon 2.4 GPM cooler water per ton and 0.0001 fouling factor
5. Rated in accordance with ARI Standard 550/590-98
6. The shaded points are certified in accordance with ARI Standard 550/590-98

YCAL0043EC**IPLV= 12.9**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	9.7	12.2	7.8	9.4	12.9	7.2	9.2	13.7	6.7	8.9	14.5	6.2	8.5	15.3	5.6
42.0	10.1	12.2	8.1	9.8	12.9	7.5	9.5	13.7	6.9	9.2	14.5	6.4	8.8	15.4	5.8
44.0	10.5	12.3	8.4	10.2	13.0	7.7	9.9	13.7	7.2	9.5	14.5	6.6	9.2	15.4	6.1
45.0	10.7	12.3	8.5	10.4	13.0	7.9	10.1	13.8	7.3	9.7	14.6	6.7	9.4	15.4	6.2
46.0	10.9	12.3	8.6	10.6	13.0	8.0	10.2	13.8	7.4	9.9	14.6	6.8	9.5	15.4	6.3
48.0	11.3	12.3	8.9	11.0	13.1	8.3	10.6	13.8	7.7	10.3	14.6	7.1	9.9	15.5	6.5
50.0	11.7	12.4	9.2	11.4	13.1	8.6	11.0	13.9	7.9	10.7	14.7	7.3	10.3	15.5	6.7

YCAL0057EC**IPLV= 13.5**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	13.2	17.7	7.8	12.8	18.7	7.2	12.4	19.8	6.6	12.0	20.9	6.1	11.6	22.1	5.6
42.0	13.7	17.8	8.0	13.3	18.8	7.4	12.9	19.9	6.8	12.4	21.0	6.3	12.0	22.2	5.8
44.0	14.3	17.9	8.3	13.8	18.9	7.6	13.3	20.0	7.0	12.9	21.2	6.5	12.5	22.3	5.9
45.0	14.6	18.0	8.4	14.0	19.0	7.7	13.8	20.1	7.2	13.1	21.2	6.6	12.7	22.4	6.0
46.0	14.7	18.0	8.5	14.4	19.1	7.9	13.8	20.1	7.2	13.4	21.3	6.7	12.9	22.5	6.1
48.0	15.3	18.1	8.8	14.9	19.2	8.1	14.4	20.3	7.5	13.9	21.4	6.9	13.4	22.6	6.3
50.0	15.8	18.2	9.0	15.3	19.3	8.3	14.9	20.4	7.7	14.4	21.5	7.1	13.8	22.7	6.5

YCAL0073EC**IPLV= 13.7**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	16.6	21.5	8.2	16.1	22.8	7.5	15.6	24.1	7.0	15.0	25.4	6.4	14.4	26.9	5.8
42.0	17.2	21.6	8.5	16.6	22.9	7.8	16.1	24.2	7.2	15.6	25.6	6.6	14.9	27.0	6.0
44.0	17.9	21.7	8.7	17.2	23.0	8.0	16.7	24.3	7.4	16.1	25.7	6.8	15.6	27.1	6.2
45.0	18.2	21.8	8.9	17.6	23.0	8.2	17.0	24.4	7.5	16.4	25.7	6.9	15.9	27.2	6.3
46.0	18.5	21.8	9.0	17.9	23.1	8.3	17.4	24.4	7.7	16.8	25.8	7.0	16.1	27.3	6.4
48.0	19.2	22.0	9.3	18.6	23.2	8.6	17.9	24.5	7.9	17.3	25.9	7.2	16.7	27.4	6.6
50.0	19.8	22.1	9.6	19.2	23.3	8.8	18.6	24.6	8.1	18.0	26.1	7.5	17.3	27.5	6.9

YCAL0087EC**IPLV= 14.8**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	21.3	27.0	8.6	20.7	28.6	7.9	20.1	30.4	7.3	19.4	32.2	6.7	18.7	34.1	6.1
42.0	22.1	27.2	8.9	21.5	28.8	8.2	20.8	30.5	7.5	20.2	32.4	6.9	19.4	34.3	6.3
44.0	22.9	27.3	9.1	22.3	29.0	8.4	21.6	30.7	7.7	20.9	32.5	7.1	20.2	34.4	6.5
45.0	23.3	27.4	9.3	22.7	29.0	8.5	22.0	30.8	7.9	21.3	32.6	7.2	20.5	34.5	6.6
46.0	23.7	27.5	9.4	23.1	29.1	8.7	22.4	30.9	8.0	21.6	32.7	7.3	20.9	34.6	6.7
48.0	24.5	27.6	9.7	23.9	29.3	8.9	23.1	31.0	8.2	22.4	32.9	7.5	21.6	34.8	6.9
50.0	25.4	27.8	10.0	24.7	29.4	9.2	23.9	31.2	8.4	23.2	33.0	7.8	22.4	35.0	7.1

NOTES:

1. kW = Compressor Input Power
2. EER = Chiller EER (includes power from compressors, fans, and the control panels 0.8 kW)
3. LCWT = Leaving Chilled Water Temperature
4. Ratings are based upon 2.4 GPM cooler water per ton and 0.0001 fouling factor
5. Rated in accordance with ARI Standard 550/590-98
6. The shaded points are certified in accordance with ARI Standard 550/590-98

Ratings - R-22 (English Units)

YCAL0107EC

IPLV= 14.7

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	29.6	24.4	13.0	29.0	25.7	12.2	28.3	27.1	11.3	27.6	28.7	10.5	26.9	30.3	9.8	26.1	32.0	9.0
42.0	30.7	24.6	13.4	30.0	25.9	12.5	29.3	27.3	11.7	28.6	28.8	10.8	27.8	30.5	10.0	27.1	32.2	9.3
44.0	31.7	24.8	13.8	31.0	26.1	12.9	30.3	27.5	12.0	29.6	29.0	11.1	28.8	30.7	10.3	28.0	32.4	9.6
45.0	32.3	24.9	14.0	31.6	26.2	13.1	30.8	27.6	12.2	30.1	29.1	11.3	29.3	30.8	10.5	28.5	32.5	9.7
46.0	32.8	25.0	14.2	32.1	26.3	13.2	31.4	27.7	12.3	30.6	29.2	11.5	29.8	30.9	10.6	29.0	32.6	9.8
48.0	34.0	25.2	14.5	33.2	26.5	13.6	32.5	27.9	12.7	31.7	29.4	11.8	30.8	31.1	10.9	30.0	32.8	10.1
50.0	35.1	25.4	14.9	34.3	26.7	14.0	33.6	28.1	13.0	32.7	29.6	12.1	31.9	31.3	11.2	31.0	33.0	10.4

YCAL0117EC

IPLV= 15.3

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	33.9	24.1	13.7	33.1	25.5	12.8	32.3	27.1	11.9	31.6	28.7	11.1	30.8	30.4	10.3	30.0	32.3	9.5
42.0	35.1	24.2	14.1	34.4	25.7	13.2	33.6	27.2	12.3	32.8	28.8	11.4	32.0	30.5	10.6	31.1	32.4	9.8
44.0	36.4	24.3	14.6	35.6	25.8	13.6	34.8	27.3	12.7	34.0	28.9	11.8	33.1	30.6	11.0	32.2	32.5	10.2
45.0	37.1	24.4	14.9	36.3	25.8	13.9	35.4	27.4	12.9	34.6	29.0	12.0	33.8	30.7	11.2	32.8	32.5	10.3
46.0	37.8	24.4	15.1	36.9	25.9	14.1	36.1	27.4	13.1	35.2	29.1	12.2	34.2	30.8	11.3	33.4	32.6	10.5
48.0	39.1	24.6	15.5	38.3	26.0	14.5	37.4	27.6	13.5	36.5	29.2	12.6	35.5	30.9	11.7	34.7	32.7	10.9
50.0	40.5	24.7	16.0	39.6	26.2	15.0	38.7	27.7	13.9	37.8	29.3	13.0	36.8	31.1	12.0	35.8	32.9	11.2

YCAL0133EC

IPLV= 14.7

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	37.2	27.8	13.4	36.5	29.3	12.5	35.7	31.0	11.7	34.8	32.7	10.9	33.9	34.6	10.1	33.0	36.6	9.4
42.0	38.6	27.9	13.8	37.8	29.5	12.9	37.0	31.1	12.1	36.1	32.9	11.3	35.2	34.8	10.4	34.2	36.8	9.7
44.0	40.0	28.1	14.2	39.2	29.6	13.3	38.3	31.3	12.4	37.4	33.0	11.6	36.5	34.9	10.8	35.5	37.0	10.0
45.0	40.7	28.2	14.5	39.9	29.7	13.5	39.0	31.4	12.6	38.0	33.1	11.8	37.1	35.0	11.0	36.1	37.1	10.2
46.0	41.4	28.3	14.7	40.6	29.8	13.7	39.6	31.5	12.8	38.7	33.2	12.0	37.8	35.1	11.1	36.8	37.1	10.3
48.0	42.9	28.5	15.1	42.0	30.0	14.2	41.0	31.6	13.2	40.1	33.4	12.3	39.0	35.3	11.5	38.0	37.3	10.6
50.0	44.4	28.7	15.6	43.4	30.2	14.6	42.5	31.8	13.6	41.5	33.6	12.7	40.4	35.5	11.8	39.3	37.5	11.0

YCAL0147EC

IPLV= 14.5

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	40.6	31.4	13.2	39.8	33.1	12.3	38.9	34.8	11.5	38.0	36.8	10.8	37.0	38.8	10.0	36.0	41.0	9.3
42.0	42.1	31.6	13.6	41.2	33.3	12.7	40.3	35.1	11.9	39.3	37.0	11.1	38.4	39.0	10.3	37.4	41.2	9.6
44.0	43.6	31.9	14.0	42.7	33.5	13.1	41.7	35.3	12.3	40.8	37.2	11.4	39.7	39.2	10.6	38.7	41.5	9.9
45.0	44.4	32.0	14.2	43.4	33.6	13.3	42.5	35.4	12.4	41.5	37.3	11.6	40.4	39.4	10.8	39.3	41.6	10.0
46.0	45.1	32.1	14.4	44.2	33.7	13.5	43.2	35.5	12.6	42.2	37.4	11.8	41.1	39.5	11.0	40.1	41.7	10.2
48.0	46.7	32.4	14.8	45.7	34.0	13.9	44.7	35.7	13.0	43.7	37.6	12.1	42.6	39.7	11.3	41.5	41.9	10.5
50.0	48.3	32.6	15.2	47.3	34.2	14.3	46.3	35.9	13.4	45.2	37.8	12.5	44.1	39.9	11.6	42.9	42.1	10.8

NOTES:

1. kW = Compressor Input Power
2. EER = Chiller EER (includes power from compressors, fans, and the control panels 0.8 kW)
3. LCWT = Leaving Chilled Water Temperature
4. Ratings are based upon 2.4 GPM cooler water per ton and 0.0001 fouling factor
5. Rated in accordance with ARI Standard 550/590-98
6. The shaded points are certified in accordance with ARI Standard 550/590-98

YCAL0107EC**IPLV= 14.7**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	25.3	33.8	8.3	24.5	35.7	7.6	23.6	37.7	7.0	22.8	39.9	6.4	21.8	42.1	5.8
42.0	26.3	34.0	8.6	25.4	35.9	7.9	24.5	38.0	7.2	23.6	40.1	6.6	22.7	42.3	6.0
44.0	27.2	34.2	8.8	26.3	36.2	8.1	25.4	38.2	7.4	24.5	40.4	6.8	23.6	42.6	6.2
45.0	27.7	34.3	8.9	26.8	36.3	8.2	25.9	38.3	7.6	25.0	40.5	6.9	24.0	42.8	6.3
46.0	28.2	34.4	9.1	27.3	36.4	8.4	26.4	38.5	7.7	25.4	40.6	7.0	24.4	42.9	6.4
48.0	29.1	34.7	9.3	28.2	36.6	8.6	27.3	38.7	7.9	26.3	40.9	7.2	25.3	43.2	6.6
50.0	30.1	34.9	9.6	29.2	36.8	8.8	28.3	38.9	8.1	27.3	41.1	7.4	26.3	43.4	6.8

YCAL0117EC**IPLV= 15.3**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	29.1	34.2	8.8	28.2	36.2	8.1	27.4	38.4	7.5	26.5	40.6	6.9	25.6	42.9	6.3
42.0	30.2	34.3	9.1	29.4	36.3	8.4	28.4	38.5	7.7	27.5	40.7	7.1	26.6	43.1	6.6
44.0	31.3	34.4	9.4	30.4	36.5	8.7	29.5	38.6	8.0	28.5	40.8	7.4	27.6	43.2	6.8
45.0	31.9	34.5	9.6	31.0	36.5	8.8	30.0	38.7	8.1	29.1	40.9	7.5	28.1	43.3	6.9
46.0	32.5	34.5	9.7	31.5	36.6	9.0	30.6	38.7	8.3	29.6	41.0	7.6	28.6	43.4	7.0
48.0	33.6	34.7	10.0	32.6	36.7	9.3	31.7	38.9	8.5	30.7	41.1	7.9	29.7	43.5	7.3
50.0	34.9	34.8	10.4	33.8	36.9	9.6	32.8	39.0	8.8	31.8	41.3	8.1	30.7	43.7	7.5

YCAL0133EC**IPLV= 14.7**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	32.1	38.8	8.7	31.1	41.0	8.0	30.1	43.4	7.4	29.0	45.9	6.8	27.9	48.5	6.2
42.0	33.3	38.9	9.0	32.3	41.2	8.3	31.2	43.6	7.6	30.2	46.1	7.0	29.0	48.7	6.4
44.0	34.5	39.1	9.2	33.4	41.4	8.5	32.4	43.8	7.9	31.3	46.3	7.2	30.2	49.0	6.6
45.0	35.1	39.2	9.4	34.0	41.5	8.7	33.0	43.9	8.0	31.9	46.4	7.4	30.7	49.1	6.7
46.0	35.7	39.3	9.5	34.6	41.6	8.8	33.5	44.0	8.1	32.5	46.5	7.5	31.3	49.2	6.9
48.0	37.0	39.5	9.8	35.8	41.7	9.1	34.8	44.2	8.4	33.6	46.7	7.7	32.5	49.4	7.1
50.0	38.3	39.7	10.1	37.2	41.9	9.4	35.9	44.4	8.6	34.8	46.9	8.0	33.6	49.6	7.3

YCAL0147EC**IPLV= 14.5**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	35.0	43.4	8.6	33.9	45.8	7.9	32.8	48.5	7.3	31.6	51.2	6.7	30.4	54.1	6.1
42.0	36.3	43.6	8.8	35.1	46.1	8.2	34.0	48.7	7.5	32.7	51.5	6.9	31.5	54.4	6.3
44.0	37.6	43.8	9.1	36.4	46.3	8.4	35.2	49.0	7.7	34.1	51.7	7.1	32.7	54.7	6.5
45.0	38.3	43.9	9.3	37.1	46.5	8.6	35.9	49.1	7.9	34.7	51.9	7.2	33.3	54.8	6.6
46.0	38.9	44.0	9.4	37.8	46.6	8.7	36.5	49.2	8.0	35.3	52.0	7.4	34.0	55.0	6.7
48.0	40.3	44.3	9.7	39.1	46.8	9.0	37.9	49.5	8.2	36.6	52.3	7.6	35.3	55.3	7.0
50.0	41.7	44.5	10.0	40.5	47.0	9.2	39.2	49.7	8.5	37.9	52.6	7.8	36.5	55.6	7.2

NOTES:

1. kW = Compressor Input Power
2. EER = Chiller EER (includes power from compressors, fans, and the control panels 0.8 kW)
3. LCWT = Leaving Chilled Water Temperature
4. Ratings are based upon 2.4 GPM cooler water per ton and 0.0001 fouling factor
5. Rated in accordance with ARI Standard 550/590-98
6. The shaded points are certified in accordance with ARI Standard 550/590-98

Ratings - R-22 (English Units)

YCAL0157EC

IPLV= 15.0

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	44.5	34.9	13.2	43.4	36.9	12.3	42.6	39.0	11.5	41.6	41.2	10.6	40.5	43.7	9.9	39.5	46.2	9.1
42.0	46.1	35.2	13.6	45.1	37.1	12.7	44.1	39.3	11.8	43.1	41.5	11.0	42.0	43.9	10.2	40.9	46.5	9.4
44.0	47.6	35.4	13.9	46.7	37.4	13.0	45.6	39.5	12.1	44.6	41.8	11.3	43.5	44.2	10.5	42.3	46.8	9.7
45.0	48.5	35.6	14.1	47.5	37.5	13.2	46.4	39.7	12.3	45.4	41.9	11.5	44.2	44.3	10.6	43.1	46.9	9.8
46.0	49.4	35.7	14.3	48.3	37.7	13.4	47.2	39.8	12.5	46.1	42.1	11.6	45.0	44.5	10.8	43.8	47.1	10.0
48.0	51.1	36.0	14.7	50.0	38.0	13.8	48.8	40.1	12.8	47.7	42.3	11.9	46.6	44.8	11.1	45.4	47.4	10.3
50.0	52.8	36.3	15.1	51.7	38.3	14.1	50.5	40.4	13.2	49.4	42.6	12.3	48.1	45.1	11.4	46.6	47.6	10.5

YCAL0173EC

IPLV= 15.7

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	49.1	36.9	13.9	48.0	39.1	12.9	47.0	41.5	12.0	45.9	44.0	11.1	44.8	46.6	10.3	43.7	49.5	9.5
42.0	50.8	37.2	14.3	49.7	39.4	13.3	48.7	41.7	12.3	47.5	44.3	11.4	46.4	46.9	10.6	45.3	49.7	9.8
44.0	52.6	37.4	14.7	51.5	39.7	13.7	50.3	42.0	12.7	49.2	44.5	11.8	48.1	47.2	10.9	46.9	50.0	10.1
45.0	53.5	37.6	14.9	52.4	39.8	13.8	51.2	42.2	12.9	50.0	44.7	11.9	48.9	47.4	11.1	47.7	50.2	10.3
46.0	54.4	37.7	15.1	53.3	39.9	14.0	52.1	42.3	13.1	50.8	44.8	12.1	49.8	47.5	11.2	48.5	50.3	10.4
48.0	56.3	38.0	15.5	55.1	40.3	14.4	53.9	42.6	13.4	52.7	45.1	12.5	51.5	47.8	11.6	50.2	50.7	10.7
50.0	58.2	38.4	15.9	57.0	40.6	14.8	55.7	42.9	13.8	54.5	45.4	12.8	53.2	48.1	11.9	51.9	51.0	11.0

YCAL0197EC

IPLV= 14.7

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	54.9	43.6	13.1	53.6	46.0	12.2	52.4	48.7	11.3	51.1	51.5	10.5	49.6	54.4	9.7	48.3	57.6	9.0
42.0	56.8	43.9	13.5	55.6	46.3	12.5	54.3	49.0	11.7	52.9	51.8	10.8	51.5	54.8	10.0	50.0	57.9	9.3
44.0	58.9	44.2	13.8	57.5	46.7	12.9	56.2	49.3	12.0	54.8	52.1	11.2	53.3	55.1	10.3	51.9	58.3	9.6
45.0	59.9	44.4	14.0	58.5	46.8	13.1	57.1	49.5	12.2	55.7	52.3	11.3	54.2	55.3	10.5	52.8	58.5	9.7
46.0	60.9	44.5	14.2	59.4	47.0	13.3	58.1	49.6	12.4	56.7	52.4	11.5	55.2	55.4	10.6	53.7	58.6	9.8
48.0	63.0	44.9	14.6	61.6	47.3	13.7	60.1	50.0	12.7	58.7	52.8	11.8	57.1	55.8	10.9	55.5	59.0	10.1
50.0	65.2	45.2	15.0	63.7	47.7	14.0	62.2	50.3	13.1	60.7	53.1	12.1	59.1	56.2	11.3	57.4	59.4	10.4

YCAL0217EC

IPLV= 15.0

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	60.6	47.4	13.4	59.5	49.9	12.6	58.1	52.6	11.7	56.7	55.6	10.9	55.3	58.7	10.1	53.8	62.1	9.4
42.0	63.0	47.7	13.9	61.6	50.3	13.0	60.2	53.0	12.1	58.8	55.9	11.3	57.3	59.1	10.4	55.7	62.4	9.7
44.0	65.2	48.1	14.3	63.8	50.6	13.3	62.2	53.3	12.4	60.9	56.3	11.6	59.3	59.4	10.8	57.7	62.8	10.0
45.0	66.3	48.3	14.5	64.9	50.8	13.5	63.3	53.5	12.6	61.9	56.4	11.8	60.4	59.6	10.9	58.8	63.0	10.1
46.0	67.5	48.5	14.7	66.1	51.0	13.7	64.6	53.7	12.8	63.0	56.6	11.9	61.4	59.8	11.1	59.8	63.1	10.3
48.0	69.9	48.8	15.1	68.3	51.3	14.1	66.8	54.0	13.2	65.0	56.9	12.2	63.5	60.1	11.4	61.8	63.5	10.6
50.0	72.3	49.2	15.5	70.7	51.7	14.5	69.1	54.4	13.5	67.4	57.3	12.6	65.6	60.5	11.7	64.0	63.9	10.9

NOTES:

1. kW = Compressor Input Power
2. EER = Chiller EER (includes power from compressors, fans, and the control panels 0.8 kW)
3. LCWT = Leaving Chilled Water Temperature
4. Ratings are based upon 2.4 GPM cooler water per ton and 0.0001 fouling factor
5. Rated in accordance with ARI Standard 550/590-98
6. The shaded points are certified in accordance with ARI Standard 550/590-98

YCAL0157EC**IPLV= 15.0**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	38.4	48.9	8.4	37.2	51.8	7.8	36.1	54.8	7.2	34.8	58.0	6.6	33.5	61.3	6.0
42.0	39.8	49.2	8.7	38.6	52.1	8.0	37.4	55.1	7.4	36.1	58.3	6.8	34.7	61.7	6.2
44.0	41.2	49.5	9.0	40.0	52.4	8.3	38.7	55.5	7.6	37.4	58.7	7.0	36.0	62.1	6.4
45.0	41.9	49.7	9.1	40.7	52.6	8.4	39.4	55.6	7.7	38.1	58.8	7.1	36.7	62.2	6.5
46.0	42.6	49.8	9.2	41.4	52.7	8.5	40.1	55.8	7.8	38.7	59.0	7.2	37.3	62.4	6.6
48.0	44.1	50.1	9.5	42.8	53.0	8.8	41.5	56.1	8.1	40.1	59.4	7.4	38.6	62.8	6.8
50.0	45.6	50.4	9.8	44.3	53.3	9.0	42.9	56.4	8.3	41.5	59.7	7.6	40.0	63.1	7.0

YCAL0173EC**IPLV= 15.7**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	42.5	52.4	8.8	41.4	55.5	8.1	40.2	58.8	7.5	38.9	62.3	6.9	37.5	66.0	6.3
42.0	44.1	52.7	9.1	42.9	55.9	8.4	41.6	59.2	7.7	40.3	62.7	7.1	38.9	66.4	6.5
44.0	45.7	53.0	9.3	44.4	56.2	8.6	43.1	59.5	7.9	41.7	63.0	7.3	40.3	66.7	6.7
45.0	46.5	53.2	9.5	45.2	56.4	8.8	43.9	59.7	8.1	42.5	63.2	7.4	41.0	66.9	6.8
46.0	47.3	53.4	9.6	46.0	56.5	8.9	44.6	59.9	8.2	43.2	63.4	7.5	41.7	67.1	6.9
48.0	48.9	53.7	9.9	47.6	56.9	9.1	46.2	60.2	8.4	44.7	63.8	7.7	43.2	67.5	7.1
50.0	50.6	54.0	10.2	49.2	57.2	9.4	47.7	60.6	8.7	46.2	64.1	8.0	44.6	67.8	7.3

YCAL0197EC**IPLV= 14.7**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	46.9	60.9	8.3	45.4	64.4	7.6	43.8	68.1	7.0	42.3	72.0	6.4	40.6	76.0	5.9
42.0	48.5	61.3	8.6	47.0	64.8	7.9	45.5	68.5	7.2	43.8	72.4	6.6	42.2	76.5	6.1
44.0	50.3	61.7	8.8	48.7	65.2	8.1	47.1	68.9	7.5	45.5	72.8	6.8	43.8	77.0	6.3
45.0	51.2	61.8	8.9	49.6	65.4	8.2	48.0	69.1	7.6	46.3	73.1	7.0	44.5	77.2	6.4
46.0	52.1	62.0	9.1	50.5	65.6	8.4	48.8	69.3	7.7	47.0	73.3	7.0	45.3	77.4	6.5
48.0	53.9	62.4	9.4	52.3	66.0	8.6	50.4	69.8	7.9	48.8	73.7	7.3	39.5	60.9	7.0
50.0	55.8	62.8	9.6	54.1	66.4	8.9	52.3	70.2	8.2	50.4	74.2	7.5	40.8	61.2	7.2

YCAL0217EC**IPLV= 15.0**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	52.2	65.7	8.6	50.5	69.4	8.0	48.8	73.4	7.3	47.1	77.6	6.7	45.2	82.0	6.1
42.0	54.1	66.0	8.9	52.4	69.8	8.2	50.7	73.8	7.5	48.8	78.1	6.9	46.8	82.5	6.3
44.0	56.1	66.4	9.2	54.3	70.2	8.5	52.6	74.2	7.8	50.7	78.5	7.1	48.8	83.0	6.5
45.0	57.1	66.6	9.3	55.3	70.4	8.6	53.5	74.4	7.9	51.6	78.7	7.2	49.7	83.2	6.6
46.0	58.1	66.8	9.5	56.3	70.6	8.7	54.5	74.6	8.0	52.5	78.9	7.4	50.6	83.4	6.7
48.0	60.1	67.1	9.8	58.3	71.0	9.0	56.4	75.1	8.3	54.4	79.4	7.6	52.4	83.9	6.9
50.0	62.2	67.5	10.0	60.3	71.4	9.3	58.4	75.5	8.5	56.4	79.8	7.8	54.4	84.4	7.2

NOTES:

1. kW = Compressor Input Power
2. EER = Chiller EER (includes power from compressors, fans, and the control panels 0.8 kW)
3. LCWT = Leaving Chilled Water Temperature
4. Ratings are based upon 2.4 GPM cooler water per ton and 0.0001 fouling factor
5. Rated in accordance with ARI Standard 550/590-98
6. The shaded points are certified in accordance with ARI Standard 550/590-98

Ratings - R-22 (English Units)

YCAL0237EC

IPLV= 15.2

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	66.4	52.9	13.4	64.9	55.9	12.4	63.5	59.1	11.5	62.0	62.6	10.7	60.5	66.3	9.9	58.8	70.2	9.2
42.0	68.8	53.3	13.7	67.3	56.3	12.8	65.7	59.6	11.9	64.2	63.0	11.0	62.6	66.8	10.2	61.0	70.7	9.4
44.0	71.2	53.7	14.1	69.7	56.8	13.1	68.1	60.0	12.2	66.4	63.5	11.3	64.8	67.2	10.5	63.1	71.2	9.7
45.0	72.4	54.0	14.3	70.9	57.0	13.3	69.2	60.2	12.4	67.5	63.7	11.5	65.9	67.4	10.7	64.2	71.4	9.8
46.0	73.6	54.2	14.5	72.1	57.2	13.5	70.4	60.5	12.6	68.8	63.9	11.7	67.1	67.7	10.8	65.3	71.6	10.0
48.0	76.2	54.6	14.9	74.5	57.7	13.9	72.8	60.9	12.9	71.1	64.4	12.0	69.3	68.1	11.1	67.5	72.1	10.3
50.0	78.7	55.1	15.3	77.0	58.1	14.2	75.3	61.4	13.2	73.5	64.9	12.3	71.6	68.6	11.4	69.8	72.6	10.5

YCAL0253EC

IPLV=15.7

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	72.4	58.5	13.3	70.9	62.1	12.4	68.9	65.7	11.4	67.7	69.8	10.6	66.0	74.1	9.8	64.2	78.6	9.0
42.0	75.0	59.0	13.7	73.4	62.6	12.7	71.8	66.4	11.8	70.0	70.4	10.9	68.3	74.6	10.1	66.5	79.2	9.3
44.0	77.7	59.6	14.0	75.9	63.1	13.0	74.3	66.9	12.1	72.5	70.9	11.2	70.7	75.2	10.3	68.8	79.8	9.5
45.0	79.0	59.8	14.2	77.2	63.4	13.2	75.5	67.2	12.2	73.7	71.2	11.3	71.9	75.5	10.5	70.0	80.1	9.7
46.0	80.3	60.1	14.4	78.6	63.7	13.4	76.8	67.5	12.4	75.0	71.5	11.5	73.1	75.8	10.6	71.2	80.3	9.8
48.0	83.0	60.7	14.8	81.2	64.2	13.7	79.3	68.1	12.7	77.5	72.1	11.8	75.6	76.4	10.9	73.6	81.0	10.1
50.0	85.8	61.2	15.1	83.8	64.8	14.1	82.0	68.6	13.0	80.0	72.7	12.1	78.0	77.0	11.2	76.0	81.6	10.3

YCAL0287EC

IPLV=15.0

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	81.2	70.7	12.7	79.4	74.6	11.8	77.5	78.7	10.9	75.6	83.2	10.1	73.6	88.0	9.4	71.5	93.1	8.6
42.0	84.0	71.4	13.0	82.1	75.3	12.1	80.2	79.5	11.2	78.2	84.1	10.4	76.2	88.9	9.6	74.1	94.0	8.9
44.0	86.8	72.2	13.3	84.9	76.2	12.4	82.9	80.4	11.5	80.9	84.9	10.6	78.8	89.8	9.8	76.6	95.0	9.1
45.0	88.3	72.6	13.4	86.3	76.6	12.5	84.3	80.8	11.6	82.2	85.4	10.8	80.1	90.3	10.0	77.9	95.5	9.2
46.0	89.7	73.0	13.6	87.7	77.0	12.6	85.7	81.2	11.8	83.6	85.8	10.9	81.5	90.7	10.1	79.3	95.9	9.3
48.0	92.7	73.8	13.9	90.6	77.8	12.9	88.6	82.1	12.0	86.4	86.7	11.1	84.2	91.7	10.3	81.9	97.0	9.5
50.0	95.7	74.7	14.2	93.6	78.7	13.2	91.5	83.0	12.3	89.3	87.7	11.4	87.0	92.6	10.6	84.6	98.0	9.7

NOTES:

1. kW = Compressor Input Power
2. EER = Chiller EER (includes power from compressors, fans, and the control panels 0.8 kW)
3. LCWT = Leaving Chilled Water Temperature
4. Ratings are based upon 2.4 GPM cooler water per ton and 0.0001 fouling factor
5. Rated in accordance with ARI Standard 550/590-98
6. The shaded points are certified in accordance with ARI Standard 550/590-98

YCAL0237EC**IPLV= 15.2**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	57.2	74.4	8.5	55.4	78.8	7.8	53.6	83.4	7.1	51.7	88.2	6.5	49.6	93.2	5.9
42.0	59.2	74.9	8.7	57.4	79.3	8.0	55.5	83.9	7.3	53.6	88.8	6.7	51.5	93.9	6.1
44.0	61.3	75.3	9.0	59.5	79.8	8.2	57.5	84.4	7.6	55.5	89.3	6.9	53.4	94.5	6.3
45.0	62.4	75.6	9.1	60.5	80.0	8.4	58.5	84.7	7.7	56.5	89.6	7.0	45.5	74.1	6.8
46.0	63.5	75.8	9.2	61.6	80.3	8.5	59.6	85.0	7.8	57.5	89.9	7.1	46.4	74.3	6.9
48.0	65.6	76.3	9.5	63.7	80.8	8.7	61.6	85.5	8.0	59.5	90.5	7.3	48.0	74.7	7.1
50.0	67.8	76.8	9.7	65.8	81.3	9.0	63.7	86.1	8.2	61.5	91.1	7.5	49.7	75.1	7.3

YCAL0253EC**IPLV=15.7**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	62.4	83.3	8.3	60.5	88.3	7.6	58.6	93.5	7.0	56.4	99.0	6.4	54.4	104.7	5.8
42.0	64.6	83.9	8.5	62.7	88.9	7.9	60.7	94.2	7.2	58.6	99.7	6.6	56.2	105.5	6.0
44.0	66.9	84.5	8.8	64.9	89.6	8.1	62.8	94.9	7.4	60.6	100.4	6.8	40.8	64.8	6.8
45.0	68.0	84.8	8.9	66.0	89.9	8.2	63.8	95.2	7.5	61.7	100.8	6.9	41.6	65.0	6.9
46.0	69.2	85.1	9.0	67.1	90.2	8.3	65.0	95.5	7.6	62.7	101.1	7.0	42.3	65.2	7.1
48.0	71.5	85.8	9.3	69.4	90.9	8.5	67.2	96.2	7.8	64.8	101.8	7.2	43.8	65.5	7.3
50.0	73.9	86.4	9.5	71.7	91.5	8.7	69.4	96.9	8.0	66.9	102.5	7.3	45.3	65.8	7.5

YCAL0287EC**IPLV=15.0**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	69.3	98.6	7.9	66.9	104.4	7.3	64.4	110.6	6.6	61.8	117.2	6.0	50.6	94.7	6.0
42.0	71.8	99.6	8.1	69.4	105.4	7.5	66.9	111.7	6.8	54.7	90.1	6.8	39.1	66.7	6.4
44.0	74.3	100.5	8.4	71.9	106.5	7.7	69.3	112.8	7.0	56.7	90.9	7.0	40.7	67.2	6.6
45.0	75.6	101.0	8.5	73.1	107.0	7.7	70.6	113.3	7.1	57.8	91.3	7.1	41.4	67.4	6.7
46.0	76.9	101.6	8.6	74.4	107.5	7.8	71.8	113.9	7.2	58.8	91.7	7.2	42.2	67.7	6.9
48.0	79.5	102.6	8.8	77.0	108.6	8.0	74.4	115.0	7.4	61.0	92.4	7.4	43.8	68.2	7.1
50.0	82.2	103.7	9.0	79.7	109.7	8.2	77.0	116.1	7.5	63.1	93.2	7.6	45.4	68.6	7.3

NOTES:

1. kW = Compressor Input Power
2. EER = Chiller EER (includes power from compressors, fans, and the control panels 0.8 kW)
3. LCWT = Leaving Chilled Water Temperature
4. Ratings are based upon 2.4 GPM cooler water per ton and 0.0001 fouling factor
5. Rated in accordance with ARI Standard 550/590-98
6. The shaded points are certified in accordance with ARI Standard 550/590-98

Ratings - R-22 (English Units)

YCAL0317EC

IPLV= 14.3

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	92.5	76.8	12.9	90.5	81.0	12.0	88.5	85.5	11.2	86.4	90.4	10.4	84.2	95.5	9.6	81.9	101.1	8.9
42.0	95.7	77.6	13.2	93.7	81.8	12.3	91.6	86.3	11.5	89.4	91.1	10.7	87.2	96.3	9.9	84.8	101.9	9.1
44.0	99.0	78.3	13.5	96.9	82.5	12.6	94.7	87.1	11.8	92.5	91.9	11.0	90.2	97.1	10.2	87.8	102.7	9.4
45.0	100.7	78.7	13.7	98.5	82.9	12.8	96.3	87.4	11.9	94.1	92.3	11.1	91.8	97.6	10.3	89.3	103.2	9.5
46.0	102.4	79.1	13.9	100.2	83.3	13.0	98.0	87.8	12.1	95.7	92.7	11.2	93.3	98.0	10.4	90.9	103.6	9.6
48.0	105.9	79.9	14.2	103.6	84.1	13.3	101.3	88.6	12.4	99.0	93.5	11.5	96.5	98.8	10.7	94.0	104.5	9.9
50.0	109.4	80.7	14.6	107.1	84.9	13.6	104.7	89.5	12.7	102.3	94.4	11.8	99.8	99.7	11.0	97.2	105.4	10.2

YCAL0347EC

IPLV= 14.5

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	99.7	83.7	12.8	97.5	88.4	12.0	95.2	93.4	11.1	92.9	98.8	10.3	90.6	104.5	9.5	88.1	110.7	8.8
42.0	103.2	84.6	13.2	100.9	89.3	12.3	98.5	94.3	11.4	96.2	99.7	10.6	93.7	105.5	9.8	91.2	111.7	9.0
44.0	106.7	85.5	13.5	104.3	90.2	12.6	101.9	95.3	11.7	99.5	100.7	10.8	97.0	106.5	10.0	94.4	112.8	9.3
45.0	108.5	86.0	13.6	106.0	90.7	12.7	103.6	95.8	11.8	101.1	101.2	11.0	98.6	107.1	10.2	96.0	113.3	9.4
46.0	110.3	86.4	13.8	107.8	91.2	12.9	105.4	96.3	12.0	102.8	101.7	11.1	100.3	107.6	10.3	97.6	113.9	9.5
48.0	114.0	87.3	14.1	111.4	92.1	13.2	108.9	97.2	12.2	106.3	102.8	11.4	103.6	108.7	10.5	100.9	115.0	9.7
50.0	117.7	88.3	14.5	115.1	93.1	13.5	112.5	98.3	12.5	109.8	103.8	11.6	107.1	109.8	10.8	104.3	116.1	10.0

YCAL0377EC

IPLV= 14.7

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	108.4	91.0	12.9	105.9	96.1	12.0	103.4	101.5	11.2	100.9	107.3	10.4	98.3	113.4	9.6	95.7	120.0	8.9
42.0	112.1	92.0	13.3	109.5	97.1	12.3	107.0	102.6	11.5	104.4	108.4	10.6	101.7	114.6	9.8	99.0	121.2	9.1
44.0	115.9	93.0	13.6	113.3	98.2	12.6	110.6	103.7	11.7	108.0	109.5	10.9	105.2	115.8	10.1	102.5	122.4	9.3
45.0	117.8	93.5	13.7	115.2	98.7	12.8	112.5	104.2	11.9	109.8	110.1	11.0	107.0	116.4	10.2	104.2	123.1	9.4
46.0	119.8	94.1	13.9	117.1	99.2	12.9	114.4	104.7	12.0	111.6	110.7	11.2	108.8	117.0	10.3	105.9	123.7	9.5
48.0	123.8	95.1	14.2	121.0	100.3	13.2	118.2	105.9	12.3	115.3	111.9	11.4	112.4	118.3	10.6	109.5	125.0	9.8
50.0	127.9	96.1	14.5	125.0	101.4	13.5	122.1	107.1	12.6	119.1	113.2	11.7	116.2	119.5	10.8	113.2	126.3	10.0

NOTES:

1. kW = Compressor Input Power
2. EER = Chiller EER (includes power from compressors, fans, and the control panels 0.8 kW)
3. LCWT = Leaving Chilled Water Temperature
4. Ratings are based upon 2.4 GPM cooler water per ton and 0.0001 fouling factor
5. Rated in accordance with ARI Standard 550/590-98
6. The shaded points are certified in accordance with ARI Standard 550/590-98

YCAL0317EC**IPLV= 14.3**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	79.4	107.1	8.2	76.8	113.6	7.5	73.8	120.6	6.8	70.8	128.1	6.2	67.4	136.2	5.6
42.0	82.4	107.9	8.4	79.6	114.5	7.7	76.8	121.5	7.0	73.6	129.1	6.4	70.0	137.0	5.7
44.0	85.3	108.8	8.7	82.5	115.4	7.9	79.7	122.4	7.3	76.5	130.0	6.6	73.2	138.1	6.0
45.0	86.8	109.3	8.8	84.1	115.8	8.1	81.2	122.9	7.4	78.0	130.5	6.7	74.6	138.6	6.0
46.0	88.3	109.7	8.9	85.6	116.2	8.2	82.6	123.3	7.5	79.5	131.0	6.8	76.1	139.1	6.1
48.0	91.4	110.7	9.1	88.6	117.2	8.4	85.7	124.3	7.7	82.4	132.0	7.0	55.9	85.4	7.1
50.0	94.5	111.6	9.4	91.7	118.2	8.6	88.7	125.3	7.9	85.5	133.0	7.2	57.7	85.9	7.3

YCAL0347EC**IPLV= 14.5**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	85.5	117.2	8.1	82.7	124.2	7.4	79.8	131.7	6.8	76.6	139.6	6.2	61.7	117.0	5.9
42.0	88.5	118.3	8.3	85.7	125.4	7.6	82.7	132.9	7.0	79.5	140.8	6.3	54.2	90.5	6.5
44.0	91.6	119.4	8.5	88.8	126.5	7.8	85.7	134.1	7.2	82.5	142.0	6.5	56.3	91.2	6.7
45.0	93.2	120.0	8.6	90.3	127.1	7.9	87.2	134.6	7.3	83.9	142.6	6.6	57.3	91.5	6.8
46.0	94.8	120.6	8.8	91.9	127.7	8.0	88.8	135.3	7.4	85.5	143.3	6.7	58.4	91.8	6.9
48.0	98.1	121.7	9.0	95.1	128.9	8.2	91.9	136.5	7.6	74.6	113.8	7.3	60.5	92.5	7.1
50.0	101.4	122.9	9.2	98.3	130.1	8.5	95.1	137.8	7.8	77.3	114.8	7.5	62.7	93.2	7.3

YCAL0377EC**IPLV= 14.7**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	92.9	126.9	8.2	90.1	134.2	7.5	87.1	141.9	6.9	84.0	149.9	6.3	57.1	96.2	6.5
42.0	96.2	128.2	8.4	93.3	135.5	7.7	90.2	143.3	7.1	87.0	151.4	6.5	59.2	96.9	6.7
44.0	99.6	129.5	8.6	96.5	136.9	7.9	93.4	144.6	7.3	90.1	152.7	6.7	61.4	97.7	6.9
45.0	101.2	130.2	8.7	98.2	137.5	8.0	95.1	145.3	7.4	91.7	153.5	6.8	62.5	98.1	7.0
46.0	102.9	130.8	8.8	99.9	138.2	8.1	96.7	146.0	7.5	65.9	93.1	7.7	63.7	98.4	7.1
48.0	106.5	132.1	9.0	103.3	139.6	8.3	100.0	147.5	7.6	68.3	93.9	7.9	66.0	99.3	7.3
50.0	110.0	133.5	9.2	106.8	141.0	8.5	103.4	149.0	7.8	70.7	94.7	8.1	68.2	100.0	7.5

NOTES:

1. kW = Compressor Input Power
2. EER = Chiller EER (includes power from compressors, fans, and the control panels 0.8 kW)
3. LCWT = Leaving Chilled Water Temperature
4. Ratings are based upon 2.4 GPM cooler water per ton and 0.0001 fouling factor
5. Rated in accordance with ARI Standard 550/590-98
6. The shaded points are certified in accordance with ARI Standard 550/590-98

Ratings - R-22 (SI Units)

YCAL0043EC

COP = 3.79

LCWT (°C)	AIR TEMPERATURE ON - CONDENSER (C)																	
	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	40.1	8.9	3.4	38.3	9.8	3.0	36.7	10.9	2.7	35.0	12.1	2.4	33.3	13.4	2.1	31.2	14.8	1.8
6.0	41.5	9.0	3.5	39.7	9.9	3.1	37.9	10.9	2.8	36.2	12.1	2.4	34.4	13.4	2.1	32.3	14.9	1.8
7.0	42.9	9.0	3.6	41.0	9.9	3.2	39.2	10.9	2.9	37.4	12.1	2.5	35.5	13.4	2.2	33.4	14.9	1.9
8.0	44.3	9.0	3.8	42.3	9.9	3.3	40.6	11.0	3.0	38.7	12.2	2.6	36.8	13.5	2.3	34.6	14.9	2.0
9.0	45.7	9.1	3.9	43.7	10.0	3.4	41.8	11.0	3.0	40.0	12.2	2.7	38.0	13.5	2.3	35.7	15.0	2.0
10.0	47.2	9.1	4.0	45.1	10.0	3.5	43.2	11.1	3.1	41.3	12.3	2.7	39.2	13.6	2.4	36.9	15.0	2.1
11.0	48.7	9.2	4.1	46.6	10.1	3.6	44.6	11.1	3.2	42.6	12.3	2.8	40.5	13.6	2.5	38.1	15.1	2.1

YCAL0057EC

COP = 3.96

LCWT (°C)	AIR TEMPERATURE ON - CONDENSER (C)																	
	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	55.2	12.8	3.5	52.8	14.2	3.1	50.3	15.8	2.7	47.7	17.5	2.4	45.1	19.4	2.0	42.3	21.4	1.8
6.0	57.0	12.9	3.6	54.5	14.3	3.2	52.0	15.9	2.8	49.3	17.6	2.4	46.6	19.5	2.1	43.8	21.5	1.8
7.0	58.5	13.0	3.7	56.3	14.4	3.3	53.8	16.0	2.9	51.2	17.7	2.5	48.1	19.6	2.2	45.2	21.7	1.9
8.0	60.3	13.0	3.8	58.0	14.5	3.4	55.4	16.1	2.9	52.5	17.8	2.6	49.6	19.7	2.2	46.7	21.8	1.9
9.0	62.1	13.1	3.9	59.9	14.6	3.5	57.1	16.2	3.0	54.3	17.9	2.6	51.4	19.8	2.3	48.2	21.9	2.0
10.0	64.5	13.2	4.0	61.3	14.6	3.5	58.8	16.2	3.1	55.9	18.0	2.7	53.1	19.9	2.3	49.7	22.0	2.0
11.0	66.4	13.3	4.1	63.2	14.7	3.6	60.6	16.3	3.2	57.6	18.1	2.8	54.6	20.0	2.4	51.5	22.1	2.1

YCAL0073EC

COP = 4.03

LCWT (°C)	AIR TEMPERATURE ON - CONDENSER (C)																	
	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	68.4	16.0	3.6	65.8	17.5	3.2	62.9	19.3	2.9	59.8	21.3	2.5	56.4	23.6	2.1	52.8	26.1	1.8
6.0	70.6	16.1	3.7	67.9	17.6	3.3	65.0	19.4	2.9	61.8	21.4	2.6	58.4	23.7	2.2	54.8	26.2	1.9
7.0	72.9	16.2	3.9	70.1	17.7	3.4	67.1	19.5	3.0	63.8	21.5	2.6	60.1	23.8	2.3	56.6	26.3	1.9
8.0	75.2	16.3	4.0	72.3	17.8	3.5	69.2	19.6	3.1	65.9	21.6	2.7	62.0	23.9	2.3	58.5	26.4	2.0
9.0	77.6	16.4	4.1	74.6	17.9	3.6	71.4	19.7	3.2	68.0	21.7	2.8	64.3	24.0	2.4	60.4	26.5	2.1
10.0	80.0	16.5	4.2	76.9	18.0	3.7	73.6	19.8	3.3	70.1	21.8	2.9	66.4	24.1	2.5	62.0	26.6	2.1
11.0	82.5	16.6	4.3	79.3	18.1	3.8	75.9	19.9	3.4	72.3	21.9	2.9	68.5	24.2	2.5	63.9	26.7	2.2

YCAL0087EC

COP = 4.35

LCWT (°C)	AIR TEMPERATURE ON - CONDENSER (C)																	
	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	87.5	19.5	3.9	84.1	21.6	3.4	80.5	24.1	3.0	76.8	26.8	2.6	72.9	29.7	2.2	68.7	33.0	1.9
6.0	90.3	19.6	4.0	86.7	21.8	3.5	83.1	24.2	3.1	79.3	26.9	2.7	75.3	29.9	2.3	71.0	33.2	2.0
7.0	93.2	19.7	4.1	89.5	21.9	3.6	85.8	24.3	3.2	81.9	27.0	2.7	77.7	30.0	2.4	73.2	33.3	2.0
8.0	96.1	19.8	4.2	92.3	22.0	3.7	88.5	24.5	3.2	84.4	27.2	2.8	80.2	30.2	2.4	75.6	33.5	2.1
9.0	99.1	20.0	4.4	95.2	22.2	3.8	91.2	24.6	3.3	87.1	27.3	2.9	82.7	30.3	2.5	77.9	33.6	2.1
10.0	102.1	20.1	4.5	98.2	22.3	3.9	94.0	24.7	3.4	89.7	27.5	3.0	85.2	30.5	2.6	80.4	33.8	2.2
11.0	105.3	20.3	4.6	101.1	22.4	4.0	96.9	24.9	3.5	92.5	27.6	3.0	87.8	30.6	2.6	82.8	34.0	2.3

NOTES:

1. kWo = Unit kW Cooling Capacity Output
2. kWi = Compressor kW Input
3. COP = Coefficient of Performance (Based upon compressor and fan input kW)
4. LCWT = Leaving Chilled Water Temperature
5. Ratings based upon 0.15L/s cooler water per kW

YCAL0107EC**COP = 4.32**

LCWT (°C)	AIR TEMPERATURE ON - CONDENSER (C)																	
	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	105.0	25.0	3.8	100.8	27.5	3.3	96.2	30.4	2.9	91.2	33.5	2.5	85.9	37.0	2.2	80.3	40.9	1.8
6.0	108.4	25.2	3.9	103.9	27.7	3.4	99.3	30.5	3.0	94.2	33.7	2.6	88.8	37.2	2.2	83.0	41.1	1.9
7.0	111.7	25.4	4.0	107.2	27.9	3.5	102.4	30.7	3.1	97.2	33.9	2.7	91.7	37.4	2.3	85.8	41.3	1.9
8.0	115.2	25.6	4.1	110.6	28.0	3.6	105.6	30.9	3.1	100.3	34.1	2.7	94.6	37.7	2.3	88.6	41.6	2.0
9.0	118.8	25.8	4.2	114.0	28.2	3.7	108.8	31.1	3.2	103.4	34.3	2.8	97.7	37.9	2.4	91.5	41.8	2.1
10.0	122.4	25.9	4.3	117.4	28.4	3.8	112.1	31.3	3.3	106.6	34.5	2.9	100.7	38.1	2.5	94.5	42.0	2.1
11.0	126.1	26.1	4.4	120.9	28.6	3.9	115.5	31.5	3.4	109.8	34.7	2.9	103.8	38.3	2.5	97.5	42.3	2.2

YCAL0117EC**COP = 4.47**

LCWT (°C)	AIR TEMPERATURE ON - CONDENSER (C)																	
	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	120.4	24.7	4.0	115.5	27.4	3.5	110.3	30.5	3.1	104.9	33.9	2.7	99.4	37.5	2.3	93.7	41.6	2.0
6.0	124.2	24.8	4.1	119.3	27.6	3.6	114.0	30.6	3.2	108.5	34.0	2.7	102.9	37.7	2.4	97.0	41.7	2.1
7.0	128.4	24.9	4.2	123.1	27.7	3.7	117.6	30.7	3.2	112.1	34.1	2.8	106.1	37.8	2.5	100.1	41.8	2.1
8.0	132.6	25.0	4.3	127.2	27.8	3.8	121.7	30.8	3.3	115.6	34.2	2.9	109.6	37.9	2.5	103.6	42.0	2.2
9.0	136.8	25.2	4.5	131.2	27.9	3.9	125.3	30.9	3.4	119.5	34.3	3.0	113.2	38.0	2.6	106.8	42.1	2.2
10.0	141.1	25.3	4.6	135.5	28.0	4.0	129.4	31.1	3.5	123.3	34.4	3.1	116.7	38.1	2.7	110.3	42.2	2.3
11.0	145.5	25.4	4.7	139.6	28.1	4.1	133.5	31.2	3.6	127.0	34.6	3.2	120.6	38.3	2.8	113.7	42.4	2.4

YCAL0133EC**COP = 4.31**

LCWT (°C)	AIR TEMPERATURE ON - CONDENSER (C)																	
	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	132.3	28.4	3.9	127.1	31.4	3.4	121.4	34.7	3.0	115.6	38.4	2.6	109.4	42.5	2.3	102.5	47.0	2.0
6.0	136.6	28.6	4.0	131.1	31.5	3.5	125.4	34.8	3.1	119.3	38.6	2.7	113.0	42.7	2.3	106.1	47.2	2.0
7.0	140.9	28.7	4.1	135.3	31.7	3.6	129.6	35.0	3.2	123.2	38.7	2.8	116.6	42.9	2.4	109.7	47.4	2.1
8.0	145.5	28.9	4.2	139.7	31.8	3.7	133.6	35.1	3.3	127.3	38.9	2.9	120.3	43.0	2.5	113.4	47.6	2.1
9.0	150.1	29.1	4.3	144.1	32.0	3.8	137.8	35.3	3.4	131.3	39.0	2.9	124.3	43.2	2.6	117.0	47.8	2.2
10.0	154.8	29.3	4.4	148.6	32.2	3.9	142.0	35.5	3.5	135.4	39.2	3.0	128.4	43.4	2.6	120.8	48.0	2.3
11.0	159.6	29.4	4.6	153.1	32.3	4.0	146.5	35.6	3.6	139.5	39.4	3.1	132.3	43.6	2.7	124.6	48.2	2.3

YCAL0147EC**COP = 4.26**

LCWT (°C)	AIR TEMPERATURE ON - CONDENSER (C)																	
	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	144.2	32.2	3.8	138.6	35.3	3.4	132.5	38.9	3.0	126.0	43.0	2.6	119.1	47.5	2.2	111.5	52.5	1.9
6.0	148.9	32.4	3.9	143.1	35.5	3.5	136.8	39.1	3.1	130.2	43.2	2.7	122.9	47.7	2.3	115.2	52.7	2.0
7.0	153.6	32.6	4.0	147.6	35.7	3.6	141.2	39.3	3.1	134.4	43.4	2.7	127.0	48.0	2.4	119.4	53.0	2.0
8.0	158.5	32.8	4.1	152.3	35.9	3.7	145.7	39.5	3.2	138.7	43.6	2.8	131.2	48.2	2.4	123.3	53.2	2.1
9.0	163.5	33.0	4.2	157.1	36.1	3.8	150.3	39.7	3.3	143.0	43.8	2.9	135.4	48.4	2.5	127.2	53.5	2.2
10.0	168.6	33.2	4.3	161.9	36.3	3.9	154.9	39.9	3.4	147.5	44.0	3.0	139.7	48.6	2.6	131.3	53.8	2.2
11.0	173.8	33.4	4.5	166.9	36.5	4.0	159.6	40.1	3.5	152.0	44.2	3.1	144.0	48.9	2.7	135.5	54.0	2.3

NOTES:

1. kWo = Unit kW Cooling Capacity Output
2. kWi = Compressor kW Input
3. COP = Coefficient of Performance (Based upon compressor and fan input kW)
4. LCWT = Leaving Chilled Water Temperature
5. Ratings based upon 0.15L/s cooler water per kW

Ratings - R-22 (SI Units)

YCAL0157EC

COP = 4.39

LCWT (°C)	AIR TEMPERATURE ON - CONDENSER (C)																	
	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	157.8	35.8	3.8	151.2	39.5	3.4	145.1	43.8	2.9	138.2	48.5	2.6	130.6	53.7	2.2	122.7	59.5	1.9
6.0	162.8	36.0	3.9	156.4	39.8	3.5	149.8	44.0	3.0	142.7	48.8	2.6	135.0	54.0	2.3	126.9	59.8	1.9
7.0	168.0	36.3	4.0	161.4	40.0	3.5	154.5	44.3	3.1	147.2	49.0	2.7	139.4	54.3	2.3	131.0	60.1	2.0
8.0	173.3	36.5	4.1	166.5	40.3	3.6	159.4	44.5	3.2	151.8	49.3	2.8	143.8	54.6	2.4	135.2	60.4	2.1
9.0	178.6	36.8	4.2	171.6	40.5	3.7	164.3	44.8	3.3	156.5	49.6	2.8	148.3	54.9	2.5	139.4	60.7	2.1
10.0	184.1	37.1	4.3	176.9	40.8	3.8	169.3	45.1	3.3	161.3	49.8	2.9	152.9	55.2	2.5	143.8	61.1	2.2
11.0	189.6	37.4	4.4	182.2	41.1	3.9	174.4	45.3	3.4	166.1	50.1	3.0	157.0	55.4	2.6	148.2	61.4	2.2

YCAL0173EC

COP = 4.60

LCWT (°C)	AIR TEMPERATURE ON - CONDENSER (C)																	
	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	174.1	37.9	4.0	167.3	42.1	3.5	160.4	46.8	3.1	153.2	52.0	2.7	145.5	57.7	2.3	137.2	63.9	2.0
6.0	179.7	38.1	4.1	172.7	42.3	3.6	165.6	47.0	3.2	158.2	52.2	2.7	150.2	58.0	2.4	141.7	64.3	2.0
7.0	185.3	38.4	4.2	177.8	42.6	3.7	170.8	47.3	3.2	163.2	52.5	2.8	155.0	58.3	2.4	146.3	64.6	2.1
8.0	191.1	38.7	4.3	183.7	42.9	3.8	176.2	47.6	3.3	168.3	52.8	2.9	159.9	58.6	2.5	150.9	64.9	2.1
9.0	196.8	38.9	4.4	189.3	43.2	3.9	181.6	47.8	3.4	173.6	53.1	3.0	164.9	58.9	2.6	155.6	65.2	2.2
10.0	202.9	39.2	4.5	195.1	43.4	4.0	187.2	48.1	3.5	178.8	53.4	3.0	169.9	59.2	2.6	160.3	65.6	2.3
11.0	209.1	39.5	4.6	201.1	43.7	4.1	192.8	48.4	3.6	184.2	53.7	3.1	175.0	59.5	2.7	165.2	65.9	2.3

YCAL0197EC

COP = 4.31

LCWT (°C)	AIR TEMPERATURE ON - CONDENSER (C)																	
	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	194.6	44.7	3.8	186.6	49.4	3.3	178.0	54.6	2.9	168.8	60.4	2.5	159.1	66.8	2.2	149.1	73.8	1.9
6.0	200.8	45.0	3.9	192.5	49.6	3.4	183.7	54.9	3.0	174.1	60.7	2.6	164.5	67.2	2.2	154.2	74.2	1.9
7.0	206.9	45.2	4.0	198.5	50.0	3.5	189.6	55.2	3.1	179.7	61.1	2.7	169.8	67.5	2.3	158.8	74.6	2.0
8.0	213.8	45.6	4.1	204.8	50.3	3.6	195.4	55.5	3.1	185.6	61.4	2.7	175.2	67.9	2.4	164.2	75.0	2.0
9.0	220.4	45.9	4.2	211.2	50.5	3.7	201.4	55.8	3.2	191.4	61.8	2.8	180.8	68.3	2.4	169.8	75.4	2.1
10.0	227.1	46.2	4.3	217.7	50.9	3.8	207.7	56.2	3.3	197.3	62.1	2.9	186.5	68.7	2.5	175.1	75.8	2.1
11.0	234.0	46.5	4.4	224.2	51.2	3.9	214.0	56.5	3.4	203.4	62.4	2.9	192.2	69.0	2.5	180.7	76.2	2.2

YCAL0217EC

COP = 4.39

LCWT (°C)	AIR TEMPERATURE ON - CONDENSER (C)																	
	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	215.7	48.5	3.9	207.1	53.4	3.4	198.0	58.9	3.0	188.1	65.1	2.6	177.5	72.0	2.3	166.0	79.6	1.9
6.0	222.7	48.9	4.0	213.8	53.7	3.5	204.3	59.2	3.1	194.2	65.4	2.7	183.4	72.4	2.3	171.7	80.0	2.0
7.0	229.7	49.2	4.1	219.8	54.0	3.6	210.8	59.5	3.2	200.5	65.8	2.8	189.4	72.7	2.4	177.5	80.4	2.0
8.0	237.0	49.5	4.2	227.5	54.3	3.7	217.5	59.8	3.3	206.8	66.1	2.8	195.5	73.1	2.5	183.2	80.8	2.1
9.0	244.2	49.8	4.3	234.4	54.6	3.8	224.2	60.1	3.4	213.3	66.4	2.9	201.7	73.4	2.5	189.4	81.2	2.2
10.0	251.9	50.2	4.4	241.7	55.0	3.9	231.0	60.5	3.4	219.9	66.8	3.0	208.0	73.8	2.6	195.4	81.6	2.2
11.0	259.6	50.6	4.5	249.1	55.3	4.0	237.6	60.8	3.5	226.6	67.1	3.1	214.4	74.2	2.7	201.6	82.0	2.3

NOTES:

1. kWo = Unit kW Cooling Capacity Output
2. kWi = Compressor kW Input
3. COP = Coefficient of Performance (Based upon compressor and fan input kW)
4. LCWT = Leaving Chilled Water Temperature
5. Ratings based upon 0.15L/s cooler water per kW

YCAL0237EC**COP = 4.46**

LCWT (°C)	AIR TEMPERATURE ON - CONDENSER (C)																	
	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	235.7	54.3	3.9	226.0	60.0	3.4	216.4	66.5	3.0	205.8	73.8	2.6	194.5	81.7	2.2	182.2	90.5	1.9
6.0	243.1	54.7	4.0	233.1	60.4	3.5	223.3	66.9	3.0	212.4	74.2	2.6	200.7	82.2	2.3	188.3	91.0	1.9
7.0	250.7	55.1	4.1	240.8	60.8	3.6	230.3	67.3	3.1	219.2	74.6	2.7	207.3	82.7	2.3	194.3	91.5	2.0
8.0	258.4	55.4	4.2	248.2	61.2	3.7	237.4	67.8	3.2	226.0	75.1	2.8	213.7	83.2	2.4	200.4	92.1	2.0
9.0	266.4	55.9	4.3	255.7	61.7	3.7	244.7	68.2	3.3	232.9	75.5	2.8	220.4	83.7	2.4	206.9	92.6	2.1
10.0	274.5	56.3	4.4	263.5	62.1	3.8	251.9	68.6	3.3	239.9	76.0	2.9	227.0	84.1	2.5	213.3	93.1	2.1
11.0	282.8	56.7	4.5	271.4	62.5	3.9	259.6	69.1	3.4	247.1	76.4	3.0	233.9	84.6	2.6	219.8	93.6	2.2

YCAL0253EC**COP = 4.59**

LCWT (°C)	AIR TEMPERATURE ON - CONDENSER (C)																	
	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	257.3	60.2	3.8	246.9	66.9	3.4	236.1	74.4	2.9	224.5	82.7	2.5	212.5	91.7	2.2	198.9	101.6	1.8
6.0	265.1	60.6	3.9	254.7	67.4	3.4	243.5	74.9	3.0	231.8	83.2	2.6	219.3	92.3	2.2	205.7	102.3	1.9
7.0	273.5	61.1	4.0	262.6	67.9	3.5	251.1	75.4	3.1	239.1	83.7	2.6	226.1	92.9	2.3	212.2	102.9	1.9
8.0	281.9	61.6	4.1	270.0	68.3	3.6	258.8	75.9	3.1	246.4	84.3	2.7	233.1	93.5	2.3	218.7	103.6	2.0
9.0	290.4	62.1	4.2	278.6	68.9	3.7	266.6	76.5	3.2	253.8	84.9	2.8	240.1	94.1	2.4	225.4	104.2	2.0
10.0	299.1	62.6	4.3	287.0	69.4	3.8	274.7	77.0	3.3	261.4	85.4	2.8	247.3	94.7	2.4	232.1	104.9	2.1
11.0	308.0	63.2	4.4	295.3	70.0	3.9	282.7	77.6	3.4	269.1	86.0	2.9	254.6	95.3	2.5	238.9	105.5	2.1

YCAL0287EC**COP = 4.39**

LCWT (°C)	AIR TEMPERATURE ON - CONDENSER (C)																	
	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	287.8	72.6	3.7	275.9	80.0	3.2	263.4	88.4	2.8	249.8	98.0	2.4	234.5	108.6	2.0	186.0	91.8	1.9
6.0	296.6	73.3	3.7	284.4	80.8	3.3	271.6	89.2	2.8	257.6	98.8	2.5	242.2	109.6	2.1	192.3	92.5	2.0
7.0	305.6	74.0	3.8	293.0	81.5	3.3	279.9	90.1	2.9	265.7	99.7	2.5	250.1	110.5	2.1	198.7	93.2	2.0
8.0	314.8	74.7	3.9	301.9	82.3	3.4	288.4	90.9	3.0	274.0	100.6	2.6	258.1	111.5	2.2	205.4	93.9	2.1
9.0	324.1	75.5	4.0	310.9	83.1	3.5	297.1	91.8	3.0	282.3	101.6	2.6	266.2	112.5	2.2	212.0	94.6	2.1
10.0	333.6	76.2	4.0	320.1	83.9	3.6	306.0	92.6	3.1	290.9	102.5	2.7	274.5	113.5	2.3	218.8	95.3	2.2
11.0	343.4	77.0	4.1	329.5	84.7	3.6	315.0	93.5	3.2	299.6	103.5	2.7	282.9	114.6	2.3	168.7	66.7	2.3

YCAL0317EC**COP = 4.19**

LCWT (°C)	AIR TEMPERATURE ON - CONDENSER (C)																	
	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	328.1	78.9	3.7	315.0	86.9	3.3	301.3	95.9	2.9	286.3	106.3	2.5	269.0	118.2	2.1	249.3	131.8	1.8
6.0	338.3	79.5	3.8	324.9	87.5	3.4	310.8	96.7	2.9	295.5	107.0	2.5	278.2	119.0	2.2	258.5	132.6	1.8
7.0	348.8	80.2	3.9	334.9	88.2	3.4	320.5	97.4	3.0	304.6	107.8	2.6	287.6	119.8	2.2	267.1	133.4	1.9
8.0	359.4	80.9	4.0	345.2	88.9	3.5	330.5	98.1	3.1	314.5	108.7	2.7	297.0	120.6	2.3	276.7	134.4	1.9
9.0	370.3	81.6	4.1	355.7	89.7	3.6	340.6	98.9	3.1	324.4	109.5	2.7	306.5	121.5	2.3	286.2	135.3	2.0
10.0	381.5	82.3	4.2	366.5	90.4	3.7	351.0	99.7	3.2	334.3	110.4	2.8	316.3	122.4	2.4	295.4	136.2	2.0
11.0	392.9	83.1	4.3	377.4	91.2	3.8	361.5	100.5	3.3	344.6	111.2	2.9	326.0	123.4	2.5	305.5	137.2	2.1

NOTES:

1. kWo = Unit kW Cooling Capacity Output
2. kWi = Compressor kW Input
3. COP = Coefficient of Performance (Based upon compressor and fan input kW)
4. LCWT = Leaving Chilled Water Temperature
5. Ratings based upon 0.15L/s cooler water per kW

Ratings - R-22 (SI Units)

YCAL0347EC

COP = 4.25

LCWT (°C)	AIR TEMPERATURE ON - CONDENSER (C)																	
	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	353.5	86.0	3.7	339.0	94.9	3.3	324.0	105.0	2.8	307.8	116.4	2.5	289.9	129.2	2.1	227.1	113.4	1.9
6.0	364.4	86.8	3.8	349.5	95.8	3.3	334.1	105.9	2.9	317.6	117.4	2.5	299.5	130.3	2.1	235.0	114.2	1.9
7.0	375.5	87.6	3.9	360.2	96.6	3.4	344.4	106.9	3.0	327.5	118.4	2.6	309.0	131.3	2.2	243.0	115.0	2.0
8.0	386.9	88.5	4.0	371.2	97.5	3.5	354.9	107.8	3.0	337.6	119.4	2.6	318.4	132.4	2.3	251.0	115.8	2.0
9.0	398.5	89.3	4.0	382.3	98.4	3.6	365.6	108.8	3.1	348.0	120.4	2.7	328.9	133.5	2.3	259.4	116.7	2.1
10.0	410.3	90.2	4.1	393.7	99.3	3.6	376.5	109.8	3.2	358.6	121.5	2.7	339.1	134.6	2.4	267.8	117.5	2.1
11.0	422.4	91.0	4.2	405.3	100.3	3.7	387.8	110.7	3.2	369.4	122.5	2.8	349.4	135.8	2.4	232.7	90.6	2.3

YCAL0377EC

COP = 4.32

LCWT (°C)	AIR TEMPERATURE ON - CONDENSER (C)																	
	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	384.0	93.5	3.7	368.1	103.2	3.3	351.8	114.0	2.9	334.7	126.1	2.5	316.1	139.4	2.1	209.0	93.4	2.0
6.0	395.8	94.4	3.8	379.4	104.1	3.3	362.7	115.1	2.9	345.1	127.2	2.5	326.0	140.7	2.2	216.0	94.0	2.1
7.0	407.8	95.3	3.9	391.0	105.1	3.4	373.8	116.1	3.0	355.7	128.4	2.6	336.5	141.9	2.2	223.1	94.7	2.1
8.0	420.2	96.3	4.0	402.8	106.1	3.5	385.2	117.2	3.0	366.6	129.6	2.6	347.0	143.1	2.3	230.3	95.4	2.2
9.0	432.7	97.2	4.1	414.9	107.2	3.6	396.7	118.4	3.1	377.8	130.8	2.7	357.6	144.4	2.3	237.7	96.1	2.3
10.0	445.6	98.2	4.1	427.2	108.3	3.6	408.6	119.5	3.2	389.1	132.0	2.8	368.5	145.8	2.4	245.2	96.8	2.3
11.0	458.6	99.2	4.2	439.7	109.3	3.7	420.6	120.7	3.2	400.7	133.3	2.8	379.5	147.1	2.4	252.8	97.5	2.4

NOTES:

1. kWo = Unit kW Cooling Capacity Output
2. kWi = Compressor kW Input
3. COP = Coefficient of Performance (Based upon compressor and fan input kW)
4. LCWT = Leaving Chilled Water Temperature
5. Ratings based upon 0.15L/s cooler water per kW



Ratings - R-407C (English Units)

YCAL0043EB

IPLV= 12.4

AIR TEMPERATURE ON CONDENSER (°F)																		
LCWT (°F)	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	11.1	9.0	11.3	10.8	9.6	10.5	10.5	10.1	9.7	10.2	10.8	9.0	9.9	11.4	8.3	9.5	12.1	7.7
42.0	11.5	9.0	11.7	11.2	9.6	10.9	10.9	10.2	10.1	10.6	10.8	9.3	10.3	11.5	8.6	9.9	12.2	7.9
44.0	12.0	9.1	12.2	11.7	9.6	11.3	11.4	10.2	10.5	11.0	10.8	9.7	10.7	11.5	9.0	10.3	12.2	8.3
45.0	12.2	9.1	12.4	11.9	9.6	11.5	11.6	10.2	10.7	11.2	10.8	9.9	10.9	11.5	9.1	10.5	12.2	8.4
46.0	12.5	9.1	12.6	12.2	9.6	11.7	11.8	10.2	10.9	11.5	10.9	10.1	11.1	11.5	9.3	10.7	12.3	8.6
48.0	13.0	9.1	13.1	12.6	9.7	12.2	12.3	10.3	11.3	11.9	10.9	10.4	11.5	11.6	9.6	11.2	12.3	8.9
50.0	13.5	9.2	13.5	13.1	9.7	12.6	12.7	10.3	11.7	12.4	10.9	10.8	12.0	11.6	10.0	11.6	12.3	9.2

YCAL0057EB

IPLV= 12.8

AIR TEMPERATURE ON CONDENSER (°F)																		
LCWT (°F)	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	15.3	13.3	11.4	14.8	14.1	10.5	14.4	15.0	9.7	14.0	16.0	8.9	13.5	16.9	8.2	13.1	18.0	7.5
42.0	15.8	13.5	11.6	15.3	14.4	10.7	14.9	15.3	9.9	14.4	16.2	9.1	14.0	17.3	8.4	13.5	18.3	7.7
44.0	16.4	13.5	12.0	15.9	14.4	11.1	15.5	15.3	10.2	15.0	16.3	9.4	14.5	17.3	8.7	14.0	18.4	8.0
45.0	16.7	13.6	12.3	16.2	14.4	11.3	15.8	15.3	10.4	15.3	16.3	9.6	14.8	17.3	8.8	14.3	18.4	8.1
46.0	17.0	13.6	12.5	16.6	14.5	11.5	16.1	15.4	10.6	15.6	16.3	9.8	15.1	17.4	9.0	14.6	18.5	8.2
48.0	17.7	13.6	12.9	17.2	14.5	11.9	16.7	15.4	11.0	16.2	16.4	10.1	15.7	17.4	9.3	15.2	18.5	8.5
50.0	18.3	13.7	13.3	17.8	14.6	12.3	17.3	15.5	11.4	16.8	16.5	10.5	16.3	17.5	9.6	15.8	18.6	8.8

YCAL0073EB

IPLV= 13.3

AIR TEMPERATURE ON CONDENSER (°F)																		
LCWT (°F)	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	19.2	16.3	12.1	18.7	17.2	11.2	18.1	18.3	10.3	17.6	19.4	9.5	17.0	20.5	8.7	16.4	21.8	8.0
42.0	19.9	16.4	12.5	19.4	17.3	11.5	18.8	18.4	10.7	18.3	19.5	9.8	17.7	20.7	9.0	17.1	21.9	8.3
44.0	20.7	16.5	12.8	19.9	17.8	11.6	19.6	18.5	11.0	19.0	19.6	10.2	18.4	20.8	9.3	17.8	22.0	8.6
45.0	21.1	16.6	13.0	20.3	17.9	11.8	19.9	18.6	11.2	19.3	19.7	10.3	18.7	20.9	9.5	18.1	22.1	8.7
46.0	21.4	16.7	13.2	20.7	17.9	12.0	20.1	19.0	11.1	19.7	19.7	10.5	19.1	20.9	9.7	18.5	22.2	8.9
48.0	22.2	16.8	13.6	21.5	18.0	12.4	20.9	19.0	11.5	20.3	20.2	10.6	19.8	21.1	10.0	19.2	22.3	9.2
50.0	23.0	17.1	13.8	22.4	18.1	12.9	21.7	19.1	11.9	21.1	20.3	11.0	20.4	21.5	10.1	19.7	22.8	9.3

YCAL0087EB

IPLV= 14.2

AIR TEMPERATURE ON CONDENSER (°F)																		
LCWT (°F)	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	23.7	19.5	12.7	23.0	20.7	11.7	22.4	22.1	10.8	21.7	23.5	9.9	21.0	24.9	9.1	20.4	26.5	8.3
42.0	24.6	19.6	13.2	23.9	20.9	12.1	23.3	22.2	11.2	22.6	23.6	10.3	21.9	25.1	9.4	21.2	26.6	8.6
44.0	25.5	19.7	13.6	24.8	21.0	12.5	24.1	22.3	11.6	23.4	23.7	10.6	22.7	25.2	9.7	22.0	26.8	8.9
45.0	26.0	19.8	13.8	25.3	21.0	12.8	24.6	22.3	11.7	23.9	23.8	10.8	23.2	25.3	9.9	22.4	26.9	9.1
46.0	26.5	19.8	14.0	25.8	21.1	13.0	25.1	22.4	11.9	24.3	23.8	11.0	23.6	25.3	10.1	22.9	26.9	9.2
48.0	27.4	19.9	14.5	26.7	21.2	13.4	26.0	22.5	12.3	25.3	24.0	11.3	24.5	25.5	10.4	23.7	27.1	9.5
50.0	28.4	20.0	14.9	27.7	21.3	13.8	27.0	22.7	12.7	26.2	24.1	11.7	25.4	25.6	10.7	24.6	27.2	9.8

NOTES:

1. kW = Compressor Input Power
2. EER = Chiller EER (includes power from compressors, fans, and the control panels 0.8 kW)
3. LCWT = Leaving Chilled Water Temperature
4. Ratings are based upon 2.4 GPM cooler water per ton and 0.0001 fouling factor
5. Rated in accordance with ARI Standard 550/590-98
6. The shaded points are certified in accordance with ARI Standard 550/590-98

YCAL0043EB**IPLV=12.4**

AIR TEMPERATURE ON CONDENSER (°F)															
LCWT (°F)	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	9.2	12.9	7.0	8.9	13.7	6.5	8.5	14.5	5.9	8.2	15.3	5.5	7.9	16.2	5.0
42.0	9.6	12.9	7.3	9.2	13.7	6.7	8.9	14.5	6.2	8.6	15.4	5.7	8.3	16.2	5.2
44.0	10.0	13.0	7.6	9.6	13.8	7.0	9.3	14.6	6.4	8.9	15.4	5.9	8.6	16.3	5.4
45.0	10.2	13.0	7.7	9.8	13.8	7.1	9.5	14.6	6.5	9.1	15.5	6.0	8.8	16.4	5.5
46.0	10.4	13.0	7.9	10.0	13.8	7.2	9.7	14.6	6.6	9.3	15.5	6.1	9.0	16.4	5.6
48.0	10.8	13.1	8.2	10.4	13.9	7.5	10.0	14.7	6.9	9.7	15.6	6.3	9.3	16.5	5.8
50.0	11.2	13.1	8.5	10.8	13.9	7.8	10.4	14.8	7.1	10.1	15.6	6.6	9.7	16.6	6.0

YCAL0057EB**IPLV=12.8**

AIR TEMPERATURE ON CONDENSER (°F)															
LCWT (°F)	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	12.6	19.1	6.9	12.2	20.3	6.3	11.8	21.5	5.8	11.4	22.7	5.3	11.0	24.1	4.9
42.0	13.0	19.4	7.0	12.6	20.6	6.5	12.2	21.9	5.9	11.8	23.1	5.4	11.4	24.5	5.0
44.0	13.6	19.5	7.3	13.1	20.7	6.7	12.7	21.9	6.1	12.2	23.2	5.6	11.8	24.6	5.2
45.0	13.8	19.6	7.4	13.4	20.7	6.8	12.9	22.0	6.3	12.5	23.3	5.7	6.4	10.9	5.6
46.0	14.1	19.6	7.6	13.6	20.8	6.9	13.2	22.0	6.4	12.7	23.3	5.8	6.6	10.9	5.7
48.0	14.7	19.7	7.8	14.2	20.9	7.2	13.7	22.1	6.6	13.2	23.5	6.1	6.8	11.0	5.9
50.0	15.2	19.8	8.1	14.7	21.0	7.4	14.2	22.2	6.8	13.8	23.6	6.3	7.1	11.0	6.2

YCAL0073EB**IPLV=13.3**

AIR TEMPERATURE ON CONDENSER (°F)															
LCWT (°F)	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	15.9	23.1	7.4	15.3	24.4	6.8	14.7	25.8	6.2	14.2	27.1	5.7	13.6	28.6	5.2
42.0	16.5	23.2	7.6	15.9	24.5	7.0	15.3	25.9	6.4	14.8	27.3	5.9	14.2	28.8	5.4
44.0	17.2	23.3	7.9	16.6	24.7	7.2	16.0	26.1	6.6	15.4	27.5	6.1	14.8	29.0	5.6
45.0	17.5	23.4	8.0	16.9	24.8	7.3	16.3	26.2	6.7	15.7	27.6	6.2	15.1	29.1	5.7
46.0	17.8	23.5	8.1	17.2	24.9	7.5	16.6	26.3	6.9	16.0	27.7	6.3	15.4	29.2	5.8
48.0	18.5	23.6	8.4	17.9	25.0	7.7	17.3	26.4	7.1	16.6	27.9	6.5	16.0	29.4	6.0
50.0	19.1	24.2	8.5	18.6	25.2	8.0	17.9	26.6	7.3	17.3	28.1	6.7	16.7	29.6	6.2

YCAL0087EB**IPLV=14.2**

AIR TEMPERATURE ON CONDENSER (°F)															
LCWT (°F)	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	19.7	28.2	7.6	19.0	30.0	7.0	18.4	31.9	6.4	17.8	34.0	5.8	17.2	36.1	5.3
42.0	20.5	28.3	7.9	19.8	30.1	7.2	19.1	32.1	6.6	18.5	34.1	6.0	17.8	36.3	5.5
44.0	21.3	28.5	8.2	20.6	30.3	7.5	19.9	32.2	6.8	19.2	34.3	6.2	18.5	36.4	5.7
45.0	21.7	28.6	8.3	21.0	30.4	7.6	20.3	32.3	6.9	19.6	34.3	6.3	18.9	36.5	5.8
46.0	22.1	28.6	8.4	21.4	30.4	7.7	20.7	32.4	7.0	19.9	34.4	6.4	19.2	36.6	5.9
48.0	23.0	28.8	8.7	22.2	30.6	8.0	21.5	32.5	7.3	20.7	34.6	6.6	20.0	36.8	6.1
50.0	23.8	28.9	9.0	23.1	30.8	8.2	22.3	32.7	7.5	21.5	34.7	6.9	20.7	36.9	6.3

NOTES:

1. kW = Compressor Input Power
2. EER = Chiller EER (includes power from compressors, fans, and the control panels 0.8 kW)
3. LCWT = Leaving Chilled Water Temperature
4. Ratings are based upon 2.4 GPM cooler water per ton and 0.0001 fouling factor
5. Rated in accordance with ARI Standard 550/590-98
6. The shaded points are certified in accordance with ARI Standard 550/590-98

Ratings - R-407C (English Units)

YCAL0087EB

IPLV= 14.2

AIR TEMPERATURE ON CONDENSER (°F)																		
LCWT (°F)	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	23.7	19.5	12.7	23.0	20.7	11.7	22.4	22.1	10.8	21.7	23.5	9.9	21.0	24.9	9.1	20.4	26.5	8.3
42.0	24.6	19.6	13.2	23.9	20.9	12.1	23.3	22.2	11.2	22.6	23.6	10.3	21.9	25.1	9.4	21.2	26.6	8.6
44.0	25.5	19.7	13.6	24.8	21.0	12.5	24.1	22.3	11.6	23.4	23.7	10.6	22.7	25.2	9.7	22.0	26.8	8.9
45.0	26.0	19.8	13.8	25.3	21.0	12.8	24.6	22.3	11.7	23.9	23.8	10.8	23.2	25.3	9.9	22.4	26.9	9.1
46.0	26.5	19.8	14.0	25.8	21.1	13.0	25.1	22.4	11.9	24.3	23.8	11.0	23.6	25.3	10.1	22.9	26.9	9.2
48.0	27.4	19.9	14.5	26.7	21.2	13.4	26.0	22.5	12.3	25.3	24.0	11.3	24.5	25.5	10.4	23.7	27.1	9.5
50.0	28.4	20.0	14.9	27.7	21.3	13.8	27.0	22.7	12.7	26.2	24.1	11.7	25.4	25.6	10.7	24.6	27.2	9.8

YCAL0107EB

IPLV= 14.2

AIR TEMPERATURE ON CONDENSER (°F)																		
LCWT (°F)	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	28.2	24.8	12.3	27.5	26.3	11.3	26.7	27.9	10.4	25.8	29.6	9.6	25.0	31.4	8.8	24.2	33.3	8.0
42.0	29.2	25.2	12.5	28.4	26.7	11.5	27.5	28.4	10.6	26.7	30.1	9.7	25.8	31.9	8.9	24.9	33.8	8.2
44.0	30.3	25.4	12.9	29.5	26.9	11.9	28.6	28.5	10.9	27.7	30.3	10.0	26.8	32.1	9.2	25.9	34.0	8.4
45.0	30.9	25.5	13.1	30.0	27.0	12.1	29.1	28.6	11.1	28.2	30.4	10.2	27.3	32.2	9.4	26.4	34.1	8.6
46.0	31.4	25.6	13.3	30.6	27.1	12.3	29.7	28.8	11.3	28.8	30.5	10.4	27.8	32.3	9.5	26.9	34.3	8.7
48.0	32.6	25.8	13.7	31.7	27.3	12.6	30.8	29.0	11.6	29.8	30.7	10.7	28.9	32.6	9.8	27.9	34.5	9.0
50.0	33.8	26.1	14.0	32.8	27.6	13.0	31.9	29.2	12.0	30.9	31.0	11.0	30.0	32.8	10.1	29.0	34.7	9.3

YCAL0117EB

IPLV= 14.4

AIR TEMPERATURE ON CONDENSER (°F)																		
LCWT (°F)	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	32.2	25.5	12.4	31.3	27.1	11.5	30.4	28.8	10.6	29.5	30.7	9.8	28.6	32.6	9.0	27.7	34.6	8.3
42.0	33.5	25.5	12.9	32.6	27.2	11.9	31.7	28.9	11.0	30.7	30.7	10.2	29.8	32.7	9.3	28.8	34.7	8.6
44.0	34.8	25.6	13.4	33.9	27.2	12.4	32.9	29.0	11.4	32.0	30.8	10.5	31.0	32.7	9.7	30.0	34.8	8.9
45.0	35.5	25.6	13.6	34.6	27.3	12.6	33.6	29.0	11.7	32.6	30.8	10.7	31.6	32.8	9.9	30.6	34.8	9.1
46.0	36.2	25.7	13.9	35.2	27.3	12.9	34.2	29.0	11.9	33.2	30.9	10.9	32.2	32.8	10.1	31.2	34.9	9.3
48.0	37.6	25.7	14.4	36.6	27.4	13.3	35.6	29.1	12.3	34.5	30.9	11.3	33.5	32.9	10.4	32.5	35.0	9.6
50.0	39.0	25.8	14.9	38.0	27.4	13.8	36.9	29.2	12.7	35.9	31.0	11.8	34.8	33.0	10.8	33.7	35.1	10.0

YCAL0133EB

IPLV= 14.1

AIR TEMPERATURE ON CONDENSER (°F)																		
LCWT (°F)	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	35.6	28.9	12.4	34.6	30.6	11.5	33.7	32.5	10.6	32.6	34.5	9.8	31.6	36.7	9.0	30.6	38.9	8.2
42.0	37.0	29.0	12.8	36.0	30.8	11.9	35.0	32.7	11.0	33.9	34.7	10.1	32.9	36.8	9.3	31.8	39.1	8.5
44.0	38.4	29.2	13.3	37.4	31.0	12.3	36.4	32.8	11.4	35.3	34.8	10.5	34.2	37.0	9.6	33.1	39.3	8.9
45.0	39.0	29.6	13.3	38.1	31.0	12.5	37.0	32.9	11.5	36.0	34.9	10.6	34.9	37.1	9.8	33.7	39.4	9.0
46.0	39.8	29.6	13.6	38.8	31.1	12.7	37.7	33.0	11.7	36.7	35.0	10.8	35.5	37.2	10.0	34.4	39.5	9.2
48.0	41.3	29.7	14.0	40.2	31.5	13.0	39.0	33.4	12.0	37.9	35.5	11.1	36.9	37.3	10.3	35.7	39.6	9.5
50.0	42.9	29.9	14.5	41.7	31.6	13.4	40.6	33.6	12.4	39.4	35.6	11.5	38.2	37.8	10.5	37.1	39.8	9.8

NOTES:

1. kW = Compressor Input Power
2. EER = Chiller EER (includes power from compressors, fans, and the control panels 0.8 kW)
3. LCWT = Leaving Chilled Water Temperature
4. Ratings are based upon 2.4 GPM cooler water per ton and 0.0001 fouling factor
5. Rated in accordance with ARI Standard 550/590-98
6. The shaded points are certified in accordance with ARI Standard 550/590-98

YCAL0087EB**IPLV= 14.2**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	19.7	28.2	7.6	19.0	30.0	7.0	18.4	31.9	6.4	17.8	34.0	5.8	17.2	36.1	5.3
42.0	20.5	28.3	7.9	19.8	30.1	7.2	19.1	32.1	6.6	18.5	34.1	6.0	17.8	36.3	5.5
44.0	21.3	28.5	8.2	20.6	30.3	7.5	19.9	32.2	6.8	19.2	34.3	6.2	18.5	36.4	5.7
45.0	21.7	28.6	8.3	21.0	30.4	7.6	20.3	32.3	6.9	19.6	34.3	6.3	18.9	36.5	5.8
46.0	22.1	28.6	8.4	21.4	30.4	7.7	20.7	32.4	7.0	19.9	34.4	6.4	19.2	36.6	5.9
48.0	23.0	28.8	8.7	22.2	30.6	8.0	21.5	32.5	7.3	20.7	34.6	6.6	20.0	36.8	6.1
50.0	23.8	28.9	9.0	23.1	30.8	8.2	22.3	32.7	7.5	21.5	34.7	6.9	20.7	36.9	6.3

YCAL0107EB**IPLV= 14.2**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	23.3	35.2	7.4	22.5	37.2	6.7	21.6	39.2	6.2	20.8	41.3	5.7	20.0	43.4	5.2
42.0	24.1	35.8	7.5	23.2	37.8	6.8	22.3	39.9	6.3	21.5	42.0	5.7	20.7	44.2	5.3
44.0	25.0	36.0	7.7	24.1	38.1	7.1	23.2	40.2	6.5	22.4	42.3	5.9	21.5	44.5	5.5
45.0	25.5	36.1	7.9	24.6	38.2	7.2	23.7	40.3	6.6	22.8	42.5	6.0	22.0	44.7	5.6
46.0	26.0	36.3	8.0	25.1	38.3	7.3	24.2	40.5	6.7	23.3	42.6	6.1	22.4	44.8	5.6
48.0	27.0	36.5	8.2	26.1	38.6	7.6	25.1	40.7	6.9	24.2	42.9	6.4	16.4	28.1	6.4
50.0	28.0	36.8	8.5	27.1	38.9	7.8	26.1	41.0	7.1	25.2	43.3	6.6	16.9	28.5	6.5

YCAL0117EB**IPLV= 14.4**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	26.8	36.8	7.6	25.9	39.0	7.0	25.0	41.4	6.4	24.1	43.9	5.9	23.3	46.5	5.4
42.0	27.9	36.9	7.9	27.0	39.1	7.2	26.0	41.5	6.6	25.1	44.0	6.1	24.3	46.6	5.6
44.0	29.0	37.0	8.2	28.1	39.3	7.5	27.1	41.7	6.9	26.2	44.2	6.3	25.3	46.8	5.8
45.0	29.6	37.0	8.3	28.6	39.3	7.7	27.7	41.7	7.0	26.7	44.2	6.4	25.8	46.9	5.9
46.0	30.2	37.1	8.5	29.2	39.4	7.8	28.2	41.8	7.2	27.3	44.3	6.6	26.3	47.0	6.0
48.0	31.4	37.2	8.8	30.4	39.5	8.1	29.4	41.9	7.4	28.4	44.5	6.8	27.4	47.1	6.2
50.0	32.7	37.3	9.1	31.6	39.6	8.4	30.6	42.1	7.7	29.5	44.6	7.1	28.5	47.3	6.5

YCAL0133EB**IPLV= 14.1**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	29.6	41.3	7.6	28.5	43.7	6.9	27.5	46.3	6.4	26.5	48.9	5.8	25.5	51.6	5.4
42.0	30.8	41.5	7.8	29.7	43.9	7.2	28.6	46.5	6.6	27.6	49.2	6.0	26.6	51.9	5.5
44.0	32.0	41.7	8.1	30.9	44.1	7.5	29.8	46.7	6.8	28.7	49.4	6.3	27.7	52.2	5.8
45.0	32.6	41.8	8.3	31.5	44.2	7.6	30.4	46.9	7.0	29.3	49.5	6.4	28.3	52.3	5.9
46.0	33.3	41.8	8.4	32.1	44.4	7.7	31.0	47.0	7.1	29.9	49.7	6.5	28.8	52.5	6.0
48.0	34.6	42.1	8.7	33.4	44.6	8.0	32.2	47.2	7.3	31.1	50.0	6.7	30.0	52.8	6.2
50.0	35.9	42.3	9.0	34.7	44.8	8.3	33.5	47.5	7.6	32.4	50.2	7.0	31.2	53.1	6.4

NOTES:

1. kW = Compressor Input Power
2. EER = Chiller EER (includes power from compressors, fans, and the control panels 0.8 kW)
3. LCWT = Leaving Chilled Water Temperature
4. Ratings are based upon 2.4 GPM cooler water per ton and 0.0001 fouling factor
5. Rated in accordance with ARI Standard 550/590-98
6. The shaded points are certified in accordance with ARI Standard 550/590-98

Ratings - R-407C (English Units)

YCAL0147EB

IPLV= 14.1

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	39.0	32.3	12.4	38.0	34.1	11.5	36.9	36.2	10.6	35.8	38.4	9.8	34.6	40.8	9.0	33.5	43.2	8.2
42.0	40.5	32.5	12.7	39.4	34.4	11.8	38.3	36.5	10.9	37.2	38.7	10.1	36.0	41.0	9.3	34.8	43.5	8.5
44.0	42.0	32.8	13.1	40.9	34.7	12.2	39.8	36.7	11.3	38.6	38.9	10.4	37.4	41.3	9.6	36.2	43.7	8.8
45.0	42.8	32.9	13.3	41.7	34.8	12.4	40.5	36.9	11.5	39.3	39.0	10.6	38.1	41.4	9.7	36.9	43.9	8.9
46.0	43.3	33.5	13.3	42.4	35.0	12.6	41.3	37.0	11.6	40.1	39.2	10.7	38.8	41.5	9.9	37.6	44.0	9.1
48.0	45.0	33.7	13.7	43.8	35.6	12.7	42.5	37.8	11.8	41.3	40.0	10.8	40.3	41.8	10.2	39.0	44.3	9.4
50.0	46.7	33.9	14.2	45.5	35.9	13.2	44.2	37.9	12.2	42.9	40.2	11.2	41.5	42.7	10.3	40.5	44.6	9.7

YCAL0157EB

IPLV= 14.6

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	42.6	36.1	12.3	41.4	38.2	11.3	40.3	40.6	10.5	39.1	43.1	9.6	37.8	45.7	8.8	36.7	48.3	8.2
42.0	44.2	36.3	12.7	43.5	38.5	11.7	41.8	40.8	10.8	40.6	43.3	10.0	39.3	46.0	9.2	38.1	48.8	8.4
44.0	45.9	36.5	13.1	44.7	38.7	12.1	43.5	41.1	11.2	42.2	43.6	10.3	40.9	46.3	9.5	39.6	49.1	8.7
45.0	46.6	36.9	13.2	45.5	38.9	12.3	44.3	41.2	11.3	43.0	43.7	10.5	41.6	46.4	9.6	40.3	49.2	8.8
46.0	47.5	37.0	13.4	46.4	39.0	12.5	45.1	41.4	11.5	43.8	43.8	10.6	42.4	46.5	9.8	41.1	49.4	9.0
48.0	49.3	37.2	13.8	48.0	39.5	12.8	46.6	41.9	11.8	45.3	44.4	10.9	44.0	46.8	10.1	42.6	49.7	9.3
50.0	51.1	37.5	14.2	49.8	39.7	13.2	48.4	42.1	12.2	47.0	44.7	11.2	45.5	47.4	10.3	44.2	50.0	9.5

YCAL0173EB

IPLV= 15.4

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	47.2	37.9	13.0	46.0	40.3	12.0	44.7	42.9	11.1	43.4	45.5	10.2	42.1	48.4	9.4	40.8	51.4	8.6
42.0	49.0	38.1	13.4	47.7	40.6	12.4	46.4	43.1	11.5	45.1	45.8	10.5	43.7	48.6	9.7	42.4	51.7	8.9
44.0	50.8	38.4	13.9	49.5	40.8	12.8	48.2	43.4	11.8	46.8	46.0	10.9	45.5	48.9	10.0	44.0	51.9	9.2
45.0	51.8	38.5	14.1	50.5	40.9	13.0	49.1	43.5	12.0	47.7	46.1	11.1	46.3	49.0	10.2	44.9	52.1	9.3
46.0	52.7	38.6	14.3	51.4	41.0	13.2	50.0	43.6	12.2	48.6	46.3	11.2	47.2	49.1	10.3	45.7	52.2	9.5
48.0	54.6	38.8	14.8	53.3	41.3	13.6	51.9	43.9	12.6	50.4	46.6	11.6	49.0	49.4	10.7	47.5	52.5	9.8
50.0	56.6	39.1	15.2	55.2	41.5	14.1	53.8	44.1	13.0	52.3	46.9	12.0	50.8	49.8	11.0	49.2	52.8	10.1

YCAL0197EB

IPLV= 13.9

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	52.3	45.2	12.1	50.8	47.9	11.1	49.3	50.9	10.2	47.8	54.1	9.4	46.2	57.4	8.6	44.7	60.9	7.9
42.0	54.3	45.4	12.5	52.8	48.3	11.5	51.2	51.2	10.6	49.6	54.4	9.7	48.1	57.7	8.9	46.5	61.2	8.2
44.0	56.3	45.8	12.9	54.8	48.5	11.9	53.2	51.5	10.9	51.6	54.7	10.1	49.9	58.1	9.2	48.3	61.6	8.5
45.0	57.4	45.9	13.1	55.8	48.7	12.1	54.2	51.7	11.1	52.6	54.9	10.2	50.9	58.2	9.4	49.2	61.8	8.6
46.0	58.3	46.4	13.2	56.7	49.2	12.1	55.0	52.2	11.2	53.5	55.1	10.4	51.8	58.4	9.5	50.1	62.0	8.7
48.0	60.5	46.7	13.6	58.8	49.5	12.5	57.1	52.5	11.6	55.4	55.7	10.6	53.6	59.2	9.8	51.9	62.7	9.0
50.0	62.7	47.0	14.0	61.0	49.8	12.9	59.3	52.8	11.9	57.5	56.0	11.0	55.7	59.4	10.1	53.9	63.1	9.3

NOTES:

1. kW = Compressor Input Power
2. EER = Chiller EER (includes power from compressors, fans, and the control panels 0.8 kW)
3. LCWT = Leaving Chilled Water Temperature
4. Ratings are based upon 2.4 GPM cooler water per ton and 0.0001 fouling factor
5. Rated in accordance with ARI Standard 550/590-98
6. The shaded points are certified in accordance with ARI Standard 550/590-98

YCAL0147EB**IPLV= 14.1**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	32.3	45.8	7.6	31.2	48.4	6.9	30.0	51.1	6.3	28.8	53.9	5.8	27.7	56.7	5.3
42.0	33.6	46.1	7.8	32.4	48.7	7.2	31.2	51.5	6.6	30.1	54.3	6.0	28.9	57.2	5.5
44.0	35.0	46.3	8.1	33.7	49.0	7.4	32.5	51.8	6.8	31.3	54.7	6.2	30.1	57.6	5.7
45.0	35.6	46.5	8.2	34.4	49.2	7.5	33.1	52.0	6.9	31.9	54.9	6.3	30.7	57.8	5.8
46.0	36.3	46.6	8.3	35.1	49.4	7.7	33.8	52.2	7.0	32.6	55.1	6.4	31.4	58.0	5.9
48.0	37.7	46.9	8.6	36.4	49.7	7.9	35.1	52.5	7.3	33.9	55.4	6.7	32.6	58.4	6.1
50.0	39.2	47.2	8.9	37.8	50.0	8.2	36.5	52.9	7.5	35.2	55.8	6.9	33.9	58.9	6.3

YCAL0157EB**IPLV= 14.6**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	35.5	51.2	7.5	34.1	54.7	6.8	33.0	57.6	6.3	31.8	61.4	5.7	30.6	65.1	5.2
42.0	36.8	51.8	7.7	35.5	54.9	7.0	34.3	58.3	6.4	33.0	61.8	5.9	31.9	65.4	5.4
44.0	38.2	52.1	8.0	36.9	55.2	7.3	35.6	58.6	6.7	34.4	62.1	6.1	33.1	65.8	5.6
45.0	39.0	52.2	8.1	37.6	55.4	7.4	36.3	58.7	6.8	35.0	62.3	6.2	25.2	45.2	5.9
46.0	39.7	52.4	8.2	38.4	55.6	7.5	37.0	58.9	6.9	35.7	62.5	6.3	25.7	45.3	6.1
48.0	41.2	52.7	8.5	39.9	55.9	7.8	38.5	59.3	7.1	37.1	62.8	6.5	26.7	45.6	6.3
50.0	42.8	53.1	8.8	41.4	56.3	8.0	39.9	59.7	7.3	38.5	63.2	6.7	27.8	45.9	6.5

YCAL0173EB**IPLV= 15.4**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	39.4	54.6	7.9	38.1	58.1	7.2	36.9	61.8	6.6	35.6	65.7	6.0	34.4	69.9	5.5
42.0	41.0	54.9	8.1	39.7	58.4	7.4	38.3	62.1	6.8	37.0	66.0	6.2	35.8	70.2	5.7
44.0	42.6	55.2	8.4	41.2	58.7	7.7	39.8	62.4	7.0	38.5	66.3	6.4	37.1	70.6	5.9
45.0	43.4	55.4	8.5	42.0	58.8	7.8	40.6	62.5	7.1	39.2	66.5	6.5	37.8	70.7	6.0
46.0	44.3	55.5	8.7	42.8	59.0	8.0	41.4	62.7	7.3	39.9	66.7	6.6	38.6	70.9	6.1
48.0	46.0	55.8	9.0	44.5	59.3	8.2	43.0	63.0	7.5	41.5	67.0	6.9	40.0	71.2	6.3
50.0	47.7	56.1	9.3	46.1	59.6	8.5	44.6	63.3	7.8	43.0	67.3	7.1	41.1	72.9	6.3

YCAL0197EB**IPLV= 13.9**

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	43.1	64.5	7.3	41.6	68.3	6.6	40.1	72.2	6.1	38.6	76.2	5.6	31.2	63.6	5.3
42.0	44.9	64.9	7.5	43.3	68.7	6.9	41.7	72.7	6.3	40.2	76.7	5.8	32.3	64.3	5.5
44.0	46.6	65.3	7.8	45.0	69.2	7.1	43.4	73.1	6.5	41.8	77.2	6.0	33.7	64.6	5.7
45.0	47.5	65.5	7.9	45.9	69.4	7.2	44.3	73.4	6.6	42.7	77.5	6.1	34.4	64.8	5.8
46.0	48.3	66.1	7.9	46.8	69.6	7.3	45.1	73.6	6.7	43.5	77.8	6.2	35.1	65.0	5.9
48.0	50.2	66.5	8.2	48.4	70.4	7.5	46.7	74.5	6.9	45.1	78.7	6.3	36.4	65.8	6.0
50.0	52.1	66.9	8.5	50.3	70.8	7.8	48.6	74.9	7.1	46.9	79.2	6.5	37.9	66.1	6.2

NOTES:

1. kW = Compressor Input Power
2. EER = Chiller EER (includes power from compressors, fans, and the control panels 0.8 kW)
3. LCWT = Leaving Chilled Water Temperature
4. Ratings are based upon 2.4 GPM cooler water per ton and 0.0001 fouling factor
5. Rated in accordance with ARI Standard 550/590-98
6. The shaded points are certified in accordance with ARI Standard 550/590-98

Ratings - R-407C (English Units)

YCAL0217EB

IPLV= 14.3

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	58.4	48.4	12.7	56.8	51.2	11.7	55.2	54.4	10.8	53.5	57.7	10.0	50.9	63.1	8.7	50.1	65.0	8.4
42.0	60.6	48.7	13.1	59.0	51.6	12.1	57.3	54.8	11.2	55.6	58.1	10.3	53.0	63.3	9.1	52.0	65.4	8.6
44.0	62.9	49.2	13.5	61.2	52.0	12.5	59.5	55.2	11.5	57.7	58.6	10.6	55.2	63.4	9.4	53.4	67.3	8.6
45.0	64.1	49.4	13.7	62.3	52.3	12.7	60.6	55.4	11.7	58.8	58.8	10.8	56.3	63.5	9.6	54.4	67.4	8.8
46.0	65.3	49.6	13.9	63.5	52.5	12.9	61.7	55.6	11.9	59.8	59.0	10.9	57.4	63.6	9.8	55.5	67.5	9.0
48.0	67.7	50.0	14.3	65.8	52.9	13.2	64.0	56.1	12.2	62.1	59.5	11.2	59.7	63.9	10.1	57.7	67.8	9.3
50.0	69.8	50.9	14.5	67.9	53.9	13.4	66.0	57.1	12.4	64.4	59.9	11.6	62.0	64.2	10.5	60.0	68.1	9.6

YCAL0237EB

IPLV= 14.8

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	63.7	54.2	12.5	61.9	57.5	11.6	60.1	61.1	10.6	58.3	64.9	9.8	56.5	69.0	8.9	54.6	73.3	8.2
42.0	66.1	54.6	12.9	64.3	57.9	11.9	62.4	61.5	11.0	60.6	65.3	10.1	58.3	70.1	9.1	56.8	73.7	8.5
44.0	68.6	55.0	13.3	66.7	58.3	12.3	64.8	61.9	11.3	62.9	65.8	10.4	60.6	70.5	9.4	58.6	74.8	8.6
45.0	69.8	55.2	13.5	68.0	58.5	12.5	66.0	62.2	11.5	64.1	66.0	10.6	61.8	70.7	9.6	59.8	75.0	8.8
46.0	71.1	55.4	13.7	69.2	58.8	12.7	67.3	62.4	11.7	65.2	66.2	10.7	63.0	70.8	9.7	60.9	75.2	8.9
48.0	73.7	55.8	14.1	71.7	59.2	13.0	69.7	62.9	12.0	67.7	66.7	11.0	65.4	71.2	10.1	63.3	75.6	9.2
50.0	76.2	56.5	14.5	74.2	59.9	13.3	72.1	63.6	12.3	70.0	67.5	11.3	67.8	71.7	10.4	65.7	76.1	9.5

YCAL0253EB

IPLV= 15.1

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	69.6	60.1	12.5	67.6	63.9	11.5	65.7	68.0	10.5	63.6	72.3	9.7	61.6	76.8	8.8	59.6	81.7	8.1
42.0	72.2	60.5	12.9	70.2	64.3	11.8	68.2	68.4	10.9	66.1	72.7	10.0	64.1	77.3	9.1	62.0	82.2	8.4
44.0	74.9	60.9	13.3	72.9	64.8	12.2	70.8	68.9	11.2	68.7	73.2	10.3	66.5	77.8	9.4	64.4	82.7	8.6
45.0	76.3	61.1	13.5	74.2	65.0	12.4	72.1	69.1	11.4	69.9	73.4	10.5	67.8	78.1	9.6	65.6	83.0	8.8
46.0	77.7	61.4	13.7	75.6	65.3	12.6	73.4	69.4	11.6	71.2	73.7	10.6	69.0	78.3	9.7	66.8	83.2	8.9
48.0	80.5	61.8	14.1	78.3	65.7	13.0	76.1	69.9	11.9	73.9	74.2	10.9	71.6	78.9	10.0	69.3	83.8	9.2
50.0	83.3	62.3	14.5	81.1	66.2	13.3	78.9	70.4	12.3	76.5	74.8	11.3	74.2	79.4	10.3	71.8	84.4	9.5

YCAL0287EB

IPLV= 14.0

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)																	
	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	76.0	73.3	11.5	74.0	77.6	10.6	72.0	82.3	9.7	69.8	87.4	8.9	67.5	92.9	8.2	65.0	98.9	7.4
42.0	78.8	74.1	11.8	76.8	78.4	10.9	74.6	83.1	10.0	72.4	88.2	9.2	70.0	93.7	8.4	67.5	99.7	7.6
44.0	81.7	74.8	12.1	79.6	79.2	11.2	77.4	84.0	10.3	75.0	89.1	9.4	72.6	94.6	8.6	70.0	100.6	7.9
45.0	83.2	75.2	12.2	81.0	79.6	11.3	78.8	84.4	10.4	76.4	89.5	9.6	73.9	95.1	8.8	71.3	101.1	8.0
46.0	84.7	75.6	12.4	82.5	80.1	11.5	80.2	84.8	10.6	77.8	90.0	9.7	75.2	95.5	8.9	72.6	101.6	8.1
48.0	87.6	76.5	12.7	85.4	80.9	11.7	83.0	85.7	10.8	80.5	90.9	10.0	78.0	96.5	9.1	75.2	102.6	8.3
50.0	90.7	77.3	13.0	88.4	81.8	12.0	85.9	86.6	11.1	83.4	91.8	10.2	80.7	97.5	9.3	78.0	103.5	8.5

NOTES:

1. kW = Compressor Input Power
2. EER = Chiller EER (includes power from compressors, fans, and the control panels 0.8 kW)
3. LCWT = Leaving Chilled Water Temperature
4. Ratings are based upon 2.4 GPM cooler water per ton and 0.0001 fouling factor
5. Rated in accordance with ARI Standard 550/590-98
6. The shaded points are certified in accordance with ARI Standard 550/590-98

YCAL0217EB

IPLV= 14.3

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	48.3	68.9	7.7	45.7	74.9	6.7	43.9	79.0	6.1	42.2	83.2	5.6	40.6	87.5	5.2
42.0	50.2	69.3	7.9	48.4	73.4	7.2	46.6	77.5	6.6	44.1	83.6	5.9	43.1	86.1	5.6
44.0	52.2	69.8	8.2	50.3	73.9	7.5	48.5	78.1	6.9	46.7	82.4	6.3	44.9	86.8	5.8
45.0	52.6	71.4	8.1	51.3	74.2	7.6	49.4	78.4	7.0	47.6	82.7	6.4	45.8	87.2	5.8
46.0	53.6	71.5	8.2	51.7	75.7	7.5	50.4	78.7	7.1	48.5	83.1	6.5	46.7	87.5	5.9
48.0	55.8	71.8	8.5	53.8	76.0	7.8	51.9	80.4	7.1	50.0	84.8	6.5	48.1	89.3	6.0
50.0	58.0	72.2	8.8	56.0	76.4	8.1	54.0	80.8	7.4	52.0	85.3	6.8	50.1	89.9	6.2

YCAL0237EB

IPLV= 14.8

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	52.8	77.8	7.5	50.5	83.5	6.7	49.1	87.6	6.2	47.0	93.8	5.6	37.7	77.6	5.4
42.0	54.8	78.3	7.7	52.9	83.1	7.1	51.1	88.1	6.5	49.2	93.4	5.9	39.6	77.1	5.7
44.0	57.0	78.8	8.0	55.0	83.6	7.3	53.1	88.7	6.7	51.2	94.0	6.1	41.1	78.0	5.8
45.0	57.8	79.6	8.0	56.0	83.9	7.4	54.1	89.0	6.8	52.1	94.3	6.2	42.0	78.2	5.9
46.0	58.9	79.8	8.2	56.8	84.7	7.5	54.8	89.9	6.8	53.1	94.7	6.3	42.8	78.4	6.0
48.0	61.2	80.3	8.4	59.0	85.2	7.7	57.0	90.4	7.0	54.9	95.8	6.4	44.3	79.4	6.2
50.0	63.5	80.8	8.7	61.3	85.7	8.0	59.2	90.9	7.3	57.1	96.4	6.6	46.1	79.8	6.4

YCAL0253EB

IPLV= 15.1

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	57.6	86.8	7.4	55.7	92.4	6.7	53.8	98.3	6.1	52.0	104.6	5.6	35.0	67.8	5.6
42.0	59.9	87.4	7.6	57.9	92.9	7.0	55.9	98.9	6.3	54.0	105.2	5.8	36.1	69.0	5.7
44.0	62.2	87.9	7.9	60.1	93.5	7.2	58.0	99.4	6.6	56.0	105.9	6.0	37.6	69.1	5.9
45.0	63.4	88.2	8.0	61.3	93.8	7.3	59.1	99.8	6.7	57.0	106.2	6.1	38.3	69.2	6.1
46.0	64.6	88.5	8.1	62.4	94.1	7.4	60.2	100.1	6.8	58.1	106.4	6.2	39.1	69.3	6.2
48.0	67.0	89.1	8.4	64.7	94.7	7.7	62.5	100.7	7.0	60.3	107.1	6.4	40.7	69.5	6.4
50.0	69.5	89.7	8.6	67.1	95.4	7.9	64.8	101.4	7.2	62.5	107.8	6.5	42.3	69.8	6.6

YCAL0287EB

IPLV= 14.0

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	62.4	105.4	6.7	59.7	112.6	6.0	56.7	120.4	5.4	53.6	128.8	4.8	33.0	72.9	5.0
42.0	64.9	106.3	6.9	62.0	113.4	6.2	59.0	121.2	5.6	55.8	129.7	4.9	34.4	73.2	5.2
44.0	67.3	107.2	7.1	64.4	114.4	6.4	61.4	122.1	5.7	50.1	99.3	5.7	35.9	73.6	5.4
45.0	68.6	107.7	7.2	65.7	114.8	6.5	62.6	122.6	5.8	51.2	99.6	5.8	36.7	73.7	5.5
46.0	69.8	108.2	7.3	66.9	115.3	6.6	63.8	123.0	5.9	52.2	99.9	5.9	37.4	73.9	5.6
48.0	72.4	109.1	7.5	69.4	116.2	6.8	66.2	124.0	6.1	54.3	100.5	6.1	39.0	74.3	5.8
50.0	75.0	110.1	7.7	71.9	117.2	7.0	68.7	125.0	6.3	56.4	101.1	6.3	40.6	74.7	6.0

NOTES:

1. kW = Compressor Input Power
2. EER = Chiller EER (includes power from compressors, fans, and the control panels 0.8 kW)
3. LCWT = Leaving Chilled Water Temperature
4. Ratings are based upon 2.4 GPM cooler water per ton and 0.0001 fouling factor
5. Rated in accordance with ARI Standard 550/590-98
6. The shaded points are certified in accordance with ARI Standard 550/590-98

Ratings - R-407C (English Units)

YCAL0317EB

IPLV= 13.2

AIR TEMPERATURE ON CONDENSER (°F)																		
LCWT (°F)	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	86.4	79.3	11.7	84.2	83.9	10.8	81.8	89.0	10.0	79.4	94.5	9.2	76.8	100.6	8.4	74.0	107.2	7.6
42.0	89.7	79.8	12.1	87.4	84.5	11.2	85.0	89.6	10.3	82.5	95.1	9.5	79.8	101.2	8.7	77.0	107.8	7.9
44.0	93.0	80.5	12.4	90.7	85.1	11.5	88.3	90.2	10.6	85.7	95.7	9.8	82.9	101.8	8.9	80.0	108.4	8.1
45.0	94.8	80.8	12.6	92.4	85.5	11.7	89.9	90.5	10.8	87.3	96.1	9.9	84.5	102.1	9.1	81.5	108.8	8.3
46.0	96.5	81.1	12.8	94.1	85.8	11.9	91.6	90.9	11.0	88.9	96.4	10.1	86.1	102.5	9.2	83.1	109.1	8.4
48.0	100.1	81.8	13.2	97.6	86.5	12.2	95.0	91.6	11.3	92.2	97.1	10.4	89.3	103.2	9.5	86.3	109.8	8.7
50.0	103.6	82.6	13.5	101.1	87.2	12.6	98.4	92.4	11.6	95.6	97.9	10.7	92.6	104.0	9.8	89.5	110.6	8.9

YCAL0347EB

IPLV= 13.5

AIR TEMPERATURE ON CONDENSER (°F)																		
LCWT (°F)	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	93.0	88.2	11.4	90.6	93.4	10.6	88.1	99.0	9.8	85.5	105.1	9.0	82.8	111.7	8.2	79.8	118.9	7.5
42.0	96.5	89.0	11.8	94.0	94.3	10.9	91.4	99.9	10.0	88.7	106.0	9.2	85.9	112.6	8.4	82.9	119.8	7.7
44.0	100.0	89.9	12.1	97.5	95.2	11.2	94.8	100.8	10.3	92.0	106.9	9.5	89.1	113.6	8.7	86.0	120.8	7.9
45.0	101.9	90.3	12.3	99.2	95.6	11.3	96.5	101.3	10.5	93.7	107.4	9.6	90.8	114.1	8.8	87.6	121.3	8.0
46.0	103.7	90.8	12.4	101.0	96.1	11.5	98.3	101.8	10.6	95.4	107.9	9.8	92.4	114.6	8.9	89.2	121.8	8.2
48.0	107.4	91.7	12.7	104.6	97.1	11.8	101.8	102.8	10.9	98.9	108.9	10.0	95.7	115.6	9.2	92.5	122.9	8.4
50.0	111.2	92.7	13.1	108.3	98.0	12.1	105.4	103.8	11.2	102.3	110.0	10.3	99.2	116.7	9.4	95.9	124.0	8.6

YCAL0377EB

IPLV= 13.7

AIR TEMPERATURE ON CONDENSER (°F)																		
LCWT (°F)	75°F			80°F			85°F			90°F			95°F			100°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	101.4	97.4	11.4	98.7	103.0	10.5	96.0	109.1	9.7	93.2	115.6	9.0	90.3	122.6	8.2	87.2	130.1	7.5
42.0	105.1	98.4	11.7	102.4	104.1	10.8	99.6	110.2	10.0	96.7	116.7	9.2	93.7	123.7	8.4	90.5	131.3	7.7
44.0	108.9	99.5	12.0	106.1	105.3	11.1	103.2	111.4	10.3	100.2	117.9	9.4	97.1	124.9	8.7	93.9	132.5	7.9
45.0	110.8	100.0	12.1	108.0	105.8	11.2	105.0	112.0	10.4	102.0	118.5	9.6	98.9	125.5	8.8	95.6	133.1	8.0
46.0	112.8	100.6	12.3	109.9	106.4	11.4	106.9	112.5	10.5	103.8	119.1	9.7	100.6	126.1	8.9	97.3	133.8	8.1
48.0	116.8	101.7	12.6	113.8	107.5	11.7	110.7	113.7	10.8	107.5	120.4	9.9	104.2	127.5	9.1	100.7	135.2	8.4
50.0	120.9	102.8	12.9	117.8	108.7	12.0	114.6	115.0	11.0	111.2	121.7	10.2	107.9	128.7	9.4	104.3	136.4	8.6

NOTES:

1. kW = Compressor Input Power
2. EER = Chiller EER (includes power from compressors, fans, and the control panels 0.8 kW)
3. LCWT = Leaving Chilled Water Temperature
4. Ratings are based upon 2.4 GPM cooler water per ton and 0.0001 fouling factor
5. Rated in accordance with ARI Standard 550/590-98
6. The shaded points are certified in accordance with ARI Standard 550/590-98

YCAL0317EB

IPLV= 13.2

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	71.0	114.5	6.9	67.8	122.5	6.2	64.4	131.3	5.5	60.8	141.0	4.9	56.9	151.5	4.2
42.0	73.9	115.1	7.1	70.7	123.1	6.4	67.2	131.9	5.7	63.5	141.5	5.1	42.7	93.3	5.0
44.0	76.9	115.7	7.4	73.6	123.7	6.6	70.1	132.5	5.9	66.3	142.1	5.3	44.7	93.4	5.2
45.0	78.4	116.0	7.5	75.1	124.0	6.7	71.5	132.8	6.0	67.7	142.4	5.4	45.7	93.5	5.3
46.0	79.9	116.4	7.6	76.5	124.4	6.9	73.0	133.1	6.1	69.1	142.7	5.5	46.8	93.6	5.4
48.0	83.0	117.1	7.9	79.6	125.1	7.1	75.9	133.8	6.4	72.0	143.4	5.7	48.8	93.8	5.7
50.0	86.2	117.9	8.1	82.6	125.9	7.3	78.9	134.6	6.6	74.9	144.1	5.9	50.9	94.1	5.9

YCAL0347EB

IPLV= 13.5

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	76.7	126.8	6.8	73.4	135.4	6.1	69.8	144.9	5.4	66.0	155.1	4.8	45.1	100.7	4.9
42.0	79.7	127.7	7.0	76.3	136.3	6.3	72.7	145.7	5.6	68.8	156.0	5.0	47.1	100.9	5.1
44.0	82.8	128.7	7.2	79.3	137.3	6.5	75.6	146.7	5.8	71.6	156.8	5.2	49.1	101.3	5.3
45.0	84.3	129.2	7.3	80.8	137.8	6.6	77.0	147.1	5.9	73.1	157.3	5.3	50.2	101.4	5.4
46.0	85.9	129.8	7.4	82.3	138.3	6.7	78.5	147.6	6.0	63.4	123.9	5.7	51.2	101.6	5.5
48.0	89.1	130.8	7.6	85.4	139.3	6.9	81.6	148.7	6.2	66.0	124.6	5.9	53.4	102.1	5.7
50.0	92.3	131.8	7.8	88.6	140.4	7.1	84.7	149.7	6.4	68.5	125.3	6.1	55.6	102.5	6.0

YCAL0377EB

IPLV= 13.7

LCWT (°F)	AIR TEMPERATURE ON CONDENSER (°F)														
	105°F			110°F			115°F			120°F			125°F		
	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
40.0	84.0	138.4	6.8	80.5	147.4	6.2	76.8	157.1	5.5	72.8	167.7	4.9	49.9	107.9	5.1
42.0	87.2	139.5	7.0	83.6	148.5	6.4	79.8	158.2	5.7	75.8	168.6	5.1	52.1	108.3	5.3
44.0	90.4	140.7	7.2	86.8	149.7	6.5	83.0	159.3	5.9	78.9	169.7	5.3	54.3	108.8	5.5
45.0	92.1	141.4	7.3	88.4	150.2	6.6	84.5	159.9	6.0	58.1	102.4	6.2	55.4	109.1	5.6
46.0	93.8	142.0	7.4	90.0	150.9	6.7	86.1	160.5	6.1	59.3	102.7	6.3	56.5	109.3	5.7
48.0	97.2	143.3	7.6	93.4	152.1	6.9	89.4	161.7	6.3	61.6	103.3	6.6	58.8	109.9	5.9
50.0	100.6	144.6	7.8	96.8	153.4	7.1	92.7	162.9	6.5	64.0	103.9	6.8	61.1	110.5	6.1

NOTES:

1. kW = Compressor Input Power
2. EER = Chiller EER (includes power from compressors, fans, and the control panels 0.8 kW)
3. LCWT = Leaving Chilled Water Temperature
4. Ratings are based upon 2.4 GPM cooler water per ton and 0.0001 fouling factor
5. Rated in accordance with ARI Standard 550/590-98
6. The shaded points are certified in accordance with ARI Standard 550/590-98

Ratings - R-407C (SI Units)

YCAL0043EB

COP =3.6

AIR TEMPERATURE ON - CONDENSER (C)																		
LCWT (°C)	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	39.4	9.2	3.3	37.4	10.3	2.9	35.4	11.5	2.5	33.3	12.8	2.1	31.1	14.2	1.8	29.1	15.7	1.6
6.0	40.8	9.3	3.4	38.8	10.3	3.0	36.7	11.5	2.6	34.5	12.8	2.2	32.3	14.2	1.9	30.2	15.7	1.6
7.0	42.3	9.3	3.5	40.2	10.3	3.1	38.0	11.5	2.7	35.7	12.8	2.3	33.5	14.3	2.0	31.3	15.8	1.7
8.0	43.8	9.3	3.6	41.6	10.4	3.2	39.3	11.5	2.7	37.0	12.9	2.4	34.7	14.3	2.0	32.5	15.9	1.7
9.0	45.3	9.3	3.7	43.1	10.4	3.3	40.7	11.6	2.8	38.4	12.9	2.4	36.0	14.4	2.1	33.7	15.9	1.8
10.0	46.9	9.4	3.9	44.6	10.4	3.4	42.2	11.6	2.9	39.7	13.0	2.5	37.3	14.4	2.2	34.9	16.0	1.9
11.0	48.5	9.4	4.0	46.1	10.5	3.5	43.6	11.7	3.0	41.1	13.0	2.6	38.6	14.5	2.2	36.2	16.1	1.9

YCAL0057EB

COP =3.8

AIR TEMPERATURE ON - CONDENSER (C)																		
LCWT (°C)	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	53.8	13.8	3.2	51.0	15.4	2.8	48.1	17.2	2.4	45.3	19.2	2.1	42.5	21.3	1.8	39.9	23.6	1.5
6.0	55.7	13.9	3.4	52.8	15.5	2.9	49.9	17.3	2.5	46.9	19.2	2.1	44.1	21.4	1.8	41.4	23.7	1.6
7.0	57.7	13.9	3.5	54.7	15.5	3.0	51.6	17.3	2.6	48.6	19.3	2.2	45.7	21.5	1.9	42.9	23.8	1.6
8.0	59.7	13.9	3.6	56.6	15.6	3.1	53.5	17.4	2.7	50.4	19.4	2.3	47.4	21.5	2.0	44.5	23.9	1.7
9.0	61.7	14.0	3.7	58.5	15.6	3.2	55.3	17.4	2.7	52.2	19.4	2.3	49.1	21.6	2.0	46.1	24.0	1.7
10.0	63.8	14.1	3.8	60.5	15.7	3.3	57.3	17.5	2.8	54.0	19.5	2.4	50.8	21.7	2.1	47.7	24.1	1.8
11.0	65.9	14.1	3.9	62.6	15.8	3.4	59.2	17.6	2.9	55.8	19.6	2.5	52.6	21.8	2.1	49.4	24.2	1.8

YCAL0073EB

COP =3.9

AIR TEMPERATURE ON - CONDENSER (C)																		
LCWT (°C)	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	67.1	17.2	3.4	64.6	18.5	3.0	61.0	20.6	2.6	57.3	22.9	2.2	53.7	25.3	1.9	50.0	27.8	1.6
6.0	70.3	16.8	3.6	66.8	18.6	3.1	63.2	20.7	2.7	59.4	23.0	2.3	55.6	25.4	2.0	51.9	28.0	1.7
7.0	72.1	17.3	3.6	69.1	18.8	3.2	65.4	20.8	2.8	61.5	23.1	2.4	57.7	25.6	2.0	53.9	28.2	1.7
8.0	74.6	17.3	3.7	70.8	19.2	3.2	67.6	21.0	2.9	63.7	23.3	2.4	59.7	25.7	2.1	55.8	28.3	1.8
9.0	77.3	17.4	3.8	73.4	19.3	3.3	69.9	21.1	2.9	65.9	23.4	2.5	61.8	25.9	2.2	57.9	28.5	1.9
10.0	80.0	17.5	4.0	75.9	19.4	3.4	71.8	21.5	3.0	67.6	23.9	2.5	64.0	26.0	2.2	60.0	28.7	1.9
11.0	82.7	17.6	4.1	78.6	19.4	3.5	74.3	21.6	3.1	70.0	24.0	2.6	65.7	26.5	2.2	62.1	28.9	2.0

YCAL0087EB

COP =4.2

AIR TEMPERATURE ON - CONDENSER (C)																		
LCWT (°C)	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	83.9	20.0	3.7	79.8	22.4	3.2	75.5	25.0	2.7	71.1	27.9	2.3	66.8	31.2	2.0	62.8	34.9	1.7
6.0	86.8	20.1	3.8	82.5	22.5	3.3	78.1	25.1	2.8	73.7	28.0	2.4	69.2	31.3	2.0	65.0	35.0	1.7
7.0	89.7	20.2	3.9	85.4	22.6	3.4	80.9	25.2	2.9	76.3	28.2	2.5	71.7	31.5	2.1	67.3	35.2	1.8
8.0	92.7	20.3	4.0	88.3	22.7	3.5	83.6	25.4	3.0	78.9	28.3	2.5	74.2	31.6	2.2	69.7	35.3	1.8
9.0	95.8	20.4	4.1	91.2	22.8	3.6	86.5	25.5	3.1	81.6	28.4	2.6	76.8	31.8	2.2	72.1	35.5	1.9
10.0	98.9	20.5	4.2	94.2	22.9	3.7	89.4	25.6	3.1	84.4	28.6	2.7	79.4	31.9	2.3	74.5	35.6	1.9
11.0	101.5	20.9	4.3	97.3	23.1	3.8	92.3	25.7	3.2	87.3	28.7	2.8	82.1	32.0	2.4	77.1	35.8	2.0

NOTES:

1. kWo = Unit kW Cooling Capacity Output
2. kWi = Compressor kW Input
3. COP = Coefficient of Performance (Based upon compressor and fan input kW)
4. LCWT = Leaving Chilled Water Temperature
5. Ratings based upon 0.15L/s cooler water per kW

YCAL0107EB**COP =4.2**

AIR TEMPERATURE ON - CONDENSER (C)																		
LCWT (°C)	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	99.6	25.7	3.5	94.4	28.6	3.0	89.0	31.8	2.6	84.1	34.9	2.2	78.7	38.6	1.9	73.4	42.3	1.6
6.0	103.0	25.9	3.6	97.7	28.8	3.1	92.2	32.0	2.7	86.6	35.5	2.3	81.0	39.2	1.9	75.6	43.0	1.7
7.0	106.5	26.0	3.7	101.0	28.9	3.2	95.4	32.2	2.7	89.7	35.7	2.3	84.0	39.4	2.0	78.4	43.3	1.7
8.0	110.1	26.2	3.8	104.4	29.1	3.3	98.6	32.4	2.8	92.8	35.9	2.4	86.9	39.6	2.1	81.3	43.6	1.8
9.0	113.7	26.4	3.9	107.9	29.3	3.4	102.0	32.6	2.9	96.0	36.1	2.5	90.0	39.9	2.1	84.2	43.9	1.8
10.0	117.4	26.7	4.0	111.5	29.5	3.5	105.4	32.8	3.0	99.2	36.4	2.5	93.1	40.2	2.2	87.2	44.2	1.9
11.0	121.2	26.9	4.1	115.1	29.8	3.5	108.9	33.0	3.0	102.6	36.6	2.6	96.3	40.4	2.2	90.2	44.5	1.9

YCAL0117EB**COP =4.2**

AIR TEMPERATURE ON - CONDENSER (C)																		
LCWT (°C)	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	114.4	26.1	3.6	108.6	29.2	3.1	102.7	32.6	2.7	96.8	36.4	2.3	91.0	40.5	2.0	85.4	45.0	1.7
6.0	118.4	26.2	3.7	112.5	29.3	3.2	106.5	32.7	2.8	100.4	36.5	2.4	94.4	40.6	2.0	88.6	45.1	1.8
7.0	122.6	26.3	3.9	116.5	29.3	3.3	110.3	32.8	2.9	104.1	36.6	2.5	97.9	40.7	2.1	91.9	45.3	1.8
8.0	126.9	26.3	4.0	120.6	29.4	3.5	114.2	32.8	3.0	107.8	36.6	2.6	101.5	40.8	2.2	95.3	45.4	1.9
9.0	131.3	26.4	4.1	124.8	29.5	3.6	118.3	32.9	3.1	111.7	36.7	2.6	105.1	41.0	2.3	98.8	45.5	1.9
10.0	135.7	26.5	4.2	129.1	29.5	3.7	122.4	33.0	3.2	115.6	36.8	2.7	108.9	41.1	2.3	102.4	45.7	2.0
11.0	140.3	26.5	4.4	133.5	29.6	3.8	126.6	33.1	3.3	119.6	36.9	2.8	112.7	41.2	2.4	106.1	45.8	2.1

YCAL0133EB**COP =4.1**

AIR TEMPERATURE ON - CONDENSER (C)																		
LCWT (°C)	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	126.3	29.6	3.6	120.0	33.0	3.1	113.4	36.8	2.7	106.8	40.9	2.3	100.1	45.4	2.0	93.7	50.1	1.7
6.0	130.7	29.8	3.7	124.2	33.1	3.2	116.6	37.4	2.7	110.6	41.1	2.4	103.8	45.5	2.0	97.2	50.3	1.7
7.0	135.2	29.9	3.8	128.6	33.3	3.3	121.6	37.0	2.9	114.6	41.2	2.5	107.6	45.8	2.1	100.8	50.6	1.8
8.0	139.4	30.3	3.9	133.0	33.4	3.4	125.9	37.2	2.9	118.7	41.4	2.5	111.5	46.0	2.2	104.5	50.9	1.9
9.0	144.2	30.4	4.0	137.0	33.8	3.5	130.3	37.4	3.0	122.8	41.6	2.6	115.5	46.2	2.2	108.3	51.1	1.9
10.0	149.1	30.6	4.1	141.8	33.9	3.6	134.2	37.8	3.1	127.1	41.8	2.7	119.5	46.4	2.3	112.2	51.4	2.0
11.0	154.2	30.7	4.3	146.6	34.1	3.7	138.9	37.9	3.2	131.0	42.2	2.7	123.2	46.9	2.4	116.1	51.6	2.0

YCAL0147EB**COP =4.1**

AIR TEMPERATURE ON - CONDENSER (C)																		
LCWT (°C)	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	138.3	33.1	3.6	131.4	36.8	3.1	124.2	40.9	2.7	116.8	45.4	2.3	109.3	50.2	2.0	101.9	55.2	1.7
6.0	143.0	33.4	3.7	136.0	37.0	3.2	128.6	41.1	2.8	120.9	45.6	2.4	113.3	50.5	2.0	105.8	55.6	1.7
7.0	147.9	33.6	3.8	140.7	37.2	3.3	133.0	41.3	2.8	125.2	45.9	2.4	117.4	50.8	2.1	109.7	55.9	1.8
8.0	151.9	34.3	3.8	145.3	37.5	3.4	137.6	41.6	2.9	129.6	46.2	2.5	121.6	51.1	2.1	113.6	56.3	1.8
9.0	157.1	34.5	3.9	149.3	38.2	3.4	142.3	41.8	3.0	134.1	46.4	2.6	125.8	51.4	2.2	117.8	56.7	1.9
10.0	162.6	34.7	4.0	154.5	38.4	3.5	146.0	42.7	3.0	138.7	46.7	2.7	130.2	51.7	2.3	122.0	57.0	2.0
11.0	168.1	34.9	4.2	159.7	38.6	3.6	151.2	42.8	3.1	142.4	47.5	2.7	133.7	52.7	2.3	126.3	57.4	2.0

NOTES:

1. kWo = Unit kW Cooling Capacity Output
2. kWi = Compressor kW Input
3. COP = Coefficient of Performance (Based upon compressor and fan input kW)
4. LCWT = Leaving Chilled Water Temperature
5. Ratings based upon 0.15L/s cooler water per kW

Ratings - R-407C (SI Units)

YCAL0157EB

COP =4.3

AIR TEMPERATURE ON - CONDENSER (C)

LCWT (°C)	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	151.0	37.0	3.5	143.5	41.2	3.1	135.7	45.8	2.6	127.7	51.0	2.3	119.9	56.8	1.9	112.3	63.0	1.6
6.0	156.2	37.2	3.7	148.5	41.4	3.2	140.5	46.1	2.7	132.3	51.3	2.3	124.2	57.0	2.0	116.3	63.3	1.7
7.0	161.6	37.5	3.8	153.6	41.6	3.3	145.3	46.3	2.8	137.0	51.5	2.4	128.6	57.3	2.0	120.5	63.7	1.7
8.0	166.5	37.9	3.8	158.8	41.9	3.3	150.3	46.6	2.9	141.7	51.8	2.5	133.1	57.6	2.1	124.7	64.0	1.8
9.0	172.1	38.1	3.9	163.6	42.4	3.4	155.4	46.9	3.0	146.6	52.1	2.5	137.8	57.9	2.2	129.1	64.3	1.9
10.0	177.8	38.4	4.1	169.2	42.6	3.5	160.1	47.4	3.0	151.5	52.4	2.6	142.4	58.3	2.2	133.6	64.7	1.9
11.0	183.7	38.6	4.2	174.7	42.9	3.6	165.5	47.7	3.1	156.1	53.0	2.7	146.7	59.0	2.3	138.1	65.1	2.0

YCAL0173EB

COP =4.5

AIR TEMPERATURE ON - CONDENSER (C)

LCWT (°C)	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	167.3	39.0	3.8	159.3	43.5	3.3	150.9	48.5	2.8	142.4	54.1	2.4	134.0	60.4	2.0	126.0	67.5	1.7
6.0	173.0	39.2	3.9	164.8	43.7	3.3	156.2	48.7	2.9	147.4	54.3	2.5	138.8	60.7	2.1	130.4	67.8	1.8
7.0	178.9	39.4	4.0	170.4	44.0	3.4	161.7	48.9	3.0	152.6	54.6	2.5	143.6	60.9	2.2	134.9	68.1	1.8
8.0	184.9	39.6	4.1	176.2	44.2	3.5	167.2	49.2	3.1	157.9	54.9	2.6	148.6	61.2	2.2	139.6	68.4	1.9
9.0	190.9	39.8	4.2	182.0	44.4	3.6	172.8	49.5	3.1	163.3	55.1	2.7	153.7	61.5	2.3	142.6	70.2	1.9
10.0	197.1	40.0	4.3	188.0	44.7	3.7	178.5	49.8	3.2	168.8	55.4	2.8	158.9	61.8	2.4	149.2	69.0	2.0
11.0	202.6	40.6	4.4	194.1	44.9	3.8	184.4	50.0	3.3	174.4	55.7	2.9	164.3	62.1	2.4	152.9	70.4	2.0

YCAL0197EB

COP =4.1

AIR TEMPERATURE ON - CONDENSER (C)

LCWT (°C)	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	185.3	46.4	3.5	175.6	51.7	3.0	165.8	57.6	2.6	155.8	64.0	2.2	145.9	70.8	1.9	136.4	78.1	1.6
6.0	191.7	46.7	3.6	181.8	52.0	3.1	171.6	57.9	2.7	161.4	64.3	2.3	151.2	71.3	1.9	141.5	78.6	1.7
7.0	198.1	47.0	3.7	188.0	52.3	3.2	177.6	58.2	2.7	167.0	64.7	2.3	156.7	71.6	2.0	146.7	79.1	1.7
8.0	204.2	47.5	3.8	193.8	52.9	3.3	183.7	58.5	2.8	172.3	65.4	2.4	162.3	72.1	2.1	152.0	79.6	1.8
9.0	211.1	47.8	3.9	200.4	53.1	3.3	189.3	59.2	2.9	178.3	65.7	2.5	167.4	72.9	2.1	156.9	80.5	1.8
10.0	218.2	48.1	4.0	207.1	53.4	3.4	195.8	59.4	3.0	184.5	66.1	2.5	173.3	73.3	2.2	162.5	80.9	1.9
11.0	225.4	48.4	4.1	213.9	53.8	3.5	202.4	59.8	3.0	190.8	66.4	2.6	179.3	73.7	2.2	168.2	81.4	1.9

YCAL0217EB

COP =4.2

AIR TEMPERATURE ON - CONDENSER (C)

LCWT (°C)	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	207.0	49.7	3.7	196.6	55.2	3.2	182.8	63.2	2.6	174.5	68.3	2.3	163.2	75.6	2.0	149.4	85.1	1.6
6.0	214.0	50.0	3.8	203.3	55.6	3.3	189.5	63.3	2.7	180.6	68.7	2.4	169.1	76.1	2.0	157.8	83.8	1.7
7.0	221.3	50.4	3.9	210.2	56.0	3.4	196.5	63.5	2.8	184.7	70.5	2.4	175.1	76.6	2.1	163.6	84.4	1.8
8.0	228.7	50.8	4.0	217.2	56.4	3.4	203.5	63.7	2.9	191.4	70.7	2.5	179.3	78.3	2.1	169.4	85.0	1.9
9.0	236.3	51.2	4.1	224.4	56.8	3.5	210.7	63.9	3.0	198.3	71.0	2.6	185.9	78.6	2.2	173.9	86.7	1.9
10.0	243.0	52.1	4.1	231.9	57.2	3.6	218.1	64.2	3.1	205.3	71.3	2.6	192.6	79.0	2.2	180.2	87.1	1.9
11.0	251.1	52.4	4.2	238.5	58.1	3.7	225.5	64.5	3.2	212.4	71.7	2.7	199.4	79.4	2.3	186.8	87.6	2.0

NOTES:

1. kWo = Unit kW Cooling Capacity Output
2. kWi = Compressor kW Input
3. COP = Coefficient of Performance (Based upon compressor and fan input kW)
4. LCWT = Leaving Chilled Water Temperature
5. Ratings based upon 0.15L/s cooler water per kW

YCAL0237EB**COP =4.3****AIR TEMPERATURE ON - CONDENSER (C)**

LCWT (°C)	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	225.7	55.7	3.6	214.3	62.0	3.1	201.1	70.0	2.6	190.5	77.1	2.3	178.6	85.8	1.9	166.1	96.2	1.6
6.0	233.4	56.0	3.7	221.6	62.4	3.2	208.3	70.3	2.7	197.2	77.5	2.3	185.0	86.3	2.0	173.3	95.8	1.7
7.0	241.2	56.4	3.8	229.1	62.8	3.3	215.6	70.6	2.8	204.0	78.0	2.4	191.5	86.8	2.1	179.3	96.4	1.7
8.0	249.2	56.8	3.9	236.8	63.2	3.4	223.1	70.9	2.9	210.1	79.0	2.5	197.2	87.9	2.1	185.5	97.0	1.8
9.0	257.4	57.2	4.0	244.6	63.7	3.5	230.7	71.3	3.0	217.3	79.4	2.5	204.1	88.3	2.2	191.2	98.1	1.8
10.0	265.2	57.8	4.1	252.1	64.4	3.5	238.5	71.7	3.0	224.7	79.8	2.6	211.1	88.8	2.2	197.8	98.6	1.9
11.0	273.8	58.2	4.2	260.3	64.8	3.6	246.4	72.1	3.1	232.3	80.3	2.7	218.2	89.3	2.3	204.5	99.2	1.9

YCAL0253EB**COP =4.4****AIR TEMPERATURE ON - CONDENSER (C)**

LCWT (°C)	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	246.5	61.8	3.6	233.9	69.0	3.1	221.0	77.0	2.6	208.1	86.0	2.2	195.5	96.2	1.9	183.7	107.6	1.6
6.0	254.9	62.2	3.7	242.0	69.4	3.2	228.7	77.5	2.7	215.4	86.5	2.3	202.4	96.7	2.0	190.0	108.1	1.7
7.0	263.5	62.6	3.8	250.2	69.9	3.3	236.5	77.9	2.8	222.8	87.0	2.4	209.4	97.2	2.0	196.5	108.7	1.7
8.0	272.1	63.0	3.9	258.5	70.3	3.4	244.5	78.4	2.9	230.4	87.5	2.4	216.5	97.7	2.1	203.0	109.2	1.8
9.0	280.9	63.4	4.0	267.0	70.8	3.4	252.7	78.9	3.0	238.1	88.1	2.5	223.7	98.3	2.1	209.8	109.8	1.8
10.0	289.9	63.8	4.1	275.7	71.2	3.5	260.9	79.4	3.0	246.0	88.6	2.6	231.1	98.9	2.2	216.7	110.5	1.9
11.0	299.0	64.3	4.2	284.5	71.7	3.6	269.4	80.0	3.1	254.0	89.2	2.7	238.7	99.5	2.2	219.5	111.2	2.0

YCAL0287EB**COP =4.1****AIR TEMPERATURE ON - CONDENSER (C)**

LCWT (°C)	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	269.5	75.4	3.3	256.2	83.7	2.9	241.7	93.3	2.4	225.7	104.5	2.0	207.8	117.6	1.7	192.3	131.2	1.5
6.0	278.3	76.1	3.4	264.7	84.4	2.9	249.8	94.1	2.5	233.4	105.3	2.1	215.1	118.4	1.7	198.5	131.7	1.6
7.0	287.4	76.8	3.5	273.3	85.2	3.0	258.1	94.9	2.6	241.3	106.1	2.2	222.7	119.2	1.8	204.8	132.2	1.6
8.0	296.7	77.5	3.5	282.2	86.0	3.1	266.5	95.7	2.6	249.3	107.0	2.2	230.4	120.0	1.8	211.2	132.7	1.7
9.0	306.1	78.3	3.6	291.2	86.8	3.1	275.1	96.6	2.7	257.6	107.8	2.3	238.2	120.9	1.9	217.7	133.2	1.7
10.0	315.7	79.1	3.7	300.4	87.6	3.2	283.9	97.5	2.7	265.9	108.7	2.3	246.2	121.8	1.9	224.3	133.8	1.8
11.0	325.5	79.9	3.8	309.8	88.5	3.3	292.8	98.3	2.8	274.4	109.7	2.4	254.3	122.7	2.0	231.9	134.3	1.9

YCAL0317EB**COP =3.9****AIR TEMPERATURE ON - CONDENSER (C)**

LCWT (°C)	25°C			30°C			35°C			40°C			45°C			50°C		
	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP	kWo	kWi	COP
5.0	306.4	81.4	3.4	291.6	90.4	2.9	275.3	100.9	2.5	256.9	113.3	2.1	236.3	128.1	1.7	213.2	145.3	1.4
6.0	316.9	81.9	3.5	301.6	90.9	3.0	285.0	101.4	2.6	266.3	113.8	2.2	245.4	128.5	1.8	221.9	145.8	1.4
7.0	327.6	82.5	3.6	312.0	91.5	3.1	294.9	102.0	2.7	275.8	114.4	2.2	254.5	129.1	1.8	230.6	146.3	1.5
8.0	338.5	83.1	3.7	322.5	92.1	3.2	304.9	102.6	2.7	285.5	115.0	2.3	263.7	129.7	1.9	239.5	146.9	1.5
9.0	349.6	83.7	3.8	333.2	92.7	3.3	315.2	103.3	2.8	295.3	115.7	2.4	273.2	130.3	2.0	248.5	147.5	1.6
10.0	361.0	84.4	3.9	344.1	93.4	3.4	325.7	104.0	2.9	305.3	116.4	2.4	282.8	131.0	2.0	257.7	148.1	1.6
11.0	372.3	85.2	3.9	355.2	94.1	3.4	336.4	104.7	3.0	315.6	117.1	2.5	292.5	131.8	2.1	266.9	149.0	1.7

NOTES:

1. kWo = Unit kW Cooling Capacity Output
2. kWi = Compressor kW Input
3. COP = Coefficient of Performance (Based upon compressor and fan input kW)
4. LCWT = Leaving Chilled Water Temperature
5. Ratings based upon 0.15L/s cooler water per kW

Ratings - R-407C (SI Units)

YCAL0347EB

COP =3.9

AIR TEMPERATURE ON - CONDENSER (C)

LCWT (°C)	25°C			30°C			35°C			40°C			45°C			50°C		
	kW _o	kW _i	COP	kW _o	kW _i	COP	kW _o	kW _i	COP	kW _o	kW _i	COP	kW _o	kW _i	COP	kW _o	kW _i	COP
5.0	329.8	90.6	3.3	313.9	100.6	2.9	296.5	112.1	2.4	277.3	125.6	2.1	255.6	141.4	1.7	196.8	125.7	1.5
6.0	340.8	91.4	3.4	324.4	101.4	2.9	306.6	113.0	2.5	286.9	126.4	2.1	264.8	142.3	1.8	204.3	126.2	1.5
7.0	352.0	92.2	3.5	335.1	102.3	3.0	316.8	113.8	2.6	296.6	127.4	2.2	274.2	143.1	1.8	212.1	126.8	1.6
8.0	363.4	93.0	3.6	346.0	103.2	3.1	327.3	114.8	2.6	306.5	128.3	2.2	283.7	144.0	1.9	219.9	127.4	1.6
9.0	375.1	93.9	3.6	357.2	104.1	3.2	337.9	115.7	2.7	316.8	129.2	2.3	293.4	144.9	1.9	227.9	128.0	1.7
10.0	387.0	94.8	3.7	368.5	105.0	3.2	348.8	116.7	2.8	327.1	130.2	2.3	303.3	145.9	2.0	236.1	128.7	1.7
11.0	399.1	95.7	3.8	380.1	106.0	3.3	359.8	117.7	2.8	337.7	131.2	2.4	313.5	146.9	2.0	208.5	99.0	1.9

YCAL0377EB

COP =4.0

AIR TEMPERATURE ON - CONDENSER (C)

LCWT (°C)	25°C			30°C			35°C			40°C			45°C			50°C		
	kW _o	kW _i	COP	kW _o	kW _i	COP	kW _o	kW _i	COP	kW _o	kW _i	COP	kW _o	kW _i	COP	kW _o	kW _i	COP
5.0	359.2	100.1	3.3	341.9	110.9	2.8	323.5	123.1	2.4	303.3	137.3	2.1	280.8	153.6	1.7	185.0	104.0	1.6
6.0	371.0	101.1	3.4	353.2	111.9	2.9	334.2	124.2	2.5	313.5	138.3	2.1	290.4	154.7	1.8	192.0	104.4	1.7
7.0	383.0	102.1	3.4	364.7	113.0	3.0	345.1	125.3	2.6	323.9	139.4	2.2	300.6	155.7	1.8	199.0	104.9	1.7
8.0	395.3	103.1	3.5	376.4	114.1	3.1	356.3	126.4	2.6	334.6	140.5	2.2	310.7	156.8	1.9	206.2	105.4	1.8
9.0	407.9	104.1	3.6	388.4	115.1	3.1	367.7	127.6	2.7	345.5	141.7	2.3	321.1	157.9	1.9	213.6	105.9	1.9
10.0	420.7	105.1	3.7	400.5	116.3	3.2	379.4	128.7	2.8	356.6	142.9	2.3	331.8	159.0	2.0	221.1	106.5	1.9
11.0	433.8	106.2	3.8	413.0	117.4	3.3	391.3	129.9	2.8	367.9	144.1	2.4	342.7	160.1	2.0	228.7	107.0	2.0



Part Load Ratings - R-22 (English Units)

YCAL0043EC				
% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	11.0	10.9	9.6
50.0	69.0	6.2	4.0	14.0
IPLV:12.9 EER				

YCAL0073EC				
% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	18.9	19.5	10.2
50.0	68.3	10.5	7.1	14.9
IPLV:13.7 EER				

YCAL0107EC				
% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	28.8	30.7	10.3
66.7	78.8	21.1	15.8	13.6
33.3	57.8	10.9	6.4	16.9
IPLV:14.7 EER				

YCAL0133EC				
% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	36.5	34.9	10.8
78.2	83.5	29.4	23.4	12.2
50.0	67.6	19.8	12.4	15.7
28.2	55.0	10.9	6.3	17.0
IPLV:14.7 EER				

YCAL0157EC				
% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	43.5	44.2	10.5
76.5	83.5	35.1	29.2	12.1
50.0	67.8	23.8	15.5	15.6
26.5	55.0	13.4	7.2	18.6
IPLV:15.0 EER				

YCAL0197EC				
% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	53.3	55.1	10.3
85.5	87.8	47.0	42.3	11.5
66.7	78.6	38.8	28.1	13.3
52.2	68.6	29.8	21.0	14.7
33.3	58.9	21.3	11.3	17.4
18.8	55.0	11.6	6.3	17.3
IPLV:14.7 EER				

YCAL0057EC				
% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	15.1	16.0	9.7
50.0	68.5	8.5	5.5	14.7
IPLV:13.5 EER				

YCAL0087EC				
% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	24.1	24.3	10.7
50.0	67.8	13.2	8.4	16.1
IPLV:14.8 EER				

YCAL0117EC				
% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	33.1	30.6	11.0
75.0	82.4	26.1	19.2	12.6
50.0	67.9	18.1	10.6	16.2
25.0	55.0	9.0	4.6	18.2
IPLV:15.3 EER				

YCAL0147EC				
% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	39.7	39.2	10.6
75.0	82.5	31.4	24.9	12.4
50.0	67.6	21.6	14.1	15.3
25.0	55.0	10.9	6.3	16.9
IPLV:14.5 EER				

YCAL0173EC				
% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	48.1	47.2	10.9
75.0	82.5	38.1	29.4	13.1
50.0	67.8	26.3	16.4	16.4
25.0	55.0	13.4	7.0	19.2
IPLV:15.7 EER				

YCAL0217EC				
% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	59.3	59.4	10.8
83.3	87.1	51.5	44.1	12.1
66.7	78.4	42.9	30.9	13.7
50.0	67.9	32.6	22.1	15.3
33.3	58.7	23.4	12.9	17.2
16.7	55.0	11.6	6.3	17.5
IPLV:15.0 EER				

YCAL0237EC

% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	64.8	67.2	10.5
84.3	87.7	57.0	51.3	11.8
66.7	78.7	47.1	34.2	13.8
51.0	68.8	36.5	25.9	15.0
33.3	58.3	25.2	13.6	17.8
17.7	55.0	13.3	6.8	18.8

IPLV:15.2 EER

YCAL0287EC

% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	78.8	89.8	9.8
81.8	86.9	68.2	62.7	11.9
59.1	75.1	52.7	38.4	14.1
40.9	64.1	38.2	21.9	16.3
18.2	55.0	17.7	8.9	17.7

IPLV:15.0 EER

YCAL0347EC

% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	97.0	106.5	10.0
85.2	87.9	85.5	80.7	11.4
66.7	79.3	71.6	54.4	13.5
51.9	70.2	56.9	37.1	14.7
33.3	59.2	39.2	20.2	15.9
18.5	55.0	21.1	10.7	16.4

IPLV:14.5 EER

YCAL0253EC

% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	70.7	75.2	10.3
83.3	87.2	61.5	55.0	11.9
66.7	78.7	51.5	37.5	13.9
50.0	68.1	39.0	26.9	15.4
33.3	59.1	28.4	14.6	18.9
16.7	55.0	14.2	6.9	19.8

IPLV:15.7 EER

YCAL0317EC

% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	90.2	97.1	10.2
83.3	87.3	78.6	71.9	11.6
66.7	79.0	66.1	50.1	13.3
50.0	69.1	51.3	32.7	14.6
33.3	59.0	36.1	18.2	15.7
16.7	55.0	17.9	8.6	16.2

IPLV:14.3 EER

YCAL0377EC

% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	105.2	115.8	10.1
83.3	87.4	92.0	85.2	11.7
66.7	79.3	77.7	58.7	13.7
50.0	69.5	60.5	38.7	15.1
33.3	59.3	42.6	22.2	16.1
16.7	55.0	21.1	10.7	16.4

IPLV:14.7 EER

Part Load Ratings - R-22 (SI Units)

YCAL0043EC				
% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	38.8	10.9	2.8
50.0	20.6	22.0	4.0	4.1
IPLV:3.79 COP				

YCAL0073EC				
% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	66.4	19.5	3.0
50.0	20.2	36.9	7.1	4.4
IPLV:4.03 COP				

YCAL0107EC				
% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	101.4	30.7	3.0
66.7	26.0	74.0	15.8	4.0
33.3	14.3	38.5	6.4	5.0
IPLV:4.32 COP				

YCAL0133EC				
% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	128.2	34.9	3.2
78.2	28.6	103.6	23.4	3.6
50.0	19.8	69.6	12.4	4.6
28.2	12.8	38.4	6.3	5.0
IPLV:4.31 COP				

YCAL0157EC				
% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	152.9	44.2	3.1
76.5	28.6	123.6	29.2	3.6
50.0	19.9	83.7	15.5	4.6
26.5	12.8	47.0	7.2	5.5
IPLV:4.39 COP				

YCAL0197EC				
% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	187.6	55.1	3.0
85.5	31.0	165.1	42.3	3.4
66.7	25.9	136.3	28.1	3.9
52.2	20.3	104.9	21.0	4.3
33.3	15.0	74.8	11.3	5.1
18.8	12.8	40.7	6.3	5.1
IPLV:4.31 COP				

YCAL0057EC				
% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	53.2	16.0	2.8
50.0	20.3	29.7	5.5	4.3
IPLV: 3.96 COP				

YCAL0087EC				
% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	84.9	24.3	3.1
50.0	19.9	46.4	8.4	4.7
IPLV:4.35 COP				

YCAL0117EC				
% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	116.3	30.6	3.2
75.0	28.0	91.9	19.2	3.7
50.0	19.9	63.7	10.6	4.7
25.0	12.8	31.8	4.6	5.3
IPLV:4.47 COP				

YCAL0147EC				
% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	139.8	39.2	3.1
75.0	28.0	110.6	24.9	3.6
50.0	19.8	75.9	14.1	4.5
25.0	12.8	38.3	6.3	5.0
IPLV:4.26 COP				

YCAL0173EC				
% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	169.1	47.2	3.2
75.0	28.1	133.9	29.4	3.8
50.0	19.9	92.4	16.4	4.8
25.0	12.8	47.3	7.0	5.6
IPLV:4.60 COP				

YCAL0217EC				
% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	208.7	59.4	3.2
83.3	30.6	181.1	44.1	3.6
66.7	25.8	150.9	30.9	4.0
50.0	20.0	114.5	22.1	4.5
33.3	14.8	82.3	12.9	5.1
16.7	12.8	40.9	6.3	5.1
IPLV:4.39 COP				

YCAL0237EC

% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	227.9	67.2	3.1
84.3	31.0	200.4	51.3	3.5
66.7	25.9	165.8	34.2	4.0
51.0	20.5	128.5	25.9	4.4
33.3	14.6	88.5	13.6	5.2
17.7	12.8	46.9	6.8	5.5

IPLV:4.46 COP

YCAL0287EC

% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	35.0	277.1	89.8	2.9
81.8	30.5	239.9	62.7	3.5
59.1	23.9	185.2	38.4	4.1
40.9	17.8	134.4	21.9	4.8
18.2	12.8	62.2	8.9	5.2

IPLV:4.39 COP

YCAL0347EC

% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	35.0	341.0	106.5	2.9
85.2	31.1	300.6	80.7	3.3
66.7	26.3	251.8	54.4	4.0
51.9	21.2	200.3	37.1	4.3
33.3	15.1	137.8	20.2	4.7
18.5	12.8	74.3	10.7	4.8

IPLV:4.25 COP

YCAL0253EC

% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	248.6	75.2	3.0
83.3	30.7	216.2	55.0	3.5
66.7	26.0	181.2	37.5	4.1
50.0	20.0	137.1	26.9	4.5
33.3	15.1	100.0	14.6	5.6
16.7	12.8	50.1	6.9	5.8

IPLV:4.59 COP

YCAL0317EC

% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	35.0	317.3	97.1	3.0
83.3	30.7	276.4	71.9	3.4
66.7	26.1	232.4	50.1	3.9
50.0	20.6	180.4	32.7	4.3
33.3	15.0	127.1	18.2	4.6
16.7	12.8	62.9	8.6	4.7

IPLV:4.19 COP

YCAL0377EC

% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	35.0	370.1	115.8	3.0
83.3	30.8	323.4	85.2	3.4
66.7	26.3	273.2	58.7	4.0
50.0	20.8	212.8	38.7	4.4
33.3	15.2	149.8	22.2	4.7
16.7	12.8	74.2	10.7	4.8

IPLV:4.32 COP

Part Load Ratings - R-407C (English Units)

YCAL0043EB				
% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	10.7	11.5	9.0
50.0	68.7	6.0	4.0	13.4
IPLV:12.4 EER				

YCAL0073EB				
% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	18.4	20.8	9.3
50.0	69.3	10.5	7.3	14.5
IPLV:13.3 EER				

YCAL0107EB				
% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	26.8	32.1	9.2
66.7	79.9	20.1	16.4	12.6
33.3	59.3	10.9	6.5	16.5
IPLV:14.2 EER				

YCAL0133EB				
% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	34.2	37.0	9.6
78.2	84.2	28.0	24.7	11.1
50.0	69.0	19.4	12.8	14.9
28.2	55.0	10.9	6.4	16.8
IPLV:14.1 EER				

YCAL0157EB				
% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	40.9	46.3	9.5
76.5	84.3	33.6	30.6	11.1
50.0	69.3	23.4	15.9	15.0
26.5	55.0	13.1	7.1	18.6
	IPLV:	14.6	EER	

YCAL0197EB				
% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	49.9	58.1	9.2
85.5	88.2	44.3	44.4	10.4
66.7	79.5	37.1	29.4	12.3
52.2	69.7	28.9	21.6	13.9
33.3	58.9	19.9	11.3	16.3
18.8	55.0	10.8	6.3	16.2
IPLV:13.9 EER				

YCAL0057EB				
% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	14.5	17.3	8.7
50.0	69.7	8.4	5.8	14.0
IPLV:12.8 EER				

YCAL0087EB				
% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	22.7	25.2	9.7
50.0	69.0	12.9	8.5	15.6
IPLV:14.2 EER				

YCAL0117EB				
% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	31.0	32.7	9.7
75.0	83.0	24.8	20.5	11.4
50.0	68.9	17.5	11.1	15.2
25.0	55.0	9.0	4.7	17.7
IPLV:14.4 EER				

YCAL0147EB				
% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	37.4	41.3	9.6
75.0	83.3	30.1	26.0	11.4
50.0	69.2	21.3	14.5	14.8
25.0	55.0	10.9	6.4	16.8
IPLV:14.1 EER				

YCAL0173EB				
% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	45.5	48.9	10.0
75.0	83.2	36.5	30.6	12.1
50.0	69.1	25.8	16.7	15.9
25.0	55.0	13.2	6.8	19.3
IPLV:15.4 EER				

YCAL0217EB				
% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	55.2	63.4	9.4
83.3	88.0	48.8	46.2	11.1
66.7	79.8	41.2	32.0	12.7
50.0	69.1	31.4	22.3	14.6
33.3	58.9	22.0	12.8	16.2
16.7	55.0	10.8	6.2	16.3
IPLV:14.3 EER				

YCAL0237EB

% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	60.6	70.5	9.4
84.3	88.4	53.9	53.4	10.8
66.7	79.8	45.3	35.4	12.9
51.0	69.7	35.1	26.2	14.2
33.3	59.0	24.3	13.4	17.3
17.7	55.0	13.1	6.5	19.1

IPLV:14.8 EER

YCAL0287EB

% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	72.6	94.6	8.6
81.8	87.4	63.4	66.3	10.5
59.1	76.0	49.6	39.8	12.9
40.9	65.0	36.3	22.4	15.2
18.2	55.0	16.7	8.8	16.7

IPLV:14.0 EER

YCAL0347EB

% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	89.1	113.6	8.7
85.2	88.3	79.2	86.0	10.0
66.7	80.0	66.8	57.4	12.0
51.9	71.0	53.5	39.1	13.2
33.3	60.0	37.1	20.3	15.0
18.5	55.0	20.2	10.1	16.4

IPLV:13.5 EER

YCAL0253EB

% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	66.5	77.8	9.4
83.3	87.7	58.4	57.0	11.0
66.7	79.7	49.6	38.8	13.1
50.0	68.8	37.5	27.1	14.8
33.3	59.0	26.6	13.9	18.4
16.7	55.0	13.1	6.5	19.1

IPLV:15.1 EER

YCAL0317EB

% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	82.9	101.8	8.9
83.3	87.7	72.9	74.9	10.4
66.7	79.7	61.7	51.7	12.1
50.0	70.0	48.3	33.8	13.4
33.3	59.4	33.8	18.6	14.5
16.7	55.0	16.7	8.7	14.9

IPLV:13.2 EER

YCAL0377EB

% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	95.0	97.1	124.9	8.7
83.3	87.8	85.5	91.8	10.1
66.7	79.9	72.7	63.0	12.0
50.0	70.3	57.2	40.8	13.7
33.3	60.1	40.6	21.9	15.6
16.7	55.0	20.2	10.1	16.4

IPLV:13.7 EER

Part Load Ratings - R-407C (SI Units)

YCAL0043EB				
% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	37.5	11.5	2.6
50.0	20.4	21.1	4.0	3.9
IPLV:3.62 COP				

YCAL0073EB				
% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	64.6	20.8	2.7
50.0	20.7	36.9	7.3	4.3
IPLV:3.91 COP				

YCAL0107EB				
% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	94.3	32.1	2.7
66.7	26.6	70.5	16.4	3.7
33.3	15.2	38.2	6.5	4.9
IPLV:4.16 COP				

YCAL0133EB				
% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	120.3	37.0	2.8
78.2	29.0	98.6	24.7	3.3
50.0	20.6	68.2	12.8	4.4
28.2	12.8	38.4	6.4	4.9
IPLV:4.13 COP				

YCAL0157EB				
% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	143.7	46.3	2.8
76.5	29.0	118.0	30.6	3.3
50.0	20.7	82.2	15.9	4.4
26.5	12.8	46.2	7.1	5.5
IPLV:4.29 COP				

YCAL0197EB				
% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	175.6	58.1	2.7
85.5	31.2	155.7	44.4	3.0
66.7	26.4	130.4	29.4	3.6
52.2	21.0	101.7	21.6	4.1
33.3	15.0	70.0	11.3	4.8
18.8	12.8	37.8	6.3	4.7
IPLV:4.07 COP				

YCAL0057EB				
% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	51.1	17.3	2.5
50.0	20.9	29.5	5.8	4.1
IPLV:3.75 COP				

YCAL0087EB				
% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	79.9	25.2	2.9
50.0	20.6	45.3	8.5	4.6
IPLV:4.17 COP				

YCAL0117EB				
% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	109.1	32.7	2.8
75.0	28.3	87.2	20.5	3.3
50.0	20.5	61.7	11.1	4.5
25.0	12.8	31.6	4.7	5.2
IPLV:4.22 COP				

YCAL0147EB				
% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	131.5	41.3	2.8
75.0	28.5	105.8	26.0	3.3
50.0	20.6	74.9	14.5	4.3
25.0	12.8	38.3	6.4	4.9
IPLV:4.12 COP				

YCAL0173EB				
% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	159.8	48.9	2.9
75.0	28.4	128.4	30.6	3.5
50.0	20.6	90.8	16.7	4.7
25.0	12.8	46.5	6.8	5.7
IPLV:4.50 COP				

YCAL0217EB				
% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	194.2	63.4	2.8
83.3	31.1	171.6	46.2	3.2
66.7	26.6	145.0	32.0	3.7
50.0	20.6	110.4	22.3	4.3
33.3	14.9	77.3	12.8	4.8
16.7	12.8	38.0	6.2	4.8
IPLV:4.18 COP				

YCAL0237EB

% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	213.2	70.5	2.8
84.3	31.3	189.7	53.4	3.2
66.7	26.6	159.2	35.4	3.8
51.0	21.0	123.4	26.2	4.2
33.3	15.0	85.4	13.4	5.1
17.7	12.8	46.2	6.5	5.6

IPLV:4.33 COP

YCAL0287EB

% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	35.0	255.3	94.6	2.5
81.8	30.8	223.1	66.3	3.1
59.1	24.4	174.3	39.8	3.8
40.9	18.3	127.7	22.4	4.5
18.2	12.8	58.6	8.8	4.9

IPLV:4.10 COP

YCAL0347EB

% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	35.0	313.4	113.6	2.6
85.2	31.3	278.6	86.0	2.9
66.7	26.6	234.9	57.4	3.5
51.9	21.7	188.1	39.1	3.9
33.3	15.5	130.4	20.3	4.4
18.5	12.8	71.1	10.1	4.8

IPLV:3.94 COP

YCAL0253EB

% DISPL.	AMBIENT DEG C	KW	COMPR kW	COP
100.0	35.0	233.9	77.8	2.8
83.3	30.9	205.5	57.0	3.2
66.7	26.5	174.4	38.8	3.8
50.0	20.5	132.0	27.1	4.3
33.3	15.0	93.5	13.9	5.4
16.7	12.8	46.1	6.5	5.6

IPLV:4.42 COP

YCAL0317EB

% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	35.0	291.6	101.8	2.6
83.3	31.0	256.3	74.9	3.0
66.7	26.5	217.0	51.7	3.6
50.0	21.1	169.9	33.8	3.9
33.3	15.2	118.8	18.6	4.2
16.7	12.8	58.7	8.7	4.4

IPLV:3.86 COP

YCAL0377EB

% DISPL.	AMBIENT DEG F	TONS	COMPR kW	EER
100.0	35.0	341.5	124.9	2.5
83.3	31.0	300.6	91.8	3.0
66.7	26.6	255.6	63.0	3.5
50.0	21.3	201.1	40.8	4.0
33.3	15.6	142.7	21.9	4.6
16.7	12.8	71.0	10.1	4.8

IPLV:4.01 COP

Physical Data - (English Units)

	Model Number YCAL								
	0043	0057	0073	0087	0107	0117	0133	0147	0157
General Unit Data									
Nominal Tons, R-22	11.0	15.1	18.9	24.1	28.8	33.1	36.5	39.7	43.5
Nominal Tons, R-407C	10.7	14.5	18.4	22.7	26.8	31.0	34.2	37.4	40.9
Number of Refrigerant Circuits	1	1	1	1	1	2	2	2	2
Refrigerant Charge									
R-22, ckt1 / ckt2, lbs	32	38	58	65	69	45/45	54/45	54/54	60/54
R-407C, ckt1 / ckt2, lbs	32	38	58	65	69	45/45	54/54	52/52	60/54
Oil Charge, ckt1 / ckt2, gallons	2.2	2.2	2.2	2.2	3.3	2.2/2.2	2.2/2.2	2.2/2.2	2.2/2.2
Shipping Weight									
Aluminum Fin Coils, lbs	2472	2488	2857	2933	3279	4689	4752	4822	4906
Copper Fin Coils, lbs	2622	2638	3007	3083	3429	4989	5052	5122	5206
Operating Weight									
Aluminum Fin Coils, lbs	2548	2564	2940	3036	3381	4931	4994	5064	5148
Copper Fin Coils, lbs	2762	2778	3275	3371	3717	5300	5363	5433	5517
Compressors, scroll type									
Compressors per circuit	2	2	2	2	3	2	2	2	2
Compressors per unit	2	2	2	2	3	4	4	4	4
Nominal Tons per compressor	7.5	10	13	15	13	10 / 10	13 / 10	13 / 13	15 / 13
Condenser									
Total Face Area ft ²	47.2	47.2	66.1	66.1	66.1	128.0	128.0	128.0	128.0
Number of Rows	2	2	2	3	3	2	2	2	2
Fins per Inch	13	13	13	13	13	13	13	13	13
Condenser Fans									
Number of Fans total	2	2	2	2	2	4	4	4	4
Fan hp/kw	2 / 1.4	2 / 1.4	2 / 1.4	2 / 1.4	2 / 1.4	2 / 1.4	2 / 1.4	2 / 1.4	2 / 1.4
Fan RPM	950	950	950	950	950	950	950	950	950
Number of Blades	3	3	3	3	3	3	3	3	3
Total Chiller CFM	16257	16257	23500	23500	23500	47360	47360	47360	47360
Evaporator, Direct Expansion									
Diameter x Length	8"x6'	8"x6'	8"x6.5'	8"x7'	8"x7'	10"x8'	10"x8'	10"x8'	10"x8'
Water Volume, gallons	9.2	9.2	10.0	12.3	12.3	29.1	29.1	29.1	29.1
Maximum Water Side Pressure, PSIG	150	150	150	150	150	150	150	150	150
Maximum Refrigerant Side Pressure, PSIG	350	350	350	350	350	350	350	350	350
Minimum Chiller Water Flow Rate, gpm	25	25	30	35	60	60	60	60	60
Maximum Chiller Water Flow Rate, gpm	60	60	70	170	170	300	300	300	300
Water Connections, inches	3	3	3	4	4	6	6	6	6

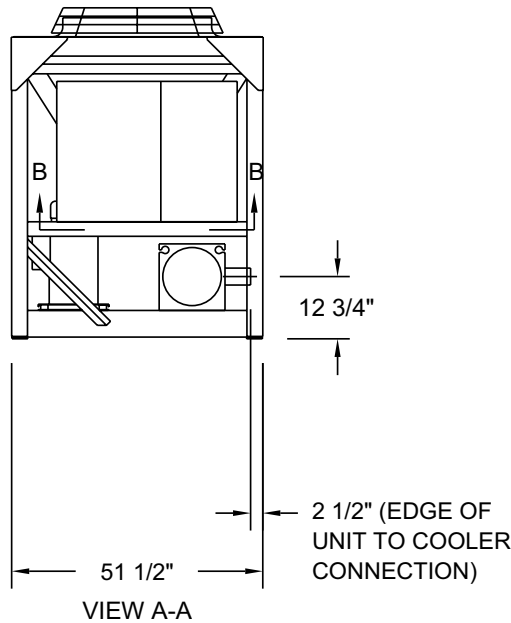
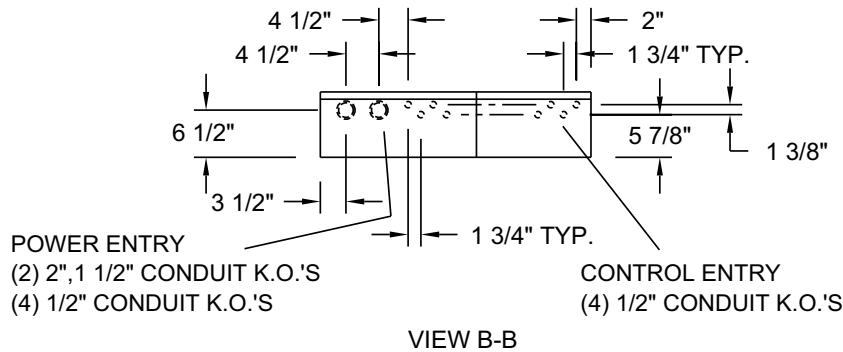
	Model Number YCAL								
	0173	0197	0217	0237	0253	0287	0317	0347	0377
General Unit Data									
Nominal Tons, R-22	48.1	53.3	59.3	64.8	70.7	78.8	90.2	97.0	105.2
Nominal Tons, R-407C	45.5	49.9	55.2	60.6	66.5	72.6	82.9	89.1	97.1
Number of Refrigerant Circuits	2	2	2	2	2	2	2	2	2
Refrigerant Charge									
R-22, ckt1 / ckt2, lbs	72/72	75/62	75/75	92/83	100/100	121/101	121/121	152/136	152/152
R-407C, ckt1 / ckt2, lbs	57/57	67/57	67/67	88/67	88/88	106/88	106/106	132/119	132/132
Oil Charge, ckt1 / ckt2, gallons	2.2/2.2	3.3/3.3	3.3/3.3	3.3/3.3	3.3/3.3	6.3/4.2	6.3/6.3	6.3/6.3	6.3/6.3
Shipping Weight									
Aluminum Fin Coils, lbs	4994	5866	6045	6217	6448	6822	6950	7977	8232
Copper Fin Coils, lbs	5294	6166	6425	6597	6828	7652	7999	8919	9174
Operating Weight									
Aluminum Fin Coils, lbs	5236	6208	6386	6558	6779	7073	7201	8466	8721
Copper Fin Coils, lbs	5605	6651	6829	7001	7222	7902	8030	9407	9662
Compressors, scroll type									
Compressors per circuit	2	3	3	3	3	3 / 2	3	3	3
Compressors per unit	4	6	6	6	6	5	6	6	6
Nominal Tons per compressor	15 / 15	13 / 10	13 / 13	15 / 13	15 / 15	20 / 25	20 / 20	25 / 20	25 / 25
Condenser									
Total Face Area ft ²	128.0	149.3	149.3	149.3	149.3	167.9	167.9	190.5	190.5
Number of Rows	3	2	3	3	3	3	3	3	3
Fins per Inch	13	13	13	13	13	13	13	13	13
Condenser Fans									
Number of Fans total	4	4	4	4	4	6	6	6	6
Fan hp/kw	2 / 1.4	2 / 1.7	2 / 1.7	2 / 1.7	2 / 1.7	2 / 1.8	2 / 1.8	2 / 1.8	2 / 1.8
Fan RPM	950	950	950	950	950	950	950	950	950
Number of Blades	3	3	3	3	3	3	3	3	3
Total Chiller CFM	46080	55253	55253	54550	53760	78652	78652	79712	79712
Evaporator, Direct Expansion									
Diameter x Length	10"x8'	12"x8'	12"x8'	12"x8'	12"x8'	12"x8'	12"x8'	12"x8'	14"x8'
Water Volume, gallons	29.1	41.2	41.2	41.2	39.9	41.2	39.9	39.9	49.5
Maximum Water Side Pressure, PSIG	150	150	150	150	150	150	150	150	150
Maximum Refrigerant Side Pressure, PSIG	350	350	350	350	350	350	350	350	350
Minimum Chiller Water Flow Rate, gpm	60	100	100	100	100	100	100	100	125
Maximum Chiller Water Flow Rate, gpm	300	350	350	350	385	350	385	385	525
Water Connections, inches	6	6	6	6	6	6	6	6	6

Physical Data - (SI Units)

	Model Number YCAL								
	0043	0057	0073	0087	0107	0117	0133	0147	0157
General Unit Data									
Nominal kW, R-22	38.7	53.1	66.5	84.8	101.3	116.4	128.4	139.6	153.0
Nominal kW, R-407C	37.6	51.0	64.7	79.8	94.3	109.0	120.3	131.5	143.8
Number of Refrigerant Circuits	1	1	1	1	1	2	2	2	2
Refrigerant Charge									
R-22, ckt1 / ckt2, kg	14.5	17.3	24.4	29.5	31.4	20.5/20.5	24.5/24.5	24.5/24.5	27.3/24.5
R-407C, ckt1 / ckt2, kg	14.5	17.3	24.4	29.5	31.4	20.5/20.5	24.5/24.5	23.5/23.5	27.3/24.5
Oil Charge, ckt1 / ckt2, liters	8.3	8.3	8.3	8.3	12.5	8.3/8.3	8.3/8.3	8.3/8.3	8.3/8.3
Shipping Weight									
Aluminum Fin Coils, kg	1121	1129	1296	1330	1487	2127	2155	2187	2225
Copper Fin Coils, kg	1189	1197	1364	1398	1555	2263	2292	2323	2361
Operating Weight									
Aluminum Fin Coils, kg	1156	1163	1334	1377	1534	2237	2265	2297	2335
Copper Fin Coils, kg	1253	1260	1486	1529	1686	2404	2433	2464	2502
Compressors, scroll type									
Compressors per circuit	2	2	2	2	3	2	2	2	2
Compressors per unit	2	2	2	2	3	4	4	4	4
Nominal kWo per compressor	26	35	46	53	46	35/35	46/35	46/46	53/46
Condenser									
Total Face Area meters ²	4	4	6	6	6	12	12	12	12
Number of Rows	2	2	2	3	3	2	2	2	2
Fins per m	512	512	512	512	512	512	512	512	512
Condenser Fans									
Number of Fans total	2	2	2	2	2	4	4	4	4
Fan hp/kw	2 / 1.4	2 / 1.4	2 / 1.4	2 / 1.4	2 / 1.4	2 / 1.4	2 / 1.4	2 / 1.4	2 / 1.4
Fan RPM	950	950	950	950	950	950	950	950	950
Number of Blades	3	3	3	3	3	3	3	3	3
Total Chiller Airflow l/s	7672	7672	11091	11091	11091	22351	22351	22351	22351
Evaporator, Direct Expansion									
Diameter x Length	203x1829	203x1830	203x1981	210x2134	210x2134	248x2438	248x2438	248x2438	248x2438
Water Volume, liters	34.9	34.9	37.7	46.7	46.7	110.3	110.3	110.3	110.3
Maximum Water Side Pressure, bar	10	10	10	10	10	10	10	10	10
Maximum Refrigerant Side Pressure, bar	24	24	24	24	24	24	24	24	24
Minimum Chiller Water Flow Rate, l/s	1.6	1.6	1.9	2.2	3.8	3.8	3.8	3.8	3.8
Maximum Chiller Water Flow Rate, l/s	3.8	3.8	4.4	10.7	10.7	18.9	18.9	18.9	18.9
Water Connections, inches	3	3	3	4	4	6	6	6	6

	Model Number YCAL								
	0173	0197	0217	0237	0253	0287	0317	0347	0377
General Unit Data									
Nominal kW, R-22	165.3	189.6	216.6	230.0	244.4	277.1	317.2	341.1	370.0
Nominal kW, R-407C	156.5	177.3	202.6	218.1	238.8	255.3	291.6	313.4	341.5
Number of Refrigerant Circuits	2	2	2	2	2	2	2	2	2
Refrigerant Charge									
R-22, ckt1 / ckt2, kg	33/33	34/28	34/34	42/38	46/46	55/46	55/55	69/62	69/69
R-407C, ckt1 / ckt2, kg	27/27	35/37	35/35	42/38	40/40	48/40	48/48	60/54	60/60
Oil Charge, ckt1 / ckt2, liters	13/13	12/11.4	12.0/12.0	20/12	20/20	24/16	24/24	24/24	24/24
Shipping Weight									
Aluminum Fin Coils, kg	1986	2130	2281	2292	2549	3101	3159	3626	3742
Copper Fin Coils, kg	2303	2377	2463	2609	2919	3478	3536	4054	4170
Operating Weight									
Aluminum Fin Coils, kg	2096	2286	2437	2448	2612	3215	3273	3848	3964
Copper Fin Coils, kg	2413	2533	2619	2765	2982	3592	3650	4276	4392
Compressors, scroll type									
Compressors per circuit	2	3	3	3	3	3 / 2	3	3	3
Compressors per unit	4	6	6	6	6	5	6	6	6
Nominal kWo per compressor	53/53	46/35	46/46	53/46	53/53	70/88	70/70	70/88	88/88
Condenser									
Total Face Area meters ²	12	14	14	14	14	16	16	18	18
Number of Rows	3	2	2	3	3	3	3	3	3
Fins per m	512	512	512	512	512	512	512	512	512
Condenser Fans									
Number of Fans total	4	4	4	4	4	6	6	6	6
Fan hp/kw	2 / 1.4	2 / 1.7	2 / 1.7	2 / 1.7	2 / 1.7	2 / 1.8	2 / 1.8	2 / 1.8	2 / 1.8
Fan RPM	950	950	950	950	950	950	950	950	950
Number of Blades	3	3	3	3	3	3	3	3	3
Total Chiller Airflow l/s	21747	26076	26076	25744	25371	37100	37100	37600	37600
Evaporator, Direct Expansion									
Diameter x Length	248x2438	309x2438	309x2438	309x2438	315x2438	309x2438	315x2438	315x2438	370x2438
Water Volume, liters	110.3	156.1	156.1	156.1	151.1	156.1	151.1	151.1	187.4
Maximum Water Side Pressure, bar	10	10	10	10	10	10	10	10	10
Maximum Refrigerant Side Pressure, bar	24	24	24	24	24	24	24	24	24
Minimum Chiller Water Flow Rate, l/s	3.8	6.3	6.3	6.3	6.3	6.3	6.3	6.3	7.9
Maximum Chiller Water Flow Rate, l/s	18.9	22.1	22.1	22.1	24.3	22.1	24.3	24.3	33.1
Water Connections, inches	6	6	6	6	6	6	6	6	6

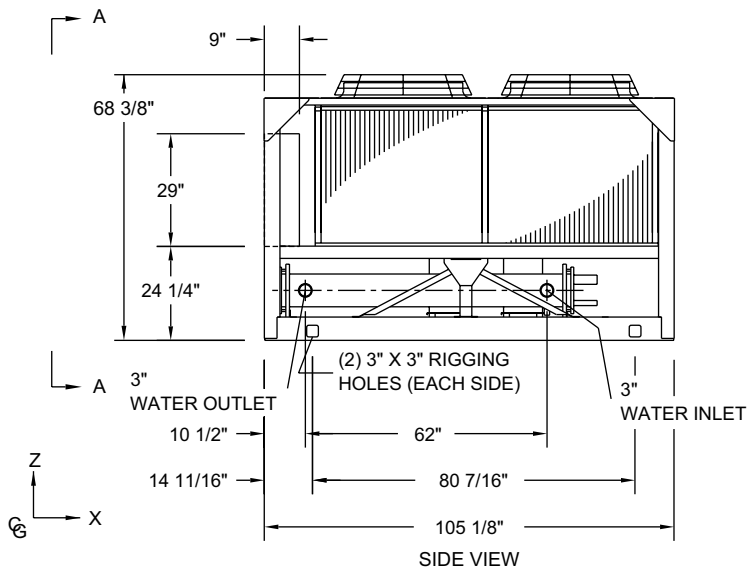
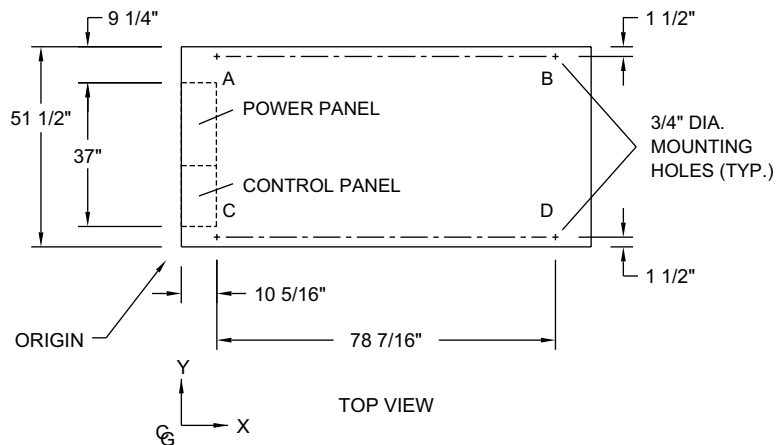
Dimensions - YCAL0043-YCAL0057 (English)



LD04868

NOTE:

Placement on a level surface of free of obstructions (including snow, for winter operation) or air circulation ensures rated performance, reliable operation, and ease of maintenance. Site restrictions may compromise minimum clearances indicated below, resulting in unpredictable airflow patterns and possible diminished performance. YORK's unit controls will optimize operation without nuisance high-pressure safety cutouts; however, the system designer must consider potential performance degradation. Access to the unit control center assumes the unit is no higher than on spring isolators. Recommended minimum clearances: Side to wall - 6'; rear to wall - 6'; control panel to end wall - 4'0"; top - no obstructions allowed; distance between adjacent units - 10'. No more than one adjacent wall may be higher than the unit.



LD04869

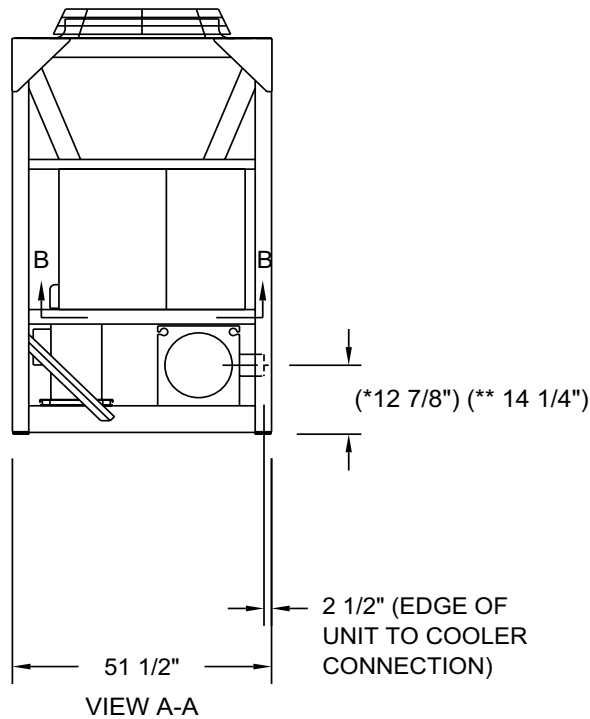
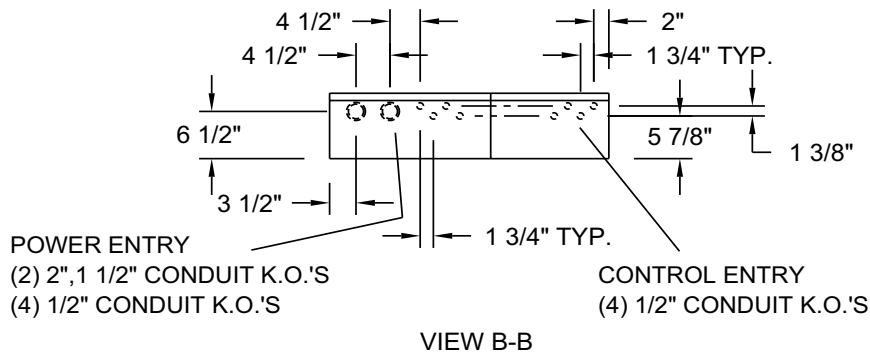
ALUMINUM

COPPER

YCAL	Center of Gravity (in)		
	X	Y	Z
0043	44.8	24.1	28.3
0057	44.8	24.1	28.3

YCAL	Center of Gravity (in)		
	X	Y	Z
0043	45.4	24.2	28.8
0057	45.4	24.2	28.8

Dimensions - YCAL0073-YCAL0107 (English)

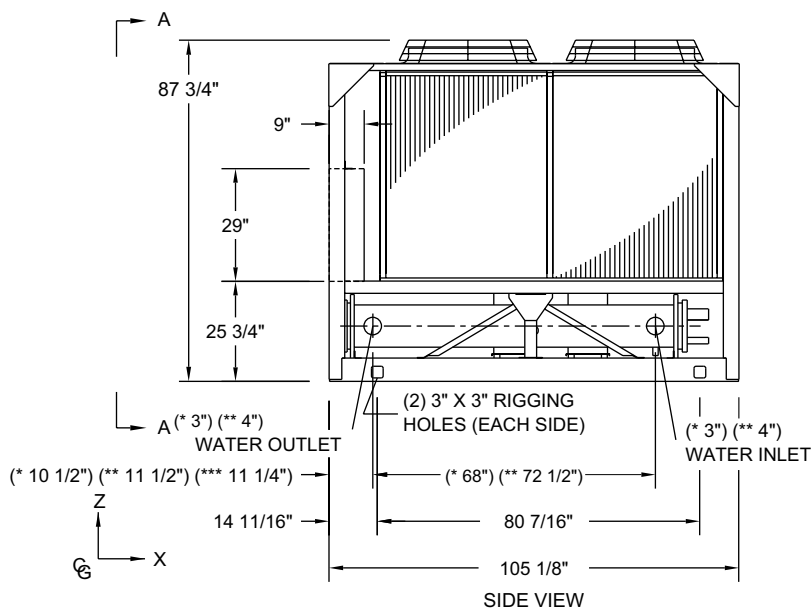
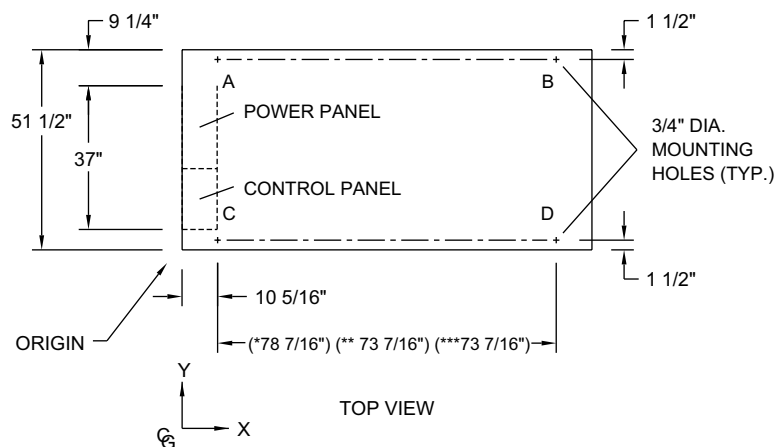


LD04857

- * Refers to Model YCAL0024
- ** Refers to Model YCAL0030 and YCAL0034

NOTE:

Placement on a level surface of free of obstructions (including snow, for winter operation) or air circulation ensures rated performance, reliable operation, and ease of maintenance. Site restrictions may compromise minimum clearances indicated below, resulting in unpredictable airflow patterns and possible diminished performance. YORK's unit controls will optimize operation without nuisance high-pressure safety cutouts; however, the system designer must consider potential performance degradation. Access to the unit control center assumes the unit is no higher than on spring isolators. Recommended minimum clearances: Side to wall - 6'; rear to wall - 6'; control panel to end wall - 4'0"; top - no obstructions allowed; distance between adjacent units - 10'. No more than one adjacent wall may be higher than the unit.



LD04858

* Refers to Model YCAL0073
 ** Refers to Model YCAL0087 and YCAL0107

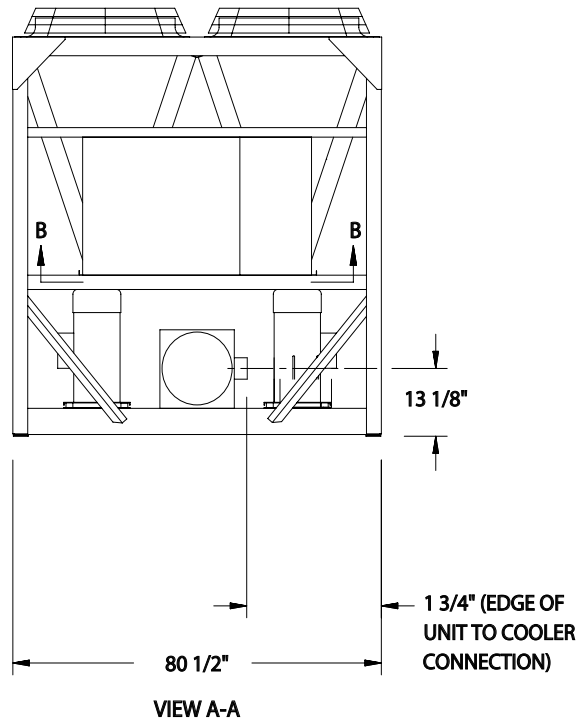
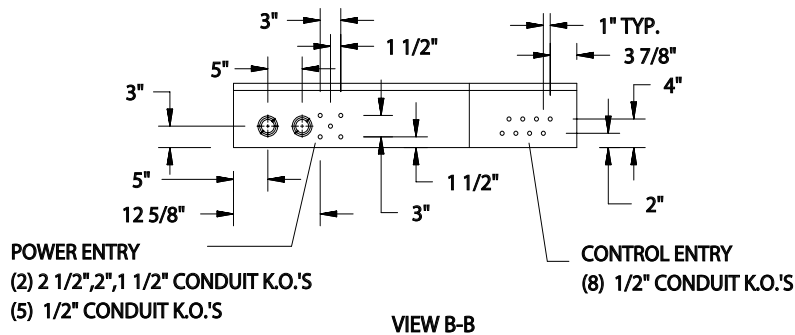
ALUMINUM

COPPER

YCAL	Center of Gravity (in)		
	X	Y	Z
0073	45.0	24.4	35.3
0087	45.0	24.4	34.9
0107	45.0	25.5	33.8

YCAL	Center of Gravity (in)		
	X	Y	Z
0073	45.8	24.5	36.2
0087	45.8	24.5	35.8
0107	45.7	25.5	34.7

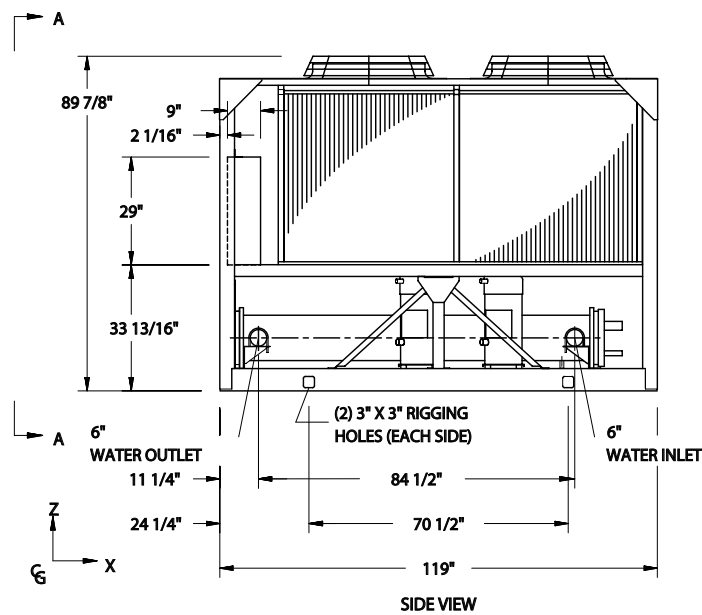
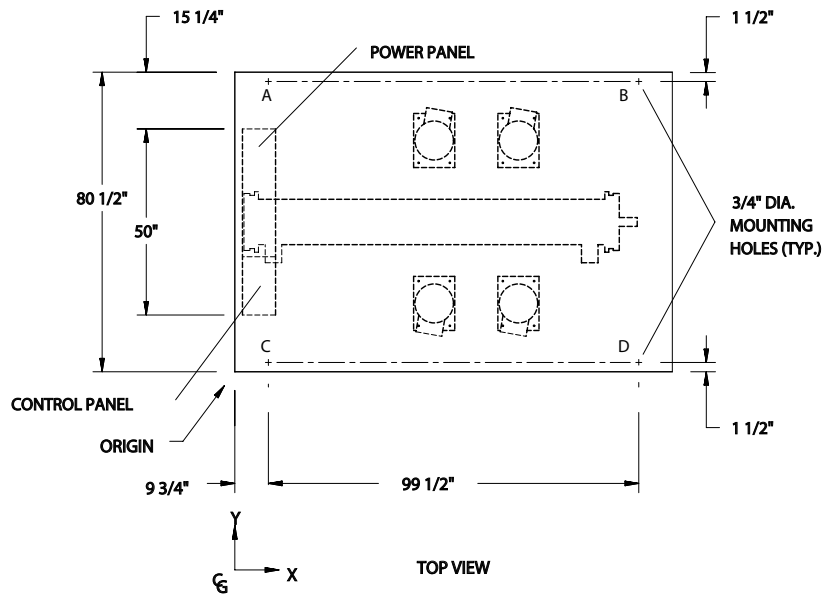
Dimensions - YCAL0117-YCAL0157 (English)



LD04872

NOTE:

Placement on a level surface of free of obstructions (including snow, for winter operation) or air circulation ensures rated performance, reliable operation, and ease of maintenance. Site restrictions may compromise minimum clearances indicated below, resulting in unpredictable airflow patterns and possible diminished performance. YORK's unit controls will optimize operation without nuisance high-pressure safety cutouts; however, the system designer must consider potential performance degradation. Access to the unit control center assumes the unit is no higher than on spring isolators. Recommended minimum clearances: Side to wall – 6'; rear to wall – 6'; control panel to end wall – 4'0"; top – no obstructions allowed; distance between adjacent units – 10'. No more than one adjacent wall may be higher than the unit.



LD04873

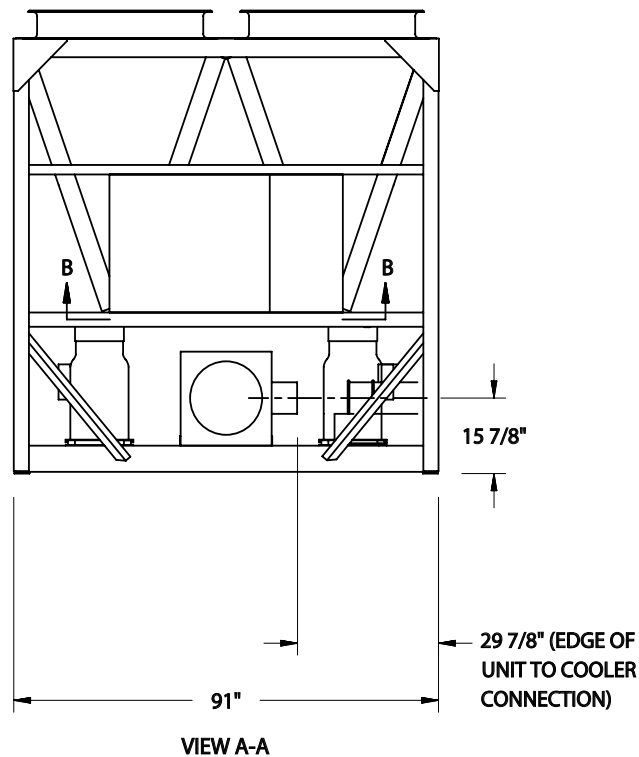
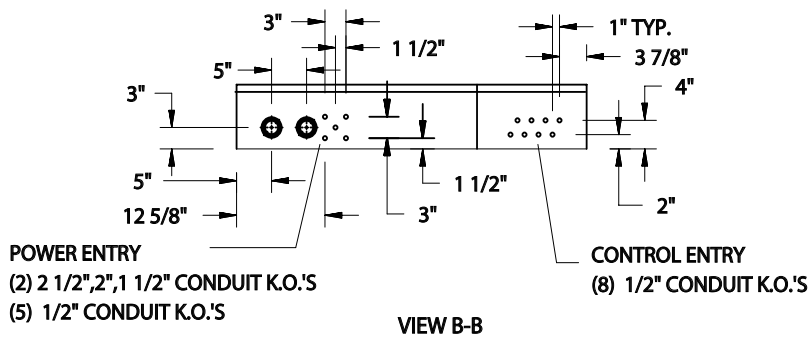
ALUMINUM

YCAL	Center of Gravity (in.)		
	X	Y	Z
0117	58.7	40.2	41.2
0133	58.3	40.4	39.7
0147	58.4	40.2	39.5
0157	58.4	40.4	39.5

COPPER

YCAL	Center of Gravity (in.)		
	X	Y	Z
0117	58.3	40.2	40.3
0133	58.4	40.4	40.1
0147	58.5	40.2	39.9
0157	58.5	40.4	39.9

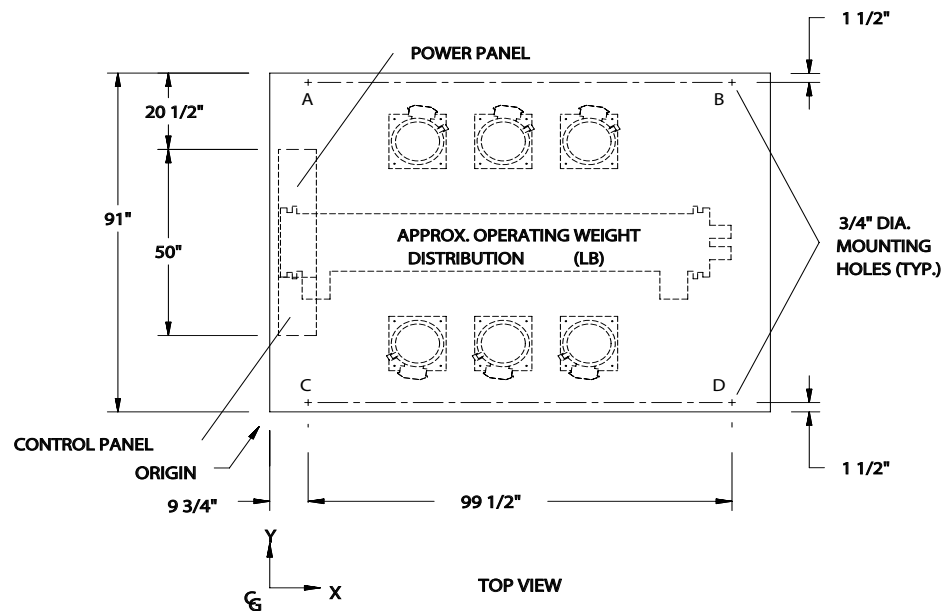
Dimensions - YCAL0173-YCAL0253(English)



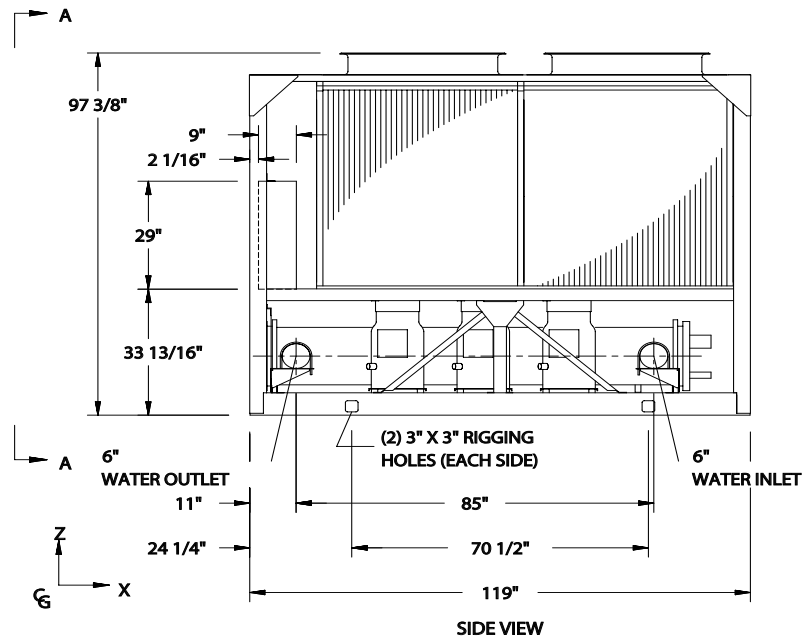
LD04876

NOTE:

Placement on a level surface of free of obstructions (including snow, for winter operation) or air circulation ensures rated performance, reliable operation, and ease of maintenance. Site restrictions may compromise minimum clearances indicated below, resulting in unpredictable airflow patterns and possible diminished performance. YORK's unit controls will optimize operation without nuisance high-pressure safety cutouts; however, the system designer must consider potential performance degradation. Access to the unit control center assumes the unit is no higher than on spring isolators. Recommended minimum clearances: Side to wall - 6'; rear to wall - 6'; control panel to end wall - 4'0"; top - no obstructions allowed; distance between adjacent units - 10'. No more than one adjacent wall may be higher than the unit.



POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



LD04877

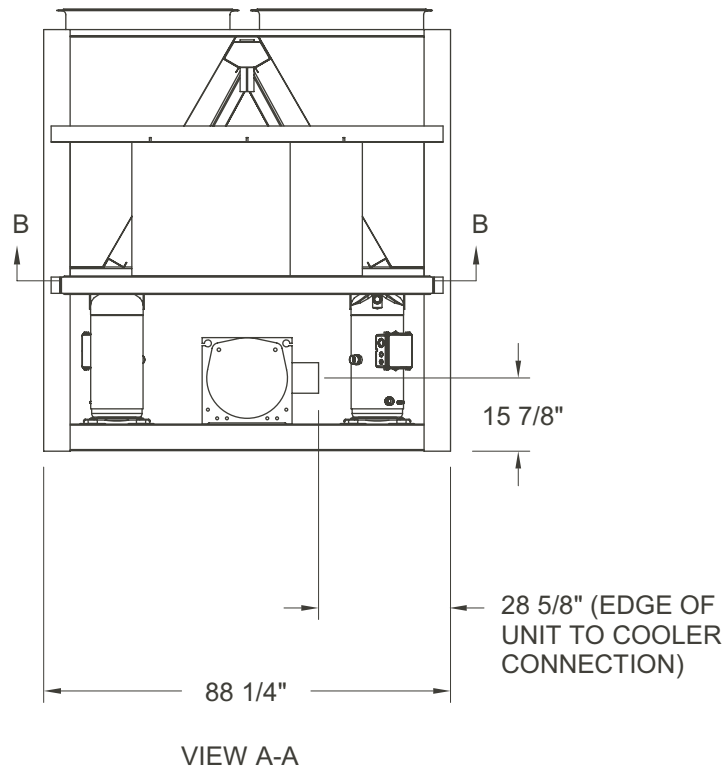
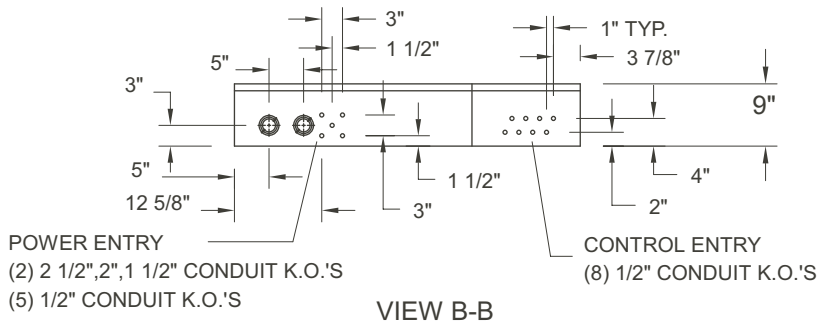
ALUMINUM

COPPER

YCAL	Center of Gravity (in.)		
	X	Y	Z
0173	58.5	40.2	39.4
0197	56.5	45.8	39.4
0217	56.6	45.4	39.4
0237	56.6	45.7	39.5
0253	56.6	45.4	39.0

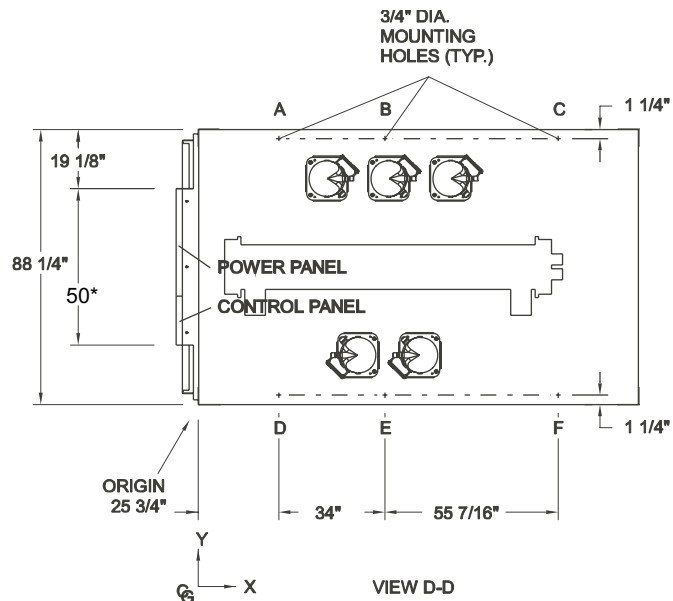
YCAL	Center of Gravity (in.)		
	X	Y	Z
0173	58.6	40.2	39.8
0197	56.7	45.7	40.0
0217	56.8	45.5	40.0
0237	56.8	45.7	40.1
0253	56.8	45.5	39.6

Dimensions - YCAL0287-YCAL0317 (English)

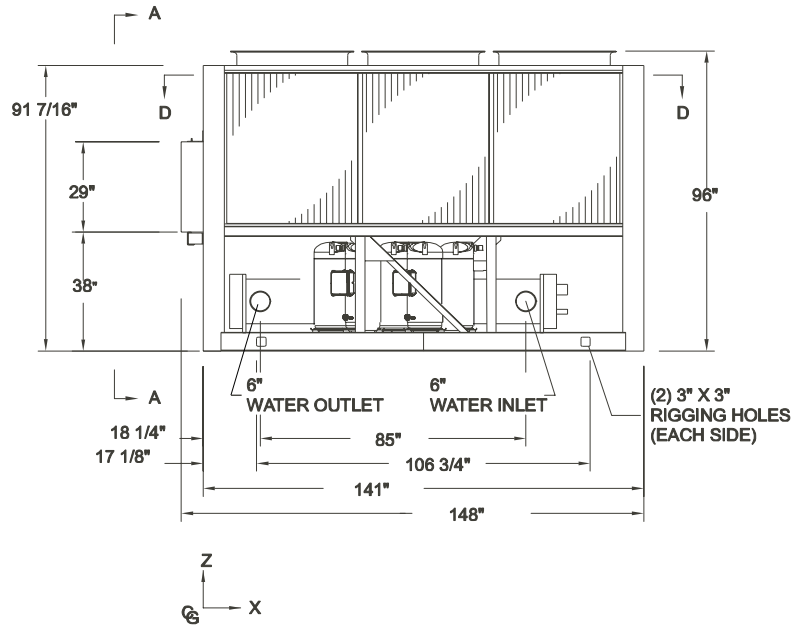


NOTE:

Placement on a level surface of free of obstructions (including snow, for winter operation) or air circulation ensures rated performance, reliable operation, and ease of maintenance. Site restrictions may compromise minimum clearances indicated below, resulting in unpredictable airflow patterns and possible diminished performance. YORK's unit controls will optimize operation without nuisance high-pressure safety cutouts; however, the system designer must consider potential performance degradation. Access to the unit control center assumes the unit is no higher than on spring isolators. Recommended minimum clearances: Side to wall - 6'; rear to wall - 6'; control panel to end wall - 4'0"; top - no obstructions allowed; distance between adjacent units - 10'. No more than one adjacent wall may be higher than the unit.



* 63" for -17 and -28 voltage code panels



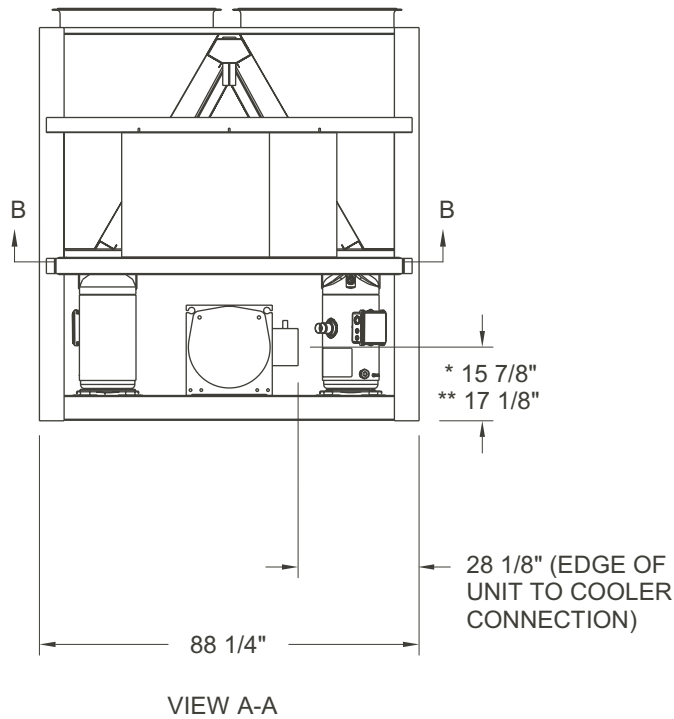
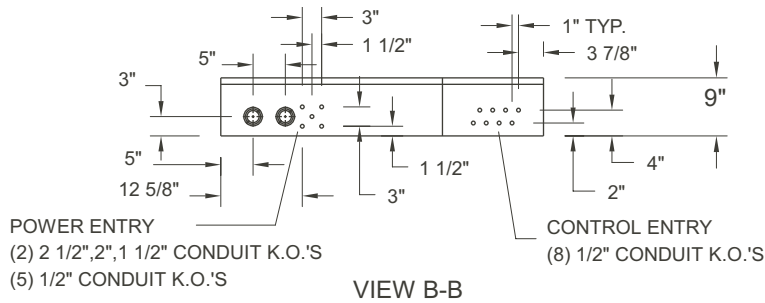
ALUMINUM

YCAL	Center of Gravity (in.)		
	X	Y	Z
0287	70.9	44.1	42.1
0317	70.9	44.1	42.1

COPPER

YCAL	Center of Gravity (in.)		
	X	Y	Z
0287	70.4	44.1	44.4
0317	70.4	44.1	44.4

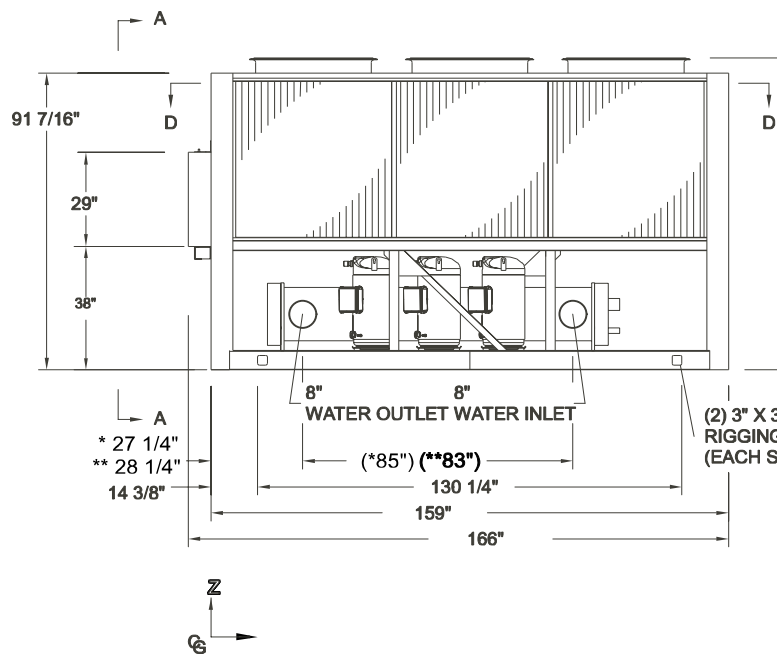
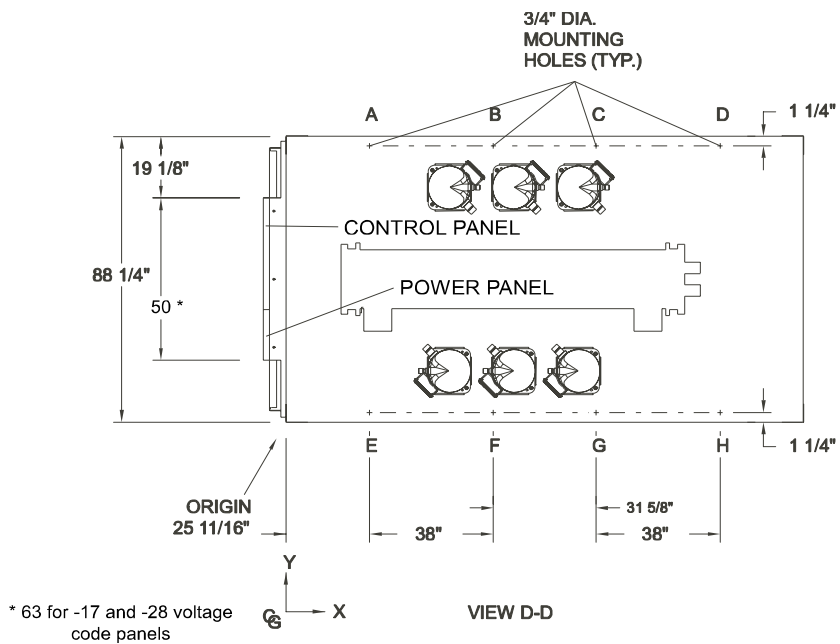
Dimensions - YCAL0347 - YCAL0377 (English)



* REFERS TO YCAL0347
 ** REFERS TO YCAL0377

NOTE:

Placement on a level surface of free of obstructions (including snow, for winter operation) or air circulation ensures rated performance, reliable operation, and ease of maintenance. Site restrictions may compromise minimum clearances indicated below, resulting in unpredictable airflow patterns and possible diminished performance. YORK's unit controls will optimize operation without nuisance high-pressure safety cutouts; however, the system designer must consider potential performance degradation. Access to the unit control center assumes the unit is no higher than on spring isolators. Recommended minimum clearances: Side to wall - 6'; rear to wall - 6'; control panel to end wall - 4'0"; top - no obstructions allowed; distance between adjacent units - 10'. No more than one adjacent wall may be higher than the unit.



* REFERS TO YCAL0347
 ** REFERS TO YCAL0377

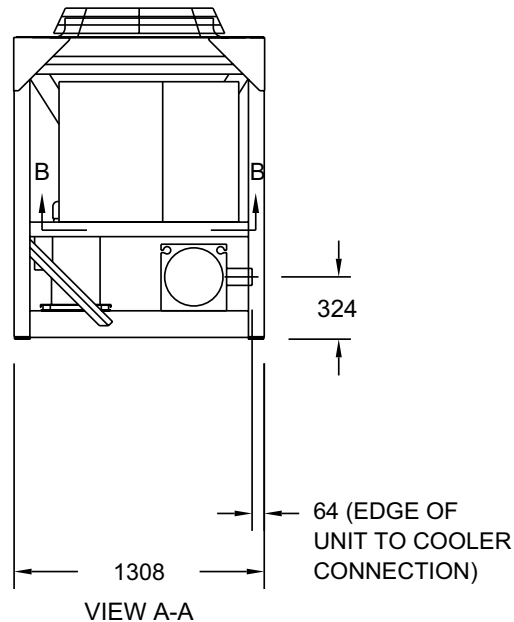
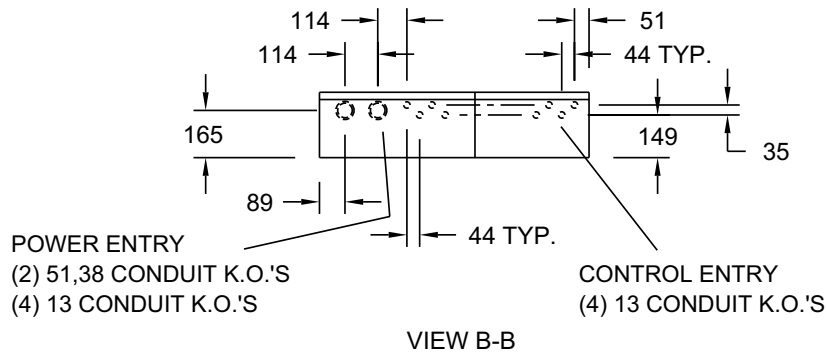
ALUMINUM

YCAL	Center of Gravity (in.)		
	X	Y	Z
0347	79.5	44.1	40.7
0377	79.5	44.1	40.7

COPPER

YCAL	Center of Gravity (in.)		
	X	Y	Z
0347	79.5	44.1	42.7
0377	79.5	44.1	42.7

Dimensions - YCAL0043-YCAL0057 (SI)

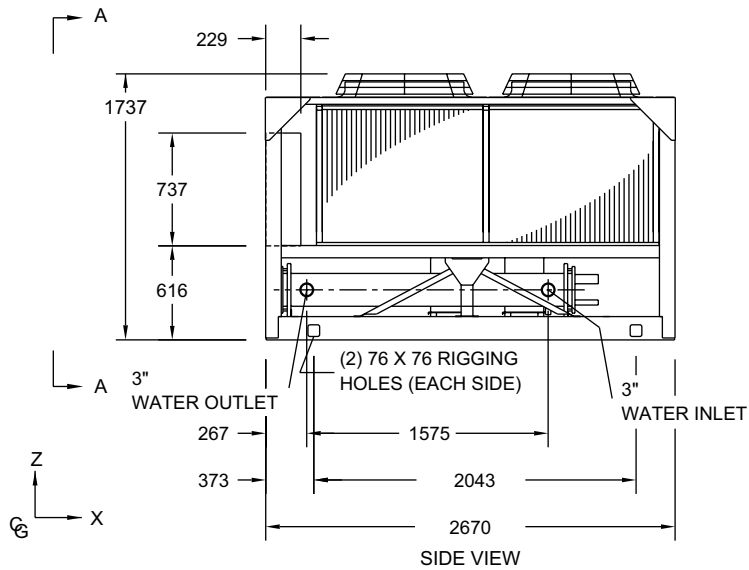
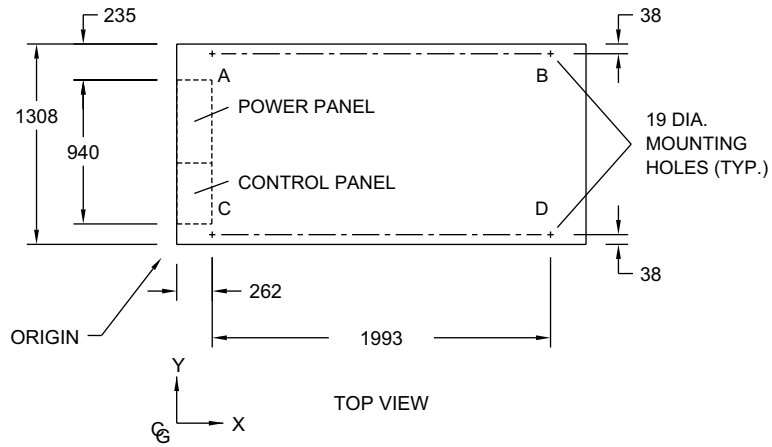


LD04870

NOTE: All dimensions are in mm unless specified otherwise.

NOTE:

Placement on a level surface of free of obstructions (including snow, for winter operation) or air circulation ensures rated performance, reliable operation, and ease of maintenance. Site restrictions may compromise minimum clearances indicated below, resulting in unpredictable airflow patterns and possible diminished performance. YORK's unit controls will optimize operation without nuisance high-pressure safety cutouts; however, the system designer must consider potential performance degradation. Access to the unit control center assumes the unit is no higher than on spring isolators. Recommended minimum clearances: Side to wall – 2m; rear to wall – 2m; control panel to end wall – 1.2m; top – no obstructions allowed; distance between adjacent units – 3m. No more than one adjacent wall may be higher than the unit.



LD04871

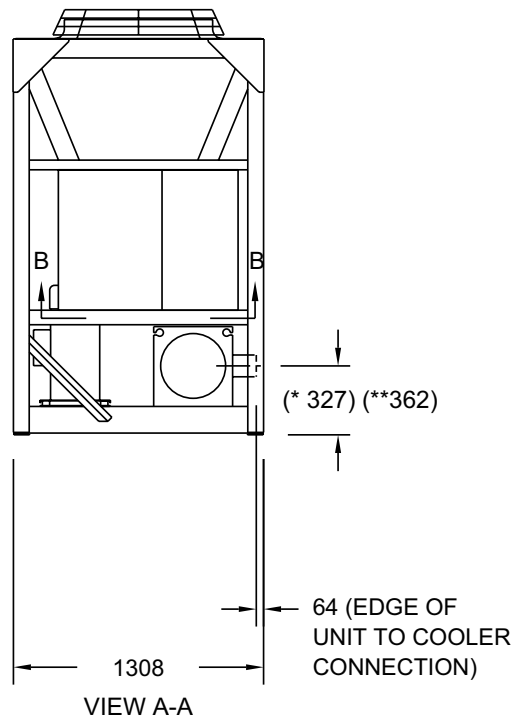
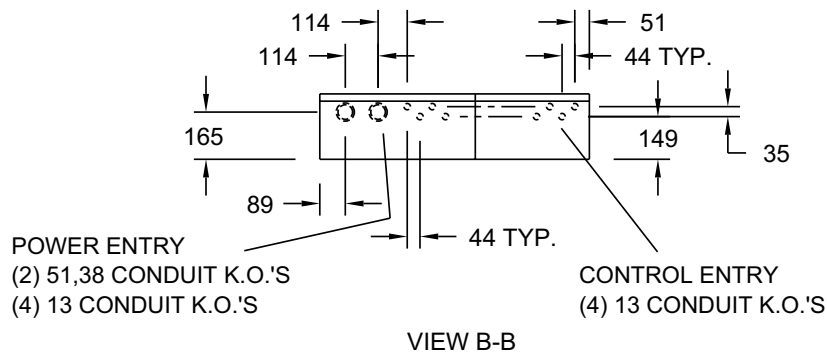
ALUMINUM

YCAL	Center of Gravity (mm)		
	X	Y	Z
0043	1138	612	719
0057	1138	611	719

COPPER

YCAL	Center of Gravity (mm)		
	X	Y	Z
0043	1153	615	731
0057	1153	615	731

Dimensions - YCAL0073-YCAL0107 (SI)



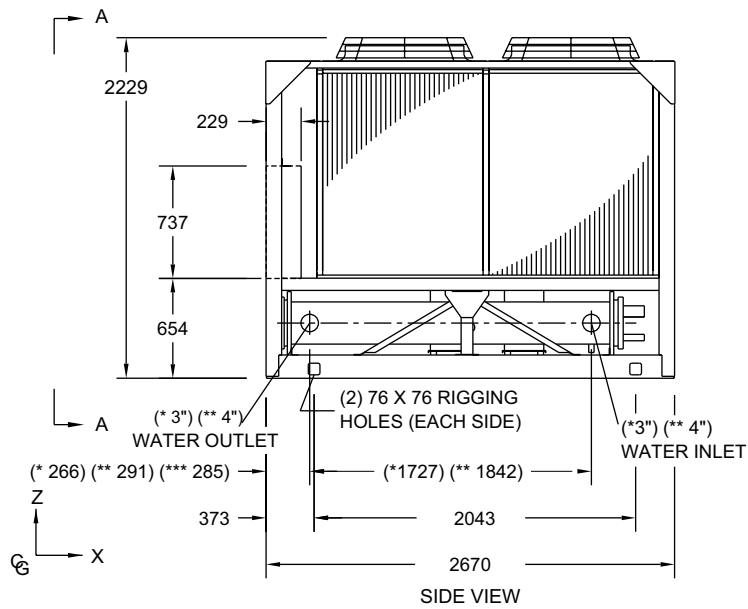
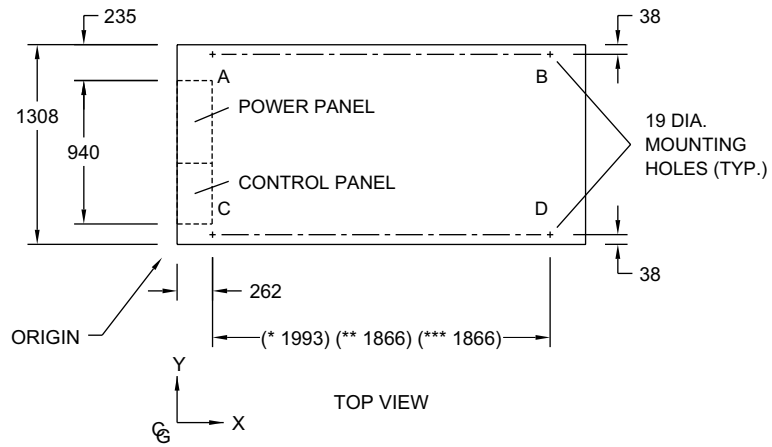
LD04859

- * Refers to Model YCAL0024
- ** Refers to Model YCAL0030 and YCAL0034

NOTE: All dimensions are in mm unless specified otherwise.

NOTE:

Placement on a level surface of free of obstructions (including snow, for winter operation) or air circulation ensures rated performance, reliable operation, and ease of maintenance. Site restrictions may compromise minimum clearances indicated below, resulting in unpredictable airflow patterns and possible diminished performance. YORK's unit controls will optimize operation without nuisance high-pressure safety cutouts; however, the system designer must consider potential performance degradation. Access to the unit control center assumes the unit is no higher than on spring isolators. Recommended minimum clearances: Side to wall – 2m; rear to wall – 2m; control panel to end wall – 1.2m; top – no obstructions allowed; distance between adjacent units – 3m. No more than one adjacent wall may be higher than the unit.



LD04860

* Refers to Model YCAL0073
 ** Refers to Model YCAL0087 and YCAL0107

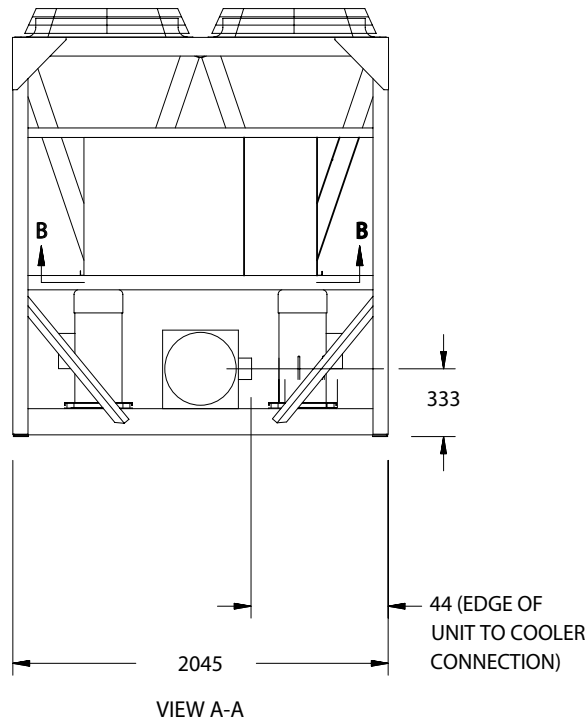
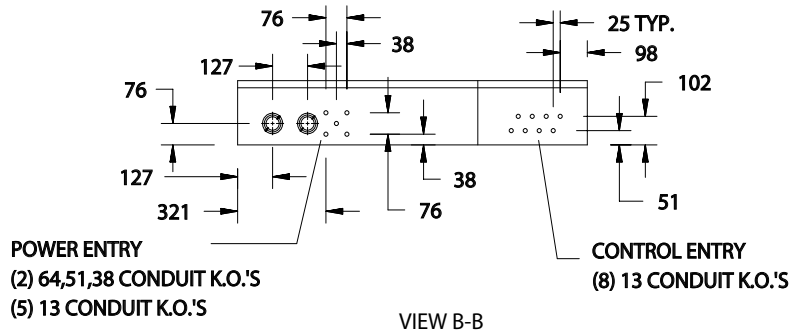
ALUMINUM

YCAL	Center of Gravity (mm)		
	X	Y	Z
0073	1143	619	897
0087	1144	620	887
0107	1143	646	860

COPPER

YCAL	Center of Gravity (mm)		
	X	Y	Z
0073	1162	623	920
0087	1163	623	909
0107	1160	647	882

Dimensions - YCAL0117-YCAL0173 (SI)

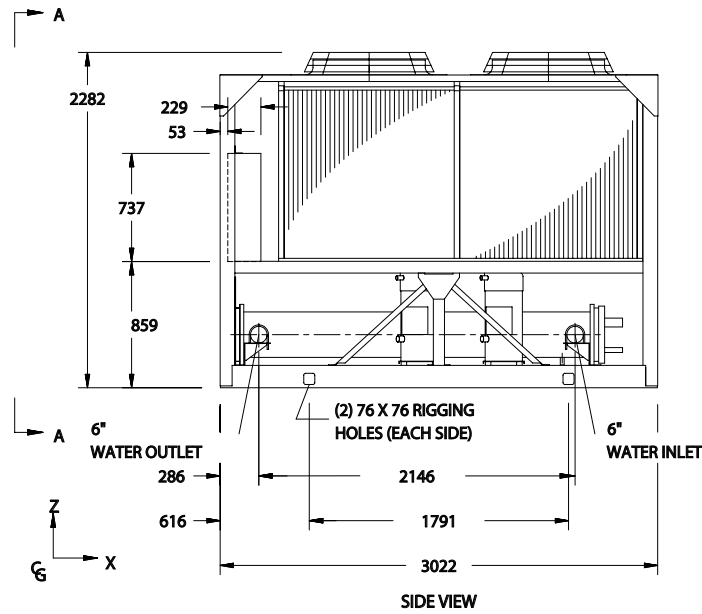
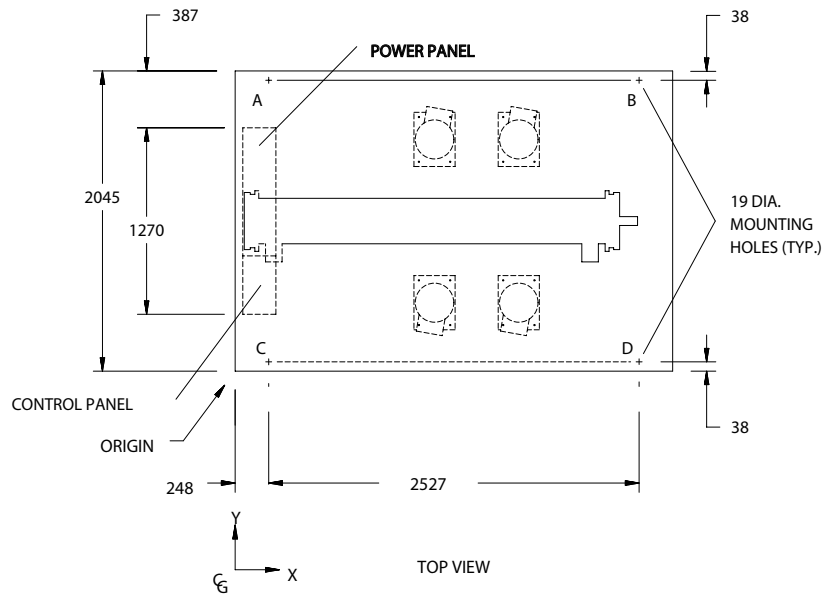


LD04874

NOTE: All dimensions are in mm unless specified otherwise.

NOTE:

Placement on a level surface of free of obstructions (including snow, for winter operation) or air circulation ensures rated performance, reliable operation, and ease of maintenance. Site restrictions may compromise minimum clearances indicated below, resulting in unpredictable airflow patterns and possible diminished performance. YORK's unit controls will optimize operation without nuisance high-pressure safety cutouts; however, the system designer must consider potential performance degradation. Access to the unit control center assumes the unit is no higher than on spring isolators. Recommended minimum clearances: Side to wall – 2m; rear to wall – 2m; control panel to end wall – 1.2m; top – no obstructions allowed; distance between adjacent units – 3m. No more than one adjacent wall may be higher than the unit.



LD04875

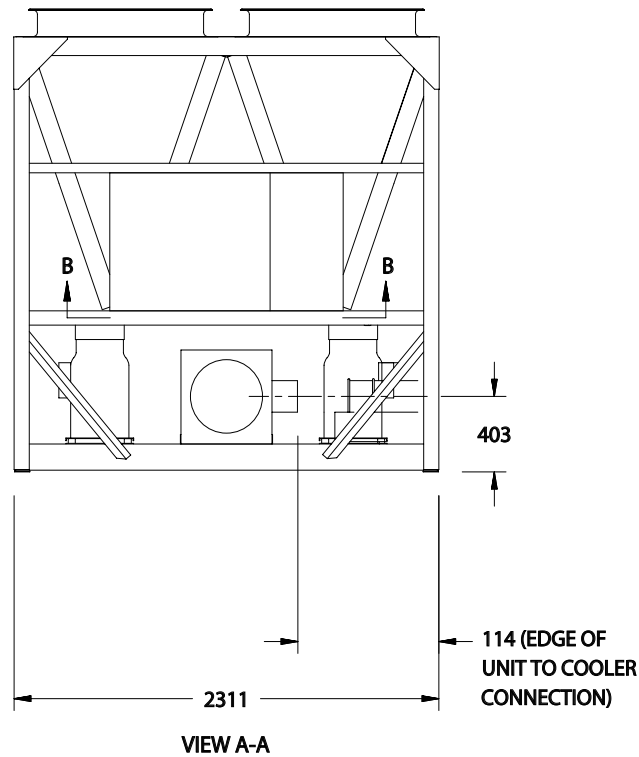
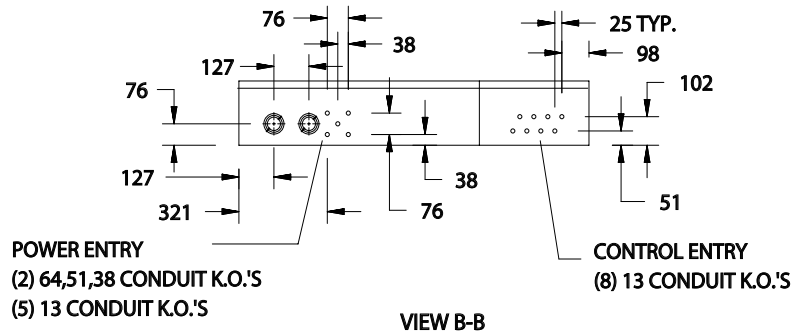
ALUMINUM

YCAL	Center of Gravity (mm)		
	X	Y	Z
0117	1490	1021	1047
0133	1481	1026	1009
0147	1483	1021	1004
0157	1484	1025	1003
0173	1485	1021	1001

COPPER

YCAL	Center of Gravity (mm)		
	X	Y	Z
0117	1482	1021	1023
0133	1483	1026	1018
0147	1485	1021	1013
0157	1486	1025	1012
0173	1487	1021	1010

Dimensions -YCAL0197-YCAL0253 (SI)

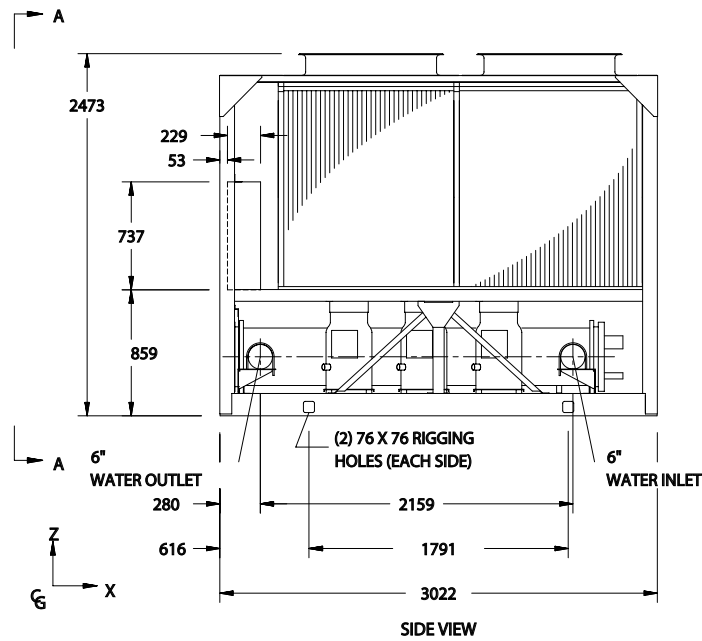
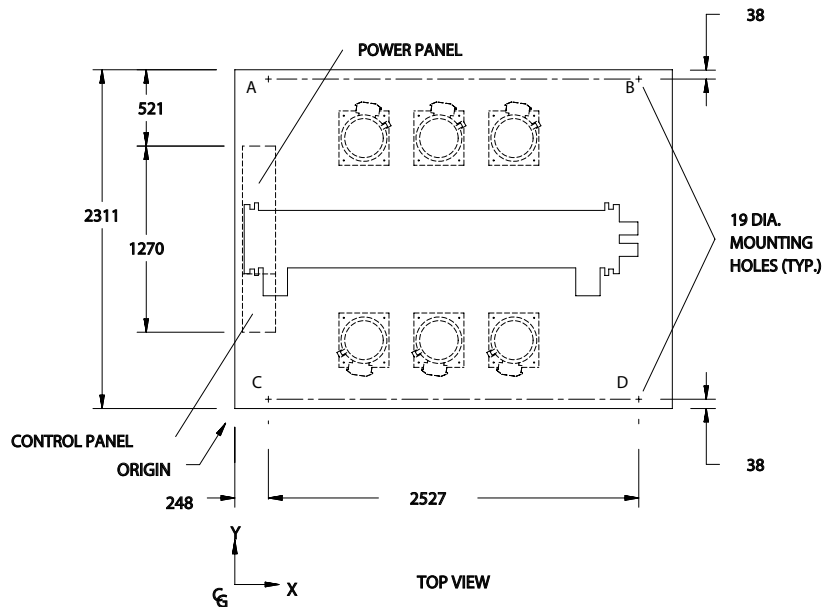


LD04878

NOTE: All dimensions are in mm unless specified otherwise.

NOTE:

Placement on a level surface of free of obstructions (including snow, for winter operation) or air circulation ensures rated performance, reliable operation, and ease of maintenance. Site restrictions may compromise minimum clearances indicated below, resulting in unpredictable airflow patterns and possible diminished performance. YORK's unit controls will optimize operation without nuisance high-pressure safety cutouts; however, the system designer must consider potential performance degradation. Access to the unit control center assumes the unit is no higher than on spring isolators. Recommended minimum clearances: Side to wall – 2m; rear to wall – 2m; control panel to end wall – 1.2m; top – no obstructions allowed; distance between adjacent units – 3m. No more than one adjacent wall may be higher than the unit.



LD04879

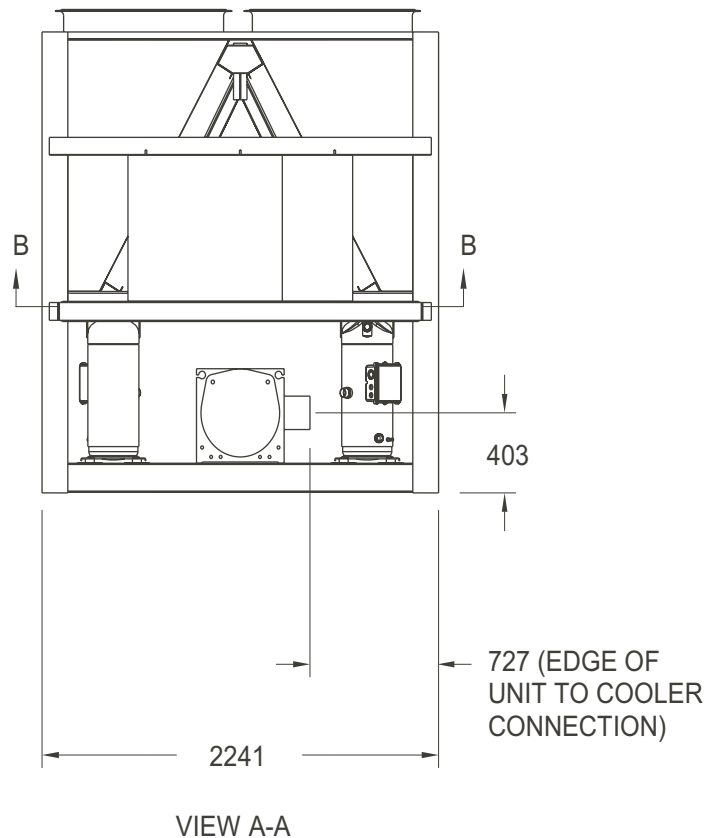
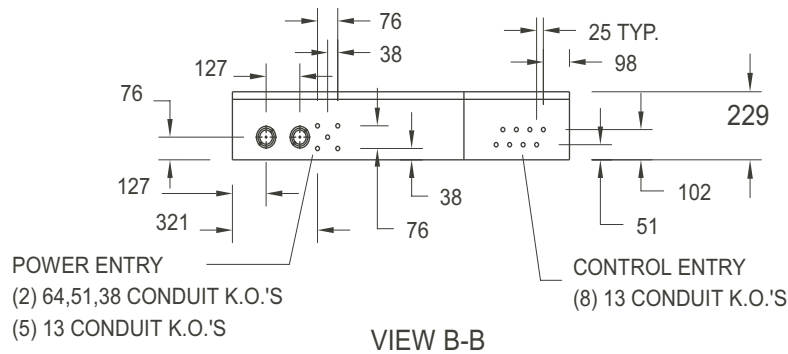
ALUMINUM

YCAL	Center of Gravity (mm)		
	X	Y	Z
0197	1435	1162	1001
0217	1437	1154	1002
0237	1438	1161	1003
0253	1437	1154	991

COPPER

YCAL	Center of Gravity (mm)		
	X	Y	Z
0197	1440	1162	1016
0217	1442	1154	1017
0237	1443	1160	1018
0253	1442	1154	1006

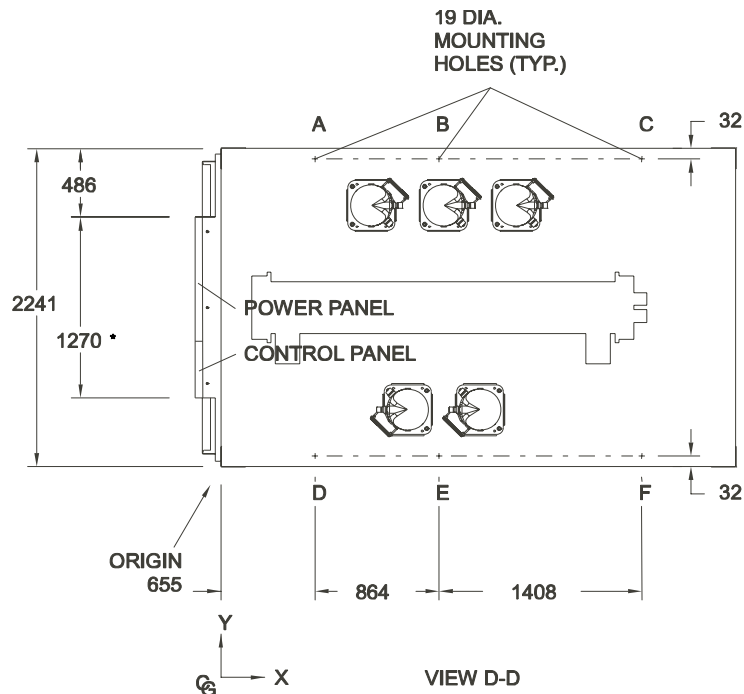
Dimensions - YCAL0287-YCAL0317 (SI)



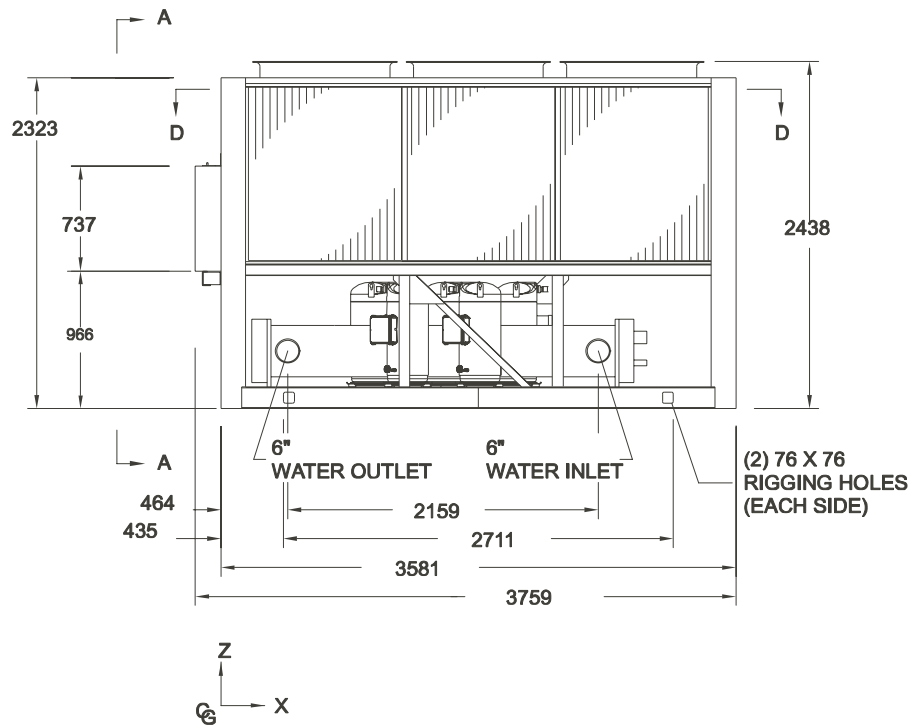
NOTE: All dimensions are in mm unless specified otherwise.

NOTE:

Placement on a level surface of free of obstructions (including snow, for winter operation) or air circulation ensures rated performance, reliable operation, and ease of maintenance. Site restrictions may compromise minimum clearances indicated below, resulting in unpredictable airflow patterns and possible diminished performance. YORK's unit controls will optimize operation without nuisance high-pressure safety cutouts; however, the system designer must consider potential performance degradation. Access to the unit control center assumes the unit is no higher than on spring isolators. Recommended minimum clearances: Side to wall – 2m; rear to wall – 2m; control panel to end wall – 1.2m; top – no obstructions allowed; distance between adjacent units – 3m. No more than one adjacent wall may be higher than the unit.



* 1600 for -17 and -28 voltage code panels



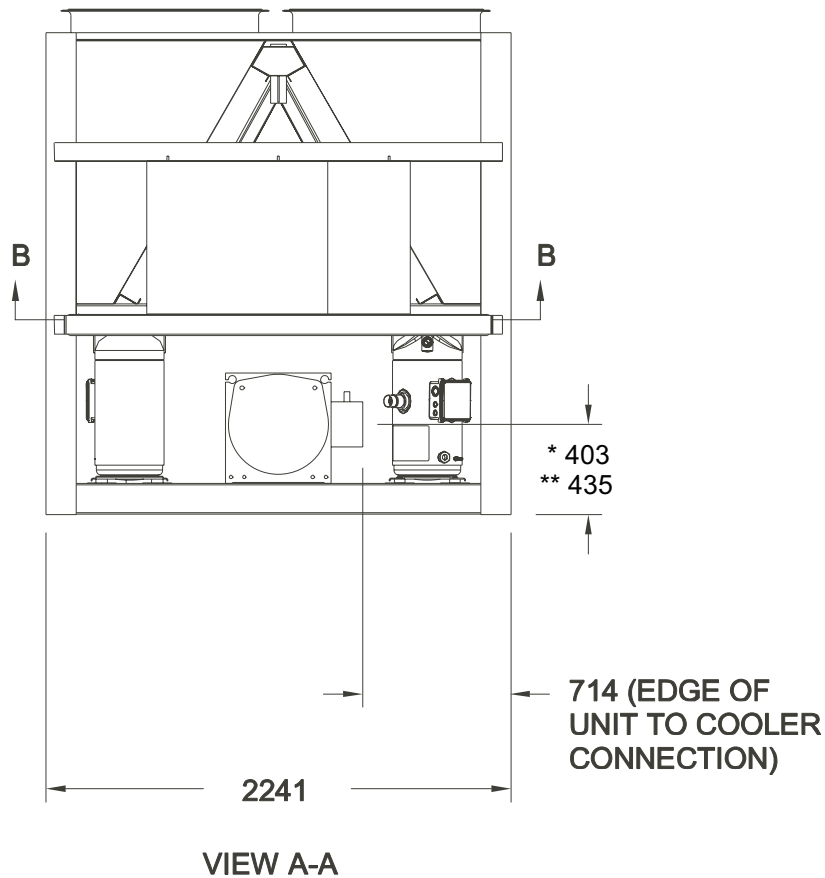
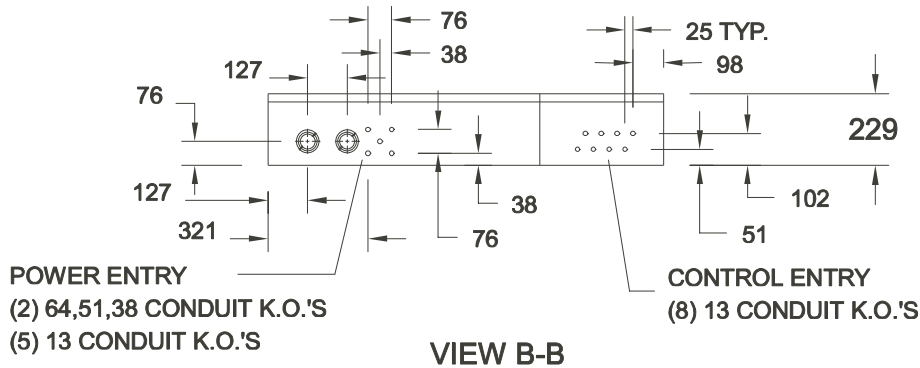
ALUMINUM

YCAL	Center of Gravity (mm)		
	X	Y	Z
0287	1801	1120	1069

COPPER

YCAL	Center of Gravity (mm)		
	X	Y	Z
0287	1788	1120	1128

Dimensions - YCAL0347 - YCAL0377 (SI)

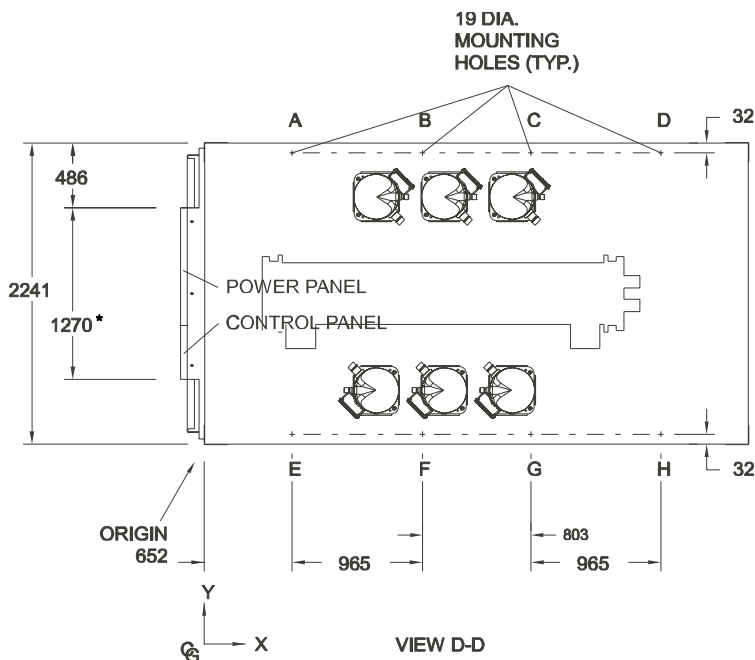


- * Refers to Model YCAL0347
- ** Refers to Model YCAL0377

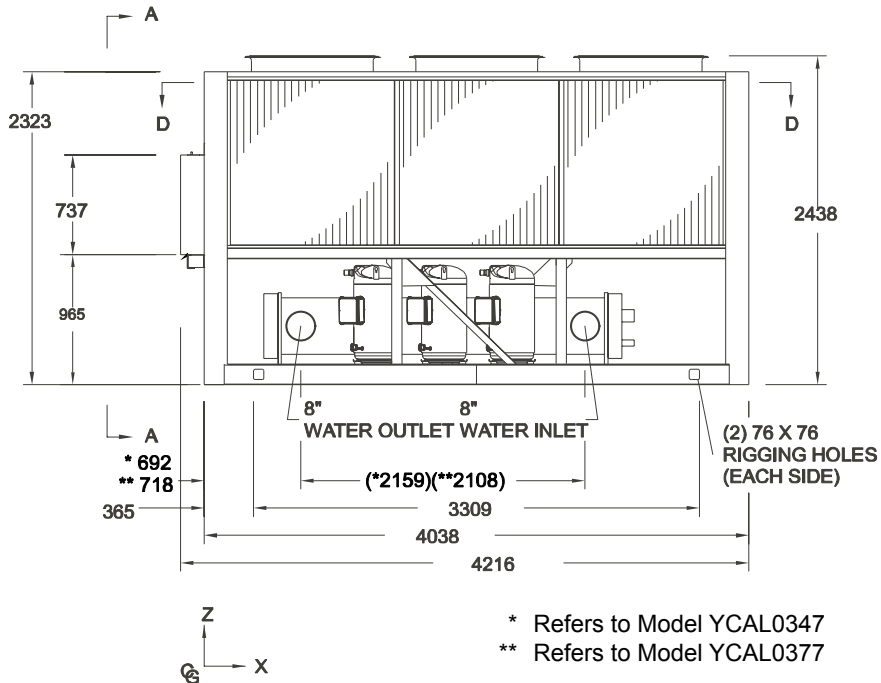
NOTE: All dimensions are in mm unless specified otherwise.

NOTE:

Placement on a level surface of free of obstructions (including snow, for winter operation) or air circulation ensures rated performance, reliable operation, and ease of maintenance. Site restrictions may compromise minimum clearances indicated below, resulting in unpredictable airflow patterns and possible diminished performance. YORK's unit controls will optimize operation without nuisance high-pressure safety cutouts; however, the system designer must consider potential performance degradation. Access to the unit control center assumes the unit is no higher than on spring isolators. Recommended minimum clearances: Side to wall – 2m; rear to wall – 2m; control panel to end wall – 1.2m; top – no obstructions allowed; distance between adjacent units – 3m. No more than one adjacent wall may be higher than the unit.



*1600 for -17 and -28 voltage code panels



ALUMINUM

YCAL	Center of Gravity (mm)		
	X	Y	Z
0317	1801	1120	1069
0347	2019	1120	1033
0377	2019	1120	1033

COPPER

YCAL	Center of Gravity (mm)		
	X	Y	Z
0317	1788	1120	1128
0347	2019	1120	1085
0377	2019	1120	1085

Weight Distribution

ALUMINUM FIN COILS

English Units

YCAL	Aluminum Fin Coil Weight Distribution (lbs)								
	A	B	C	D	E	F	G	H	Total
0043	668	524	760	596	---	---	---	---	2,548
0057	672	527	765	600	---	---	---	---	2,564
0073	776	615	864	685	---	---	---	---	2,940
0087	758	680	842	755	---	---	---	---	3,036
0107	882	789	903	807	---	---	---	---	3,381
0117	1,261	1,200	1,266	1,204	---	---	---	---	4,931
0133	1,283	1,223	1,274	1,214	---	---	---	---	4,994
0147	1,292	1,235	1,297	1,239	---	---	---	---	5,064
0157	1,318	1,263	1,311	1,256	---	---	---	---	5,148
0173	1,333	1,280	1,338	1,284	---	---	---	---	5,236
0197	1,655	1,466	1,637	1,450	---	---	---	---	6,208
0217	1,688	1,501	1,692	1,505	---	---	---	---	6,386
0237	1,742	1,552	1,727	1,538	---	---	---	---	6,558
0253	1,792	1,593	1,797	1,597	---	---	---	---	6,779
0287	1,573	836	1,129	1,573	836	1,126	---	---	7,073
0317	1,615	840	1,146	1,615	840	1,144	---	---	7,201
0347	1,360	1,162	880	829	1,360	1,162	882	832	8,466
0377	1,401	1,199	909	856	1,399	1,197	906	854	8,721

SI Units

YCAL	Aluminum Fin Coil Weight Distribution (kg)								
	A	B	C	D	E	F	G	H	Total
0043	303	238	345	270	---	---	---	---	1,156
0057	305	239	347	272	---	---	---	---	1,163
0073	352	279	392	311	---	---	---	---	1,333
0087	344	309	382	343	---	---	---	---	1,377
0107	400	358	410	366	---	---	---	---	1,534
0117	572	544	574	546	---	---	---	---	2,236
0133	582	555	578	551	---	---	---	---	2,265
0147	586	560	588	562	---	---	---	---	2,297
0157	598	573	595	570	---	---	---	---	2,335
0173	605	581	607	583	---	---	---	---	2,375
0197	751	665	742	658	---	---	---	---	2,816
0217	766	681	768	683	---	---	---	---	2,897
0237	790	704	783	698	---	---	---	---	2,975
0253	813	723	815	724	---	---	---	---	3,075
0287	715	380	513	715	380	512	---	---	3,215
0317	734	382	521	734	382	520	---	---	3,273
0347	618	528	400	377	618	528	401	378	3,848
0377	637	545	413	389	636	544	412	388	3,964

COPPER FIN COILS

English Units

YCAL	Copper Fin Coil Weight Distribution (lbs)								Total
	A	B	C	D	E	F	G	H	
0043	718	581	809	654	---	---	---	---	2,762
0057	722	584	814	658	---	---	---	---	2,778
0073	854	704	941	776	---	---	---	---	3,275
0087	830	776	912	853	---	---	---	---	3,371
0107	954	885	974	904	---	---	---	---	3,717
0117	1,354	1,292	1,358	1,296	---	---	---	---	5,300
0133	1,375	1,315	1,366	1,307	---	---	---	---	5,363
0147	1,384	1,327	1,389	1,332	---	---	---	---	5,433
0157	1,410	1,355	1,403	1,348	---	---	---	---	5,517
0173	1,426	1,372	1,430	1,377	---	---	---	---	5,605
0197	1,766	1,577	1,747	1,561	---	---	---	---	6,651
0217	1,799	1,612	1,803	1,616	---	---	---	---	6,829
0237	1,852	1,662	1,838	1,649	---	---	---	---	7,001
0253	1,903	1,704	1,907	1,708	---	---	---	---	7,222
0287	1,760	933	1,258	1,760	933	1258	---	---	7,902
0317	1,800	937	1,278	1,800	937	1278	---	---	8,030
0347	1,511	1,291	979	922	1,511	1,291	979	922	9,407
0377	1,553	1,327	1,001	948	1,553	1,327	1,005	948	9,662

SI Units

YCAL	Copper Fin Coil Weight Distribution (kg)								Total
	A	B	C	D	E	F	G	H	
0043	326	263	367	297	---	---	---	---	1,253
0057	327	265	369	299	---	---	---	---	1,260
0073	387	319	427	352	---	---	---	---	1,486
0087	377	352	414	387	---	---	---	---	1,529
0107	433	402	442	410	---	---	---	---	1,686
0117	614	586	616	588	---	---	---	---	2,404
0133	624	597	620	593	---	---	---	---	2,432
0147	628	602	630	604	---	---	---	---	2,464
0157	640	615	637	612	---	---	---	---	2,502
0173	647	622	649	624	---	---	---	---	2,542
0197	801	715	793	708	---	---	---	---	3,017
0217	816	731	818	733	---	---	---	---	3,098
0237	840	754	833	748	---	---	---	---	3,176
0253	863	773	865	775	---	---	---	---	3,276
0287	800	424	572	800	424	572	---	---	3,592
0317	818	426	581	818	426	581	---	---	3,650
0347	687	587	445	419	687	587	445	419	4,276
0377	706	603	455	431	706	603	457	431	4,392

Isolator Selections - (Aluminum Coils)

1" DEFLECTION ISOLATOR SELECTION - VMC TYPE

Aluminum Fin, 1" Isolator Selections								
YCAL	VMC Type CP-x-xx							
	A	B	C	D	E	F	G	H
0043	CP-1-27	CP-1-26	CP-1-28	CP-1-27	---	---	---	---
0057	CP-1-27	CP-1-26	CP-1-28	CP-1-27	---	---	---	---
0073	CP-1-28	CP-1-27	CP-1-28	CP-1-28	---	---	---	---
0087	CP-1-28	CP-1-27	CP-1-28	CP-1-28	---	---	---	---
0107	CP-1-28	CP-1-28	CP-1-31	CP-1-28	---	---	---	---
0117	CP-2-27	CP-2-27	CP-2-27	CP-2-27	---	---	---	---
0133	CP-2-27	CP-2-27	CP-2-27	CP-2-27	---	---	---	---
0147	CP-2-27	CP-2-27	CP-2-27	CP-2-27	---	---	---	---
0157	CP-2-27	CP-2-27	CP-2-27	CP-2-27	---	---	---	---
0173	CP-2-27	CP-2-27	CP-2-27	CP-2-27	---	---	---	---
0197	CP-2-28	CP-2-28	CP-2-28	CP-2-28	---	---	---	---
0217	CP-2-28	CP-2-28	CP-2-28	CP-2-28	---	---	---	---
0237	CP-2-28	CP-2-28	CP-2-28	CP-2-28	---	---	---	---
0253	CP-2-28	CP-2-28	CP-2-28	CP-2-28	---	---	---	---
0287	CP-2-31	CP-2-26	CP-2-27	CP-2-31	CP-2-26	CP-2-27	---	---
0317	CP-2-31	CP-2-26	CP-2-27	CP-2-31	CP-2-26	CP-2-27	---	---
0347	CP-2-28	CP-2-27	CP-2-26	CP-2-26	CP-2-28	CP-2-27	CP-2-26	CP-2-26
0377	CP-2-28	CP-2-27	CP-2-26	CP-2-26	CP-2-28	CP-2-27	CP-2-26	CP-2-26

SEISMIC ISOLATOR SELECTION - VMC TYPE

Aluminum Fin, Seismic Isolator Selections								
YCAL	VMC Model # AEQM-xxxx							
	A	B	C	D	E	F	G	H
0043	AEQM-97	AEQM-96	AEQM-98	AEQM-97	---	---	---	---
0057	AEQM-97	AEQM-96	AEQM-98	AEQM-97	---	---	---	---
0073	AEQM-98	AEQM-97	AEQM-98	AEQM-98	---	---	---	---
0087	AEQM-98	AEQM-97	AEQM-98	AEQM-98	---	---	---	---
0107	AEQM-98	AEQM-98	AEQM-99	AEQM-98	---	---	---	---
0117	AEQM-1300	AEQM-1300	AEQM-1300	AEQM-1300	---	---	---	---
0133	AEQM-1300	AEQM-1300	AEQM-1300	AEQM-1300	---	---	---	---
0147	AEQM-1300	AEQM-1300	AEQM-1300	AEQM-1300	---	---	---	---
0157	AEQM-1600	AEQM-1300	AEQM-1600	AEQM-1300	---	---	---	---
0173	AEQM-1600	AEQM-1300	AEQM-1600	AEQM-1300	---	---	---	---
0197	AEQM-1625	AEQM-1600	AEQM-1625	AEQM-1600	---	---	---	---
0217	AEQM-1625	AEQM-1600	AEQM-1625	AEQM-1600	---	---	---	---
0237	AEQM-1625	AEQM-1600	AEQM-1625	AEQM-1600	---	---	---	---
0253	AEQM-1625	AEQM-1600	AEQM-1625	AEQM-1600	---	---	---	---
0287	AEQM-1625	AEQM-1000	AEQM-1300	AEQM-1625	AEQM-1000	AEQM-1300	---	---
0317	AEQM-1625	AEQM-1000	AEQM-1300	AEQM-1625	AEQM-1000	AEQM-1300	---	---
0347	AEQM-1600	AEQM-1600	AEQM-1000	AEQM-1000	AEQM-1600	AEQM-1300	AEQM-1000	AEQM-1000
0377	AEQM-1600	AEQM-1600	AEQM-1000	AEQM-1000	AEQM-1600	AEQM-1300	AEQM-1000	AEQM-1000

NEOPRENE ISOLATOR SELECTION - VMC TYPE

Aluminum Fin, Neoprene Isolator Selections								
YCAL	VMC Type RD							
	A	B	C	D	E	F	G	H
0043	-3 Grn	-2 Gray	-3 Gray	-3 Grn	---	---	---	---
0057	-3 Grn	-2 Gray	-3 Gray	-3 Grn	---	---	---	---
0073	-3 Gray	-3 Grn	-3 Gray	-3 Grn	---	---	---	---
0087	-3 Gray	-3 Grn	-3 Gray	-3 Grn	---	---	---	---
0107	-3 Gray	-3 Grn	-3 Gray	-3 Grn	---	---	---	---
0117	-4 Blk	-4 Blk	-4 Blk	-4 Blk	---	---	---	---
0133	-4 Blk	-4 Blk	-4 Blk	-4 Blk	---	---	---	---
0147	-4 Blk	-4 Blk	-4 Blk	-4 Blk	---	---	---	---
0157	-4 Blk	-4 Blk	-4 Blk	-4 Blk	---	---	---	---
0173	-4 Blk	-4 Blk	-4 Blk	-4 Blk	---	---	---	---
0197	-4 Red	-4 Red	-4 Red	-4 Red	---	---	---	---
0217	-4 Red	-4 Red	-4 Red	-4 Red	---	---	---	---
0237	-4 Red	-4 Red	-4 Red	-4 Red	---	---	---	---
0253	-4 Red	-4 Red	-4 Red	-4 Red	---	---	---	---
0287	-4 Red	-3 Gray	-3 Gray	-4 Red	-3 Gray	-3 Gray	---	---
0317	-4 Red	-3 Gray	-3 Gray	-4 Red	-3 Gray	-3 Gray	---	---
0347	-4 Blk	-4 Blk	-3 Gray	-3 Gray	-4 Blk	-4 Blk	-3 Gray	-3 Gray
0377	-4 Blk	-4 Blk	-3 Gray	-3 Gray	-4 Blk	-4 Blk	-3 Gray	-3 Gray

Isolator Selections - (Copper Coils)

1" DEFLECTION ISOLATOR SELECTION - VMC TYPE

Copper Fin, 1" Isolator Selections								
YCAL	VMC Type CP-x-xx							
	A	B	C	D	E	F	G	H
0043	CP-1-27	CP-1-26	CP-1-28	CP-1-27	---	---	---	---
0057	CP-1-27	CP-1-26	CP-1-28	CP-1-27	---	---	---	---
0073	CP-1-28	CP-1-27	CP-1-31	CP-1-28	---	---	---	---
0087	CP-1-28	CP-1-27	CP-1-31	CP-1-28	---	---	---	---
0107	CP-1-31	CP-1-28	CP-1-31	CP-1-28	---	---	---	---
0117	CP-2-27	CP-2-27	CP-2-27	CP-2-27	---	---	---	---
0133	CP-2-27	CP-2-27	CP-2-27	CP-2-27	---	---	---	---
0147	CP-2-27	CP-2-27	CP-2-27	CP-2-27	---	---	---	---
0157	CP-2-27	CP-2-27	CP-2-27	CP-2-27	---	---	---	---
0173	CP-2-27	CP-2-27	CP-2-27	CP-2-27	---	---	---	---
0197	CP-2-28	CP-2-28	CP-2-28	CP-2-28	---	---	---	---
0217	CP-2-28	CP-2-28	CP-2-28	CP-2-28	---	---	---	---
0237	CP-2-31	CP-2-28	CP-2-31	CP-2-28	---	---	---	---
0253	CP-2-31	CP-2-28	CP-2-31	CP-2-28	---	---	---	---
0287	CP-2-31	CP-2-26	CP-1-27	CP-2-31	CP-2-26	CP-1-27	---	---
0317	CP-2-31	CP-2-26	CP-1-27	CP-2-31	CP-2-26	CP-1-27	---	---
0347	CP-2-28	CP-1-27	CP-2-26	CP-2-26	CP-2-28	CP-1-27	CP-2-26	CP-2-26
0377	CP-2-28	CP-1-27	CP-2-26	CP-2-26	CP-2-28	CP-1-27	CP-2-26	CP-2-26

SEISMIC ISOLATOR SELECTION - VMC TYPE

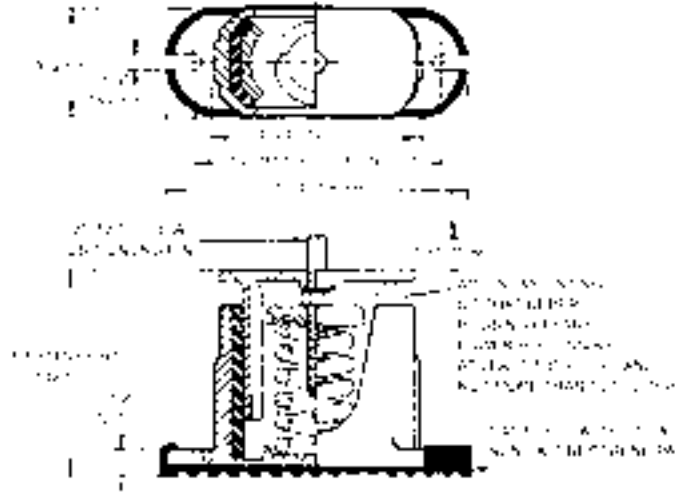
Copper Fin, Seismic Isolator Selections								
YCAL	VMC Model # AEQM-xxxx							
	A	B	C	D	E	F	G	H
0043	AEQM-97	AEQM-96	AEQM-98	AEQM-97	---	---	---	---
0057	AEQM-97	AEQM-96	AEQM-98	AEQM-97	---	---	---	---
0073	AEQM-98	AEQM-97	AEQM-99	AEQM-98	---	---	---	---
0087	AEQM-98	AEQM-97	AEQM-99	AEQM-98	---	---	---	---
0107	AEQM-99	AEQM-98	AEQM-99	AEQM-98	---	---	---	---
0117	AEQM-1600	AEQM-1600	AEQM-1600	AEQM-1300	---	---	---	---
0133	AEQM-1600	AEQM-1600	AEQM-1600	AEQM-1300	---	---	---	---
0147	AEQM-1600	AEQM-1600	AEQM-1600	AEQM-1600	---	---	---	---
0157	AEQM-1600	AEQM-1600	AEQM-1600	AEQM-1600	---	---	---	---
0173	AEQM-1600	AEQM-1600	AEQM-1600	AEQM-1600	---	---	---	---
0197	AEQM-1625	AEQM-1600	AEQM-1625	AEQM-1600	---	---	---	---
0217	AEQM-1625	AEQM-1625	AEQM-1625	AEQM-1625	---	---	---	---
0237	AEQM-1625	AEQM-1625	AEQM-1625	AEQM-1625	---	---	---	---
0253	AEQM-1625	AEQM-1625	AEQM-1625	AEQM-1625	---	---	---	---
0287	AEQM-1625	AEQM-1000	AEQM-1600	AEQM-1625	AEQM-1000	AEQM-1600	---	---
0317	AEQM-1625	AEQM-1000	AEQM-1600	AEQM-1625	AEQM-1000	AEQM-1600	---	---
0347	AEQM-1625	AEQM-1600	AEQM-1300	AEQM-1000	AEQM-1625	AEQM-1600	AEQM-1300	AEQM-1000
0377	AEQM-1625	AEQM-1600	AEQM-1300	AEQM-1000	AEQM-1625	AEQM-1600	AEQM-1300	AEQM-1000

NEOPRENE ISOLATOR SELECTION - VMC TYPE

Copper Fin, Neoprene Isolator Selections

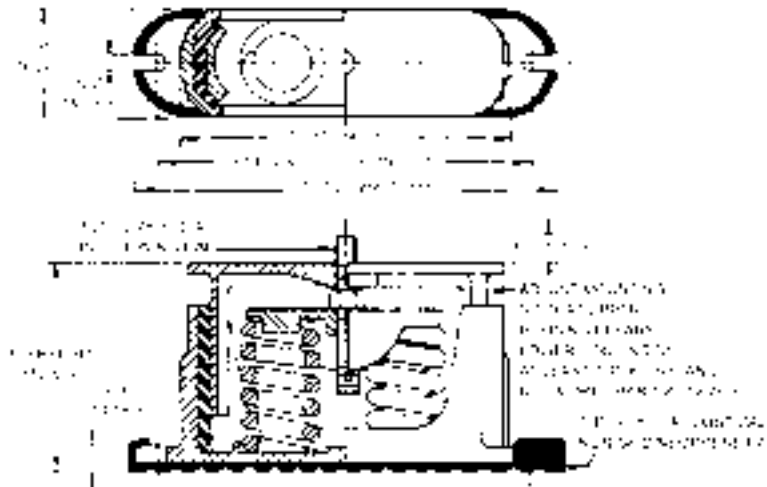
YCAL	VMC Type RD							
	A	B	C	D	E	F	G	H
0043	-3 Grn	-3 Grn	-3 Gray	-3 Grn	---	---	---	---
0057	-3 Grn	-3 Grn	-3 Gray	-3 Grn	---	---	---	---
0073	-3 Gray	-3 Gray	-3 Gray	-3 Gray	---	---	---	---
0087	-3 Gray	-3 Gray	-3 Gray	-3 Gray	---	---	---	---
0107	-3 Gray	-3 Gray	-3 Gray	-3 Gray	---	---	---	---
0117	-4 Blk	-4 Blk	-4 Blk	-4 Blk	---	---	---	---
0133	-4 Blk	-4 Blk	-4 Blk	-4 Blk	---	---	---	---
0147	-4 Blk	-4 Blk	-4 Blk	-4 Blk	---	---	---	---
0157	-4 Blk	-4 Blk	-4 Blk	-4 Blk	---	---	---	---
0173	-4 Blk	-4 Blk	-4 Blk	-4 Blk	---	---	---	---
0197	-4 Red	-4 Red	-4 Red	-4 Red	---	---	---	---
0217	-4 Red	-4 Red	-4 Red	-4 Red	---	---	---	---
0237	-4 Red	-4 Red	-4 Red	-4 Red	---	---	---	---
0253	-4 Red	-4 Red	-4 Red	-4 Red	---	---	---	---
0287	-4 Red	-3 Gray	-4 Blk	-4 Red	-3 Gray	-4 Blk	---	---
0317	-4 Red	-3 Gray	-4 Blk	-4 Red	-3 Gray	-4 Blk	---	---
0347	-4 Red	-4 Blk	-3 Gray	-3 Gray	-4 Red	-4 Blk	-3 Gray	-3 Gray
0377	-4 Red	-4 Blk	-3 Gray	-3 Gray	-4 Red	-4 Blk	-3 Gray	-3 Gray

Isolator Selections



LD03839

TYPE CP 1



LD03840

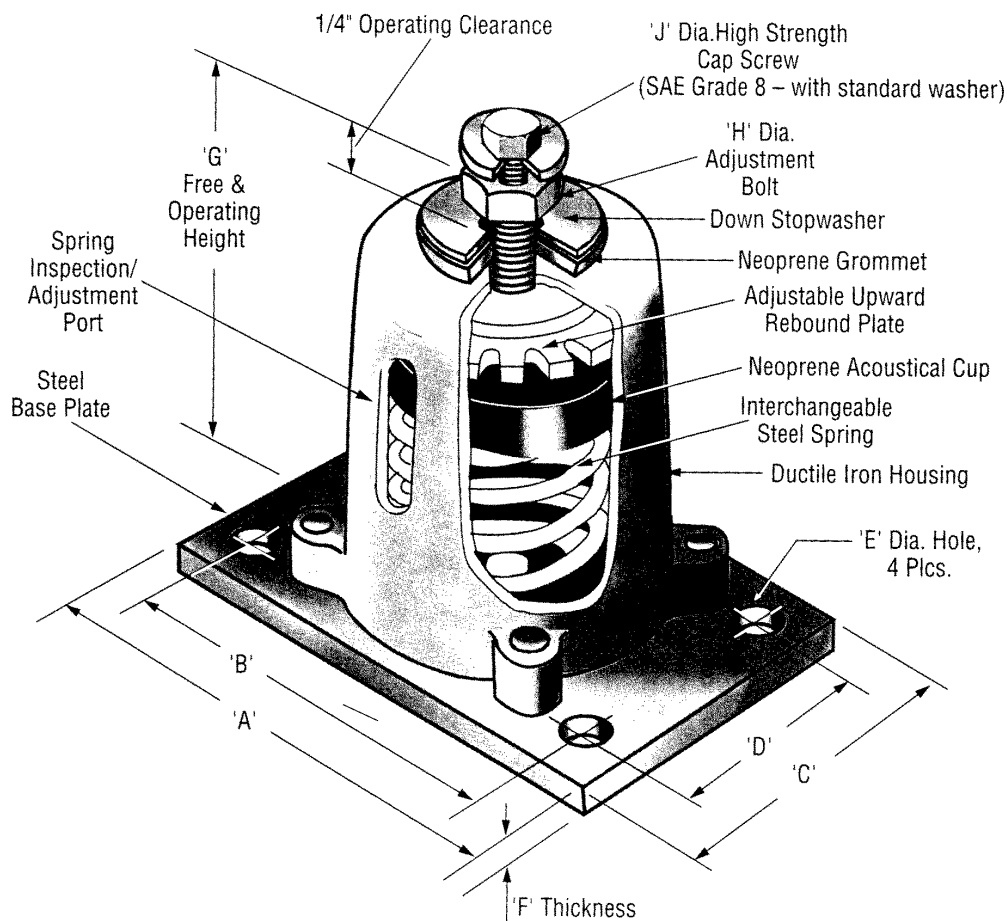
TYPE CP 2

ISOLATOR SPRING IDENTIFICATION TABLE

1" DEFLECTION			SEISMIC		
MODEL	PART- #	COLOR	MODEL	PART #	COLOR
CP-1-26	308439-26	PURPLE	AEQM-96	301055-96	BLACK
CP-1-27	308439-27	ORANGE	AEQM-97	301055-97	WHITE
CP-1-28	308439-28	GREEN	AEQM-98	301055-98	GRAY
CP-1-31	308439-31	GRAY	AEQM-99	301055-99	BLUE
CP-2-25	308439-25	RED	AEQM-1000	30106-1000	GREEN
CP-2-26	308692-26	PURPLE	AEQM-1300	30106-1300	YELLOW
CP-2-27	308962-27	ORANGE	AEQM-1600	301060-1600	GRAY
CP-2-28	308692-28	GREEN	AEQM-1625	301060-1625	RED
CP-2-31	308692-31	GRAY	AEQM-1628	301060-1628	GRAY/GREEN

DIMENSIONS

MODEL #	A	B	C	D	E	F	G	H	J
AEQM-97	7	5-1/2	4-1/2	2-1/2	5/8	1/4	7-1/4	5/8	3/8
AEQM-98	7	5-1/2	4-1/2	2-1/2	5/8	1/4	7-1/4	5/8	3/8
AEQM-99	7	5-1/2	4-1/2	2-1/2	5/8	1/4	7-1/4	5/8	3/8
AEQM-1000	8-1/2	6-1/2	6	4-1/2	3/4	3/8	8-3/8	7/8	1/2
AEQM-1300	8-1/2	6-1/2	6	4-1/2	3/4	3/8	8-3/8	7/8	1/2
AEQM-1600	8-1/2	6-1/2	6	4-1/2	3/4	3/8	8-3/8	7/8	1/2
AEQM-1625	8-1/2	6-1/2	6	4-1/2	3/4	3/8	8-3/8	7/8	1/2
AEQM-1628	8-1/2	6-1/2	6	4-1/2	3/4	3/8	8-3/8	7/8	1/2



TYPE AEQM

LD04045

Electrical Data

NOTES:

1. Minimum Circuit Ampacity (MCA) is based on 125% of the rated load amps for the largest motor plus 100% of the rated load amps for all other loads included in the circuit, per N.E.C. Article 430-24. If the optional Factory Mounted Control Transformer is provided, add the following MCA values to the electrical tables for the system providing power to the transformer: -17, add 2.5 amps; -28, add 2.3 amps; -40, add 1.5 amps, -46, add 1.3 amps; -58, add 1 amps.
2. The minimum recommended disconnect switch is based on 115% of the rated load amps for all loads included in the circuit, per N.E.C. Article 440.
3. Minimum fuse size is based upon 150% of the rated load amps for the largest motor plus 100% of the rated load amps for all other loads included in the circuit to avoid nuisance trips at start-up due to lock rotor amps. It is not recommended in applications where brown outs, frequent starting and stopping of the unit, and/or operation at ambient temperatures in excess of 95°F (35°C) is anticipated.
4. Maximum fuse size is based upon 225% of the rated load amps for the largest motor plus 100% of the rated load amps for all other loads included in the circuit, per N.E.C. Article 440-22.
5. Circuit breakers must be UL listed and CSA certified and maximum size is based on 225% of the rated load amps for the largest motor plus 100% of the rated load amps for all other loads included in the circuit. Exception: YCAL0014 and YCAL0020 must have the optional factory overloads installed to use a standard circuit breaker. Otherwise, an HACR-type circuit breakers must be used. Maximum HACR circuit breaker rating is based on 225% of the rated load amps for the largest motor plus 100% of the rated load amps for all other loads included in the circuit.
6. The "INCOMING WIRE RANGE" is the minimum and maximum wire size that can be accommodated by the unit wiring lugs. The (2) preceding the wire range indicates the number of termination points available per phase of the wire range specified. Actual wire size and number of wires per phase must be determined based on the National Electrical Code, **using copper connectors only**. Field wiring must also comply with local codes.
7. A ground lug is provided for each compressor system to accommodate a field grounding conductor per N.E.C. Table 250-95. A control circuit grounding lug is also supplied.
8. The supplied disconnect is a "Disconnecting Means" as defined in the N.E.C. 100, and is intended for isolating the unit for the available power supply to perform maintenance and troubleshooting. This disconnect is not intended to be a Load Break Device.
9. Field Wiring by others which complies to the National Electrical Code & Local Codes.

LEGEND

ACR-LINE	ACROSS THE LINE START
C.B.	CIRCUIT BREAKER
D.E.	DUAL ELEMENT FUSE
DISC SW	DISCONNECT SWITCH
FACT MOUNT CB	FACTORY MOUNTED CIRCUIT BREAKER
FLA	FULL LOAD AMPS
HZ	HERTZ
MAX	MAXIMUM
MCA	MINIMUM CIRCUIT AMPACITY
MIN	MINIMUM
MIN NF	MINIMUM NON FUSED
RLA	RATED LOAD AMPS
S.P. WIRE	SINGLE POINT WIRING
UNIT MTD SERV SW	UNIT MOUNTED SERVICE (NON-FUSED DISCONNECT SWITCH)
LRA	LOCKED ROTOR AMPS

VOLTAGE CODE

-50=380/415-3-50

INTENTIONALLY LEFT BLANK

Electrical Data

YCAL0043 - YCAL0253

SINGLE POINT ON YCAL0043-0107 MODELS; DUAL POINT ON YCAL0117-0253 MODELS (See Fig. 1 or 2)
 (One or Two Field Provided Power Supply Circuits to the chiller. Field connections to Factory Provided Terminal Block(s) per system)

MODEL YCAL	VOLT	HZ	SYSTEM #1 FIELD SUPPLIED WIRING							SYSTEM #1 COMPRESSOR & FAN							
			MCA ¹	MIN N/F DISC SW ²	D.E. FUSE		CKT. BKR. ⁵		INCOMING (LUGS) WIRE RANGE ⁶	COMPR. #1		COMPR. #2		COMPR. #3		FANS	
					MIN ³	MAX ⁴	MIN	MAX		RLA	LRA	RLA	LRA	RLA	LRA	QTY	FLA (EA)
0043	380/415	50	35	60	40	45	40	45	# 10 - # 1	12.0	99	12.0	99	—	—	2	4.0
0057	380/415	50	46	60	50	60	50	60	# 10 - # 1	16.6	127	16.6	127	—	—	2	4.0
0073	380/415	50	53	60	60	70	60	70	# 10 - # 1	19.9	167	19.9	167	—	—	2	4.0
0087	380/415	50	62	100	70	80	70	80	# 10 - # 1	23.9	198	23.9	198	—	—	2	4.0
0107	380/415	50	73	100	80	90	80	90	# 10 - # 1	19.9	167	19.9	167	19.9	167	2	4.0
0117	380/415	50	46	60	50	60	50	60	# 10 - # 1	16.6	127	16.6	127	—	—	2	4.0
0133	380/415	50	53	60	60	70	60	70	# 10 - # 1	19.9	167	19.9	167	—	—	2	4.0
0147	380/415	50	53	60	60	70	60	70	# 10 - # 1	19.9	167	19.9	167	—	—	2	4.0
0157	380/415	50	62	100	70	80	70	80	# 10 - # 1	23.9	198	23.9	198	—	—	2	4.0
0173	380/415	50	62	100	70	80	70	80	# 10 - # 1	23.9	198	23.9	198	—	—	2	4.0
0197	380/415	50	73	100	80	90	80	90	# 10 - # 1	19.9	167	19.9	167	19.9	167	2	4.0
0217	380/415	50	73	100	80	90	80	90	# 10 - # 1	19.9	167	19.9	167	19.9	167	2	4.0
0237	380/415	50	86	100	100	100	100	100	# 10 - # 1	23.9	198	23.9	198	23.9	198	2	4.0
0253	380/415	50	86	100	100	100	100	100	# 10 - # 1	23.9	198	23.9	198	23.9	198	2	4.0

UNIT VOLTAGE	UNIT VOLTAGE	CONTROL POWER	MCA	OVER CURRENT PROTECTION, SEE NOTE B		NF DISC Sw
			NOTE A	MIN	MAX	
MODELS w/o CONTROL TRANS		115-1-60/50	15A	10A	15A	30 A / 240V
MODELS W. CONTROL TRANS.	-50	380/415-3-50	15A	10A	15A	30 A / 480V

A. Minimum #14 AWG, 75°C, Copper Recommended

B. Minimum and Maximum Over Current Protection, Dual Element Fuse or Circuit Breaker

VOLTAGE RANGE			
VOLTAGE CODE	UNIT POWER	MIN.	MAX.
-50	380/415-3-50	342	440

YCAL0043 - YCAL0253

SINGLE POINT ON YCAL0043-0107 MODELS; DUAL POINT ON YCAL0117-0253 MODELS (See Fig. 1 or 2)
(One or Two Field Provided Power Supply Circuits to the chiller. Field connections to Factory Provided Terminal Block(s) per system)

MODEL YCAL	VOLT	HZ	SYSTEM #2 FIELD SUPPLIED WIRING							SYSTEM #2 COMPRESSOR & FAN							
			MCA ¹	MIN N/F DISC SW ²	D.E. FUSE		CKT. BKR. ⁵		INCOMING (LUGS) WIRE RANGE ⁶	COMPR. #1		COMPR. #2		COMPR. #3		FANS	
					MIN ³	MAX ⁴	MIN	MAX		RLA	LRA	RLA	LRA	RLA	LRA	QTY	FLA (EA)
0043	380/415	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0057	380/415	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0073	380/415	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0087	380/415	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0107	380/415	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
0117	380/415	50	46	60	50	60	50	60	# 10 - # 1	16.6	127	16.6	127	—	—	2	4.0
0133	380/415	50	46	60	50	60	50	60	# 10 - # 1	16.6	127	16.6	127	—	—	2	4.0
0147	380/415	50	53	60	60	70	60	70	# 10 - # 1	19.9	167	19.9	167	—	—	2	4.0
0157	380/415	50	53	60	60	70	60	70	# 10 - # 1	19.9	167	19.9	167	—	—	2	4.0
0173	380/415	50	62	100	70	80	70	80	# 10 - # 1	23.9	198	23.9	198	—	—	2	4.0
0197	380/415	50	62	100	70	70	70	70	# 10 - # 1	16.6	127	16.6	127	16.6	127	2	4.0
0217	380/415	50	73	100	80	90	80	90	# 10 - # 1	19.9	167	19.9	167	19.9	167	2	4.0
0237	380/415	50	73	100	80	90	80	90	# 10 - # 1	19.9	167	19.9	167	19.9	167	2	4.0
0253	380/415	50	86	100	100	100	100	100	# 10 - # 1	23.9	198	23.9	198	23.9	198	2	4.0

YCAL0043 - YCAL0253

SINGLE POINT POWER SUPPLY CONNECTIONS (see Fig. 1)

(SINGLE POINT STANDARD ON YCAL0043-0107 MODELS; OPTIONAL ON YCAL0117-0253 MODELS. DISCONNECT AND BREAKERS OPTIONAL ON ALL MODELS)

MODEL YCAL	VOLT	HZ	SINGLE POINT FIELD SUPPLIED WIRING								
			MCA ¹	MIN N/F DISC SW ²	D.E. FUSE		CKT. BKR. ⁵		INCOMING (LUGS) WIRE RANGE ⁶		
					MIN ³	MAX ⁴	MIN	MAX	FACTORY SUPPLIED OPTIONAL		
									SINGLE POINT	DISCONNECT	BREAKER
0043	380/415	50	35	60	40	45	40	45	# 10 - # 1	# 14 - 2	# 14 - 2
0057	380/415	50	46	60	50	60	50	60	# 10 - # 1	# 14 - 2	# 14 - 2
0073	380/415	50	53	60	60	70	60	70	# 10 - # 1	# 14 - 2	# 14 - 2
0087	380/415	50	62	100	70	70	70	70	# 10 - # 1	# 14 - 1/0	# 14 - 1/0
0107	380/415	50	73	100	80	90	80	90	# 10 - # 1	# 14 - 1/0	# 14 - 1/0
0117	380/415	50	87	100	100	100	100	100	# 10 - # 1	# 14 - 1/0	# 14 - 1/0
0133	380/415	50	94	150	100	110	100	110	# 10 - # 1	# 2 - 4/0	# 14 - 1/0
0147	380/415	50	101	150	110	110	110	110	# 10 - # 1	# 2 - 4/0	# 2 - 4/0
0157	380/415	50	110	150	125	125	125	125	# 10 - # 1	# 2 - 4/0	# 2 - 4/0
0173	380/415	50	118	150	125	125	125	125	# 10 - 3/0	# 2 - 4/0	# 2 - 4/0
0197	380/415	50	131	150	150	150	150	150	# 10 - 3/0	# 2 - 4/0	# 2 - 4/0
0217	380/415	50	141	200	150	150	150	150	# 10 - 3/0	# 6 - 350	# 2 - 4/0
0237	380/415	50	154	200	175	175	175	175	# 10 - 3/0	# 6 - 350	# 4 - 300
0253	380/415	50	166	200	175	175	175	175	# 10 - 3/0	# 6 - 350	# 4 - 300

YCAL0043- YCAL0253

SINGLE POINT POWER SUPPLY CONNECTIONS (see Fig. 1)

(SINGLE POINT STANDARD ON YCAL0043-0107 MODELS; OPTIONAL ON YCAL0117-0253 MODELS. DISCONNECT AND BREAKERS OPTIONAL ON ALL MODELS)

SYSTEM #1 COMPRESSOR & FAN								SYSTEM #2 FIELD SUPPLIED WIRING							
COMPR. #1		COMPR. #2		COMPR. #3		FANS		COMPR. #1		COMPR. #2		COMPR. #3		FANS	
RLA	LRA	RLA	LRA	RLA	LRA	QTY	FLA (EA)	RLA	LRA	RLA	LRA	RLA	LRA	QTY	FLA (EA)
12.0	99	12.0	99	—	—	2	4.0	—	—	—	—	—	—	—	—
16.6	127	16.6	127	—	—	2	4.0	—	—	—	—	—	—	—	—
19.9	167	19.9	167	—	—	2	4.0	—	—	—	—	—	—	—	—
23.9	198	23.9	198	—	—	2	4.0	—	—	—	—	—	—	—	—
19.9	167	19.9	167	19.9	167	2	4.0	—	—	—	—	—	—	—	—
16.6	127	16.6	127	—	—	2	4.0	16.6	127	16.6	127	—	—	2	4.0
19.9	167	19.9	167	—	—	2	4.0	16.6	127	16.6	127	—	—	2	4.0
19.9	167	19.9	167	—	—	2	4.0	19.9	167	19.9	167	—	—	2	4.0
23.9	198	23.9	198	—	—	2	4.0	19.9	167	19.9	167	—	—	2	4.0
23.9	198	23.9	198	—	—	2	4.0	23.9	198	23.9	198	—	—	2	4.0
19.9	167	19.9	167	19.9	167	2	4.0	16.6	127	16.6	127	16.6	127	2	4.0
19.9	167	19.9	167	19.9	167	2	4.0	19.9	167	19.9	167	19.9	167	2	4.0
23.9	198	23.9	198	23.9	198	2	4.0	19.9	167	19.9	167	19.9	167	2	4.0
23.9	198	23.9	198	23.9	198	2	4.0	23.9	198	23.9	198	23.9	198	2	4.0

Electrical Data

YCAL0287 - YCAL0377

MULTIPLE POINT POWER SUPPLY CONNECTIONS (see Fig. 3)

(Two Field Provided Power Supply Circuits to the chiller. Field connections to Factory Provided Terminal Blocks (standard), Non-Fused Disconnect Switches (optional), or Individual System Circuit Breakers (optional) per electrical system)

MODEL YCAL	VOLT	HZ	SYSTEM #1 FIELD SUPPLIED WIRING									SYSTEM #1 COMPRESSOR & FAN								
			MCA ¹	MIN N/F DISC SW ²	D.E. FUSE		CKT. BKR. ⁵		INCOMING (LUGS) WIRE RANGE ⁶			COMPR. #1		COMPR. #2		COMPR. #3		FANS		
					MIN ³	MAX ⁴	MIN	MAX	TERMINAL BLOCK (std)	NF DISC. SWITCHES (opt)	CIR BREAKERS (opt)	RLA	LRA	RLA	LRA	RLA	LRA	QTY	FLA (EA)	
0287	380/415	50	118	150	150	150	150	150	150	# 14 - 2/0	# 6 - 350	# 6 - 350	32.6	215	32.6	215	32.6	215	3	3.8
0317	380/415	50	118	150	150	150	150	150	150	# 14 - 2/0	# 6 - 350	# 6 - 350	32.6	215	32.6	215	32.6	215	3	3.8
0347	380/415	50	156	200	175	200	175	200	200	# 6 - 400	# 6 - 350	# 6 - 350	44.2	270	44.2	270	44.2	270	3	3.8
0377	380/415	50	156	200	175	200	175	200	200	# 6 - 400	# 6 - 350	# 6 - 350	44.2	270	44.2	270	44.2	270	3	3.8

YCAL0287 - YCAL0377

MULTIPLE POINT POWER SUPPLY CONNECTIONS (see Fig. 3)

(Two Field Provided Power Supply Circuits to the chiller. Field connections to Factory Provided Terminal Blocks (standard), Non-Fused Disconnect Switches (optional), or Individual System Circuit Breakers (optional) per electrical system)

MCA ¹	SYSTEM #2 FIELD SUPPLIED WIRING						SYSTEM #2 COMPRESSOR & FAN									
	MIN N/F DISC SW ²	D.E. FUSE		CKT. BKR. ⁵		INCOMING (LUGS) WIRE RANGE ⁶			COMPR. #1		COMPR. #2		COMPR. #3		FANS	
		MIN ³	MAX ⁴	MIN	MAX	TERMINAL BLOCK (std)	NF DISC. SWITCHES (opt)	CIR BREAKERS (opt)	RLA	LRA	RLA	LRA	RLA	LRA	QTY	FLA (EA)
111	150	150	150	150	150	# 6 - 400	# 6 - 350	# 6 - 350	44.2	270	44.2	270	—	—	3	3.8
118	150	150	150	150	150	# 14 - 2/0	# 6 - 350	# 6 - 350	32.6	215	32.6	215	32.6	215	3	3.8
118	200	175	200	175	200	# 14 - 2/0	# 6 - 350	# 6 - 350	32.6	215	32.6	215	32.6	215	3	3.8
156	200	175	200	175	200	# 6 - 400	# 6 - 350	# 6 - 350	44.2	270	44.2	270	44.2	270	3	3.8

Electrical Data

YCAL0287 - YCAL0377

SINGLE POINT POWER SUPPLY CONNECTIONS WITH INDIVIDUAL SYSTEM CIRCUIT BREAKERS (see Fig. 4)
 (One Field Provided Power Supply Circuit to the chiller. Field connections to Factory Provided Terminal Block (optional) or Non-Fused Disconnect Switch (optional). Includes Individual Branch Circuit Protection (Breakers) per electrical system)

MODEL YCAL	VOLT	HZ	SINGLE POINT FIELD SUPPLIED WIRING								
			MCA ¹	MIN N/F DISC SW ²	D.E. FUSE		CKT. BKR. ⁵		INCOMING (LUGS) WIRE RANGE ⁶		
					MIN ³	MAX ⁴	MIN	MAX	TERMINAL BLOCK (opt)	NF DISC. SWITCH (opt)	
0287	380/415	50	221	250	250	250	250	250	250	# 6 - 400	# 6 - 350
0317	380/415	50	227	400	250	250	250	250	250	# 6 - 400	(2) 3/0-500
0347	380/415	50	265	400	300	300	300	300	300	2/0 - 500	(2) 3/0-500
0377	380/415	50	300	400	300	300	300	300	300	2/0 - 500	(2) 3/0-500

See Notes on page 94.

See Notes on page 74.

YCAL0287 - YCAL0377

SINGLE POINT POWER SUPPLY CONNECTIONS WITH INDIVIDUAL SYSTEM CIRCUIT BREAKERS (see Fig. 4)
 (One Field Provided Power Supply Circuit to the chiller. Field connections to Factory Provided Terminal Block (optional) or Non-Fused Disconnect Switch (optional). Includes Individual Branch Circuit Protection (Breakers) per electrical system)

SYSTEM #1 COMPRESSOR & FAN								SYSTEM #2 FIELD SUPPLIED WIRING							
COMPR. #1		COMPR. #2		COMPR. #3		FANS		COMPR. #1		COMPR. #2		COMPR. #3		FANS	
RLA	LRA	RLA	LRA	RLA	LRA	QTY	FLA(EA)	RLA	LRA	RLA	LRA	RLA	LRA	QTY	FLA(EA)
32.6	215	32.6	215	32.6	215	3	3.8	44.2	270	44.2	270	—	—	3	3.8
32.6	215	32.6	215	32.6	215	3	3.8	32.6	215	32.6	215	32.6	215	3	3.8
44.2	270	44.2	270	44.2	270	3	3.8	32.6	215	32.6	215	32.6	215	3	3.8
44.2	270	44.2	270	44.2	270	3	3.8	44.2	270	44.2	270	44.2	270	3	3.8

Power Wiring

Figure 1: Single Point Supply Connection – Terminal Block, Non-Fused Disconnect Switch or Circuit Breaker (YCAL0043-0253)

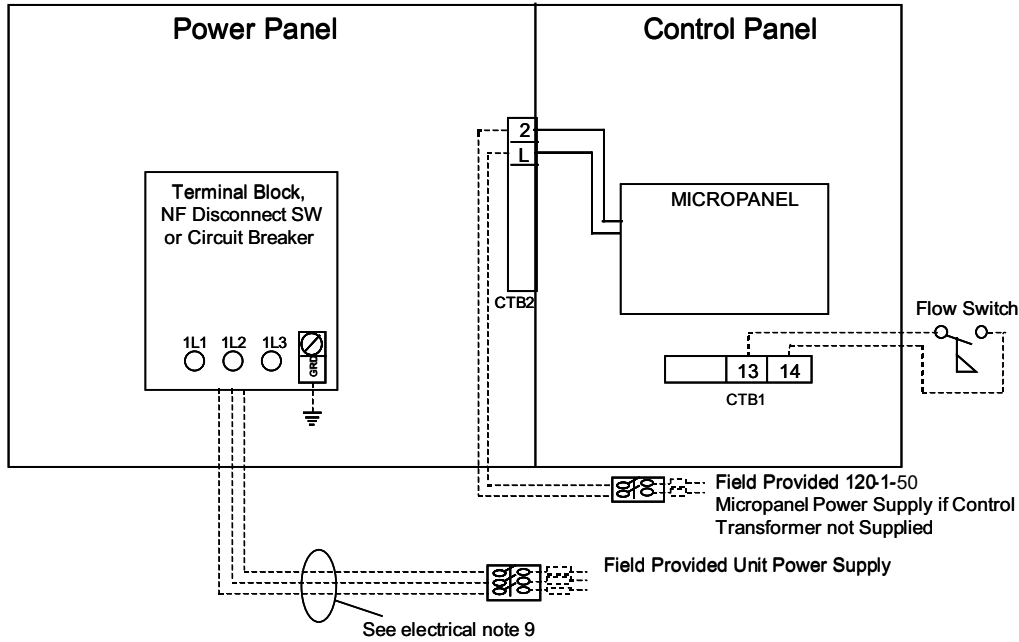


Figure 2: Multiple Point Power Supply Connection – Terminal Block (YCAL0107-00253)

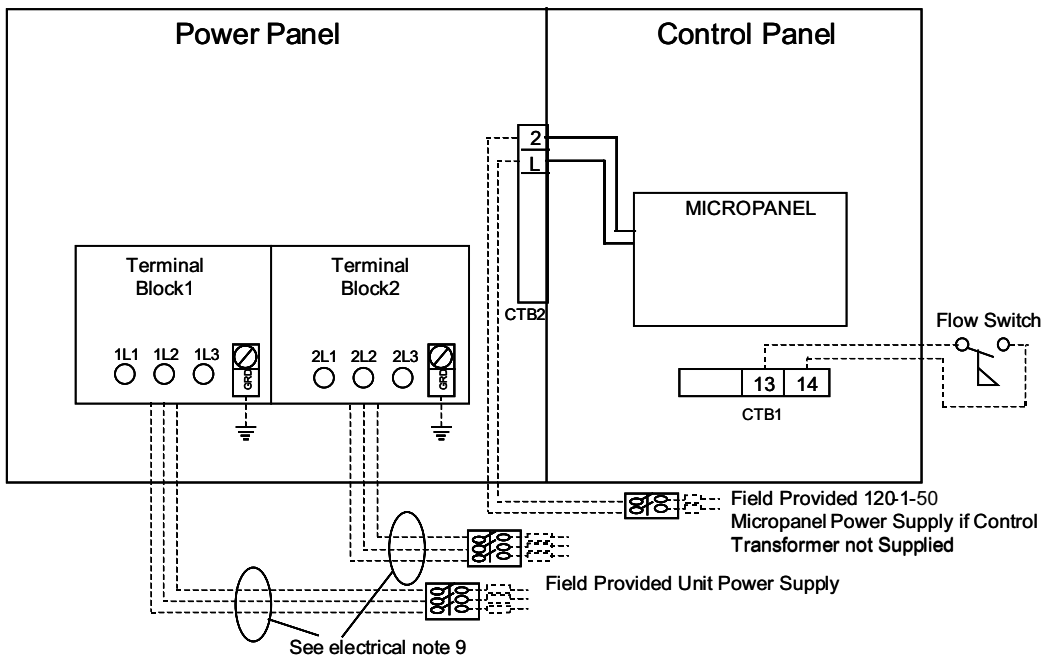


Figure 3: Multiple Point Power Supply Connection – Terminal Block, Non-Fused Disconnect Switches or Circuit Breakers (YCAL0287-0377)

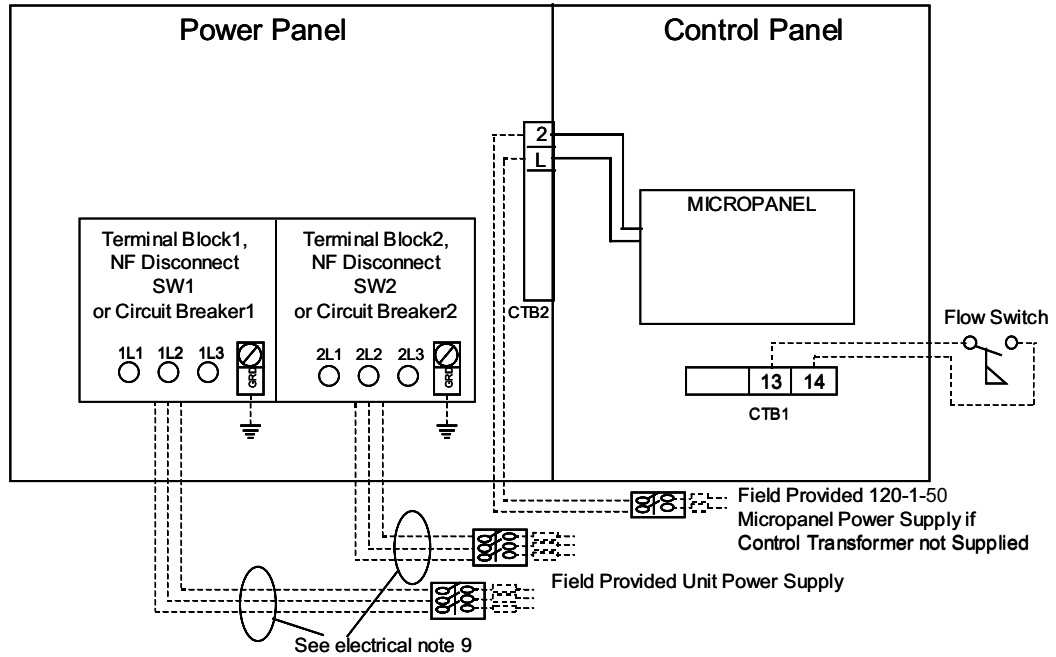
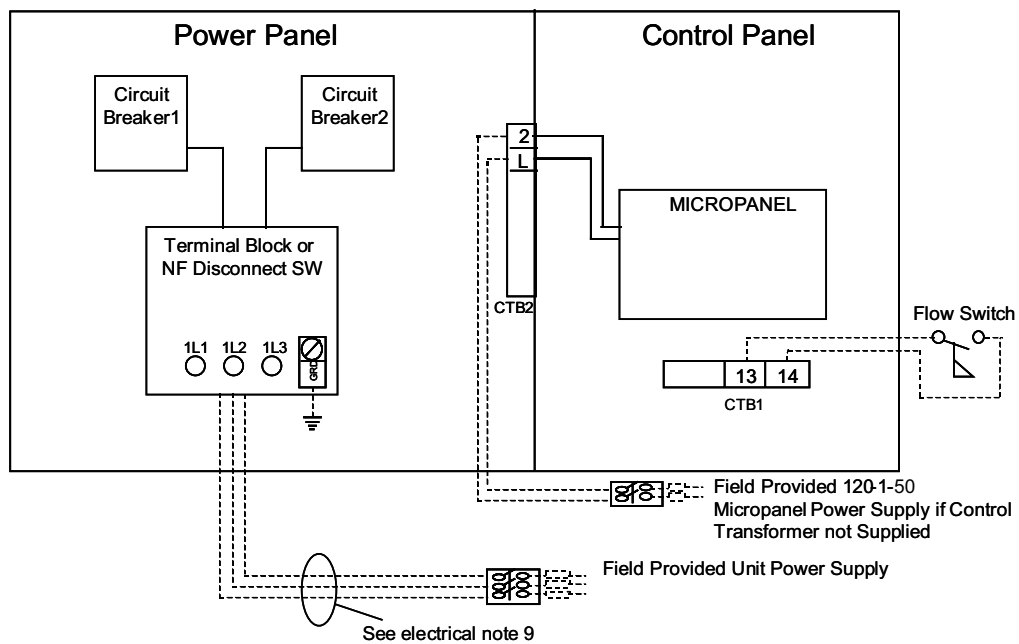
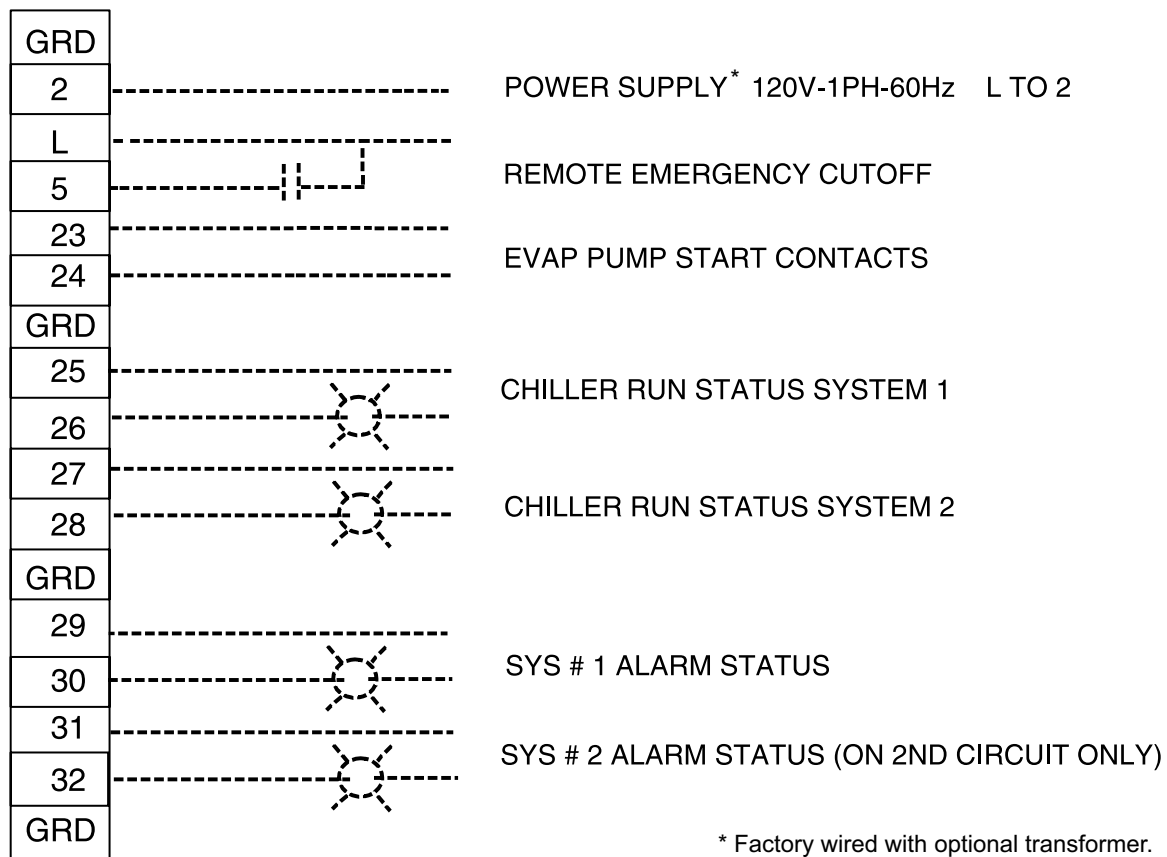
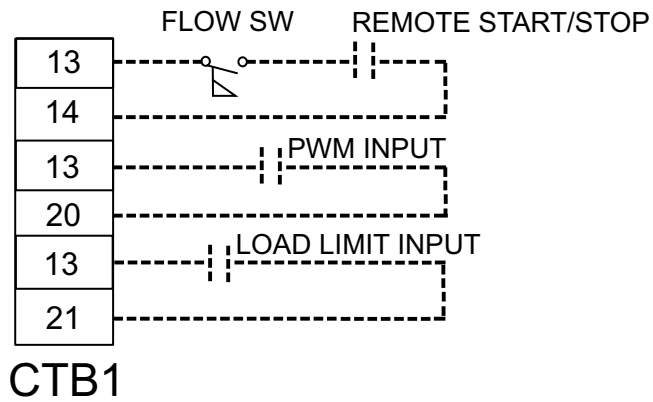


Figure 4: Single Point Supply Connection – Terminal Block or Non-Fused Disconnect Switch to Individual System Circuit Breakers (YCAL0280-0377)



Control Wiring



* Factory wired with optional transformer.

CTB2

LD03819

INTENTIONALLY LEFT BLANK

LD03611

Application Data

UNIT LOCATION

The YCAL chillers are designed for outdoor installation. When selecting a site for installation, be guided by the following conditions:

1. For outdoor locations of the unit, select a place having an adequate supply of fresh air for the condenser.
2. Avoid locations beneath windows or between structures where normal operating sounds may be objectionable.
3. Installation sites may be either on a roof, or at ground level. (See FOUNDATION.)
4. The condenser fans are the propeller-type, and are not recommended for use with duct work in the condenser air stream.
5. When it is desirable to surround the unit(s), it is recommended that the screening be able to pass the required chiller CFM without exceeding 0.1" of water external static pressure.
6. Protection against corrosive environments is available by supplying the units with either copper fin, cured phenolic, or epoxy coating on the condenser coils. The phenolic or epoxy coils should be offered with any units being installed at the seashore or where salt spray may hit the unit.

In installations where winter operation is intended and snow accumulations are expected, additional height must be provided to ensure normal condenser air flow.

Recommended clearances for units are given in DIMENSIONS. When the available space is less, the unit(s) must be equipped with the discharge pressure transducer option to permit high pressure unloading in the event that air recirculation were to occur.

FOUNDATION

The unit should be mounted on a flat and level foundation, ground or roof, capable of supporting the entire operating weight of the equipment. Operating weights are given in the PHYSICAL DATA tables.

ROOF LOCATIONS – Choose a spot with adequate structural strength to safely support the entire weight

of the unit and service personnel. Care must be taken not to damage the roof during installation. If the roof is “bonded”, consult the building contractor or architect for special installation requirements. Roof installations should incorporate the use of spring-type isolators to minimize the transmission of vibration into the building structure.

GROUND LEVEL INSTALLATIONS – It is important that the units be installed on a substantial base that will not settle, causing strain on the liquid lines and resulting in possible leaks. A one-piece concrete slab with footers extending below the frost line is highly recommended. Additionally, the slab should not be tied to the main building foundation as noises will telegraph.

Mounting holes (11/16" diameter) are provided in the steel channel for bolting the unit to its foundation. See DIMENSIONS.

For ground level installations, precautions should be taken to protect the unit from tampering by or injury to unauthorized persons. Screws on access panels will prevent casual tampering; however, further safety precautions, such as unit enclosure options, a fenced-in enclosure, or locking devices on the panels may be advisable. Check local authorities for safety regulations.

CHILLED LIQUID PIPING

The chilled liquid piping system should be laid out so that the circulating pump discharges into the cooler. The inlet and outlet cooler liquid connections are given in DIMENSIONS.

Hand stop valves are recommended for use in all lines to facilitate servicing. Drain connections should be provided at all low points to permit complete drainage of the cooler and system piping. Additionally, a strainer (40 mesh) is recommended for use on the INLET line to the cooler.

Pressure gauge connections are recommended for installation in the inlet and outlet water lines. Gauges are not furnished with the unit and are to be furnished by other suppliers.

The chilled liquid lines that are exposed to outdoor ambients should be wrapped with a supplemental heater cable and covered with insulation. As an alternative, ethylene glycol should be added to protect against freeze-up during low ambient periods.

A flow switch is available as an accessory on all units.

Guide Specifications

PART 1 – GENERAL

1.01 SCOPE

- A. The requirements of the General Conditions, Supplementary Conditions, Division 1, and Drawings apply to all Work herein.
- B. Provide Microprocessor controlled, multiple-scroll compressor, air-cooled, liquid chillers of the scheduled capacities as shown and indicated on the Drawings, including but not limited to:
 1. Chiller package
 2. Electrical power and control connections
 4. Chilled water connections

1.02 QUALITY ASSURANCE

- A. Products shall be Designed, Tested, Rated and Certified in accordance with, and installed in compliance with applicable sections of the following Standards and Codes:
 1. ANSI/ASHRAE Standard 15 – *Safety Code for Mechanical Refrigeration*
 2. ASHRAE 90.1– *Energy Efficiency compliance.*
 3. ANSI/NFPA Standard 70 – *National Electrical Code (N.E.C.).*
 4. *ASME Boiler & Pressure Vessel Code, Section VIII, Division 1.*
 5. ARI Standard 550/590 – *Positive Displacement Compressors and Air Cooled Rotary Screw Water-Chilling Packages.*
 6. Conform to Intertek Testing Services, formerly ETL, for construction of chillers.
 7. Manufactured in facility registered to ISO 9002.
- B. Factory Test: Chiller shall be pressure-tested, evacuated and fully charged with refrigerant and oil, and shall be factory operational run tested with water flowing through the vessel.
- C. Warranty: Manufacturer shall Warrant all equipment and material of its manufacture against defects in workmanship and material for a period of one year from date of initial start-up or eighteen (18) months from date of shipment, whichever occurs first.

1.03 DELIVERY AND HANDLING

- A. Unit shall be delivered to job site fully assembled,

and charged with refrigerant and oil by the Manufacturer.

- B. Unit shall be stored and handled per Manufacturer's instructions.

PART 2 - PRODUCTS

2.01 CHILLER MATERIALS AND COMPONENTS

- A. General: Install and commission, as shown on the schedules and plans, factory assembled, charged, and tested air cooled scroll compressor chiller(s) as specified herein. Chiller shall be designed, selected, and constructed using a refrigerant with Flammability rating of "1", as defined by ANSI/ASHRAE STANDARD - 34 *Number Designation and Safety Classification of Refrigerants*. Chiller shall include, but is not limited to: a complete system with a single refrigerant circuit 35 tons (123kW) and below, and not less than two refrigerant circuits above 35 tons (123kW), scroll compressors, direct expansion type evaporator, air-cooled condenser, refrigerant, lubrication system, interconnecting wiring, safety and operating controls including capacity controller, control center, motor starting components, and special features as specified herein or required for safe, automatic operation.
- B. Cabinet: External structural members shall be constructed of heavy gauge, galvanized steel coated with baked on powder paint which, when subject to ASTM B117, 500 hour, 5% salt spray test, yields minimum ASTM 1654 rating of "6".

2.02 COMPRESSORS

- Compressors: Shall be hermetic, scroll-type, including:
1. Compliant design for axial and radial sealing
 2. Refrigerant flow through the compressor with 100% suction cooled motor.
 3. Large suction side free volume and oil sump to provide liquid handling capability.
 4. Compressor crankcase heaters to provide extra liquid migration protection.
 5. Annular discharge check valve and reverse vent assembly to provide low pressure drop, silent shut-down and reverse rotation protection.
 6. Initial Oil charge.
 7. Oil Level sightglass.
 8. Vibration isolator mounts for compressors.
 9. Brazed-type connections for fully hermetic refrigerant circuits.

Guide Specifications

2.03 REFRIGERANT CIRCUIT COMPONENTS

Each refrigerant circuit shall include: liquid line shutoff valve with charging port, low side pressure relief device, filter-drier, solenoid valve, sight glass with moisture indicator, thermostatic expansion valves, and flexible, closed-cell foam insulated suction line.

2.04 HEAT EXCHANGERS

A. Evaporator:

1. Direct expansion type with refrigerant inside high efficiency copper tubes, chilled liquid forced over the tubes by galvanized steel baffles.
2. Constructed, tested, and stamped in accordance with applicable sections of ASME pressure vessel code for minimum 350 PSIG (24 bar) refrigerant side design working pressure and 150 PSIG (10 bar) water side design working pressure.
3. Shell covered with 3/4" (19mm), flexible, closed cell insulation, thermal conductivity of 0.26k ([BTU/HR-Ft²-°F]/in.) maximum. Water nozzles with grooves for mechanical couplings, and insulated by Contractor after pipe installation.
4. Provide vent and drain fittings, and thermostatically controlled heaters to protect to -20°F (29°C) ambient in off-cycle.

B. Air Cooled Condenser:

1. Coils: Internally enhanced, seamless copper tubes, mechanically expanded into aluminum alloy fins with full height collars. Subcooling coil an integral part of condenser. Design working pressure shall be 450 PSIG (31 bar).
2. Fans: Shall be dynamically and statically balanced, direct drive, corrosion resistant glass fiber reinforced composite blades molded into low noise, full airfoil cross section, providing vertical air discharge from extended orifices for efficiency and low sound. Each fan in its own compartment to prevent cross flow during fan cycling. Guards of heavy gauge, PVC (polyvinylchloride) coated or galvanized steel.
3. Fan Motors: High efficiency, direct drive, 6 pole, 3 phase, insulation class "F", current protected, Totally Enclosed Air-Over (TEAO), rigid mounted, with double sealed, permanently lubricated, ball bearings.

2.05 CONTROLS

A. General: Automatic start, stop, operating, and protection sequences across the range of scheduled

conditions and transients.

B. Microprocessor Enclosure: Rain and dust tight NEMA 3R/12 (IP55) powder painted steel cabinet with hinged, latched, and gasket sealed door.

C. Microprocessor Control Center:

1. Automatic control of compressor start/stop, anti-coincidence and anti-recycle timers, automatic pumpdown shutdown, condenser fans, evaporator pump, evaporator heater, unit alarm contacts, and chiller operation from 0°F to 125°F (-18°C to 52°C) ambient. Automatic reset to normal chiller operation after power failure.
2. Remote water temperature reset via a Pulse Width Modulated (PWM) input signal or up to two steps of demand (load) limiting.
3. Software stored in non-volatile memory, with programmed setpoints retained in lithium battery backed real time clock (RTC) memory for minimum 5 years.
4. Forty character liquid crystal display, descriptions in English (or Spanish, French, Italian, or German), numeric data in English (or Metric) units. Sealed keypad with sections for Setpoints, Display/Print, Entry, Unit Options & clock, and On/Off Switch.
5. Programmable Setpoints (within Manufacturer limits): display language; chilled liquid temperature setpoint and range, remote reset temperature range, set daily schedule/holiday for start/stop, manual override for servicing, low and high ambient cutouts, number of compressors, low liquid temperature cutout, low suction pressure cutout, high discharge pressure cutout, anti-recycle timer (compressor start cycle time), and anti-coincident timer (delay compressor starts).
6. Display Data: Return and leaving liquid temperatures, low leaving liquid temperature cutout setting, low ambient temperature cutout setting, outdoor air temperature, English or metric data, suction pressure cutout setting, each system suction pressure (optional on YCAL0014 0060 models), discharge pressure (optional), liquid temperature reset via a YORK ISN DDC or Building Automation System (by others) via PWM input as standard or a 4-20milliamp or 0-10 VDC input or contact closure with optional BAS interface, anti-recycle timer status for each compressor, anti-coincident system start timer condition, compressor run status, no cooling load condition, day, date and time, daily start/stop times, holiday status, automatic or manual system lead/lag control, lead system definition,

compressor starts/operating hours (each), status of hot gas valves, evaporator heater and fan operation, run permissive status, number of compressors running, liquid solenoid valve status, load & unload timer status, water pump status.

7. System Safeties: Shall cause individual compressor systems to perform auto shut down; manual reset required after the third trip in 90 minutes. Includes: high discharge pressure, low suction pressure, high pressure switch, and motor protector. Compressor motor protector shall protect against damage due to high input current or thermal overload of windings.
 8. Unit Safeties: Shall be automatic reset and cause compressors to shut down if low ambient, low leaving chilled liquid temperature, under voltage, and flow switch operation. Contractor shall provide flow switch and wiring per chiller manufacturer requirements.
 9. Alarm Contacts: Low ambient, low leaving chilled liquid temperature, low voltage, low battery, and (per compressor circuit): high discharge pressure, and low suction pressure.
- D. Manufacturer shall provide any controls not listed above, necessary for automatic chiller operation. Mechanical Contractor shall provide field control wiring necessary to interface sensors to the chiller control system.

2.06 POWER CONNECTION AND DISTRIBUTION

- A. Power Panels:
 1. NEMA 3R/12 (IP55) rain/dust tight, powder painted steel cabinets with hinged, latched, and gasket sealed outer doors. Provide main power connection(s), control power connections, compressor and fan motor start contactors, current overloads, and factory wiring.
 2. Power supply shall enter unit at a single location, be 3 phase of scheduled voltage, and connect to individual terminal blocks per compressor. Separate disconnecting means and/or external branch circuit protection (by Contractor) required per applicable local or national codes.
- B. Exposed compressor, control and fan motor power wiring shall be routed through liquid tight conduit.

2.07 ACCESSORIES AND OPTIONS

Some accessories and options supercede standard product features. Your YORK representative will be pleased to provide assistance.

- A. Microprocessor controlled, Factory installed Across-the-Line type compressor motor starters as standard.
- B. Outdoor Ambient Temperature Control
 1. Low Ambient Control: Permits unit operation to 0°F ambient. Standard unit controls to 25°F ambient. Low Ambient Control standard on YCAL0090-0124 models.
 2. High Ambient Control: Permits unit operation above 115°F ambient.
- C. Power Supply Connections:
 1. Single Point Power Supply: Single point Terminal Block for field connection and interconnecting wiring for compressors. Separate external protection must be supplied, by others, which must comply with the National Electric Code and/or local codes. Single Point Power Supply option available on YCAL0087-0253 models and standard on YCAL0043-0087 models
 2. Single Point or Multiple Point Power Supply with individual System Circuit Breakers: Single or Multiple Point Terminal Block(s) for field connection and factory interconnecting wiring to factory supplied system breakers. Available on YCAL 0287-0377 models.
 3. Single Point or Multiple Point Disconnect: Single or Dual point Non-Fused Disconnect(s) and lockable external handle (in compliance with Article 440-14 of N.E.C.) can be supplied to isolate the unit power voltage for servicing. Separate external fusing must be supplied by others, in the incoming power wiring, which must comply with the National Electric Code and/or local codes.
 4. Single Point Disconnect with Individual System Breakers: Single Point Terminal Block with Non-Fused Disconnect and lockable external handle (in compliance with Article 440-14 of N.E.C.) can be supplied to isolate power voltage for servicing. Factory interconnecting wiring from disconnect to factory supplied circuit breakers. Available on YCAL0287-0377 models.
 5. Single Point Circuit Breaker: Single Point Terminal Block with Circuit Breaker and lockable external handle (in accordance with Article 440-14 of the N. E. C.) can be supplied to isolate power voltage for servicing. Incoming power must comply with the National Electric Code and/or local codes. Single Point Circuit Break-

Guide Specifications

ers available on YCAL0043-0157.

- D. Pressure Transducers and Readout Capability
 - 1. Discharge Pressure Transducers: Permits unit to sense and display discharge pressure. Standard on YCAL0287-0377 models.
 - 2. Suction Pressure Transducers: Permits unit to sense and display suction pressure. This capability is standard on YCAL0237-0377 models.
- E. Control Power Transformer: Converts unit power voltage to 120-1-60 (500 VA capacity). Factory-mounting includes primary and secondary wiring between the transformer and the control panel.
- F. Motor Current Module: Capable of monitoring compressor motor current. Provides extra protection against compressor reverse rotation, phase-loss and phase imbalance. Option consists of one module per electrical system. (Factory-mounted.)
- G. Power Factor Correction Capacitors: Provided to correct unit compressor factors to a 0.90-0.95.
- H. Condenser Coil Environmental Protection:
 - 1. Pre-Coated Fin: Epoxy coated aluminum fin stock to guard from corrosive agents and insulate against galvanic potential. For mild sea shore or industrial locations.
 - 2. Copper Fin: Provide copper fins in lieu of aluminum.
 - 3. Post-Coated-Dipped: Dipped-cured coating on condenser coils for seashore and other corrosive applications (with the exception of strong alkalis, oxidizers, and wet bromine, chlorine and fluorine in concentrations greater than 100ppm).
- I. Protective Chiller Panels (Factory or Field Mounted)
 - 1. Louvered Panels (condenser coils only): Painted steel as per remainder of unit cabinet, over external condenser coil faces.
 - 2. Wire Panels (full unit): Heavy gauge, welded wire-mesh, coated to resist corrosion, to protect condenser coils from incidental damage and restrict unauthorized access to internal components.
 - 3. Louvered Panels (full unit): Painted steel as per remainder of unit cabinet, to protect condenser coils from incidental damage, visually screen internal components, and prevent unauthorized access to internal components.
- 4. Louvered/Wire Panels: Louvered steel panels on external condenser coil faces, painted as per remainder of unit cabinet. Heavy gauge, welded wire-mesh, coated to resist corrosion, around base of machine to restrict unauthorized access.
- J. Flow Switch (Field-mounted): Vapor proof SPDT, NEMA 4X switch (___ 150 PSIG or ___ 300 PSIG), -20°F to 250°F.
- K. Differential Pressure Switch: Alternative to an above mentioned flow switch. Pretempco model DPS300A-P40PF-82582-5 (300 psi max. working pressure) SPDT 5 amp 125/250VAC switch, Range 0 - 40 PSID, deadband 0.5 - 0.8 psi, with 1/4" NPTE Pressure Connections.
- L. Evaporator options:
 - 1. Provide 1½" cooler insulation in lieu of standard ¾".
 - 2. Provide DX Cooler with 300 PSIG water-side design working pressure in lieu of standard 150 PSIG.
 - 3. Provide Raised Face Flanges for field installation on cooler nozzles and field piping:
 - a. 150 PSIG, welded Flanges.
 - b. 300 PSIG, welded Flanges.
- M. Service Isolation valves: Service suction and discharge (ball type) isolation valves are added to unit per system. This option also includes a system high pressure relief valve in compliance with ASHRAE 15. (Factory-mounted.)
- N. Remote Cooler: Manufacturer shall provide separately: chiller less evaporator, leaving and return water sensors, and liquid line components (solenoid valves, filter driers, sight glasses, and TXVs), as discrete elements of a complete factory system. Contractor shall be field erect system and provide interconnecting refrigerant piping and wiring in accordance with Manufacturer recommendations, and project plans and schedules. Where not otherwise specified, Contractor provided system piping shall be in accordance with applicable sections of ASHRAE Handbook.
- O. Hot Gas By-Pass: Permits continuous, stable operation at capacities below the minimum step of unloading to as low as 5% capacity (depending on both the unit & operating conditions) by introducing an artificial load on the cooler. Hot gas by-pass is installed on only one refrigerant circuit.

- P. Microprocessor Membrane Keypad Graphics on in lieu of Standard English:
1. French language.
 2. German language.
 3. Spanish language.
 4. Italian language.
- Q. Thermal Storage: Leaving chilled liquid setpoint range for charge cycle from 25°F to 20°F minimum, with automatic reset of the leaving brine temperature up to 40°F above the setpoint.
- R. Low Temperature Process Brine: Leaving chilled liquid setpoint range 20°F to 50°F.
- S. Chicago Code Relief Valves to meet Chicago Code requirements.
- T. Building Automation System (EMS) Reset Interface: Chiller to accept 4 to 20mA, 0 to 10 VDC, or discrete contact closure input to reset the leaving chilled liquid temperature.
- U. Remote Control Panel (Field-mounted): Auxiliary panel for remote user interface for functions normally made at the unit control center. Available on YCAL0014-0080 models.
- V. OptiView Remote Control Panel (Field-mounted): Graphical interface panel to remotely control and monitor up to 8 different units.
- W. Multi-Unit Sequencing Panel (Field-mounted): Separate Sequencing control center is provided to permit control of up to eight chillers in parallel based on mixed liquid temperature.
- X. Sound Reduction (Factory-mounted):
1. Low speed, reduced noise fans
 2. Compressor Acoustic Sound Blankets
- Y. Vibration Isolation (Field-mounted):
1. Neoprene Pad Isolators.
 2. 1 Inch Deflection Spring Isolators: Level adjustable, spring and cage type isolators for mounting under the unit base rails.
 3. 2 Inch Deflection Seismic Isolators: Level adjustable, restrained mounts in rugged welded steel housing with vertical and horizontal limit stops. Housings shall be designed to withstand a minimum 1.0g accelerated force in all directions to 2 inches.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. General: Rig and Install in full accordance with Manufacturers requirements, Project drawings, and Contract documents.
- B. Location: Locate chiller as indicated on drawings, including cleaning and service maintenance clearance per Manufacturer instructions. Adjust and level chiller on support structure.
- C. Components: Installing Contractor shall provide and install all auxiliary devices and accessories for fully operational chiller.
- D. Electrical: Coordinate electrical requirements and connections for all power feeds with Electrical Contractor (Division 16).
- E. Controls: Coordinate all control requirements and connections with Controls Contractor.
- F. Finish: Installing Contractor shall paint damaged and abraded factory finish with touch-up paint matching factory finish.







P.O. Box 1592, York, Pennsylvania USA 17405-1592
Copyright © by York International Corporation 2001

Tel: 800-861-1001
www.york.com

Subject to change without notice. Printed in USA
ALL RIGHTS RESERVED

Form 150.62-EG1 (102)
Supersedes: 150.62-EG1 (1001)

XXX 3M 102 7.36
Codes: DXL, ET