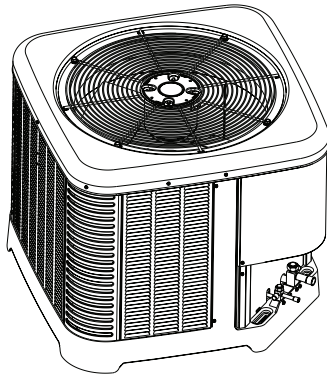


INSTALLATION INSTRUCTIONS

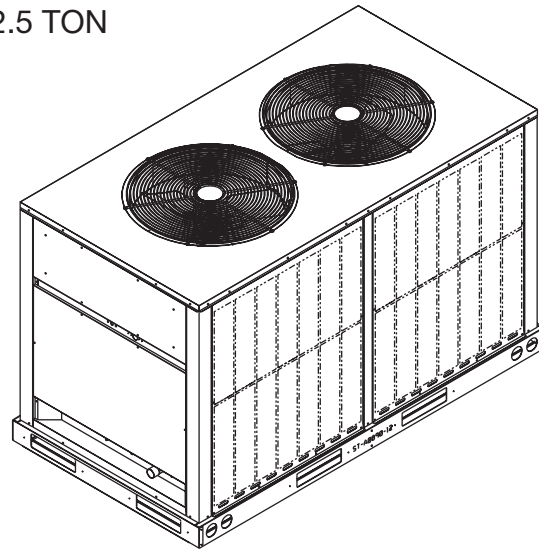
FOR A/C CONDENSING UNITS

(-)ACY SERIES 6.5, 7.5, 10 (sm & lg), 12.5, 15, & 20 TONS
WITH R-454B REFRIGERANT

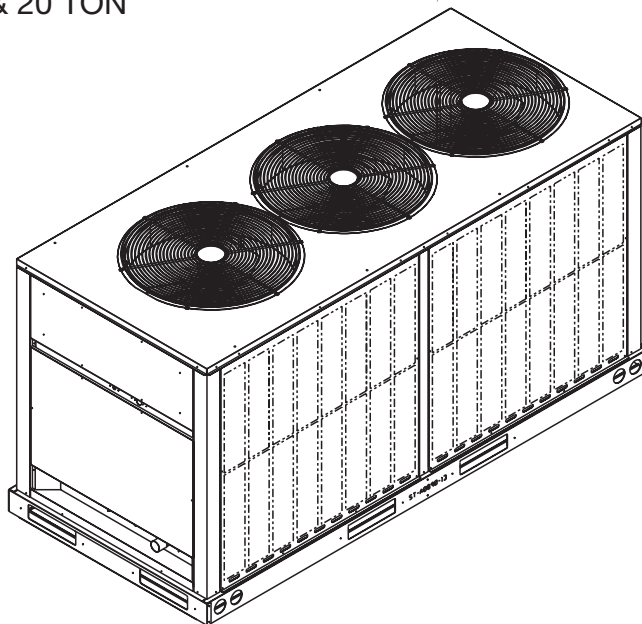
6.5, 7.5, & 10 TON



10 & 12.5 TON



15 & 20 TON



DO NOT DESTROY THIS MANUAL. PLEASE READ CAREFULLY AND KEEP
IN A SAFE PLACE FOR FUTURE REFERENCE BY A SERVICEMAN.

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1.0 IMPORTANT SAFETY INFORMATION

⚠️ WARNINGS:

- These instructions are intended as an aid to qualified, licensed service personnel for proper installation, adjustment, and operation of this unit. Read these instructions thoroughly before attempting installation or operation. Failure to follow these instructions may result in improper installation, adjustment, service, or maintenance possibly resulting in fire, electrical shock, property damage, personal injury, or death.
- The unit must be permanently grounded. Failure to do so can cause electrical shock resulting in severe personal injury or death.
- Turn off electric power at the fuse box or service panel before making any electrical connections.
- Complete the ground connection before making line voltage connections. Failure to do so can result in electrical shock, severe personal injury, or death.
- Disconnect all power to unit before starting maintenance. Failure to do so can cause electrical shock resulting in severe personal injury or death.
- Never assume the unit is properly wired and/or grounded. Always test the unit cabinet with a non-contact voltage detector available at most electrical supply houses or home centers before removing access panels or coming into contact with the unit cabinet.
- Do not use oxygen to purge lines or pressurize system for leak test. Oxygen reacts violently with oil, which can cause an explosion resulting in severe personal injury or death.
- The top of the scroll compressor shell is hot. Touching the compressor top may result in serious personal injury.
- The manufacturer's warranty does not cover any damage or defect to the unit caused by the attachment or use of any components, accessories, or devices (other than those authorized by the manufacturer) into, onto, or in conjunction with the heat pump. You should be aware that the use of unauthorized components, accessories, or devices may adversely affect the operation of the heat pump and may also endanger life and property. The manufacturer disclaims any responsibility for such loss or injury resulting from the use of such unauthorized components, accessories, or devices.

⚠️ CAUTIONS:

- Only match this outdoor unit with a matched indoor coil or air handler approved for use with this outdoor unit per the unit manufacturer's specification sheet. The use of unmatched coils or air handler will likely result in a charge imbalance between the cooling and heating modes which can cause unsatisfactory

operation including a high-pressure switch lockout condition.

- When coil is installed over a finished ceiling and/or living area, it is required that a secondary sheet metal condensate pan be constructed and installed under the entire unit. Failure to do so can result in property damage.
- The compressor has an internal overload protector. Under some conditions, it can take up to 2 hours for this overload to reset. Make sure overload has had time to reset before condemning the compressor.

⚠️ REFRIGERANT WARNINGS:

WARNING: Risk of Fire or Explosion. Dispose Of Properly In Accordance with Federal Or Local Regulations. Flammable Refrigerant Used.

DANGER: Risk of Fire Or Explosion due to Flammable Refrigerant Used. Follow Handling Instructions Carefully in Compliance with National Regulations.

WARNING: Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer.

WARNING: The appliance shall be stored in a room without continuously operating ignition sourced (for example: open flames, an operating gas appliance or an operating electric heater.)

WARNING: Do not pierce or burn.

WARNING: Be aware that refrigerants may not contain an odor.

WARNING: If this unit is connected via an air duct system to one or more rooms with an area less than Amin, that room shall be without continuously operating flames or other potential ignition sources. See **3.2: A2L Refrigerant Installation Safety Data**.

WARNING: Auxiliary devices which may be a potential ignition source shall not be installed in the duct work.

WARNING: If this unit is connected via duct to one or more rooms, only auxiliary devices approved by the manufacturer are declared suitable with A2L refrigerants shall be installed in the connecting duct work.

WARNING: Appliance shall be installed, operated and stores in a room with a floor area larger than 'X'm2. See **3.2: A2L Refrigerant Installation Safety Data**.

DANGER: Risk of fire or explosion. Flammable refrigerant used. To be repaired only by trained service personnel. Do not puncture refrigerant tubing.

DANGER: Risk of fire or explosion. Flammable refrigerant used. Consult the repair manual/owner's guide before attempting to service this product. All safety precautions must be followed.

2.0 GENERAL INFORMATION

⚠ WARNING:

Improper installation, or installation not made in accordance with these instructions, can result in unsatisfactory operation and/or dangerous conditions and can cause the related warranty not to apply.

2.1 Introduction

The information contained in this manual has been prepared to assist in the proper installation, operation, and maintenance of the air conditioning system by a qualified installer.

Read this manual and any instructions packaged with separate equipment required to make up the system prior to installation. Owner should retain this manual for future reference.

The images contained within this document may not be an exact representation of every unit, accessory, installation, etc. All dimensions contained in this document are approximations. We reserve the right to change the content of this document at any time.

2.2 Importance of Quality Installation

The equipment must be stored in a way that prevents mechanical damage from occurring.

A quality installation is critical to assure safety, reliability, comfort, and customer satisfaction. Strict adherence to applicable codes, the information in this installation manual, the outdoor unit installation manual, and the thermostat installation manual are key to a quality installation. Read the entire instruction manuals before starting the installation.

IMPORTANT: This product has been designed and manufactured to meet certified AHRI capacity and efficiency ratings with the appropriate outdoor units. However, proper refrigerant charge, proper airflow, and refrigerant line sizing are critical to achieve optimum capacity and efficiency and to assure reliable operation. Installation of this product should follow the manufacturer's refrigerant charging and airflow instructions located in this installation manual and the charging chart label affixed to the outdoor unit. Failure to confirm proper charge and airflow may reduce energy efficiency and shorten equipment life.

The equipment has been evaluated in accordance with the Code of Federal Regulations, Appendix A to Subpart F of Part 431, Title 10.

Install the unit in accordance with applicable national, state, and local codes. Latest editions are available from: "National Fire Protection Association, Inc., Batterymarch Park, Quincy, MA 02269." These publications are:

- ANSI/NFPA No. 70-(Latest Edition) National Electrical Code.
- NFPA90A Installation of Air Conditioning and Ventilating Systems.
- NFPA90B Installation of warm air heating and air conditioning systems.
 - UL 60335-2-40 4th Edition
 - CSA C22.2 No. 60335-2-40 4th Edition

Manufacturer Qualifications: ISO 9001: 2015

Install the indoor unit in such a way as to allow necessary access to the coil/filter rack and blower/control compartment.

If any hot work is to be conducted on the refrigerating equipment or any associated parts, appropriate fire extinguishing equipment must be on site. A dry powder CO2 fire extinguisher must be near the charging area at all times during installation, commissioning, service, and decommissioning.



RECOGNIZE THIS SYMBOL AS AN INDICATION OF IMPORTANT SAFETY INFORMATION!

⚠ WARNING

THESE INSTRUCTIONS ARE INTENDED AS AN AID TO QUALIFIED SERVICE PERSONNEL FOR PROPER INSTALLATION, ADJUSTMENT AND OPERATION OF THIS UNIT. READ THESE INSTRUCTIONS THOROUGHLY BEFORE ATTEMPTING INSTALLATION OR OPERATION. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN IMPROPER INSTALLATION, ADJUSTMENT, SERVICE OR MAINTENANCE, POSSIBLY RESULTING IN FIRE, ELECTRICAL SHOCK, CARBON MONOXIDE POISONING, EXPLOSION, PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

⚠ WARNING

PROPOSITION 65 WARNING: THIS PRODUCT CONTAINS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

DO NOT DESTROY THIS MANUAL. PLEASE READ CAREFULLY AND KEEP IN A SAFE PLACE FOR FUTURE REFERENCE BY A SERVICEMAN.



2.0 GENERAL INFORMATION

2.3 System Sizing and Selection

Before specifying any air-conditioning equipment, a survey of the structure and heat gain calculation must be made. A heat gain calculation involves identifying all surfaces and openings that gain heat from the surrounding air and quantifying that heat to determine the amount of heat that needs to be removed. A heat gain calculation also calculates the extra heat load caused by sunlight and for humidity removal. These factors must be considered before selecting an air-conditioning system to provide year-round comfort. The Air Conditioning Contractors of America (ACCA) Manual N method of load calculation is one recognized procedure for determining the cooling load for commercial buildings.

After the proper equipment combination has been selected, satisfying both sensible and latent requirements, the system must be properly installed. Only then can the system provide the comfort it was designed to provide.

There are several factors that installers must consider.

- Outdoor unit location
- Indoor unit blower speed and airflow
- Proper equipment evacuation
- Supply and return air duct design and sizing
- Refrigerant charge
- System air balancing
- Diffuser and return air grille location and sizing

IMPORTANT: Excessive use of elbows in the refrigerant line set can produce excessive pressure drop. Follow industry best practices for installation. Installation and commissioning of this equipment is to be performed by trained and qualified HVAC professionals. For technical assistance, contact your Distributor Service Coordinator.

2.4 Importance of Proper Indoor/Outdoor Match-Ups

To assure many years of reliable operation and optimum customer comfort and to assure the outdoor unit warranty remains valid, an air-handler model or indoor coil should be selected that is properly matched to the outdoor unit. The recommended approach is to select an air-handler or indoor coil that has an AHRI match with the outdoor unit. Refer to the AHRI directory at www.ahridirectory.org to confirm the air-handler and outdoor unit are a certified combination in the AHRI Directory.

2.5 Checking Product Received

Upon receiving unit, inspect it for any shipping damage. Claims for damage, either apparent or concealed, should be filed immediately with the shipping company. Check model number, electrical characteristics, and accessories to determine if they are correct. Check system components (outdoor unit, air handler, etc.) to make sure they are properly matched.

2.6 Efficiency Testing Notice

For purposes of verifying or testing efficiency ratings, the test procedure in Title 10, Chapter II, Subchapter D, Part 431, Subpart F, Section 96 and the clarifying provisions provided in the AHRI Operations Manual 340/360 that were applicable at the date of manufacture should be used for test set up and performance.

2.7 Compressor Break-In Notice

Prior to agency testing, unit must be charged at 95°F [35°C] dry bulb outdoor and 80°F [26.7°C] dry bulb/67°F [19.4°C] wet bulb Indoor then unit must be run for 16 hours at 115°F [46.1°C] outdoor ambient temperature with 80°F [26.7°C] dry bulb/75°F [23.9°C] wet bulb indoor ambient temperature to break the compressor in. After the 16 hours break-in bring the rooms down to 95°F [35°C] dry bulb outdoor 80°F [26.7°C] dry bulb/67°F [19.4°C] wet bulb Indoor and perform the final charge based on sub-cooling listed on the charging chart.

3.0 UNIT SPECIFICATIONS

3.1 Electrical and Physical Data

Model (-)ACY2 Series	078CAZ	078DAZ	078YAZ
Cooling Performance^A			
Gross Cooling Capacity Btu [kW]	78,000 [22.9]	78,000 [22.9]	78,000 [22.9]
EER	11.2	11.2	11.2
IEER ^B	14.8	14.8	14.8
Nominal CFM/AHRI Rated CFM [L/s]	2600/2580 [1227/1218]	2600/2580 [1227/1218]	2600/2580 [1227/1218]
AHRI Net Cooling Capacity Btu [kW]	72,200 [21.2]	72,200 [21.2]	72,200 [21.2]
Net Sensible Capacity Btu [kW]	53,500 [15.7]	53,500 [15.7]	53,500 [15.7]
Net Latent Capacity Btu [kW]	18,700 [5.5]	18,700 [5.5]	18,700 [5.5]
Compressor			
No./Type	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)^C	86	86	86
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled
Tube Diameter	0.375	0.375	0.375
Outer Face Area sq. ft. [sq. m]	31.8 [3.0]	31.8 [3.0]	31.8 [3.0]
Inner Face Area sq. ft. [sq. m]	29.6 [2.7]	29.6 [2.7]	29.6 [2.7]
Rows / FPI [FPcm]	2 / 22 [9]	2 / 22 [9]	2 / 22 [9]
Outdoor Fan - Type	Propeller	Propeller	Propeller
No. Blades/Diameter in. [mm]	4/26 [660]	4/26 [660]	4/26 [660]
Drive Type/No. Speeds	ECM/1	ECM/1	PSC/1
CFM [L/s]	5,700 [2,690]	5,700 [2,690]	5,700 [2,690]
No. Motors/HP	1 at 1/2HP	1 at 3/4HP	1 at 1/2HP
Motor RPM	1100	1100	1100
Refrigerant Charge Oz. [g]	338 [9,582]	338 [9,582]	338 [9,582]
Weights			
Net Weight lbs. [kg]	383 [174]	383 [174]	383 [174]
Ship Weight lbs. [kg]	403 [183]	403 [183]	403 [183]

3.0 UNIT SPECIFICATIONS

3.1 Electrical and Physical Data (Cont.)

Model (-)ACY2 Series	090CAZ	090DAZ	090YAZ
Cooling Performance^A			
Gross Cooling Capacity Btu [kW]	90,000 [26.4]	90,000 [26.4]	90,000 [26.4]
EER	11.2	11.2	11.2
IEER ^B	14.8	14.8	14.8
Nominal CFM/AHRI Rated CFM [L/s]	2600/2580 [1227/1218]	2600/2580 [1227/1218]	2600/2580 [1227/1218]
AHRI Net Cooling Capacity Btu [kW]	85,500 [25.1]	85,500 [25.1]	85,500 [25.1]
Net Sensible Capacity Btu [kW]	61,500 [18.0]	61,500 [18.0]	61,500 [18.0]
Net Latent Capacity Btu [kW]	24,000 [7.0]	24,000 [7.0]	24,000 [7.0]
Compressor			
No./Type	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)^C	86	86	86
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled
Tube Diameter	0.375	0.375	0.375
Outer Face Area sq. ft. [sq. m]	31.8 [3.0]	31.8 [3.0]	31.8 [3.0]
Inner Face Area sq. ft. [sq. m]	29.6 [2.7]	29.6 [2.7]	29.6 [2.7]
Rows / FPI [FPcm]	2 / 22 [9]	2 / 22 [9]	2 / 22 [9]
Outdoor Fan - Type	Propeller	Propeller	Propeller
No. Blades/Diameter in. [mm]	4/26	4/26	4/26
Drive Type/No. Speeds	ECM/1	ECM/1	PSC/1
CFM [L/s]	5,700 [2,690]	5,700 [2,690]	5,700 [2,690]
No. Motors/HP	1 at 1/2HP	1 at 3/4HP	1 at 1/2HP
Motor RPM	1100	1100	1100
Refrigerant Charge Oz. [g]	338 [9,582]	338 [9,582]	338 [9,582]
Weights			
Net Weight lbs. [kg]	383 [174]	383 [174]	383 [174]
Ship Weight lbs. [kg]	403 [183]	403 [183]	403 [183]

3.0 UNIT SPECIFICATIONS

3.1 Electrical and Physical Data (Cont.)

Model (-)ACY2 Series	119CAZ	119DAZ	120CAZ	120DAZ
Cooling Performance^A				
Gross Cooling Capacity Btu [kW]	120,000 [35.2]	120,000 [35.2]	120,000 [35.2]	120,000 [35.2]
EER	11.2	11.2	11.2	11.2
IEER ^B	14.8	14.8	14.8	14.8
Nominal CFM/AHRI Rated CFM [L/s]	4000/3900 [1888/1841]	4000/3900 [1888/1841]	4000/3900 [1888/1841]	4000/3900 [1888/1841]
AHRI Net Cooling Capacity Btu [kW]	112,000 [32.8]	112,000 [32.8]	114,000 [33.4]	114,000 [33.4]
Net Sensible Capacity Btu [kW]	86,000 [25.2]	86,000 [25.2]	86,000 [25.2]	86,000 [25.2]
Net Latent Capacity Btu [kW]	26,000 [7.6]	26,000 [7.6]	28,000 [8.2]	28,000 [8.2]
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB)^C				
	86	86	88	88
Outdoor Coil - Fin Type				
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Diameter	0.375	0.375	0.375	0.375
Outer Face Area sq. ft. [sq. m]	31.8 [3.0]	31.8 [3.0]	16.4 [1.5]	16.4 [1.5]
Inner Face Area sq. ft. [sq. m]	29.6 [2.7]	29.6 [2.7]	16.4 [1.5]	16.4 [1.5]
Rows / FPI [FPcm]	2 / 22 [9]	2 / 22 [9]	2 / 22 [9]	2 / 22 [9]
Outdoor Fan - Type				
No. Blades/Diameter in. [mm]	4/26	4/26	4/26 [660]	4/26 [660]
Drive Type/No. Speeds	ECM/1	ECM/1	ECM/2	ECM/2
CFM [L/s]	5,700 [2,690]	5,700 [2,690]	11,400 [5380]	11,400 [5380]
No. Motors/HP	1 at 1/2HP	1 at 3/4HP	2 at 1/2HP	2 at 3/4HP
Motor RPM	1100	1100	1100	1100
Refrigerant Charge Oz. [g]				
	338 [9,582]	338 [9,582]	460 [13,041]	460 [13,041]
Weights				
Net Weight lbs. [kg]	411 [186]	411 [186]	565 [256]	565 [256]
Ship Weight lbs. [kg]	431 [195]	431 [195]	585 [265]	585 [265]

3.0 UNIT SPECIFICATIONS

3.1 Electrical and Physical Data

Model (-)ACY2 Series	120YAZ	150CAZ	150DAZ	150YAZ
Cooling Performance^A				
Gross Cooling Capacity Btu [kW]	120,000 [35.2]	150,000 [44.0]	150,000 [44.0]	150,000 [44.0]
EER	11.2	11.0	11.0	11.0
IEER ^B	14.8	14.2	14.2	14.2
Nominal CFM/AHRI Rated CFM [L/s]	4000/3900 [1888/1841]	4500/4350 [2124/2053]	4500/4350 [2124/2053]	4500/4350 [2124/2053]
AHRI Net Cooling Capacity Btu [kW]	114,000 [33.4]	142,500 [42.0]	142,500 [42.0]	142,500 [42.0]
Net Sensible Capacity Btu [kW]	86,000 [25.2]	106,000 [31.1]	106,000 [31.1]	106,000 [31.1]
Net Latent Capacity Btu [kW]	28,000 [8.2]	36,500 [10.7]	36,500 [10.7]	36,500 [10.7]
Compressor				
No./Type	1/Scroll	2/Scroll	2/Scroll	2/Scroll
Outdoor Sound Rating (dB)^C	88	88	88	88
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Diameter	0.375	0.375	0.375	0.375
Outer Face Area sq. ft. [sq. m]	16.4 [1.5]	16.4 [1.5]	16.4 [1.5]	16.4 [1.5]
Inner Face Area sq. ft. [sq. m]	16.4 [1.5]	16.4 [1.5]	16.4 [1.5]	16.4 [1.5]
Rows / FPI [FPcm]	2 / 22 [9]	2 / 22 [56]	2 / 22 [56]	2 / 22 [56]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Blades/Diameter in. [mm]	4/26 [660]	4/26 [660]	4/26 [660]	4/26 [660]
Drive Type/No. Speeds	PSC/2	ECM/1	ECM/1	PSC/1
CFM [L/s]	11,400 [5380]	11,400 [5380]	11,400 [5380]	11,400 [5380]
No. Motors/HP	2 at 1/2HP	2 at 1/2HP	2 at 3/4HP	2 at 1/2HP
Motor RPM	1100	1100	1100	1100
Refrigerant Charge Oz. [g]	460 [13,041]	372 [10,546]	372 [10,546]	372 [10,546]
Weights				
Net Weight lbs. [kg]	565 [256]	647 [293]	647 [293]	647 [293]
Ship Weight lbs. [kg]	585 [265]	667 [303]	667 [303]	667 [303]

3.0 UNIT SPECIFICATIONS

3.1 Electrical and Physical Data

Model (-)ACY2 Series	180CAZ	180DAZ	180YAZ
Cooling Performance^A			
Gross Cooling Capacity Btu [kW]	180,000 [52.8]	180,000 [52.8]	180,000 [52.8]
EER	11.0	11.0	11.0
IEER ^B	14.2	14.2	14.2
Nominal CFM/AHRI Rated CFM [L/s]	5400/5200	5400/5200	5400/5200
AHRI Net Cooling Capacity Btu [kW]	171,000 [50.1]	171,000 [50.1]	171,000 [50.1]
Net Sensible Capacity Btu [kW]	125,000 [36.6]	125,000 [36.6]	125,000 [36.6]
Net Latent Capacity Btu [kW]	46,000 [13.5]	46,000 [13.5]	46,000 [13.5]
Compressor			
No./Type	2/Scroll	2/Scroll	2/Scroll
Outdoor Sound Rating (dB)^C	90	90	90
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled
Tube Diameter	0.375	0.375	0.375
Outer Face Area sq. ft. [sq. m]	30.3 [2.8]	30.3 [2.8]	30.3 [2.8]
Inner Face Area sq. ft. [sq. m]	30.3 [2.8]	30.3 [2.8]	30.3 [2.8]
Rows / FPI [FPcm]	3 / 18 [46]	3 / 18 [46]	3 / 18 [46]
Outdoor Fan - Type	Propeller	Propeller	Propeller
No. Blades/Diameter in. [mm]	4/24	4/24	4/24
Drive Type/No. Speeds	ECM/1	ECM/1	PSC/1
CFM [L/s]	12,000 [5663]	12,000 [5663]	12,000 [5663]
No. Motors/HP	3 at 1/2HP	3 at 3/4HP	3 at 1/2HP
Motor RPM	1,100	1,100	1,100
Refrigerant Charge Oz. [g]	656.5 [18,611]	656.5 [18,611]	656.5 [18,611]
Weights			
Net Weight lbs. [kg]	832 [337]	832 [337]	832 [337]
Ship Weight lbs. [kg]	852 [386]	852 [386]	852 [386]

3.0 UNIT SPECIFICATIONS

3.1 Electrical and Physical Data (Cont.)

Model (-)ACY2 Series	240CAZ	240DAZ	240YAZ
Cooling Performance^A			
Gross Cooling Capacity Btu [kW]	240,000 [70.3]	240,000 [70.3]	240,000 [70.3]
EER	10.0	10.0	10.0
IEER ^B	13.2	13.2	13.2
Nominal CFM/AHRI Rated CFM [L/s]	6800/6650 [3209/3138]	6800/6650 [3209/3138]	6800/6650 [3209/3138]
AHRI Net Cooling Capacity Btu [kW]	240,000 [70.3]	240,000 [70.3]	240,000 [70.3]
Net Sensible Capacity Btu [kW]	165,000 [48.4]	165,000 [48.4]	165,000 [48.4]
Net Latent Capacity Btu [kW]	75,000 [22.0]	75,000 [22.0]	75,000 [22.0]
Compressor			
No./Type	2/Scroll	2/Scroll	2/Scroll
Outdoor Sound Rating (dB)^C			
	90	90	90
Outdoor Coil - Fin Type			
	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled
Tube Diameter	0.375	0.375	0.375
Outer Face Area sq. ft. [sq. m]	30.3 [2.8]	30.3 [2.8]	30.3 [2.8]
Inner Face Area sq. ft. [sq. m]	30.3 [2.8]	30.3 [2.8]	30.3 [2.8]
Rows / FPI [FPCm]	3 / 18 [46]	3 / 18 [46]	3 / 18 [46]
Outdoor Fan - Type			
	Propeller	Propeller	Propeller
No. Blades/Diameter in. [mm]	4/24 [609]	4/24 [609]	4/24 [609]
Drive Type/No. Speeds	ECM/1	ECM/1	PSC/1
CFM [L/s]	12,000 [5663]	12,000 [5663]	12,000 [5663]
No. Motors/HP	3 at 1/2HP	3 at 3/4HP	3 at 1/2HP
Motor RPM	1100	1100	1100
Refrigerant Charge Oz. [g]			
	587.5 [16,655]	587.5 [16,655]	587.5 [16,655]
Weights			
Net Weight lbs. [kg]	926 [420]	926 [420]	926 [420]
Ship Weight lbs. [kg]	946 [429]	946 [429]	946 [429]

3.0 UNIT SPECIFICATIONS

3.1 Electrical and Physical Data

- A. Cooling Performance is rated at 95°F ambient, 80°F entering dry bulb, 67°F entering wet bulb. Gross capacity does not include the effect of fan motor heat. AHRI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to 20% of nominal CFM. Units are certified in accordance with the Unitary Air Conditioner Equipment certification program, which is based on AHRI Standard 210/240 or 360.
- B. EER and Integrated Efficiency Ratio (IEER) are rated at AHRI standards 340/360 and in accordance with DOE test procedures.
- C. Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.

Model Number	OPERATING						SHIPPING					
	H (Height)		L (Length)		W (Width)		H (Height)		L (Length)		W (Width)	
	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
(-)ACY2078	51	1295	35.75	908	35.75	908	53	1346	38.38	975	38.38	975
(-)ACY2090	51	1295	35.75	908	35.75	908	53	1346	38.38	975	38.38	975
(-)ACY2119	51	1295	35.25	895	35.25	895	53	1346	38.38	975	38.38	975
(-)ACY2120	43.99	1117	74.27	1886	40	1016	45	1143	75.5	1918	41	1041
(-)ACY2150	43.99	1117	74.27	1886	40	1016	45	1143	75.5	1918	41	1041
(-)ACY2180	43.99	1117	89.89	2283	40	1016	45	1143	91	2311	41	1041
(-)ACY2240	43.99	1117	89.89	2283	40	1016	45	1143	91	2311	41	1041

3.0 UNIT SPECIFICATIONS

3.1 Electrical and Physical Data (Cont.)

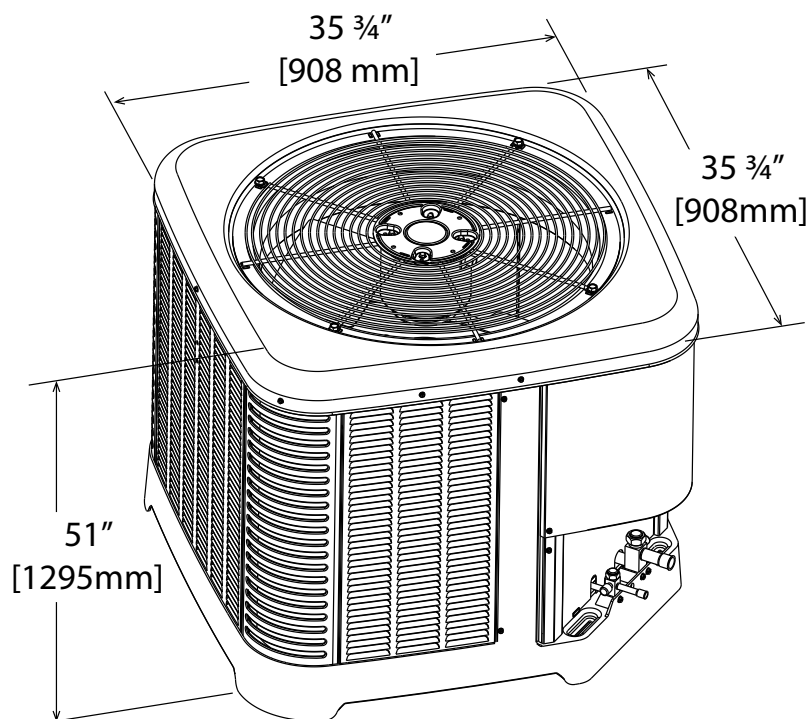
ELECTRICAL DATA – (-)ACY2 SERIES											
		078CAZ	078DAZ	078YAZ	090CAZ	090DAZ	090YAZ	119CAZ	119DAZ	120CAZ	120DAZ
Unit Information	Unit Operating Voltage Range	187-253	414-506	541-610	187-253	414-506	541-610	187-253	414-506	187-253	414-506
	Volts	208/230	460	575	208/230	460	575	208/230	460	208/230	460
	Minimum Circuit Ampacity	39/39	17/17	13	39/39	17/17	13	39/39	21	44/44	24
	Minimum Overcurrent Protection Device Size	45	20	15	45	20	15	60	30	60	30
	Maximum Overcurrent Protection Device Size	60	25	20	60	25	20	70	35	70	35
Compressor Motor	No.	1	1	1	1	1	1	1	1	1	1
	Volts	208/230	460	575	208/230	460	575	208/230	460	208/230	460
	Phase	3	3	3	3	3	3	3	3	3	3
	Amps (RLA), Comp. 1	26.3	11	9.2	26.3	11	9.2	26.5	14	26.5	14
	Amps (LRA), Comp. 1	178.5	95.3	65	178.5	95.3	65	255	123	255	123
Condenser Motor	No.	1	1	1	1	1	1	1	1	2	2
	Volts	208/230	460	575	208/230	460	575	208/230	460	208/230	460
	Phase	1	1	1	1	1	1	1	1	1	1
	HP	1/2	3/4	1/2	1/2	3/4	1/2	1/2	3/4	1/2	3/4
	Amps (FLA, each)	5.2	3	1	5.2	3	1	5.2	3	5.2	3
	Amps (LRA, each)	-	-	2.2	-	-	2.2	-	-	-	-

ELECTRICAL DATA – (-)ACY2 SERIES											
		120YAZ	150CAZ	150DAZ	150YAZ	180CAZ	180DAZ	180YAZ	240CAZ	240DAZ	240YAZ
Unit Information	Unit Operating Voltage Range	541-610	187-253	414-506	541-610	187-253	414-506	541-610	187-253	414-506	541-610
	Volts	575	208/230	460	575	208/230	460	575	208/230	460	575
	Minimum Circuit Ampacity	17	61/61	26	19	78/78	35	24	91/91	44	33
	Minimum Overcurrent Protection Device Size	20	70	30	20	90	40	30	100	50	40
	Maximum Overcurrent Protection Device Size	25	80	30	25	100	45	30	110	50	40
Compressor Motor	No.	1	1	1	1	1	1	1	1	1	1
	Volts	575	208/230	460	575	208/230	460	575	208/230	460	575
	Phase	3	3	3	3	3	3	3	3	3	3
	Amps (RLA), Comp. 1	11.5	44.8	18.4	14.4	55.4	23	18	66.6	30.8	25.8
	Amps (LRA), Comp. 1	93.7	332.4	149.2	108	357	206	156	510	280	215.2
Condenser Motor	No.	2	2	2	2	3	3	3	3	3	3
	Volts	575	208/230	460	575	208/230	460	575	208/230	460	575
	Phase	1	1	1	1	1	1	1	1	1	1
	HP	1/2	1/2	3/4	1/2	1/2	3/4	1/2	1/2	3/4	1/2
	Amps (FLA, each)	1	5.2	3	1	5.2	3	1	5.2	3	1
	Amps (LRA, each)	2.2	-	-	2.2	-	-	2.2	-	-	2.2

3.0 UNIT SPECIFICATIONS

3.1 Electrical and Physical Data (Cont.)

UNIT DIMENSIONS — (-)ACY2078, (-)ACY2090 & (-)ACY2119 (6.5, 7.5 & 10 TON)

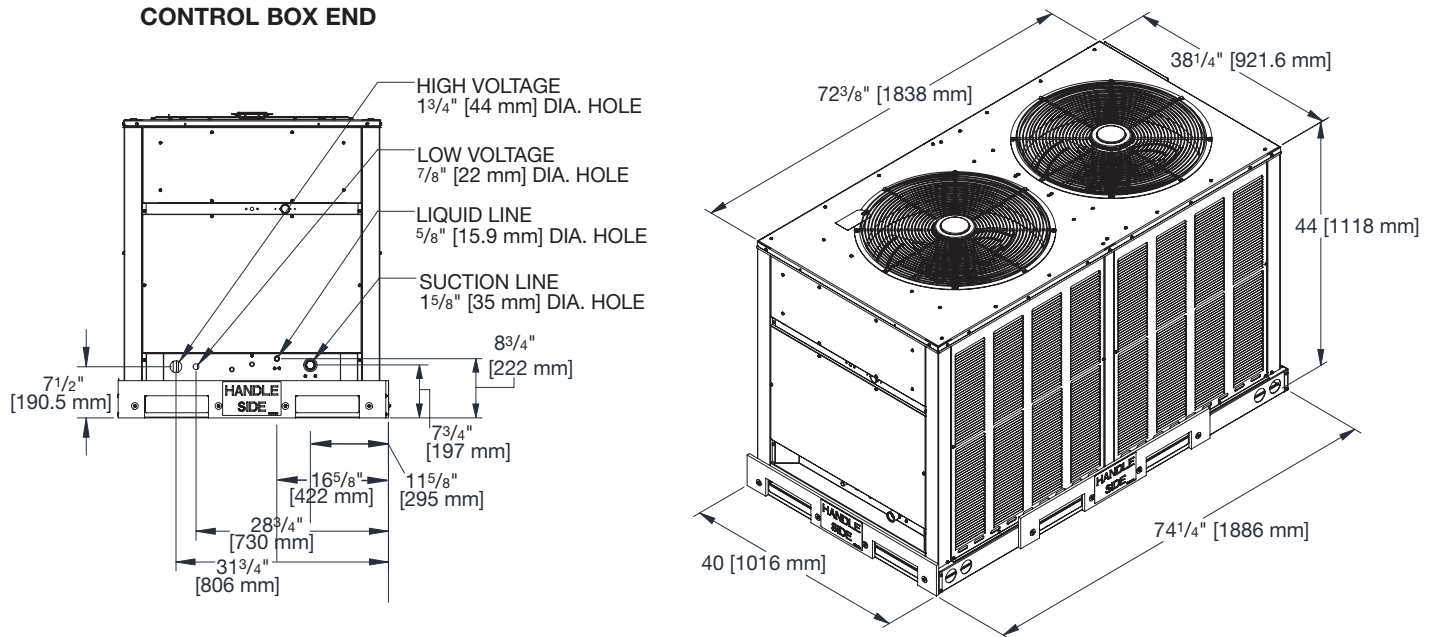


See **Section 4.3** for unit corner weights.

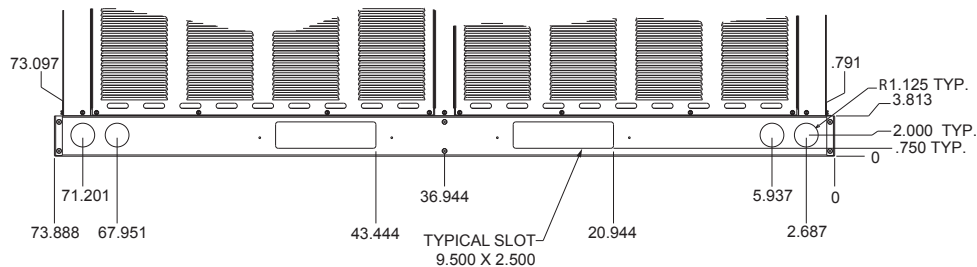
3.0 UNIT SPECIFICATIONS

3.1 Electrical and Physical Data (Cont.)

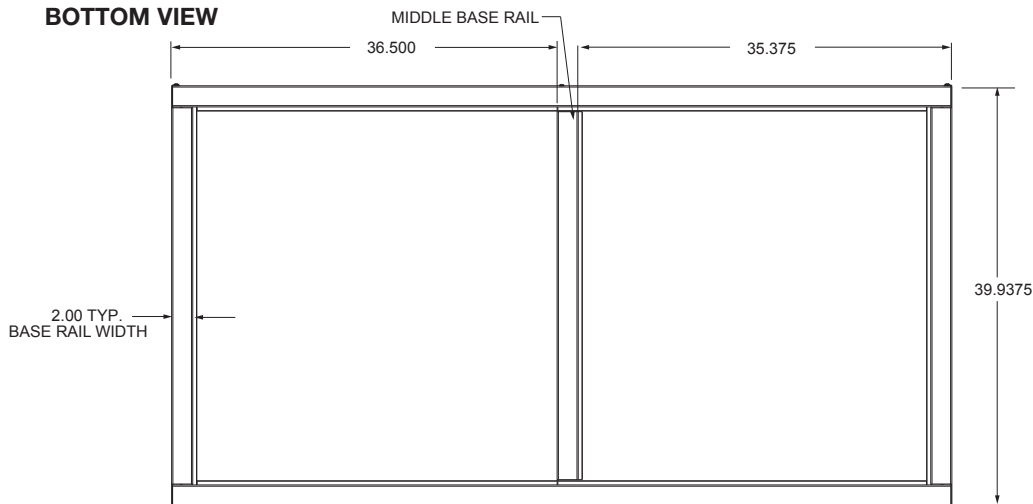
UNIT DIMENSIONS — (-)ACY2120 & (-)ACY2150 (10 & 12.5 TON)



BASE RAILS



BOTTOM VIEW

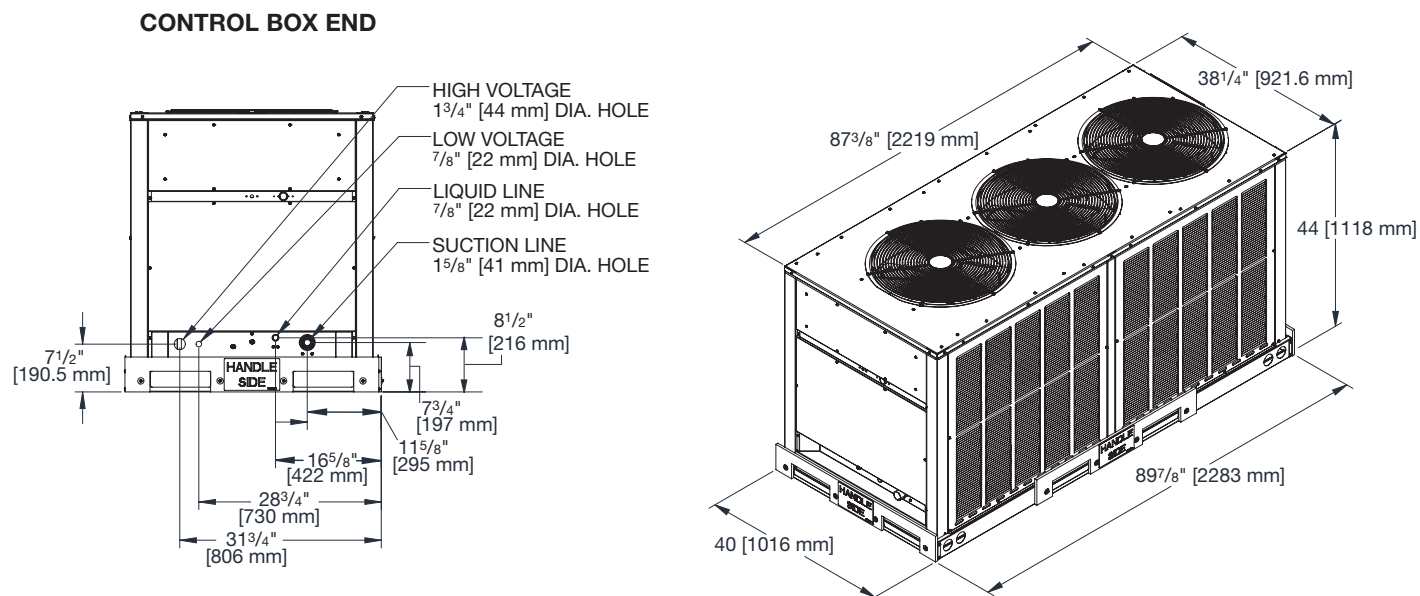


See **Section 4.3** for unit corner weights.

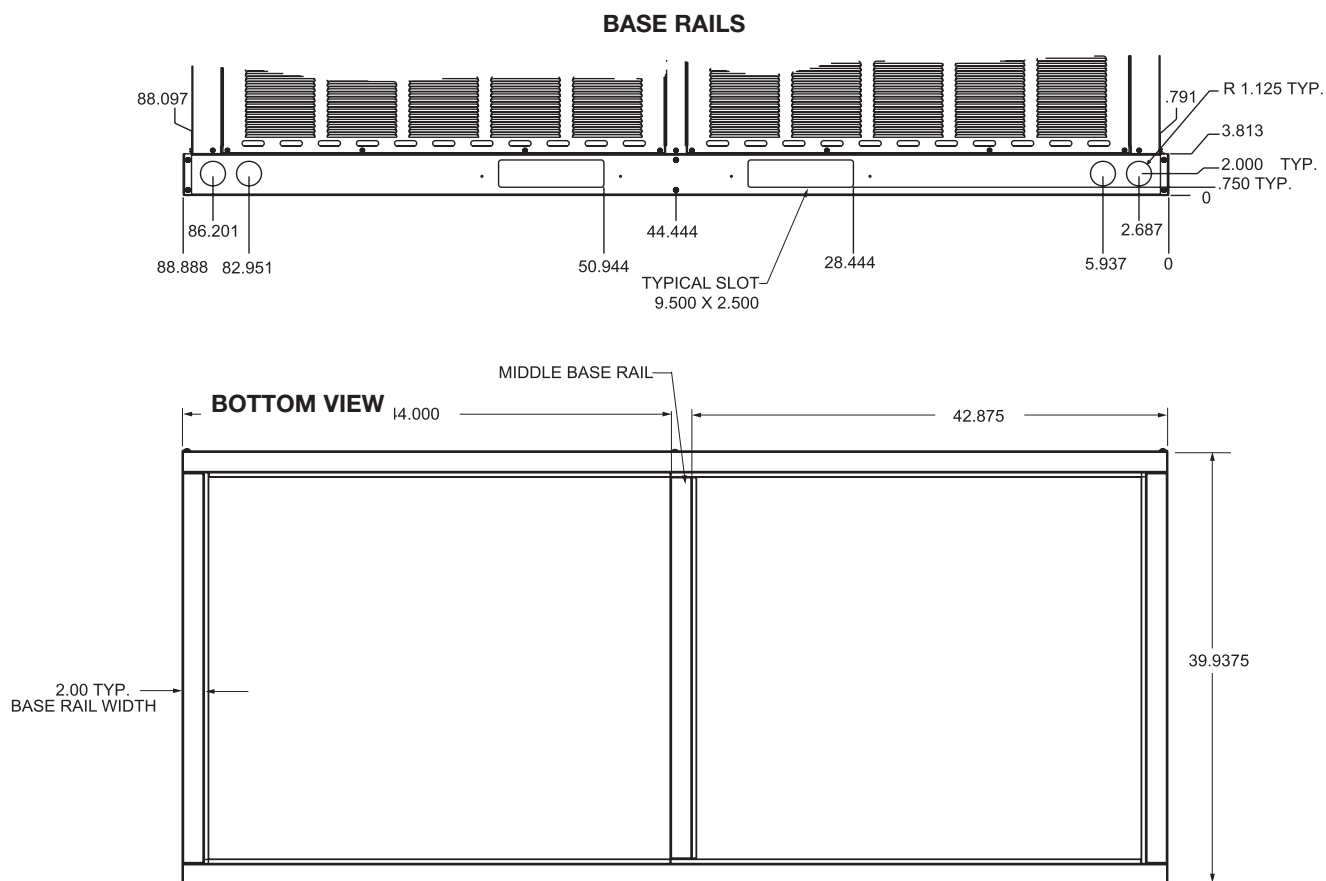
3.0 UNIT SPECIFICATIONS

3.1 Electrical and Physical Data (Cont.)

UNITS DIMENSIONS — (-)ACY2180 & (-)ACY2240 (15 & 20 TON)



ST-A0890-13-01



See **Section 4.3** for unit corner weights.

3.0 UNIT SPECIFICATIONS

3.2 A2L Refrigerant Installation Safety Data

Qmin at Rating Plate Charge Weight [0' - 200' 1/2" Line Set]						
(-)ACY2	078/090 [0']	078/090 [50']	078/090 [100']	078/090 [150']	078/090 [200']	
Refrigerant Chart Weight (oz)	338.0	388.0	438.0	488.0	538.0	
Minimum Total Room Area, TAmin (ft2)	623	715	807	900	992	
Minimum circulation airflow, Qmin (cfm)	1124	1291	1457	1623	1789	
Installed Altitude (ft above sea level)	Altitude Adjustment Factor	Minimum Total Conditioned Room Area, TAmin (sq ft)				
0	1.000	623	715	807	900	992
1000	1.025	638	733	827	922	1017
2000	1.051	655	751	848	946	1042
3000	1.078	672	771	870	970	1070
4000	1.107	690	792	893	996	1098
5000	1.138	709	813	918	1024	1129
6000	1.170	729	836	944	1053	1161
6500	1.187	739	848	958	1068	1177

Qmin at Rating Plate Charge Weight [0' - 200' 1/2" Line Set]						
(-)ACY2	119 [0']	119 [50']	119 [100']	119 [150']	119 [200']	
Refrigerant Chart Weight (oz)	328.0	378.0	428.0	478.0	528.0	
Minimum Total Room Area, TAmin (ft2)	605	697	789	881	973	
Minimum circulation airflow, Qmin (cfm)	1091	1257	1424	1590	1756	
Installed Altitude (ft above sea level)	Altitude Adjustment Factor	Minimum Total Conditioned Room Area, TAmin (sq ft)				
0	1.000	605	697	789	881	973
1000	1.025	620	714	808	903	997
2000	1.051	635	732	829	926	1023
3000	1.078	652	751	851	950	1049
4000	1.107	669	771	873	976	1078
5000	1.138	688	793	898	1002	1107
6000	1.170	707	815	923	1031	1139
6500	1.187	717	827	936	1046	1155

3.0 UNIT SPECIFICATIONS

3.2 A2L Refrigerant Installation Safety Data

Qmin at Rating Plate Charge Weight [0' - 200' 5/8" Line Set]						
(-)ACY2	120 [0']	120 [50']	120 [100']	120 [150']	120 [200']	
Refrigerant Chart Weight (oz)	373.5	448.5	523.5	598.5	673.5	
Minimum Total Room Area, TAmin (ft2)	688	781	873	965	1057	
Minimum circulation airflow, Qmin (cfm)	1242	1409	1575	1741	1908	
Installed Altitude (ft above sea level)	Altitude Adjustment Factor	Minimum Total Conditioned Room Area, TAmin (sq ft)				
0	1.000	688	781	873	965	1057
1000	1.025	706	800	894	989	1083
2000	1.051	723	820	917	1014	1111
3000	1.078	742	842	941	1040	1140
4000	1.107	762	864	966	1068	1170
5000	1.138	783	888	993	1098	1203
6000	1.170	805	913	1021	1129	1237
6500	1.187	817	926	1036	1145	1254

Qmin at Rating Plate Charge Weight [0' - 200' 5/8" Line Set]						
(-)ACY2	150 [0']	150 [50']	150 [100']	150 [150']	150 [200']	
Refrigerant Chart Weight (oz)	381.5	456.5	531.5	606.5	681.5	
Minimum Total Room Area, TAmin (ft2)	703.2	795.4	887.5	979.7	1071.9	
Minimum circulation airflow, Qmin (cfm)	1269	1435	1602	1768	1934	
Installed Altitude (ft above sea level)	Altitude Adjustment Factor	Minimum Total Conditioned Room Area, TAmin (sq ft)				
0	1.000	703	795	888	980	1072
1000	1.025	721	733	827	922	1017
2000	1.051	739	751	848	946	1042
3000	1.078	758	771	870	970	1070
4000	1.107	779	792	893	996	1098
5000	1.138	800	813	918	1024	1129
6000	1.170	823	836	944	1053	1161
6500	1.187	834	848	958	1068	1177

3.0 UNIT SPECIFICATIONS

3.2 A2L Refrigerant Installation Safety Data

Qmin at Rating Plate Charge Weight [0' - 200' 5/8" Line Set]						
(-)ACY2	180 [0']	180 [50']	180 [100']	180 [150']	180 [200']	
Refrigerant Chart Weight (oz)	681.5	756.5	831.5	906.5	981.5	
Minimum Total Room Area, TAmin (ft2)	1256.2	1348.3	1440.5	1532.7	1624.8	
Minimum circulation airflow, Qmin (cfm)	2267	2433	2599	2766	2932	
Installed Altitude (ft above sea level)	Altitude Adjustment Factor	Minimum Total Conditioned Room Area, TAmin (sq ft)				
0	1.000	1256	1348	1441	1533	1625
1000	1.025	1287	1382	1476	1571	1665
2000	1.051	1320	1417	1514	1611	1707
3000	1.078	1355	1454	1553	1653	1752
4000	1.107	1391	1493	1595	1697	1799
5000	1.138	1429	1534	1639	1744	1849
6000	1.170	1470	1577	1685	1793	1901
6500	1.187	1491	1600	1709	1819	1928

Qmin at Rating Plate Charge Weight [0' - 200' 7/8" Line Set]						
(-)ACY2	240 [0']	240 [50']	240 [100']	240 [150']	240 [200']	
Refrigerant Chart Weight (oz)	537.5	692.5	847.5	1002.5	1157.5	
Minimum Total Room Area, TAmin (ft2)	990.8	1082.9	1175.1	1267.2	1359.4	
Minimum circulation airflow, Qmin (cfm)	1788	1954	2120	2287	2453	
Installed Altitude (ft above sea level)	Altitude Adjustment Factor	Minimum Total Conditioned Room Area, TAmin (sq ft)				
0	1.000	991	1083	1175	1267	1359
1000	1.025	1015	1110	1204	1299	1393
2000	1.051	1041	1138	1235	1332	1429
3000	1.078	1068	1168	1267	1366	1466
4000	1.107	1097	1199	1301	1403	1505
5000	1.138	1127	1232	1337	1442	1547
6000	1.170	1159	1267	1375	1483	1590
6500	1.187	1176	1285	1394	1504	1613