

LENNOX®

ENGINEERING DATA

HEAT PUMP OUTDOOR UNITS

HPXA19

DAVE LENNOX SIGNATURE™ COLLECTION WITH SILENTCOMFORT™ TECHNOLOGY

Two-Stage Compressor

SEER - up to 18.60

2 to 5 Tons

Cooling Capacity - 25,000 to 59,000 Btuh

Heating Capacity - 22,200 to 54,000 Btuh



**NOTE - ELECTRONIC
VERSION ONLY**



CERTIFICATION APPLIES ONLY
WHEN THE COMPLETE
SYSTEM IS LISTED
WITH ARI

Specially Designed
SilentComfort™
Fan Guard

Lennox System
Operation Monitor
(LSOM)

Heavy Gauge
Steel Cabinet With
Powder Paint Finish

Defrost
Control

Extra insulation
reduces operating
sound levels

Copeland Scroll Ultra Tech™
Two-Stage Compressor

Low Pressure
Switch

Discharge
Temperature Switch

High Pressure
Switch

Support
Feet Raise Unit
Off Ground

Quiet, Variable-
Speed (-038 only)
Direct Drive Fan

Lanced
Aluminum Fins

Copper Tube
Outdoor Coil

Enhanced
PVC Coated
Coil Guard

Brass Service
Valves

Reversing Valve



REGISTERED
QUALITY
SYSTEMS



MODEL NUMBER IDENTIFICATION

HP X A 19 - 036 - 230

Unit Type
HP = Heat Pump

Refrigerant Type
X = R410A

Major Revision

Series

Minor Revision Number

Voltage
230 = 208/230v-60hz-1ph

Nominal Cooling Capacity

024 = 2 tons (7.0 kW)
036 = 3 tons (10.6 kW)
038 = 3 tons (10.6 kW)
048 = 4 tons (14.1 kW)
060 = 5 tons (17.6 kW)

Visit us at www.lennox.com

For the latest technical information, www.davenet.com

NOTE - Due to Lennox' ongoing commitment to quality, Specifications, Ratings and Dimensions subject to change without notice and without incurring liability. Improper installation, adjustment, alteration, service or maintenance can cause property damage or personal injury. Installation and service must be performed by a qualified installer and servicing agency.

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FEATURES

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WARRANTY

Compressor — limited warranty for ten years in residential installations, five years in non-residential installations.

All other covered components — limited warranty for five years in residential installations, one year in non-residential installations. Refer to Lennox Equipment Limited Warranty certificate included with unit for specific details.

APPLICATION

SEER up to 18.60.

Heating COP up to 3.76.

HSPF (Region IV) up to 9.35.

Sound levels as low as 71 dB.

3 through 5 ton (10.6 through 17.6 kW).

Single phase power supply.

Vertical air discharge allows concealment behind shrubs at grade level or out of sight on a roof.

Designed for applications with remotely located indoor air handler units or indoor add-on coils with FM21 furnace control. See FM21 bulletin, Controls section. Also see Coils and Air Handlers sections for indoor unit data.

Units shipped completely factory assembled, piped and wired. Each unit is test operated at the factory insuring proper operation. Installer must set outdoor unit, connect refrigerant lines and make electrical connections to complete job.

APPROVALS

Certified in accordance with the USE certification program, which is based on ARI Standard 210/240-94.

Sound rated in Lennox reverberant sound test room in accordance with test conditions included in ARI Standard 270-95.

Tested in the Lennox Research Laboratory environmental test room.

Rated according to U.S. Department of Energy (DOE) test procedures.

Units and components within bonded for grounding to meet safety standards for servicing required by UL and CEC.

Units are UL and ULC listed.

ENERGY STAR® certified units are designed to use less energy, help save money on utility bills, and help protect the environment. ISO 9001 Registered Manufacturing Quality System.

CABINET

Heavy-gauge galvanized steel cabinet with five station metal wash process.

Baked-on outdoor enamel paint finish provides superior rust and corrosion protection.

Separate compressor and control compartment insulated with thick fiberglass insulation. Compartment provides protection from the weather and keeps sound transmission at a minimum. Control box is located in the compressor and controls compartment with all controls factory wired.

Large removable access panel provides complete service access. Drainage holes are provided in base section for moisture removal. High density polyethylene feet raise the unit off of the mounting surface away from damaging moisture.

Non-corrosive PVC (polyvinyl chloride) coated steel wire outdoor coil guard is furnished.

Refrigerant Line Connections, Electrical Inlets and Service Valves

Vapor and liquid lines are located inside unit cabinet and are made with sweat connections. See dimension drawing.

Fully serviceable brass service valves prevent corrosion and provide access to refrigerant system. Vapor valve can be fully shut off, while liquid valve may be front seated to manage refrigerant charge while servicing system.

Vapor and liquid line service valves and gauge ports are located inside the cabinet.

High capacity drier with internal check valve and strainer are furnished and factory installed in the liquid line.

Field wiring inlets conveniently located for ease of entry. See dimension drawing.

CONTROLS

Lennox System Operation Monitor (LSOM)

Provides detailed information for proper preventive maintenance and fast, easy servicing.

Displays the most common fault conditions through indicator LED's.

Monitor detects both mechanical and electrical system problems.

Monitors only and does not provide safety protection.

When an abnormal condition is detected, communicates the specific condition through the ALERT and TRIP lights.

POWER LED (green) - indicates voltage within the range of 19-28 VAC is present at the power connection.

ALERT LED (yellow) - communicates an abnormal system condition through a unique flash code. The ALERT LED will flash a number of times consecutively, pause and then repeat the process. The number of consecutive flashes, defined as the Flash Code, correlates to a particular abnormal condition. The codes can indicate one of the following: long run time, system pressure trip (discharge or suction pressure out-of-limits or compressor overloaded), short cycling, locked rotor, open circuit, open start circuit (current present only in run circuit), open run circuit (current present only in start circuit), welded contactor (compressor runs continuously), or low voltage (control circuit < 17 VAC).

TRIP LED (red) - indicates there is a demand signal from the thermostat but no current to the compressor is detected by the monitor.

Defrost Control

Solid-state control furnished as standard.

Gives a demand defrost cycle whenever system heating performance falls below optimum levels. The sensing element on coil determines when defrost cycle is required and when to terminate cycle.

Anti-short cycle (5 minutes) incorporated into the board.

Diagnostic LED's furnished as an aid in troubleshooting.

Conveniently located in control box.



FEATURES

COMPRESSOR

Copeland Scroll Ultra Tech™ Two-Stage Compressor

Compressor features high efficiency with uniform suction flow, constant discharge flow and high volumetric efficiency and quiet operation.

Compressor consists of two involute spiral scrolls matched together to generate a series of crescent shaped gas pockets between them.

During compression, one scroll remains stationary while the other scroll orbits around it. Gas is drawn into the outer pocket, the pocket is sealed as the scroll rotates.

As the spiral movement continues, gas pockets are pushed to the center of the scrolls. Volume between the pockets is simultaneously reduced.

When pocket reaches the center, gas is now at high pressure and is forced out of a port located in the center of the fixed scrolls.

During compression, several pockets are compressed simultaneously resulting in a smooth continuous compression cycle.

Continuous flank contact, maintained by centrifugal force, minimizes gas leakage and maximizes efficiency.

Scroll compressor is tolerant to the effects of slugging and contaminants. If this occurs, scrolls separate,

allowing liquid or contaminants to be worked toward the center and discharged.

On the fixed scroll there are two bypass ports in the first suction pocket. On the outside of the fixed scroll there is a "slider ring" that is controlled by an internal solenoid that will rotate and cover the bypass ports. When the thermostat calls for first-stage cooling, the bypass ports are open and the compressor operates at 67% capacity, creating more cost-effective and efficient compressor operation. The bypassed refrigerant is returned to the compressor housing through the bypass ports. When the thermostat calls for second-stage cooling, the internal solenoid is energized, the slider ring rotates and covers the bypass ports, and the compressor operates at full capacity.

Low gas pulses during compression reduces operational sound levels.

Compressor motor is internally protected from excessive current and temperature.

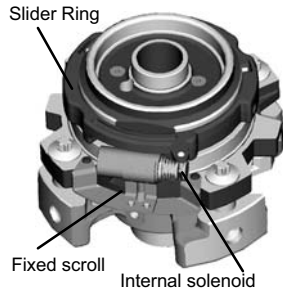
Compressor is installed in the unit on specially formulated, resilient rubber mounts for better sound dampening and vibration free operation.

Crankcase Heater

Crankcase heater prevents migration of liquid refrigerant into compressor and ensures proper compressor lubrication. Factory installed.

Compressor Hard Start Kit (-024 Models Only)

Increases the compressor starting torque. Factory installed.



REFRIGERATION SYSTEM

Refrigerant

Non-chlorine, ozone friendly, R-410A.

Unit pre-charged with refrigerant. See Specification table.

Hi-Capacity Liquid Line Drier

Factory installed in the liquid line, the drier traps moisture or dirt that could contaminate the refrigerant system.

100% molecular-sieve, bead type bi-flow drier.

Copper Tube/Enhanced Fin Coil

Lennox designed and fabricated coil.

Ripple-edged aluminum fins.

Copper tube construction is corrosion resistant and easy to service.

Precise coil circuiting gives uniform refrigerant distribution for high efficiency.

Wrap around "U" shaped configuration provides extra large surface area with low air resistance.

Fin collars grip tubing for maximum contact area.

Inverted coil circuiting prevents ice buildup at coil base in low ambient operating conditions.

Discharge gas enters bottom of coil during defrost and heat of refrigerant flows counter to water drainage resulting in extremely clean and unobstructed fins and tubes.

Fin spacing allows rapid and complete water drainage.

Flared shoulder tubing connections/silver soldering construction.

Coil is factory tested under high pressure to insure leakproof construction.

Entire coil is accessible for cleaning.

Expansion Valve - Outdoor Unit

Designed and sized specifically for use in heat pump system.

Sensing bulb is located on the suction line between the coil and the reversing valve thus sensing evaporator out temperature in any cycle.

Factory installed and piped.

Outdoor Fan with SilentComfort™ Fan Guard

Specially-designed, SilentComfort fan guard uses Passive Vortex Suppression to reduce air noise. Corrosion-resistant PVC (polyvinyl chloride) coated steel wire.

Direct drive fan moves large air volumes uniformly through entire outdoor coil for high refrigerant cooling capacity.

Vertical air discharge minimizes operating sounds and eliminates damage to lawn and shrubs.

Fan motor is inherently protected.

Variable-speed outdoor coil fan motor on HPXA19-038 models.

Motor totally enclosed for maximum protection from weather, dust and corrosion.

Rain shield on motor provides additional protection from moisture.

Fan service access accomplished by removal of fan guard.

Reversing Valve

4-way interchange reversing valve effects a rapid change in direction of refrigerant flow resulting in quick changeover from cooling to heating and vice versa.

Valve operates on pressure differential between outdoor unit and indoor unit of the system. Factory installed.

Discharge Temperature Switch

Shuts off unit if operating conditions cause the compressor discharge line temperature to rise above setpoint.

Protects compressor from excessive pressure/temperature.

Automatic reset when temperature drops below setpoint.

High Pressure Switch

Shuts off unit if abnormal operating conditions cause the discharge pressure to rise above setting.

Protects compressor from excessive condensing pressure.

Automatic reset.

Low Pressure Switch

Shuts off unit if suction pressure falls below setting.

Provides loss of charge and freeze-up protection.

Automatic reset.

OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA

REFRIGERANT SYSTEM

Refrigerant Line Kits

Refrigerant lines (vapor & liquid) are shipped refrigeration clean. Lines are cleaned, dried, pressurized and sealed at factory. Vapor line fully insulated.

L15 lines are stubbed at both ends.

Not available for HPXA19-060 model, must be field fabricated.

Refrigerant line length should not exceed 50 ft. (15 m) in any installation. If longer length lines are required, contact your Lennox Field Technical Consultant.

Check/Expansion Valve Kits

Must be ordered extra and field installed on certain evaporator units.

See ARI Ratings tables.

Chatleff style fitting.

Freezestat

Installs on or near the discharge line of the evaporator or on the suction line.

Senses suction line temperature and cycles the compressor off when suction line temperature falls below it's setpoint.

Opens at 29°F (-2°C) and closes at 58°F (14°C).

CONTROLS

SignatureStat™ Programmable Thermostat

Combination temperature and humidity control.

2 Heat/2 Cool.

Auto-changeover.

Easy-to-use, menu driven thermostat with a back-lit, dot-matrix LCD screen.

Remote outdoor sensor (furnished) allows the thermostat to display outdoor temperature and adjust indoor dewpoint temperature for precision humidity control.

See the SignatureStat Engineering Handbook bulletin in the Controls section for more information.

See Controls section and Lennox Price Book for additional thermostats.

Indoor Blower Speed Relay Kit

Kit allows the indoor blower to operate at high-speed during second-stage compressor operation and low-speed during first-stage compressor operation.

Relay kit also provides optimum humidity control conditions by automatically reducing indoor blower speed during continuous fan.



Mild Weather Kit

Heat pump units operate satisfactorily in the heating mode at outdoor air temperatures up to 75°F (24°C).

Mild Weather Kit can be field installed, allowing heating operation above 75°F (24°C).

Time Delay Relay Kit

Delays the indoor blower-off time during the cooling cycle.

See ARI Ratings tables for usage.

Low Ambient Kit

Units will operate satisfactorily down to 45°F (7°C) outdoor air temperature without any additional controls.

Kit can be added in the field enabling unit to operate properly down to 30°F (-1°C).

Crankcase heater and a freezestat should be installed on compressors equipped with a low ambient kit.

A compressor lock-out thermostat should be added to terminate compressor operation below recommended operation conditions (on/off operation, 30°F (-1°C) or modulating operation, 0°F (-18°C).

Monitor Kit - Service Light

Contains ambient compensating thermistor and service light thermostat.

For use with thermostats requiring input for indicator lights.

Outdoor Thermostat Kit

An outdoor thermostat can be used to lock out some of the electric heating elements on indoor units where two stage control is applicable.

Outdoor thermostat maintains the heating load on the low power input as long as possible before allowing the full power load to come on the line.

Thermostat kit and mounting box must be ordered extra.

COMPRESSOR HARD START KIT

Single-phase units are equipped with a PSC compressor motor. This type of motor normally doesn't need a potential relay and start capacitor.

In conditions such as low voltage, this kit may be required to increase the compressor starting torque.

MOUNTING BASE

Provides permanent foundation for outdoor units.

High density polyethylene structural material is lightweight, sturdy, sound-absorbing, and will withstand the rigors of the sun, heat, cold, moisture, oil, and refrigerant. Will not mildew or rot. Can be shipped singly or in packages of 6 to a carton.

OUTDOOR SOUND DATA

Unit Model No.	Octave Band Sound Power Levels dBA, re 10 ⁻¹² Watts								1 Sound Rating Number (dB)
	Center Frequency - HZ								
	63	125	250	500	1000	2000	4000	8000	
HPXA19-024	47.0	53.5	59.5	65.0	64.5	62.5	57.0	49.0	70
HPXA19-036	59.0	57.5	60.0	65.5	65.0	67.5	58.5	52.0	71
HPXA19-038	50.0	60.0	63.5	68.5	69.0	66.5	62.5	54.0	74
HPXA19-048	49.0	62.5	63.5	68.0	68.5	65.5	59.0	51.0	73
HPXA19-060	54.5	62.5	62.5	70.5	69.5	66.0	60.5	52.5	75

NOTE - the octave sound power data does not include tonal correction.

¹ Tested according to ARI Standard 270-95 test conditions.

SPECIFICATIONS

General Data		Model No.	HPXA19-024	HPXA19-036	HPXA19-038	HPXA19-048	HPXA19-060
Nominal Tonnage (kW)			2 (7.0)	3 (10.6)	3 (10.6)	4 (14.1)	5 (17.6)
Connections (sweat)	Liquid line o.d. - in. (mm)		3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)
	Vapor line o.d. - in. (mm)		7/8 (22.2)	7/8 (22.2)	7/8 (22.2)	7/8 (22.2)	1-1/8 (28.5)
Refrigerant		¹ R-410A furnished	10 lbs. 4 oz. (4.65 kg)	11 lbs. 0 oz. (5.00 kg)	13 lbs. 15 oz. (6.32 kg)	12 lbs. 14 oz. (5.84 kg)	14 lbs. 6 oz. (6.52 kg)
Outdoor Coil	Net face area sq. ft. (m ²) - Outer Coil		16.04 (1.49)	16.04 (1.49)	24.06 (2.24)	24.06 (2.24)	24.06 (2.24)
	Inner Coil		15.56 (1.45)	15.56 (1.45)	23.33 (2.17)	23.33 (2.17)	23.33 (2.17)
	Tube diameter - in. (mm)		5/16 (0.52)	5/16 (0.52)	5/16 (0.52)	5/16 (0.52)	5/16 (0.52)
	Number of rows		2	2	2	2	2
	Fins per inch (m)		22	22	22	22	22
Outdoor Fan	Diameter in. (mm) and no. of blades		24 (610) - 3	24 (610) - 3	24 (610) - 4	24 (610) - 4	24 (610) - 4
	Motor hp (W)		1/10 (74.8)	1/10 (74.8)	1/3 (249)	1/4 (187)	1/4 (187)
	Cfm (L/s)		3159 (1485)	3159 (1485)	3135 (1480) first-stage 3600 (1700) second-stage	3900 (1840)	4200 (1980)
	Rpm		825	825	700 first-stage 820 second-stage	820	820
	Watts		170	170	105 first-stage 150 second-stage	300	350
Shipping Data - lbs. (kg) 1 package			261 (118)	262 (119)	316 (143)	318 (144)	340 (154)

ELECTRICAL DATA

Electrical Data		Line voltage data - 60hz	208/230V-1ph	208/230V-1ph	208/230V-1ph	208/230V-1ph	208/230V-1ph
³ Maximum overcurrent protection (amps)			20	35	40	45	60
² Minimum circuit ampacity			13.7	22.1	23.7	28.2	33.8
Compressor	Rated load amps		10.3	16.7	16.7	21.2	25.7
	Locked rotor amps		52	82	82	96	118
	Power factor		0.99	0.98	0.98	0.99	0.99
Outdoor Coil Fan Motor	Full load amps		0.8	0.8	2.8	1.7	1.7
	Locked rotor amps		2	2	Not Applicable	3.1	3.1

OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA

Compressor Hard Start Kit		Factory Installed	10J42	10J42	10J42	81J69	81J69
Compressor Low Ambient Cut-off			45F08	45F08	45F08	45F08	45F08
Freezestat	3/8 in. tubing		93G35	93G35	93G35	93G35	93G35
	1/2 in. tubing		39H29	39H29	39H29	39H29	39H29
	5/8 in. tubing		50A93	50A93	50A93	50A93	50A93
³ Indoor Blower Speed Relay Kit			40K58	40K58	40K58	40K58	40K58
Low Ambient Kit			54M89	54M89	68M04	54M89	54M89
Mild Weather Kit			33M07	33M07	33M07	33M07	33M07
Monitor Kit - Service Light			76F53	76F53	76F53	76F53	76F53
Mounting Base	Part No. - Catalog No.	MB2-L (69J07)	MB2-L (69J07)	MB2-L (69J07)	MB2-L (69J07)	MB2-L (69J07)	MB2-L (69J07)
	Net Weight	15 lbs. (7 kg)	15 lbs. (7 kg)	15 lbs. (7 kg)	15 lbs. (7 kg)	15 lbs. (7 kg)	15 lbs. (7 kg)
Outdoor Thermostat Kit	Thermostat		56A87	56A87	56A87	56A87	56A87
	Mounting Box - US		31461	31461	31461	31461	31461
	Canada		33A09	33A09	33A09	33A09	33A09
Refrigerant Line Set	15 ft. (4.6 m) length		L15-65-15	L15-65-15	L15-65-15	L15-65-15	Field Fabricate
	30 ft. (9 m) length		L15-65-30	L15-65-30	L15-65-30	L15-65-30	Field Fabricate
	40 ft. (12 m) length		L15-65-40	L15-65-40	L15-65-40	L15-65-40	Field Fabricate
	50 ft. (15 m) length		L15-65-50	L15-65-50	L15-65-50	L15-65-50	Field Fabricate
SignatureStat™ Programmable Thermostat			51M28	51M28	51M28	51M28	51M28
Time Delay Relay Kit			58M81	58M81	58M81	58M81	58M81

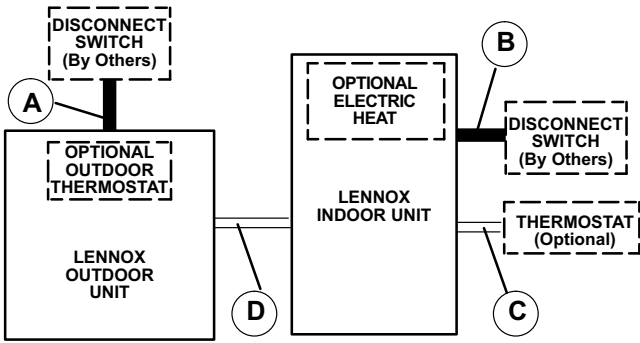
NOTE — Extremes of operating range are plus 10% and minus 5% of line voltage.

¹ Refrigerant charge sufficient for 15 ft. (4.6 m) length of refrigerant lines.

² Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

³ HACR type breaker or fuse.

FIELD WIRING



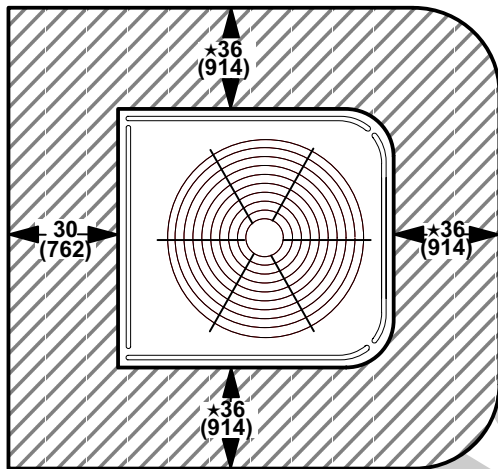
- A — Two Wire Power (see Electrical Data)
- B — Two or Three Wire Power (size to heater capacity)
- C — Twelve Wire Low Voltage — 18 ga. minimum
— Fourteen Wire Low Voltage with Optional Outdoor Thermostat
- D — Eight Wire Low Voltage — 18 ga. minimum
— Ten Wire Low Voltage with Optional Outdoor Thermostat

— Field Wiring Not Furnished —

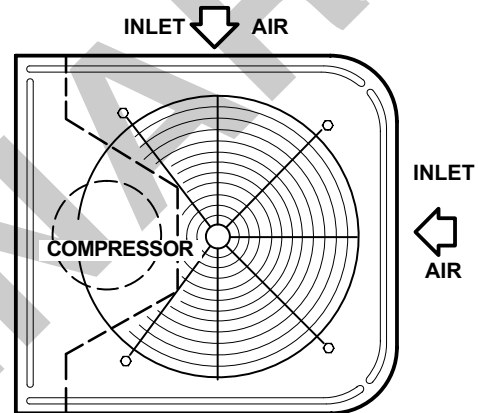
All wiring must conform to NEC or CEC and local electrical codes.

DIMENSIONS - INCHES (MM)

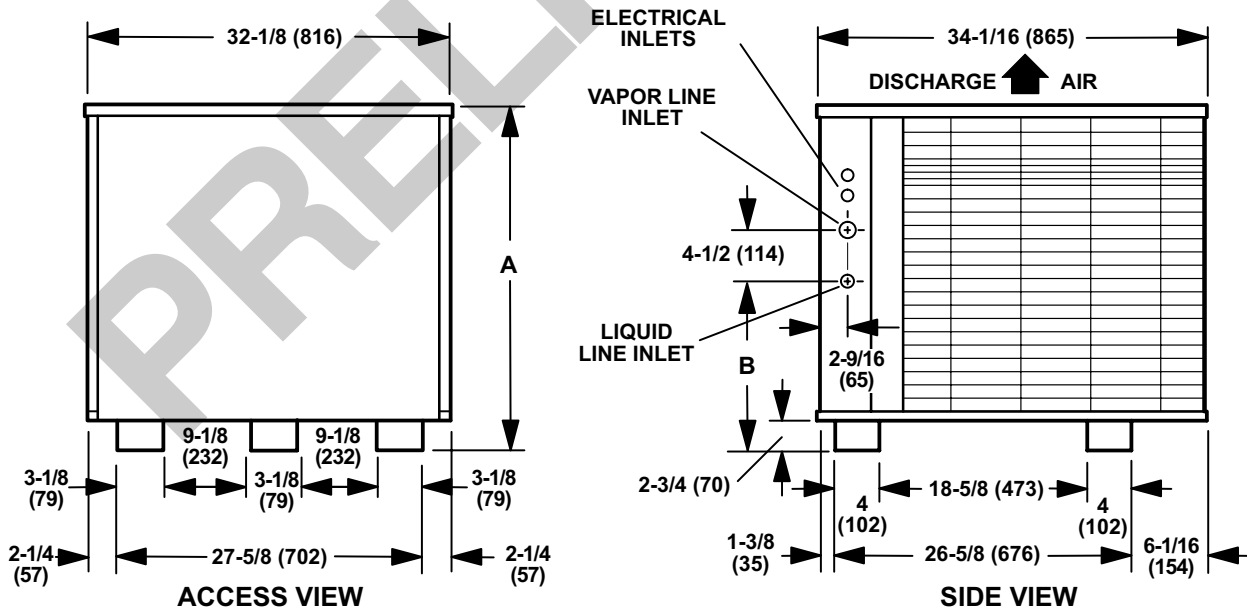
INSTALLATION CLEARANCES



- * One side of unit may be 12 in. (305 mm)
- One of the remaining sides may be 6 in. (152 mm)
- NOTE - 48 in (1219 mm) clearance required on top of unit
- NOTE - 24 in. (610 mm) required between two units



INLET AIR
TOP VIEW



Model No.	A		B	
	in.	mm	in.	mm
HPXA19-024 HPXA19-036	30-7/8	784	12-3/4	324
HPXA19-038 HPXA19-048 HPXA19-060	44-7/8	1140	14-1/4	362

ARI RATINGS

2 TON (-024)

Outdoor Unit Model No. Unit Size 1 Sound Rating Number	2 ARI Standard 210/240 Ratings															Indoor Unit Model No.	Expansion Device	
	Cooling Capacity		High Temp. Heating Capacity		Low Temp. Heating Capacity		Efficiency				Total Cool. Watts	Total High Htg. Watts	Total Low Htg. Watts	High Htg. COP	Low Htg. COP			
	Btuh	kW	Btuh	kW	Btuh	kW	SEER	EER	IV	V								
HPXA19 -024 2 Ton (70 dB)	Air Handlers	25,000	7.3	22,600	6.6	14,200	4.2	14.90	12.10	7.70	6.70	2065	1930	1820	3.44	2.28	³ CBX32M-030 (Multi)	Factory Installed
		25,000	7.3	22,600	6.6	14,200	4.2	14.90	12.10	7.70	6.70	2065	1930	1820	3.44	2.28	³ CB30M-31 (Multi)	⁴ 49L24 order extra
		25,000	7.3	22,800	6.7	14,300	4.2	14.55	11.95	7.70	6.65	2095	1940	1850	3.44	2.26	³ CBX32M-042 (Multi)	Factory Installed
		25,000	7.3	22,800	6.7	14,300	4.2	14.55	11.95	7.70	6.65	2095	1940	1850	3.44	2.26	³ CB30M-46 (Multi)	⁴ 49L24 order extra
		25,200	7.4	22,800	6.7	14,200	4.2	14.95	12.15	7.75	6.70	2075	1920	1830	3.48	2.28	³ CBX32M-036 (Multi)	Factory Installed
		25,200	7.4	22,800	6.7	14,200	4.2	14.95	12.15	7.75	6.70	2075	1920	1830	3.48	2.28	³ CB30M-41 (Multi)	⁴ 49L24 order extra
		25,200	7.4	22,600	6.6	14,100	4.1	15.10	12.40	7.75	6.70	2035	1905	1800	3.48	2.30	³ CB30U-31 (Up-Flow)	⁴ 49L24 order extra
		25,200	7.4	22,800	6.7	14,200	4.2	14.65	12.10	7.70	6.65	2085	1935	1850	3.46	2.24	³ CB30U-41/46 (Up-Flow)	⁴ 49L24 order extra
		25,600	7.5	22,200	6.5	13,700	4.0	17.00	13.25	8.10	7.00	1935	1800	1690	3.62	2.38	⁵ CBX32MV-024/030 (Multi)	Factory Installed
		26,000	7.6	22,800	6.7	14,000	4.1	17.50	13.15	8.25	7.00	1980	1770	1705	3.78	2.40	⁵ CBX32MV-036 (Multi)	Factory Installed
		26,000	7.6	22,800	6.7	14,000	4.1	17.50	13.15	8.25	7.00	1980	1770	1705	3.78	2.40	⁵ CB31MV-41 (Multi)	⁴ 49L24 order extra

NOTE - Use FM21 Control with any listed coil and furnace that meets system design requirements. See FM21 page in Controls section for additional data.

NOTE - Ratings for all C33 coils include all cased and uncased coils.

¹ Sound Rating Number in accordance with test conditions included in ARI Standard 270.

² Certified in accordance with USE certification program which is based on ARI Standard 210/240 with 25 ft. (7.6 m) of connecting refrigerant lines;

Cooling Ratings - 95°F (35°C) outdoor air temperature and 80°F (27°C) db/67°F (19°C) wb entering indoor coil air.

High Temperature Heating Ratings - 47°F (8°C) db/43°F (6°C) wb outdoor air temperature and 70°F (21°C) db entering indoor coil air.

Low Temperature Heating Ratings - 17°F (-8.3°C) db/15°F (-9.4°C) wb outdoor air temperature and 70°F (21°C) db entering indoor coil air.

³ Blower must be capable of time-off blower delay, high-speed cooling/heating operation during second-stage compressor operation, and low-speed cooling/heating operation during first-stage compressor operation. Time Delay Relay Kit (**40K58**) and Indoor Blower Speed Relay Kit (**58M81**) are recommend for field installation.

⁴ **Factory installed expansion valve on indoor unit MUST be replaced with valve specified.**

⁵ Blower control must be set for a time-off blower delay.

⁶ Most popular air handler combination.

⁷ Includes all heat sizes for this model.

