

LENNOX

ENGINEERING DATA

PACKAGED GAS HEAT/COOLING**LCA/LGA****WITH HUMIDITROL™ OPTION****For LCA/LGA090H/102H/120H/150S****7.5, 8.5, 10 and 12 Ton (29.9, 35.2 and 42.2 kW)****Cooling Capacity - 90,000 to 138,000 Btuh (26.4 to 40.4 kW)****LGA Gas Heating Input - 130,000 and 235,000 Btuh (38.1 and 68.9 kW)****LCA Optional Electric Heat - 7.5 to 60 kW**

March 2001

ADVANCE DATA!
(Subject to change)**SPECIFICATIONS**

Model No.		LGA090H		LGA102H		
Gas Heating Performance LGA Models Only	Heat Input Type	Standard (S)	High (H)	Standard (S)	High (H)	
	Input (low) - Btuh (kW)	84,500 (24.8)	152,500 (44.7)	84,500 (24.8)	152,500 (44.7)	
	Output (low) - Btuh (kW)	67,500 (19.8)	122,000 (35.8)	67,500 (19.8)	122,000 (35.8)	
	Input (High) - Btuh (kW)	130,000 (38.1)	235,000 (68.9)	130,000 (38.1)	235,000 (68.9)	
	Output (High) - Btuh (kW)	104,000 (30.5)	188,000 (55.1)	104,000 (30.5)	188,000 (55.1)	
	AGA/CGA Thermal Efficiency	80.0%	80.0%	80.0%	80.0%	
	Gas Supply Connections Natural or LPG/Propane	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	
	Gas Supply Pressure in. wc (kPa) - Natural (recommended) LPG/Propane	7 (1.7) 11 (2.7)	7 (1.7) 11 (2.7)	7 (1.7) 11 (2.7)	7 (1.7) 11 (2.7)	
Cooling Performance	Model No.	LCA/LGA090H		LCA/LGA102H		
	Nominal Tonnage	7.5		8.5		
	Cooling Efficiency Type	High (H)		High (H)		
	Gross Cooling Capacity - Btuh (kW)	93,800 (27.5)		105,000 (30.8)		
	① Net Cooling Capacity - Btuh (kW)	90,000 (26.4)		101,000 (29.6)		
	Total Unit Power (kW)	8.0		9.0		
	① EER (Btuh/Watt)	11.3		11.0		
	② Integrated Part Load Value (Btuh/Watt)	12.0		12.0		
	Refrigerant Charge	Circuit 1	10 lbs. 0 oz. (4.54 kg)		9 lbs. 4 oz. (4.20 kg)	
	Furnished (HCFC-22)	Circuit 2	10 lbs. 0 oz. (4.54 kg)		9 lbs. 4 oz. (4.20 kg)	
Refrigerant Charge Furnished with Humiditrol Option (HCFC-22)	Circuit 1	12 lbs. 0 oz. (5.44 kg)		10 lbs. 12 oz. (4.88 kg)		
	Circuit 2	10 lbs. 0 oz. (4.54 kg)		9 lbs. 4 oz. (4.20 kg)		
	③ Sound Rating Number (db)	88		88		
Condenser Coil	Net face area - sq. ft. (m ²)	29.3 (2.72) total		29.3 (2.72) total		
	Tube diameter - in. (mm) - number of rows	3/8 (9.5) - 2		3/8 (9.5) - 2		
	Fins per inch (m)	20 (787)		20 (787)		
Condenser Fans	Diameter - in. (mm) - number of blades	(2) 24 (610) - 3		(2) 24 (610) - 3		
	Total air volume - cfm (L/s)	8,000 (3775)		8,000 (3775)		
	Motor horsepower (W)	(2) 1/3 (249)		(2) 1/3 (249)		
	Motor rpm	1075		1075		
	Total Motor watts	700		700		
Evaporator Coil	Net face area - sq. ft. (m ²)	10.5 (0.98) total		10.5 (0.98) total		
	Tube diameter - in. (mm) - number of rows	3/8 (9.5) - 3		3/8 (9.5) - 3		
	Fins per inch (m)	14 (551)		14 (551)		
	Drain number and size	(1) 1 in. fpt		(1) 1 in. fpt		
	Expansion device type	Balanced Port Thermostatic Expansion Valve, removeable power head				
Indoor Blower and Drive Selection	Wheel nominal diameter x width - in. (mm)	(1) 15 x 15 (381 x 381)				
	Voltage & phase	208/230v, 460v or 575v-3ph				
	③ Belt Drive - Nominal motor output	2 hp (1.5 kW) / 3 hp (2.2 kW) / 5 hp (3.7 kW)				
	Maximum useable output	2.3 hp (1.7 kW) / 3.45 hp (2.6 kW) / 5.75 hp (4.3 kW)				
	Motor - Drive kit # (RPM range)	2 hp - kit #1 (680-940) or kit #3 (850-1130) / 3 hp - kit #1 or #2 (680-940), kit #3 (850-1130), kit #4 (895-1120), kit #5 (1105-1410) or kit #6 (1110-1395) 5 hp - kit #4 (895-1120) or kit #6 (1110-1395)				
Filters	Type of filter	Disposable, commercial grade, pleated				
	Number and size - in. (mm)	(4) 18 x 24 x 2 (457 x 610 x 51)				
Electrical characteristics		208/230v, 460v or 575v - 60 hertz - 3 phase				

① Certified in accordance with the ULE certification program, which is based on ARI Standard 340/360, 95°F (35°C) outdoor air temperature and 80°F (27°C) db/67°F (19°C) wb entering evaporator air; minimum external duct static pressure.

NOTE — Net capacity includes evaporator blower motor heat deduction. Gross capacity does not include evaporator blower motor heat deduction.

② Integrated Part Load Value rated at 80°F (27°C) outdoor air temperature.

③ Sound Rating Number rated in accordance with test conditions included in ARI Standard 270.

④ Using total air volume and system static pressure requirements determine from blower performance tables rpm and motor output required. Maximum usable output of motors furnished by Lennox are shown. In Canada, nominal motor output is also maximum usable motor output. If motors of comparable output are used, be sure to keep within the service factor limitations outlined on the motor nameplate.

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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SPECIFICATIONS

Model No.		LGA120H		LGA150S	
Gas Heating Performance LGA Models Only	Heat Input Type	Standard (S)	High (H)	Standard (S)	High (H)
	Input (low) - Btuh (kW)	84,500 (24.8)	152,500 (44.7)	84,500 (24.8)	152,500 (44.7)
	Output (low) - Btuh (kW)	67,500 (19.8)	122,000 (35.8)	67,500 (19.8)	122,000 (35.8)
	Input (High) - Btuh (kW)	130,000 (38.1)	235,000 (68.9)	130,000 (38.1)	235,000 (68.9)
	Output (High) - Btuh (kW)	104,000 (30.5)	188,000 (55.1)	104,000 (30.5)	188,000 (55.1)
	AGA/CGA Thermal Efficiency	80.0%	80.0%	80.0%	80.0%
	Gas Supply Connections Natural or LPG/Propane	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT
Gas Supply Pressure in. wc (kPa) - Natural (recommended)	7 (1.7) 11 (2.7)	7 (1.7) 11 (2.7)	7 (1.7) 11 (2.7)	7 (1.7) 11 (2.7)	
Cooling Performance	Model No.	LCA/LGA120H		LCA/LGA150S	
	Nominal Tonnage	10.0		12.0	
	Cooling Efficiency Type	High (H)		Standard (S)	
	Gross Cooling Capacity - Btuh (kW)	125,000 (36.6)		145,000 (42.5)	
	① Net Cooling Capacity - Btuh (kW)	120,000 (35.2)		138,000 (40.4)	
	Total Unit Power (kW)	10.9		15.3	
	① EER (Btuh/Watt)	11.0		9.0	
	② Integrated Part Load Value (Btuh/Watt)	11.8		9.5	
	Refrigerant Charge Circuit 1	11 lbs. 8 oz. (5.22 kg)		12 lbs. 0 oz. (5.44 kg)	
	Furnished (HCFC-22) Circuit 2	11 lbs. 8 oz. (5.22 kg)		12 lbs. 0 oz. (5.44 kg)	
Refrigerant Charge Furnished with Circuit 1	13 lbs. 8 oz. (6.12 kg)		12 lbs. 8 oz. (5.67 kg)		
Humiditrol Option (HCFC-22) Circuit 2	11 lbs. 8 oz. (5.22 kg)		12 lbs. 0 oz. (5.44 kg)		
③ Sound Rating Number (db)	88		88		
Condenser Coil	Net face area - sq. ft. (m ²)	29.3 (2.72) total		29.3 (2.72) total	
	Tube diameter - in. (mm) number of rows	3/8 (9.5) - 2		3/8 (9.5) - 2	
	Fins per inch (m)	20 (787)		20 (787)	
Condenser Fans	Diameter - in. (mm) - number of blades	(2) 24 (610) - 3		(2) 24 (610) - 3	
	Total Air volume - cfm (L/s)	8,000 (3775)		8,000 (3775)	
	Motor horsepower (W)	(2) 1/3 (249)		(2) 1/3 (249)	
	Motor rpm	1075		1075	
	Total Motor watts	700		700	
Evaporator Coil	Net face area - sq. ft. (m ²)	10.5 (0.98) total		10.5 (0.98) total	
	Tube diameter - in. (mm) - number of rows	3/8 (9.5) - 4		3/8 (9.5) - 3	
	Fins per inch (m)	14 (551)		14 (551)	
	Drain number and size	(1) 1 in. fpt		(1) 1 in. fpt	
Expansion device type	Balanced Port Thermostatic Expansion Valve, removeable power head				
Indoor Blower and Drive Selection	Wheel nominal diameter x width - in. (mm)	(1) 15 x 15 (381 x 381)			
	Voltage & phase	208/230v, 460v or 575v-3ph			
	③ Belt Drive - Nominal motor output	2 hp (1.5 kW) / 3 hp (2.2 kW) / 5 hp (3.7 kW)			
	Maximum useable output	2.3 hp (1.7 kW) / 3.45 hp (2.6 kW) / 5.75 hp (4.3 kW)			
	Motor - Drive kit # (RPM range)	2 hp - kit #1 (680-940) or kit #3 (850-1130) / 3 hp - kit #1 or #2 (680-940), kit #3 (850-1130), kit #4 (895-1120), kit #5 (1105-1410) or kit #6 (1110-1395) 5 hp - kit #4 (895-1120) or kit #6 (1110-1395)			
Filters	Type of filter	Disposable, commercial grade, pleated			
	Number and size - in. (mm)	(4) 18 x 24 x 2 (457 x 610 x 51)			
Electrical characteristics		208/230v, 460v or 575v - 60 hertz - 3 phase			

① Certified in accordance with the ULE certification program, which is based on ARI Standard 340/360, 95°F (35°C) outdoor air temperature and 80°F (27°C) db/67°F (19°C) wb entering evaporator air; minimum external duct static pressure.
 NOTE — Net capacity includes evaporator blower motor heat deduction. Gross capacity does not include evaporator blower motor heat deduction.
 ② Integrated Part Load Value rated at 80°F (27°C) outdoor air temperature.
 ③ Sound Rating Number rated in accordance with test conditions included in ARI Standard 270.
 ④ Using total air volume and system static pressure requirements determine from blower performance tables rpm and motor output required. Maximum usable output of motors furnished by Lennox are shown. In Canada, nominal motor output is also maximum usable motor output. If motors of comparable output are used, be sure to keep within the service factor limitations outlined on the motor nameplate.

HIGH ALTITUDE DERATE		
Units may be installed at altitudes up to 2000 feet (610 m) above sea level without any modification. At altitudes above 2000 feet (610 m), units must be derated to match gas manifold pressures shown in table below.		
NOTE — This is the only permissible derate for these units.		
Altitude - ft. (m)	Gas Manifold Pressure - in. w.g. (kPa)	
	Natural Gas	LPG/Propane
2001 - 3000 (610 - 915)	3.6 (0.90)	10.2 (2.54)
3001 - 4000 (915 - 1220)	3.5 (0.87)	9.9 (2.46)
4001 - 5000 (1220 - 1525)	3.4 (0.85)	9.6 (2.39)
5001 - 6000 (1525 - 1830)	3.3 (0.82)	9.4 (2.34)
6001 - 7000 (1830 - 2135)	3.2 (0.80)	9.1 (2.26)
7001 - 8000 (2135 - 2440)	3.1 (0.77)	8.8 (2.19)

HUMIDITROL™ CONDENSER REHEAT OPTION

- Factory installed option designed to control humidity.
- Unit comes equipped with 1 row reheat coil, humidity sensor for field installation, solenoid valve and humidity controller.
- Provides dehumidification on demand.
- Uses ASHRAE 90.1 recommended method for reheat with comfort conditioning humidity control.
- Optional Remote Mounted Humidity Sensor Kit (56L33) is available.

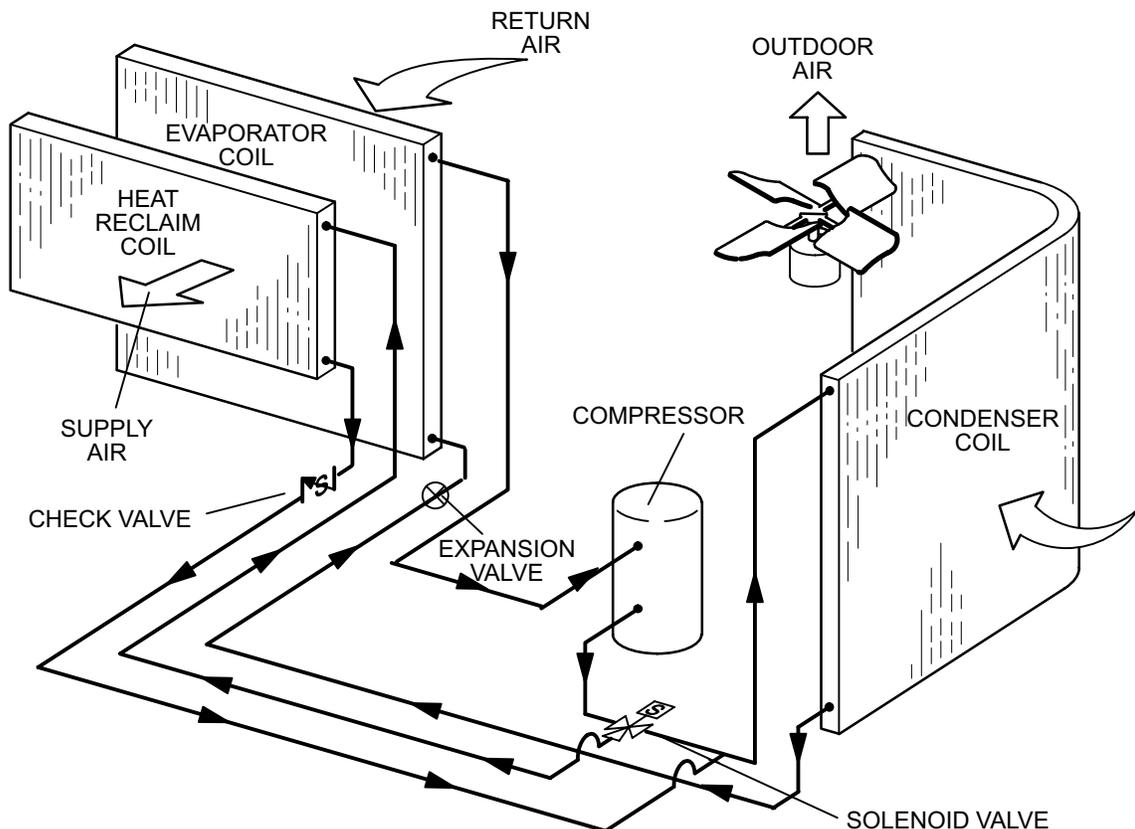
Benefits

- Improves indoor air quality and provides better ventilation.
- Helps prevent humidity damage.
- Improves comfort levels by reducing humidity/latent heat load.

Operation

- The humidity sensor is located remotely in the occupied space.
- The unit will operate conventionally whenever there is a demand for the space thermostat. If there is no demand for dehumidification from the humidity sensor and the sensible cooling demand is satisfied, compressor operation will terminate. If the relative humidity of the space is above the setpoint of the humidity controller, the compressor will continue to operate.
- The solenoid valve diverts hot gas from the compressor to the reheat coil. The cooled air from the evaporator is then reheated. The de-superheated and partially condensed refrigerant continues to the outdoor air condenser coil where condensing is completed. The unit will continue to operate in this mode until the humidity controller is satisfied. The unit will then return to normal cooling mode operation if there is a demand from the thermostat.
- Reheat operation will initiate on a demand from the humidistat and does not require a cooling demand from the thermostat.
- If thermostat calls for 1st stage cooling and the humidistat calls for reheat, the 1st stage compressor will operate in the reheat mode and the 2nd stage compressor will operate in normal cooling mode.
- If thermostat calls for both stages of cooling, the humidistat demand will be ignored until one stage of cooling demand is satisfied.
- Cooling has priority over dehumidification if conflicting demands occur.
- The reheat coil is sized to provide 75°F to 80°F (24°C to 27°C) supply air when operating in the reheat mode only. This avoids causing a heating or sensible cooling demand to occur in the occupied space.
- Reheat controls are located in the compressor control section of the unit for easy access.
- Humidity sensor provides input to the humidity controller which is used to control activation of the dehumidification operation.
- The humidity controller is factory set at 60% relative humidity and can be adjusted through the IMC board. The unit will operate in dehumidification mode until the relative humidity of the conditioned space is 5% below the setpoint.

HUMIDITROL REFRIGERANT SCHEMATIC



ELECTRICAL DATA - LCA/LGA090H/102H

Model No.		LCA/LGA090H									LCA/LGA102H								
Line voltage data — 60 Hz — 3 phase		208/230V			460V			575V			208/230v			460v			575v		
Compressors (2)	Rated load amps - each (total)	12.4 (24.9)			6.4 (12.8)			4.8 (9.6)			13.5 (27.0)			7.4 (14.8)			5.8 (11.6)		
	Locked rotor amps - each (total)	88.0 (176.0)			44.0 (88.0)			34.0 (68.0)			120 (240)			50 (100)			40 (80)		
Condenser Fan Motors (2)	Full load amps - each (total)	4.8			2.6			2.0			2.4 (4.8)			1.3 (2.6)			1.0 (2.0)		
	Locked rotor amps - each (total)	9.4			4.8			3.8			4.7 (9.4)			2.4 (4.8)			1.9 (3.8)		
Evaporator Blower Motor	Motor Output - hp	2	3	5	2	3	5	2	3	5	2	3	5	2	3	5	2	3	5
	- kW	1.5	2.2	3.7	1.5	2.2	3.7	1.5	2.2	3.7	1.5	2.2	3.7	1.5	2.2	3.7	1.5	2.2	3.7
	Full load amps	7.5	10.6	16.7	3.4	4.8	7.6	2.7	3.9	6.1	7.5	10.6	16.7	3.4	4.8	7.6	2.7	3.9	6.1
	Locked rotor amps	46.9	66	105	20.4	26.8	45.6	16.2	23.4	36.6	46.9	66	105	20.4	26.8	45.6	16.2	23.4	36.6
Recommended maximum fuse size (amps)	With Exhaust Fan	50	50	60	25	25	30	20	20	25	50	60	60	30	30	35	20	25	25
	Less Exhaust Fan	50	50	60	25	25	30	20	20	25	50	50	60	30	30	30	20	20	25
*Minimum Circuit Ampacity	With Exhaust Fan	43	46	52	22	24	26	17	18	20	46	49	55	24	26	29	19	20	23
	Less Exhaust Fan	41	44	50	21	22	25	16	17	19	43	46	52	23	25	27	18	19	22
Optional Power Exhaust Fan	(Number) Horsepower (W)	(1) 1/3 (249)			(1) 1/3 (249)			(1) 1/3 (249)			(1) 1/3 (249)			(1) 1/3 (249)			(1) 1/3 (249)		
	Full load amps	2.4			1.3			1.0			2.4			1.3			1.0		
	Locked rotor amps	4.7			2.4			1.9			4.7			2.4			1.9		
Service Outlet (2) 115 volt GFCI (amp rating)		15			15			15			15			15			15		

ELECTRICAL DATA - LCA/LGA120H/150S

Model No.		LCA/LGA120H									LCA/LGA150S								
Line voltage data — 60 Hz — 3 phase		208/230v			460v			575v			208/230v			460v			575v		
Compressors (2)	Rated load amps - each (total)	17.3 (34.6)			9.0 (18.0)			7.1 (14.2)			18.6 (37.2)			9 (18)			7.4 (14.8)		
	Locked rotor amps - each (total)	123 (246)			62 (124)			50 (100)			156 (312)			70 (140)			54 (108)		
Condenser Fan Motors (2)	Full load amps - each (total)	2.4 (4.8)			1.3 (2.6)			1.0 (2.0)			2.4 (4.8)			1.3 (2.6)			1.0 (2.0)		
	Locked rotor amps - each (total)	4.9 (9.4)			2.4 (4.8)			1.9 (3.8)			4.7 (9.4)			2.4 (4.8)			1.9 (3.8)		
Evaporator Blower Motor	Motor Output - hp	2	3	5	2	3	5	2	3	5	2	3	5	2	3	5	2	3	5
	- kW	1.5	2.2	3.7	1.5	2.2	3.7	1.5	2.2	3.7	1.5	2.2	3.7	1.5	2.2	3.7	1.5	2.2	3.7
	Full load amps	7.5	10.6	16.7	3.4	4.8	7.6	2.7	3.9	6.1	7.5	10.6	16.7	3.4	4.8	7.6	2.7	3.9	6.1
	Locked rotor amps	46.9	66	105	20.4	26.8	45.6	16.2	23.4	36.6	46.9	66	105	20.4	26.8	45.6	16.2	23.4	36.6
Recommended maximum fuse size (amps)	With Exhaust Fan	70	70	80	35	35	40	25	30	30	70	70	80	35	35	40	25	30	30
	Less Exhaust Fan	60	70	70	35	35	35	25	25	30	70	70	80	35	35	35	25	30	30
*Minimum Circuit Ampacity	With Exhaust Fan	54	57	63	28	29	32	22	23	26	57	60	66	28	29	32	23	24	26
	Less Exhaust Fan	52	55	61	27	28	31	21	22	25	55	58	64	27	28	31	22	23	25
Optional Power Exhaust Fan	(Number) Horsepower (W)	(1) 1/3 (249)			(1) 1/3 (249)			(1) 1/3 (249)			(1) 1/3 (249)			(1) 1/3 (249)			(1) 1/3 (249)		
	Full load amps	2.4			1.3			1.0			2.4			1.3			1.0		
	Locked rotor amps	4.7			2.4			1.9			4.7			2.4			1.9		
Service Outlet (2) 115 volt GFCI (amp rating)		15			15			15			15			15			15		

OPTIONAL ELECTRIC HEAT ACCESSORIES - LCA MODELS

UNIT FUSE BLOCKS WITH ELECTRIC HEAT

Unit Model No.		LCA090H		LCA102H		LCA120H		LCA150S			
Electric Heat		EHA (see Electric Heat Data tables for additional information)									
kW Input Range		7.5-15-22.5-30-45						15-22.5-30-45-60			
Unit Fuse Block (3 phase)	With Power Exhaust Fans	2 hp (1.5 kW) 208/230v	56K93		56K93		56K95		56K95		
		2 hp (1.5 kW) 460v	56K52		25K08		25K09		25K09		
		2 hp (1.5 kW) 575v	56K51		56K51		56K52		56K52		
		3 hp (2.2 kW) 208/230v	56K93		56K94		56K95		56K95		
		3 hp (2.2 kW) 460v	56K52		25K08		25K09		25K09		
	3 hp (2.2 kW) 575v	56K51		56K52		25K08		25K08			
	5 hp (3.7 kW) 208/230v	56K94		56K94		56K96		56K96			
	5 hp (3.7 kW) 460v	25K08		25K09		25K10		25K10			
	5 hp (3.7 kW) 575v	56K52		56K52		25K08		25K08			
	Without Power Exhaust Fans	2 hp (1.5 kW) 208/230v	56K93		56K93		56K94		56K95		
		2 hp (1.5 kW) 460v	56K52		25K08		25K09		25K09		
		2 hp (1.5 kW) 575v	56K51		56K51		56K52		56K52		
		3 hp (2.2 kW) 208/230v	56K93		56K93		56K95		56K95		
		3 hp (2.2 kW) 460v	56K52		25K08		25K09		25K09		
		3 hp (2.2 kW) 575v	56K51		56K51		56K52		25K08		
5 hp (3.7 kW) 208/230v	56K94		56K94		56K95		56K96				
5 hp (3.7 kW) 460v	25K08		25K08		25K09		25K09				
5 hp (3.7 kW) 575v	56K52		56K52		25K08		25K08				

LTB2 ELECTRIC HEAT TERMINAL BLOCK — LTB2-175 (30K75) 175 amps
 (Required For Units Without Disconnect/Circuit Breaker But With Single Point Power Source)

NOTE -Terminal Block is factory installed in units with factory installed electric heat without disconnect/circuit breaker but with single point power source.

OPTIONAL ELECTRIC HEAT DATA (REQUIRES UNIT FUSE BLOCK AND TERMINAL BLOCK)

LCA090H							
Electric Heat Model No. & Net Weight	No. of Steps	Volts Input	kW Input	Btuh Output	†Total Unit + Electric Heat Minimum Circuit Ampacity (with Power Exhaust Fan)		
					2 hp (1.5 kW)	3 hp (2.2 kW)	5 hp (3.7 kW)
7.5 kW Heat EHA100-7.5	1	208	5.6	19,100	43	46	52
	1	220	6.3	21,500	43	46	52
208/230v (16L08)	1	230	6.9	23,600	43	46	52
	1	240	7.5	25,600	43	46	52
460v (16L09)	1	440	6.3	21,500	22	24	27
	1	460	6.9	23,600	22	24	27
575v (16L10)	1	480	7.5	25,600	22	24	27
	1	550	6.3	21,500	17	18	21
31 lbs. (14 kg)	1	575	6.9	23,600	17	18	21
	1	600	7.5	25,600	17	18	21
15 kW Heat EHA100-15	1	208	11.3	38,600	52	56	63
	1	220	12.6	43,000	58	62	69
208/230v (16L11)	1	230	13.8	47,100	58	62	69
	1	240	15.0	51,200	58	62	69
460v (16L12)	1	440	12.6	43,000	29	31	34
	1	460	13.8	47,100	29	31	34
575v (16L13)	1	480	15.0	51,200	29	31	34
	1	550	12.6	43,000	23	25	27
31 lbs. (14 kg)	1	575	13.8	47,100	23	25	27
	1	600	15.0	51,200	23	25	27
22.5 kW Heat EHA360-22.5	2	208	16.9	57,700	71	75	83
	2	220	18.9	64,500	80	84	92
208/230v (99J28)	2	230	20.6	70,700	80	84	92
	2	240	22.5	76,800	80	84	92
460v (99J29)	2	440	18.9	64,500	40	42	45
	2	460	20.7	70,700	40	42	45
575v (99J30)	2	480	22.5	76,800	40	42	45
	2	550	19.0	64,500	32	34	36
38 lbs. (17 kg)	2	575	20.7	70,700	32	34	36
	2	600	22.5	76,800	32	34	36
30 kW Heat EHA150-30	2	208	22.5	76,800	91	95	103
	2	220	25.2	86,000	103	107	115
208/230v (99J07)	2	230	27.6	93,900	103	107	115
	2	240	30.0	102,400	103	107	115
460v (99J08)	2	440	25.2	86,000	51	53	57
	2	460	27.6	93,900	51	53	57
575v (99J09)	2	480	30.0	102,400	51	53	57
	2	550	25.2	86,000	41	43	45
38 lbs. (17 kg)	2	575	27.6	93,900	41	43	45
	2	600	30.0	102,400	41	43	45
45 kW Heat EHA150-45	2	208	33.8	115,300	130	134	142
	2	220	37.8	129,000	148	152	160
208/230v (99J10)	2	230	41.3	141,000	148	152	160
	2	240	45.0	153,600	148	152	160
460v (99J11)	2	440	37.8	129,000	74	76	79
	2	460	41.3	141,000	74	76	79
575v (99J12)	2	480	45.0	153,600	74	76	79
	2	550	37.8	129,000	59	61	64
42 lbs. (19 kg)	2	575	41.3	141,000	59	61	64
	2	600	45.0	153,600	59	61	64

LCA102H							
Electric Heat Model No. & Net Weight	No. of Steps	Volts Input	kW Input	Btuh Output	†Total Unit + Electric Heat Minimum Circuit Ampacity (with Power Exhaust Fan)		
					2 hp (1.5 kW)	3 hp (2.2 kW)	5 hp (3.7 kW)
7.5 kW Heat EHA102-7.5	1	208	5.6	19,100	46	49	55
	1	220	6.3	21,500	46	49	55
208/230v (99J01)	1	230	6.9	23,600	46	49	55
	1	240	7.5	25,600	46	49	55
460v (99J02)	1	440	6.9	21,500	24	26	29
	1	460	6.9	23,600	24	26	29
575v (99J03)	1	480	7.5	25,600	24	26	29
	1	550	6.3	21,500	19	20	23
31 lbs. (14 kg)	1	575	6.9	23,600	19	20	23
	1	600	7.5	25,600	19	20	23
15 kW Heat EHA150-15	1	208	11.3	38,600	52	56	63
	1	220	12.6	43,000	58	62	69
208/230v (99J04)	1	230	13.8	47,100	58	62	69
	1	240	15.0	51,200	58	62	69
460v (99J05)	1	440	12.6	43,000	29	31	34
	1	460	13.8	47,100	29	31	34
575v (99J06)	1	480	15.0	51,200	29	31	34
	1	550	12.6	43,000	23	25	27
31 lbs. (14 kg)	1	575	13.8	47,100	23	25	27
	1	600	15.0	51,200	23	25	27
22.5 kW Heat EHA360-22.5	**2	208	16.9	57,700	71	75	83
	**2	220	18.9	64,500	80	84	92
208/230v (99J28)	**2	230	20.7	70,700	80	84	92
	**2	240	22.5	76,800	80	84	92
460v (99J29)	**2	440	18.9	64,500	40	42	45
	**2	460	20.7	70,700	40	42	45
575v (99J30)	**2	480	22.5	76,800	40	42	45
	**2	550	18.9	64,500	32	34	36
38 lbs. (17 kg)	**2	575	20.7	70,700	32	34	36
	**2	600	22.5	76,800	32	34	36
30 kW Heat EHA150-30	**2	208	22.5	76,800	91	95	103
	**2	220	25.2	86,000	103	107	115
208/230v (99J07)	**2	230	27.5	93,900	103	107	115
	**2	240	30.0	102,400	103	107	115
460v (99J08)	**2	440	25.2	86,000	51	53	57
	**2	460	27.5	93,900	51	53	57
575v (99J09)	**2	480	30.0	102,400	51	53	57
	**2	550	25.2	86,000	41	43	45
38 lbs. (17 kg)	**2	575	27.5	93,900	41	43	45
	**2	600	30.0	102,400	41	43	45
45 kW Heat EHA150-45	**2	208	33.8	115,300	130	134	142
	**2	220	37.8	129,000	148	152	160
208/230v (99J10)	**2	230	41.3	141,000	148	152	160
	**2	240	45.0	153,600	148	152	160
460v (99J11)	**2	440	37.8	129,000	74	76	79
	**2	460	41.3	141,000	74	76	79
575v (99J12)	**2	480	45.0	153,600	74	76	79
	**2	550	37.8	129,000	59	61	64
42 lbs. (19 kg)	**2	575	41.3	141,000	59	61	64
	**2	600	45.0	153,600	59	61	64

*Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F (75°C).
 **May be used with two stage control.
 NOTE — Fuse block must be ordered extra. Factory installed heaters will have the fuse block factory installed. Fuse block must be installed in unit with field installed heaters. Also requires LTB2 Terminal Block.

*Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F (75°C).
 **May be used with two stage control.
 NOTE — Fuse block must be ordered extra. Factory installed heaters will have the fuse block factory installed. Fuse block must be installed in unit with field installed heaters. Also requires LTB2 Terminal Block.

OPTIONAL ELECTRIC HEAT DATA (REQUIRES UNIT FUSE BLOCK AND TERMINAL BLOCK)

LCA120H							
Electric Heat Model No. & Net Weight	No. of Steps	Volts Input	kW Input	Btuh Output	†Total Unit + Electric Heat Minimum Circuit Ampacity (with Power Exhaust Fan)		
					2 hp (1.5 kW)	3 hp (2.2 kW)	5 hp (3.7 kW)
15 kW Heat EHA150-15 208/230v (99J04) 460v (99J05) 575v (99J06) 31 lbs. (14 kg)	1	208	11.3	38,600	58	62	69
	1	220	12.6	43,000	58	62	69
	1	230	13.8	47,100	58	62	69
	1	240	15.0	51,200	58	62	69
	1	440	12.6	43,000	29	31	34
	1	460	13.8	47,100	29	31	34
	1	480	15.0	51,200	29	31	34
	1	550	12.6	43,000	23	25	27
	1	575	13.8	47,100	23	25	27
	1	600	15.0	51,200	23	25	27
22.5 kW Heat EHA360-22.5 208/230v (99J28) 460v (99J29) 575v (99J30) 38 lbs. (17 kg)	**2	208	16.9	57,700	71	75	83
	**2	220	18.9	64,500	80	84	92
	**2	230	20.7	70,700	80	84	92
	**2	240	22.5	76,800	80	84	92
	**2	440	18.9	64,500	40	42	45
	**2	460	20.7	70,700	40	42	45
	**2	480	22.5	76,800	40	42	45
	**2	550	18.9	64,500	32	34	36
	**2	575	20.7	70,700	32	34	36
	**2	600	22.5	76,800	32	34	36
30 kW Heat EHA150-30 208/230v (99J07) 460v (99J08) 575v (99J09) 38 lbs. (17 kg)	**2	208	22.5	76,800	91	95	103
	**2	220	25.2	86,000	103	107	115
	**2	230	27.5	93,900	103	107	115
	**2	240	30.0	102,400	103	107	115
	**2	440	25.2	86,000	51	53	57
	**2	460	27.5	93,900	51	53	57
	**2	480	30.0	102,400	51	53	57
	**2	550	25.2	86,000	41	43	45
	**2	575	27.5	93,900	41	43	45
	**2	600	30.0	102,400	41	43	45
45 kW Heat EHA150-45 208/230v (99J10) 460v (99J11) 575v (99J12) 42 lbs. (19 kg)	**2	208	33.8	115,300	130	134	142
	**2	220	37.8	129,000	148	152	160
	**2	230	41.3	141,000	148	152	160
	**2	240	45.0	153,600	148	152	160
	**2	440	37.8	129,000	74	76	79
	**2	460	41.3	141,000	74	76	79
	**2	480	45.0	153,600	74	76	79
	**2	550	37.8	129,000	59	61	64
	**2	575	41.3	141,000	59	61	64
	**2	600	45.0	153,600	59	61	64
60 kW Heat EHA150-60 208/230v (99J13) 460v (99J14) 575v (99J15) 49 lbs. (22 kg)	**2	208	45.0	153,600	137	141	149
	**2	220	50.4	172,000	157	161	169
	**2	230	55.1	188,000	157	161	169
	**2	240	60.0	204,800	157	161	169
	**2	440	50.4	172,000	79	80	84
	**2	460	55.1	188,000	79	80	84
	**2	480	60.0	204,800	79	80	84
	**2	550	50.4	172,000	63	64	67
	**2	575	55.1	188,000	63	64	67
	**2	600	60.0	204,800	63	64	67

LCA150S							
Electric Heat Model No. & Net Weight	No. of Steps	Volts Input	kW Input	Btuh Output	†Total Unit + Electric Heat Minimum Circuit Ampacity (with Power Exhaust Fan)		
					2 hp (1.5 kW)	3 hp (2.2 kW)	5 hp (3.7 kW)
15 kW Heat EHA150-15 208/230v (99J04) 460v (99J05) 575v (99J06) 31 lbs. (14 kg)	1	208	11.3	38,600	57	60	66
	1	220	12.6	43,000	58	62	69
	1	230	13.8	47,100	58	62	69
	1	240	15.0	51,200	58	62	69
	1	440	12.6	43,000	29	31	34
	1	460	13.8	47,100	29	31	34
	1	480	15.0	51,200	29	31	34
	1	550	12.6	43,000	23	25	27
	1	575	13.8	47,100	23	25	27
	1	600	15.0	51,200	23	25	27
22.5 kW Heat EHA360-22.5 208/230v (99J28) 460v (99J29) 575v (99J30) 38 lbs. (17 kg)	**2	208	16.9	57,700	71	75	83
	**2	220	18.9	64,500	82	86	92
	**2	230	20.7	70,700	82	86	92
	**2	240	22.5	76,800	82	86	92
	**2	440	18.9	64,500	40	42	45
	**2	460	20.7	70,700	40	42	45
	**2	480	22.5	76,800	40	42	45
	**2	550	18.9	64,500	32	34	36
	**2	575	20.7	70,700	3	34	36
	**2	600	22.5	76,800	32	34	36
30 kW Heat EHA150-30 208/230v (99J07) 460v (99J08) 575v (99J09) 38 lbs. (17 kg)	**2	208	22.5	76,800	91	95	103
	**2	220	25.2	86,000	103	107	115
	**2	230	27.5	93,900	103	107	115
	**2	240	30.0	102,400	103	107	115
	**2	440	25.2	86,000	51	53	57
	**2	460	27.5	93,900	51	53	57
	**2	480	30.0	102,400	51	53	57
	**2	550	25.2	86,000	41	43	45
	**2	575	27.5	93,900	41	43	45
	**2	600	30.0	102,400	41	43	45
45 kW Heat EHA150-45 208/230v (99J10) 460v (99J11) 575v (99J12) 42 lbs. (19 kg)	**2	208	33.8	115,300	130	134	142
	**2	220	37.8	129,000	148	152	160
	**2	230	41.3	141,000	148	152	160
	**2	240	45.0	153,600	148	152	160
	**2	440	37.8	129,000	74	76	79
	**2	460	41.3	141,000	74	76	79
	**2	480	45.0	153,600	74	76	79
	**2	550	37.8	129,000	59	61	64
	**2	575	41.3	141,000	59	61	64
	**2	600	45.0	153,600	59	61	64
60 kW Heat EHA150-60 208/230v (99J13) 460v (99J14) 575v (99J15) 49 lbs. (22 kg)	**2	208	45.0	153,600	137	141	149
	**2	220	50.4	172,000	157	161	169
	**2	230	55.1	188,000	157	161	169
	**2	240	60.0	204,800	157	161	169
	**2	440	50.4	172,000	79	80	84
	**2	460	55.1	188,000	79	80	84
	**2	480	60.0	204,800	79	80	84
	**2	550	50.4	172,000	63	64	67
	**2	575	55.1	188,000	63	64	67
	**2	600	60.0	204,800	63	64	67

NOTE - H indicates high efficiency units. **S-** indicates standard efficiency units.
 *Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F (75°C).
 **May be used with two stage control.
 NOTE — Fuse block must be ordered extra. Factory installed heaters will have the fuse block factory installed. Fuse block must be installed in unit with field installed heaters. Also requires LTB2 Terminal Block.

*Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F (75°C).
 **May be used with two stage control.
 NOTE — Fuse block must be ordered extra. Factory installed heaters will have the fuse block factory installed. Fuse block must be installed in unit with field installed heaters. Also requires LTB2 Terminal Block.

COOLING RATINGS

NOTE — For Temperatures and Capacities not shown in tables, see bulletin — Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

LCA/LGA090H — HIGH EFFICIENCY - COOLING CAPACITY - ONE COMPRESSOR OPERATING

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			65°F (18°C)				75°F (24°C)				85°F (29°C)				95°F (35°C)											
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)		
			kBtuh	kW		Dry Bulb			kBtuh	kW		Dry Bulb			kBtuh	kW		Dry Bulb			kBtuh	kW		Dry Bulb		
					75°F 24°C	80°F 27°C	85°F 29°C	75°F 24°C			80°F 27°C	85°F 29°C	75°F 24°C	80°F 27°C			85°F 29°C	75°F 24°C	80°F 27°C	85°F 29°C						
63°F (17°C)	2400	1135	48.6	14.2	2.09	.63	.78	.94	47.2	13.8	2.36	.63	.80	.96	45.7	13.4	2.67	.64	.81	.98	44.1	12.9	3.02	.65	.83	.99
	3000	1415	50.5	14.8	2.10	.68	.87	1.00	49.0	14.4	2.37	.69	.89	1.00	47.5	13.9	2.68	.70	.91	1.00	45.8	13.4	3.02	.72	.93	1.00
	3600	1700	52.1	15.3	2.10	.74	.95	1.00	50.6	14.8	2.38	.75	.96	1.00	49.0	14.4	2.68	.77	.98	1.00	47.4	13.9	3.03	.79	1.00	1.00
67°F (19°C)	2400	1135	51.8	15.2	2.10	.49	.61	.74	50.2	14.7	2.38	.50	.61	.75	48.6	14.2	2.68	.50	.62	.77	46.9	13.7	3.03	.51	.63	.79
	3000	1415	53.5	15.7	2.12	.52	.65	.83	51.8	15.2	2.39	.52	.66	.85	50.1	14.7	2.69	.53	.67	.87	48.3	14.2	3.04	.54	.69	.89
	3600	1700	54.7	16.0	2.12	.55	.71	.91	53.0	15.5	2.39	.55	.73	.93	51.2	15.0	2.70	.56	.75	.95	49.3	14.4	3.04	.57	.77	.97
71°F (22°C)	2400	1135	55.2	16.2	2.12	.37	.48	.58	53.6	15.7	2.39	.37	.48	.59	51.9	15.2	2.70	.38	.49	.60	50.0	14.7	3.05	.38	.49	.61
	3000	1415	56.9	16.7	2.13	.38	.50	.63	55.2	16.2	2.40	.38	.51	.64	53.4	15.6	2.71	.38	.52	.65	51.4	15.1	3.05	.39	.53	.66
	3600	1700	58.0	17.0	2.14	.39	.53	.68	56.3	16.5	2.41	.39	.54	.70	54.4	15.9	2.71	.40	.55	.72	52.4	15.4	3.06	.40	.56	.74

LCA/LGA090H — HIGH EFFICIENCY - COOLING CAPACITY - ALL COMPRESSORS OPERATING

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)				95°F (35°C)				105°F (41°C)				115°F (46°C)											
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)		
			kBtuh	kW		Dry Bulb			kBtuh	kW		Dry Bulb			kBtuh	kW		Dry Bulb			kBtuh	kW		Dry Bulb		
					75°F 24°C	80°F 27°C	85°F 29°C	75°F 24°C			80°F 27°C	85°F 29°C	75°F 24°C	80°F 27°C			85°F 29°C	75°F 24°C	80°F 27°C	85°F 29°C						
63°F (17°C)	2400	1135	88.6	26.0	5.41	.68	.83	.97	85.5	25.1	6.12	.69	.84	.98	82.2	24.1	6.91	.70	.86	1.00	78.7	23.1	7.80	.71	.89	1.00
	3000	1415	92.1	27.0	5.43	.73	.91	1.00	88.8	26.0	6.13	.74	.93	1.00	85.5	25.1	6.93	.76	.95	1.00	81.8	24.0	7.83	.78	.97	1.00
	3600	1700	94.9	27.8	5.44	.79	.98	1.00	91.8	26.9	6.15	.81	.99	1.00	88.5	25.9	6.94	.83	1.00	1.00	85.0	24.9	7.85	.85	1.00	1.00
67°F (19°C)	2400	1135	94.3	27.6	5.44	.53	.65	.79	91.0	26.7	6.14	.54	.66	.80	87.3	25.6	6.94	.54	.68	.82	83.6	24.5	7.85	.55	.69	.85
	3000	1415	97.3	28.5	5.46	.56	.70	.87	93.8	27.5	6.17	.57	.72	.89	90.1	26.4	6.96	.57	.74	.92	86.1	25.2	7.87	.59	.76	.94
	3600	1700	99.4	29.1	5.48	.59	.77	.95	95.8	28.1	6.17	.60	.78	.96	92.0	27.0	6.98	.61	.80	.98	88.0	25.8	7.89	.62	.83	.99
71°F (22°C)	2400	1135	100.6	29.5	5.48	.40	.51	.63	97.0	28.4	6.18	.40	.52	.64	93.3	27.3	6.98	.40	.53	.65	89.3	26.2	7.88	.41	.54	.66
	3000	1415	103.6	30.4	5.50	.41	.55	.68	99.8	29.2	6.20	.41	.55	.70	95.9	28.1	7.00	.42	.56	.71	91.7	26.9	7.91	.42	.57	.73
	3600	1700	105.6	30.9	5.51	.42	.58	.74	101.8	29.8	6.21	.42	.59	.76	97.6	28.6	7.02	.43	.60	.78	93.4	27.4	7.92	.43	.61	.80

LCA/LGA102H - HIGH EFFICIENCY - COOLING CAPACITY - ONE COMPRESSOR OPERATING

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			65°F (18°C)				75°F (24°C)				85°F (29°C)				95°F (35°C)											
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)		
			kBtuh	kW		Dry Bulb			kBtuh	kW		Dry Bulb			kBtuh	kW		Dry Bulb			kBtuh	kW		Dry Bulb		
					75°F 24°C	80°F 27°C	85°F 29°C	75°F 24°C			80°F 27°C	85°F 29°C	75°F 24°C	80°F 27°C			85°F 29°C	75°F 24°C	80°F 27°C	85°F 29°C						
63°F (17°C)	2720	1285	53.4	15.6	2.43	.65	.80	.95	51.8	15.2	2.71	.65	.81	.96	50.2	14.7	3.05	.66	.83	.98	48.4	14.2	3.45	.67	.85	.99
	3400	1605	55.4	16.2	2.43	.69	.88	1.00	53.8	15.8	2.72	.71	.90	1.00	52.1	15.3	3.05	.72	.91	1.00	50.3	14.7	3.46	.74	.93	1.00
	4080	1925	57.1	16.7	2.44	.75	.95	1.00	55.4	16.2	2.72	.77	.97	1.00	53.7	15.7	3.06	.79	.98	1.00	52.0	15.2	3.46	.80	.99	1.00
67°F (19°C)	2720	1285	56.8	16.6	2.43	.51	.62	.75	55.1	16.1	2.72	.51	.63	.77	53.3	15.6	3.06	.52	.64	.79	51.4	15.1	3.47	.52	.65	.80
	3400	1605	58.6	17.2	2.44	.53	.67	.84	56.8	16.6	2.72	.54	.68	.86	54.9	16.1	3.07	.55	.69	.88	53.0	15.5	3.47	.55	.71	.90
	4080	1925	59.9	17.6	2.44	.56	.73	.91	58.1	17.0	2.73	.57	.74	.93	56.1	16.4	3.07	.58	.76	.95	54.1	15.9	3.47	.59	.78	.97
71°F (22°C)	2720	1285	60.6	17.8	2.44	.38	.49	.60	58.8	17.2	2.72	.38	.50	.61	56.9	16.7	3.07	.39	.50	.62	54.9	16.1	3.48	.39	.51	.63
	3400	1605	62.4	18.3	2.44	.39	.52	.65	60.5	17.7	2.73	.39	.53	.66	58.4	17.1	3.07	.40	.53	.67	56.4	16.5	3.48	.40	.54	.68
	4080	1925	63.7	18.7	2.45	.40	.55	.70	61.6	18.1	2.73	.41	.56	.72	59.6	17.5	3.08	.41	.57	.73	57.4	16.8	3.49	.41	.58	.75

LCA/LGA102H - HIGH EFFICIENCY - COOLING CAPACITY - ALL COMPRESSORS OPERATING

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)				95°F (35°C)				105°F (41°C)				115°F (46°C)											
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)		
			kBtuh	kW		Dry Bulb			kBtuh	kW		Dry Bulb			kBtuh	kW		Dry Bulb			kBtuh	kW		Dry Bulb		
					75°F 24°C	80°F 27°C	85°F 29°C	75°F 24°C			80°F 27°C	85°F 29°C	75°F 24°C	80°F 27°C			85°F 29°C	75°F 24°C	80°F 27°C	85°F 29°C						
63°F (17°C)	2720	1285	99.4	29.1	6.15	.67	.82	.97	95.9	28.1	6.96	.68	.84	.98	92.3	27.1	7.90	.69	.86	.99	88.8	26.0	8.96	.70	.88	1.00
	3400	1605	103.1	30.2	6.16	.72	.91	1.00	99.6	29.2	6.98	.74	.92	1.00	96.0	28.1	7.91	.75	.94	1.00	92.3	27.1	8.97	.77	.97	1.00
	4080	1925	106.3	31.2	6.18	.78	.97	1.00	102.8	30.1	6.99	.80	.99	1.00	99.2	29.1	7.93	.82	1.00	1.00	95.8	28.1	9.00	.84	1.00	1.00
67°F (19°C)	2720	1285	105.6	30.9	6.17	.53	.65	.78	101.9	29.9	7.00	.53	.66	.80	98.1	28.8	7.93	.54	.67	.82	94.3	27.6	9.00	.54	.68	.84
	3400	1605	108.8	31.9	6.19	.55	.70	.87	105.0	30.8	7.01	.56	.71	.89	101.1	29.6	7.96	.57	.73	.91	97.1	28.5	9.02	.58	.75	.93
	4080	1925	111.2	32.6	6.20	.58	.76	.94	107.3	31.4	7.01	.59	.78	.96	103.2	30.2	7.97	.60	.79	.98	99.1	29.0	9.04	.61	.82	.99
71°F (22°C)	2720	1285	112.7	33.0	6.20	.39	.51	.62	108.7	31.9	7.02	.40	.51	.63	104.7	30.7	7.97	.40	.52	.64	100.7	29.5	9.06	.40	.53	.66
	3400	1605	115.8	33.9	6.21	.40	.54	.68	111.8	32.8	7.04	.41	.55	.69	107.6	31.5	7.99	.41	.56	.70	103.3	30.3	9.07	.41	.57	.72
	4080	1925	118.1	34.6	6.22	.41	.57	.73	113.8	33.4	7.05	.42	.58	.75	109.5	32.1	8.00	.42	.59	.77	105.2	30.8	9.10	.43	.60	.79

COOLING RATINGS

NOTE — For Temperatures and Capacities not shown in tables, see bulletin — Cooling Unit Rating Table Correction Factor Data in Miscellaneous Engineering Data section.

LCA/LGA120H - HIGH EFFICIENCY - COOLING CAPACITY - ONE COMPRESSOR OPERATING

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			65°F (18°C)						75°F (24°C)						85°F (29°C)						95°F (35°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
			cfm	L/s	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW
63°F (17°C)	3200	1510	65.6	19.2	3.05	.64	.79	.95	63.7	18.7	3.42	.65	.81	.96	61.6	18.1	3.85	.66	.82	.98	59.5	17.4	4.35	.67	.84	.99
	4000	1890	68.2	20.0	3.07	.69	.88	1.00	66.1	19.4	3.44	.71	.90	1.00	64.0	18.8	3.88	.72	.92	1.00	61.8	18.1	4.38	.74	.94	1.00
	4800	2265	70.3	20.6	3.09	.76	.96	1.00	68.2	20.0	3.46	.77	.97	1.00	66.1	19.4	3.90	.79	.99	1.00	63.9	18.7	4.41	.81	1.00	1.00
67°F (19°C)	3200	1510	69.6	20.4	3.08	.51	.62	.75	67.5	19.8	3.46	.51	.63	.77	65.4	19.2	3.89	.52	.64	.78	63.1	18.5	4.40	.52	.65	.80
	4000	1890	71.9	21.1	3.11	.53	.67	.84	69.7	20.4	3.48	.54	.68	.86	67.4	19.8	3.92	.55	.69	.88	65.0	19.0	4.42	.55	.71	.90
	4800	2265	73.5	21.5	3.12	.56	.73	.92	71.2	20.9	3.50	.57	.75	.94	68.9	20.2	3.94	.58	.76	.96	66.4	19.5	4.44	.59	.78	.98
71°F (22°C)	3200	1510	74.2	21.7	3.13	.38	.49	.60	72.0	21.1	3.50	.38	.49	.61	69.6	20.4	3.94	.39	.50	.61	67.1	19.7	4.45	.39	.51	.62
	4000	1890	76.4	22.4	3.15	.39	.52	.65	74.1	21.7	3.52	.39	.53	.66	71.6	21.0	3.96	.40	.53	.67	69.0	20.2	4.48	.40	.54	.68
	4800	2265	77.9	22.8	3.16	.40	.55	.70	75.4	22.1	3.54	.41	.56	.72	72.9	21.4	3.98	.41	.57	.74	70.2	20.6	4.49	.41	.58	.76

LCA/LGA120H - HIGH EFFICIENCY - COOLING CAPACITY - ALL COMPRESSORS OPERATING

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
			cfm	L/s	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW
63°F (17°C)	3200	1510	121.1	35.5	7.75	.67	.82	.97	117.0	34.3	8.77	.68	.84	.98	112.6	33.0	9.93	.69	.86	.99	107.9	31.6	11.25	.71	.88	1.00
	4000	1890	125.9	36.9	7.81	.73	.91	1.00	121.6	35.6	8.82	.74	.93	1.00	116.9	34.3	9.99	.76	.95	1.00	112.2	32.9	11.31	.78	.97	1.00
	4800	2265	129.9	38.1	7.85	.79	.97	1.00	125.5	36.8	8.88	.81	.99	1.00	121.1	35.5	10.04	.83	1.00	1.00	116.4	34.1	11.37	.85	1.00	1.00
67°F (19°C)	3200	1510	128.6	37.7	7.83	.53	.65	.78	124.1	36.4	8.87	.53	.66	.80	119.3	35.0	10.02	.54	.67	.82	114.3	33.5	11.36	.55	.68	.84
	4000	1890	132.7	38.9	7.90	.56	.70	.87	128.0	37.5	8.91	.56	.71	.89	123.0	36.0	10.09	.57	.73	.91	117.6	34.5	11.41	.58	.75	.94
	4800	2265	135.7	39.8	7.93	.59	.76	.95	130.8	38.3	8.95	.60	.78	.97	125.6	36.8	10.14	.61	.80	.98	120.2	35.2	11.46	.62	.83	.99
71°F (22°C)	3200	1510	136.9	40.1	7.94	.40	.51	.63	132.1	38.7	8.97	.40	.52	.64	127.1	37.2	10.14	.40	.52	.65	121.8	35.7	11.46	.40	.53	.66
	4000	1890	141.0	41.3	7.99	.41	.54	.68	135.9	39.8	9.02	.41	.55	.69	130.6	38.3	10.20	.41	.56	.71	124.9	36.6	11.53	.42	.57	.73
	4800	2265	143.6	42.1	8.02	.42	.58	.74	138.4	40.6	9.06	.42	.59	.76	133.0	39.0	10.24	.43	.60	.78	127.0	37.2	11.56	.43	.61	.80

LCA/LGA150S - STANDARD EFFICIENCY - COOLING CAPACITY - ONE COMPRESSOR OPERATING

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			65°F (18°C)						75°F (24°C)						85°F (29°C)						95°F (35°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
			cfm	L/s	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW
63°F (17°C)	3800	1795	75.6	22.2	4.37	.64	.79	.93	73.5	21.5	4.89	.64	.80	.94	71.3	20.9	5.48	.65	.81	.96	68.9	20.2	6.15	.66	.83	.97
	4400	2075	77.3	22.7	4.41	.66	.83	.97	75.2	22.0	4.93	.67	.85	.98	72.9	21.4	5.52	.69	.86	.99	70.5	20.7	6.19	.70	.88	1.00
	5000	2360	78.8	23.1	4.45	.70	.88	1.00	76.6	22.4	4.97	.71	.89	1.00	74.3	21.8	5.55	.72	.91	1.00	71.8	21.0	6.23	.74	.93	1.00
67°F (19°C)	3800	1795	80.1	23.5	4.47	.50	.61	.75	77.8	22.8	4.99	.51	.62	.76	75.5	22.1	5.58	.51	.63	.77	72.9	21.4	6.25	.51	.64	.79
	4400	2075	81.6	23.9	4.51	.52	.64	.80	79.3	23.2	5.03	.52	.65	.81	76.8	22.5	5.61	.53	.66	.83	74.2	21.7	6.28	.53	.67	.85
	5000	2360	82.9	24.3	4.54	.53	.67	.84	80.5	23.6	5.05	.54	.68	.86	78.0	22.9	5.64	.54	.70	.88	75.3	22.1	6.31	.55	.71	.90
71°F (22°C)	3800	1795	84.9	24.9	4.59	.38	.49	.59	82.6	24.2	5.11	.38	.49	.60	80.1	23.5	5.70	.38	.49	.61	77.4	22.7	6.37	.38	.50	.62
	4400	2075	86.5	25.4	4.63	.39	.50	.62	84.1	24.6	5.14	.39	.51	.63	81.5	23.9	5.73	.39	.51	.64	78.7	23.1	6.40	.39	.52	.65
	5000	2360	87.8	25.7	4.66	.39	.52	.65	85.2	25.0	5.17	.39	.53	.66	82.6	24.2	5.77	.40	.53	.67	79.8	23.4	6.44	.40	.54	.69

LCA/LGA150S - STANDARD EFFICIENCY - COOLING CAPACITY - ALL COMPRESSORS OPERATING

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			85°F (29°C)						95°F (35°C)						105°F (41°C)						115°F (46°C)					
			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Comp Motor kW Input	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
			cfm	L/s	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	kBtuh	kW
63°F (17°C)	3800	1795	139.4	40.9	11.02	.66	.81	.95	134.7	39.5	12.36	.67	.83	.96	129.6	38.0	13.90	.68	.85	.98	124.3	36.4	15.62	.70	.87	.99
	4400	2075	142.6	41.8	11.09	.69	.86	.99	137.8	40.4	12.45	.71	.88	1.00	132.7	38.9	13.98	.72	.90	1.00	127.1	37.2	15.71	.74	.92	1.00
	5000	2360	145.3	42.6	11.16	.73	.91	1.00	140.4	41.1	12.52	.74	.92	1.00	135.3	39.7	14.06	.76	.94	1.00	129.8	38.0	15.79	.78	.96	1.00
67°F (19°C)	3800	1795	147.7	43.3	11.22	.52	.64	.78	142.6	41.8	12.57	.53	.65	.79	137.2	40.2	14.10	.53	.66	.81	131.4	38.5	15.83	.54	.67	.83
	4400	2075	150.3	44.0	11.28	.54	.67	.83	145.2	42.6	12.64	.54	.68	.84	139.7	40.9	14.17	.55	.70	.86	133.8	39.2	15.91	.56	.71	.89
	5000	2360	152.6	44.7	11.34	.55	.70	.87	147.3	43.2	12.70	.56	.72	.89	141.7	41.5	14.23	.57	.74	.91	135.6	39.7	15.99	.58	.76	.93
71°F (22°C)	3800	1795	156.6	45.9	11.46	.39	.51	.62	151.4	44.4	12.81	.39	.51	.63	145.7	42.7	14.35	.40	.52	.64	139.6	40.9	16.10	.40	.53	.65
	4400	2075	159.5	46.7	11.53	.40	.52	.65	154.0	45.1	12.88	.40	.53	.66	148.2	43.4	14.43	.40	.54	.67	142.0	41.6	16.18	.41	.55	.69
	5000	2360	161.7	47.4	11.60	.41	.54	.68	156.1	45.7	12.96	.41	.55	.69	150.1	44.0	14.50	.41	.56	.71	143.8	42.1	16.25	.42	.57	.73

HUMIDITROL REHEAT OPTION RATINGS

LCA/LGA090H - REHEAT CAPACITY - FULL LOAD

Entering Wet Bulb Temp erature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil				
			85°F (29°C)				
	Total Cooling Capacity with Humiditrol		Sensible To Total Ratio (S/T) with Humiditrol				
			Dry Bulb				
cfm	L/s	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	
63°F (17°C)	2400	1135	61.0	17.9	0.54	0.75	0.96
	3000	1415	66.7	19.5	0.63	0.88	1.00
	3600	1700	65.3	19.1	0.69	0.97	1.00
67°F (19°C)	2400	1135	70.7	20.7	0.37	0.53	0.72
	3000	1415	73.8	21.6	0.42	0.60	0.83
	3600	1700	74.6	21.9	0.45	0.69	0.93
71°F (22°C)	2400	1135	81.0	23.7	0.26	0.39	0.54
	3000	1415	85.5	25.1	0.29	0.45	0.61
	3600	1700	85.1	24.9	0.28	0.48	0.68

LCA/LGA120H - REHEAT CAPACITY - FULL LOAD

Entering Wet Bulb Temp erature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil				
			85°F (29°C)				
	Total Cooling Capacity with Humiditrol		Sensible To Total Ratio (S/T) with Humiditrol				
			Dry Bulb				
cfm	L/s	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	
63°F (17°C)	3200	1510	84.9	24.9	0.53	0.74	0.96
	4000	1890	88.2	25.8	0.61	0.87	1.00
	4800	2265	92.6	27.1	0.71	0.96	1.00
67°F (19°C)	3200	1510	96.9	28.3	0.38	0.54	0.71
	4000	1890	101.7	29.8	0.43	0.61	0.83
	4800	2265	105.4	30.9	0.47	0.69	0.94
71°F (22°C)	3200	1510	110.0	32.2	0.25	0.39	0.54
	4000	1890	114.9	33.7	0.28	0.44	0.61
	4800	2265	118.5	34.7	0.30	0.49	0.68

LCA/LGA102H - REHEAT CAPACITY - FULL LOAD

Entering Wet Bulb Temp erature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil				
			85°F (29°C)				
	Total Cooling Capacity with Humiditrol		Sensible To Total Ratio (S/T) with Humiditrol				
			Dry Bulb				
cfm	L/s	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	
63°F (17°C)	2720	1285	70.6	20.7	0.54	0.75	0.96
	3400	1605	72.5	21.2	0.60	0.87	1.00
	4080	1925	75.5	22.1	0.69	0.96	1.00
67°F (19°C)	2720	1285	80.2	23.5	0.38	0.54	0.71
	3400	1605	81.2	23.8	0.40	0.60	0.83
	4080	1925	85.7	25.1	0.46	0.69	0.92
71°F (22°C)	2720	1285	91.3	26.8	0.25	0.40	0.53
	3400	1605	92.6	27.1	0.25	0.42	0.60
	4080	1925	95.7	28.0	0.27	0.47	0.67

LCA/LGA150S - REHEAT CAPACITY - FULL LOAD

Entering Wet Bulb Temp erature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil				
			85°F (29°C)				
	Total Cooling Capacity with Humiditrol		Sensible To Total Ratio (S/T) with Humiditrol				
			Dry Bulb				
cfm	L/s	kBtuh	kW	75°F 24°C	80°F 27°C	85°F 29°C	
63°F (17°C)	3800	1795	97.3	28.5	0.51	0.73	0.93
	4400	2075	101.3	29.7	0.56	0.80	0.99
	5000	2360	103.0	30.2	0.62	0.87	1.00
67°F (19°C)	3800	1795	110.8	32.5	0.36	0.52	0.71
	4400	2075	115.3	33.8	0.40	0.57	0.78
	5000	2360	116.2	34.1	0.41	0.61	0.83
71°F (22°C)	3800	1795	124.6	36.5	0.23	0.38	0.52
	4400	2075	129.9	38.1	0.26	0.41	0.57
	5000	2360	131.4	38.5	0.27	0.43	0.61

WEIGHT DATA - ALL MODELS

Model No.	Description	Weight	
		lbs.	kg
Net Weights			
LCA090H	Net weight (Base unit)	1140	517
LGA090H	Net weight (Base unit with low fire heat exchanger)	1220	553
LCA102H	Net weight (Base unit)	1140	517
LGA102H	Net weight (Base unit with low fire heat exchanger)	1220	553
LCA120H	Net weight (Base unit)	1180	535
LGA120H	Net weight (Base unit with low fire heat exchanger)	1260	572
LCA150S	Net weight (Base unit)	1170	531
LGA150S	Net weight (Base unit with low fire heat exchanger)	1250	567
Shipping Weights (Add Factory Installed Options Weights To Base Unit Weights For Total Shipping Weight)			
LCA090H	Base unit	1225	556
LGA090H	Base unit with low fire heat exchanger	1305	592
LCA102H	Base unit	1225	556
LGA102H	Base unit with low fire heat exchanger	1305	592
LCA120H	Base unit	1265	574
LGA120H	Base unit with low fire heat exchanger	1345	610
LCA150S	Base unit	1255	569
LGA150S	Base unit with low fire heat exchanger	1335	606
All Models	High Fire Heat Exchanger (add to Base unit)	40	18
	Economizer (add to Base unit)	66	30
	Humiditrol Option	20	9
	Outdoor Air Damper (add to Base unit)	40	18
	Power Exhaust (add to Base unit)	28	13
	LTL Packaging (less than truck load) (add to Base unit)	105	48

BLOWER DATA

**BLOWER TABLE INCLUDES RESISTANCE FOR LCA090 BASE UNIT ONLY WITH DRY INDOOR COIL & AIR FILTERS IN PLACE.
FOR ALL UNITS ADD:**

- 1 - Wet indoor coil air resistance of selected unit.
- 2 - Any factory installed options air resistance (heat section, economizer, etc.)
- 3 - Any field installed accessories air resistance (duct resistance, diffuser, etc.)

Then determine from blower table blower motor output and drive required.

See Page 11 for wet coil and option/accessory air resistance data.

MINIMUM AIR VOLUME REQUIRED FOR USE WITH OPTIONAL ELECTRIC HEAT

LCA090 & LCA102 requires 3000 cfm (1415 L/s) minimum air with electric heat.

LCA120 & LCA150 models require 4000 cfm (1890 L/s) minimum air with electric heat.

BOLD ITALIC INDICATES FIELD FURNISHED DRIVE

Air Volume cfm (L/s)	Total Static Pressure - in. w.g. (Pa)												
	.20 (50)	.40 (100)	.60 (150)	.80 (200)	1.00 (250)	1.20 (300)	1.40 (350)	1.60 (400)	1.80 (450)	2.00 (495)	2.20 (545)	2.40 (595)	2.60 (645)
	RPM BHP (kW)	RPM BHP (kW)	RPM BHP (kW)	RPM BHP (kW)	RPM BHP (kW)	RPM BHP (kW)	RPM BHP (kW)	RPM BHP (kW)	RPM BHP (kW)	RPM BHP (kW)	RPM BHP (kW)	RPM BHP (kW)	RPM BHP (kW)
2250 (1060)	455 0.30 <i>(0.22)</i>	555 0.45 <i>(0.34)</i>	640 0.60 <i>(0.45)</i>	720 0.80 (0.60)	790 1.00 (0.75)	855 1.20 (0.90)	915 1.40 (1.04)	975 1.60 (1.19)	1030 1.85 (1.38)	1080 2.05 (1.53)	1130 2.30 (1.72)	1175 2.55 (1.90)	1220 2.80 (2.09)
2500 (1180)	475 0.40 <i>(0.30)</i>	575 0.55 <i>(0.41)</i>	660 0.70 <i>(0.52)</i>	735 0.90 (0.67)	805 1.10 (0.82)	870 1.30 (0.97)	930 1.55 (1.16)	985 1.75 (1.31)	1040 2.00 (1.49)	1090 2.25 (1.68)	1140 2.50 (1.87)	1185 2.75 (2.05)	1230 3.00 (2.24)
2750 (1300)	495 0.45 <i>(0.34)</i>	595 0.65 <i>(0.48)</i>	675 0.85 <i>(0.63)</i>	750 1.05 (0.78)	820 1.25 (0.93)	885 1.45 (1.08)	940 1.70 (1.27)	995 1.90 (1.42)	1050 2.20 (1.64)	1100 2.45 (1.83)	1145 2.65 (1.98)	1195 2.95 (2.20)	1240 3.25 (2.42)
3000 (1415)	525 0.55 <i>(0.41)</i>	615 0.75 <i>(0.56)</i>	695 0.95 (0.71)	770 1.20 (0.90)	835 1.40 (1.04)	895 1.60 (1.19)	955 1.85 (1.38)	1010 2.10 (1.57)	1060 2.35 (1.75)	1110 2.65 (1.98)	1160 2.90 (2.16)	1205 3.20 (2.39)	1250 3.45 (2.57)
3250 (1535)	550 0.65 <i>(0.48)</i>	640 0.90 <i>(0.67)</i>	715 1.10 (0.82)	790 1.35 (1.01)	855 1.60 (1.19)	915 1.80 (1.34)	970 2.05 (1.53)	1025 2.35 (1.75)	1075 2.60 (1.94)	1125 2.85 (2.13)	1170 3.15 (2.35)	1215 3.40 (2.54)	1260 3.70 (2.76)
3500 (1650)	580 0.80 <i>(0.60)</i>	665 1.05 <i>(0.78)</i>	740 1.25 (0.93)	810 1.50 (1.12)	870 1.75 (1.31)	930 2.00 (1.49)	985 2.25 (1.68)	1040 2.55 (1.90)	1090 2.85 (2.13)	1135 3.10 (2.31)	1185 3.40 (2.54)	1230 3.70 (2.76)	1270 4.00 (2.98)
3750 (1770)	605 0.95 <i>(0.71)</i>	690 1.20 (0.90)	760 1.45 (1.08)	830 1.70 (1.27)	890 1.95 (1.45)	950 2.25 (1.68)	1005 2.50 (1.87)	1055 2.80 (2.09)	1105 3.10 (2.31)	1150 3.35 (2.50)	1195 3.65 (2.72)	1240 3.95 (2.95)	1285 4.30 (3.21)
4000 (1890)	635 1.10 <i>(0.82)</i>	715 1.40 (1.04)	785 1.65 (1.23)	850 1.90 (1.42)	910 2.20 (1.64)	965 2.45 (1.83)	1020 2.75 (2.05)	1070 3.05 (2.28)	1120 3.35 (2.50)	1165 3.65 (2.72)	1210 3.95 (2.95)	1255 4.30 (3.21)	1295 4.60 (3.43)
4250 (2005)	665 1.30 <i>(0.97)</i>	740 1.60 (1.19)	810 1.85 (1.38)	870 2.15 (1.60)	930 2.45 (1.83)	985 2.75 (2.05)	1040 3.05 (2.28)	1090 3.35 (2.50)	1135 3.65 (2.72)	1185 4.00 (2.98)	1225 4.30 (3.21)	1270 4.65 (3.47)	1310 4.95 (3.69)
4500 (2125)	695 1.50 (1.12)	770 1.80 (1.34)	835 2.10 (1.57)	895 2.40 (1.79)	955 2.70 (2.01)	1005 3.00 (2.24)	1060 3.35 (2.50)	1105 3.65 (2.72)	1155 4.00 (2.98)	1200 4.30 (3.21)	1245 4.65 (3.47)	1285 5.00 (3.73)	1325 5.30 (3.95)
4750 (2240)	725 1.75 (1.31)	795 2.05 (1.53)	860 2.40 (1.79)	920 2.70 (2.01)	975 3.00 (2.24)	1030 3.35 (2.50)	1080 3.65 (2.72)	1125 3.95 (2.95)	1175 4.35 (3.25)	1215 4.65 (3.47)	1260 5.00 (3.73)	1300 5.35 (3.99)	1340 5.70 (4.25)
5000 (2360)	760 2.05 (1.53)	825 2.35 (1.75)	885 2.65 (1.98)	945 3.00 (2.24)	1000 3.35 (2.50)	1050 3.65 (2.72)	1100 4.00 (2.98)	1145 4.35 (3.25)	1190 4.70 (3.51)	1235 5.05 (3.77)	1280 5.45 (4.07)	-----	-----
5250 (2475)	790 2.30 (1.72)	855 2.65 (1.98)	910 2.95 (2.20)	970 3.35 (2.50)	1020 3.65 (2.72)	1070 4.00 (2.98)	1120 4.35 (3.25)	1165 4.70 (3.51)	1210 5.10 (3.80)	1255 5.45 (4.07)	-----	-----	-----
5500 (2595)	820 2.60 (1.94)	880 2.95 (2.20)	940 3.30 (2.46)	995 3.70 (2.76)	1045 4.05 (3.02)	1095 4.40 (3.28)	1145 4.80 (3.58)	1190 5.15 (3.84)	1230 5.50 (4.10)	-----	-----	-----	-----
5750 (2715)	850 2.95 (2.20)	910 3.30 (2.46)	965 3.70 (2.76)	1020 4.05 (3.02)	1070 4.45 (3.32)	1120 4.80 (3.58)	1165 5.20 (3.88)	1210 5.60 (4.18)	-----	-----	-----	-----	-----
6000 (2830)	885 3.35 (2.50)	940 3.70 (2.76)	995 4.10 (3.06)	1045 4.45 (3.32)	1095 4.85 (3.62)	1145 5.25 (3.92)	1190 5.65 (4.21)	-----	-----	-----	-----	-----	-----

FACTORY INSTALLED DRIVE KIT SPECIFICATIONS

Motor Outputs				RPM Range					
Nominal hp	Maximum hp	Nominal kW	Maximum kW	Drive 1	Drive 2	Drive 3	Drive 4	Drive 5	Drive 6
2	2.3	1.5	1.7	680 - 940	-----	850 - 1130	-----	-----	-----
3 Standard	3.45	2.2	2.6	680 - 940	-----	850 - 1130	-----	1105 - 1410	-----
3 High Efficiency	3.45	2.2	2.6	-----	680 - 895	-----	895 - 1120	-----	1110 - 1395
5	5.75	3.7	4.3	-----	-----	-----	895 - 1120	-----	1110 - 1395

NOTE — Using total air volume and system static pressure requirements determine from blower performance tables rpm and motor output required. Maximum usable output of motors furnished by Lennox are shown. In Canada, nominal motor output is also maximum usable motor output. If motors of comparable output are used, be sure to keep within the service factor limitations outlined on the motor nameplate.

BLOWER DATA

FACTORY INSTALLED OPTIONS/FIELD INSTALLED ACCESSORY AIR RESISTANCE

Air Volume		Total Resistance									
		Wet Indoor Coil				Electric Heat		Economizer		Humiditrol Heat Reclaim Coil	
		090H, 102H, 150S		120H							
cfm	L/s	in. w.g.	Pa	in. w.g.	Pa	in. w.g.	Pa	in. w.g.	Pa	in. w.g.	Pa
2250	1060	.06	15	.10	25	.01	2	.035	9	.02	5
2500	1180	.08	20	.12	30	.01	2	.04	10	.03	7
2750	1300	.09	22	.14	35	.01	2	.045	11	.03	7
3000	1415	.10	25	.16	40	.02	5	.05	12	.03	7
3250	1535	.11	27	.19	47	.02	5	.06	15	.04	10
3500	1650	.13	32	.21	52	.03	7	.07	17	.04	10
3750	1770	.14	35	.23	57	.03	7	.075	19	.05	12
4000	1890	.16	40	.26	65	.04	10	.08	20	.05	12
4250	2005	.17	42	.28	70	.04	10	.09	22	.06	15
4500	2125	.18	45	.31	77	.05	12	.10	25	.07	17
4750	2240	.20	50	.33	82	.05	12	.11	27	.07	17
5000	2360	.22	55	.36	90	.06	15	.12	30	.08	20
5250	2475	.24	60	.39	97	.06	15	.13	32	.08	20
5500	2595	.26	65	.42	104	.07	17	.14	35	.09	22
5750	2715	.28	70	.45	112	.07	17	.15	37	.10	25
6000	2830	.30	75	.48	119	.08	20	.16	40	.10	25

CEILING DIFFUSER AIR RESISTANCE

Unit Size	Air Volume		Total Resistance							
			RTD11 Step-Down Diffuser						FD11 Flush Diffuser	
	cfm	L/s	2 Ends Open		1 Side, 2 Ends Open		All Ends & Sides Open			
			in. w.g.	Pa	in. w.g.	Pa	in. w.g.	Pa	in. w.g.	Pa
090 102 & 120 Models	3600	1700	.36	90	.28	70	.23	57	.15	37
	3800	1795	.40	99	.32	80	.26	65	.18	45
	4000	1890	.44	109	.36	90	.29	72	.21	52
	4200	1980	.49	122	.40	99	.33	82	.24	60
	4400	2075	.54	134	.44	109	.37	92	.27	67
	4600	2170	.60	149	.49	122	.42	104	.31	77
	4800	2265	.65	162	.53	132	.46	114	.35	87
	5000	2360	.69	172	.58	144	.50	124	.39	97
150 Models	4200	1980	.22	55	.19	47	.16	40	.10	25
	4400	2075	.28	70	.24	60	.20	50	.12	30
	4600	2170	.34	85	.29	72	.24	60	.15	37
	4800	2265	.40	99	.34	85	.29	72	.19	47
	5000	2360	.46	114	.39	97	.34	85	.23	57
	5200	2455	.52	129	.44	109	.39	97	.27	67
	5400	2550	.58	144	.49	122	.43	107	.31	77
	5600	2645	.64	159	.54	134	.47	117	.35	87
5800	2735	.70	174	.59	147	.51	127	.39	97	

POWER EXHAUST FANS PERFORMANCE

Return Air System Static Pressure		Air Volume Exhausted	
in. w.g.	Pa	cfm	L/s
0	0	4200	1980
0.05	12	3970	1875
0.10	25	3750	1770
0.15	37	3520	1660
0.20	50	3300	1560
0.25	62	3080	1455
0.30	75	2860	1350
0.35	87	2640	1245

*Throw is the horizontal or vertical distance an air stream travels on leaving the outlet or diffuser before the maximum velocity is reduced to 50 ft. (15 m) per minute. Four sides open.

CEILING DIFFUSER AIR THROW DATA

Model No.	Air Volume		*Effective Throw Range			
			RTD11 Step-Down		FD11 Flush	
	cfm	L/s	ft.	m	ft.	m
090 102 120	3600	1700	25 - 33	8 - 10	22 - 29	7 - 9
	3800	1795	27 - 35	8 - 11	22 - 30	7 - 9
	4000	1885	29 - 37	9 - 11	24 - 33	7 - 10
	4200	1980	32 - 40	10 - 12	26 - 35	8 - 11
	4400	2075	34 - 42	10 - 13	28 - 37	9 - 11
150	5600	2645	39 - 49	12 - 15	28 - 37	9 - 11
	5800	2740	42 - 51	13 - 16	29 - 38	9 - 12
	6000	2830	44 - 54	13 - 17	40 - 50	12 - 15
	6200	2925	45 - 55	14 - 17	42 - 51	13 - 16
	6400	3020	46 - 55	14 - 17	43 - 52	13 - 16
	6600	3115	47 - 56	14 - 17	45 - 56	14 - 17

*Throw is the horizontal or vertical distance an air stream travels on leaving the outlet or diffuser before the maximum velocity is reduced to 50 ft. (15 m) per minute. Four sides open.

DIMENSIONS - INCHES (MM)

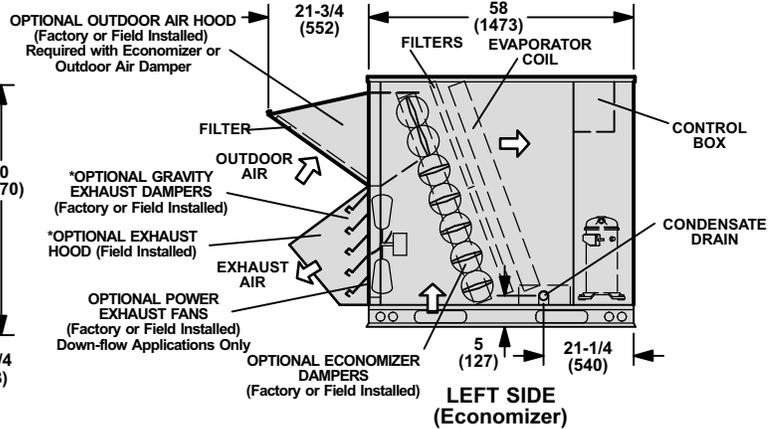
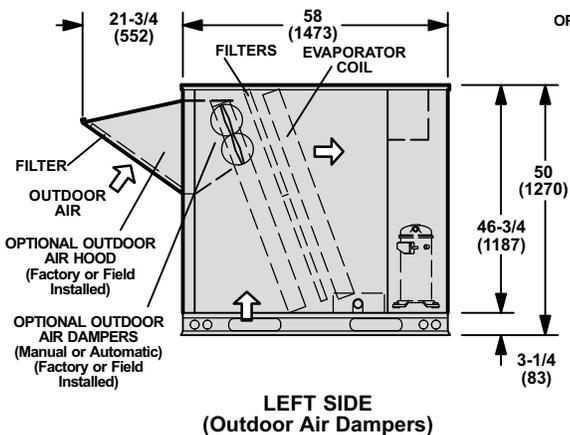
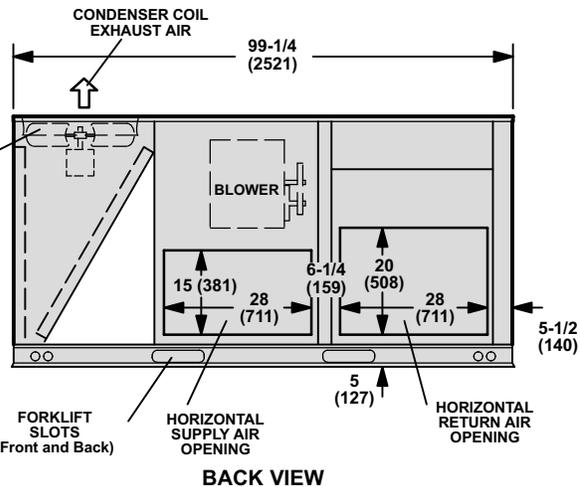
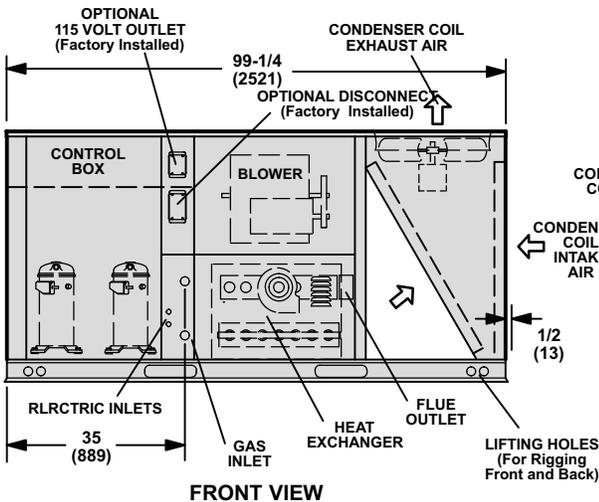
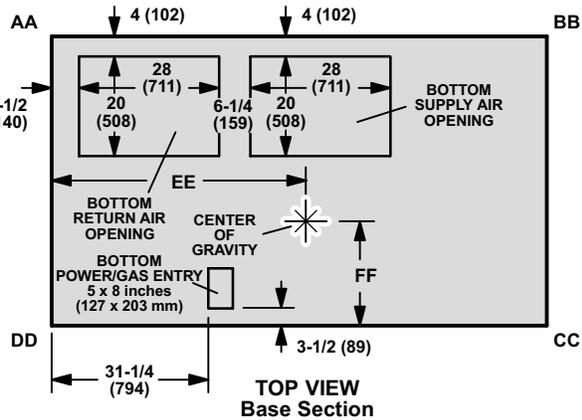
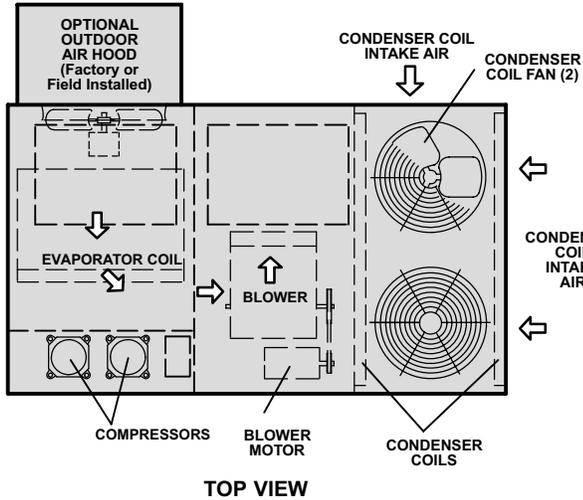
Shown With Optional Economizer Dampers, Power Exhaust Fans, Convenience Outlet, Unit Disconnect

Model Number	AA		BB		CC		DD	
	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg
LGA090H Base Unit	280	127	260	118	300	136	330	150
LGA090H Max. Unit	350	159	320	145	350	159	400	181
LGA102 Base Unit	280	127	260	118	300	136	330	150
LGA102 Max. Unit	350	159	320	145	350	159	400	181
LGA120 Base Unit	290	132	260	118	300	136	330	150
LGA120 Max. Unit	360	163	330	150	360	163	410	186
LGA150 Base Unit	300	136	270	122	300	136	350	159
LGA150 Max. Unit	370	168	320	145	350	159	420	191

Model Number	EE		FF	
	inch	mm	inch	mm
LGA090H Base Unit	47	1194	21-1/2	546
LGA090H Max. Unit	46	1168	21-1/2	546
LGA102 Base Unit	47	1194	21-1/2	546
LGA102 Max. Unit	46	1168	23-1/2	597
LGA120 Base Unit	47	1194	21-1/2	546
LGA120 Max. Unit	46	1168	23-1/2	597
LGA150 Base Unit	46	1168	21	533
LGA150 Max. Unit	45	1143	23	584

Base Unit — The standard unit with NO OPTIONS.
 Max. Unit — The standard unit with ALL OPTIONS installed. (Economizer, Power Exhaust Fans, High Input Heating and Controls)

Base Unit — The standard unit with NO OPTIONS.
 Max. Unit — The standard unit with ALL OPTIONS installed. (Economizer, Power Exhaust Fans, High Input Heating and Controls)



*NOTE — Field Installed in Return Air Duct for Horizontal Applications.

DIMENSIONS - INCHES (MM)

Shown With Optional Economizer Dampers, Power Exhaust Fans, Convenience Outlet, Unit Disconnect

CORNER WEIGHTS - lbs. (kg)

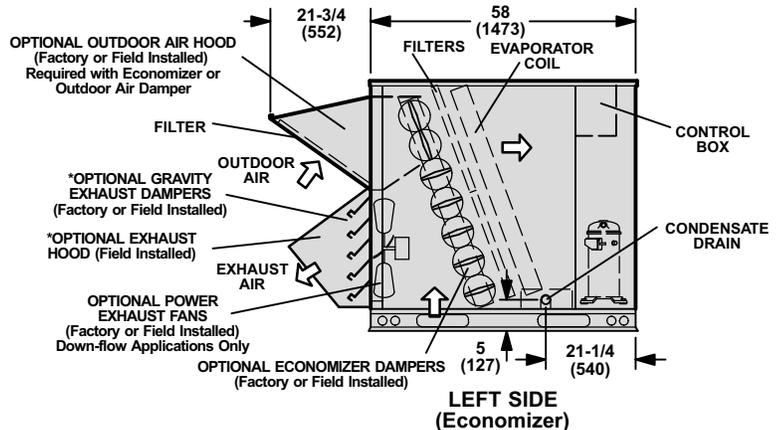
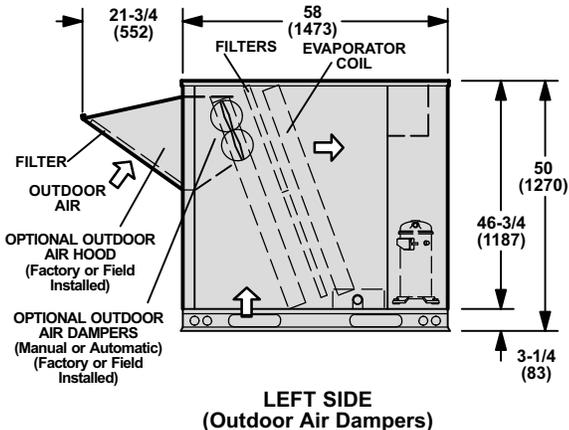
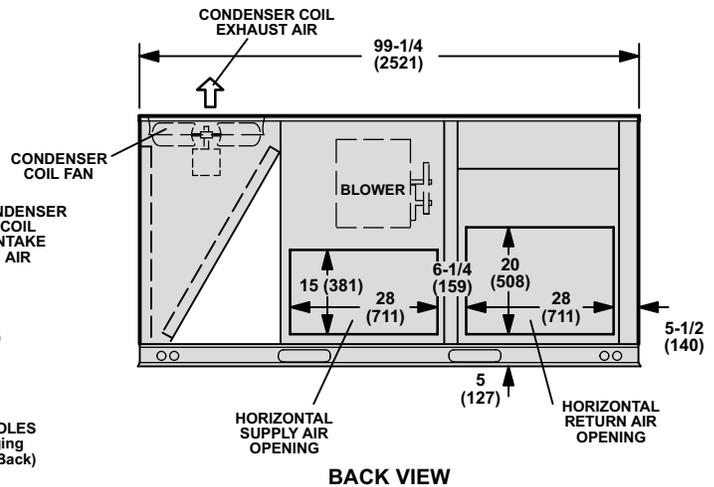
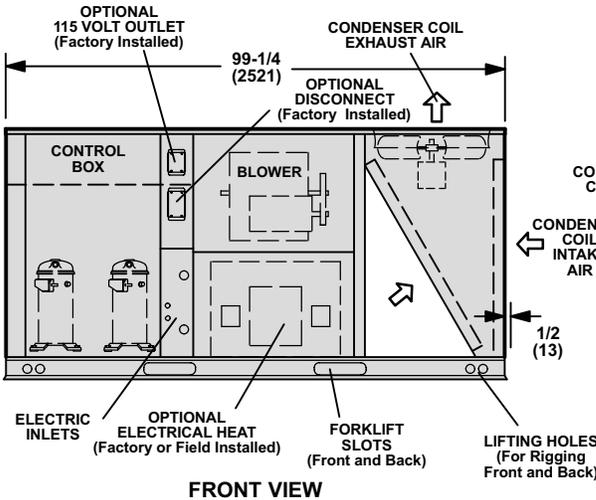
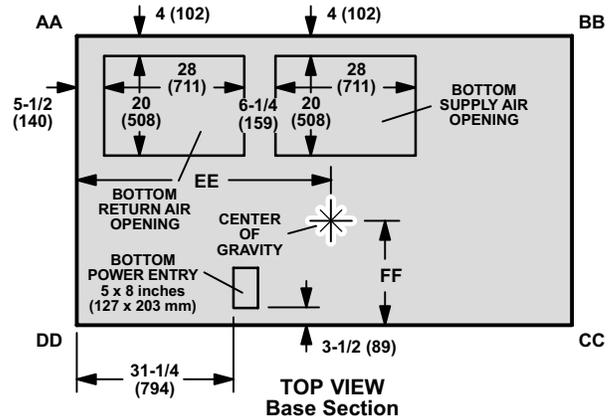
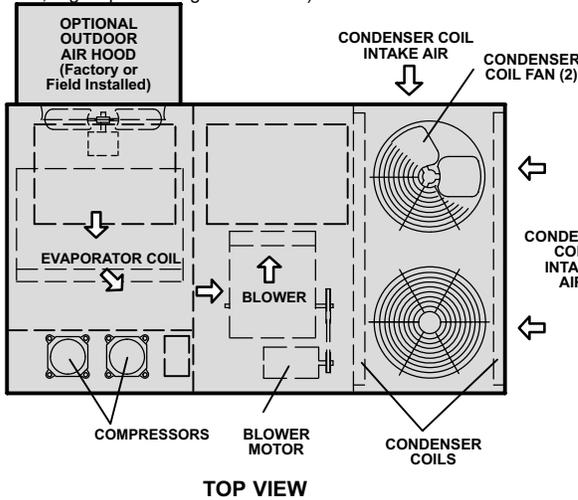
Model Number	AA		BB		CC		DD	
	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg
LCA090H Base Unit	270	122	250	113	280	127	320	145
LCA090H Max. Unit	340	154	300	136	330	150	380	172
LCA102 Base Unit	270	122	250	113	280	127	320	145
LCA102 Max. Unit	340	154	300	136	330	150	380	172
LCA120 Base Unit	270	122	250	113	290	132	320	145
LCA120 Max. Unit	350	159	310	141	340	154	390	177
LCA150 Base Unit	280	127	260	118	290	132	340	154
LCA150 Max. Unit	350	159	300	136	340	154	400	181

CENTER OF GRAVITY - inches (mm)

Model Number	EE		FF	
	inch	mm	inch	mm
LCA090H Base Unit	47	1194	21-1/2	546
LCA090H Max. Unit	45-1/2	1156	23-1/2	597
LCA102 Base Unit	47	1194	21-1/2	546
LCA102 Max. Unit	45-1/2	1156	23-1/2	597
LCA120 Base Unit	47	1194	21-1/2	546
LCA120 Max. Unit	45-1/2	1156	23-1/2	597
LCA150 Base Unit	46	1168	21	533
LCA150 Max. Unit	45	1143	23	584

Base Unit — The standard unit with NO OPTIONS.
 Max. Unit — The standard unit with ALL OPTIONS Installed. (Economizer, Power Exhaust Fans, High Input Heating and Controls)

Base Unit — The standard unit with NO OPTIONS.
 Max. Unit — The standard unit with ALL OPTIONS Installed. (Economizer, Power Exhaust Fans, High Input Heating and Controls)

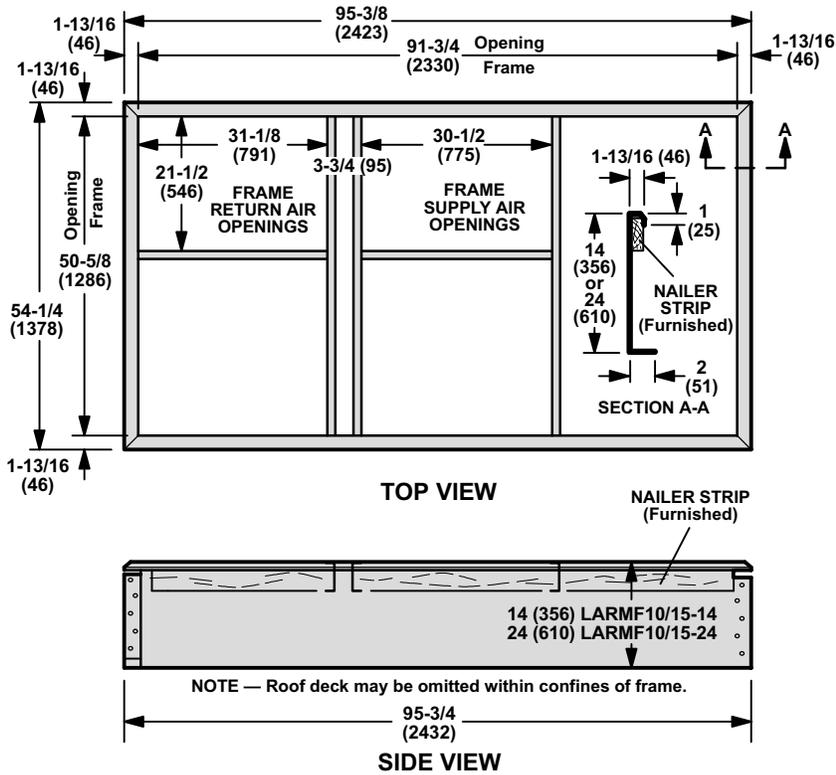


*NOTE — Field Installed in Return Air Duct for Horizontal Applications.

ACCESSORY DIMENSIONS - INCHES (MM)

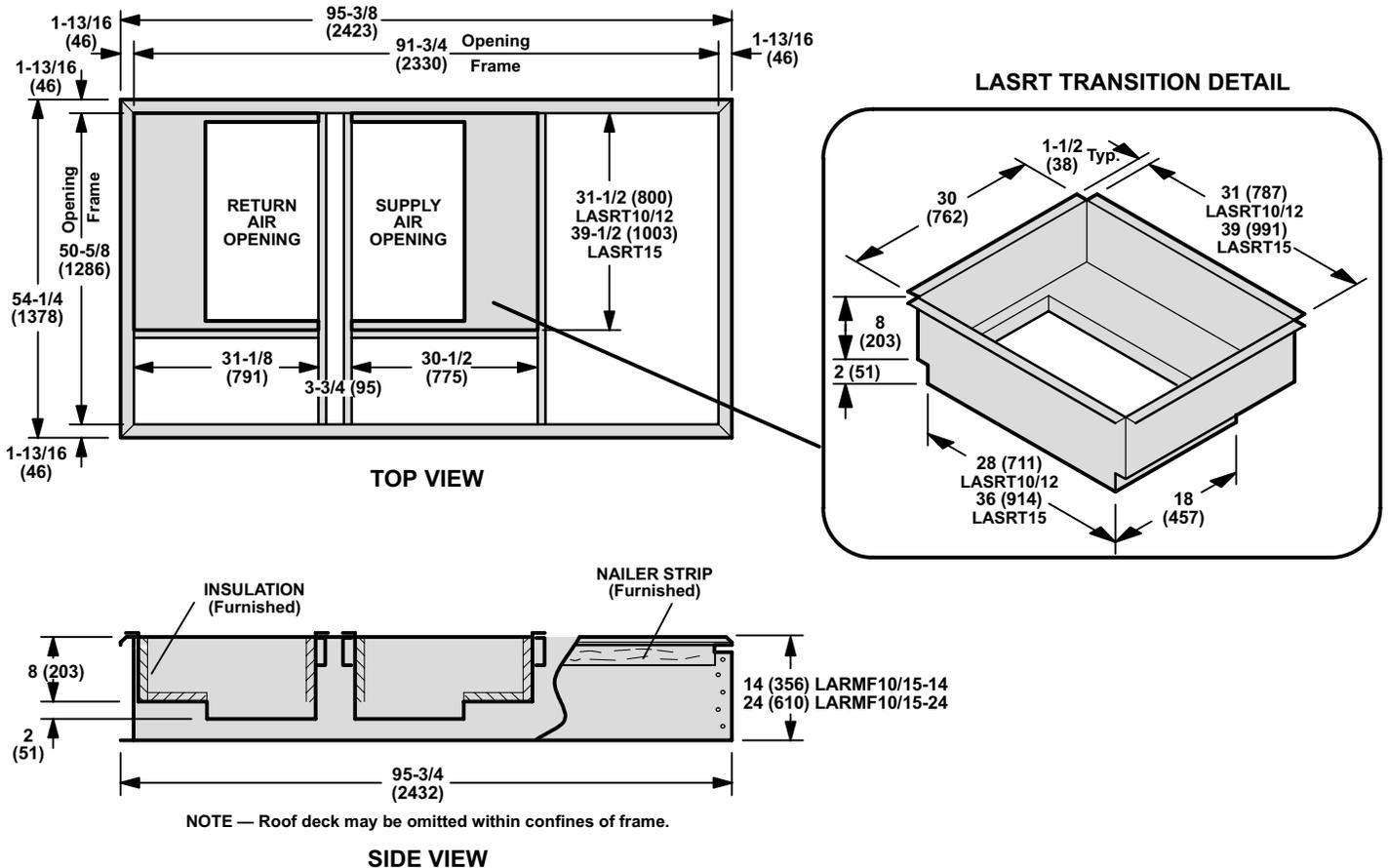
LARMF10/15-14 and LARMF10/15-24 ROOF MOUNTING FRAMES

With Double Duct Opening For 102, 120 & 150 Units



LARMF10/15-14 and LARMF10/15-24 ROOF MOUNTING FRAMES

With LASRT Supply & Return Air Transitions For FD11 & RTD11 Ceiling Diffusers



ACCESSORY DIMENSIONS - INCHES (MM)

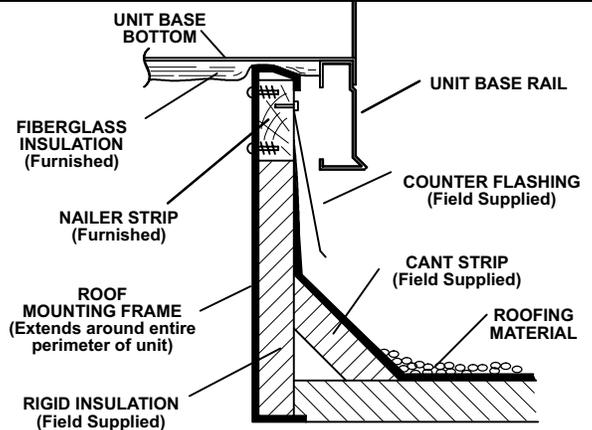
ROOF MOUNTING FRAME SPECIFICATIONS

Roof Mounting frame is rigid enough to be spanned over its entire length or cantilevered if supported on both sides of center of gravity.

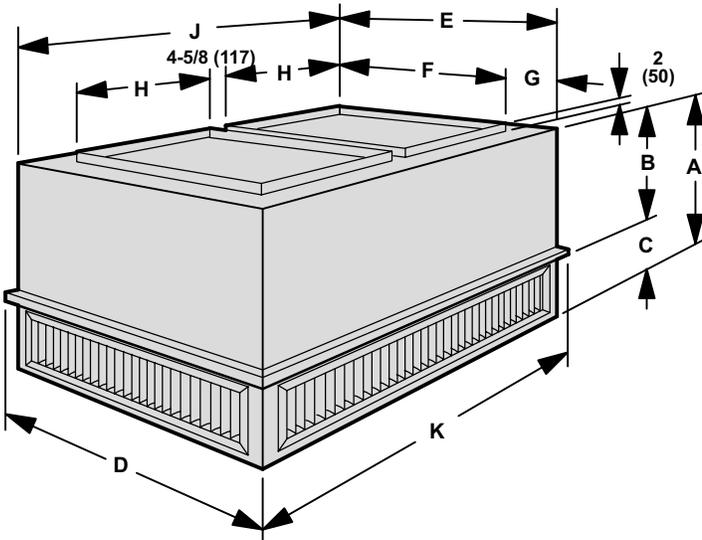
Roof Mounting Frame	LARMF10/15-14	LARMF10/15-24
*Moment of inertia (I) (in. ⁴) (cm ⁴)	39 (1634)	160 (6639)
*Section modulus $\frac{I}{C}$ (in. ³) (cm ³)	5.5 (90)	13.1 (512)
Frame weight. (lb./ft.) (kg/m) of length	5.5 (8.2)	8.5 (12.7)
Design strength (psi) (kPa)	20,000 (137,900)	

*Includes both sides of frame.

Typical Flashing Detail for LARMF10/15 Roof Mounting Frames



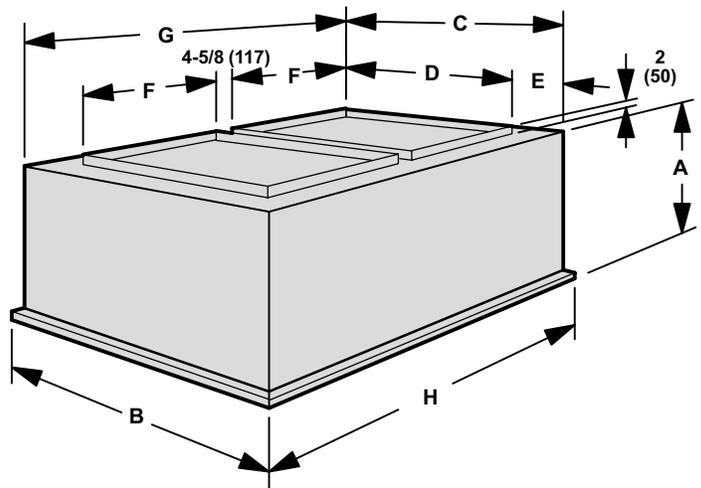
RTD11-135 & RTD11-185 STEP-DOWN CEILING DIFFUSER



Model Number	A		B		C		D		E	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
RTD11-135	28	711	18-7/8	479	9-1/8	232	35-5/8	905	33-5/8	854
RTD11-185	34	864	23-7/8	606	10-1/8	257	47-5/8	1210	45-5/8	1159

Model Number	F		G		H		J		K	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
RTD11-135	28	711	2-13/16	71	18	457	45-5/8	1159	47-5/8	1210
RTD11-185	36	914	4-13/16	122	18	457	45-5/8	1159	47-5/8	1210

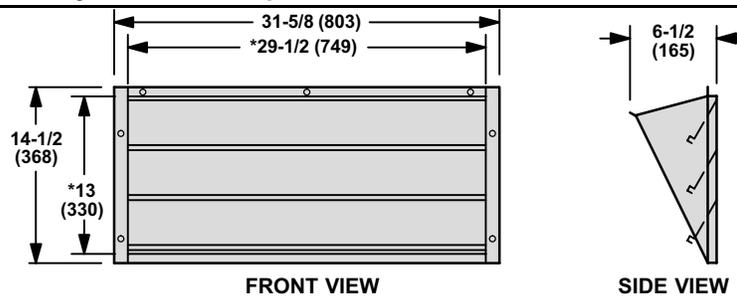
FD11-135 & FD11-185 FLUSH CEILING DIFFUSER



Model Number	A		B		C		D	
	inch	mm	inch	mm	inch	mm	inch	mm
FD11-135	24-1/8	613	35-5/8	905	33-5/8	854	28	711
FD11-185	30-1/8	613	47-5/8	1210	45-5/8	1159	36	914

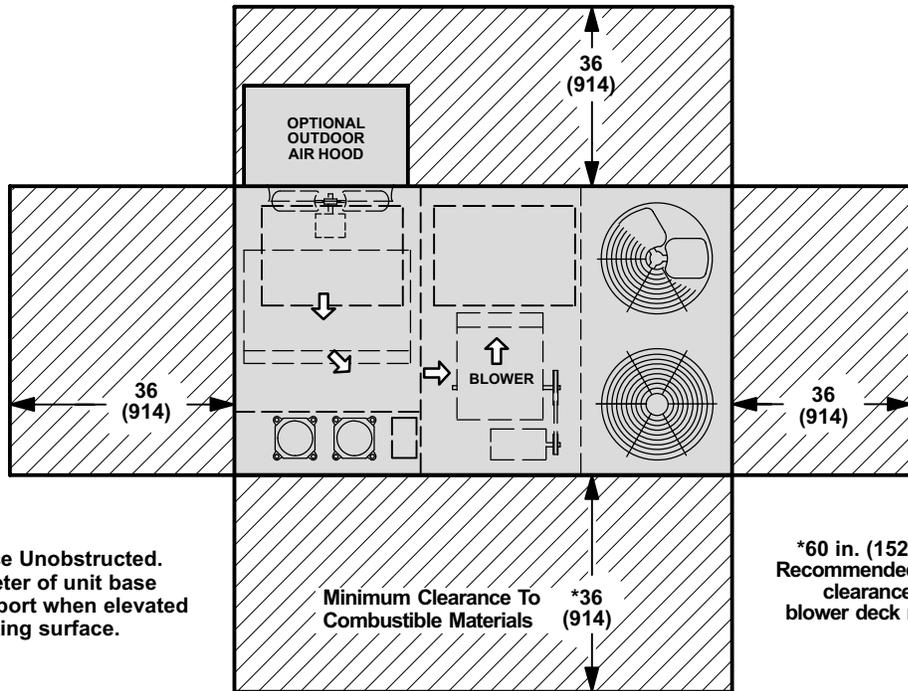
Model Number	E		F		G		H	
	inch	mm	inch	mm	inch	mm	inch	mm
FD11-135	2-13/16	71	18	457	45-5/8	1159	47-5/8	1210
FD11-185	4-13/16	122	18	457	45-5/8	1159	47-5/8	1210

LAGEDH03/15 Horizontal Gravity Exhaust Dampers - Field Installed in Return Air Duct



*NOTE — Opening size required in return air duct.

INSTALLATION CLEARANCES - INCHES (MM)



NOTE — Top Clearance Unobstructed.
NOTE — Entire perimeter of unit base
requires support when elevated
above mounting surface.