FORM 150.63-EG2 (899)

MILLENNIUM® AIR-COOLED SCROLL CONDENSING UNIT

YCUL0045SC – YCUL0275SC
45 – 275H KW
12 – 78 TON
50 HZ

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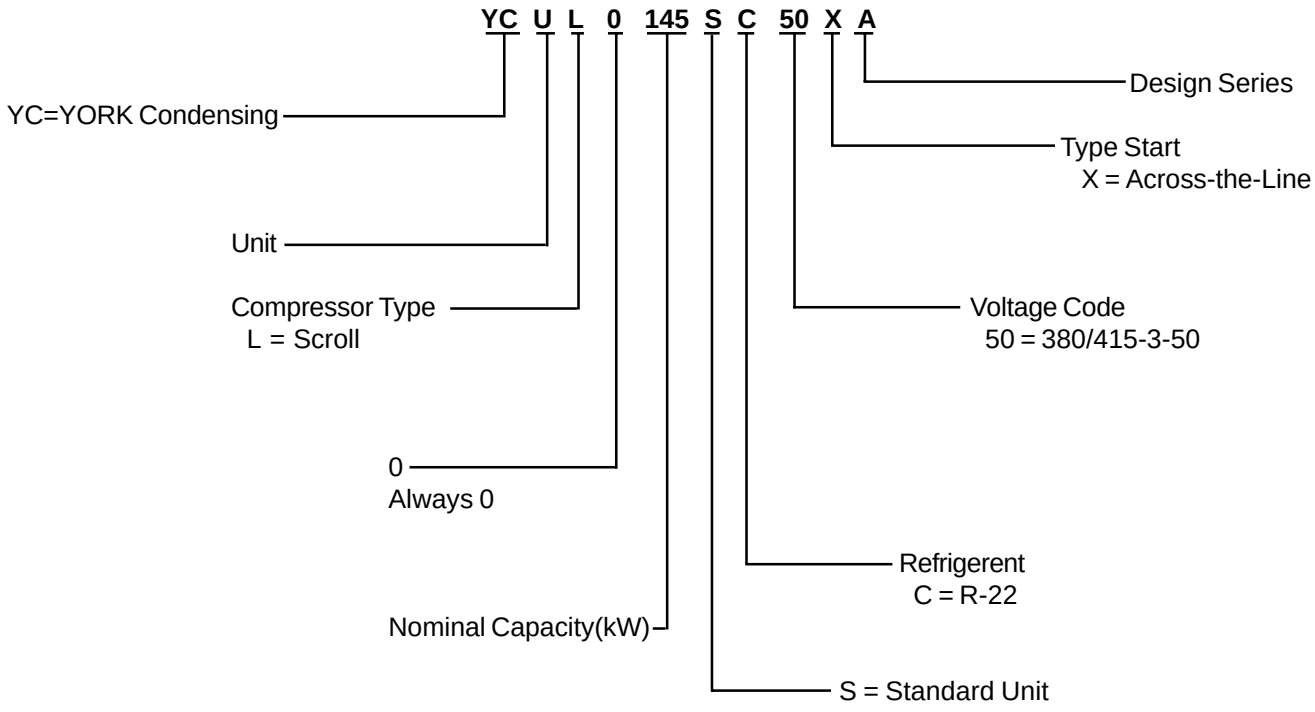
NOMENCLATURE



Introduction

YORK *Millennium*® Air-Cooled Scroll Condensing Units are the perfect refrigeration components for all air conditioning applications that use DX central station air handling. They are designed for outdoor (roof or ground level) installation. Each unit includes hermetic scroll compressors, an air cooled condenser, and a weather resistant microprocessor control center, all mounted on a formed steel base.

Specifications

GENERAL

The 45 - 275 kW (12 - 78 ton) YCUL Models are shipped complete from the factory ready for installation.

The unit is pressure-tested, evacuated and given a holding charge of Refrigerant-22 (HCFC-22) and includes an initial oil charge (remaining R-22 supplied by others). After assembly, a operational test is performed to assure that each control device 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, and are c ETL listed. All units are produced at an ISO 9000-registered facility.

COMPRESSORS

The chiller has suction-gas cooled, hermetic, scroll compressors. The compressor features a no-contact scroll design utilizing floating tip seals. High efficiency is achieved through a controlled orbit and the use of an advanced scroll geometry. All rotating parts are statically and dynamically balanced. A large internal volume and oil reservoir means greater liquid tolerance.

CONDENSER

Coils – The condenser coils are seamless copper tubes 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. The 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.

REFRIGERANT CIRCUIT

One (YCUL0045-0121) or two (YCUL00125-0275) independent refrigerant circuits will be finished on each unit. All unit piping will be copper, with brazed joints. The liquid line will include a field connection shutoff valve with charging port located on each condenser circuit. Suction line connections are provided on each refrigeration circuit at the suction valve. A filter drier and sight glass are shipped loose for field installation on each refrigerant circuit. Field refrigerant piping can be connected to the condensing unit without loss of charge in the unit.

All expansion valves and liquid line solenoid valves and refrigerant field piping are supplied by others.

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:
- Suction temperatures (optional)
- 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:
- Suction pressure setting
- Suction pressure control zone
- Remote reset temperature range
- Set daily schedule/holiday for start/stop
- Manual override for servicing
- Low and high ambient cutouts
- Number of compressors
- 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 clock
- Set options
- Set unit option
- Set unit control for Discharge Air Temperature Control or for Suction Pressure Control (requires Suction Pressure Transducers – standard on YCUL0211 - 0275 and optional on YCUL0045 - 0185.

UNIT ON/OFF switch

The microprocessor control center is capable of displaying the following:

- Suction temperatures (optional)
- Low ambient temperature cutout setting
- Outdoor air temperature
- English or Metric data
- Suction pressure cutout setting
- Each system suction pressure (optional on YCUL0045-0185 models and standard on YCUL0211 - 0275 kW models) and discharge pressure (optional)
- Discharge Air 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 (Discharge Air Temperature control only)
- Automatic lead/lag of compressors within a system
- Compressor starts & operating hours (each compressor)
- Status of hot gas valves, and fan operation
- Run permissive status
- Number of compressors running
- Liquid solenoid valve status
- Load & unload timer status

Specifications *(Continued)*

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 115-1-50 control power
- Fan contactors & overload current protection

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

Options and Accessories

POWER OPTIONS:

COMPRESSOR POWER CONNECTIONS – See electrical data for specific voltage and options availability. (Factory-mounted).

SINGLE-POINT SUPPLY TERMINAL BLOCK – (*Available on YCUL0125 - 0275 models [standard on YCUL0045 - 0121 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 NON-FUSED DISCONNECT SWITCH – A unit-mounted disconnect switch 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*. (This option includes the Single-Point Power connection).*

SINGLE-POINT CIRCUIT BREAKER – 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 115-1-50 (500VA capacity). Factory mounting includes primary- and secondary-wiring between the transformer and the control panel. (Factory-mounted.)

CE MARK – System wiring and components are designed in compliance with European conformity. (Single Point Circuit Breaker Option must also be included for unit to comply with CE.)

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

CONTROL OPTIONS:

AMBIENT KIT (LOW) – Standard units will operate to -4°C (25°F). This accessory includes all necessary components to permit chiller operation to -18°C (0°F). (*This option includes the Discharge Pressure Transducer / Readout Capability option).* (Factory mounted).

AMBIENT KIT (HIGH) – Required if units are to operate when the ambient temperature is above 46°C (115°F). 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 discharge air 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 READOUT CAPABILITY – The addition of pressure transducers allows models to sense and display discharge pressure. This is recommended for brine chilling applications. *(This option as included with either the low or high ambient kits).* (Factory mounted).

SUCTION PRESSURE TRANSDUCERS AND READOUT CAPABILITY – (*Available on YCUL0045-0185 models [standard on YCUL0211-0275 models]).* The addition of suction transducers allows models to sense and display suction pressure. This option is required for suction pressure control capability on YCUL0045-0185. (Factory mounted).

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

COMPRESSOR AND PIPING OPTIONS:

CHICAGO CODE RELIEF VALVES – Unit will be provided with relief valves to meet Chicago code requirements. (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. Hot gas by-pass is installed on only refrigerant system #1 on two circuited units. (Factory mounted).

Options and Accessories *(Continued)*

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).

BLACK FIN 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 phenolic-coated coils (below), are recommended for units being installed at the seashore or where salt spray may hit the unit.

PHENOLIC-COATED CONDENSER COILS – The unit is built with cured-phenolic-coated condenser coils. This is another choice for seashore and other corrosive applications (with the exception of strong alkalies, 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) – 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. This can cut installation cost by eliminating the need for separate, expensive fencing. (Factory- or field-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 or field-mounted).

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

LOUVERED PANELS (Full Unit) – Louvered panels surround the front, back, and sides of the unit. These 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 46°C (115°F). (Factory- or field-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 15 mm (5/8") thickness; one layer of anti-vibrating heavy material thickness of 3mm (1/8") . 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 25.4mm (1") or seismic deflection or neoprene pad isolators for mounting under unit base rails. (Field mounted).

Selection Data

The ratings shown on pages 20 through 34 are based on unit operation in a well designed and properly piped system.

SELECTION RULES

1. Capabilities are based on Refrigerant 22.
2. Ratings may interpolated, but must not be extrapolated.
3. Ratings shown are at saturated suction temperatures corresponding to pressures at the compressor. In actual practice, suction line pressure drop has the effect of reducing compressor capacity, forcing the compressor to operate at a lower suction pressure to maintain the desired evaporator temperature.

For normal air conditioning applications, size the suction line for a pressure drop of 0.2 bar (3 PSI), corresponding to 1.1°C (2°F), for R-22 refrigerant. Thus, the evaporator temperature will be approximately 1.1°C (2°F) higher than the compressor suction temperature. Line loss must be taken into consideration when selecting the evaporator.

SELECTION PROCEDURE

The air-cooled condensing unit may be selected from the Ratings on pages 20 through 34, if the ambient air temperature at the condenser and the saturated suction temperature at the compressor are known. The ambient air temperature is a known design parameter, but the suction temperature at the compressor, in many cases, is known only within certain allowable limits. The actual compressor operating suction temperature and the overall performance of the system will depend directly upon the choice of the evaporator. Starting with a preliminary evaporator selection at a nominal evaporator temperature and using data supplied by the evaporator manufacturer, enter the ratings tables and select a unit to meet the required cooling load at a suction temperature at least 1.1°C (2°F) below the evaporator temperature. The 1.1°C (2°F) allows for normal suction line loss.

If more accurate selection is required, the evaporator capacity should be plotted against the condensing unit capacity to determine the balanced system performance. Again, it is necessary to factor in the suction line loss.

After the system balance point has been determined, the compressor KW input may be interpolated from the ratings tables.

SAMPLE SELECTION

Select an Air-Cooled Condensing Unit with a matched central station air handling unit having the following operating conditions:

Design Conditions

1. An air handling unit with four large DX coils (two per circuit) having a total cooling load of 600 MBH (50 tons).
2. The coil suction temperature required 45°F.
3. The design outdoor ambient temperature is 95°F.
4. The power supply is 380V/3 phase/50 HZ.

Selection

1. Enter the YCU 50 HZ Rating Table (page xx).
2. The model YCUL0185SC will provide 50.8 tons with 48.1 compressor KW input at 95°F ambient air and 43°F suction pressure.
3. Calculate the compressor KW input for the specific design conditions of 50 tons and 95°F ambient air.

$$KW = \frac{50 \text{ tons}}{50.8 \text{ tons}} \times 48.1 \text{ KW} = 47.3 \text{ KW}$$

The YCUL0185SC is the suitable selection for the design capacity.

REFRIGERANT PIPING

General – When the unit has been located in its final position, the unit piping may be connected. Normal installation precautions should be observed in order to receive maximum operating efficiencies. System piping should conform to ASHRAE guidelines. All piping design and installation is the responsibility of the user.

YORK ASSUMES NO WARRANTY RESPONSIBILITY FOR SYSTEM OPERATION OR FAILURES DUE TO IMPROPER PIPING OR PIPING DESIGN.

Filter driers and sight glasses are shipped loose for field installation on each refrigerant circuit. Field refrigerant piping can be connected to the condensing unit without loss of the holding charge in the unit.

All expansion valves, liquid line solenoid valves, and refrigerant piping are supplied and installed by others.

Table 4 lists refrigerant line connections sizes per unit model number.

REFRIGERANT LINE SIZING

Refrigerant piping systems must be designed to provide practical line sizes without excessive pressure drops, prevent compressor oil from being "trapped" in the refrigerant piping, and ensure proper flow of liquid refrigerant to the thermal expansion valve. Considerations should be give to:

1) Suction line pressure drop due to refrigerant flow.
2) Suction line refrigerant velocity for oil return.
3) Liquid line pressure drop due to refrigerant flow.
4) Liquid line pressure drop (or gain) due to vertical rise of the liquid line.

Table 5 provides the pressure drops for given pipe sizes for both liquid and suction lines. The pressure drops given are per 30.5 m (100 ft.) of refrigerant piping. These friction losses do not include any allowances for strainer, filter drier, solenoid valve, isolation valve or fittings

Nominal pressure drop for solenoids, sight glass, and driers are shown in Table 2.

Table 1 includes approximate equivalent lengths for copper fittings.

To ensure a solid column of liquid refrigerant to the expansion valve, the total liquid line pressure drop should never exceed 276 kPa (40 psi). Refrigerant vapor in the liquid line will measurably reduce valve capacity and poor system performance can be expected.

To allow adequate oil return to the compressor, suction risers should be sized for a minimum of 5.08 m/s (1000 FPM) while the system is operating at minimum capacity to ensure oil return up the suction riser. Refer to Table 5 under column labeled Nominal Tons (KW) Unloaded.

Evaporator Below Condensing Unit

On a system where the evaporator is located below the condensing unit, the suction line must be sized for both pressure drop and oil return. In some cases a double suction riser must be installed to ensure reliable oil return at reduced loads. Table 3 indicates when a double suction riser should be used for listed pipe sizes to provide adequate oil return at reduced loads. The calculated information was based on maintaining a minimum of 5.08 m/s (1000 fpm) refrigerant vapor velocity.

Condenser Below Evaporator

When the condensing unit is located below the evaporator, the liquid line must be designed for both friction loss and static head loss due the vertical rise. The value of static head loss of 3.4 kPa/30 cm (5 PSI/ft.) must be added to the friction loss pressure drop in addition to all pressure drops due to driers, valves, etc.

OIL TRAPS

All horizontal suction lines should be pitched at least 2 cm/m (1/4" per foot) in the direction of the refrigerant flow to aid in the return of oil to the compressor. All suction lines with a vertical rise exceeding .91 meters (3 feet) should have a "P" trap at the bottom and top of the riser. Suction lines with a vertical rise exceeding 7.6 meters (25 feet) should be trapped every 4.6 meters (15 feet).

REFRIGERANT CHARGE

The condensing unit is charged with 2.7 kg (6 lbs.) of R-22 for a holding charge. The remaining operating charge for the condensing unit, evaporator coil, and refrigerant piping must be weighed in after all refrigerant piping is installed, leak checked, and evacuated. Final adjustment of refrigerant charge should be verified by subcooling values (refer to section on Pre-Startup for checking subcooling).

REFRIGERANT PIPING REFERENCE

For more details, refer to ASHRAE Refrigeration Handbook, Chapter 2.

TABLE 1 – FITTING EQUIVALENT LENGTHS

*COPPER FITTING EQUIVALENT LENGTHS		
LINE SIZE O.D.	SHORT-RADIUS ELL	LONG-RADIUS ELL
3/4" (19mm)	6.5 ft. (2m)	4.5 ft. (1.4m)
7/8" (22mm)	7.8 ft. (2.4m)	5.3 ft. (1.6m)
1-1/8" (29mm)	2.7 ft. (.8m)	1.9 ft. (.6m)
1-3/8" (35mm)	3.2 ft. (1m)	2.2 ft. (.7m)
1-5/8" (41mm)	3.8 ft. (1.2m)	2.6 ft. (8m)
2-1/8" (54mm)	5.2 ft. (1.6m)	3.4 ft. (1m)
2-5/8" (67mm)	6.5 ft. (20m)	4.2 ft. (1.3m)

TABLE 2 – MISCELLANEOUS LIQUID LINE PRESSURE DROPS

*MISCELLANEOUS LIQUID LINE PRESSURE	
SOLENOID VALVE	2 TO 3 PSI (13.8 TO 20.7 kPa)
FILTER/DRIER	2 TO 3 PSI (13.8 TO 20.7 kPa)
SIGHT GLASS	0.5 PSI (3.4 kPa)

TABLE 4 – REFRIGERANT LINE CONNECTIONS

YCUL REFRIGERANT LINE CONNECTIONS		
MODEL YCUL0	SUCTION	LIQUID
045	1-3/8"	7/8"
061	1-5/8"	7/8"
081	2-1/8"	7/8"
095	2-1/8"	7/8"
121	2-1/8"	7/8"
125	2-1/8"	7/8"
145	2-1/8"	7/8"
161	2-1/8"	7/8"
171	2-1/8"	7/8"
185	2-1/8"	7/8"
211	2-1/8"	1-1/8"
235	2-1/8"	1-1/8"
255	2-1/8"	1-1/8"
275	2-5/8"	1-1/8"

TABLE 3 – REFRIGERATION PIPING CHARGES

REFRIGERANT LINE CHARGES			
SUCTION LINES		LIQUID LINES	
1-3/8" (35mm)	.2 oz./ft. (6 grams/30cm)	3/4" (19mm)	2.7 oz./ft. (76 grams/30cm)
1-5/8" (41mm)	.3 oz./ft. (8 grams/30 cm)	7/8" (22mm)	3.7 oz./ft. (105 grams/30cm)
2-1/8" (54mm)	.6 oz/ft. (17 grams/30cm)	1-1/8" (29mm)	6.2 oz./ft. (176 grams/30cm)
2-5/8" (67mm)	.8 oz./ft. (23 grams/30cm)	1-3/8" (35mm)	8.6 oz./ft. (244 grams/30cm)

* Pressure drops or equivalent length values are approximate. If more precise value is desired, consult ASHRAE Refrigerant Handbook.

Selection Data *(Continued)*

TABLE 5 – REFRIGERANT LINE PRESSURE DROPS (ENGLISH)

MODEL NUMBER YCUL00	SYSTEM NUMBER	[1]NOMINAL TONS	SUCTION LINE				LIQUID LINE	
			COPPER TYPE L INCHES O.D.	[2]PRESSURE DROP PSI/100 FT.	VELOCITY @NOMINAL CAPACITY IN FPM	[4]NOMINAL TONS UNLOADED	COPPER TYPE L INCHES O.D.	[3]PRESSURE DROP PSI/100 FT.
45	1	13	1-5/8	1.9	2080	7.5	5/8	9.2
			[5]2-1/8	0.5	1170		3/4	3.5
61	1	17	1-5/8	3.2	2720	9	5/8	15.1
			[5]2-1/8	0.8	1530		3/4	5.7
81	1	22	1-5/8	5.1	3520	12	3/4	9.1
			2-1/8	1.3	1980		7/8	4.2
95	1	28	2-1/8	2.0	2520	14	3/4	14.3
			[5]2-5/8	0.7	1680		7/8	6.5
121	1	32	2-1/8	2.6	2880	11	7/8	8.4
			[5]2-5/8	0.9	1920		1-1/8	2.4
125	1	18	1-5/8	3.5	2880	9	3/4	6.3
			[5]2-1/8	0.9	1620		7/8	2.9
	2	18	1-5/8	3.5	2880	9	3/4	6.3
			[5]2-1/8	0.9	1620		7/8	2.9
145	1	22	1-5/8	5.1	3520	11	3/4	9.1
			[5]2-5/8	1.3	1980		7/8	4.2
	2	18	1-5/8	3.5	2880	9	3/4	6.3
			[5]2-5/8	0.9	1620		7/8	2.9
161	1	23	1-5/8	5.5	3680	12	3/4	9.9
			2-1/8	1.4	2070		7/8	4.5
	2	23	1-5/8	5.5	3680	12	3/4	9.9
			2-1/8	1.4	2070		7/8	4.5
171	1	26	2-1/8	1.8	2340	13	3/4	12.4
			[5]2-5/8	0.6	1560		7/8	5.7
	2	22	1-5/8	5.1	3520	11	3/4	9.1
			2-1/8	1.3	1980		7/8	4.2
185	1	27	[5]2-1/8	1.9	2430	14	3/4	13.3
			[5]2-5/8	0.7	1620		7/8	6.1
	2	27	2-1/8	1.9	2430	14	3/4	13.3
			[5]2-5/8	0.7	1620		7/8	6.1

See Page 15 for Refrigerant Piping Notes.

TABLE 5 – REFRIGERANT LINE PRESSURE DROPS (ENGLISH)

MODEL NUMBER YCUL00	SYSTEM NUMBER	[1]NOMINAL TONS	SUCTION LINE				LIQUID LINE	
			COPPER TYPE L INCHES O.D.	[2]PRESSURE DROP PSI/100 FT.	VELOCITY @NOMINAL CAPACITY IN FPM	[4]NOMINAL TONS UNLOADED	COPPER TYPE L INCHES O.D.	[3]PRESSURE DROP PSI/100 FT.
211	1	33	2-1/8	2.7	2970	11	7/8	8.9
			[5]2-5/8	1.0	1980		1-1/8	2.5
	2	26	[5]2-1/8	1.8	2340	9	3/4	12.4
			[5]2-5/8	.6	1560		7/8	5.7
235	1	33	2-1/8	2.7	2970	11	7/8	8.9
			[5]2-5/8	1.0	1980		1-1/8	2.5
	2	33	2-1/8	2.7	2970	11	7/8	8.9
			[5]2-5/8	1.0	1980		1-1/8	2.5
255	1	39	2-1/8	3.7	3510	13	7/8	12.1
			[5]2-5/8	1.3	2340		1-1/8	3.4
	2	33	2-1/8	2.7	2970	11	7/8	8.9
			[5]2-5/8	1.0	1980		1-1/8	2.5
275	1	39	2-1/8	3.7	3510	13	7/8	12.1
			[5]2-5/8	1.3	2340		1-1/8	3.4
	2	39	2-1/8	3.7	3510	13	7/8	12.1
			[5]2-5/8	1.3	2340		1-1/8	3.4

See Page 15 for Refrigerant Piping Notes.

Selection Data *(Continued)*

TABLE 5 – REFRIGERANT LINE PRESSURE DROPS (METRIC)

MODEL NUMBER YCUL00	SYSTEM NUMBER	[1]NOMINAL KW	SUCTION LINE				LIQUID LINE	
			COPPER TYPE L INCHES O.D.	[2]PRESSURE DROP kPa/30.5 m	VELOCITY @NOMINAL CAPACITY IN M/S	[4]NOMINAL KW UNLOADED	COPPER TYPE L INCHES O.D.	[3]PRESSURE DROP kPa/30.5 m
45	1	46	1-5/8	13.1	10.6	26	5/8	63.4
			[5]2-1/8	3.4	5.9		3/4	24.1
61	1	60	1-5/8	22.1	13.8	32	5/8	104.1
			[5]2-1/8	5.5	7.8		3/4	39.3
81	1	77	1-5/8	35.2	17.9	42	3/4	62.7
			2-1/8	9.0	10.6		7/8	29.0
95	1	98	2-1/8	13.8	12.8	49	3/4	99.0
			[5]2-5/8	6.2	8.5		7/8	44.8
121	1	113	2-1/8	18.0	14.6	39	7/8	58.0
			[5]2-5/8	6.2	9.8		1-1/8	16.5
125	1	63	1-5/8	24.1	14.6	32	3/4	43.4
			[5]2-1/8	6.2	8.2		7/8	20.0
	2	63	1-5/8	24.1	14.6	32	3/4	43.4
			[5]2-1/8	6.2	8.2		7/8	20.0
145	1	77	1-5/8	35.2	17.8	39	3/4	62.7
			[5]2-5/8	9.0	10.1		7/8	28.6
	2	63	1-5/8	24.1	14.6	32	3/4	43.4
			[5]2-5/8	6.2	8.2		7/8	20.0
161	1	81	1-5/8	38.0	18.7	42	3/4	68.3
			2-1/8	9.7	10.5		7/8	31.0
	2	81	1-5/8	38.0	18.7	42	3/4	68.3
			2-1/8	9.7	10.5		7/8	31.0
171	1	91	2-1/8	12.4	11.9	46	3/4	85.5
			[5]2-5/8	4.1	7.9		7/8	39.3
	2	77	1-5/8	35.1	17.9	39	3/4	62.7
			2-1/8	9.0	10.1		7/8	29.0
185	1	95	[5]2-1/8	13.1	12.3	49	3/4	91.7
			[5]2-5/8	4.8	8.2		7/8	42.1
	2	95	2-1/8	13.1	12.3	49	3/4	91.7
			[5]2-5/8	4.8	8.2		7/8	42.1

See Page 15 for Refrigerant Piping Notes.

TABLE 5 – REFRIGERANT LINE PRESSURE DROPS (METRIC)

MODEL NUMBER YCUL00	SYSTEM NUMBER	[1]NOMINAL KW	SUCTION LINE				LIQUID LINE	
			COPPER TYPE L INCHES O.D.	[2]PRESSURE DROP kPa/30.5 m	VELOCITY @NOMINAL CAPACITY IN M/S	[4]NOMINAL KW UNLOADED	COPPER TYPE L INCHES O.D.	[3]PRESSURE DROP kPa/30.5 m
211	1	116	2-1/8	18.6	15.1	11	7/8	61.4
			[5]2-5/8	6.9	10.1		1-1/8	17.2
	2	91	[5]2-1/8	12.4	11.9	9	3/4	85.5
			[5]2-5/8	4.1	7.9		7/8	39.3
235	1	116	2-1/8	18.6	15.1	11	7/8	61.2
			[5]2-5/8	6.9	10.1		1-1/8	17.2
	2	116	2-1/8	18.6	15.1	11	7/8	61.4
			[5]2-5/8	6.9	10.1		1-1/8	17.2
255	1	137	2-1/8	25.5	17.8	13	7/8	83.4
			[5]2-5/8	9.0	11.9		1-1/8	23.4
	2	116	2-1/8	18.6	15.1	11	7/8	61.4
			[5]2-5/8	6.9	10.1		1-1/8	17.2
275	1	137	2-1/8	25.5	17.8	13	7/8	83.4
			[5]2-5/8	9.0	11.9		1-1/8	23.4
	2	137	2-1/8	25.5	17.8	13	7/8	83.4
			[5]2-5/8	9.0	11.9		1-1/8	23.4

REFRIGERANT PIPING NOTES

1. Based on R-22 at the nominal capacity of the unit or system, an ambient temperature of 35°C (95°F) and a suction temperature of 7.2°C (45°F).
2. Suction line sizes were calculated based on a nominal maximum pressure drop to 20.7 kPa/30.5 m (3 PSI/100 ft.). When calculating suction line pressure drop for a specific application, it should be noted that system capacity decreases as suction line pressure drop increases.
3. Liquid pressure drop (or gain) due to a vertical liquid line is not included in the tables and must be taken into account when determining pressure drop (or gain) of the liquid line. The nominal value that must be included in the liquid line loss (or gain) is 3.4 kPa/30 cm (.5 PSI/foot) of rise (or gain). To ensure a solid column of liquid refrigerant to the expansion valve, the total maximum pressure drop of the liquid line should not exceed 276 kPa (40 PSI) based on 8.3°C (15°F) subcooled liquid. Vapor in the liquid line, even in small amounts, will measurably reduce valve capacity and poor system performance will result. In addition, pressure loss for strainers, filter driers, solenoid valves, and isolation valve or fittings are not included in this table, and must be taken into account.
4. Nominal Tons (KW) Unloaded is based on one compressor (per system) operating at design conditions.
5. Based on minimum compressor staging for the given pipe size, a double suction riser should be used to ensure proper oil return to the compressor on all vertical suction risers. Oil returning up the riser moves up the inner surface of the pipe and depends on the mass velocity of the refrigerant vapor at the wall surface to move the oil up the vertical rise.
6. Hot gas bypass lines are typically 7/8" for lines up to 40 feet and 1-1/8" for lines over 12 meters (40 feet in length). The field connections sizes are 7/8" for the optional factory mounted hot gas bypass valve. Note: Hot gas bypass is only available for refrigerant system number 1.

Typical YCU System Configuration

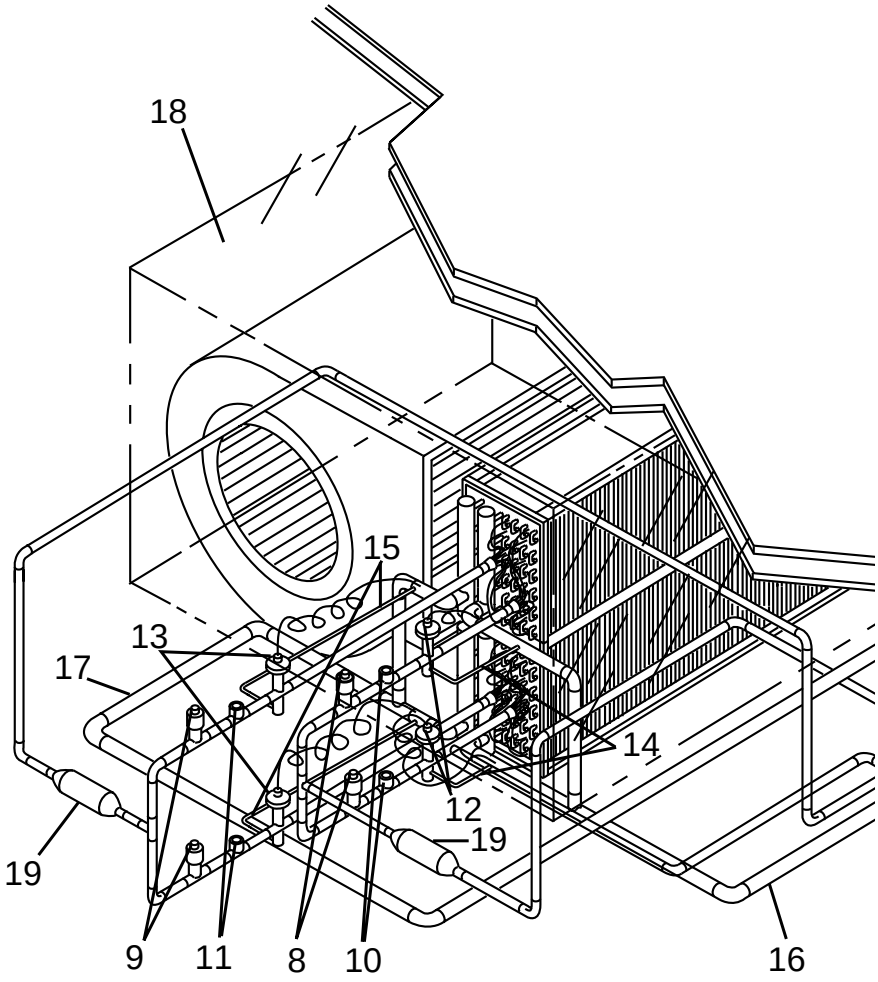


FIG. 1 – PIPING SAMPLE

NOTES:

1. Outdoor unit and indoor unit should be located as close together as possible.
2. Filters driers provided by YORK for field installation by others.
3. Sight glass supplied by YORK.
4. Expansion valves supplied by others to be properly sized for each application.
5. Suction lines should be insulated. Double suction risers may not be required. ASHRAE refrigeration pipe sizing guidelines should be followed. The illustration above shows a double suction riser if job conditions or ASHRAE requirements make this necessary.
6. Piping must also meet all applicable codes and standards for field piping.

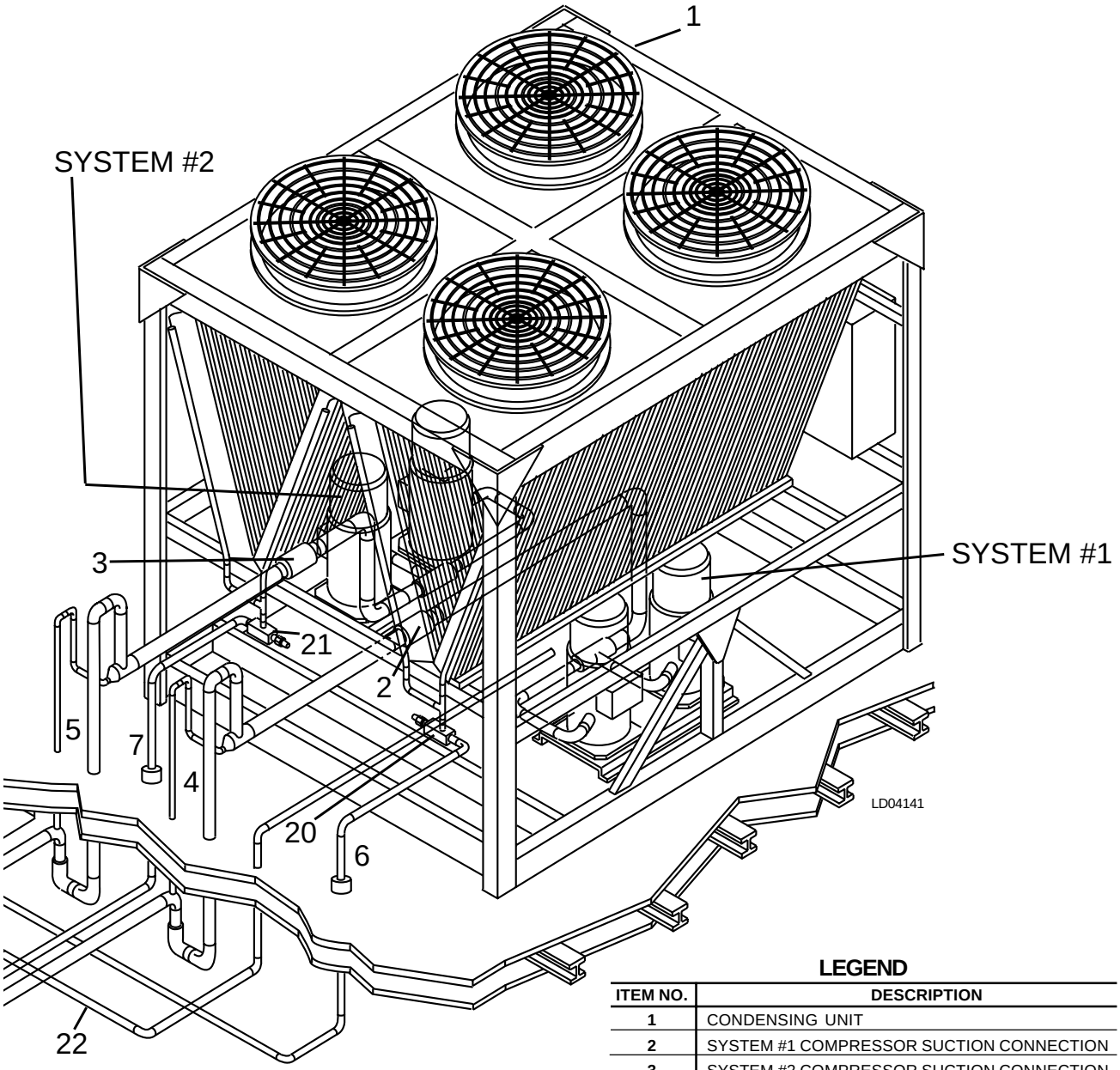


FIG. 1 – PIPING SAMPLE (CONTINUED)

LEGEND

ITEM NO.	DESCRIPTION
1	CONDENSING UNIT
2	SYSTEM #1 COMPRESSOR SUCTION CONNECTION
3	SYSTEM #2 COMPRESSOR SUCTION CONNECTION
4	SYSTEM #1 SUCTION LINE VERTICAL RISER
5	SYSTEM #2 SUCTION LINE VERTICAL RISER
6	SYSTEM #1 LIQUID LINE
7	SYSTEM #2 LIQUID LINE
8	SYSTEM #1 LIQUID LINE SOLENOID VALVE
9	SYSTEM #2 LIQUID LINE SOLENOID VALVE
10	SYSTEM #1 SIGHT GLASS
11	SYSTEM #2 SIGHT GLASS
12	SYSTEM #1 EXPANSION VALVE
13	SYSTEM #2 EXPANSION VALVE
14	SYSTEM #1 TXV EQUALIZER LINE
15	SYSTEM #2 TXV EQUALIZER LINE
16	SYSTEM #1 SUCTION LINE
17	SYSTEM #2 SUCTION LINE
18	AIR-HANDLING UNIT
19	FILTER DRIERS
20	SYSTEM #1 LIQUID LINE VALVE
21	SYSTEM #2 LIQUID LINE VALVE
22	SYSTEM #1 HOT GAS BYPASS LINE (OPTIONAL)

Design Parameters

ENGLISH UNITS

YCUL0	SUCTION TEMPERATURE (°F)		AIR ON CONDENSER (°F)	
	MIN[1]	MAX[1]	MIN[2]	MAX[3]
045SC	35	55	0	125
061SC	35	55	0	125
081SC	35	55	0	125
095SC	35	55	0	125
121SC	35	55	0	125
125SC	35	55	0	125
145SC	35	55	0	125
161SC	35	55	0	125
171SC	35	55	0	125
185SC	35	55	0	125
211SC	35	55	0	125
235SC	35	55	0	125
255SC	35	55	0	125
275SC	35	55	0	125

SI UNITS

YCUL0	SUCTION TEMPERATURE (°C)		AIR ON CONDENSER (°C)	
	MIN[1]	MAX[1]	MIN[2]	MAX[3]
045SC	1.7	12.8	-17.7	51.7
061SC	1.7	12.8	-17.7	51.7
081SC	1.7	12.8	-17.7	51.7
095SC	1.7	12.8	-17.7	51.7
121SC	1.7	12.8	-17.7	51.7
125SC	1.7	12.8	-17.7	51.7
145SC	1.7	12.8	-17.7	51.7
161SC	1.7	12.8	-17.7	51.7
171SC	1.7	12.8	-17.7	51.7
185SC	1.7	12.8	-17.7	51.7
211SC	1.7	12.8	-17.7	51.7
235SC	1.7	12.8	-17.7	51.7
255SC	1.7	12.8	-17.7	51.7
275SC	1.7	12.8	-17.7	51.7

NOTES:

1. For lower or higher suction temperature applications, contact your nearest YORK Office for application requirements.
2. For operation at temperatures below 25°F (-3.9°C), the optional Low Ambient Kit will need to be installed on the system.
3. For operation at temperatures above 115°F (46.1°C), the optional High Ambient Kit will need to be installed on the system.

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Ratings - R22 (English Units)

YCUL0045SC

SST	75°F			80°F			85°F			90°F			95°F			100°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	11.8	8.7	12.2	11.5	9.2	11.5	11.2	9.8	10.7	10.9	10.3	10.0	10.6	11.0	9.3	10.3	11.6	8.6
37	12.2	8.8	12.7	11.9	9.3	11.9	11.7	9.8	11.1	11.4	10.4	10.4	11.1	11.0	9.6	10.7	11.6	8.9
39	12.7	8.8	13.1	12.4	9.3	12.3	12.1	9.9	11.5	11.8	10.4	10.7	11.5	11.0	10.0	11.2	11.7	9.3
41	13.2	8.9	13.6	12.9	9.4	12.7	12.6	9.9	11.9	12.3	10.5	11.1	12.0	11.1	10.3	11.6	11.7	9.6
43	13.7	8.9	14.0	13.4	9.4	13.2	13.1	9.9	12.3	12.8	10.5	11.5	12.4	11.1	10.7	12.1	11.8	9.9
45	14.2	8.9	14.5	13.9	9.4	13.6	13.6	10.0	12.7	13.2	10.6	11.9	12.9	11.2	11.1	12.5	11.8	10.3
47	14.7	9.0	15.0	14.4	9.5	14.1	14.1	10.0	13.2	13.7	10.6	12.3	13.4	11.2	11.4	13.0	11.9	10.6
49	15.3	9.0	15.5	14.9	9.5	14.5	14.6	10.1	13.6	14.2	10.7	12.7	13.9	11.3	11.8	13.5	11.9	11.0
51	15.8	9.1	16.0	15.5	9.6	15.0	15.1	10.1	14.0	14.7	10.7	13.1	14.4	11.3	12.2	14.0	12.0	11.3
53	16.4	9.1	16.5	16.0	9.6	15.4	15.6	10.2	14.5	15.3	10.8	13.5	14.9	11.4	12.6	14.5	12.0	11.7
55	16.9	9.2	17.0	16.6	9.7	15.9	16.2	10.2	14.9	15.8	10.8	13.9	15.4	11.4	13.0	15.0	12.1	12.1

YCUL0061SC

SST	75°F			80°F			85°F			90°F			95°F			100°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	15.8	12.5	12.4	15.4	13.3	11.5	15.0	14.1	10.7	14.6	14.9	9.9	14.2	15.9	9.1	13.8	16.8	8.4
37	16.4	12.6	12.8	16.0	13.3	11.9	15.6	14.1	11.1	15.2	15.0	10.2	14.8	15.9	9.4	14.3	16.9	8.7
39	17.0	12.7	13.2	16.6	13.4	12.3	16.2	14.2	11.4	15.8	15.1	10.6	15.3	16.0	9.8	14.9	17.0	9.0
41	17.7	12.8	13.6	17.2	13.5	12.7	16.8	14.3	11.8	16.4	15.2	10.9	15.9	16.1	10.1	15.4	17.1	9.3
43	18.3	12.8	14.0	17.9	13.6	13.1	17.4	14.4	12.1	16.9	15.3	11.2	16.5	16.2	10.4	16.0	17.2	9.6
45	18.9	12.9	14.4	18.5	13.7	13.5	18.0	14.5	12.5	17.6	15.4	11.6	17.1	16.3	10.7	16.6	17.3	9.9
47	19.6	13.0	14.9	19.1	13.8	13.8	18.7	14.6	12.9	18.2	15.5	11.9	17.7	16.4	11.0	17.2	17.4	10.2
49	20.3	13.1	15.3	19.8	13.9	14.2	19.3	14.7	13.2	18.8	15.6	12.3	18.3	16.5	11.4	17.8	17.5	10.5
51	21.0	13.2	15.7	20.5	14.0	14.6	20.0	14.8	13.6	19.5	15.7	12.6	18.9	16.6	11.7	18.4	17.6	10.8
53	21.7	13.3	16.1	21.2	14.1	15.1	20.6	14.9	14.0	20.1	15.8	13.0	19.6	16.7	12.0	19.0	17.7	11.1
55	22.4	13.4	16.6	21.9	14.2	15.5	21.3	15.0	14.4	20.8	15.9	13.4	20.2	16.8	12.4	19.7	17.8	11.4

YCUL0081SC

SST	75°F			80°F			85°F			90°F			95°F			100°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	20.0	16.4	12.5	19.7	17.2	11.8	19.2	18.1	11.1	18.8	19.0	10.3	18.3	20.0	9.6	17.8	21.1	8.9
37	20.8	16.5	12.9	20.4	17.3	12.2	20.0	18.2	11.4	19.5	19.2	10.7	19.0	20.2	9.9	18.5	21.3	9.2
39	21.6	16.7	13.3	21.2	17.5	12.5	20.8	18.4	11.8	20.3	19.3	11.0	19.8	20.3	10.3	19.2	21.4	9.5
41	22.4	16.8	13.7	22.0	17.6	12.9	21.5	18.5	12.1	21.0	19.5	11.3	20.5	20.5	10.6	20.0	21.6	9.8
43	23.2	16.9	14.1	22.8	17.8	13.3	22.3	18.7	12.5	21.8	19.6	11.7	21.3	20.6	10.9	20.7	21.7	10.1
45	24.1	17.1	14.5	23.6	17.9	13.7	23.1	18.8	12.8	22.6	19.8	12.0	22.1	20.8	11.2	21.5	21.9	10.4
47	25.0	17.2	15.0	24.5	18.1	14.1	24.0	19.0	13.2	23.4	19.9	12.4	22.9	20.9	11.6	22.3	22.0	10.8
49	25.8	17.4	15.4	25.4	18.2	14.5	24.8	19.1	13.6	24.3	20.1	12.7	23.7	21.1	11.9	23.1	22.2	11.1
51	26.7	17.5	15.8	26.2	18.4	14.9	25.7	19.3	14.0	25.1	20.3	13.1	24.5	21.3	12.2	23.9	22.4	11.4
53	27.7	17.7	16.2	27.1	18.5	15.3	26.6	19.4	14.3	26.0	20.4	13.4	25.4	21.5	12.6	24.7	22.6	11.7
55	28.6	17.8	16.6	28.1	18.7	15.7	27.5	19.6	14.7	26.9	20.6	13.8	26.3	21.6	12.9	25.6	22.7	12.0

NOTES:

1. SST = Saturated Suction Temperature
2. kW = Compressors Input Power
3. EER = Condensing Unit EER (includes power from compressors, fans and the control panel)

YCUL0045SC

SST	105°F			110°F			115°F			120°F			125°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	10.0	12.3	7.9	9.7	13.0	7.3	9.3	13.8	6.7	9.0	14.7	6.2	8.6	15.5	5.6
37	10.4	12.3	8.3	10.1	13.1	7.6	9.7	13.9	7.0	9.3	14.7	6.4	9.0	15.6	5.9
39	10.8	12.4	8.6	10.5	13.1	7.9	10.1	13.9	7.3	9.7	14.7	6.7	9.3	15.6	6.1
41	11.3	12.4	8.9	10.9	13.2	8.2	10.5	14.0	7.5	10.1	14.8	6.9	9.7	15.7	6.3
43	11.7	12.5	9.2	11.3	13.2	8.5	10.9	14.0	7.8	10.5	14.8	7.2	10.1	15.7	6.6
45	12.2	12.5	9.5	11.8	13.3	8.8	11.4	14.1	8.1	11.0	14.9	7.4	10.5	15.8	6.8
47	12.6	12.6	9.8	12.2	13.3	9.1	11.8	14.1	8.4	11.4	14.9	7.7	10.9	15.8	7.1
49	13.1	12.6	10.2	12.7	13.4	9.4	12.2	14.2	8.7	11.8	15.0	8.0	11.4	15.9	7.3
51	13.6	12.7	10.5	13.1	13.4	9.7	12.7	14.2	9.0	12.3	15.0	8.2	11.8	15.9	7.6
53	14.0	12.7	10.9	13.6	13.5	10.0	13.2	14.3	9.3	12.7	15.1	8.5	12.2	16.0	7.8
55	14.6	12.8	11.2	14.1	13.5	10.4	13.6	14.3	9.6	13.2	15.1	8.8	12.7	16.0	8.1

YCUL0061SC

SST	105°F			110°F			115°F			120°F			125°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	13.3	17.9	7.7	12.9	19.0	7.1	12.4	20.2	6.5	11.9	21.5	5.9	11.4	22.8	5.4
37	13.8	18.0	8.0	13.4	19.1	7.3	12.9	20.3	6.7	12.4	21.6	6.1	11.9	22.9	5.6
39	14.4	18.1	8.3	13.9	19.2	7.6	13.4	20.4	6.9	12.9	21.6	6.3	12.4	23.0	5.8
41	14.9	18.2	8.5	14.4	19.3	7.8	13.9	20.5	7.2	13.4	21.7	6.6	12.9	23.1	6.0
43	15.5	18.3	8.8	15.0	19.4	8.1	14.5	20.6	7.4	13.9	21.8	6.8	13.4	23.1	6.2
45	16.1	18.4	9.1	15.5	19.5	8.4	15.0	20.7	7.7	14.4	21.9	7.0	13.9	23.2	6.4
47	16.6	18.5	9.4	16.1	19.6	8.6	15.5	20.8	7.9	15.0	22.0	7.2	14.4	23.3	6.6
49	17.2	18.6	9.7	16.7	19.7	8.9	16.1	20.9	8.2	15.5	22.1	7.5	7.9	10.2	7.3
51	17.8	18.7	10.0	17.3	19.8	9.2	16.7	21.0	8.4	16.1	22.2	7.7	8.2	10.2	7.6
53	18.4	18.8	10.3	17.9	19.9	9.5	17.3	21.1	8.7	16.6	22.3	8.0	8.5	10.2	7.8
55	19.1	18.9	10.6	18.5	20.0	9.7	17.8	21.2	8.9	17.2	22.4	8.2	8.8	10.2	8.1

YCUL0081SC

SST	105°F			110°F			115°F			120°F			125°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	17.3	22.3	8.3	16.7	23.5	7.6	16.1	24.8	7.0	15.5	26.2	6.4	14.8	27.7	5.8
37	18.0	22.4	8.5	17.4	23.7	7.9	16.7	25.0	7.2	16.1	26.4	6.6	15.4	27.8	6.0
39	18.7	22.6	8.8	18.1	23.8	8.1	17.4	25.1	7.5	16.7	26.5	6.9	16.0	28.0	6.2
41	19.4	22.7	9.1	18.8	24.0	8.4	18.1	25.3	7.7	17.4	26.7	7.1	16.7	28.2	6.5
43	20.1	22.9	9.4	19.5	24.1	8.7	18.8	25.4	8.0	18.1	26.8	7.3	17.4	28.3	6.7
45	20.9	23.1	9.7	20.2	24.3	9.0	19.5	25.6	8.2	18.8	27.0	7.6	18.0	28.5	6.9
47	21.6	23.2	10.0	21.0	24.5	9.2	20.3	25.8	8.5	19.5	27.2	7.8	18.7	28.6	7.1
49	22.4	23.4	10.3	21.7	24.6	9.5	21.0	25.9	8.8	20.2	27.3	8.1	19.4	28.8	7.4
51	23.2	23.5	10.6	22.5	24.8	9.8	21.8	26.1	9.0	21.0	27.5	8.3	20.2	29.0	7.6
53	24.0	23.7	10.9	23.3	25.0	10.1	22.5	26.3	9.3	21.7	27.7	8.6	20.9	29.2	7.8
55	24.9	23.9	11.2	24.1	25.1	10.4	23.3	26.5	9.6	22.5	27.9	8.8	21.7	29.4	8.1

NOTES:

1. SST = Saturated Suction Temperature
2. kW = Compressors Input Power
3. EER = Condensing Unit EER (includes power from compressors, fans and the control panel)

Ratings - R22 (English Units) (Continued)

YCUL0095SC

SST	75°F			80°F			85°F			90°F			95°F			100°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	25.3	19.1	13.9	24.7	20.1	12.9	24.1	21.3	12.0	23.5	22.5	11.1	22.8	23.8	10.3	22.1	25.2	9.5
37	26.3	19.2	14.3	25.7	20.3	13.4	25.0	21.4	12.4	24.4	22.7	11.5	23.7	24.0	10.6	23.0	25.4	9.8
39	27.3	19.3	14.8	26.7	20.4	13.8	26.0	21.6	12.8	25.3	22.8	11.9	24.6	24.1	11.0	23.9	25.5	10.1
41	28.3	19.4	15.3	27.7	20.5	14.2	27.0	21.7	13.2	26.3	22.9	12.3	25.6	24.2	11.4	24.8	25.6	10.5
43	29.4	19.6	15.7	28.7	20.7	14.7	28.0	21.8	13.6	27.3	23.1	12.7	26.6	24.4	11.7	25.8	25.8	10.8
45	30.4	19.7	16.2	29.8	20.8	15.1	29.0	22.0	14.1	28.3	23.2	13.1	27.5	24.5	12.1	26.8	25.9	11.2
47	31.5	19.8	16.7	30.8	20.9	15.6	30.1	22.1	14.5	29.3	23.3	13.5	28.6	24.7	12.5	27.7	26.1	11.5
49	32.6	20.0	17.2	31.9	21.1	16.1	31.2	22.2	14.9	30.4	23.5	13.9	29.6	24.8	12.9	28.8	26.2	11.9
51	33.8	20.1	17.7	33.1	21.2	16.5	32.3	22.4	15.4	31.5	23.6	14.3	30.7	24.9	13.3	29.8	26.3	12.3
53	35.0	20.2	18.2	34.2	21.3	17.0	33.4	22.5	15.9	32.6	23.7	14.7	31.7	25.1	13.7	30.8	26.5	12.6
55	36.2	20.4	18.7	35.4	21.5	17.5	34.6	22.6	16.3	33.7	23.9	15.2	32.8	25.2	14.1	31.9	26.6	13.0

YCUL0121SC

SST	75°F			80°F			85°F			90°F			95°F			100°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	29.6	25.8	12.4	29.0	27.2	11.6	28.3	28.6	10.8	27.6	30.1	10.1	26.9	31.8	9.3	26.1	33.5	8.6
37	30.7	26.1	12.8	30.1	27.4	11.9	29.4	28.9	11.1	28.7	30.4	10.4	27.9	32.0	9.6	27.1	33.8	8.9
39	31.9	26.3	13.1	31.2	27.7	12.3	30.5	29.1	11.5	29.7	30.6	10.7	29.0	32.3	9.9	28.1	34.0	9.2
41	33.0	26.6	13.5	32.4	27.9	12.6	31.6	29.4	11.8	30.9	30.9	11.0	30.0	32.6	10.2	29.2	34.3	9.4
43	34.2	26.8	13.9	33.5	28.2	13.0	32.8	29.6	12.1	32.0	31.2	11.3	31.1	32.8	10.5	30.2	34.6	9.7
45	35.5	27.1	14.2	34.7	28.4	13.3	34.0	29.9	12.5	33.1	31.5	11.6	32.3	33.1	10.8	31.4	34.9	10.0
47	36.7	27.3	14.6	36.0	28.7	13.7	35.2	30.2	12.8	34.3	31.7	11.9	33.4	33.4	11.1	32.5	35.2	10.3
49	38.0	27.6	15.0	37.2	29.0	14.1	36.4	30.4	13.1	35.5	32.0	12.2	34.6	33.7	11.4	33.6	35.5	10.5
51	39.3	27.9	15.4	38.5	29.3	14.4	37.7	30.8	13.5	36.8	32.3	12.6	35.8	34.0	11.7	34.8	35.8	10.8
53	40.7	28.2	15.8	39.8	29.6	14.8	38.9	31.0	13.8	38.0	32.6	12.9	37.0	34.3	12.0	36.0	36.1	11.1
55	42.0	28.4	16.1	41.2	29.8	15.1	40.2	31.3	14.1	39.3	32.9	13.2	38.3	34.6	12.3	37.2	36.4	11.4

YCAL00125SC

SST	75°F			80°F			85°F			90°F			95°F			100°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	31.6	23.2	13.2	31.1	24.7	12.3	30.5	26.2	11.5	29.9	27.9	10.7	29.2	29.7	9.9	28.4	31.7	9.1
37	32.9	23.4	13.6	32.3	24.8	12.7	31.7	26.4	11.9	31.1	28.0	11.1	30.4	29.8	10.3	29.6	31.8	9.5
39	34.1	23.5	14.1	33.6	24.9	13.2	33.0	26.5	12.3	32.3	28.1	11.5	31.6	29.9	10.7	30.8	31.9	9.9
41	35.4	23.6	14.5	34.8	25.1	13.6	34.2	26.6	12.8	33.6	28.3	11.9	32.9	30.1	11.1	32.1	32.0	10.2
43	36.7	23.7	15.0	36.2	25.2	14.1	35.5	26.7	13.2	34.9	28.4	12.3	34.2	30.2	11.5	33.4	32.1	10.6
45	38.1	23.9	15.5	37.5	25.3	14.6	36.9	26.9	13.6	36.2	28.5	12.7	35.5	30.3	11.9	34.7	32.2	11.0
47	39.5	24.0	16.0	38.9	25.4	15.1	38.3	27.0	14.1	37.6	28.7	13.2	36.9	30.4	12.3	36.1	32.3	11.4
49	41.0	24.1	16.5	40.4	25.6	15.5	39.7	27.1	14.6	39.0	28.8	13.6	38.3	30.6	12.7	37.5	32.4	11.8
51	42.4	24.3	17.1	41.8	25.7	16.0	41.2	27.2	15.0	40.5	28.9	14.1	39.7	30.7	13.1	38.9	32.6	12.2
53	44.0	24.4	17.6	43.3	25.8	16.6	42.7	27.4	15.5	42.0	29.0	14.5	41.2	30.8	13.6	40.3	32.8	12.6
55	45.5	24.5	18.1	44.9	25.9	17.1	44.2	27.5	16.0	43.5	29.2	15.0	42.7	31.0	14.0	41.9	32.9	13.1

NOTES:

1. SST = Saturated Suction Temperature
2. kW = Compressors Input Power
3. EER = Condensing Unit EER (includes power from compressors, fans and the control panel)

YCAL0095SC

SST	105°F			110°F			115°F			120°F			125°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	21.4	26.7	8.7	20.7	28.3	8.0	20.0	29.9	7.3	19.2	31.7	6.7	18.4	33.5	6.1
37	22.3	26.8	9.0	21.6	28.4	8.3	20.8	30.1	7.6	20.0	31.8	6.9	19.2	33.7	6.3
39	23.2	27.0	9.3	22.4	28.5	8.6	21.6	30.2	7.9	20.8	32.0	7.2	20.0	33.8	6.5
41	24.1	27.1	9.7	23.3	28.7	8.9	22.5	30.3	8.1	21.6	32.1	7.4	20.8	33.9	6.8
43	25.0	27.3	10.0	24.2	28.8	9.2	23.4	30.5	8.4	22.5	32.2	7.7	21.6	34.1	7.0
45	25.9	27.4	10.3	25.1	29.0	9.5	24.3	30.6	8.7	23.4	32.4	8.0	22.5	34.2	7.3
47	26.9	27.5	10.6	26.1	29.1	9.8	25.2	30.8	9.0	24.3	32.5	8.2	23.3	34.3	7.5
49	27.9	27.7	11.0	27.0	29.2	10.1	26.1	30.9	9.3	25.2	32.6	8.5	24.2	34.5	7.8
51	28.9	27.8	11.3	28.0	29.4	10.4	27.1	31.0	9.6	26.1	32.8	8.8	25.1	34.6	8.1
53	29.9	28.0	11.7	29.0	29.5	10.8	28.0	31.2	9.9	27.1	32.9	9.1	26.0	34.7	8.3
55	31.0	28.1	12.0	30.0	29.7	11.1	29.0	31.3	10.2	28.0	33.1	9.4	27.0	34.9	8.6

YCUL0121SC

SST	105°F			110°F			115°F			120°F			125°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	25.2	35.3	7.9	24.3	37.3	7.3	23.4	39.4	6.7	22.4	41.5	6.1	21.4	43.8	5.5
37	26.2	35.6	8.2	25.3	37.6	7.5	24.3	39.6	6.9	23.3	41.8	6.3	22.3	44.1	5.7
39	27.2	35.9	8.4	26.3	37.8	7.8	25.3	39.9	7.1	24.3	42.1	6.5	23.2	44.4	5.9
41	28.3	36.2	8.7	27.3	38.1	8.0	26.3	40.2	7.3	25.2	42.4	6.7	24.1	44.7	6.1
43	29.3	36.4	9.0	28.3	38.4	8.2	27.3	40.5	7.6	26.2	42.7	6.9	25.0	45.0	6.3
45	30.4	36.7	9.2	29.4	38.7	8.5	28.3	40.8	7.8	27.2	43.0	7.1	18.1	27.9	7.1
47	31.5	37.0	9.5	30.4	39.0	8.7	29.3	41.1	8.0	28.2	43.3	7.3	18.8	28.0	7.3
49	32.6	37.3	9.7	31.5	39.3	9.0	30.4	41.4	8.3	29.2	43.6	7.6	19.5	28.2	7.6
51	33.8	37.7	10.0	32.6	39.6	9.2	31.5	41.7	8.5	30.3	43.9	7.8	20.2	28.3	7.8
53	34.9	38.0	10.3	33.8	40.0	9.5	32.6	42.1	8.7	31.4	44.3	8.0	21.0	28.5	8.1
55	36.1	38.3	10.5	34.9	40.3	9.7	33.7	42.4	9.0	32.5	44.6	8.2	21.8	28.6	8.3

YCUL0125SC

SST	105°F			110°F			115°F			120°F			125°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	27.6	33.7	8.4	26.7	36.0	7.7	25.8	38.3	7.0	24.8	40.9	6.4	23.7	43.5	5.8
37	28.8	33.8	8.8	27.9	36.1	8.0	26.9	38.4	7.3	25.9	40.9	6.7	24.8	43.6	6.1
39	30.0	33.9	9.1	29.1	36.1	8.4	28.1	38.5	7.7	27.1	41.0	7.0	26.0	43.7	6.3
41	31.2	34.0	9.5	30.3	36.3	8.7	29.4	38.6	8.0	28.3	41.1	7.3	27.2	43.8	6.6
43	32.5	34.2	9.8	31.6	36.4	9.0	30.6	38.7	8.3	29.6	41.2	7.6	28.5	43.9	6.9
45	33.8	34.3	10.2	32.9	36.5	9.4	31.9	38.8	8.6	30.9	41.3	7.9	29.8	44.0	7.2
47	35.2	34.4	10.6	34.3	36.6	9.7	33.3	38.9	9.0	32.2	41.4	8.2	31.1	44.1	7.5
49	36.6	34.5	10.9	35.6	36.7	10.1	34.6	39.1	9.3	33.5	41.6	8.5	32.4	44.2	7.8
51	38.0	34.6	11.3	37.1	36.8	10.5	36.0	39.2	9.7	34.9	41.7	8.9	33.8	44.3	8.1
53	39.4	34.8	11.7	38.5	37.0	10.9	37.5	39.3	10.0	36.4	41.8	9.2	35.2	44.4	8.4
55	40.9	34.9	12.1	40.0	37.1	11.2	38.9	39.5	10.4	37.8	41.9	9.6	36.7	44.5	8.8

NOTES:

1. SST = Saturated Suction Temperature
2. kW = Compressors Input Power
3. EER = Condensing Unit EER (includes power from compressors, fans and the control panel)

Ratings - R22 (English Units) (Continued)

YCUL0145SC

SST	75°F			80°F			85°F			90°F			95°F			100°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	36.0	27.8	12.9	35.3	29.3	12.1	34.6	31.0	11.3	33.8	32.8	10.6	33.0	34.7	9.8	32.1	36.8	9.1
37	37.4	28.0	13.4	36.7	29.5	12.5	36.0	31.2	11.7	35.2	33.0	10.9	34.3	34.9	10.2	33.4	36.9	9.4
39	38.8	28.2	13.8	38.1	29.7	12.9	37.3	31.4	12.1	36.5	33.2	11.3	35.6	35.1	10.5	34.7	37.2	9.7
41	40.3	28.4	14.2	39.5	30.0	13.3	38.8	31.6	12.5	37.9	33.4	11.7	37.0	35.3	10.9	36.1	37.4	10.1
43	41.8	28.6	14.6	41.0	30.2	13.8	40.2	31.8	12.9	39.4	33.6	12.1	38.5	35.5	11.2	37.5	37.6	10.4
45	43.3	28.8	15.1	42.5	30.4	14.2	41.7	32.0	13.3	40.8	33.8	12.4	39.9	35.7	11.6	38.9	37.8	10.8
47	44.9	29.0	15.6	44.1	30.6	14.6	43.2	32.3	13.7	42.3	34.1	12.8	41.4	36.0	12.0	40.4	38.0	11.1
49	46.5	29.2	16.0	45.7	30.8	15.1	44.8	32.5	14.1	43.9	34.3	13.2	42.9	36.2	12.3	41.9	38.3	11.5
51	48.1	29.5	16.5	47.3	31.0	15.5	46.4	32.7	14.5	45.5	34.5	13.6	44.5	36.4	12.7	43.4	38.5	11.8
53	49.8	29.7	16.9	49.0	31.3	15.9	48.1	32.9	15.0	47.1	34.8	14.0	46.1	36.7	13.1	45.0	38.8	12.2
55	51.5	29.9	17.4	50.7	31.5	16.4	49.7	33.2	15.4	48.7	35.0	14.4	47.7	36.9	13.5	46.6	39.0	12.5

YCUL0161SC

SST	75°F			80°F			85°F			90°F			95°F			100°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	40.8	32.9	12.7	40.0	34.6	11.9	39.1	36.4	11.2	38.2	38.3	10.4	37.2	40.4	9.7	36.1	42.6	9.0
37	42.4	33.2	13.1	41.5	34.9	12.3	40.6	36.7	11.5	39.7	38.6	10.8	38.6	40.7	10.0	37.6	42.9	9.3
39	44.0	33.5	13.5	43.1	35.2	12.7	42.2	37.0	11.9	41.2	38.9	11.1	40.1	41.0	10.3	39.0	43.2	9.6
41	45.6	33.8	13.9	44.7	35.5	13.1	43.8	37.3	12.2	42.7	39.2	11.4	41.6	41.3	10.7	40.5	43.5	9.9
43	47.3	34.1	14.3	46.4	35.8	13.5	45.4	37.6	12.6	44.3	39.5	11.8	43.2	41.6	11.0	42.0	43.8	10.2
45	49.0	34.4	14.7	48.1	36.1	13.8	47.0	37.9	13.0	45.9	39.9	12.1	44.8	42.0	11.3	43.6	44.2	10.5
47	50.8	34.7	15.1	49.8	36.4	14.2	48.7	38.2	13.3	47.6	40.2	12.5	46.4	42.3	11.6	45.1	44.5	10.8
49	52.6	35.0	15.6	51.5	36.7	14.6	50.4	38.5	13.7	49.3	40.5	12.8	48.1	42.6	12.0	46.8	44.9	11.1
51	54.4	35.3	16.0	53.3	37.0	15.0	52.2	38.9	14.1	51.0	40.9	13.2	49.7	43.0	12.3	48.4	45.2	11.4
53	56.3	35.6	16.4	55.2	37.3	15.4	54.0	39.2	14.5	52.8	41.2	13.5	51.5	43.3	12.6	50.1	45.6	11.7
55	58.2	35.9	16.8	57.0	37.7	15.8	55.8	39.6	14.8	54.6	41.6	13.9	53.2	43.7	13.0	51.8	46.0	12.1

YCUL0171SC

SST	75°F			80°F			85°F			90°F			95°F			100°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	43.9	36.7	12.5	42.9	38.7	11.6	41.9	40.8	10.8	40.9	43.1	10.1	39.7	45.5	9.3	38.6	48.0	8.6
37	45.6	37.0	12.8	44.6	39.0	12.0	43.5	41.1	11.2	42.4	43.4	10.4	41.3	45.8	9.6	40.1	48.4	8.9
39	47.3	37.3	13.2	46.3	39.3	12.4	45.2	41.4	11.5	44.1	43.7	10.7	42.9	46.1	10.0	41.6	48.7	9.2
41	49.1	37.6	13.6	48.0	39.6	12.8	46.9	41.7	11.9	45.7	44.0	11.1	44.5	46.4	10.3	43.2	49.0	9.5
43	50.9	37.9	14.1	49.8	39.9	13.1	48.7	42.0	12.3	47.4	44.3	11.4	46.2	46.7	10.6	44.8	49.3	9.8
45	52.8	38.2	14.5	51.6	40.2	13.5	50.4	42.3	12.6	49.2	44.6	11.8	47.9	47.1	10.9	46.5	49.7	10.1
47	54.7	38.5	14.9	53.5	40.5	13.9	52.3	42.7	13.0	51.0	45.0	12.1	49.6	47.4	11.2	48.2	50.0	10.4
49	56.6	38.8	15.3	55.4	40.8	14.3	54.1	43.0	13.4	52.8	45.3	12.4	51.4	47.7	11.6	49.9	50.4	10.7
51	58.6	39.1	15.7	57.3	41.1	14.7	56.0	43.3	13.7	54.6	45.6	12.8	53.2	48.1	11.9	51.7	50.7	11.0
53	60.6	39.4	16.1	59.3	41.5	15.1	57.9	43.6	14.1	56.5	46.0	13.2	55.0	48.4	12.2	53.5	51.1	11.3
55	62.6	39.7	16.6	61.3	41.8	15.5	59.9	44.0	14.5	58.4	46.3	13.5	56.9	48.8	12.6	55.3	51.4	11.6

NOTES:

1. SST = Saturated Suction Temperature
2. kW = Compressors Input Power
3. EER = Condensing Unit EER (includes power from compressors, fans and the control panel)

YCUL0145SC

SST	105°F			110°F			115°F			120°F			125°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	31.1	38.9	8.4	30.1	41.2	7.7	29.0	43.7	7.1	27.9	46.4	6.4	26.6	49.1	5.8
37	32.4	39.1	8.7	31.4	41.4	8.0	30.3	43.9	7.3	29.1	46.5	6.7	27.8	49.3	6.1
39	33.7	39.3	9.0	32.6	41.7	8.3	31.5	44.1	7.6	30.3	46.7	7.0	29.0	49.5	6.3
41	35.1	39.5	9.3	34.0	41.9	8.6	32.8	44.3	7.9	31.6	47.0	7.2	30.3	49.7	6.6
43	36.4	39.8	9.6	35.3	42.1	8.9	34.1	44.6	8.2	32.9	47.2	7.5	31.6	50.0	6.8
45	37.8	40.0	10.0	36.7	42.3	9.2	35.5	44.8	8.5	34.2	47.4	7.7	32.9	50.2	7.1
47	39.3	40.2	10.3	38.1	42.6	9.5	36.9	45.0	8.7	35.6	47.7	8.0	34.2	50.4	7.3
49	40.7	40.5	10.6	39.6	42.8	9.8	38.3	45.3	9.0	37.0	47.9	8.3	35.6	50.7	7.6
51	42.3	40.7	11.0	41.1	43.0	10.1	39.8	45.5	9.3	38.4	48.2	8.6	37.0	50.9	7.9
53	43.8	41.0	11.3	42.6	43.3	10.5	41.3	45.8	9.6	39.9	48.4	8.9	38.5	51.2	8.1
55	45.4	41.2	11.6	44.1	43.5	10.8	42.8	46.0	9.9	41.4	48.6	9.2	29.6	34.9	8.8

YCUL0161SC

SST	105°F			110°F			115°F			120°F			125°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	35.1	44.9	8.3	33.9	47.4	7.7	32.6	50.0	7.0	31.3	52.8	6.4	29.9	55.8	5.8
37	36.4	45.2	8.6	35.2	47.7	7.9	33.9	50.3	7.3	32.6	53.1	6.7	31.1	56.1	6.1
39	37.8	45.6	8.9	36.6	48.1	8.2	35.3	50.7	7.5	33.9	53.5	6.9	32.4	56.4	6.3
41	39.3	45.9	9.2	38.0	48.4	8.4	36.6	51.0	7.8	35.2	53.8	7.1	33.7	56.8	6.5
43	40.8	46.2	9.4	39.4	48.7	8.7	38.0	51.4	8.0	36.6	54.1	7.4	35.1	57.1	6.7
45	42.3	46.5	9.7	40.9	49.1	9.0	39.5	51.7	8.3	38.0	54.5	7.6	36.4	57.5	6.9
47	43.8	46.9	10.0	42.4	49.4	9.2	40.9	52.1	8.5	39.4	54.9	7.8	37.8	57.9	7.1
49	45.4	47.3	10.3	43.9	49.8	9.5	42.5	52.4	8.8	40.9	55.3	8.1	39.2	58.2	7.4
51	47.0	47.6	10.6	45.5	50.1	9.8	44.0	52.8	9.0	42.4	55.6	8.3	40.7	58.6	7.6
53	48.6	48.0	10.9	47.1	50.5	10.1	45.6	53.2	9.3	43.9	56.0	8.5	42.1	59.0	7.8
55	50.3	48.4	11.2	48.8	50.9	10.4	47.1	53.6	9.6	45.4	56.4	8.8	23.0	26.2	8.7

YCUL0171SC

SST	105°F			110°F			115°F			120°F			125°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	37.3	50.8	7.9	36.0	53.7	7.3	34.7	56.7	6.7	33.3	60.0	6.1	31.8	63.4	5.5
37	38.8	51.1	8.2	37.5	54.0	7.5	36.1	57.1	6.9	34.7	60.3	6.3	33.2	63.7	5.7
39	40.3	51.4	8.5	38.9	54.4	7.8	37.5	57.4	7.2	36.1	60.6	6.5	34.5	64.1	5.9
41	41.9	51.8	8.8	40.5	54.7	8.1	39.0	57.7	7.4	37.5	61.0	6.8	35.9	64.4	6.2
43	43.5	52.1	9.0	42.0	55.0	8.3	40.5	58.1	7.6	38.9	61.3	7.0	37.3	64.8	6.4
45	45.1	52.4	9.3	43.6	55.4	8.6	42.0	58.4	7.9	40.4	61.7	7.2	29.3	45.4	6.9
47	46.7	52.8	9.6	45.2	55.7	8.8	43.6	58.8	8.1	42.0	62.1	7.4	30.4	45.7	7.1
49	48.4	53.1	9.9	46.9	56.1	9.1	45.2	59.1	8.4	43.5	62.4	7.7	31.6	45.9	7.4
51	50.1	53.5	10.2	48.5	56.4	9.4	46.9	59.5	8.6	45.1	62.8	7.9	32.7	46.2	7.6
53	51.9	53.8	10.5	50.2	56.8	9.7	48.5	59.9	8.9	46.7	63.1	8.2	23.8	29.1	8.2
55	53.7	54.2	10.8	52.0	57.1	9.9	50.2	60.3	9.2	48.4	63.5	8.4	24.7	29.2	8.5

NOTES:

1. SST = Saturated Suction Temperature
2. kW = Compressors Input Power
3. EER = Condensing Unit EER (includes power from compressors, fans and the control panel)

Ratings - R22 (English Units) (Continued)

YCUL0185SC

SST	75°F			80°F			85°F			90°F			95°F			100°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	48.3	37.7	13.4	47.2	39.8	12.5	46.0	42.1	11.6	44.8	44.5	10.7	43.6	47.1	9.9	42.3	49.8	9.2
37	50.1	37.9	13.8	49.0	40.0	12.9	47.8	42.3	12.0	46.6	44.8	11.1	45.3	47.4	10.3	44.0	50.1	9.5
39	52.1	38.2	14.3	50.9	40.3	13.3	49.7	42.6	12.4	48.4	45.0	11.5	47.1	47.6	10.6	45.8	50.3	9.8
41	54.0	38.4	14.7	52.8	40.5	13.7	51.6	42.8	12.8	50.3	45.3	11.9	48.9	47.8	11.0	47.5	50.6	10.1
43	56.1	38.6	15.2	54.8	40.8	14.2	53.5	43.1	13.2	52.2	45.5	12.3	50.8	48.1	11.3	49.4	50.9	10.5
45	58.1	38.9	15.7	56.8	41.0	14.6	55.5	43.3	13.6	54.1	45.8	12.6	52.7	48.4	11.7	51.2	51.1	10.8
47	60.2	39.1	16.2	58.9	41.3	15.1	57.5	43.6	14.0	56.1	46.0	13.0	54.6	48.6	12.1	53.1	51.4	11.2
49	62.4	39.4	16.6	61.0	41.5	15.5	59.6	43.8	14.5	58.1	46.3	13.4	56.6	48.9	12.5	55.0	51.7	11.5
51	64.6	39.6	17.1	63.2	41.8	16.0	61.7	44.1	14.9	60.2	46.5	13.9	58.6	49.1	12.9	57.0	51.9	11.9
53	66.8	39.9	17.6	65.4	42.0	16.5	63.9	44.3	15.4	62.3	46.8	14.3	60.7	49.4	13.2	59.1	52.1	12.3
55	69.1	40.1	18.2	67.6	42.3	17.0	66.1	44.6	15.8	64.5	47.0	14.7	62.8	49.7	13.6	61.1	52.4	12.6

YCUL0211SC

SST	75°F			80°F			85°F			90°F			95°F			100°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	53.7	44.4	12.6	52.6	46.9	11.7	51.4	49.6	10.9	50.2	52.5	10.2	48.9	55.6	9.4	47.5	58.8	8.7
37	55.7	44.8	13.0	54.6	47.3	12.1	53.4	50.0	11.3	52.2	52.9	10.5	50.8	56.0	9.7	49.4	59.2	9.0
39	57.8	45.1	13.4	56.7	47.7	12.5	55.5	50.4	11.7	54.2	53.3	10.8	52.8	56.3	10.0	51.3	59.7	9.3
41	60.0	45.5	13.8	58.8	48.0	12.9	57.6	50.7	12.0	56.2	53.7	11.2	54.8	56.7	10.4	53.3	60.1	9.6
43	62.2	45.9	14.2	61.0	48.4	13.3	59.7	51.1	12.4	58.4	54.0	11.5	56.9	57.2	10.7	55.3	60.5	9.9
45	64.5	46.3	14.6	63.2	48.8	13.6	61.9	51.6	12.7	60.5	54.5	11.9	59.0	57.6	11.0	57.4	60.9	10.2
47	66.8	46.7	15.0	65.5	49.2	14.0	64.2	52.0	13.1	62.7	54.9	12.2	61.2	58.0	11.3	59.6	61.4	10.5
49	69.2	47.1	15.4	67.9	49.6	14.4	66.5	52.4	13.5	65.0	55.3	12.6	63.4	58.4	11.7	61.8	61.8	10.8
51	71.6	47.5	15.8	70.3	50.0	14.8	68.8	52.8	13.9	67.3	55.7	12.9	65.7	58.9	12.0	64.0	62.2	11.1
53	74.1	47.9	16.3	72.7	50.4	15.2	71.2	53.2	14.2	69.7	56.2	13.3	68.0	59.4	12.3	66.3	62.7	11.4
55	76.6	48.3	16.7	75.2	50.9	15.6	73.7	53.6	14.6	72.1	56.6	13.6	70.4	59.8	12.7	68.6	63.2	11.8

YCUL0235SC

SST	75°F			80°F			85°F			90°F			95°F			100°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	60.8	51.9	12.4	59.5	54.6	11.6	58.1	57.5	10.8	56.7	60.6	10.1	55.1	63.8	9.4	53.5	67.3	8.7
37	63.1	52.4	12.8	61.8	55.1	12.0	60.3	58.0	11.2	58.8	61.1	10.4	57.2	64.3	9.7	55.5	67.8	8.9
39	65.5	52.9	13.2	64.1	55.6	12.3	62.6	58.5	11.5	61.1	61.6	10.7	59.4	64.9	9.9	57.7	68.4	9.2
41	67.9	53.3	13.5	66.5	56.1	12.7	64.9	59.0	11.8	63.3	62.1	11.0	61.6	65.4	10.2	59.8	68.9	9.5
43	70.4	53.8	13.9	68.9	56.6	13.0	67.3	59.5	12.2	65.7	62.6	11.4	63.9	66.0	10.5	62.1	69.5	9.8
45	72.9	54.3	14.3	71.4	57.1	13.4	69.8	60.0	12.5	68.0	63.2	11.7	66.2	66.5	10.8	64.3	70.1	10.0
47	75.5	54.9	14.7	73.9	57.6	13.8	72.2	60.6	12.9	70.5	63.7	12.0	68.6	67.1	11.1	66.6	70.7	10.3
49	78.1	55.4	15.1	76.5	58.2	14.1	74.8	61.2	13.2	73.0	64.3	12.3	71.0	67.7	11.4	69.0	71.3	10.6
51	80.8	55.9	15.5	79.1	58.7	14.5	77.4	61.7	13.5	75.5	64.9	12.6	73.5	68.3	11.7	71.4	71.9	10.9
53	83.6	56.5	15.8	81.8	59.3	14.9	80.0	62.3	13.9	78.0	65.5	13.0	76.0	68.9	12.0	73.9	72.5	11.2
55	86.4	57.1	16.2	84.6	59.9	15.2	82.7	62.9	14.2	80.7	66.1	13.3	78.6	69.5	12.3	76.4	73.2	11.5

NOTES:

1. SST = Saturated Suction Temperature
2. kW = Compressors Input Power
3. EER = Condensing Unit EER (includes power from compressors, fans and the control panel)

YCUL0185SC

SST	105°F			110°F			115°F			120°F			125°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	41.0	52.7	8.4	39.7	55.8	7.7	38.2	59.1	7.1	36.8	62.6	6.5	35.3	66.2	5.9
37	42.7	53.0	8.7	41.3	56.1	8.0	39.8	59.3	7.4	38.3	62.8	6.7	36.8	66.5	6.1
39	44.4	53.3	9.0	42.9	56.3	8.3	41.4	59.6	7.6	39.9	63.1	7.0	38.3	66.7	6.4
41	46.1	53.5	9.4	44.6	56.6	8.6	43.1	59.8	7.9	41.5	63.3	7.2	39.9	67.0	6.6
43	47.9	53.8	9.7	46.3	56.9	8.9	44.8	60.1	8.2	43.1	63.6	7.5	41.5	67.2	6.8
45	49.7	54.0	10.0	48.1	57.1	9.2	46.5	60.4	8.4	44.8	63.8	7.7	43.1	67.5	7.1
47	51.5	54.3	10.3	49.9	57.4	9.5	48.2	60.7	8.7	46.5	64.1	8.0	44.8	67.7	7.3
49	53.4	54.6	10.7	51.7	57.7	9.8	50.0	61.0	9.0	48.3	64.4	8.3	46.5	68.0	7.6
51	55.4	54.8	11.0	53.6	57.9	10.1	51.9	61.2	9.3	50.0	64.7	8.5	48.2	68.3	7.8
53	57.3	55.1	11.3	55.6	58.2	10.4	53.7	61.5	9.6	51.9	64.9	8.8	50.0	68.6	8.1
55	59.3	55.4	11.7	57.5	58.5	10.8	55.7	61.7	9.9	53.7	65.2	9.1	51.8	68.8	8.3

YCUL0211SC

SST	105°F			110°F			115°F			120°F			125°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	46.0	62.3	8.0	44.3	66.0	7.3	42.6	70.0	6.7	40.8	74.2	6.0	38.9	78.6	5.5
37	47.8	62.7	8.3	46.2	66.5	7.6	44.4	70.4	6.9	42.6	74.6	6.3	40.6	79.1	5.7
39	49.7	63.2	8.5	48.1	66.9	7.8	46.3	70.8	7.2	44.4	75.1	6.5	35.3	62.1	6.1
41	51.7	63.6	8.8	50.0	67.3	8.1	48.2	71.3	7.4	46.2	75.5	6.7	36.8	62.4	6.4
43	53.7	64.0	9.1	51.9	67.8	8.4	50.1	71.7	7.7	48.1	75.9	7.0	38.4	62.7	6.6
45	55.7	64.5	9.4	54.0	68.2	8.6	52.1	72.2	7.9	50.1	76.3	7.2	40.1	62.9	6.9
47	57.9	64.9	9.7	56.0	68.7	8.9	54.1	72.6	8.2	52.1	76.8	7.5	41.7	63.2	7.1
49	60.0	65.3	10.0	58.1	69.1	9.2	56.2	73.1	8.4	54.1	77.3	7.7	43.4	63.5	7.4
51	62.2	65.8	10.3	60.3	69.6	9.5	58.3	73.6	8.7	56.2	77.8	8.0	45.2	63.8	7.7
53	64.5	66.2	10.6	62.5	70.0	9.8	60.5	74.0	9.0	58.3	78.2	8.2	47.0	64.1	7.9
55	66.8	66.7	10.9	64.8	70.5	10.1	62.7	74.5	9.3	50.6	60.8	9.0	40.4	50.5	8.5

YCUL0235SC

SST	105°F			110°F			115°F			120°F			125°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	51.7	71.0	8.0	49.9	74.9	7.3	48.0	79.1	6.7	45.9	83.5	6.1	43.8	88.1	5.5
37	53.8	71.5	8.2	51.9	75.4	7.6	49.9	79.6	6.9	47.8	84.0	6.3	45.6	88.7	5.7
39	55.8	72.1	8.5	53.9	76.0	7.8	51.9	80.2	7.2	49.7	84.6	6.5	47.4	89.3	5.9
41	57.9	72.7	8.7	55.9	76.6	8.0	53.9	80.8	7.4	51.6	85.2	6.7	49.3	89.9	6.1
43	60.1	73.3	9.0	58.0	77.2	8.3	55.9	81.4	7.6	53.6	85.8	7.0	35.7	55.7	6.9
45	62.3	73.9	9.3	60.2	77.9	8.5	58.0	82.0	7.8	55.7	86.4	7.2	37.1	55.9	7.1
47	64.6	74.5	9.5	62.4	78.5	8.8	60.1	82.7	8.1	57.7	87.1	7.4	38.6	56.3	7.3
49	66.9	75.1	9.8	64.6	79.1	9.0	62.3	83.3	8.3	59.8	87.8	7.6	40.0	56.6	7.6
51	69.2	75.7	10.1	66.9	79.7	9.3	64.5	84.0	8.5	62.0	88.4	7.8	41.5	56.9	7.8
53	71.6	76.4	10.3	69.2	80.4	9.5	66.8	84.6	8.8	64.2	89.1	8.0	43.0	57.3	8.1
55	74.0	77.0	10.6	71.6	81.1	9.8	69.1	85.3	9.0	66.5	89.8	8.3	44.6	57.6	8.3

NOTES:

1. SST = Saturated Suction Temperature
2. kW = Compressors Input Power
3. EER = Condensing Unit EER (includes power from compressors, fans and the control panel)

Ratings - R22 (English Units) (Continued)

YCUL0255SC

SST	75°F			80°F			85°F			90°F			95°F			100°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	66.1	55.8	12.7	64.6	58.8	11.8	63.0	62.0	11.0	61.4	65.4	10.2	59.7	69.0	9.4	57.9	72.9	8.7
37	68.6	56.2	13.1	67.1	59.3	12.2	65.5	62.5	11.3	63.8	65.9	10.5	62.0	69.5	9.8	60.2	73.4	9.0
39	71.2	56.7	13.5	69.6	59.7	12.6	67.9	63.0	11.7	66.2	66.4	10.9	64.4	70.0	10.1	62.5	73.9	9.3
41	73.8	57.2	13.8	72.2	60.2	12.9	70.5	63.5	12.0	68.7	66.9	11.2	66.8	70.6	10.4	64.9	74.5	9.6
43	76.5	57.7	14.2	74.8	60.7	13.3	73.1	64.0	12.4	71.2	67.4	11.5	69.3	71.1	10.7	67.3	75.0	9.9
45	79.3	58.1	14.6	77.6	61.2	13.7	75.7	64.5	12.7	73.8	68.0	11.9	71.9	71.6	11.0	69.8	75.6	10.2
47	82.1	58.6	15.1	80.3	61.7	14.1	78.4	65.0	13.1	76.5	68.5	12.2	74.4	72.2	11.3	72.3	76.1	10.5
49	85.0	59.1	15.5	83.1	62.2	14.5	81.2	65.5	13.5	79.2	69.0	12.5	77.1	72.8	11.6	74.9	76.7	10.8
51	87.9	59.7	15.9	86.0	62.8	14.8	84.0	66.1	13.8	81.9	69.6	12.9	79.8	73.3	11.9	77.5	77.2	11.1
53	90.9	60.2	16.3	89.0	63.3	15.2	86.9	66.6	14.2	84.8	70.1	13.2	82.5	73.9	12.3	80.2	77.8	11.4
55	94.0	60.7	16.7	92.0	63.8	15.6	89.8	67.1	14.6	87.6	70.7	13.6	85.3	74.4	12.6	82.9	78.4	11.7

YCUL0275SC

SST	75°F			80°F			85°F			90°F			95°F			100°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	71.0	60.2	12.7	69.3	63.6	11.8	67.5	67.2	10.9	65.7	71.1	10.1	63.8	75.1	9.3	61.9	79.5	8.6
37	73.7	60.7	13.1	72.0	64.1	12.2	70.2	67.7	11.3	68.3	71.6	10.5	66.3	75.6	9.7	64.3	80.0	8.9
39	76.5	61.1	13.5	74.7	64.6	12.6	72.8	68.2	11.7	70.9	72.1	10.8	68.9	76.2	10.0	66.8	80.5	9.2
41	79.4	61.6	13.9	77.5	65.0	12.9	75.6	68.7	12.0	73.6	72.6	11.1	71.5	76.7	10.3	69.4	81.0	9.5
43	82.3	62.1	14.3	80.4	65.5	13.3	78.4	69.2	12.4	76.3	73.1	11.5	74.2	77.2	10.6	72.0	81.5	9.8
45	85.3	62.6	14.8	83.3	66.0	13.7	81.2	69.7	12.7	79.1	73.6	11.8	76.9	77.7	10.9	74.6	82.1	10.1
47	88.3	63.0	15.2	86.3	66.5	14.1	84.1	70.2	13.1	81.9	74.1	12.2	79.7	78.2	11.2	77.3	82.6	10.4
49	91.4	63.5	15.6	89.3	67.0	14.5	87.1	70.7	13.5	84.9	74.6	12.5	82.5	78.8	11.6	80.1	83.2	10.7
51	94.6	64.0	16.0	92.4	67.5	14.9	90.2	71.2	13.9	87.8	75.1	12.9	85.4	79.3	11.9	82.9	83.7	11.0
53	97.8	64.5	16.5	95.6	68.0	15.3	93.3	71.7	14.3	90.8	75.6	13.2	88.4	79.8	12.2	85.8	84.2	11.3
55	101.1	65.0	16.9	98.8	68.5	15.7	96.4	72.2	14.6	93.9	76.2	13.6	91.4	80.3	12.6	88.7	84.8	11.6

NOTES:

1. SST = Saturated Suction Temperature
2. kW = Compressors Input Power
3. EER = Condensing Unit EER (includes power from compressors, fans and the control panel)

YCUL0255SC

SST	105°F			110°F			115°F			120°F			125°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	56.1	77.0	8.0	54.1	81.4	7.4	52.1	86.0	6.7	50.0	90.9	6.1	47.8	96.0	5.6
37	58.3	77.5	8.3	56.3	81.9	7.6	54.2	86.5	7.0	52.0	91.4	6.4	49.7	96.5	5.8
39	60.5	78.1	8.6	58.5	82.4	7.9	56.3	87.1	7.2	54.1	91.9	6.6	51.8	97.1	6.0
41	62.9	78.6	8.8	60.7	83.0	8.1	58.5	87.6	7.4	56.2	92.5	6.8	45.3	77.2	6.5
43	65.2	79.1	9.1	63.0	83.5	8.4	60.8	88.2	7.7	58.4	93.0	7.0	47.1	77.6	6.7
45	67.6	79.7	9.4	65.4	84.1	8.6	63.1	88.7	7.9	60.6	93.6	7.2	48.9	78.0	6.9
47	70.1	80.2	9.7	67.8	84.6	8.9	65.4	89.3	8.2	62.9	94.2	7.5	50.8	78.5	7.2
49	72.6	80.8	9.9	70.3	85.2	9.2	67.8	89.9	8.4	65.2	94.7	7.7	43.6	61.1	7.7
51	75.2	81.4	10.2	72.8	85.8	9.4	70.2	90.4	8.7	67.6	95.3	7.9	45.2	61.3	8.0
53	77.8	82.0	10.5	75.3	86.4	9.7	72.7	91.0	8.9	70.0	95.9	8.2	46.9	61.6	8.2
55	80.5	82.6	10.8	77.9	87.0	10.0	75.3	91.6	9.2	72.5	96.5	8.4	48.6	61.8	8.5

YCUL0275SC

SST	105°F			110°F			115°F			120°F			125°F		
° F	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER	TONS	KW	EER
35	59.8	84.1	7.9	57.7	89.0	7.2	55.6	94.1	6.6	53.4	99.6	6.0	51.1	105.3	5.5
37	62.2	84.6	8.2	60.1	89.5	7.5	57.8	94.6	6.8	55.6	100.1	6.2	53.2	105.8	5.7
39	64.7	85.1	8.4	62.4	90.0	7.7	60.2	95.1	7.1	57.8	100.6	6.5	55.4	106.3	5.9
41	67.1	85.6	8.7	64.9	90.5	8.0	62.5	95.7	7.3	60.1	101.1	6.7	57.6	106.8	6.1
43	69.7	86.1	9.0	67.3	91.0	8.3	64.9	96.2	7.6	62.4	101.6	6.9	41.6	65.7	6.9
45	72.3	86.7	9.3	69.9	91.6	8.5	67.4	96.7	7.8	64.8	102.1	7.1	43.2	65.9	7.1
47	74.9	87.2	9.6	72.4	92.1	8.8	69.9	97.3	8.1	67.3	102.7	7.4	44.9	66.1	7.4
49	77.6	87.8	9.8	75.1	92.6	9.1	72.5	97.8	8.3	69.8	103.2	7.6	46.7	66.3	7.7
51	80.4	88.3	10.1	77.8	93.2	9.3	75.1	98.3	8.6	72.3	103.8	7.8	48.4	66.5	7.9
53	83.2	88.9	10.4	80.5	93.8	9.6	77.7	98.9	8.8	74.9	104.3	8.1	50.2	66.7	8.2
55	86.0	89.4	10.7	83.3	94.3	9.9	80.5	99.4	9.1	77.5	104.8	8.3	52.1	66.9	8.5

NOTES:

1. SST = Saturated Suction Temperature
2. kW = Compressors Input Power
3. EER = Condensing Unit EER (includes power from compressors, fans and the control panel)

Ratings - R22 (SI Units)

YCUL0045SC

SST	25°C			30°C			35°C			40°C			45°C			50°C		
° 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
2	41.5	8.9	3.5	39.7	9.9	3.1	37.8	11.0	2.8	35.8	12.2	2.4	33.7	13.5	2.1	31.4	15.0	1.8
3	42.9	9.0	3.7	41.1	9.9	3.2	39.2	11.0	2.8	37.2	12.2	2.5	35.0	13.6	2.1	32.6	15.1	1.8
4	44.4	9.0	3.8	42.6	10.0	3.3	40.6	11.0	2.9	38.5	12.2	2.6	36.2	13.6	2.2	33.8	15.1	1.9
5	46.0	9.1	3.9	44.1	10.0	3.4	42.0	11.1	3.0	39.9	12.3	2.6	37.5	13.6	2.3	35.1	15.1	2.0
6	47.5	9.1	4.0	45.6	10.0	3.6	43.5	11.1	3.1	41.3	12.3	2.7	38.9	13.7	2.4	36.4	15.2	2.0
7	49.1	9.1	4.1	47.1	10.1	3.7	45.0	11.2	3.2	42.7	12.4	2.8	40.2	13.7	2.4	37.6	15.2	2.1
8	50.8	9.2	4.2	48.7	10.1	3.8	46.5	11.2	3.3	44.1	12.4	2.9	41.6	13.8	2.5	39.0	15.3	2.2
9	52.4	9.2	4.4	50.3	10.2	3.9	48.0	11.3	3.4	45.6	12.5	3.0	43.0	13.8	2.6	40.3	15.3	2.2
10	54.1	9.3	4.5	51.9	10.2	4.0	49.6	11.3	3.5	47.1	12.5	3.1	44.5	13.9	2.7	41.7	15.4	2.3
11	55.9	9.3	4.6	53.6	10.3	4.1	51.2	11.3	3.6	48.7	12.6	3.2	46.0	13.9	2.8	43.1	15.4	2.4
12	57.6	9.3	4.8	55.3	10.3	4.2	52.9	11.4	3.7	50.2	12.6	3.3	47.5	13.9	2.8	44.5	15.4	2.4

YCUL0061SC

SST	25°C			30°C			35°C			40°C			45°C			50°C		
° 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
2	55.7	12.8	3.6	53.2	14.3	3.1	50.5	15.9	2.7	47.7	17.7	2.3	44.8	19.7	2.0	41.7	22.0	1.7
3	57.6	12.9	3.7	55.0	14.3	3.2	52.3	16.0	2.8	49.4	17.8	2.4	46.4	19.8	2.1	43.2	22.1	1.7
4	59.6	13.0	3.8	56.9	14.4	3.3	54.1	16.0	2.9	51.1	17.9	2.5	48.0	19.9	2.1	44.8	22.2	1.8
5	61.5	13.1	3.9	58.8	14.5	3.4	55.9	16.1	3.0	52.8	18.0	2.6	49.7	20.0	2.2	46.4	22.3	1.9
6	63.5	13.1	4.0	60.7	14.6	3.5	57.7	16.2	3.0	54.6	18.0	2.6	51.4	20.1	2.3	48.0	22.3	1.9
7	65.5	13.2	4.1	62.6	14.7	3.6	59.6	16.3	3.1	56.4	18.1	2.7	53.1	20.2	2.3	49.6	22.4	2.0
8	67.6	13.3	4.2	64.6	14.7	3.7	61.5	16.4	3.2	58.3	18.2	2.8	54.8	20.2	2.4	51.3	22.5	2.0
9	69.7	13.4	4.3	66.7	14.8	3.8	63.5	16.5	3.3	60.1	18.3	2.9	56.6	20.3	2.5	53.0	22.6	2.1
10	71.8	13.5	4.4	68.7	14.9	3.9	65.5	16.6	3.4	62.0	18.4	2.9	58.4	20.4	2.5	54.7	22.7	2.2
11	74.0	13.5	4.5	70.8	15.0	4.0	67.5	16.6	3.5	64.0	18.5	3.0	60.3	20.5	2.6	56.5	22.8	2.2
12	76.2	13.6	4.6	73.0	15.1	4.1	69.5	16.7	3.6	65.9	18.6	3.1	62.2	20.6	2.7	58.2	22.9	2.3

YCUL0081SC

SST	25°C			30°C			35°C			40°C			45°C			50°C		
° 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
2	70.8	16.7	3.6	68.2	18.3	3.2	65.2	20.1	2.9	61.9	22.1	2.5	58.2	24.4	2.1	54.1	26.9	1.8
3	73.2	16.9	3.7	70.5	18.4	3.3	67.5	20.2	2.9	64.1	22.2	2.6	60.3	24.5	2.2	56.1	27.0	1.9
4	75.7	17.0	3.8	72.9	18.6	3.4	69.8	20.3	3.0	66.3	22.4	2.6	62.4	24.6	2.3	58.1	27.1	1.9
5	78.2	17.1	3.9	75.4	18.7	3.5	72.2	20.5	3.1	68.6	22.5	2.7	64.6	24.8	2.3	60.2	27.3	2.0
6	80.8	17.2	4.0	77.9	18.8	3.6	74.6	20.6	3.2	70.9	22.6	2.8	66.9	24.9	2.4	62.4	27.4	2.1
7	83.5	17.4	4.1	80.4	19.0	3.7	77.1	20.8	3.3	73.3	22.8	2.9	69.1	25.0	2.5	64.6	27.5	2.1
8	86.2	17.5	4.2	83.1	19.1	3.8	79.6	20.9	3.4	75.7	22.9	2.9	71.5	25.2	2.6	66.8	27.7	2.2
9	89.0	17.6	4.4	85.7	19.2	3.9	82.1	21.1	3.4	78.2	23.1	3.0	73.8	25.3	2.6	69.0	27.9	2.3
10	91.8	17.8	4.5	88.5	19.4	4.0	84.8	21.2	3.5	80.7	23.2	3.1	76.3	25.5	2.7	71.4	28.0	2.3
11	94.6	17.9	4.6	91.2	19.5	4.1	87.4	21.4	3.6	83.3	23.4	3.2	78.7	25.6	2.8	73.7	28.2	2.4
12	97.6	18.1	4.7	94.1	19.7	4.2	90.2	21.5	3.7	85.9	23.5	3.3	81.2	25.8	2.8	76.1	28.3	2.4

NOTES:

1. SST = Saturated Suction Temperature
2. kWo = Unit kW Cooling Capacity Output
3. kWi = Compressors Input Power
4. COP = Coefficient of Performance (based on compressor and fan input kW)

YCUL0095SC

SST	25°C			30°C			35°C			40°C			45°C			50°C		
° 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
2	89.1	19.5	4.0	85.3	21.6	3.5	81.2	23.9	3.0	76.8	26.4	2.6	72.1	29.3	2.3	67.2	32.5	1.9
3	92.2	19.6	4.1	88.3	21.7	3.6	84.1	24.0	3.1	79.6	26.6	2.7	74.8	29.4	2.3	69.7	32.6	2.0
4	95.4	19.8	4.2	91.3	21.8	3.7	87.0	24.1	3.2	82.4	26.7	2.8	77.5	29.5	2.4	72.3	32.7	2.0
5	98.6	19.9	4.4	94.5	21.9	3.8	90.0	24.2	3.3	85.2	26.8	2.9	80.2	29.7	2.5	74.9	32.8	2.1
6	101.9	20.0	4.5	97.7	22.1	3.9	93.1	24.4	3.4	88.2	26.9	3.0	83.0	29.8	2.6	77.6	32.9	2.2
7	105.3	20.1	4.6	100.9	22.2	4.0	96.2	24.5	3.5	91.2	27.1	3.1	85.9	29.9	2.6	80.3	33.1	2.2
8	108.8	20.2	4.7	104.2	22.3	4.2	99.4	24.6	3.6	94.2	27.2	3.1	88.8	30.0	2.7	83.1	33.2	2.3
9	112.3	20.3	4.9	107.6	22.4	4.3	102.6	24.7	3.7	97.3	27.3	3.2	91.8	30.2	2.8	85.9	33.3	2.4
10	115.8	20.5	5.0	111.0	22.5	4.4	105.9	24.9	3.8	100.5	27.4	3.3	94.8	30.3	2.9	88.8	33.4	2.5
11	119.4	20.6	5.1	114.5	22.7	4.5	109.3	25.0	3.9	103.7	27.6	3.4	97.9	30.4	3.0	91.7	33.6	2.5
12	123.1	20.7	5.2	118.1	22.8	4.6	112.7	25.1	4.0	107.0	27.7	3.5	101.0	30.5	3.0	94.7	33.7	2.6

YCUL0121SC

SST	25°C			30°C			35°C			40°C			45°C			50°C		
° 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
2	104.4	26.4	3.6	100.2	29.0	3.2	95.5	31.8	2.8	90.3	35.0	2.4	84.6	38.6	2.0	78.3	42.5	1.7
3	107.9	26.7	3.7	103.6	29.2	3.2	98.8	32.1	2.8	93.5	35.3	2.5	87.6	38.8	2.1	81.2	42.8	1.8
4	111.6	26.9	3.8	107.1	29.4	3.3	102.2	32.3	2.9	96.7	35.5	2.5	90.7	39.1	2.2	84.1	43.0	1.8
5	115.3	27.1	3.9	110.7	29.7	3.4	105.6	32.6	3.0	100.0	35.8	2.6	93.8	39.4	2.2	87.1	43.3	1.9
6	119.0	27.3	4.0	114.4	29.9	3.5	109.1	32.8	3.1	103.4	36.0	2.7	97.0	39.6	2.3	90.1	43.6	1.9
7	122.9	27.6	4.1	118.1	30.1	3.6	112.7	33.1	3.1	106.8	36.3	2.7	100.3	39.9	2.4	93.3	43.8	2.0
8	126.8	27.8	4.1	121.9	30.4	3.7	116.3	33.3	3.2	110.3	36.6	2.8	103.6	40.2	2.4	96.4	44.1	2.1
9	130.8	28.0	4.2	125.7	30.6	3.8	120.0	33.6	3.3	113.8	36.8	2.9	107.0	40.4	2.5	99.6	44.4	2.1
10	134.9	28.3	4.3	129.6	30.9	3.9	123.8	33.8	3.4	117.4	37.1	2.9	110.5	40.7	2.5	102.9	44.7	2.2
11	139.0	28.5	4.4	133.6	31.2	3.9	127.7	34.1	3.5	121.1	37.4	3.0	114.0	41.0	2.6	106.3	45.0	2.2
12	143.3	28.8	4.5	137.7	31.4	4.0	131.6	34.4	3.5	124.8	37.7	3.1	117.5	41.3	2.7	76.4	27.7	2.5

YCUL0125SC

SST	25°C			30°C			35°C			40°C			45°C			50°C		
° 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
2	111.8	23.8	3.8	108.1	26.6	3.4	103.8	29.8	2.9	98.8	33.3	2.5	93.2	37.4	2.2	86.8	41.9	1.8
3	115.7	23.9	3.9	112.0	26.7	3.5	107.6	29.9	3.0	102.6	33.4	2.6	96.9	37.5	2.3	90.5	42.0	1.9
4	119.7	24.1	4.0	115.9	26.8	3.6	111.5	29.9	3.1	106.5	33.5	2.7	100.8	37.6	2.3	94.3	42.1	2.0
5	123.7	24.2	4.2	120.0	26.9	3.7	115.6	30.1	3.2	110.5	33.6	2.8	104.7	37.6	2.4	98.1	42.2	2.1
6	127.9	24.3	4.3	124.1	27.0	3.8	119.7	30.2	3.4	114.5	33.7	2.9	108.7	37.7	2.5	102.1	42.3	2.1
7	132.2	24.4	4.4	128.3	27.2	3.9	123.9	30.3	3.5	118.7	33.8	3.0	112.8	37.8	2.6	106.1	42.3	2.2
8	136.7	24.5	4.5	132.7	27.3	4.0	128.2	30.4	3.6	123.0	33.9	3.1	117.0	37.9	2.7	110.3	42.4	2.3
9	141.2	24.6	4.7	137.2	27.4	4.2	132.5	30.5	3.7	127.3	34.0	3.2	121.3	38.1	2.8	114.5	42.6	2.4
10	145.8	24.7	4.8	141.7	27.5	4.3	137.1	30.6	3.8	131.8	34.2	3.3	125.7	38.2	2.9	118.8	42.7	2.5
11	150.5	24.9	4.9	146.4	27.6	4.4	141.7	30.8	3.9	136.3	34.3	3.4	130.2	38.3	3.0	123.3	42.8	2.6
12	155.4	25.0	5.1	151.2	27.7	4.5	146.4	30.9	4.0	140.9	34.4	3.5	134.8	38.4	3.1	127.8	42.9	2.6

NOTES:

1. SST = Saturated Suction Temperature
2. kWo = Unit kW Cooling Capacity Output
3. kWi = Compressors Input Power
4. COP = Coefficient of Performance (based on compressor and fan input kW)

Ratings - R22 (SI Units) (Continued)

YCUL0145SC

SST	25°C			30°C			35°C			40°C			45°C			50°C		
° 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
2	127.1	28.5	3.7	122.6	31.4	3.3	117.4	34.8	2.9	111.5	38.5	2.5	104.9	42.8	2.2	97.5	47.5	1.8
3	131.5	28.6	3.8	126.9	31.6	3.4	121.6	34.9	3.0	115.6	38.7	2.6	108.9	43.0	2.2	101.4	47.7	1.9
4	136.0	28.8	4.0	131.3	31.8	3.5	125.9	35.1	3.1	119.7	38.9	2.7	112.9	43.1	2.3	105.3	47.9	2.0
5	140.6	29.0	4.1	135.8	32.0	3.6	130.2	35.3	3.2	124.0	39.1	2.8	117.0	43.4	2.4	109.3	48.1	2.0
6	145.3	29.2	4.2	140.4	32.1	3.7	134.7	35.5	3.3	128.4	39.3	2.9	121.2	43.6	2.5	113.4	48.2	2.1
7	150.2	29.4	4.3	145.1	32.3	3.8	139.3	35.7	3.4	132.8	39.5	3.0	125.6	43.8	2.5	117.6	48.4	2.2
8	155.1	29.6	4.4	149.9	32.5	3.9	144.0	35.9	3.5	137.4	39.7	3.0	130.0	44.0	2.6	121.9	48.7	2.2
9	160.1	29.8	4.5	154.8	32.7	4.0	148.8	36.1	3.6	142.0	39.9	3.1	134.5	44.2	2.7	126.2	48.9	2.3
10	165.2	30.0	4.7	159.8	32.9	4.1	153.6	36.3	3.7	146.8	40.1	3.2	139.1	44.4	2.8	130.7	49.1	2.4
11	170.5	30.2	4.8	164.9	33.2	4.3	158.6	36.5	3.8	151.6	40.4	3.3	143.8	44.6	2.9	135.2	49.3	2.5
12	175.8	30.4	4.9	170.1	33.4	4.4	163.7	36.8	3.9	156.5	40.6	3.4	148.6	44.8	3.0	139.9	49.6	2.5

YCUL0161SC

SST	25°C			30°C			35°C			40°C			45°C			50°C		
° 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
2	144.0	33.7	3.7	138.5	36.9	3.3	132.3	40.5	2.9	125.4	44.5	2.5	117.9	49.0	2.2	109.4	54.1	1.8
3	149.0	33.9	3.8	143.3	37.1	3.4	136.9	40.7	3.0	129.9	44.8	2.6	122.1	49.3	2.2	113.5	54.4	1.9
4	154.0	34.2	3.9	148.2	37.4	3.5	141.7	41.0	3.0	134.4	45.1	2.7	126.4	49.6	2.3	117.6	54.7	2.0
5	159.2	34.4	4.0	153.2	37.7	3.5	146.5	41.3	3.1	139.0	45.4	2.7	130.7	50.0	2.4	121.8	55.0	2.0
6	164.5	34.7	4.1	158.3	37.9	3.6	151.4	41.6	3.2	143.7	45.7	2.8	135.2	50.3	2.4	126.1	55.3	2.1
7	169.8	35.0	4.2	163.5	38.2	3.7	156.4	41.9	3.3	148.5	46.0	2.9	139.8	50.6	2.5	130.5	55.6	2.1
8	175.3	35.2	4.3	168.8	38.5	3.8	161.5	42.2	3.4	153.4	46.3	3.0	144.5	50.9	2.6	134.8	56.0	2.2
9	180.9	35.5	4.4	174.2	38.8	3.9	166.7	42.5	3.5	158.4	46.6	3.0	149.3	51.2	2.6	139.4	56.3	2.3
10	186.6	35.8	4.5	179.7	39.1	4.0	172.0	42.8	3.6	163.5	46.9	3.1	154.2	51.5	2.7	144.0	56.6	2.3
11	192.4	36.1	4.6	185.3	39.4	4.1	177.4	43.1	3.6	168.6	47.3	3.2	159.1	51.9	2.8	148.7	57.0	2.4
12	198.4	36.4	4.7	191.0	39.7	4.2	182.9	43.4	3.7	173.9	47.6	3.3	164.2	52.2	2.8	153.5	57.3	2.4

YCUL0171SC

SST	25°C			30°C			35°C			40°C			45°C			50°C		
° 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
2	154.8	37.6	3.6	148.4	41.3	3.2	141.4	45.6	2.8	133.7	50.3	2.4	125.4	55.6	2.1	116.5	61.4	1.7
3	160.2	37.8	3.7	153.6	41.6	3.3	146.3	45.9	2.8	138.4	50.6	2.5	129.9	55.9	2.1	120.8	61.7	1.8
4	165.6	38.1	3.8	158.8	41.9	3.4	151.4	46.1	2.9	143.3	50.9	2.5	134.5	56.2	2.2	125.2	62.0	1.9
5	171.2	38.4	3.9	164.2	42.2	3.4	156.5	46.4	3.0	148.2	51.2	2.6	139.2	56.5	2.2	129.7	62.3	1.9
6	176.9	38.6	4.0	169.7	42.4	3.5	161.8	46.7	3.1	153.3	51.5	2.7	144.0	56.8	2.3	134.3	62.6	2.0
7	182.7	38.9	4.1	175.3	42.7	3.6	167.2	47.0	3.2	158.4	51.8	2.8	149.0	57.1	2.4	138.9	63.0	2.0
8	188.6	39.2	4.2	181.0	43.0	3.7	172.6	47.3	3.3	163.6	52.1	2.8	154.0	57.4	2.4	143.6	63.3	2.1
9	194.6	39.5	4.3	186.8	43.3	3.8	178.2	47.6	3.4	169.0	52.4	2.9	159.1	57.7	2.5	148.5	63.6	2.1
10	200.8	39.7	4.4	192.7	43.6	3.9	183.9	47.9	3.4	174.4	52.7	3.0	164.3	58.1	2.6	153.4	63.9	2.2
11	207.0	40.0	4.5	198.7	43.9	4.0	189.7	48.2	3.5	179.9	53.1	3.1	169.5	58.4	2.7	158.4	64.3	2.3
12	213.4	40.3	4.7	204.8	44.2	4.1	195.5	48.5	3.6	185.6	53.4	3.2	174.9	58.7	2.7	163.5	64.6	2.3

NOTES:

1. SST = Saturated Suction Temperature
2. kWo = Unit kW Cooling Capacity Output
3. kWi = Compressors Input Power
4. COP = Coefficient of Performance (based on compressor and fan input kW)

YCUL0185SC

SST	25°C			30°C			35°C			40°C			45°C			50°C		
° 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
2	170.1	38.6	3.9	162.9	42.6	3.4	155.1	47.2	2.9	146.9	52.2	2.5	138.2	57.8	2.2	128.9	64.1	1.9
3	176.1	38.8	4.0	168.6	42.9	3.5	160.7	47.4	3.0	152.2	52.5	2.6	143.2	58.1	2.3	133.7	64.3	1.9
4	182.2	39.0	4.1	174.5	43.1	3.6	166.3	47.6	3.1	157.6	52.7	2.7	148.4	58.3	2.3	138.7	64.5	2.0
5	188.4	39.2	4.2	180.5	43.3	3.7	172.1	47.8	3.2	163.1	52.9	2.8	153.7	58.5	2.4	143.7	64.7	2.0
6	194.7	39.5	4.3	186.6	43.5	3.8	178.0	48.1	3.3	168.8	53.2	2.9	159.0	58.8	2.5	148.8	65.0	2.1
7	201.1	39.7	4.4	192.8	43.8	3.9	184.0	48.3	3.4	174.5	53.4	3.0	164.5	59.0	2.5	154.0	65.2	2.2
8	207.7	39.9	4.6	199.2	44.0	4.0	190.1	48.5	3.5	180.4	53.6	3.0	170.1	59.3	2.6	159.4	65.4	2.2
9	214.5	40.1	4.7	205.7	44.2	4.1	196.3	48.8	3.6	186.3	53.9	3.1	175.8	59.5	2.7	164.8	65.7	2.3
10	221.3	40.3	4.8	212.3	44.4	4.2	202.6	49.0	3.7	192.4	54.1	3.2	181.6	59.8	2.8	170.3	66.0	2.4
11	228.3	40.6	5.0	219.0	44.7	4.4	209.1	49.3	3.8	198.6	54.4	3.3	187.6	60.0	2.9	175.9	66.2	2.5
12	235.4	40.8	5.1	225.9	44.9	4.5	215.7	49.5	3.9	205.0	54.6	3.4	193.6	60.2	2.9	181.7	66.4	2.5

YCUL0211SC

SST	25°C			30°C			35°C			40°C			45°C			50°C		
° 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
2	189.4	45.5	3.6	182.2	50.3	3.2	173.9	55.7	2.8	164.7	61.7	2.4	154.3	68.5	2.1	142.7	76.1	1.7
3	195.9	45.8	3.7	188.5	50.6	3.3	180.0	56.1	2.9	170.7	62.1	2.5	160.1	68.9	2.1	148.3	76.4	1.8
4	202.6	46.2	3.8	195.0	51.0	3.4	186.4	56.4	3.0	176.7	62.5	2.6	166.0	69.3	2.2	154.0	76.8	1.8
5	209.4	46.5	3.9	201.6	51.3	3.5	192.8	56.7	3.0	182.9	62.9	2.6	172.0	69.7	2.3	159.8	77.2	1.9
6	216.3	46.9	4.0	208.4	51.7	3.6	199.3	57.1	3.1	189.3	63.3	2.7	178.1	70.1	2.3	165.8	77.6	2.0
7	223.4	47.2	4.1	215.3	52.0	3.7	206.1	57.5	3.2	195.8	63.7	2.8	184.4	70.5	2.4	171.9	78.0	2.0
8	230.7	47.6	4.2	222.3	52.4	3.8	212.9	57.9	3.3	202.5	64.0	2.9	190.8	70.9	2.5	178.1	78.4	2.1
9	238.1	47.9	4.4	229.5	52.8	3.9	219.9	58.3	3.4	209.2	64.4	2.9	197.4	71.3	2.5	153.9	61.2	2.3
10	245.7	48.3	4.5	236.9	53.2	4.0	227.1	58.7	3.5	216.2	64.8	3.0	204.1	71.7	2.6	159.4	61.5	2.3
11	253.4	48.6	4.6	244.4	53.5	4.1	234.3	59.1	3.6	223.3	65.2	3.1	210.9	72.1	2.7	165.1	61.8	2.4
12	261.3	49.0	4.7	252.1	53.9	4.2	241.8	59.5	3.7	230.5	65.6	3.2	217.9	72.5	2.8	170.8	62.0	2.5

YCUL0235SC

SST	25°C			30°C			35°C			40°C			45°C			50°C		
° 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
2	214.3	53.1	3.6	205.7	58.2	3.2	196.0	64.0	2.8	185.4	70.4	2.4	173.5	77.5	2.1	160.4	85.5	1.7
3	221.7	53.5	3.7	212.7	58.7	3.3	202.8	64.4	2.9	191.9	70.8	2.5	179.7	78.0	2.1	166.3	86.0	1.8
4	229.1	54.0	3.8	219.9	59.1	3.3	209.7	64.9	2.9	198.4	71.4	2.5	186.0	78.5	2.2	172.3	86.5	1.9
5	236.8	54.4	3.9	227.3	59.6	3.4	216.8	65.4	3.0	205.1	71.9	2.6	192.4	79.1	2.2	178.4	87.0	1.9
6	244.6	54.9	4.0	234.8	60.1	3.5	224.0	65.9	3.1	212.0	72.4	2.7	198.9	79.7	2.3	184.7	87.6	2.0
7	252.5	55.3	4.1	242.4	60.5	3.6	231.3	66.4	3.2	219.0	73.0	2.8	205.5	80.2	2.4	191.0	88.1	2.0
8	260.6	55.8	4.2	250.2	61.0	3.7	238.8	66.9	3.2	226.2	73.5	2.8	212.3	80.8	2.4	197.5	88.7	2.1
9	268.8	56.3	4.3	258.1	61.5	3.8	246.4	67.5	3.3	233.4	74.1	2.9	219.3	81.4	2.5	203.9	89.4	2.1
10	277.2	56.8	4.4	266.2	62.1	3.9	254.1	68.0	3.4	240.8	74.6	3.0	226.3	81.9	2.6	210.6	90.0	2.2
11	285.7	57.3	4.5	274.4	62.6	4.0	262.0	68.5	3.5	248.4	75.2	3.0	233.5	82.5	2.6	151.7	55.3	2.4
12	294.4	57.8	4.6	282.8	63.1	4.0	270.0	69.1	3.6	256.0	75.8	3.1	240.8	83.1	2.7	156.6	55.6	2.5

NOTES:

1. SST = Saturated Suction Temperature
2. kWo = Unit kW Cooling Capacity Output
3. kWi = Compressors Input Power
4. COP = Coefficient of Performance (based on compressor and fan input kW)

Ratings - R22 (SI Units) (Continued)

YCUL0255SC

SST	25°C			30°C			35°C			40°C			45°C			50°C		
° 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
2	232.9	57.1	3.7	223.1	62.8	3.2	212.4	69.2	2.8	200.8	76.3	2.4	188.3	84.3	2.1	174.8	93.1	1.8
3	240.9	57.5	3.8	230.8	63.2	3.3	219.8	69.6	2.9	207.9	76.8	2.5	195.0	84.8	2.1	181.2	93.5	1.8
4	249.0	57.9	3.9	238.6	63.7	3.4	227.4	70.1	3.0	215.1	77.3	2.6	201.9	85.2	2.2	187.8	94.0	1.9
5	257.3	58.4	4.0	246.6	64.1	3.5	235.1	70.6	3.0	222.5	77.7	2.6	209.0	85.7	2.3	194.4	94.5	1.9
6	265.8	58.8	4.1	254.8	64.6	3.6	242.9	71.1	3.1	230.0	78.2	2.7	216.1	86.2	2.3	201.3	95.0	2.0
7	274.5	59.3	4.2	263.2	65.1	3.7	250.9	71.5	3.2	237.7	78.7	2.8	223.5	86.7	2.4	208.2	95.5	2.0
8	283.3	59.7	4.3	271.7	65.5	3.8	259.1	72.0	3.3	245.5	79.2	2.9	230.9	87.2	2.5	215.3	96.0	2.1
9	292.3	60.2	4.4	280.3	66.0	3.9	267.3	72.5	3.4	253.4	79.8	2.9	238.5	87.7	2.5	222.5	96.5	2.2
10	301.4	60.6	4.5	289.1	66.5	4.0	275.8	73.0	3.5	261.5	80.3	3.0	246.2	88.3	2.6	229.9	97.1	2.2
11	310.8	61.1	4.6	298.1	67.0	4.0	284.4	73.5	3.5	269.7	80.8	3.1	254.1	88.8	2.7	200.0	77.0	2.4
12	320.2	61.6	4.7	307.2	67.5	4.1	293.2	74.0	3.6	278.1	81.3	3.2	262.1	89.3	2.7	206.5	77.4	2.5

YCUL0275SC

SST	25°C			30°C			35°C			40°C			45°C			50°C		
° 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
2	250.2	61.7	3.7	239.0	68.1	3.2	227.1	75.3	2.8	214.4	83.3	2.4	201.0	92.2	2.0	186.8	102.0	1.7
3	258.8	62.1	3.8	247.3	68.6	3.3	235.1	75.7	2.9	222.0	83.8	2.5	208.2	92.6	2.1	193.7	102.4	1.8
4	267.6	62.5	3.9	255.7	69.0	3.4	243.1	76.2	2.9	229.8	84.2	2.5	215.6	93.1	2.2	200.7	102.9	1.8
5	276.6	63.0	4.0	264.4	69.4	3.5	251.4	76.7	3.0	237.7	84.7	2.6	223.2	93.6	2.2	207.9	103.3	1.9
6	285.7	63.4	4.1	273.2	69.9	3.6	259.8	77.2	3.1	245.8	85.1	2.7	230.9	94.0	2.3	215.2	103.8	2.0
7	295.1	63.8	4.2	282.2	70.3	3.7	268.4	77.6	3.2	254.0	85.6	2.8	238.7	94.5	2.4	222.7	104.3	2.0
8	304.6	64.2	4.3	291.3	70.8	3.8	277.2	78.1	3.3	262.4	86.1	2.8	246.7	95.0	2.4	230.3	104.8	2.1
9	314.3	64.7	4.4	300.6	71.2	3.9	286.2	78.6	3.4	270.8	86.6	2.9	254.9	95.5	2.5	238.0	105.2	2.1
10	324.1	65.1	4.5	310.1	71.7	4.0	295.2	79.0	3.4	279.5	87.1	3.0	263.2	96.0	2.6	245.9	105.7	2.2
11	334.1	65.6	4.6	319.8	72.2	4.1	304.5	79.5	3.5	288.4	87.6	3.1	271.6	96.5	2.6	176.8	64.4	2.5
12	344.4	66.0	4.7	329.6	72.6	4.2	313.9	80.0	3.6	297.4	88.1	3.1	280.2	96.9	2.7	182.6	64.6	2.6

NOTES:

1. SST = Saturated Suction Temperature
2. kWo = Unit kW Cooling Capacity Output
3. kWi = Compressors Input Power
4. COP = Coefficient of Performance (based on compressor and fan input kW)

Part Load Ratings - *(English Units)*

YCUL0045SC				
% DISPL.	ENT. AIR TEMP. °F	TONS	kW	EER
100.0	95.0	12.9	11.2	11.1
50.0	68.6	7.4	3.8	13.4

YCUL0061SC				
% DISPL.	ENT. AIR TEMP. °F	TONS	kW	EER
100.0	95.0	17.1	16.3	10.7
50.0	69.3	10.0	5.3	14.8

YCUL0081SC				
% DISPL.	ENT. AIR TEMP. °F	TONS	kW	EER
100.0	95.0	22.1	20.8	11.2
50.0	68.2	12.5	7.2	14.9

YCUL0095SC				
% DISPL.	ENT. AIR TEMP. °F	TONS	kW	EER
100.0	95.0	27.5	24.5	12.1
50.0	69.0	15.9	8.1	17.5

YCUL0121SC				
% DISPL.	ENT. AIR TEMP. °F	TONS	kW	EER
100.0	95.0	32.3	33.1	10.8
66.7	78.3	23.7	17.1	14.3
33.3	58.1	12.7	6.6	16.2

YCUL0125SC				
% DISPL.	ENT. AIR TEMP. °F	TONS	kW	EER
100.0	95.0	35.5	30.3	11.9
75.0	81.4	28.0	18.6	13.9
50.0	67.1	19.4	9.8	15.1
25.0	55.0	9.9	4.3	16.7

YCUL0145SC				
% DISPL.	ENT. AIR TEMP. °F	TONS	kW	EER
100.0	95.0	39.9	35.7	11.6
78.2	83.4	32.9	24.4	13.2
50.0	67.8	22.3	12.0	15.2
28.2	55.0	13.2	6.4	17.1

YCUL0161SC				
% DISPL.	ENT. AIR TEMP. °F	TONS	kW	EER
100.0	95.0	44.8	42.0	11.3
75.0	82.2	35.9	26.6	13.4
50.0	68.4	25.4	14.4	15.2
25.0	55.0	13.2	6.5	17.1

YCUL0171SC				
% DISPL.	ENT. AIR TEMP. °F	TONS	kW	EER
100.0	95.0	47.9	47.1	10.9
76.5	82.9	39.0	30.6	12.9
50.0	68.9	27.6	15.8	15.5
26.5	55.0	15.3	7.1	18.5

YCUL0185SC				
% DISPL.	ENT. AIR TEMP. °F	TONS	kW	EER
100.0	95.0	52.7	48.4	11.7
75.0	82.4	42.5	30.4	14.2
50.0	68.8	30.3	16.2	16.7
25.0	55.0	15.9	7.0	19.4

YCUL0211SC				
% DISPL.	ENT. AIR TEMP. °F	TONS	kW	EER
100.0	95.0	59.0	57.6	11.0
85.5	87.3	52.5	44.4	12.3
66.7	77.9	43.1	29.2	14.4
52.2	69.5	34.6	20.9	15.0
33.3	57.7	22.8	11.0	15.4
18.8	55.0	13.2	6.5	16.1

YCUL0235SC				
% DISPL.	ENT. AIR TEMP. °F	TONS	kW	EER
100.0	95.0	66.2	66.5	10.8
83.3	86.6	58.2	49.2	12.5
66.7	78.3	48.8	34.5	14.2
50.0	68.7	37.9	22.9	15.3
33.3	58.2	26.1	13.2	15.7
16.7	55.0	13.1	6.4	16.0

YCUL0255SC				
% DISPL.	ENT. AIR TEMP. °F	TONS	kW	EER
100.0	95.0	71.9	71.6	11.0
84.3	87.0	63.5	54.0	12.5
66.7	78.5	53.1	36.7	14.7
51.0	69.4	42.0	24.9	15.9
33.3	58.5	28.7	13.8	16.7
17.7	55.0	15.4	6.8	18.1

YCUL0275SC				
% DISPL.	ENT. AIR TEMP. °F	TONS	kW	EER
100.0	95.0	76.9	77.7	10.9
83.3	86.8	67.8	57.1	12.7
66.7	78.8	57.2	39.4	14.9
50.0	69.3	44.9	25.9	16.5
33.3	58.9	31.2	14.4	17.6
16.7	55.0	15.8	7.0	18.3

Part Load Ratings - (SI Units)

YCUL0045SC				
% DISPL.	AMBIENT °C	UNIT kW*o*	COMP. kW*i*	COP
100.0	35.0	45.3	11.2	3.24
50.0	20.3	25.9	3.8	3.94

YCUL0061SC				
% DISPL.	AMBIENT °C	UNIT kW*o*	COMP. kW*i*	COP
100.0	35.0	60.0	16.3	3.14
50.0	20.7	35.1	5.3	4.34

YCUL0081SC				
% DISPL.	AMBIENT °C	UNIT kW*o*	COMP. kW*i*	COP
100.0	35.0	77.6	20.8	3.29
50.0	20.1	43.8	7.2	4.38

YCUL0095SC				
% DISPL.	AMBIENT °C	UNIT kW*o*	COMP. kW*i*	COP
100.0	35.0	96.9	24.5	3.55
50.0	20.6	56.0	8.1	5.12

YCUL0121SC				
% DISPL.	AMBIENT °C	UNIT kW*o*	COMP. kW*i*	COP
100.0	35.0	113.5	33.1	3.16
66.7	25.7	83.5	17.1	4.19
33.3	14.5	44.6	6.6	4.75

YCUL0125SC				
% DISPL.	AMBIENT °C	UNIT kW*o*	COMP. kW*i*	COP
100.0	35.0	124.8	30.3	3.48
75.0	27.5	98.6	18.6	4.07
50.0	19.5	68.2	9.8	4.42
25.0	12.8	34.9	4.3	4.89

YCUL0145SC				
% DISPL.	AMBIENT °C	UNIT kW*o*	COMP. kW*i*	COP
100.0	35.0	140.3	35.7	3.39
78.2	28.6	115.5	24.4	3.86
50.0	19.9	78.3	12.0	4.44
28.2	12.8	46.3	6.4	5.03

YCUL0161SC				
% DISPL.	AMBIENT °C	UNIT kW*o*	COMP. kW*i*	COP
100.0	35.0	157.5	42.0	3.31
75.0	27.9	126.4	26.6	3.92
50.0	20.2	89.3	14.4	4.46
25.0	12.8	46.3	6.5	5.00

YCUL0171SC				
% DISPL.	AMBIENT °C	UNIT kW*o*	COMP. kW*i*	COP
100.0	35.0	168.4	47.1	3.20
76.5	28.3	137.2	30.6	3.79
50.0	20.5	97.0	15.8	4.53
26.5	12.8	53.7	7.1	5.41

YCUL0185SC				
% DISPL.	AMBIENT °C	UNIT kW*o*	COMP. kW*i*	COP
100.0	35.0	185.3	48.4	3.43
75.0	28.0	149.3	30.4	4.15
50.0	20.8	106.6	16.2	4.90
25.0	12.8	55.8	7.0	5.68

YCUL0211SC				
% DISPL.	AMBIENT °C	UNIT kW*o*	COMP. kW*i*	COP
100.0	35.0	207.6	57.6	3.22
85.5	30.7	184.6	44.4	3.61
66.7	25.5	151.5	29.2	4.21
52.2	20.8	121.9	20.9	4.39
33.3	14.3	80.1	11.0	4.50
18.8	12.8	46.3	6.5	4.70

YCUL0235SC				
% DISPL.	AMBIENT °C	UNIT kW*o*	COMP. kW*i*	COP
100.0	35.0	232.9	66.5	3.18
83.3	30.4	204.5	49.2	3.65
66.7	25.7	171.5	34.5	4.16
50.0	20.4	133.3	22.9	4.48
33.3	14.5	91.7	13.2	4.59
16.7	12.8	46.2	6.4	4.70

YCUL0255SC				
% DISPL.	AMBIENT °C	UNIT kW*o*	COMP. kW*i*	COPR
100.0	35.0	252.7	71.6	3.22
84.3	30.5	223.3	54.0	3.68
66.7	25.8	186.9	36.7	4.29
51.0	20.8	147.9	24.9	4.66
33.3	14.7	100.9	13.8	4.90
17.7	12.8	54.2	6.8	5.29

YCUL0275SC				
% DISPL.	AMBIENT °C	UNIT kW*o*	COMP. kW*i*	COPR
100.0	35.0	270.4	77.7	3.20
83.3	30.5	238.3	57.1	3.73
66.7	26.0	201.3	39.4	4.35
50.0	20.7	157.7	25.9	4.83
33.3	14.9	109.9	14.4	5.17
16.7	12.8	55.6	7.0	5.37

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Physical Data - *(English Units)*

Model YCUL0	045SC	061SC	081SC	095SC	121SC	125SC	145SC
Nominal Tons	12.9	17.1	22.1	27.5	32.3	35.5	39.9
Number of Refrigerant Circuits	1	1	1	1	1	2	2
Compressors per circuit	2	2	2	2	3	2	2
Compressors per unit	2	2	2	2	3	4	4
Condenser							
Total Face Area ft^2	47.2	47.2	66.1	66.1	66.1	128.0	128.0
Number of Rows	2	2	2	3	3	2	2
Fins per Inch	14	14	14	12	14	12	12
Condenser Fans							
Number of Fans total	2	2	2	2	2	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
Fan RPM	1140	1140	1140	1140	1140	1140	1140
Number of Blades	3	3	3	3	3	3	3
Total Condensing Unit CFM	16257	16257	23500	23500	23500	47360	47360
Operating/Shipping Weight							
Aluminum Fin Coils, lbs	1740	1750	1886	2017	2171	3205	3248
Copper Fin Coils, lbs	1907	1917	2120	2317	2522	3593	3638
Holding Refrigerant Charge, R22, Sys1, Sys2, lbs	6	6	6	6	6	6/6	6/6
Operating Refrigerant Charge, R22, Sys1, Sys2, lbs	25.0	29.6	45.2	50.7	53.8	35.1/35.1	42.1/35.1
Pump Down Capacity, R22, Sys1, Sys2, lbs	43.2	43.2	60.5	90.7	90.7	58.4/58.4	58.4/58.4
Oil Charge, ckt1 / ckt2, gallons	1.7	1.7	2.1	3.5	3.2	2.0/2.0	2.1/2.1

Notes:

1. Pump Down Capacity is based on 100°F (37.8°C) liquid R22 and 80% of condenser volume.
2. Operating Refrigerant Charge is for Condensing Unit only, does not include refrigerant lines and evaporator coil.

161SC	171SC	185SC	211SC	235SC	255SC	275SC
44.8	47.9	52.7	59.0	66.2	71.9	76.9
2	2	2	2	2	2	2
2	2	2	3	3	3	3
4	4	4	6	6	6	6
128.0	128.0	128.0	149.3	149.3	149.3	149.3
2	2	3	2	2	3	3
12	12	14	14	16	12	14
4	4	4	4	4	4	4
2 / 1.4	2 / 1.4	2 / 1.4	2 / 1.7	2 / 1.7	2 / 1.7	2 / 1.7
1140	1140	1140	1140	1140	1140	1140
3	3	3	3	3	3	3
47360	47360	46080	55253	55253	54550	53760
3293	3358	3640	3932	4030	4259	4432
3681	3745	4318	4459	4633	4937	5224
6/6	6/6	6/6	6/6	6/6	6/6	6/6
42.1/42.1	46.8/42.1	56.2/56.2	58.5/48.4	58.5/58.5	71.8/64.7	78.0/78.0
58.4/58.4	58.4/58.4	87.6/87.6	68.1/68.1	68.1/68.1	102.2/102.2	102.2/102.2
2.1/2.1	3.5/2.1	3.5/3.5	3.2/3.0	3.2/3.2	5.2/3.2	5.2/5.2

Physical Data - (SI Units)

Model YCUL0	045SC	061SC	081SC	095SC	121SC	125SC	145SC
Nominal kW	45.3	60.0	77.6	96.9	113.5	124.8	140.3
Number of Refrigerant Circuits	1	1	1	1	1	2	2
Compressors per circuit	2	2	2	2	3	2	2
Compressors per unit	2	2	2	2	3	4	4
Condenser							
Total Face Area meters^2	4	4	6	6	6	12	12
Number of Rows	2	2	2	3	3	2	2
Fins per m	551	551	551	472	551	472	472
Condenser Fans							
Number of Fans total	2	2	2	2	2	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
Fan RPM	1140	1140	1140	1140	1140	1140	1140
Number of Blades	3	3	3	3	3	3	3
Total Condensing Unit Airflow l/s	7672	7672	11091	11091	11091	22351	22351
Operating/Shipping Weight							
Aluminum Fin Coils, kg	789	794	856	915	985	1454	1473
Copper Fin Coils, kg	865	870	962	1051	1144	1630	1650
Holding Refrigerant Charge, R22, Sys1/Sys2, kg	2.7	2.7	2.7	2.7	2.7	2.7/2.7	2.7/2.7
Operating Refrigerant Charge, R22, Sys1, Sys2, kg	11.7	13.3	18.7	23.4	24.2	16.4/16.4	19.5/16.4
Pump Down Capacity, R22, Sys1, Sys2, kg	19.6	19.6	27.4	41.1	41.1	26.5/26.5	26.5/26.5
Oil Charge, ckt1/ckt2, liters	6	6	8	13	12	8.0/8.0	8.0/8.0

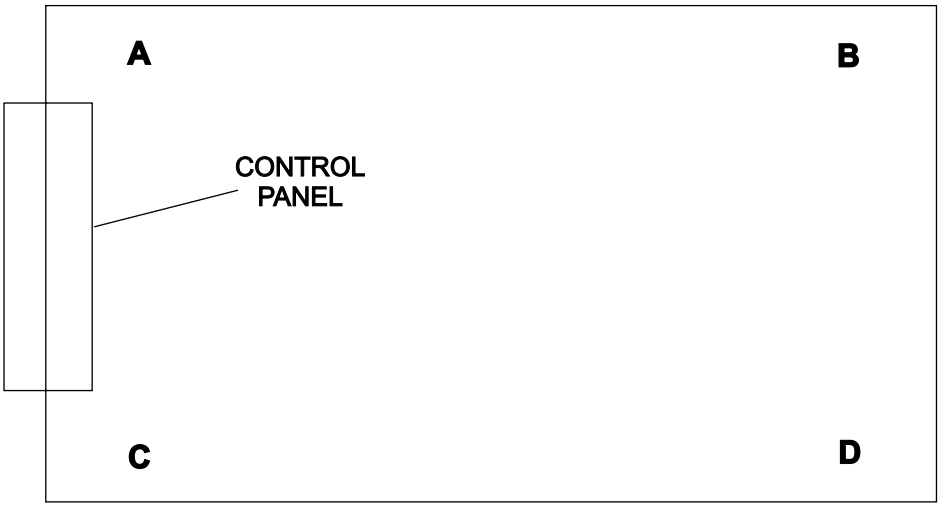
Notes:

1. Pump Down Capacity is based on 100°F (37.8°C) liquid R22 and 80% of condenser volume.
2. Operating Refrigerant Charge is for Condensing Unit only, does not include refrigerant lines and evaporator coil.

161SC	171SC	185SC	211SC	235SC	255SC	275SC
157.5	168.4	185.3	207.6	232.9	252.7	270.4
2	2	2	2	2	2	2
2	2	2	3	3	3	3
4	4	4	6	6	6	6
12	12	12	14	14	14	14
2	2	3	2	2	3	3
472	472	551	551	630	472	551
4	4	4	4	4	4	4
2 / 1.4	2 / 1.4	2 / 1.4	2 / 1.7	2 / 1.7	2 / 1.7	2 / 1.7
1140	1140	1140	1140	1140	1140	1140
3	3	3	3	3	3	3
22351	22351	21747	26076	26076	25744	25371
1494	1523	1651	1783	1828	1932	2010
1670	1699	1959	2023	2101	2239	2369
2.7/2.7	2.7/2.7	2.7/2.7	2.7/2.7	2.7/2.7	2.7/2.7	2.7/2.7
19.5/19.5	28.9/19.5	25.7/25.7	26.5/21.8	26.5/26.5	32.8/29.6	35.9/35.9
26.5/26.5	26.5/26.5	39.7/39.7	30.9/30.9	30.9/30.9	46.4/46.4	46.4/46.4
8.0/8.0	13/8	13/13	12/11.4	12.0/12.0	20/12	20/20

Isolator Selections

ISOLATOR SELECTION
(ALUMINUM COILS)



LD03701

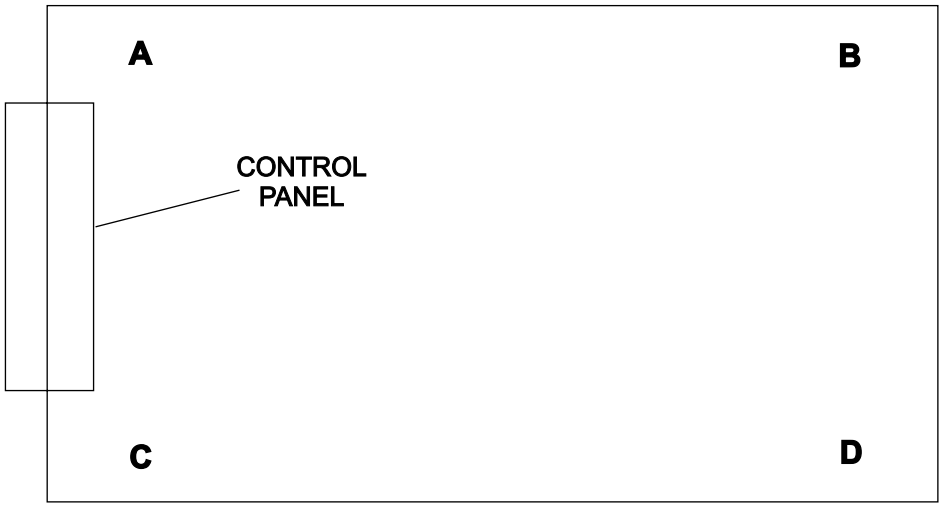
1" DEFLECTION

Model YCUL0	A	B	C	D
045SC	CP-1-26	CP-1-26	CP-1-26	CP-1-26
061SC	CP-1-26	CP-1-26	CP-1-26	CP-1-26
081SC	CP-1-26	CP-1-26	CP-1-26	CP-1-26
095SC	CP-1-26	CP-1-26	CP-1-26	CP-1-26
121SC	CP-1-27	CP-1-27	CP-1-27	CP-1-27
125SC	CP-1-28	CP-1-28	CP-1-28	CP-1-28
145SC	CP-1-28	CP-1-28	CP-1-28	CP-1-28
161SC	CP-1-28	CP-1-28	CP-1-28	CP-1-28
171SC	CP-1-28	CP-1-28	CP-1-28	CP-1-28
185SC	CP-1-28	CP-1-31	CP-1-28	CP-1-31
211SC	CP-1-31	CP-1-31	CP-1-31	CP-1-31
235SC	CP-1-31	CP-1-31	CP-1-31	CP-1-31
255SC	CP-2-26	CP-2-26	CP-2-26	CP-2-26
275SC	CP-2-26	CP-2-26	CP-2-26	CP-2-26

SEISMIC

Model YCUL0	A	B	C	D
045SC	AEQM-95	AEQM-95	AEQM-95	AEQM-95
061SC	AEQM-95	AEQM-95	AEQM-95	AEQM-95
081SC	AEQM-96	AEQM-96	AEQM-96	AEQM-96
095SC	AEQM-96	AEQM-96	AEQM-96	AEQM-96
121SC	AEQM-96	AEQM-96	AEQM-96	AEQM-96
125SC	AEQM-98	AEQM-98	AEQM-98	AEQM-98
145SC	AEQM-98	AEQM-98	AEQM-98	AEQM-98
161SC	AEQM-98	AEQM-98	AEQM-98	AEQM-98
171SC	AEQM-98	AEQM-98	AEQM-98	AEQM-98
185SC	AEQM-98	AEQM-98	AEQM-98	AEQM-98
211SC	AEQM-1000	AEQM-1000	AEQM-1000	AEQM-1000
235SC	AEQM-1000	AEQM-1000	AEQM-1000	AEQM-1000
255SC	AEQM-1000	AEQM-1000	AEQM-1000	AEQM-1000
275SC	AEQM-1000	AEQM-1000	AEQM-1000	AEQM-1000

ISOLATOR SELECTION
(COPPER COILS)



LD03701

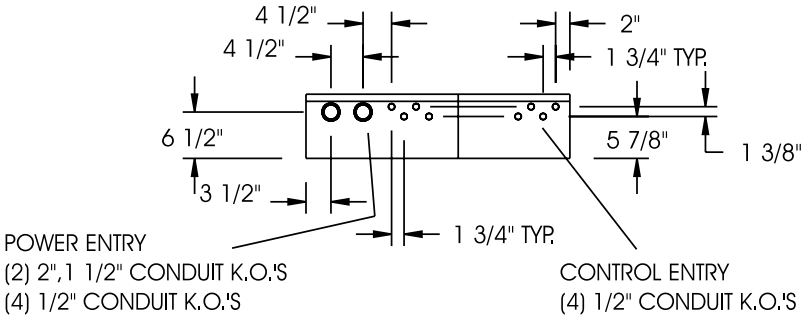
1" DEFLECTION

Model YCUL0	A	B	C	D
045SC	CP-1-26	CP-1-26	CP-1-26	CP-1-26
061SC	CP-1-26	CP-1-26	CP-1-26	CP-1-26
081SC	CP-1-26	CP-1-26	CP-1-26	CP-1-26
095SC	CP-1-27	CP-1-27	CP-1-27	CP-1-27
121SC	CP-1-27	CP-1-27	CP-1-27	CP-1-27
125SC	CP-1-28	CP-1-31	CP-1-28	CP-1-31
145SC	CP-1-28	CP-1-31	CP-1-28	CP-1-31
161SC	CP-1-31	CP-1-31	CP-1-31	CP-1-31
171SC	CP-1-31	CP-1-31	CP-1-31	CP-1-31
185SC	CP-1-31	CP-1-31	CP-1-31	CP-1-31
211SC	CP-2-26	CP-2-26	CP-2-26	CP-2-26
235SC	CP-2-26	CP-2-26	CP-2-26	CP-2-26
255SC	CP-2-27	CP-2-27	CP-2-27	CP-2-27
275SC	CP-2-27	CP-2-27	CP-2-27	CP-2-27

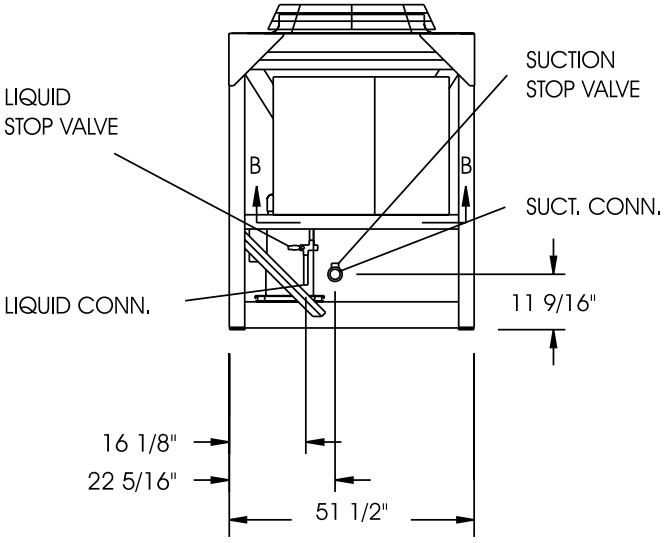
SEISMIC

Model YCUL0	A	B	C	D
045SC	AEQM-96	AEQM-96	AEQM-96	AEQM-96
061SC	AEQM-96	AEQM-96	AEQM-96	AEQM-96
081SC	AEQM-96	AEQM-96	AEQM-96	AEQM-96
095SC	AEQM-96	AEQM-97	AEQM-96	AEQM-97
121SC	AEQM-97	AEQM-97	AEQM-97	AEQM-97
125SC	AEQM-98	AEQM-98	AEQM-98	AEQM-98
145SC	AEQM-98	AEQM-98	AEQM-98	AEQM-98
161SC	AEQM-98	AEQM-98	AEQM-98	AEQM-98
171SC	AEQM-1000	AEQM-1000	AEQM-1000	AEQM-1000
185SC	AEQM-1000	AEQM-1000	AEQM-1000	AEQM-1000
211SC	AEQM-1300	AEQM-1300	AEQM-1300	AEQM-1300
235SC	AEQM-1300	AEQM-1300	AEQM-1300	AEQM-1300
255SC	AEQM-1300	AEQM-1300	AEQM-1300	AEQM-1300
275SC	AEQM-1600	AEQM-1600	AEQM-1600	AEQM-1600

Dimensions - YCUL0045SC (English)



VIEW B-B

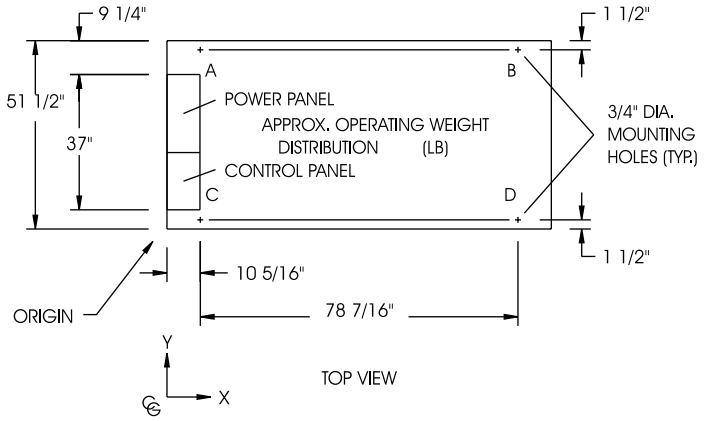


VIEW A-A

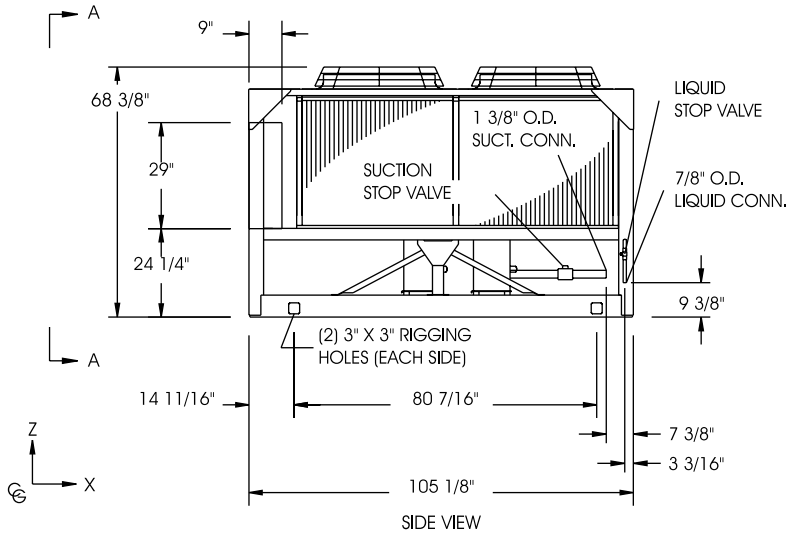
LD04417

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.



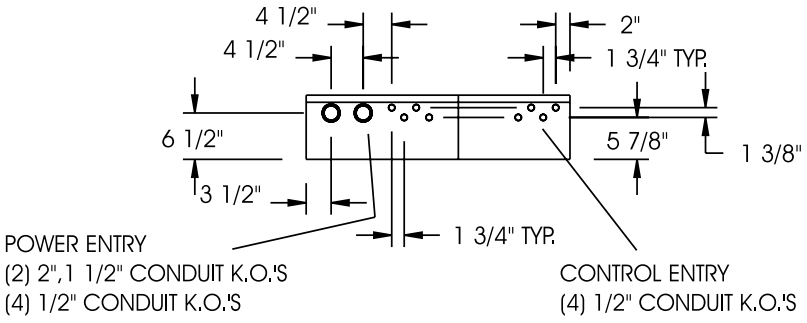
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



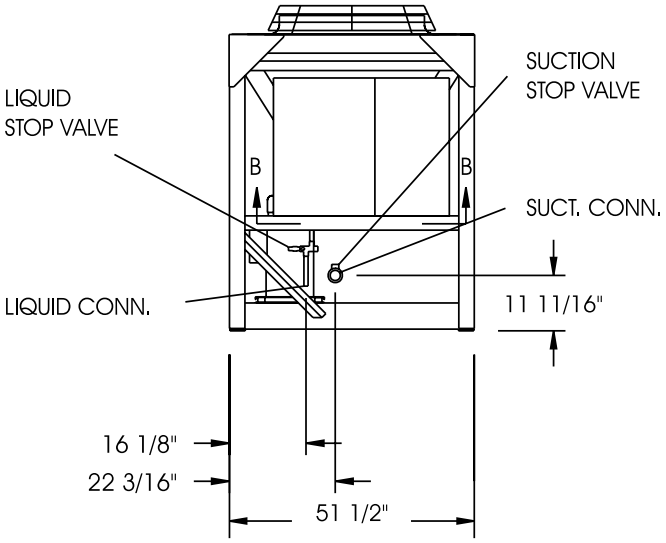
LD04418

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
045SC	421	449	421	449	1740	52.9	29.0	25.7

Dimensions - YCUL0061SC (English)



VIEW B-B

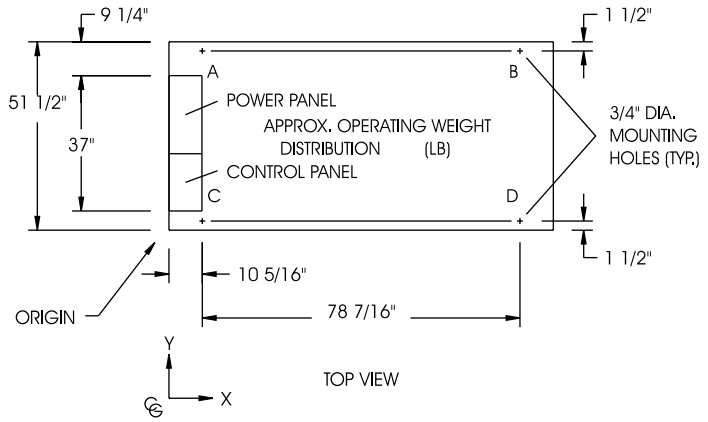


VIEW A-A

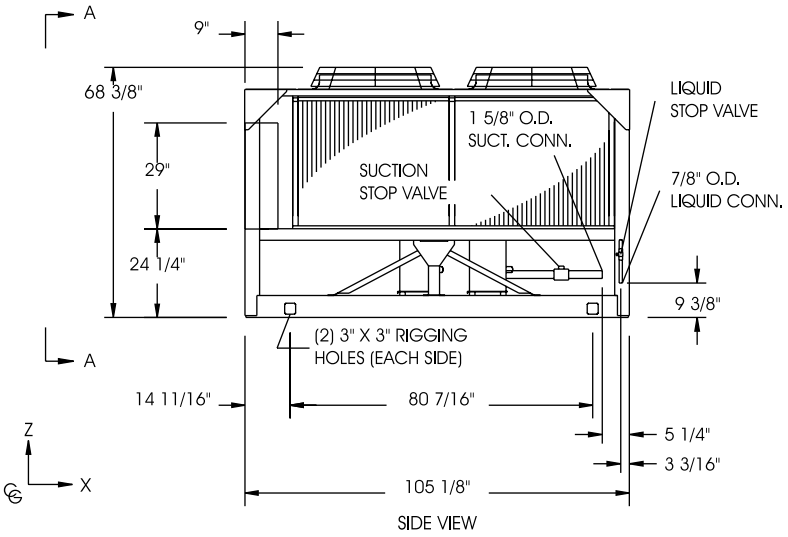
LD04419

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.



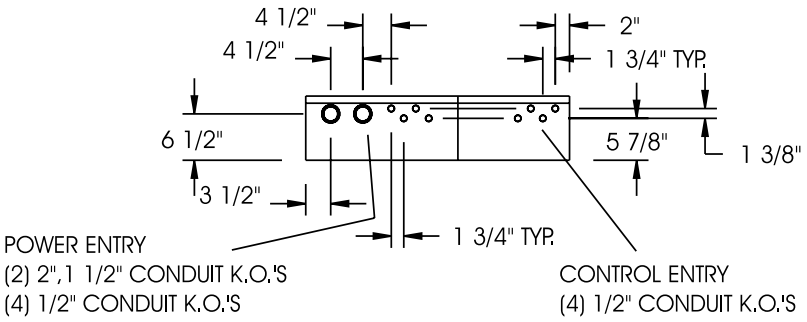
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



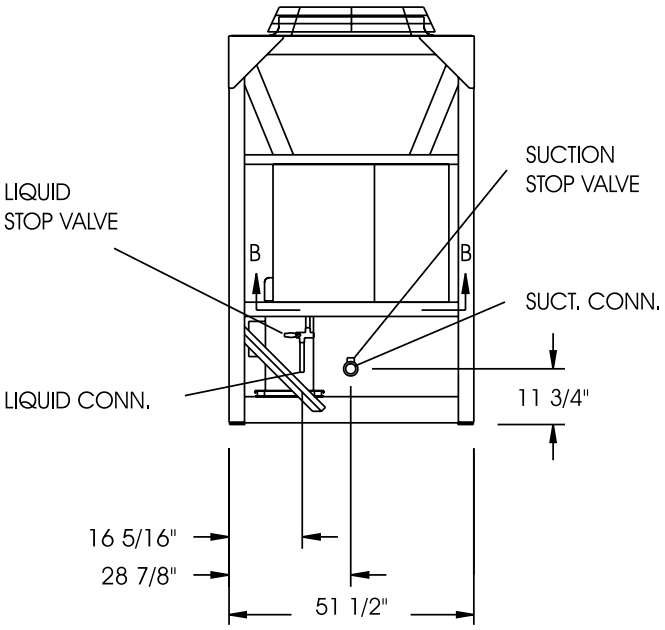
LD04420

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
061SC	424	452	424	452	1750	52.9	29.0	25.6

Dimensions - YCUL0081SC (English)



VIEW B-B

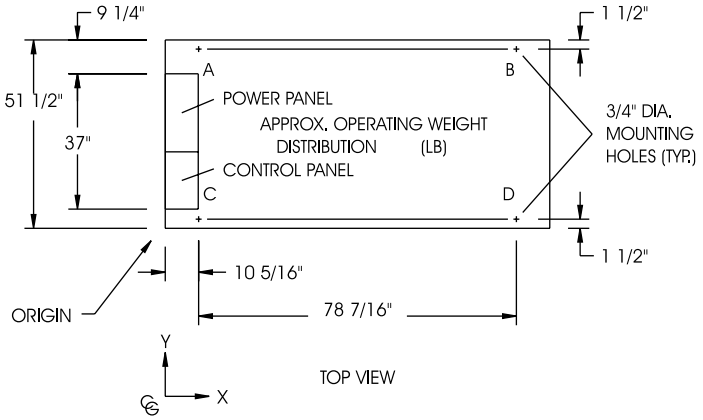


VIEW A-A

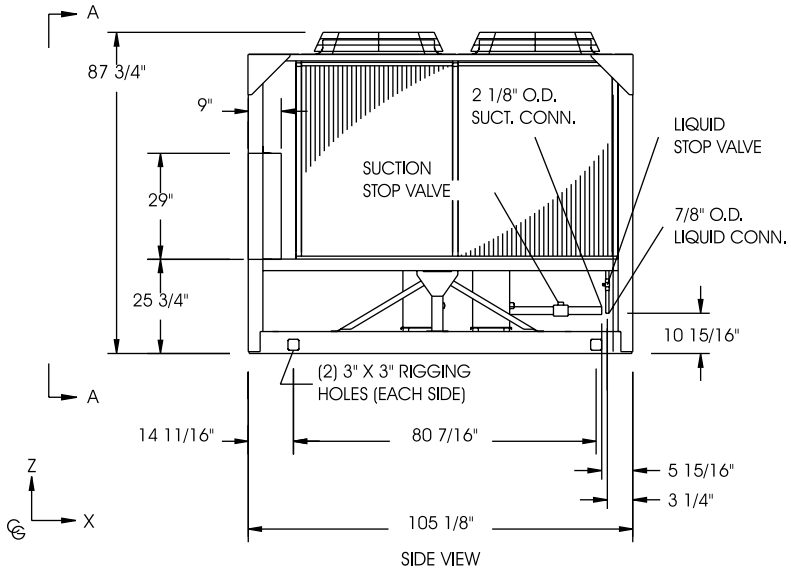
LD04421

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 – 10'; top – no obstructions allowed; distance between adjacent units – 10'. No more than one adjacent wall may be higher than the unit.



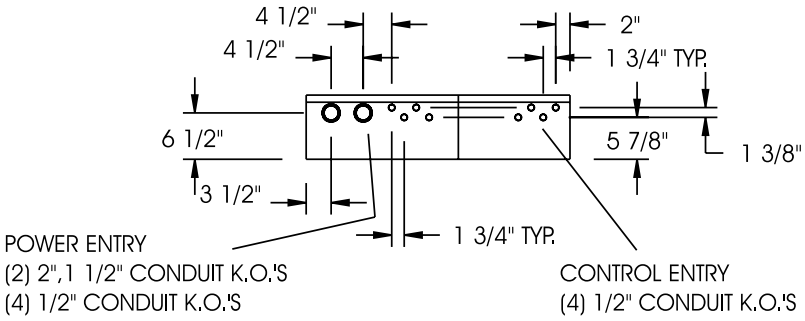
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



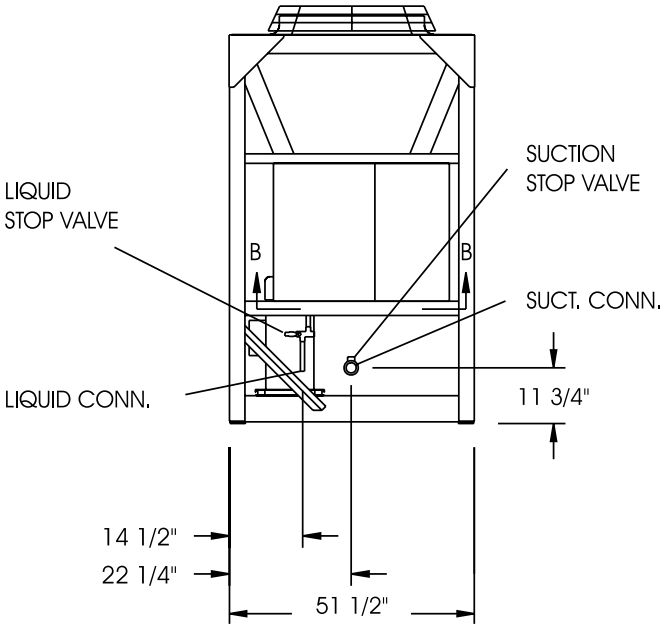
LD04422

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
081SC	448	495	448	495	1886	53.6	29.2	32.6

Dimensions - YCUL0095SC (English)



VIEW B-B



VIEW A-A

LD04423

NOTE:

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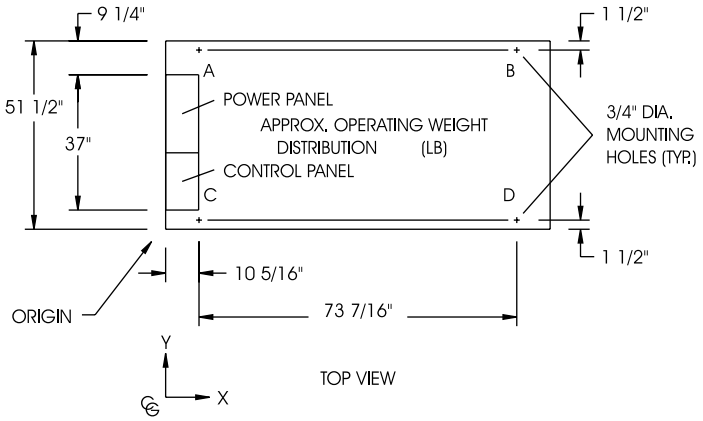
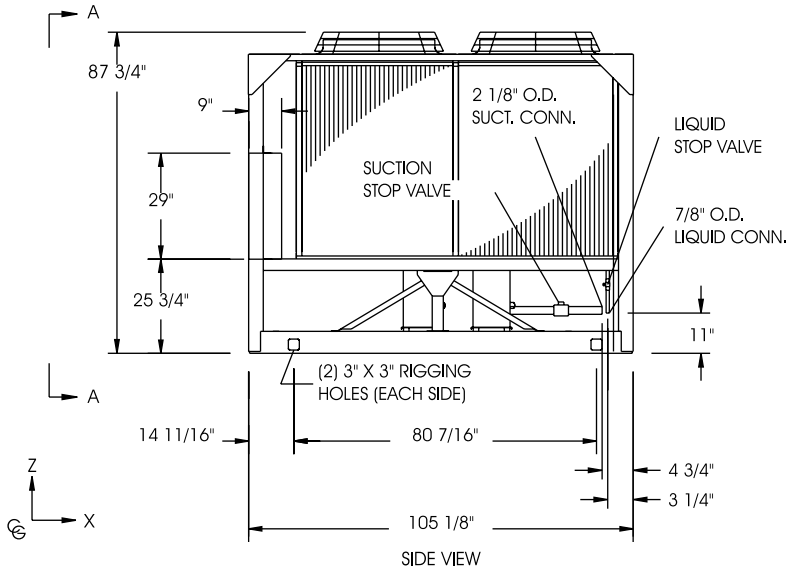


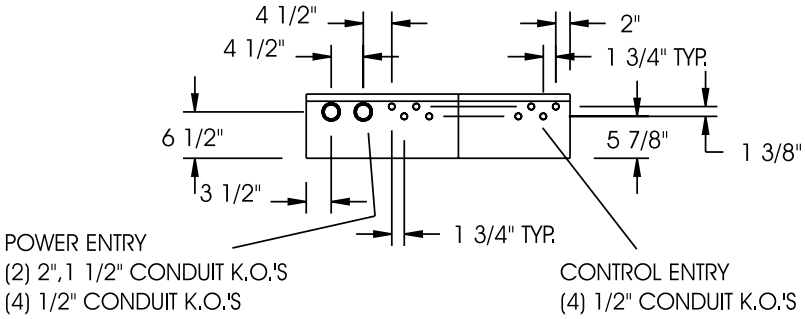
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



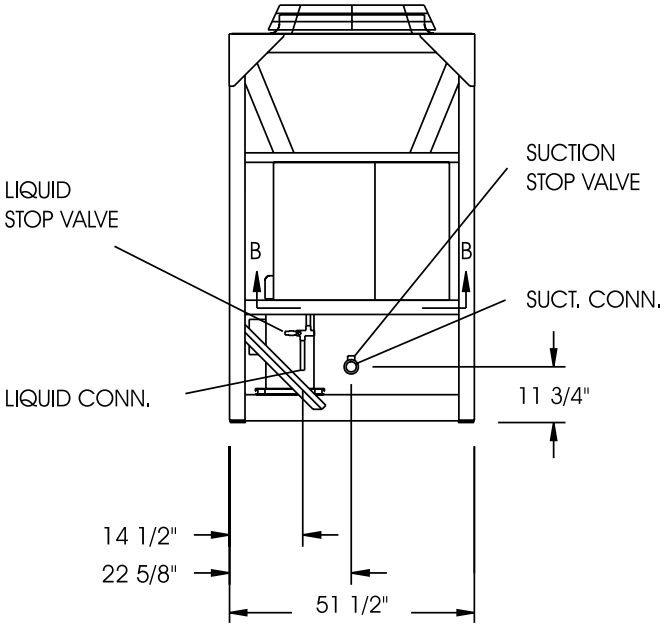
LD04424

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
095SC	438	571	438	571	2017	53.8	29.3	33.3

Dimensions - YCUL0121SC (English)



VIEW B-B

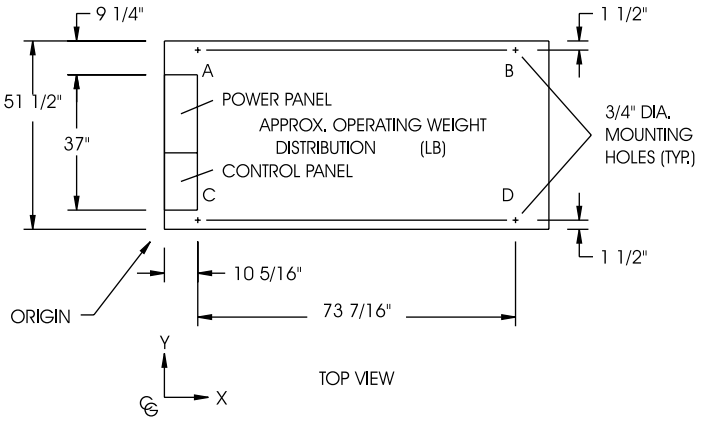


VIEW A-A

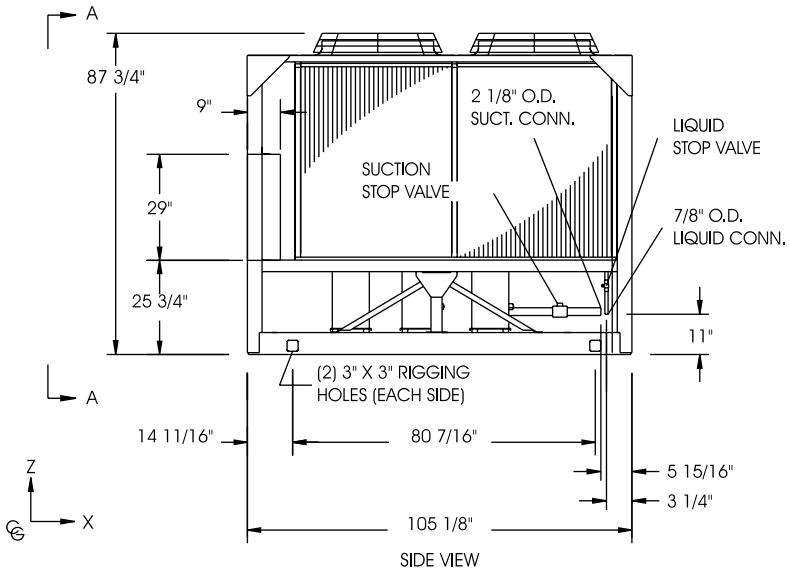
LD04425

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 – 10'; top – no obstructions allowed; distance between adjacent units – 10'. No more than one adjacent wall may be higher than the unit.

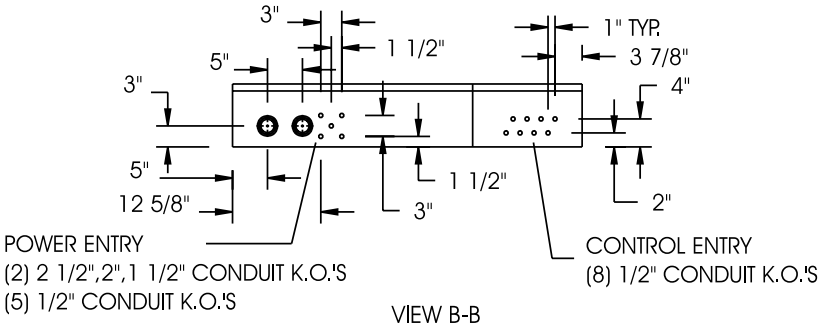


POWER: MULTIPLE POINT WITH TERMINAL BLOCKS

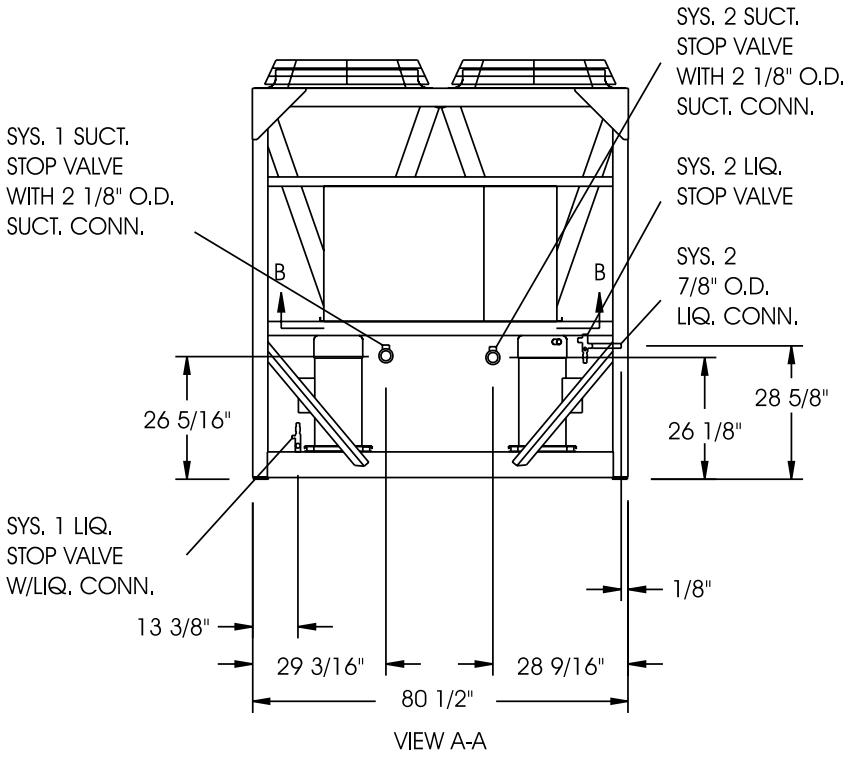


MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
121SC	508	577	508	577	2171	51.4	30.2	32.2

Dimensions - YCUL0125SC (English)



VIEW B-B



VIEW A-A

LD04427

NOTE:

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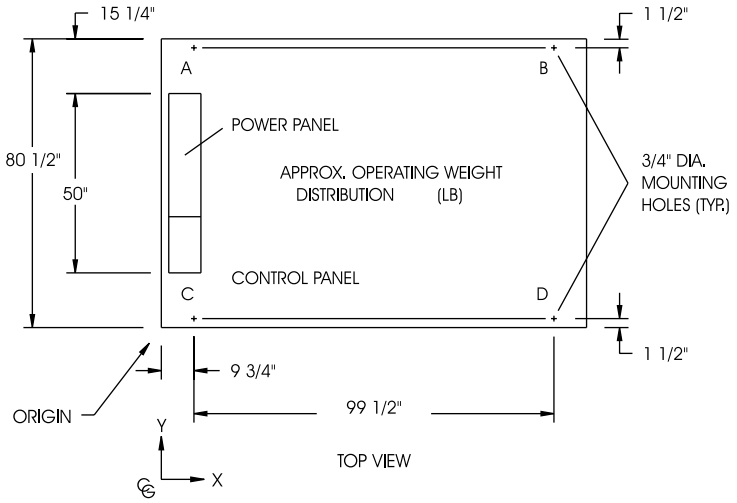
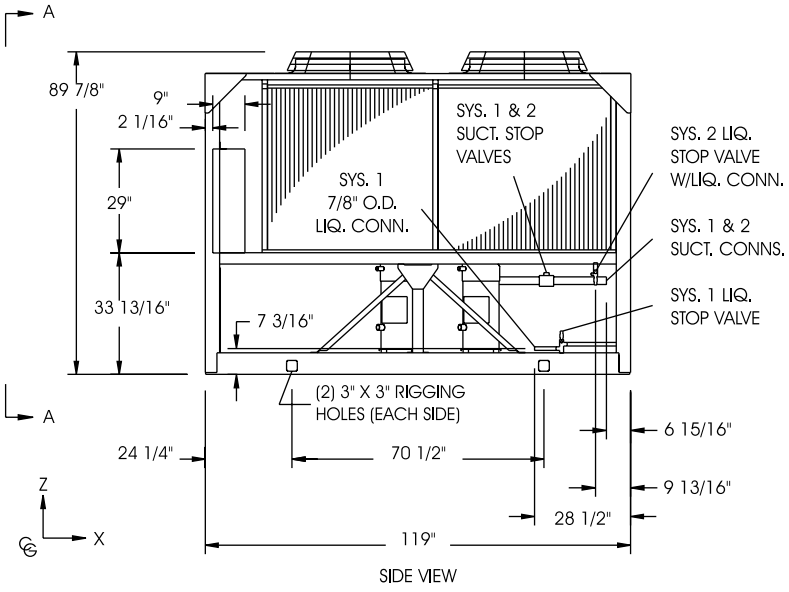


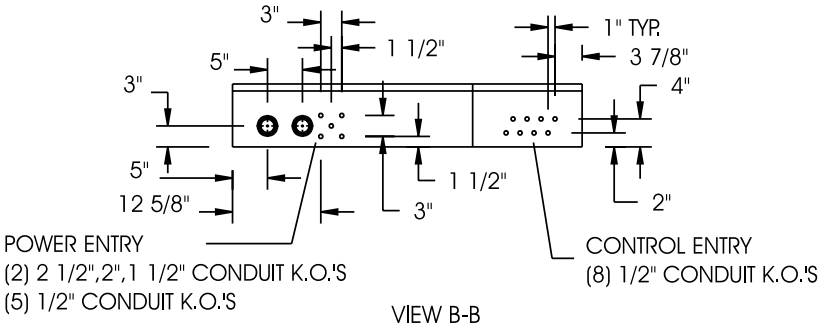
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



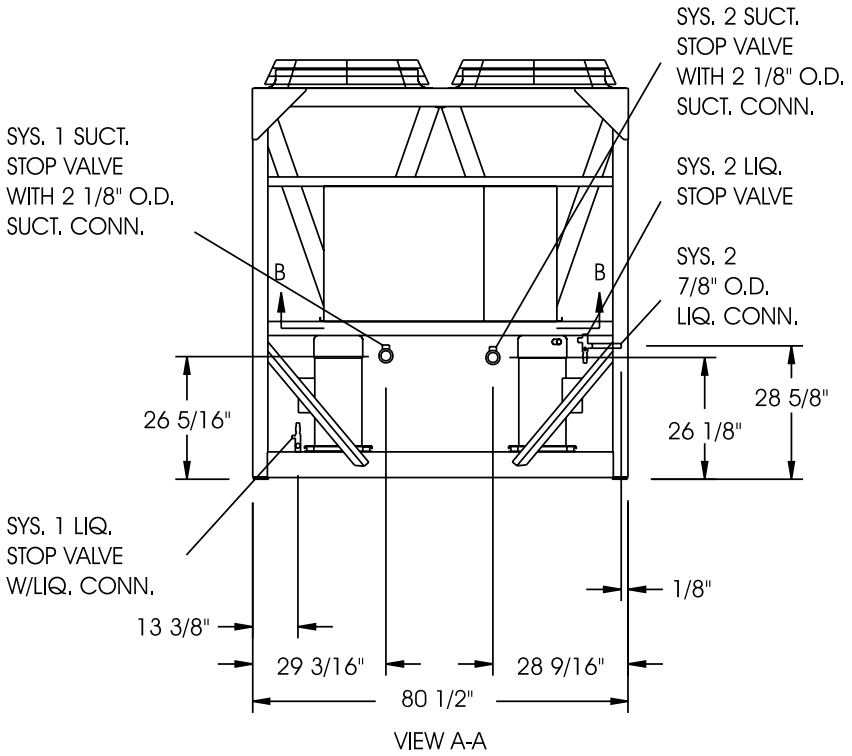
LD04428

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
125SC	787	816	787	816	3205	60.4	40.3	34.2

Dimensions - YCUL0145SC (English)



VIEW B-B



VIEW A-A

LD04427

NOTE:

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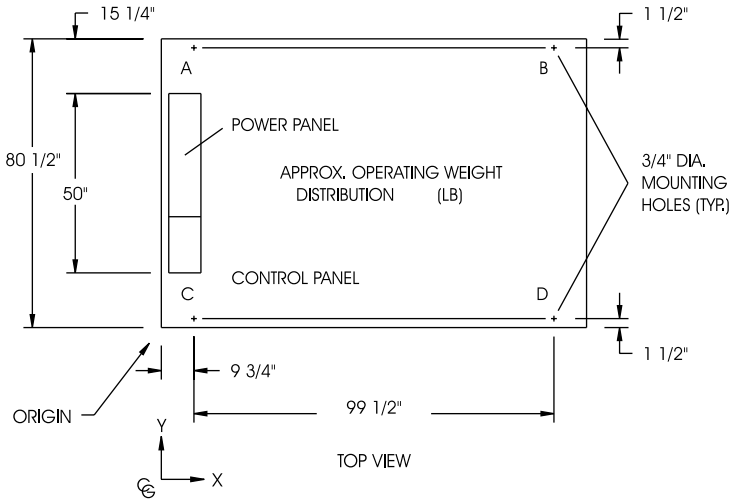
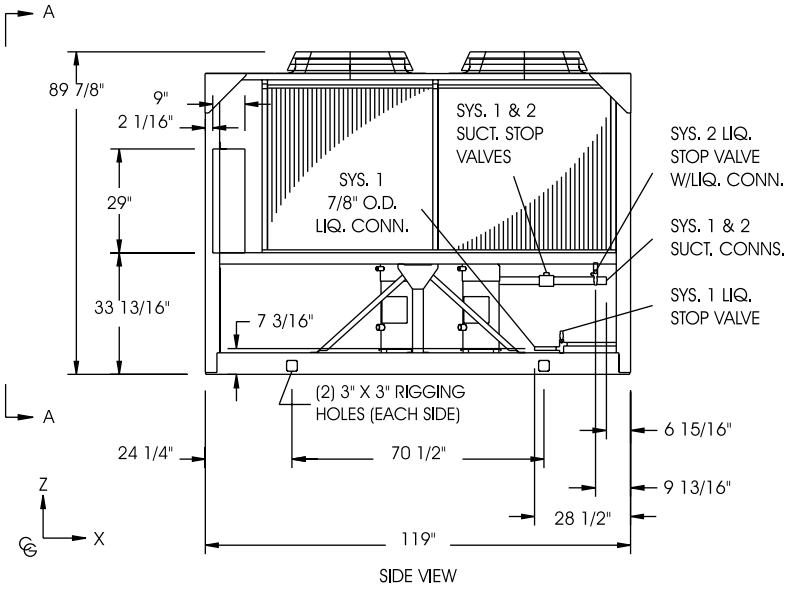


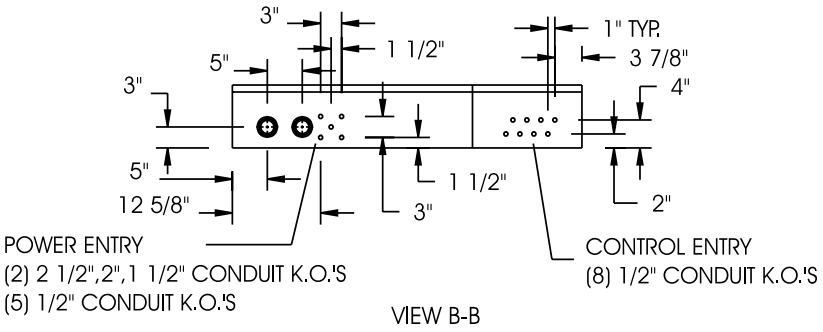
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



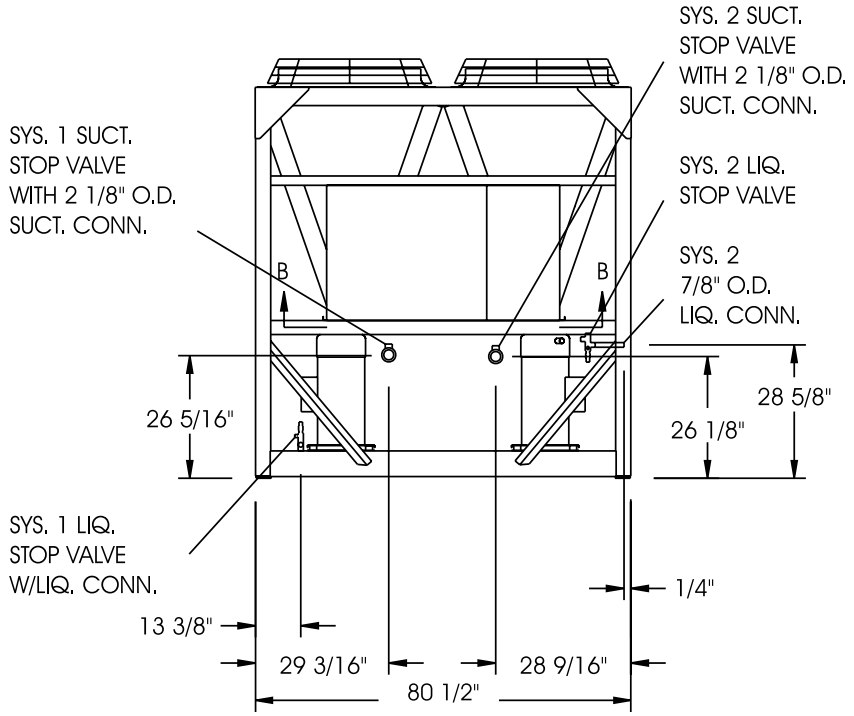
LD04428

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
145SC	796	828	796	828	3248	60.5	40.6	33.9

Dimensions - YCUL0161SC (English)



VIEW B-B



VIEW A-A

LD04429

NOTE:

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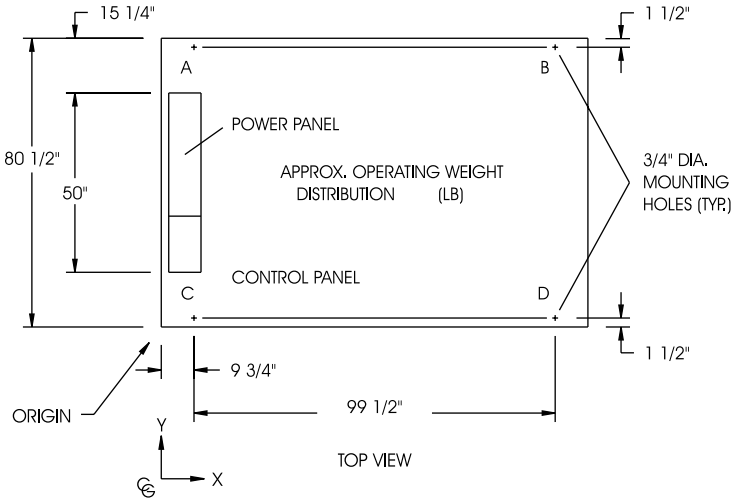
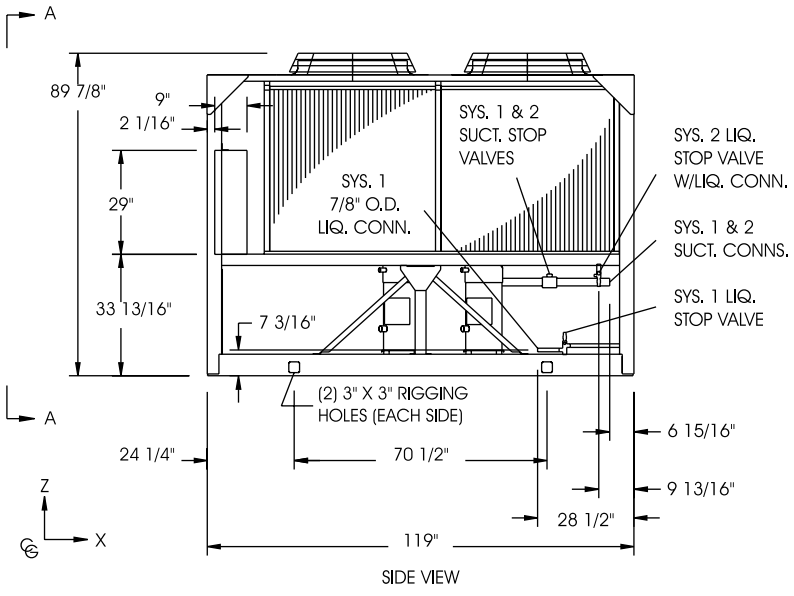


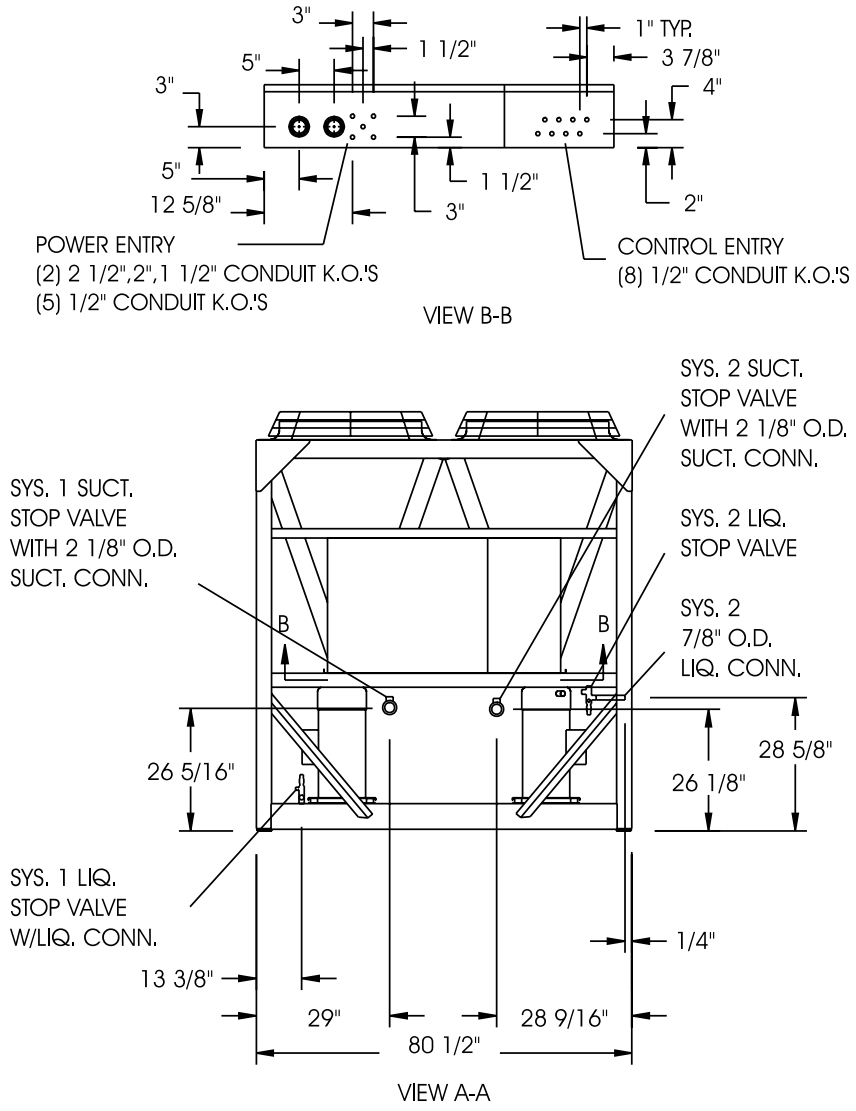
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



LD04430

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
161SC	806	841	806	841	3293	60.6	40.3	33.7

Dimensions - YCUL0171SC (English)



LD04431

NOTE:

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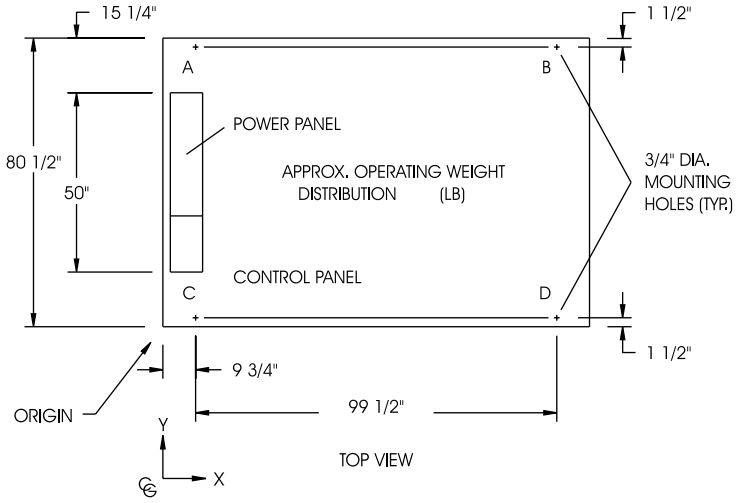
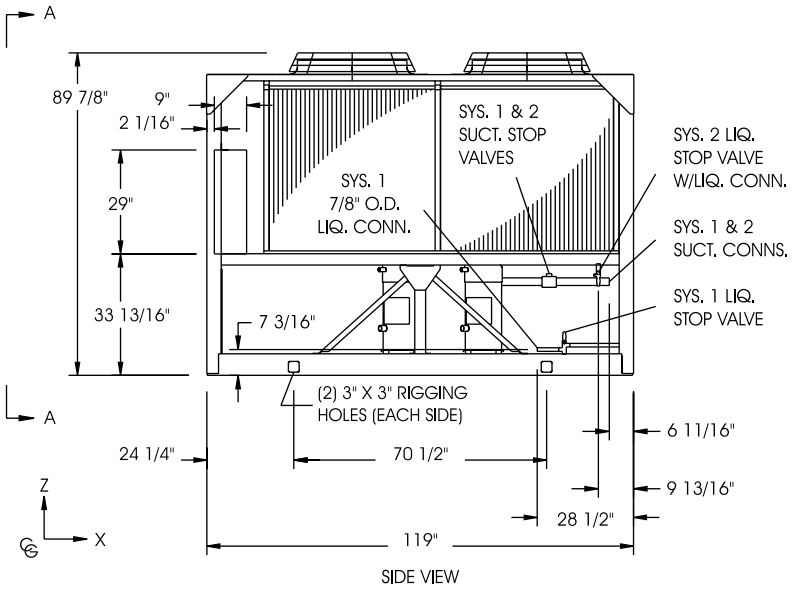


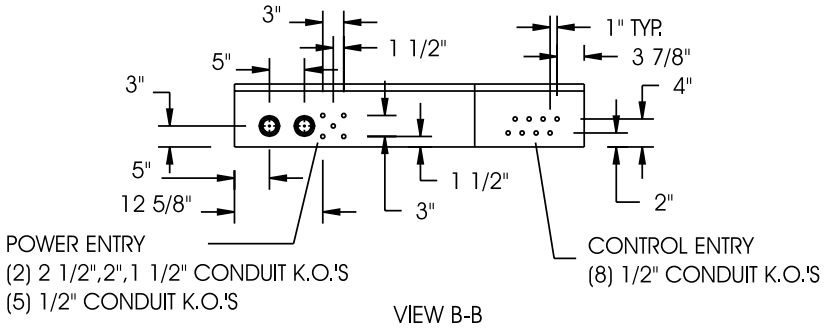
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



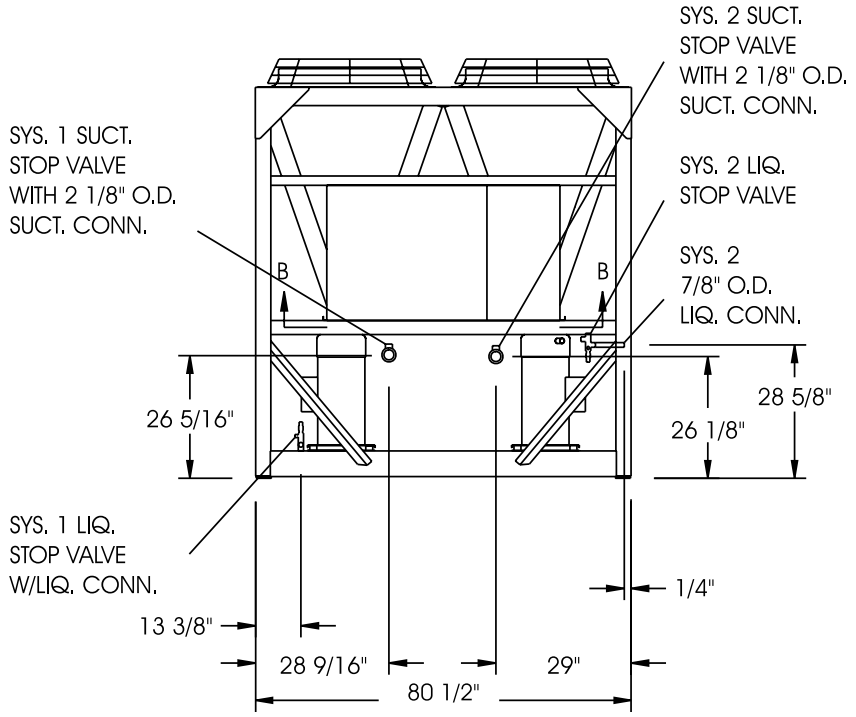
LD04432

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
171SC	820	859	820	859	3358	60.7	40.5	33.4

Dimensions - YCUL0185SC (English)



VIEW B-B

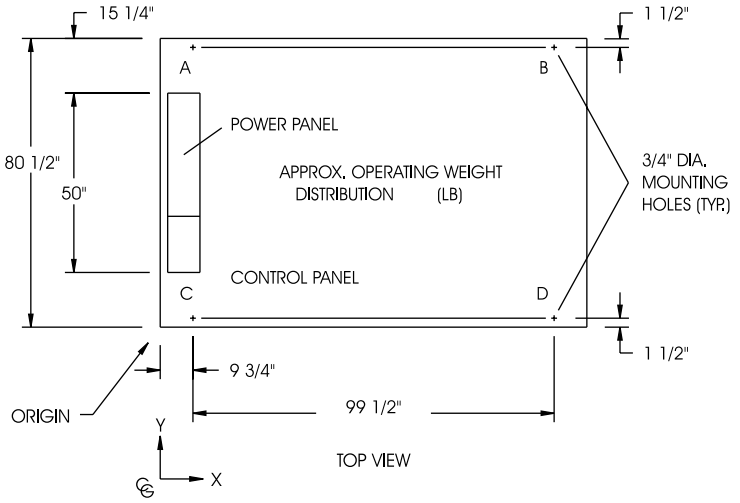


VIEW A-A

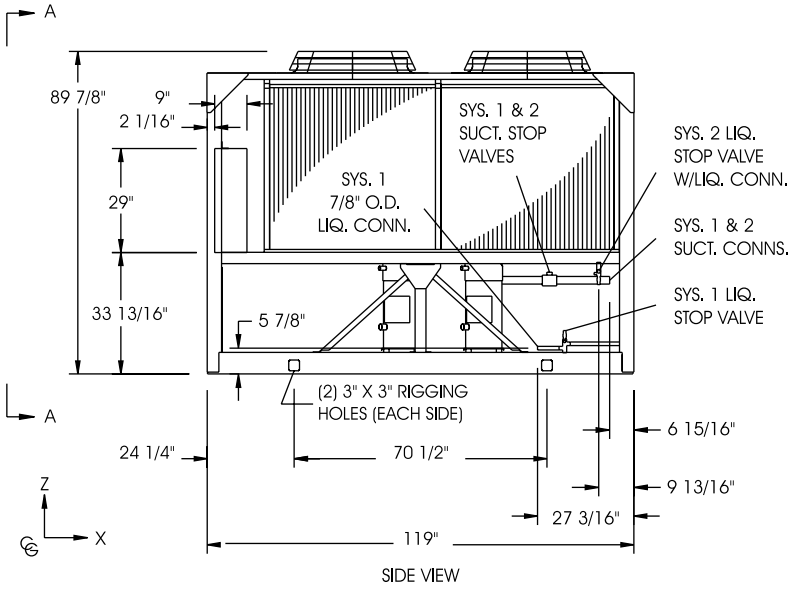
LD04433

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 – 10'; top – no obstructions allowed; distance between adjacent units – 10'. No more than one adjacent wall may be higher than the unit.



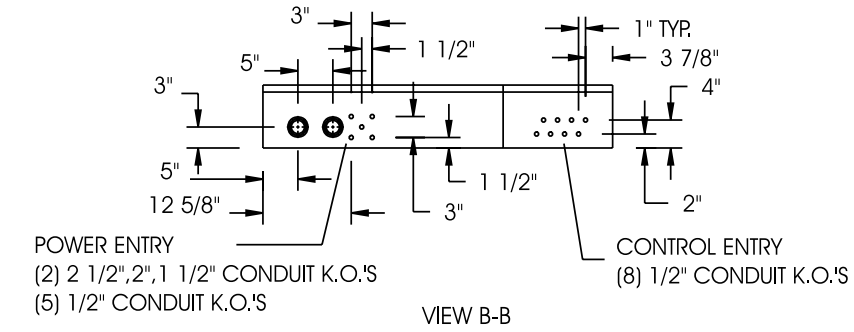
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



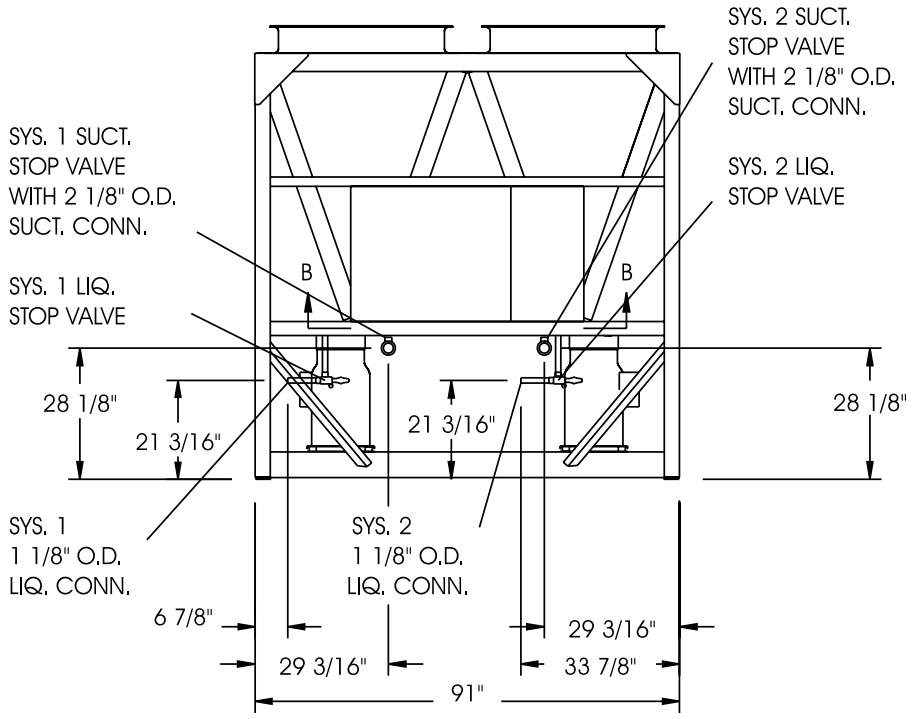
LD04434

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
185SC	882	938	882	938	3640	61.0	40.3	35.1

Dimensions - YCUL0211SC (English)



VIEW B-B



VIEW A-A

LD04435

NOTE:

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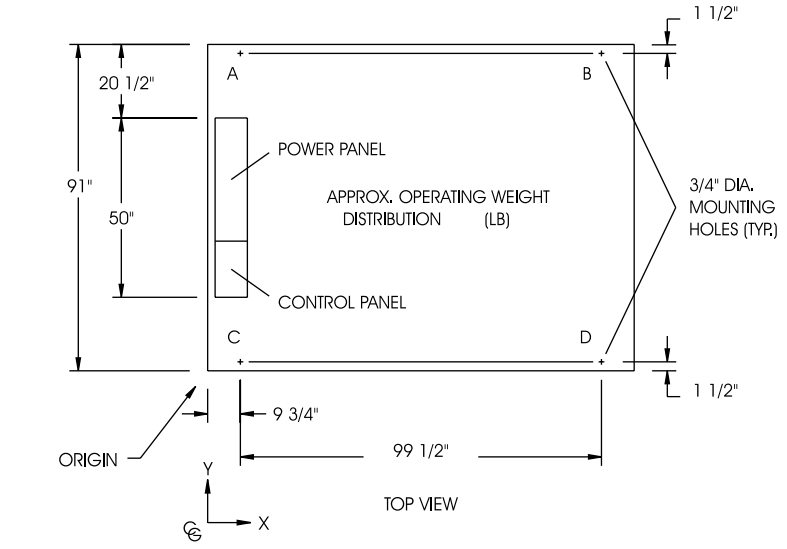
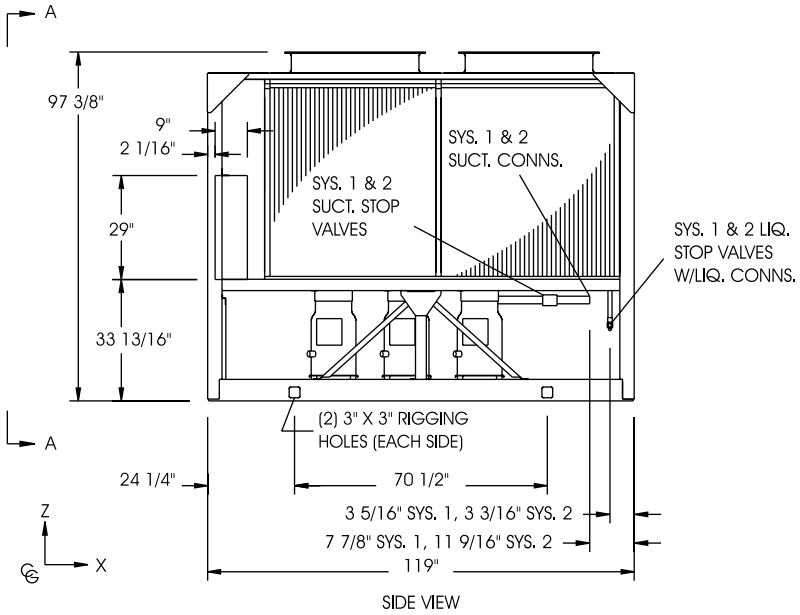


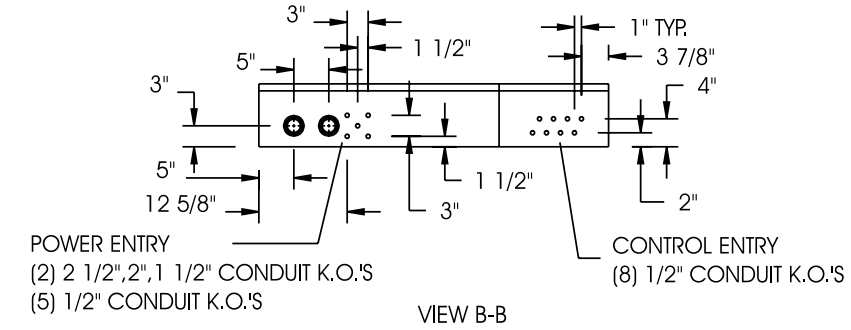
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



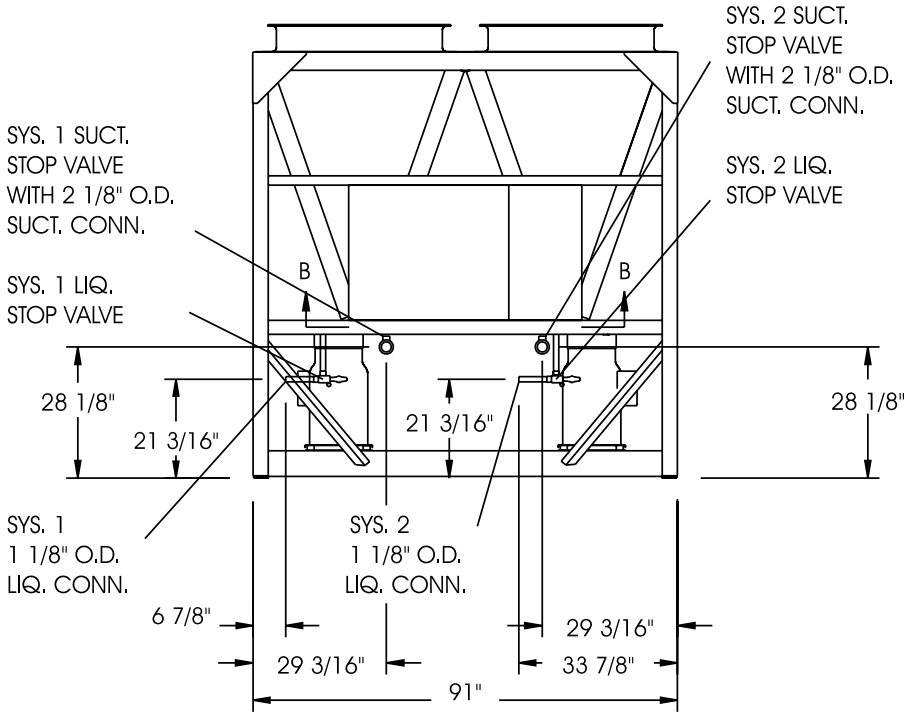
LD04436

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
211SC	1021	945	1021	945	3932	57.6	46.2	35.8

Dimensions - YCUL0235SC (English)



VIEW B-B

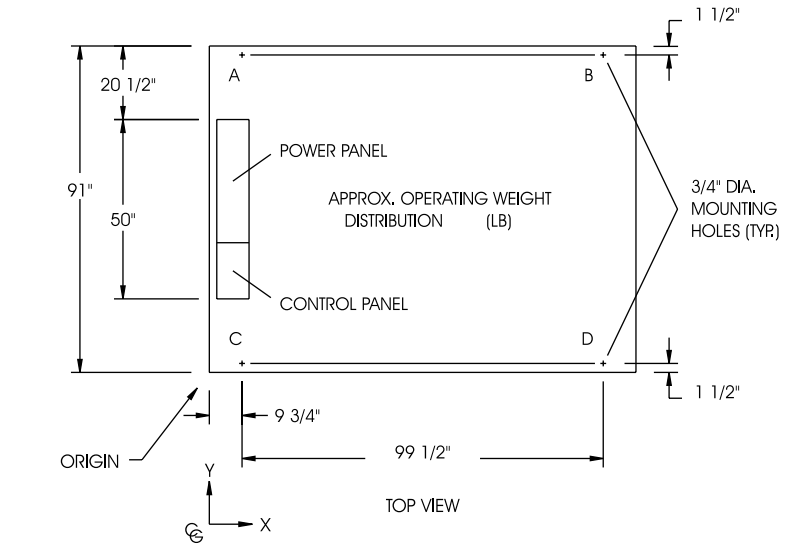


VIEW A-A

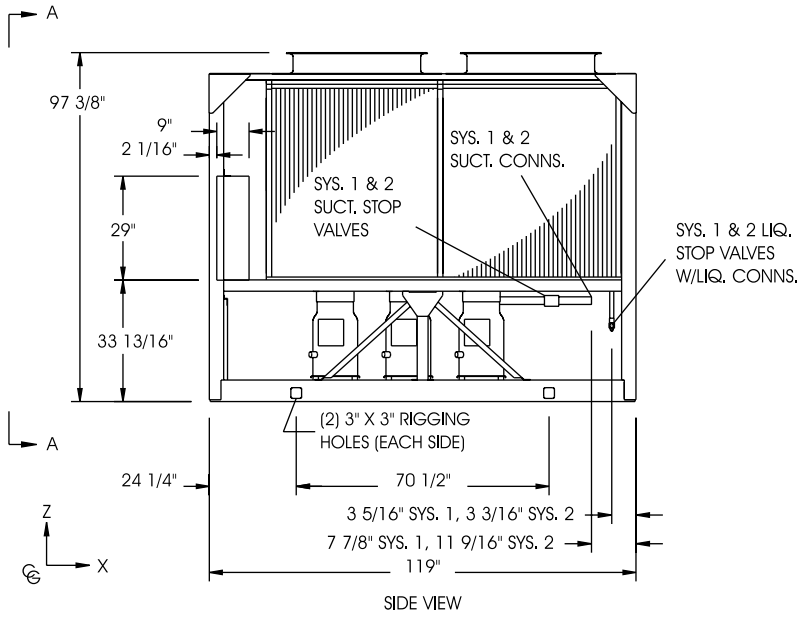
LD04437

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.



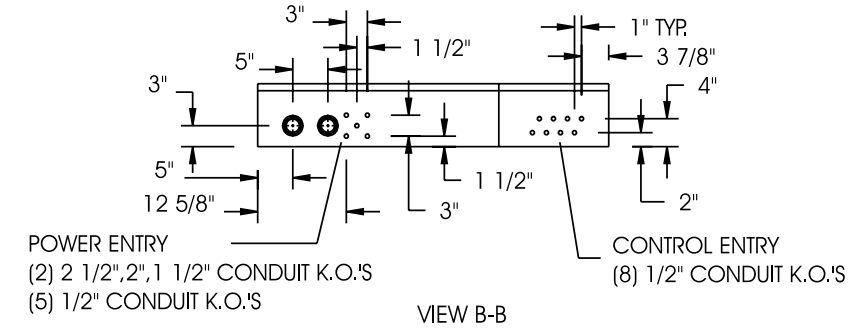
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



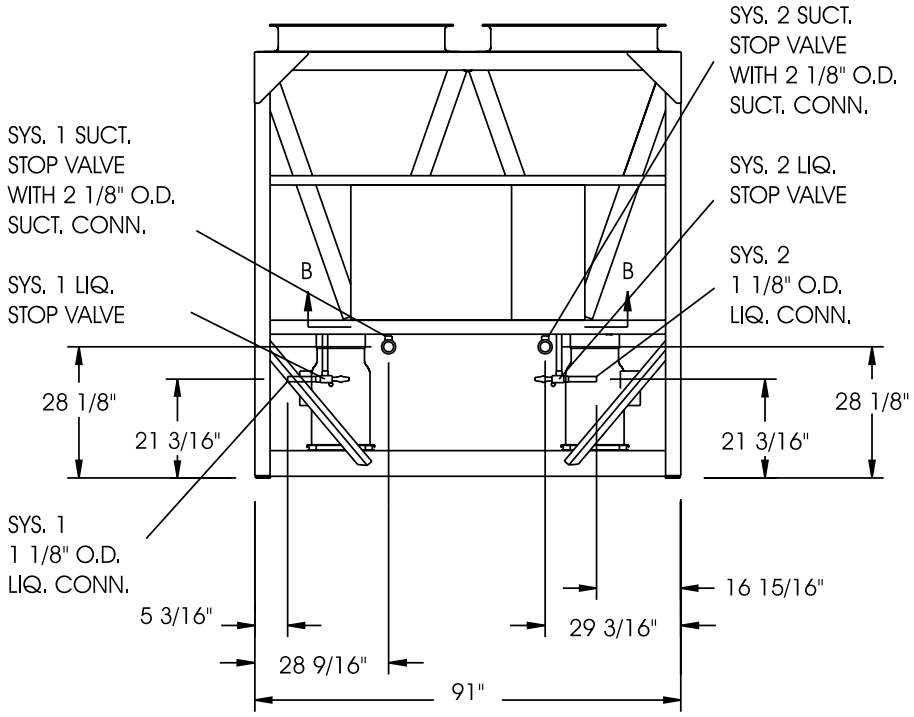
LD04438

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
235SC	1045	969	1045	969	4030	57.6	45.7	35.7

Dimensions - YCUL0255SC (English)



VIEW B-B

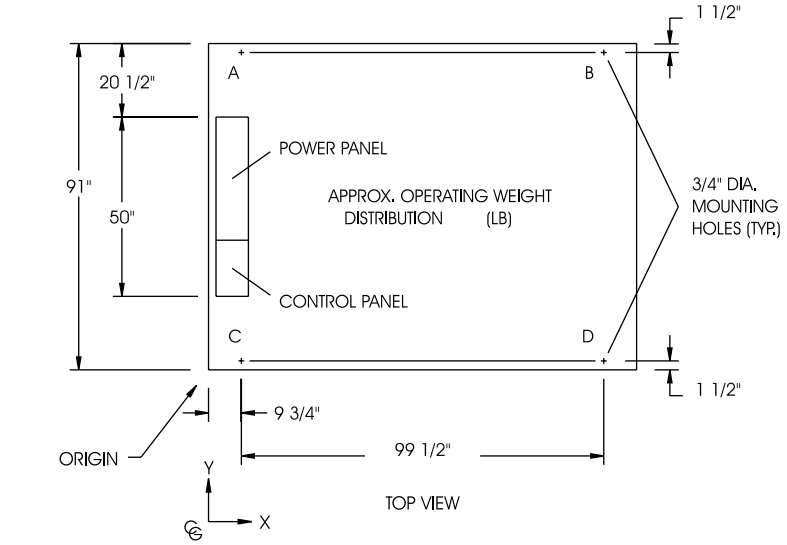


VIEW A-A

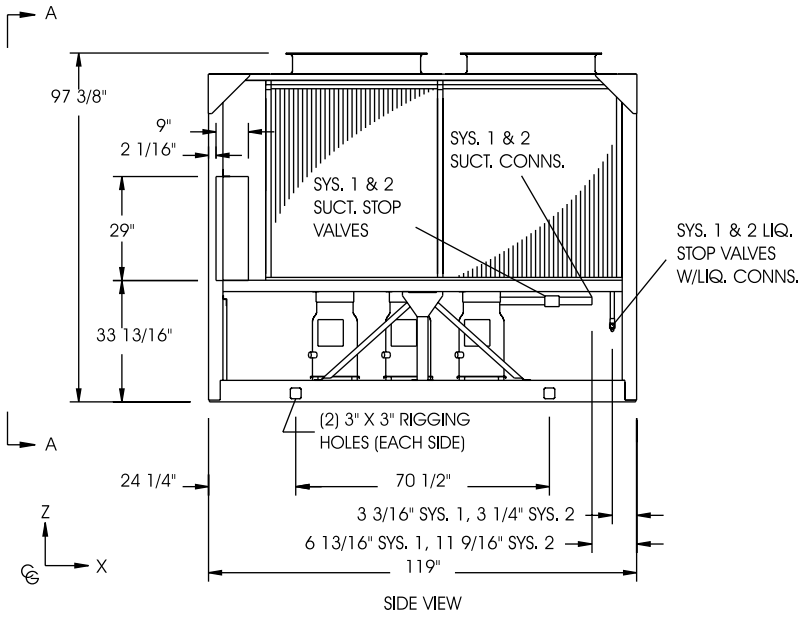
LD04439

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.



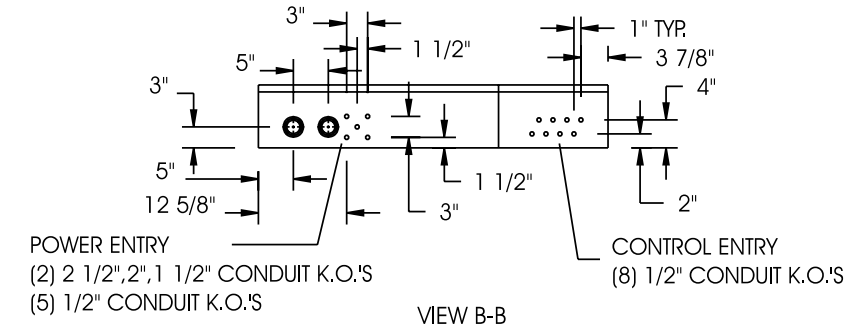
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



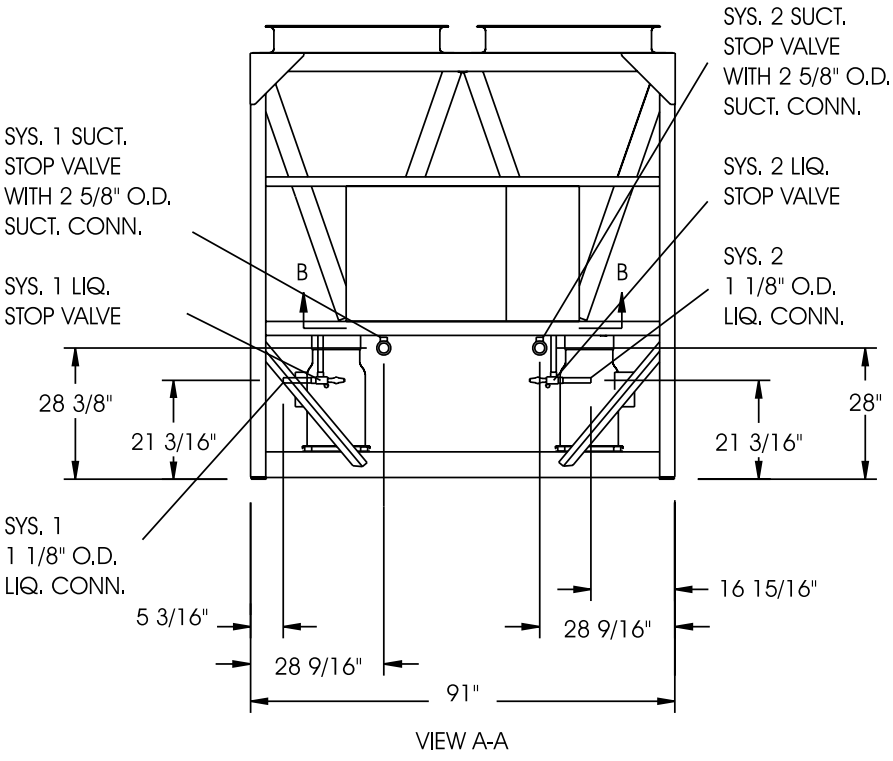
LD04440

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
255SC	1099	1030	1099	1030	4259	57.9	46.1	36.7

Dimensions - YCUL0275SC (English)



VIEW B-B

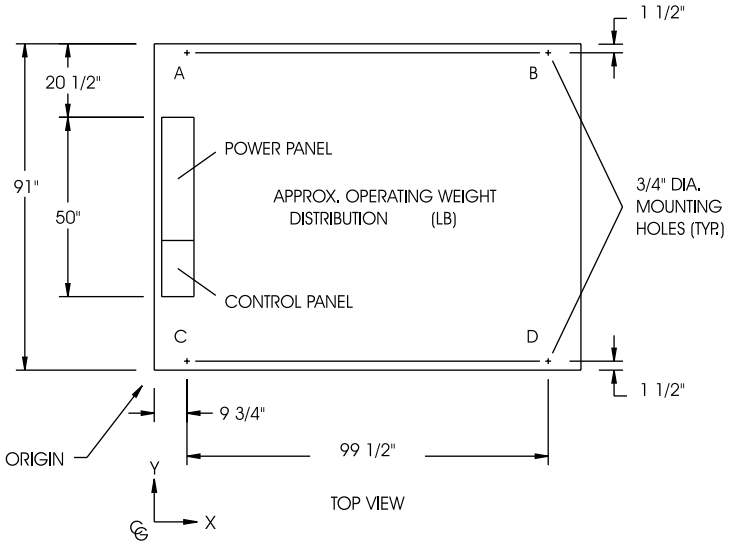


VIEW A-A

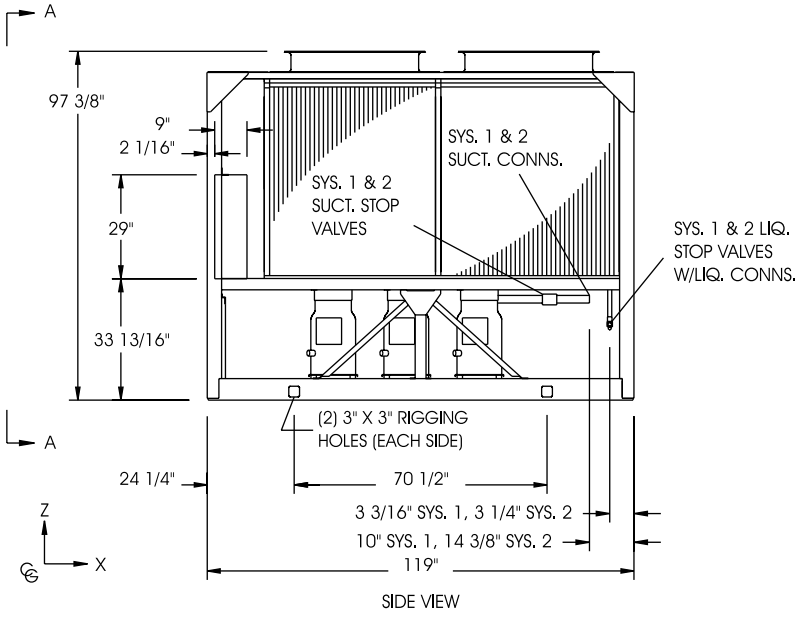
LD04441

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.



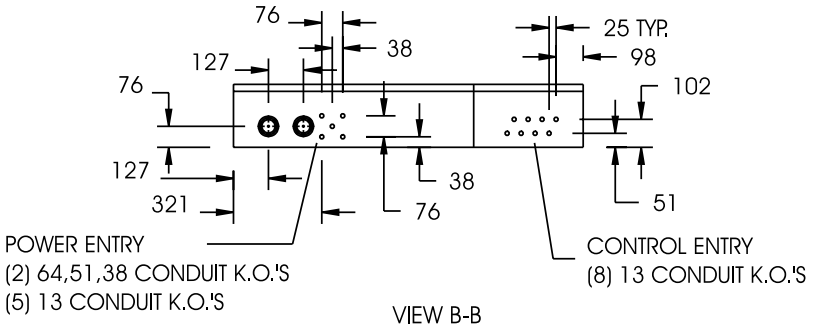
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



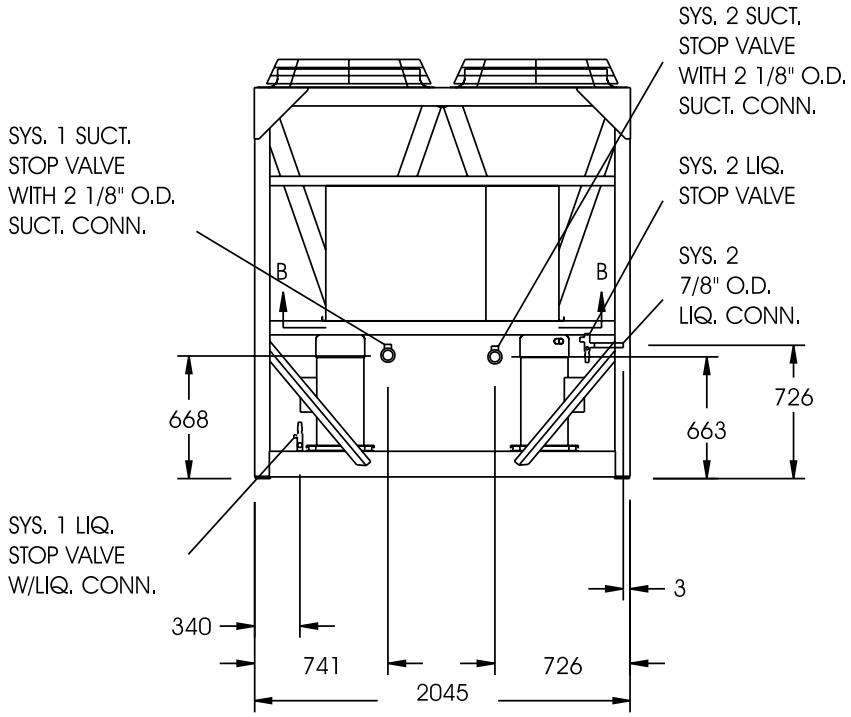
LD04442

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
275SC	1142	1074	1142	1074	4432	57.9	45.7	36.5

Dimensions - YCUL0045SC (SI)



VIEW B-B



VIEW A-A

LD04443

NOTE:

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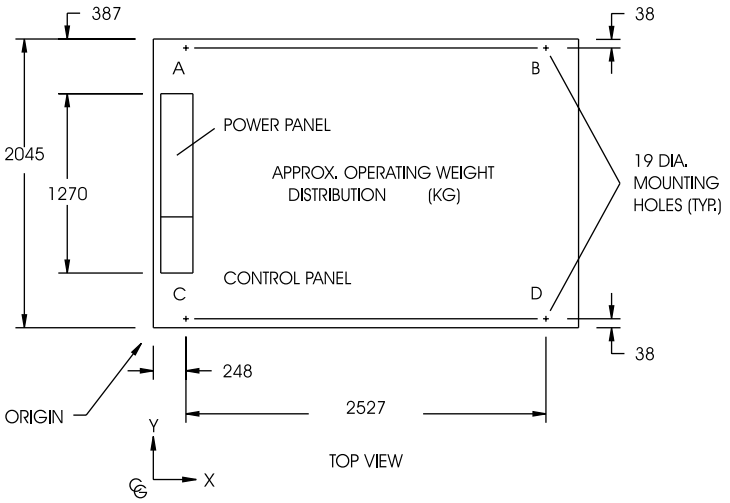
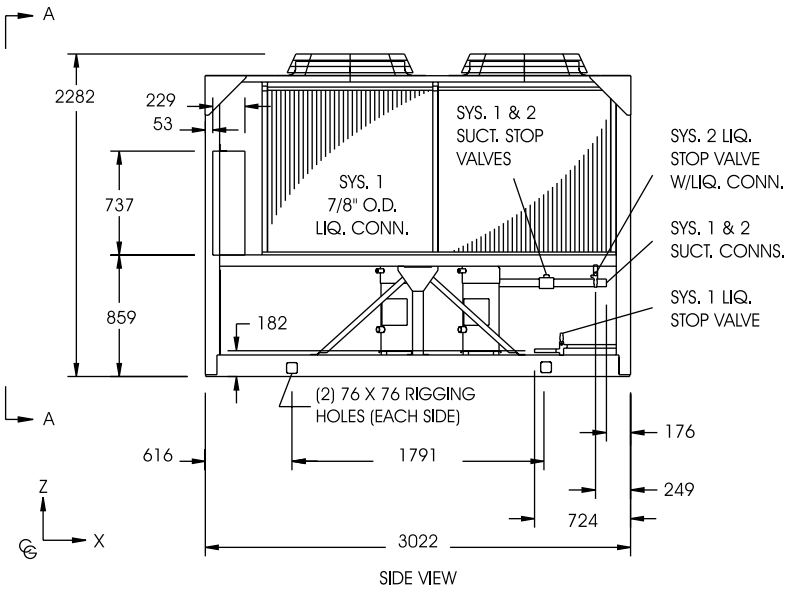


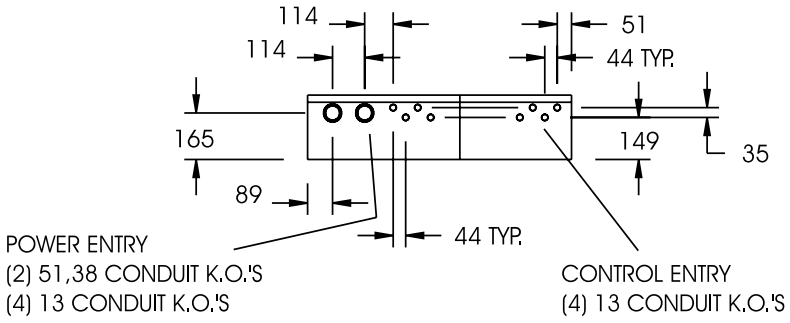
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



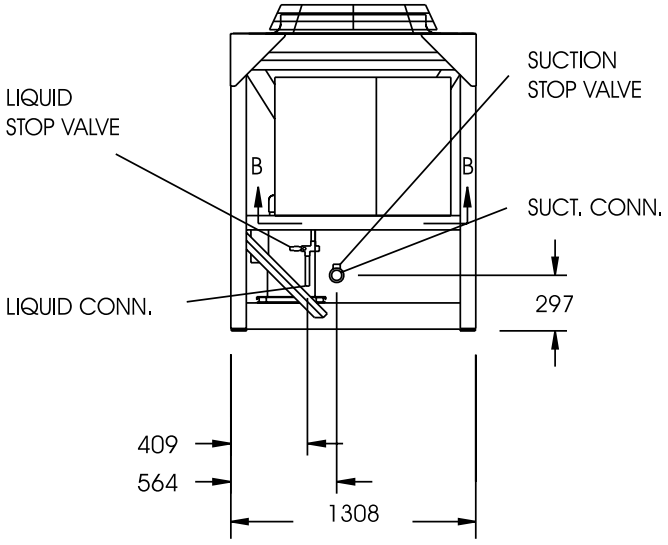
LD04444

MODEL	WEIGHT DISTRIBUTION (kg)					CENTER OF GRAVITY (mm)		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
045SC	191	204	191	204	789	1343	736	653

Dimensions - YCUL0061SC (SI)



VIEW B-B



VIEW A-A

LD04445

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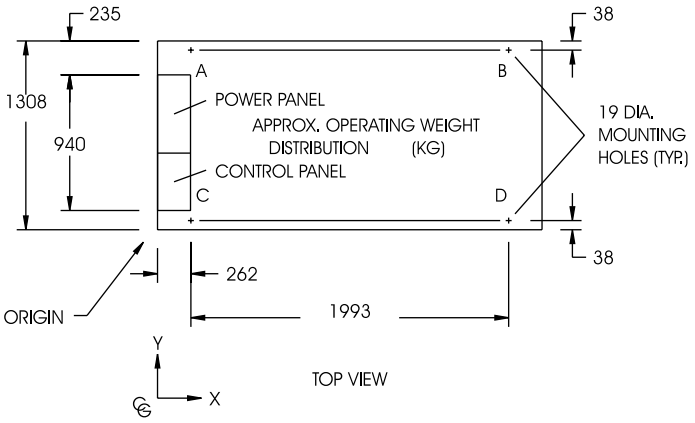
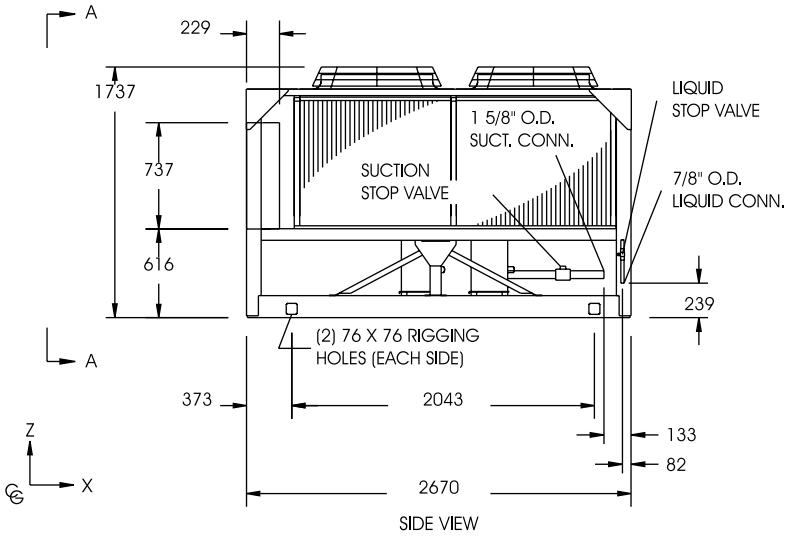


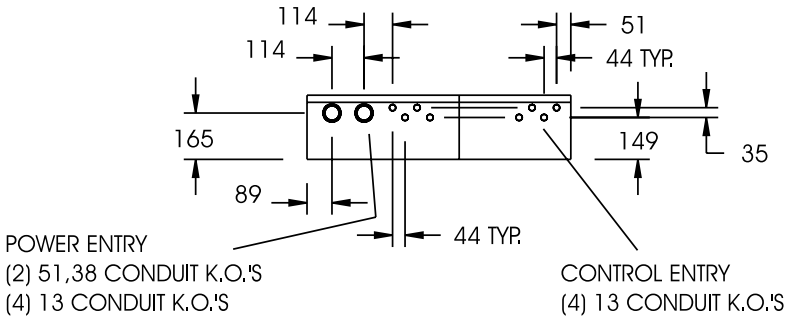
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



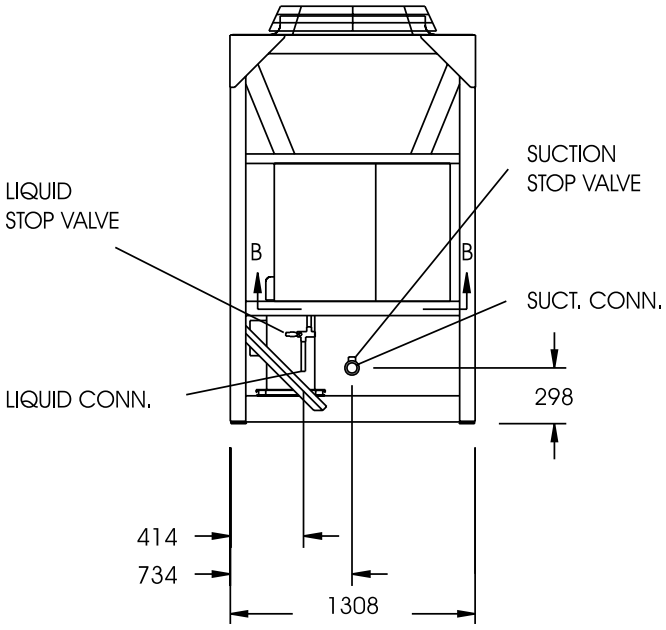
LD04446

MODEL	WEIGHT DISTRIBUTION (kg)					CENTER OF GRAVITY (mm)		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
061SC	192	205	192	205	794	1344	737	651

Dimensions - YCUL0081SC (SI)



VIEW B-B



VIEW A-A

LD04447

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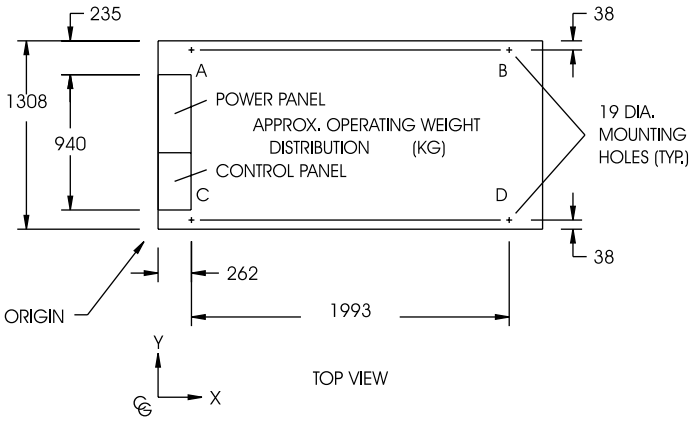
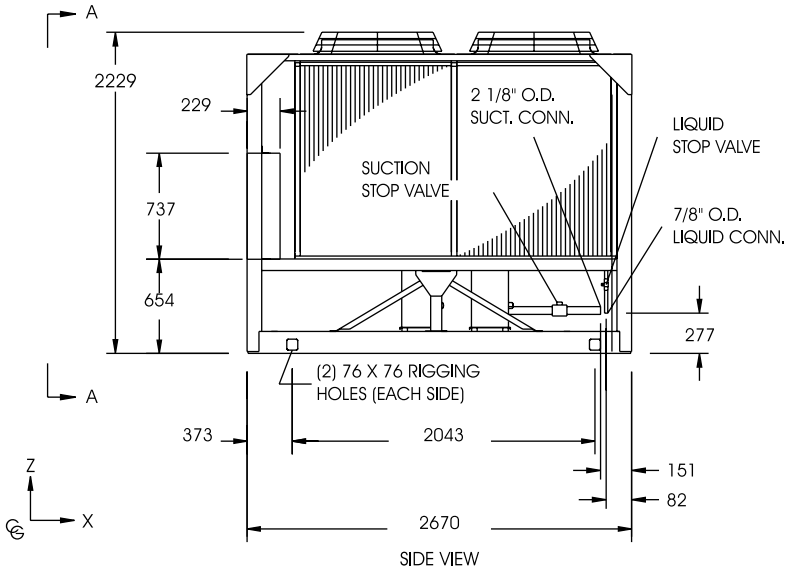


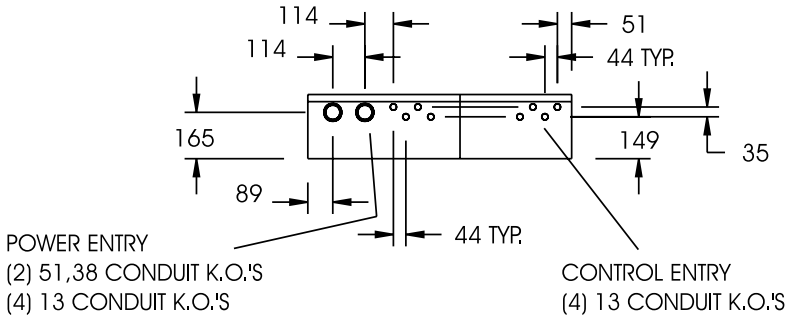
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



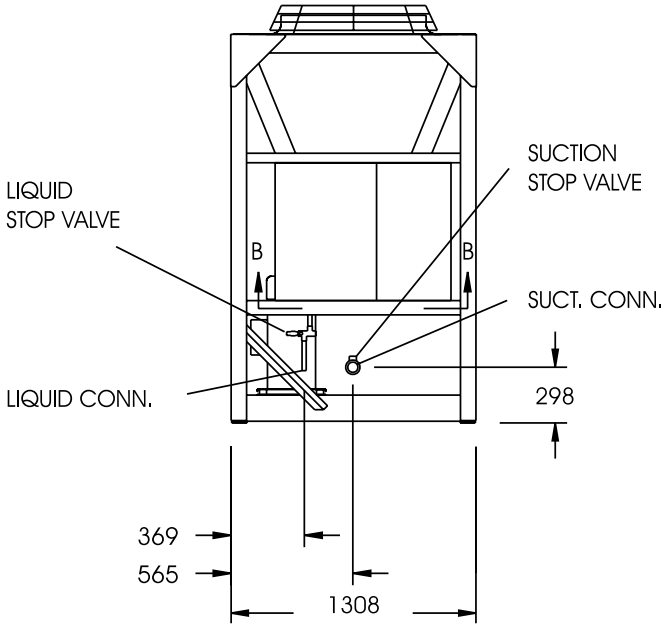
LD04448

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
081SC	203	225	203	225	856	1361	743	827

Dimensions - YCUL0095SC (SI)



VIEW B-B



VIEW A-A

LD04449

NOTE:

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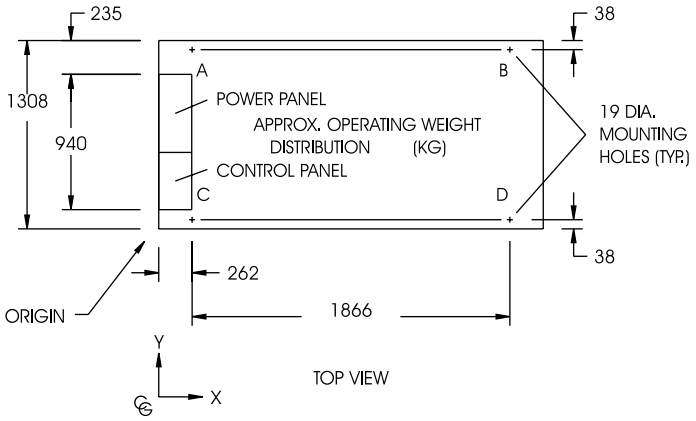
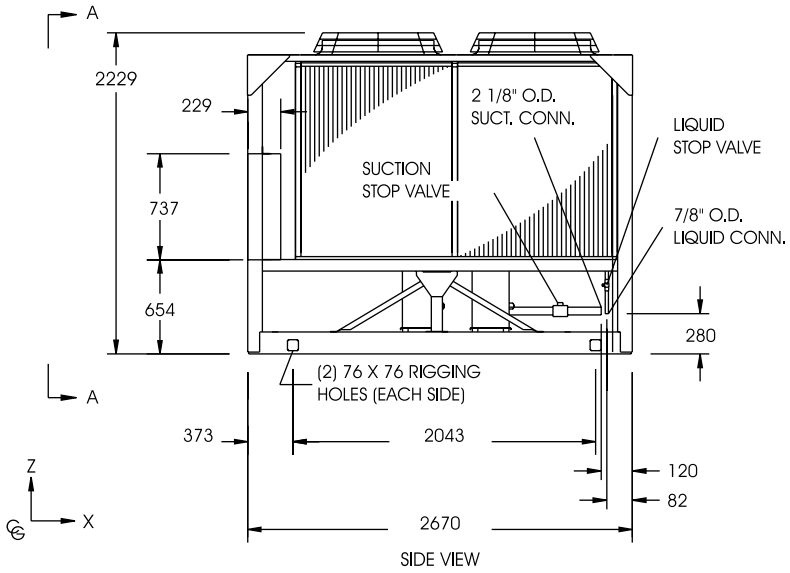


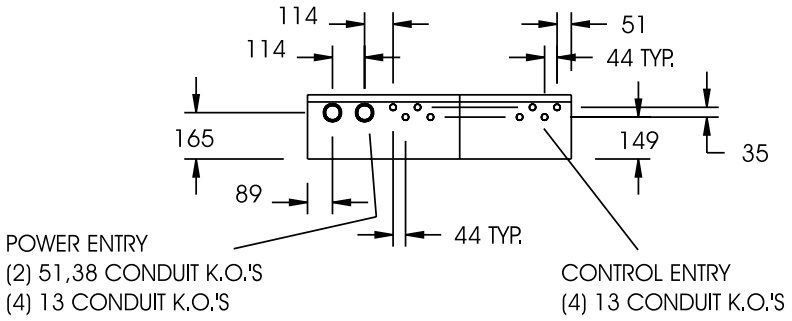
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



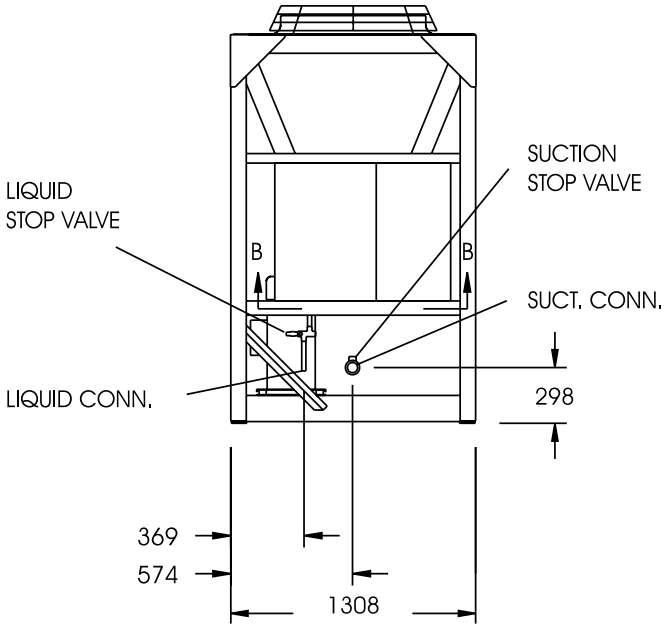
LD04450

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
095SC	199	259	199	259	915	1367	744	845

Dimensions - YCUL0121SC (SI)



VIEW B-B

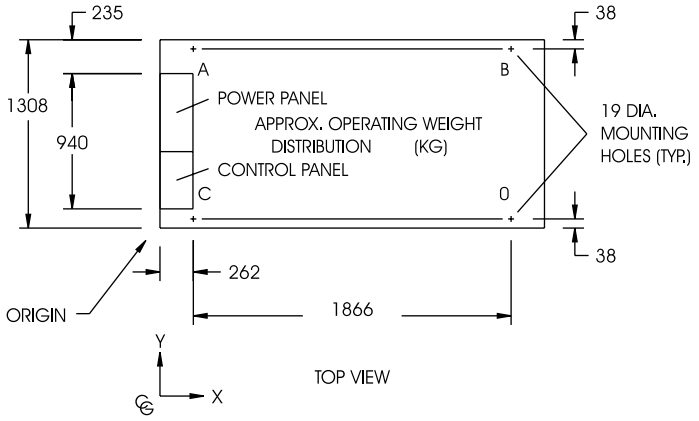


VIEW A-A

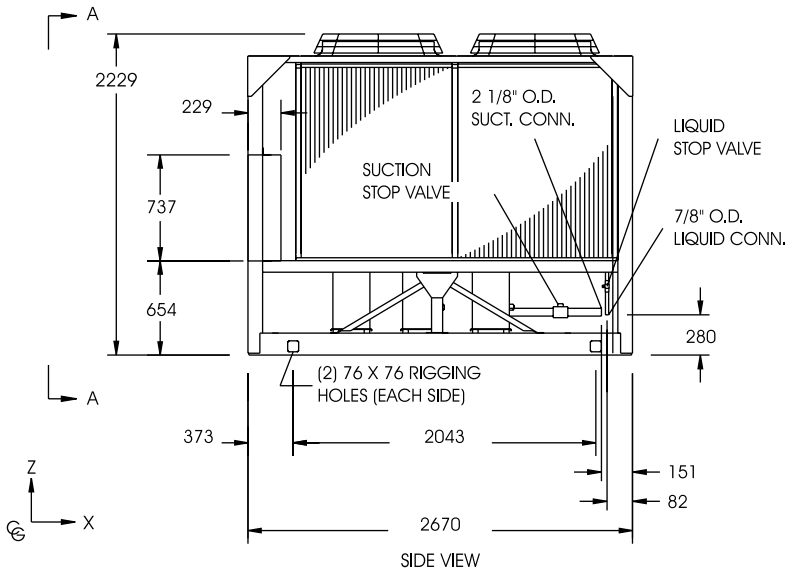
LD04451

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.



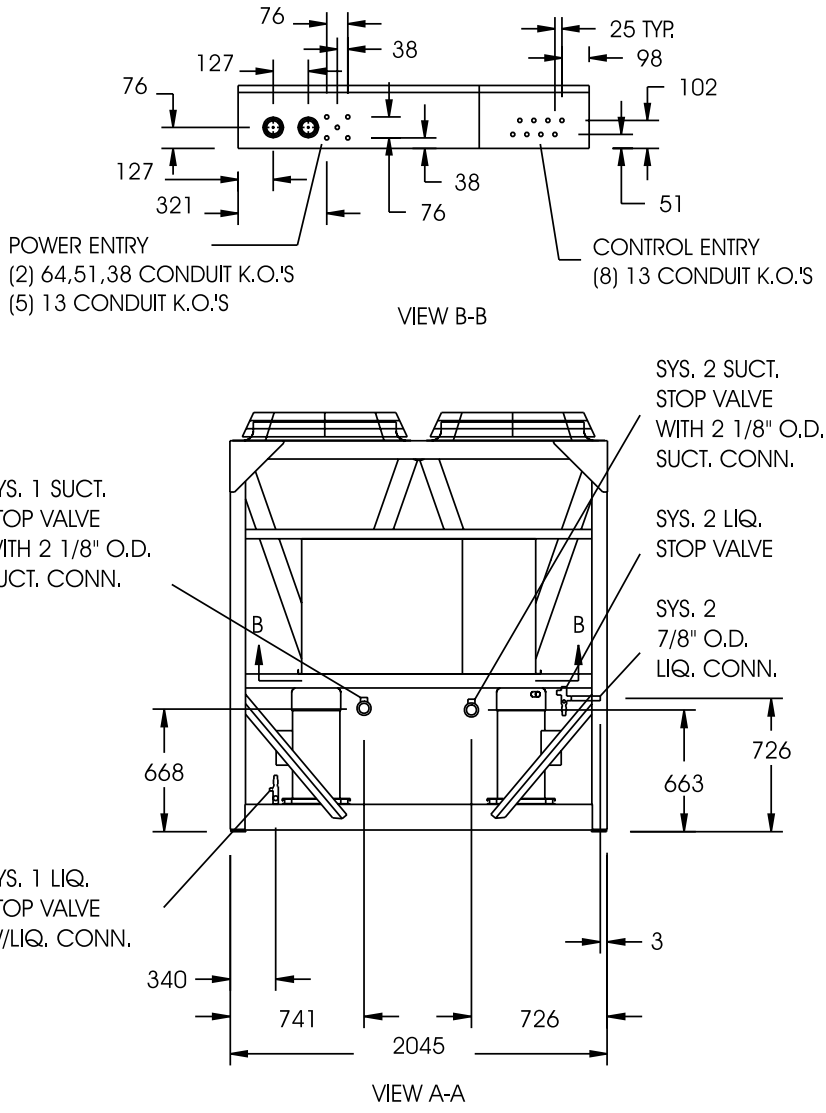
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



LD04452

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
121SC	231	262	231	262	985	1306	766	817

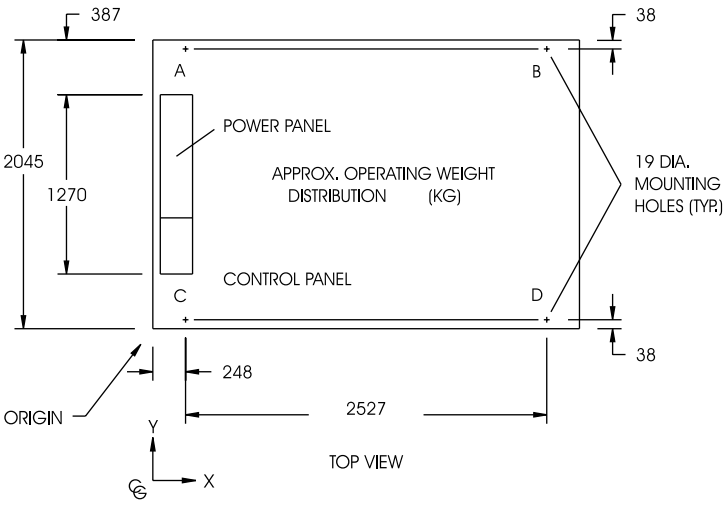
Dimensions - YCUL0125SC (SI)



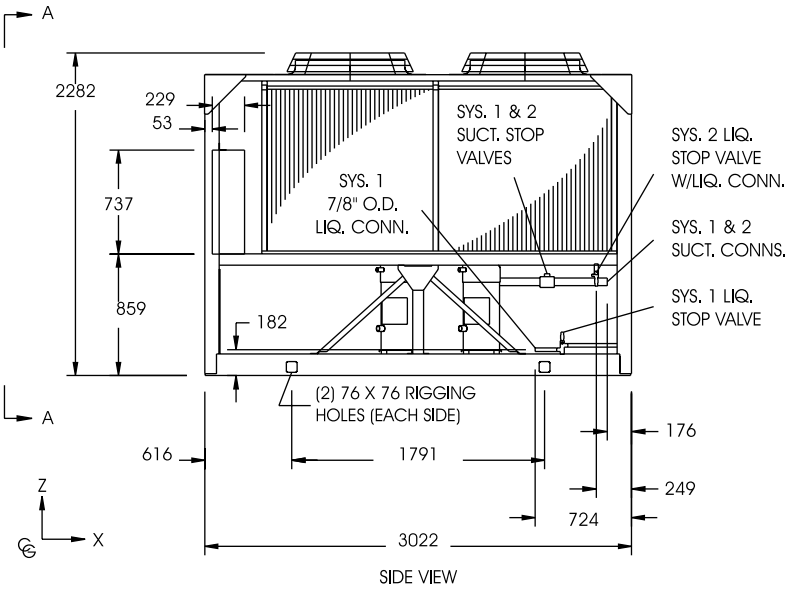
LD04453

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.



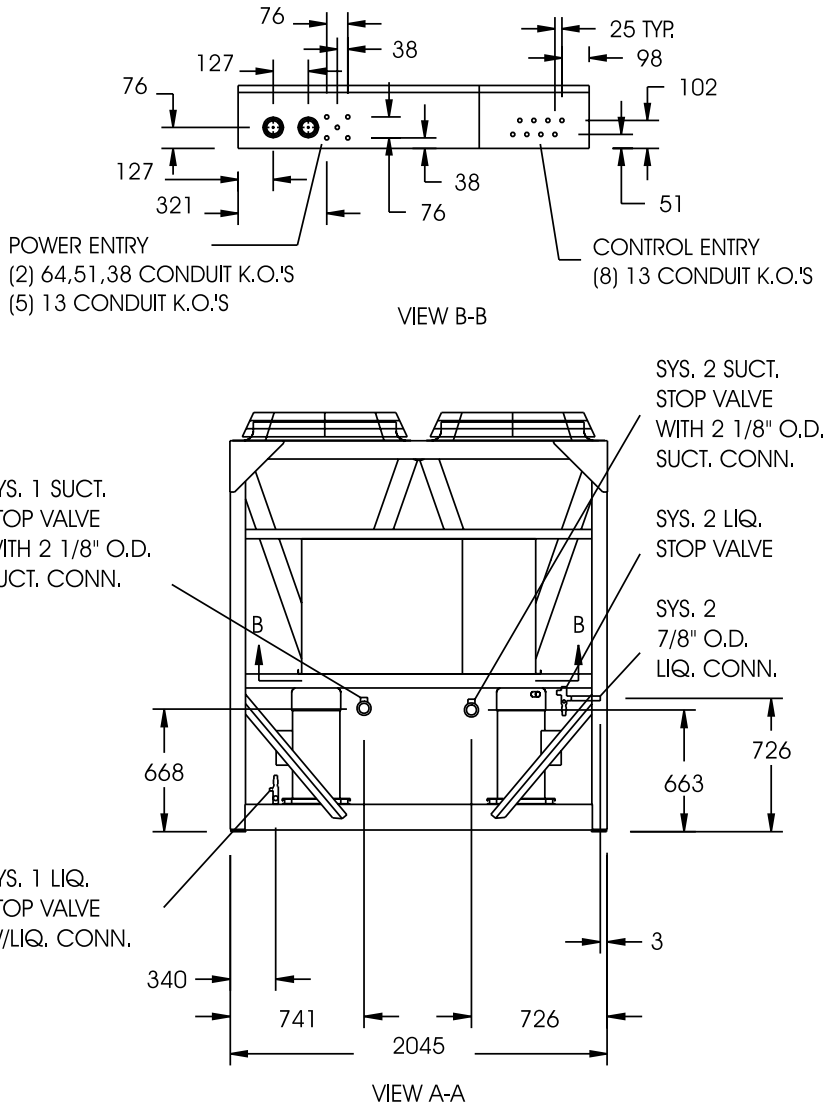
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



LD04454

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
125SC	357	370	357	370	1454	1534	1022	867

Dimensions - YCUL0145SC (SI)



LD04453

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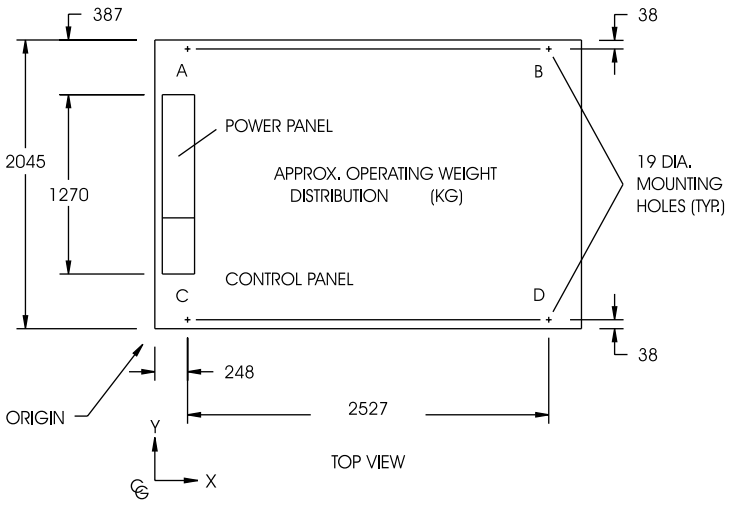
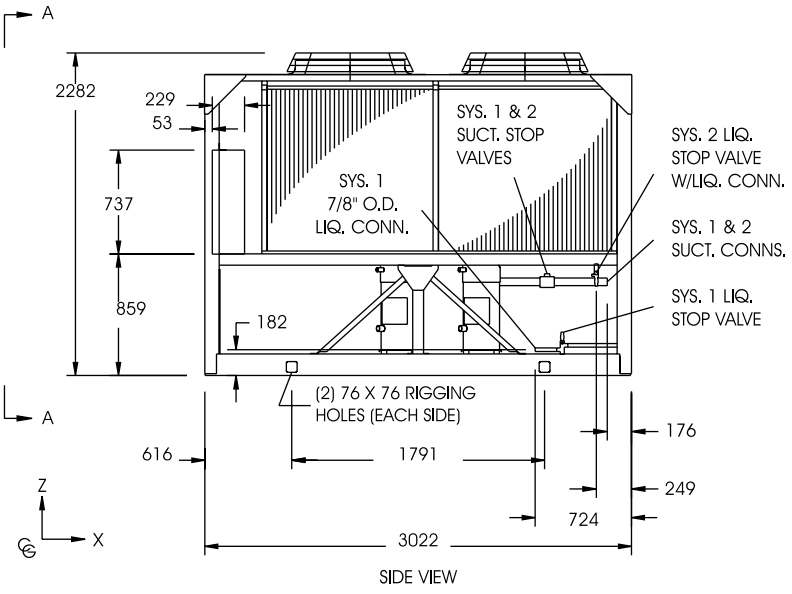


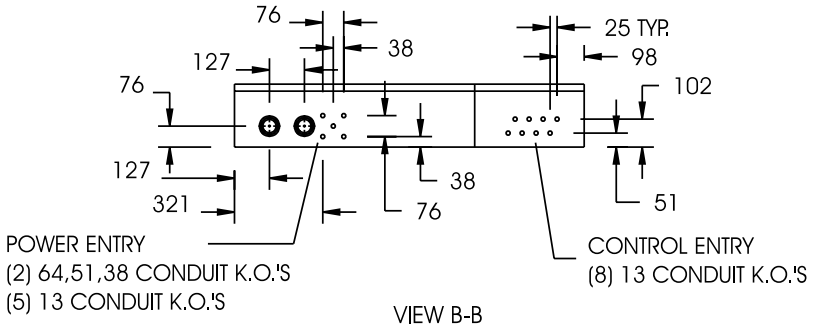
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



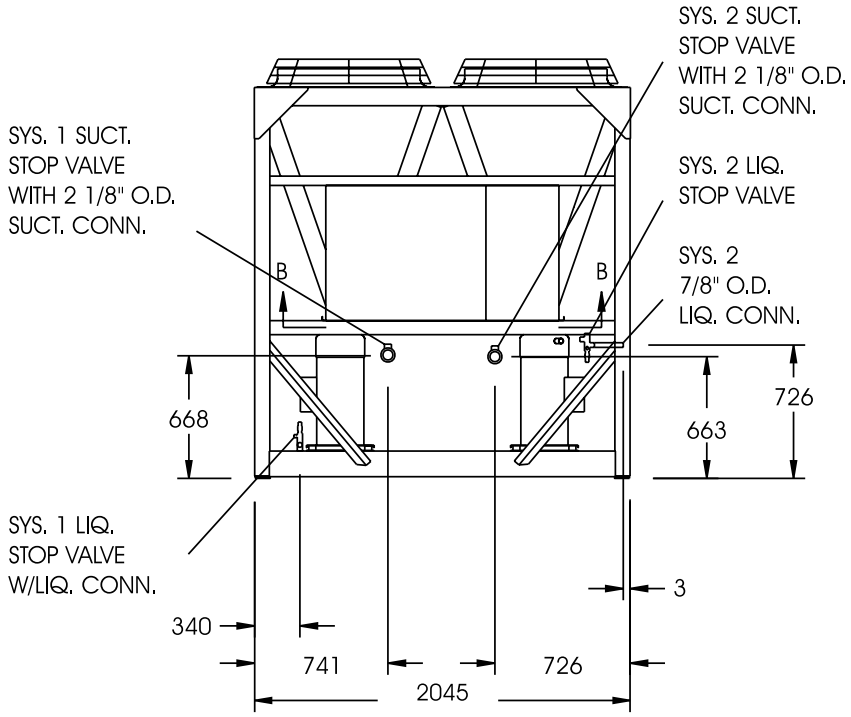
LD04454

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
125SC	361	376	361	376	1473	1537	1031	861

Dimensions - YCUL0161SC (SI)



VIEW B-B

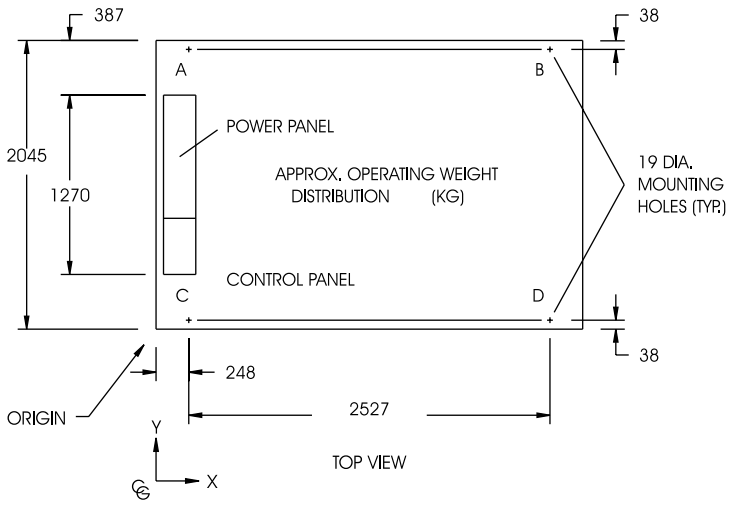


VIEW A-A

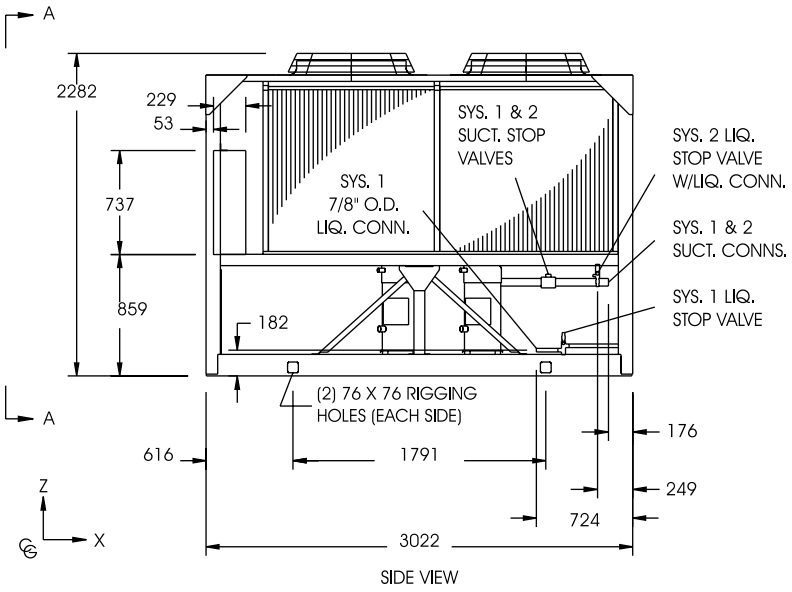
LD04455

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.



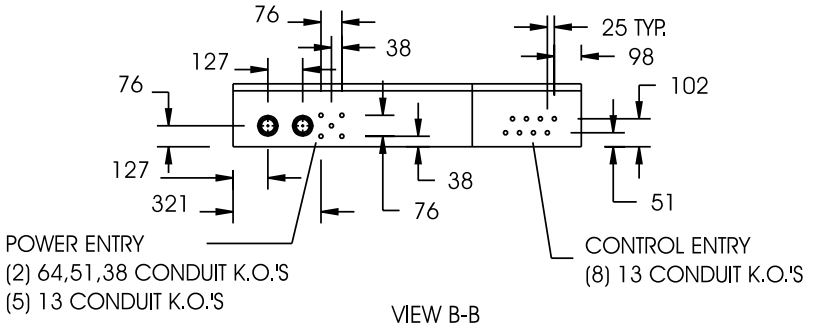
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



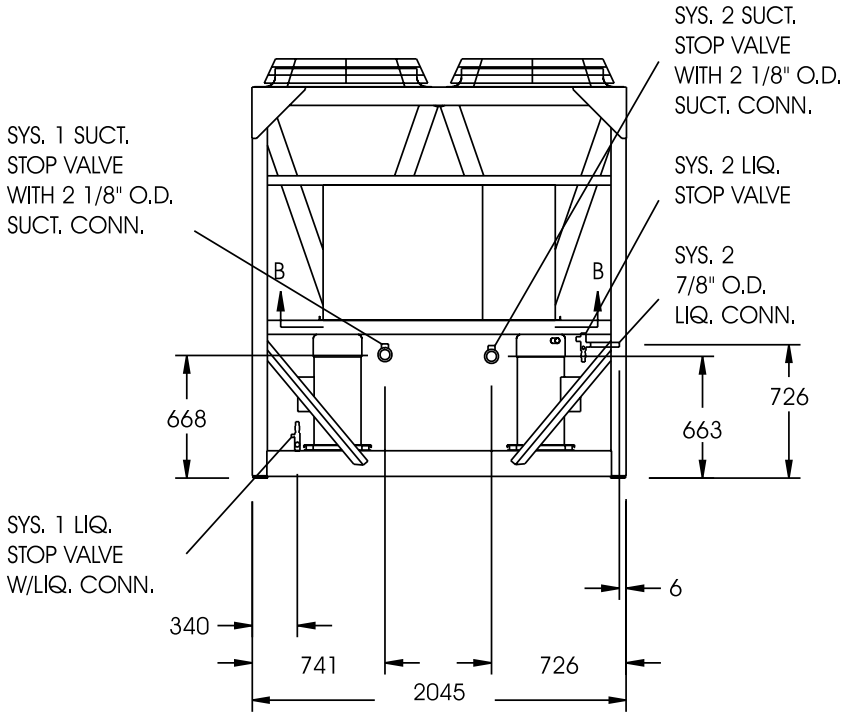
LD04456

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
161SC	366	381	366	381	1494	1538	1022	856

Dimensions - YCUL0171SC (SI)



VIEW B-B



VIEW A-A

LD04457

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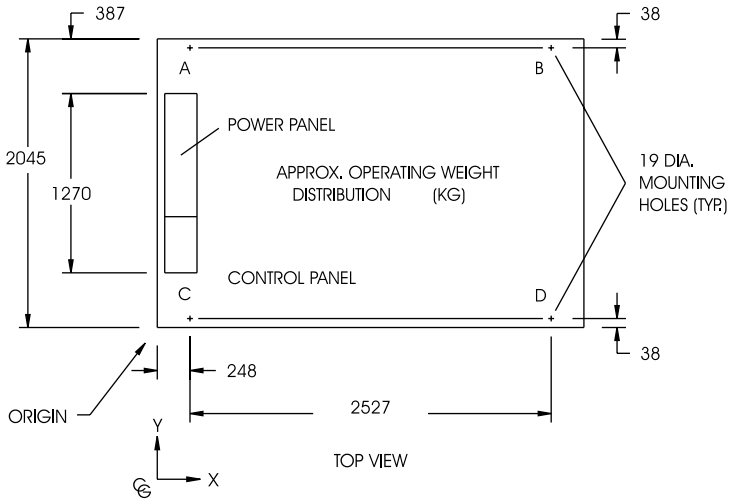
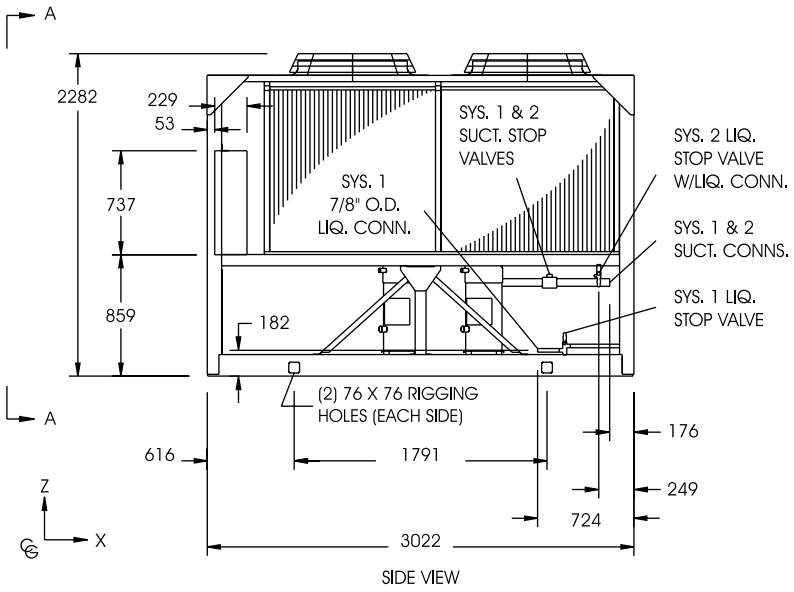


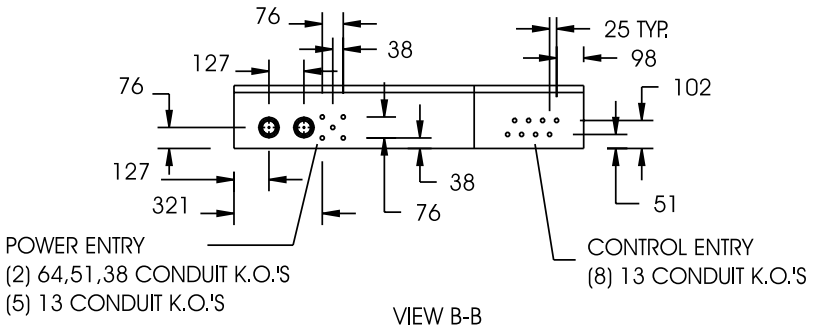
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



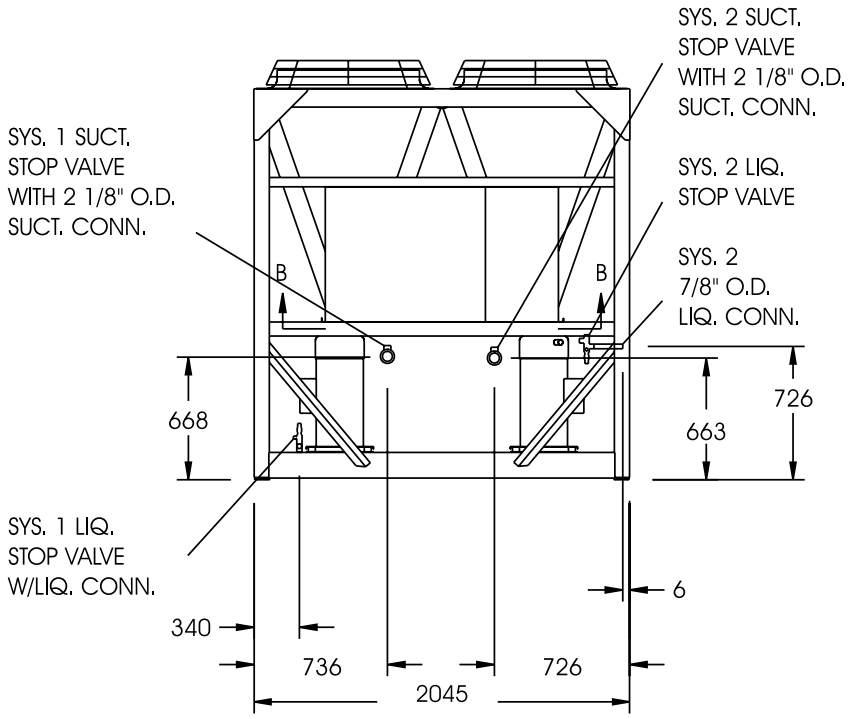
LD04458

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
171SC	372	390	372	390	1523	1541	1030	849

Dimensions - YCUL0185SC (SI)



VIEW B-B



VIEW A-A

LD04459

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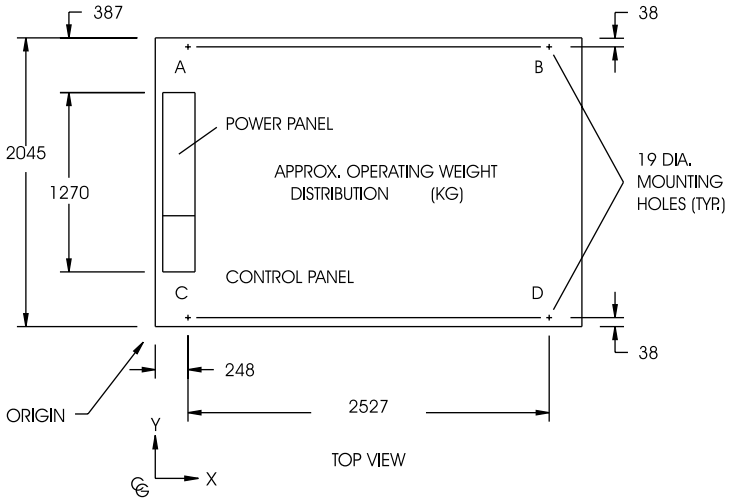
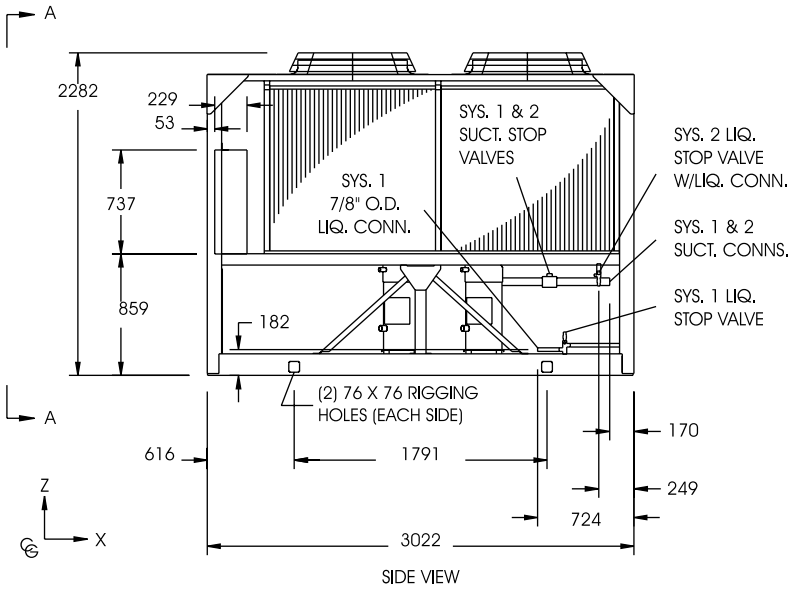


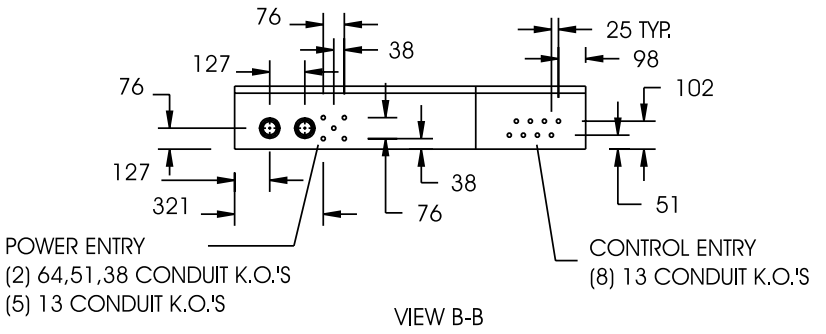
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



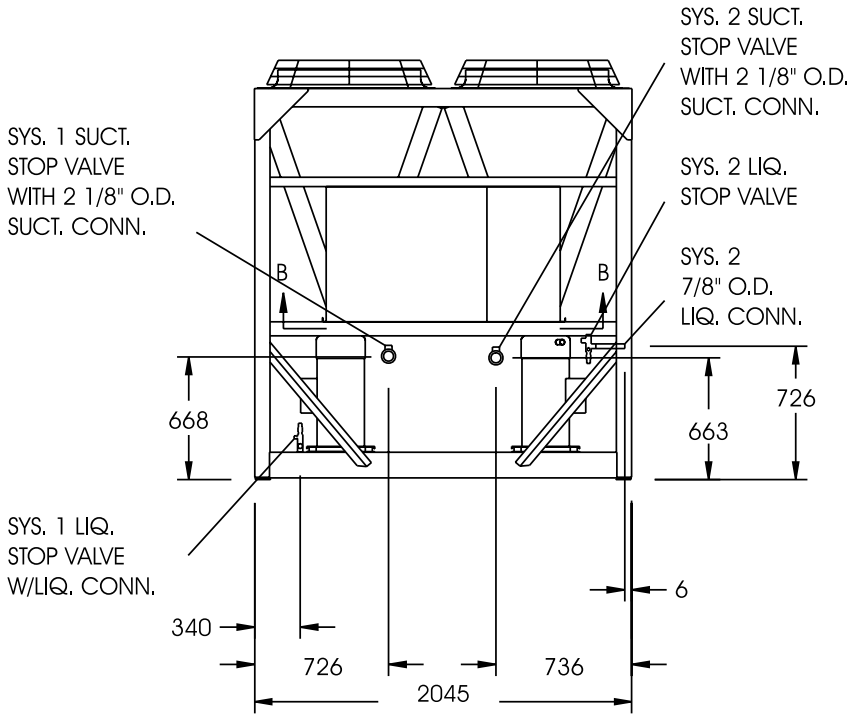
LD04460

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
185SC	400	425	400	425	1651	1550	1022	891

Dimensions - YCUL0211SC (SI)



VIEW B-B



VIEW A-A

LD04461

NOTE:

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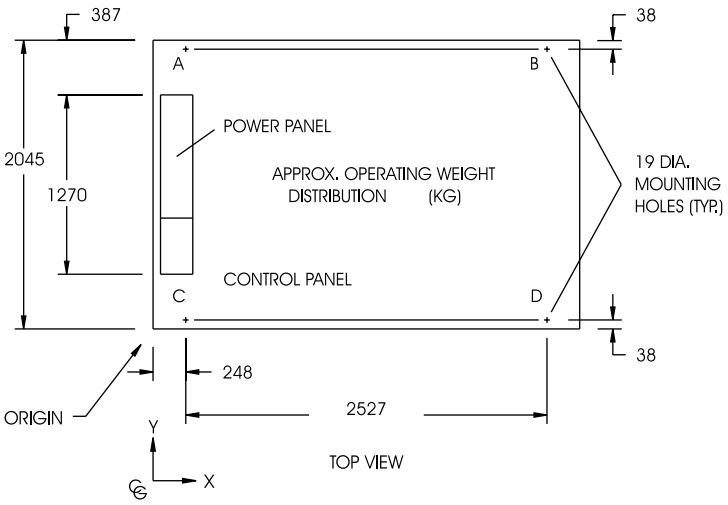
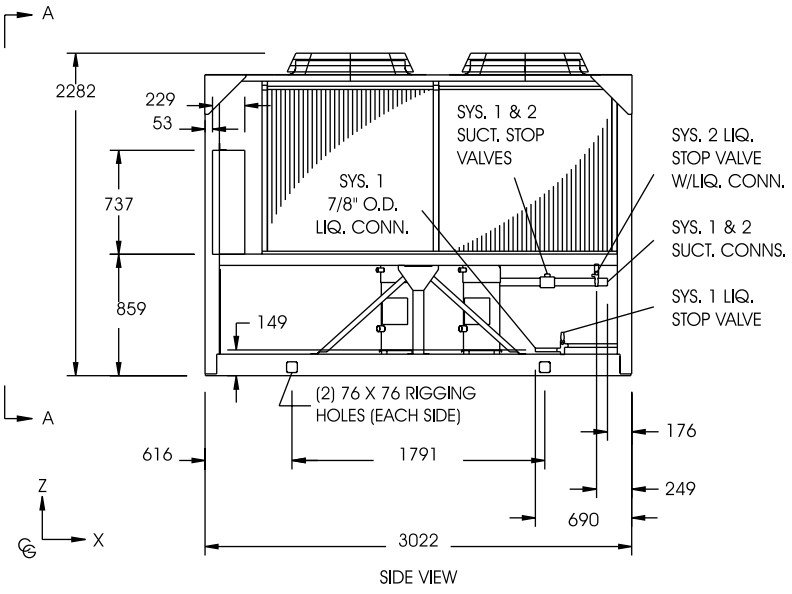


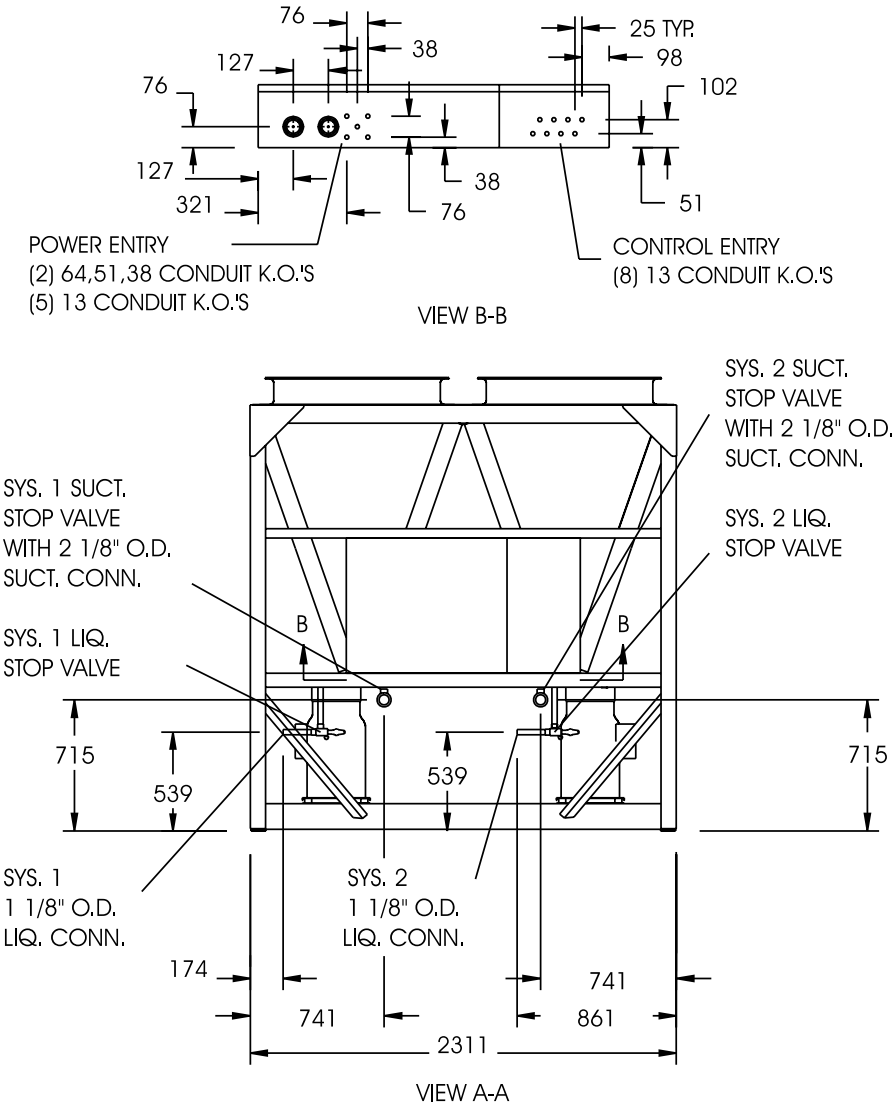
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



LD04462

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
211SC	463	429	463	429	1783	1462	1172	908

Dimensions - YCUL0235SC (SI)



LD04463

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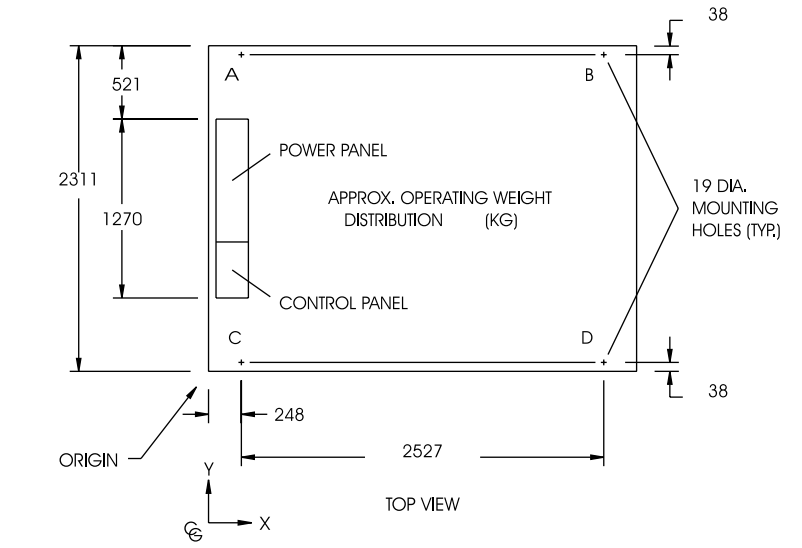
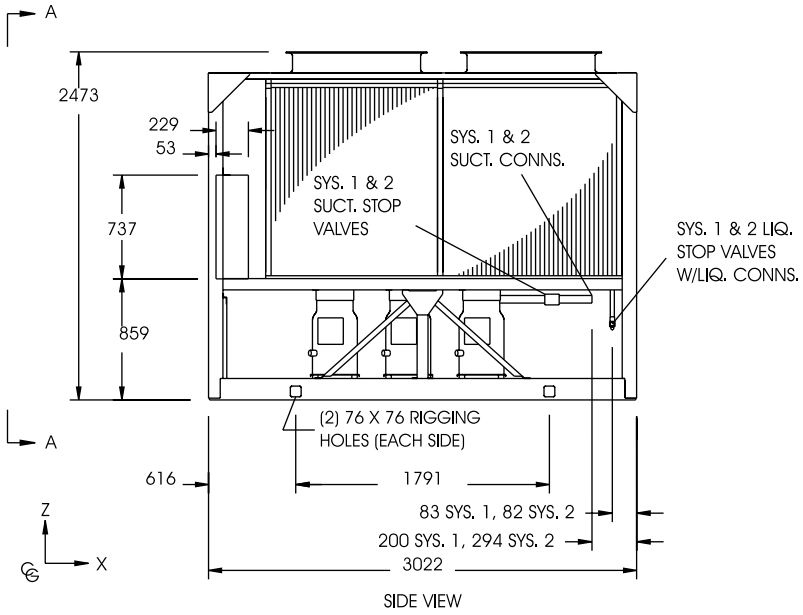


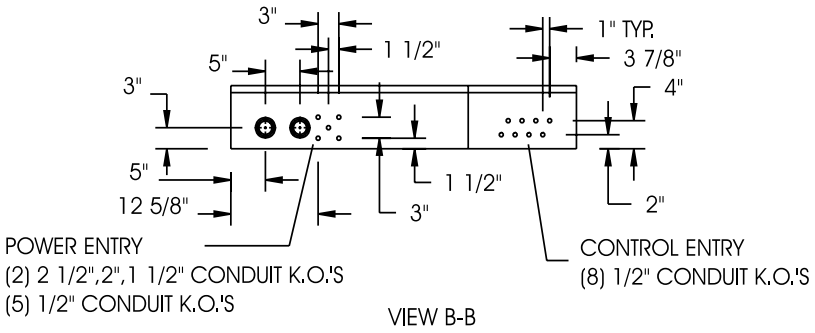
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



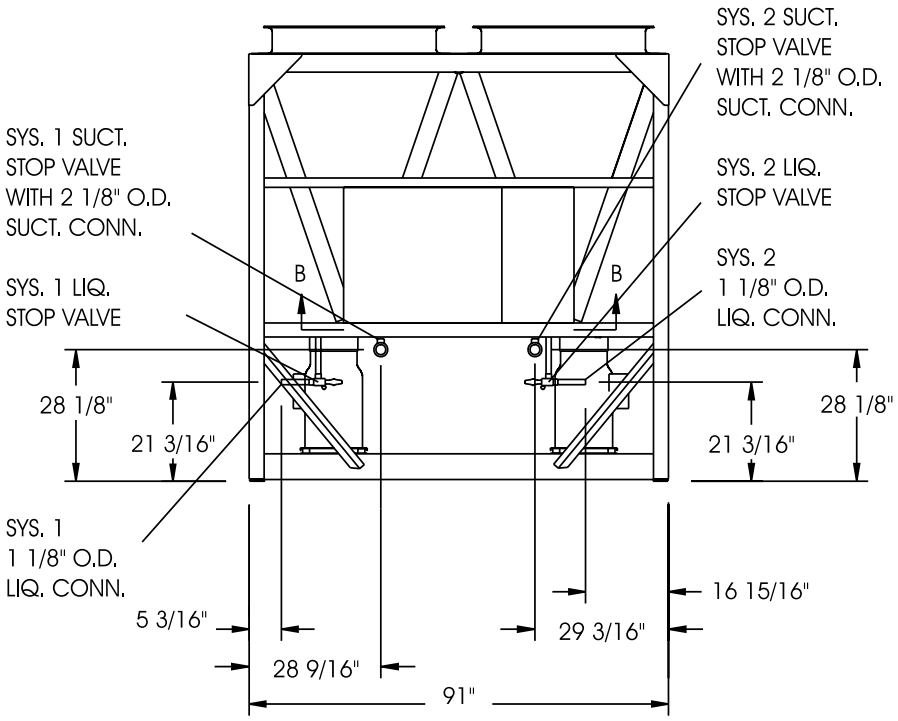
LD04464

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
235SC	474	440	474	440	1828	1463	1161	908

Dimensions - YCUL0255SC (SI)



VIEW B-B



VIEW A-A

LD04465

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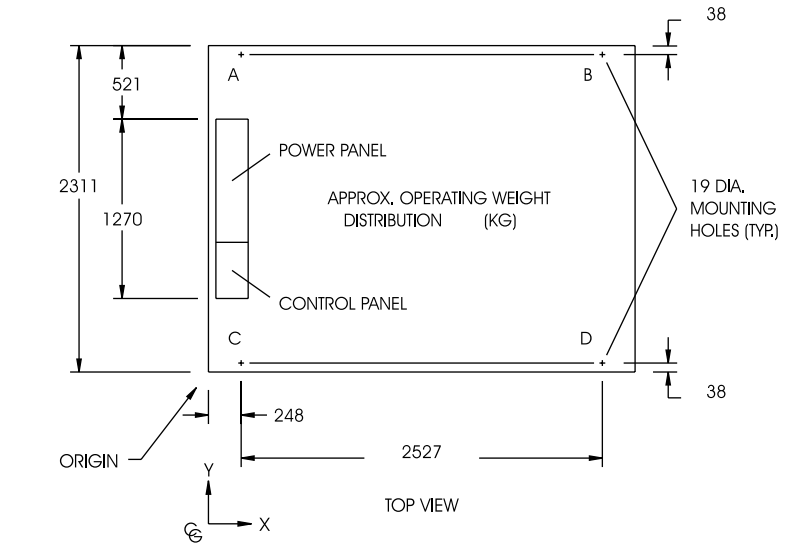
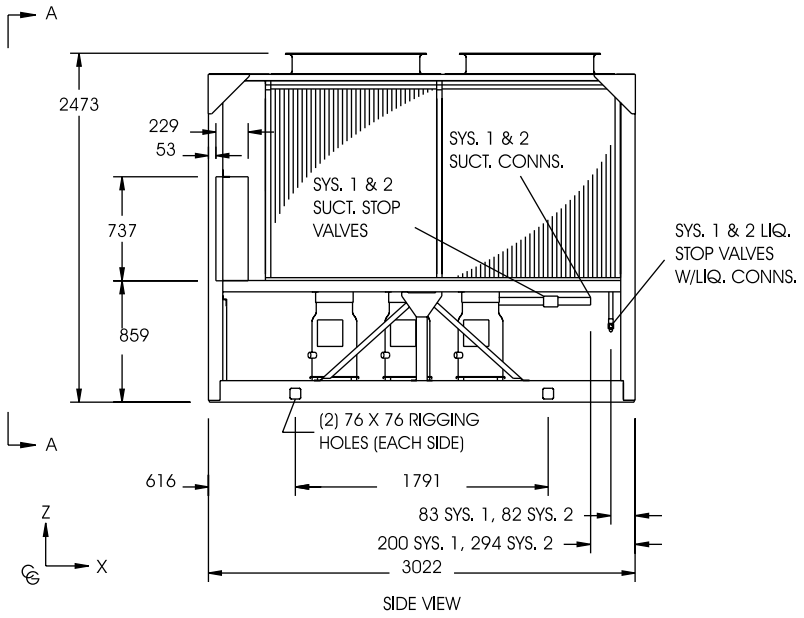


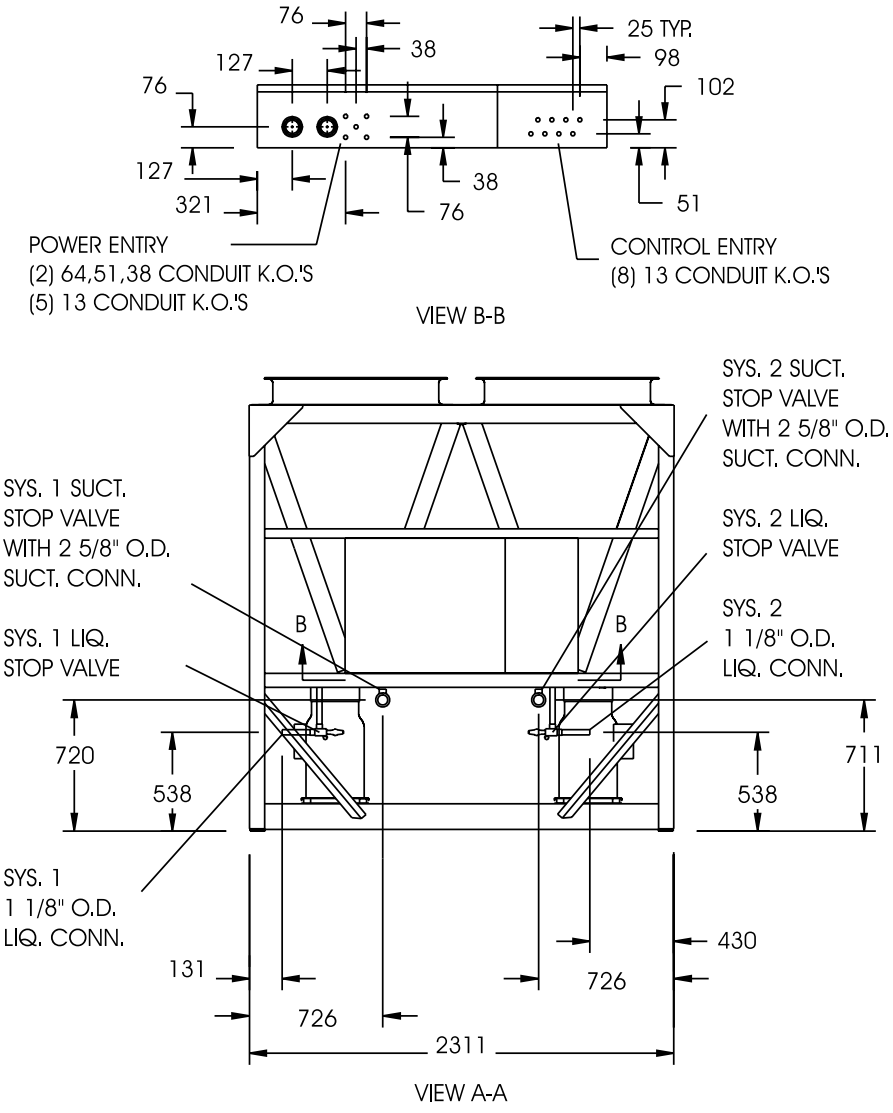
POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



LD04466

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
255SC	499	467	499	467	1932	1469	1171	931

Dimensions - YCUL0275SC (SI)



LD04467

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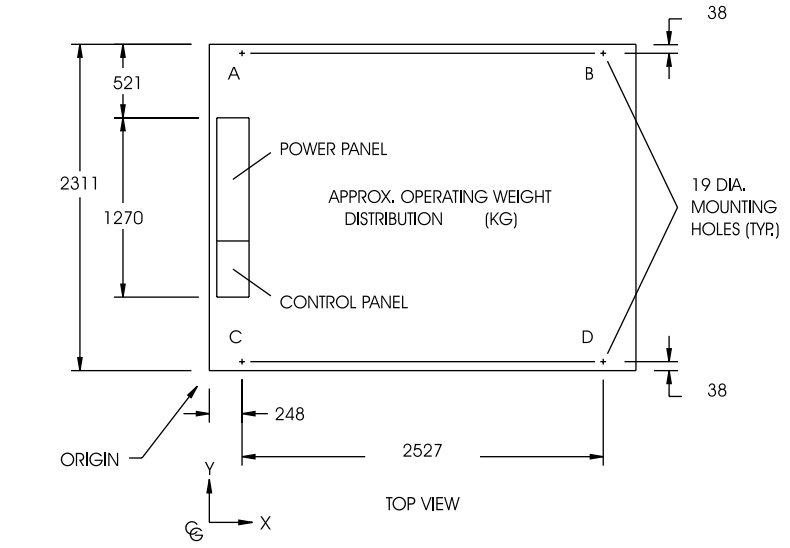
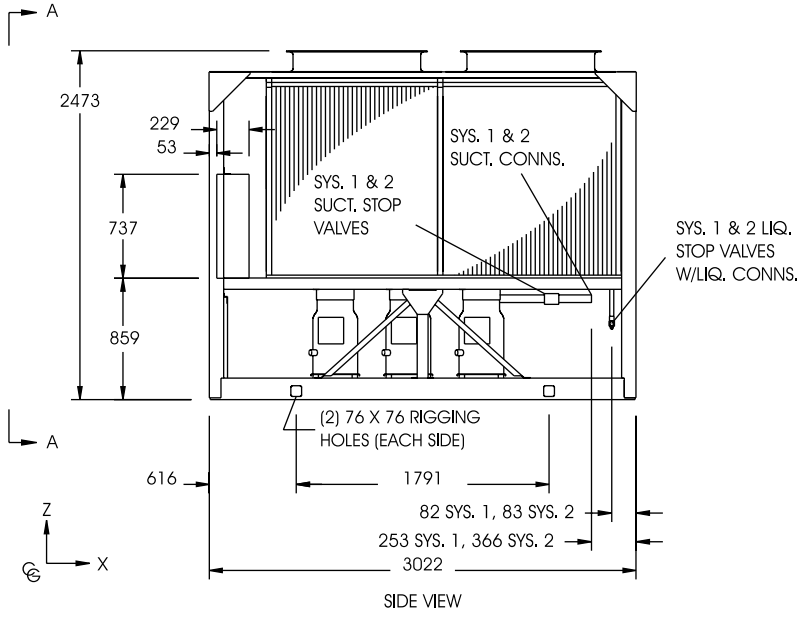


POWER: MULTIPLE POINT WITH TERMINAL BLOCKS



LD04468

MODEL	WEIGHT DISTRIBUTION					CENTER OF GRAVITY		
YCUL0	A	B	C	D	TOTAL	X	Y	Z
275SC	518	487	518	487	2010	1471	1160	928

Electrical Notes

NOTES:

I. 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: -50, add 1.75 amps.

2. 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 35ºC (95ºF) is anticipated.

3. 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.

4. The minimum recommended disconnect switch is based on 115% of the rated load amps for all loads included in the circuit. Local codes must be met.

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: YCUL0045 and YCUL0061 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.

VOLTAGE CODE
-50 =320/415-3-50

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 ARMS

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Electrical Data

STANDARD POWER CONNECTIONS

(SINGLE POINT ON YCUL0045 - 0121 MODELS; DUAL POINT ON YCUL0125 - 0275 MODELS)

SYSTEM #1 FIELD SUPPLIED WIRING										SYSTEM #1 COMPRESSOR & FAN							
MODEL YCUL	VOLT	HZ	MCA	MIN N/F DISC SW	D.E. FUSE		CKT. BKR.		INCOMING WIRE RANGE	COMPR. #1		COMPR. #2		COMPR. #3		FANS	
					MIN	MAX	MIN	MAX		RLA	LRA	RLA	LRA	RLA	LRA	QTY	FLA (EA)
0045SC	380/415	50	34	60	40	40	40	40	# 10 - # 6	11.5	98	11.5	98	—	—	2	3.8
0061SC	380/415	50	45	60	50	60	50	60	# 8 - # 4	16.3	130	16.3	130	—	—	2	3.8
0081SC	380/415	50	57	60	70	70	70	70	# 6 - # 2	21.7	170	21.7	170	—	—	2	3.8
0095SC	380/415	50	62	100	70	80	70	80	# 6 - # 2	24.1	175	24.1	175	—	—	2	3.8
0121SC	380/415	50	81	100	90	100	90	100	# 4 - # 1	22.6	175	22.6	175	22.6	175	2	3.8
0125SC	380/415	50	41	60	45	50	45	50	# 8 - # 4	14.5	120	14.5	120	—	—	2	3.8
0145SC	380/415	50	58	60	70	70	70	70	# 6 - # 2	22.1	170	22.1	170	—	—	2	3.8
0161SC	380/415	50	58	60	70	70	70	70	# 6 - # 2	22.1	170	22.1	170	—	—	2	3.8
0171SC	380/415	50	65	100	80	80	80	80	# 4 - # 1	25.3	175	25.3	175	—	—	2	3.8
0185SC	380/415	50	63	100	70	80	70	80	# 6 - # 2	24.2	175	24.2	175	—	—	2	3.8
0211SC	380/415	50	83	100	90	100	90	100	# 4 - # 1	23.1	170	23.1	170	23.1	170	2	3.8
0235SC	380/415	50	82	100	90	100	90	100	# 4 - # 1	22.9	170	22.9	170	22.9	170	2	3.8
0255SC	380/415	50	92	100	100	110	100	110	# 2 - 1/0	26.0	175	26.0	175	26.0	175	2	3.8
0275SC	380/415	50	92	100	100	110	100	110	# 2 - 1/0	25.8	175	25.8	175	25.8	175	2	3.8

See Notes on page 102.

UNIT VOLTAGE	UNIT VOLTAGE	CONTROL POWER	MCA	OVER CURRENT PROTECTION, SEE NOTE B		NFDISC 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	380/415-1-50	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

STANDARD POWER CONNECTIONS

SYSTEM #2 FIELD SUPPLIED WIRING							SYSTEM #2 COMPRESSOR & FAN							
MCA	MIN N/F	D.E. FUSE		CKT. BRK.		INCOMING WIRE	COMPR. #1		COMPR. #2		COMPR. #3		FANS	
	DISC SW	MIN	MAX	MIN	MAX	RANGE	RLA	LRA	RLA	LRA	RLA	LRA	QTY	FLA (EA)
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
41	60	45	50	45	50	# 8 - # 4	14.5	120	14.5	120	—	—	2	3.8
41	60	45	50	45	50	# 8 - # 4	14.5	120	14.5	120	—	—	2	3.8
58	60	70	70	70	70	# 6 - # 2	22.1	170	22.1	170	—	—	2	3.8
58	60	70	70	70	70	# 6 - # 2	21.8	170	21.8	170	—	—	2	3.8
63	100	70	80	70	80	# 6 - # 2	24.2	175	24.2	175	—	—	2	3.8
57	100	70	70	70	70	# 6 - # 2	15.1	120	15.1	120	15.1	120	2	3.8
82	100	90	100	90	100	# 4 - # 1	22.9	170	22.9	170	22.9	170	2	3.8
80	100	90	100	90	100	# 4 - # 1	22.3	170	22.3	170	22.3	170	2	3.8
92	100	100	110	100	110	# 2 - 1/0	25.8	175	25.8	175	25.8	175	2	3.8

SINGLE POINT POWER CONNECTIONS

(SINGLE POINT STANDARD ON YCUL0045 - 0121 MODELS; OPTIONAL ON YCUL0125 - 0275. DISCONNECT AND BREAKERS OPTIONAL ON ALL MODELS)

SINGLE POINT FIELD SUPPLIED WIRING

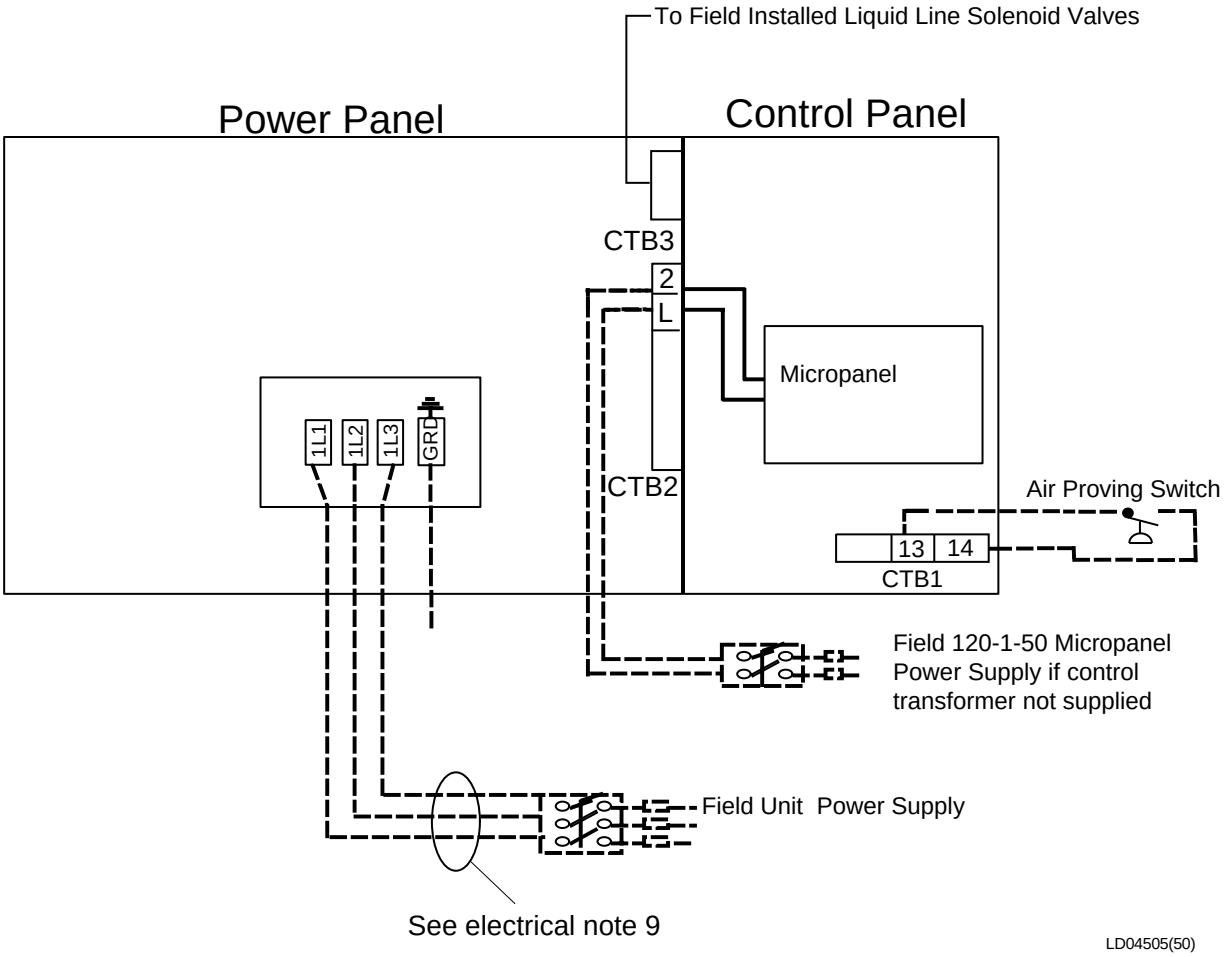
MODEL YCUL	VOLT	HZ	MCA	MIN N/F DISC SW	D.E. FUSE		CKT. BKR.		INCOMING WIRE RANGE		
									FACTORY SUPPLIED OPTIONAL		
					MIN	MAX	MIN	MAX	SINGLE POINT	DISCONNECT	BREAKER
0045SC	380/415	50	34	60	40	40	40	40	# 10 - # 6	# 10 - # 6	# 10 - # 6
0061SC	380/415	50	45	60	50	60	50	60	# 8 - # 4	# 8 - # 4	# 8 - # 4
0081SC	380/415	50	57	60	70	70	70	70	# 6 - # 2	# 6 - # 2	# 6 - # 2
0095SC	380/415	50	62	100	70	80	70	80	# 6 - # 2	# 6 - # 2	# 6 - # 2
0121SC	380/415	50	81	100	90	100	90	100	# 4 - # 1	# 4 - # 1	# 4 - # 1
0125SC	380/415	50	77	100	90	90	90	90	# 4 - # 1	# 4 - # 1	# 4 - # 1
0145SC	380/415	50	95	150	100	100	110	110	# 2 - 1/0	# 2 - 1/0	# 2 - 1/0
0161SC	380/415	50	110	150	125	125	125	125	# 2 - 1/0	# 2 - 1/0	# 2 - 1/0
0171SC	380/415	50	116	150	125	125	125	125	# 1 - 2/0	# 1 - 2/0	# 1 - 2/0
0185SC	380/415	50	119	150	125	125	125	125	# 1 - 2/0	# 1 - 2/0	# 1 - 2/0
0211SC	380/415	50	136	150	150	150	150	150	1/0 - 3/0	1/0 - 3/0	1/0 - 3/0
0235SC	380/415	50	159	200	175	175	175	175	2/0 - 4/0	2/0 - 4/0	2/0 - 4/0
0255SC	380/415	50	167	200	175	175	175	175	2/0 - 4/0	2/0 - 4/0	2/0 - 4/0
0275SC	380/415	50	177	200	200	200	200	200	3/0 - 250	3/0 - 250	3/0 - 250

See Notes on page 102.

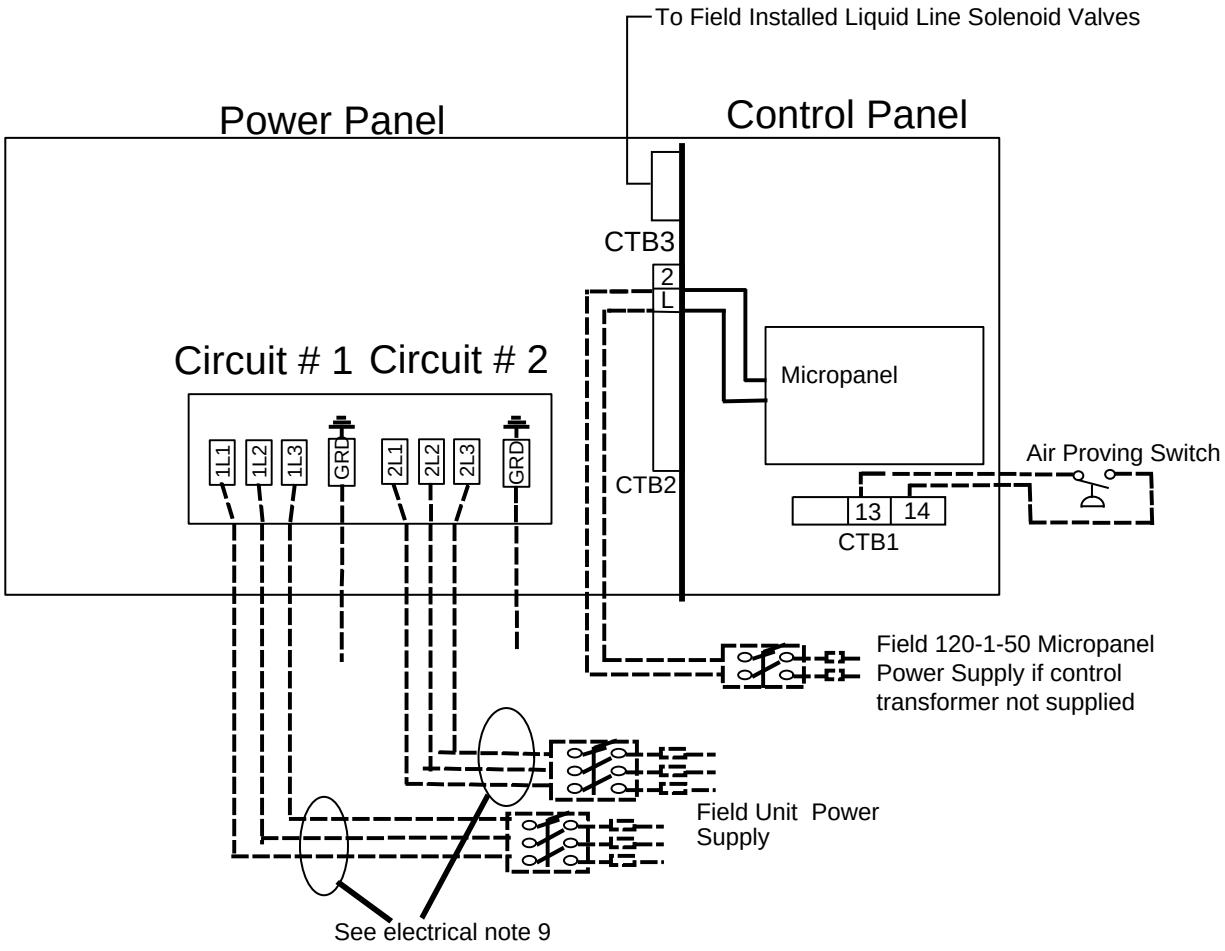
SINGLE POINT POWER CONNECTIONS

SYSTEM #1 COMPRESSOR & FAN								SYSTEM #2 COMPRESSOR & FAN							
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)
11.5	98	11.5	98	—	—	2	3.8	—	—	—	—	—	—	—	—
16.3	130	16.3	130	—	—	2	3.8	—	—	—	—	—	—	—	—
21.7	170	21.7	170	—	—	2	3.8	—	—	—	—	—	—	—	—
24.1	175	24.1	175	—	—	2	3.8	—	—	—	—	—	—	—	—
22.6	175	22.6	175	22.6	175	2	3.8	—	—	—	—	—	—	—	—
14.5	120	14.5	120	—	—	2	3.8	14.5	120	14.5	120	—	—	2	3.8
22.1	170	22.1	170	—	—	2	3.8	14.5	120	14.5	120	—	—	2	3.8
22.1	170	22.1	170	—	—	2	3.8	22.1	170	22.1	170	—	—	2	3.8
25.3	175	25.3	175	—	—	2	3.8	21.8	170	21.8	170	—	—	2	3.8
24.2	175	24.2	175	—	—	2	3.8	24.2	175	24.2	175	—	—	2	3.8
23.1	170	23.1	170	23.1	170	2	3.8	15.1	120	15.1	120	15.1	120	2	3.8
22.9	170	22.9	170	22.9	170	2	3.8	22.9	170	22.9	170	22.9	170	2	3.8
26.0	175	26.0	175	26.0	175	2	3.8	22.3	170	22.3	170	22.3	170	2	3.8
25.8	175	25.8	175	25.8	175	2	3.8	25.8	175	25.8	175	25.8	175	2	3.8

Single Power Supply Wiring – (YCUL0045 - 0275)

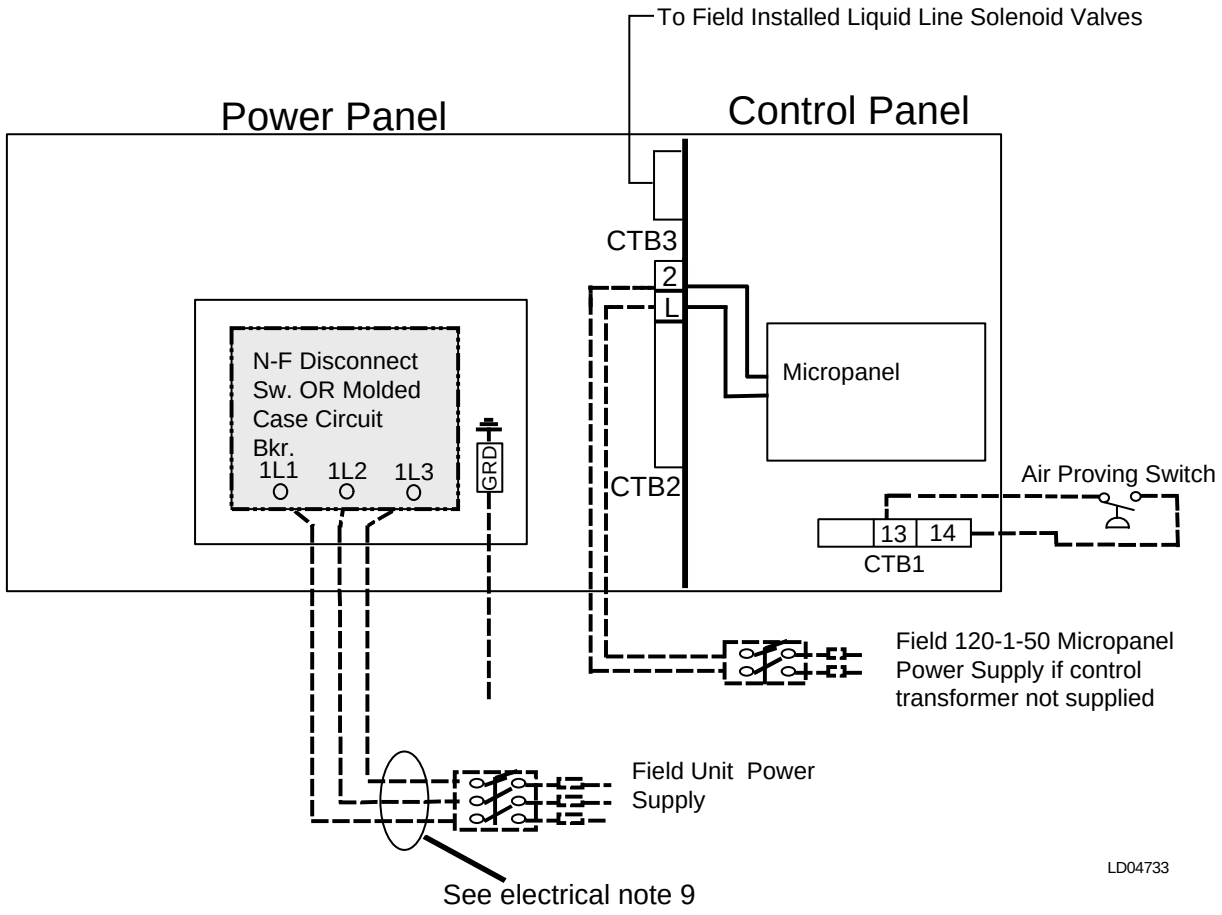


Multiple Point Power Supply Wiring – (YCUL0125 - 0275)

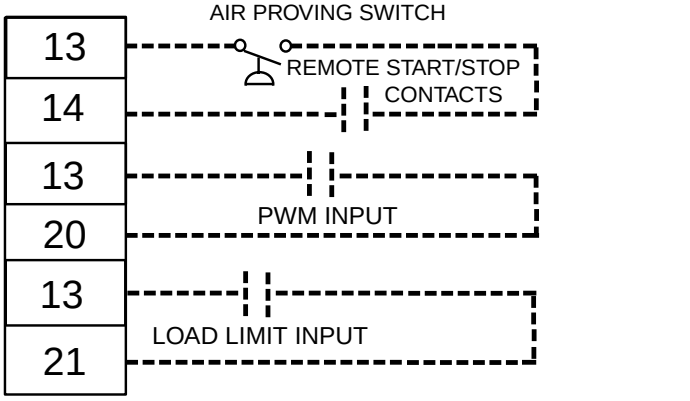


LD04732

Optional Single Point Power Supply Wiring – N-F Disc Sw OR Circ Bkr (0045 - 0275)

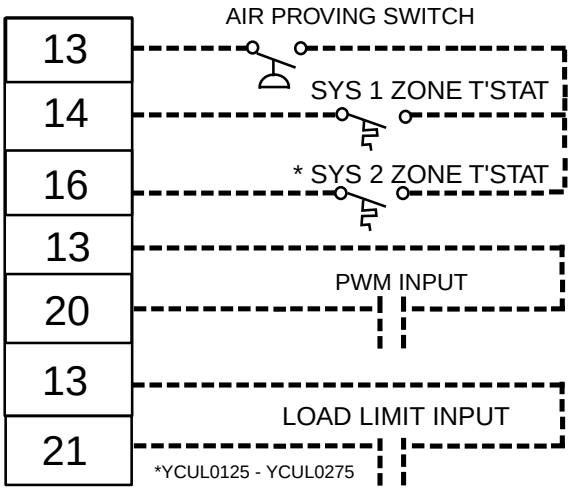


Control Wiring



CTB1 – DISCHARGE AIR TEMPERATURE CONTROL

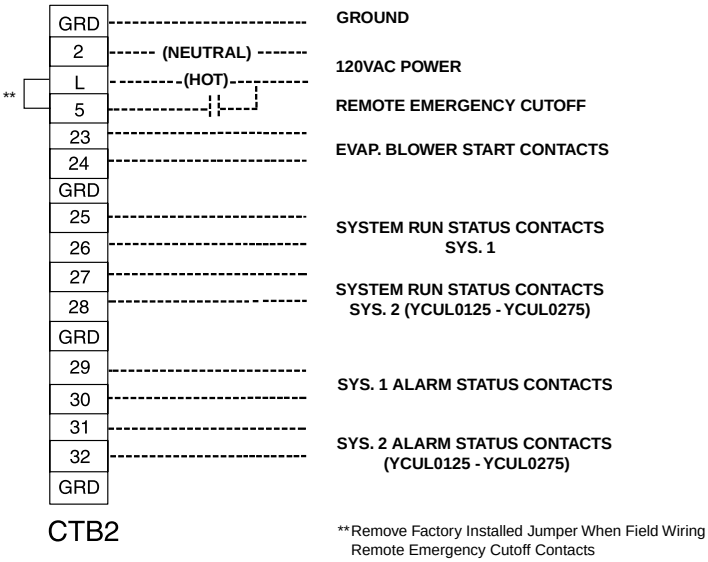
LD04288



CTB1 – SUCTION PRESSURE CONTROL

LD04734

CTB1 CONTROL PANEL FIELD WIRING

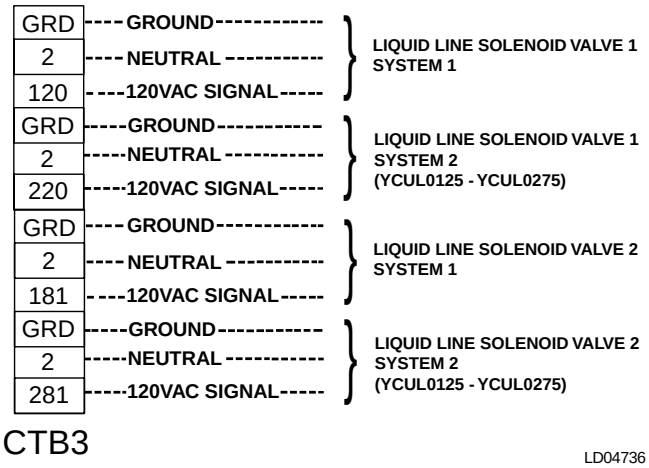


CTB2

**Remove Factory Installed Jumper When Field Wiring Remote Emergency Cutoff Contacts

LD04735

CTB2 POWER PANEL FIELD WIRING



CTB3

LD04736

CTB3 POWER PANEL FIELD WIRING

Application Data

UNIT LOCATION

The YCUL Condensing Units 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 refrigerant 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 (3/4" 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.

REFRIGERANT PIPING

When sizing refrigerant pipe for split system air conditioning, consideration must be given to the: (1) Suction line pressure drop due to friction, (2) Liquid line pressure drop due to friction, (3) Suction line velocity for oil return, and (4) Liquid line pressure drop due to vertical rise. Refer to DESIGN PARAMETERS for friction losses for both the suction and liquid lines for the condensing unit.

On a system where the evaporator blower is located below the condensing unit, the suction line must be sized for both pressure drop and oil return.

When the condensing unit is located below the evaporator blower, the liquid line must be designed for pressure drop due to friction loss and vertical rise. If the pressure drop due to vertical rise and friction loss exceeds 30 psi, some refrigerant will flash before it reaches the thermal expansion valve.

All horizontal suction lines should be pitched at least 1/4 inch per foot in the direction of the refrigerant flow to aid the return of oil to the compressor. All suction lines with a vertical rise exceeding 3 feet should have a ‘P’ trap at the bottom and the top to facilitate oil return. Suction lines with a vertical rise exceeding 25 feet should be trapped every 15 feet to provide drain points for the oil when the circuit is deactivated. When the circuit is reactivated, oil will return to the compressor more quickly and in smaller slugs.

For more details, refer to ASHRAE Refrigeration Handbook, System Practices for Halocarbon Refrigerants.

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, condensing units of the scheduled capacities as shown and indicated on the Drawings, including but not limited to:

1. Condensing Unit package
2. Holding Charge of refrigerant and oil
3. Electrical power and control connections
4. DX Central Station Air Handling connections

1.02 QUALITY ASSURANCE

A. Products shall be Designed, Tested, and installed in compliance with applicable sections of the following Standards and Codes:

1. ANSI/ASHRAE Standard 15 – *Safety Code for Mechanical Refrigeration*
2. ANSI/NFPA Standard 70 – *National Electrical Code (N.E.C.).*
3. ASME Boiler and Pressure Vessel Code, Sec tion VIII, Division 1.
4. Manufactured in facility registered to ISO 9002.

B. Factory Test: Condensing Unit shall be pressure-tested, evacuated and given a holding charge of refrigerant and a full oil charge, and shall be factory operational run tested to assure each control device operates properly.

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 given holding charge of refrigerant and a full oil charge by the Manufacturer.

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

PART 2 - PRODUCTS

2.01 CONDENSING UNITS MATERIALS AND COMPONENTS

A. General: Install and commission, as shown on the schedules and plans, factory assembled, charged, and tested air cooled scroll compressor condensing unit as specified herein. Condensing Unit 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*. Condensing Unit shall include, but is not limited to: a system with a single refrigerant circuit 35 tons (123kW) and below, and not less than two refrigerant circuits above 35 tons (123kW), scroll compressors, 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. Tip seals to provide efficient axial sealing while preventing scroll tip to base contact.
2. Controlled Orbit Design for radial sealing to incorporate minimum flank to flank contact for long service life.
3. Refrigerant flow through the compressor with 100% suction cooled motor.
4. Large suction side free volume and oil sump to provide liquid handling capability.
5. Annular discharge check valve and reverse vent assembly to provide low pressure drop, silent shutdown 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.

2.03 REFRIGERANT CIRCUIT

One (YCUL0045-0121) or two (YCUL0125-0275) independent refrigerant circuits will be furnished on each unit. All unit piping will be copper, with brazed joints. The liquid line will include a field connection shutoff valve with charging port located on each condenser circuit. Suction line connections are provided on each refrigeration circuit at the suction valve. Filter drier and sight glass are shipped loose for field installation on each refrigerant circuit. Field refrigerant piping can be connected to the condensing unit without loss of charge in the unit.

All expansion valves and liquid line solenoid valves and refrigerant field piping are supplied by others.

2.04 HEAT EXCHANGERS

A. 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 (polyvinyl chloride) 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. Condensing Unit control can be set for Discharge Air Temperature Control or for Suction Pressure Control. (Note: Suction Pressure Control requires optional Suction Pressure Transducers on Models YCUL0045-0185.)
   2. Automatic control of compressor start/stop, anti-coincidence and anti-recycle timers, automatic pump-down shut-down, condenser fans, unit alarm contacts, and condensing unit operation from 0°F to 125°F (-18°C to 52°C) ambient. Automatic reset to normal chiller operation after power failure.
   3. Discharge air temperature reset via a Pulse Width Modulated (PWM) input signal or up to two steps of demand (load) limiting.
   4. Software stored in non-volatile memory, with programmed set-points retained in lithium battery backed real time clock (RTC) memory for minimum 5 years.
   5. 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 Set-points, Display/Print, Entry, Unit Options & clock, and On/Off Switch.
   6. Programmable Set-points (within Manufacturer limits): display language; suction pressure setting and control 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 suction pressure cutout, high discharge pressure cutout, anti-recycle timer (compressor start cycle time), and anti-coincident timer (delay compressor starts).
   7. Display Data: Suction temperatures (optional), low ambient temperature cutout setting, outdoor air temperature, English or metric data, suction pressure cutout setting, each system suction pressure (optional on YCUL0045-0185 models), discharge pressure (optional), discharge air 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 (when controlling based on Discharge Air Temperature only), automatic lead/lag of compressors within a system, compressor starts/operating hours (each), status of hot gas valves, and fan operation, run permissive status, number of compressors running, liquid solenoid valve status, load & unload timer status.
   8. 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.

9. Unit Safeties: Shall be automatic reset and cause compressors to shut down if low ambient, or under voltage.
10. Alarm Contacts: Low ambient, 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 condensing unit operation. Mechanical Contractor shall provide field control wiring necessary to interface sensors to the condensing unit 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 -17.8°C (0°F) ambient. Standard unit controls to -3.9°C (25°F) ambient.
2. High Ambient Control: Permits unit operation above 46.1°C (115°F) ambient.

C. Power Supply Connections:

1. Single Point Power Supply: Single point Terminal Block for field connection and interconnecting wiring to the compressors. Separate external protection must be supplied, by others, in the incoming power wiring, which must comply with the National Electric Code and/or local codes. Single Point Supply standard on YCUL0045 - 0121 models.
2. Single Point Disconnect: 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 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.
3. Single Point Circuit Breaker: Single point Terminal Block with Circuit Breaker and lockable external handle (in compliance with Article 440-14 of N.E.C.) can be supplied to isolate power voltage for servicing. Incoming power wiring must comply with the National Electric Code and/or local codes.

D. CE Mark: System wiring and components are designed in compliance with European conformity. (Single Point Circuit Breaker Option must also be included for unit to comply with CE.)

E. Pressure & Temperature Transducers and Sensors

1. Discharge Pressure Transducers: Permits unit to sense and display discharge pressure.
2. Suction Pressure Transducers: Permits unit to sense and display suction pressure. This capability is standard on YCUL0211-0275 models. (This option is required for suction pressure control on models YCUL0045-00185.)
3. Suction Temperature Sensors: Permits units to sense and display suction temperature.

F. Control Power Transformer: Converts unit power voltage to 120-1-50 (500 VA capacity). Factory mounting includes primary- and secondary-wiring between the transformer and the control panel.

G. Power Factor Correction Capacitors: Provided to correct unit compressor factors to a 0.90-0.95.

H. Condenser Coil Environmental Protection:

1. Black Fin: Epoxy coated aluminum fin stock to guard from corrosive agents and insulate against galvanic potential. For mild seashore or industrial locations.

2. Copper Fin: Provide copper fins in lieu of aluminum.
3. Phenolic Coating: Cured phenolic 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 Condensing Unit 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. 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. Hot gas by-pass is installed on only one refrigerant circuit.

K. Microprocessor Membrane Keypad Graphics on in lieu of Standard English:
   1. French language.
   2. German language.
   3. Spanish language.
   4. Italian language.

L. Chicago Code Relief Valves to meet Chicago Code requirements.

M. Building Automation System (EMS) Reset Interface: Condensing Unit to accept 4 to 20mA, 0 to 10 VDC, or discrete contact closure input to reset the discharge air temperature.

N. Remote Control Panel (Field Mounted): Auxiliary panel for remote user interface for functions normally made at the unit control center.

O. Sound Reduction (Factory Mounted):
   1. Low speed, reduced noise fans
   2. Compressor Acoustic Sound Blankets

P. 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 condensing unit as indicated on drawings, including cleaning and service maintenance clearance per Manufacturer instructions. Adjust and level condensing unit on support structure.

C. Components: Installing Contractor shall provide and install all auxiliary devices and accessories for fully operational condensing unit.

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.

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Supersedes: Nothing