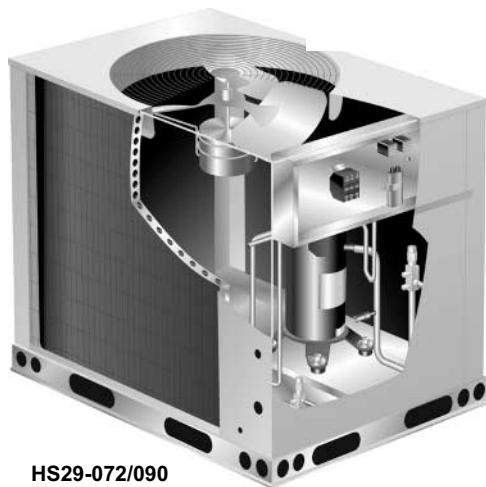
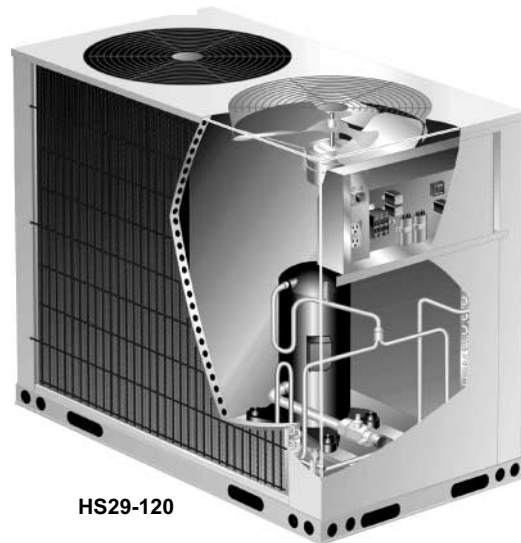


HS29-180/240

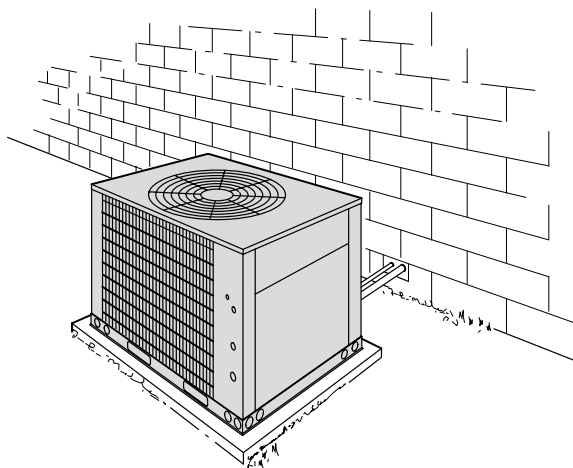


HS29-072/090

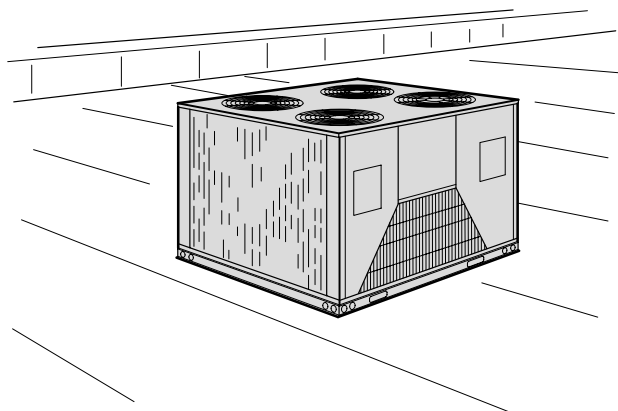


HS29-120

Typical Applications



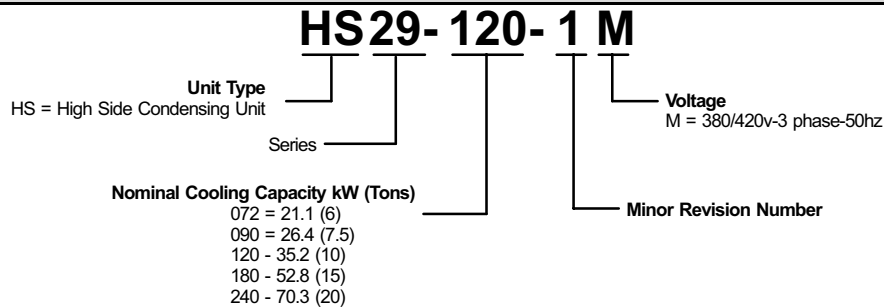
Unit on a slab at grade level



Rooftop Installation

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.

MODEL NUMBER IDENTIFICATION



FEATURES

Applications

- Condensing units available in 21.1, 26.4, 35.2, 52.8 and 70.3 kW (6, 7.5, 10, 15 and 20 ton) nominal sizes.
- Designed for applications with remotely located blower-coil unit or furnace with add-on evaporator coil.
- See rating tables for efficiencies and capacities.
- For blower-coil unit or evaporator unit data, see bulletins indexed in tab section Coils-Blower Coil Units.
- All units shipped factory assembled, piped and wired.
- Test operated at factory to ensure dependable operation.

Completely Tested

- All units tested in Lennox Research Laboratory environmental test room which meet American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) Standard 37 requirements.
- Condensing units with a capacity less than 19 kW (65,000 Btuh) are rated in accordance with Air Conditioning and Refrigeration Institute (ARI) Standard 210/240-94 while operating at rated voltages and air volumes.
- Condensing units with a capacity of 19 kW (65,000 Btuh) or greater are rated in accordance with Air Conditioning and Refrigeration Institute (ARI) Standard 340/360-93 while operating at rated voltages and air volumes.
- Sound tested in Lennox reverberant sound test room in accordance with test conditions included in Air Conditioning and Refrigeration Institute (ARI) Standard 270-95.
- Units and components within are bonded for grounding to meet safety standards for servicing required by Underwriter's Laboratories (UL) and the International Electrotechnical Commission (IEC).

Compressors

- HS29-072, HS29-090 and HS29-120 feature a single scroll compressor.
- HS29-180 and HS29-240 have two scroll compressors.
- 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 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.
- 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 resilient rubber mounts for vibration free operation.

Crankcase Heater (All Models)

- Assures proper compressor lubrication at all times.

Cabinet

- Heavy gauge steel cabinet with five station metal wash process.
- Pre-painted panels provides superior rust and corrosion protection.
- Removeable panels allow access for unit servicing. See dimension drawings.
- Heavy duty steel base channels raise the unit off of mounting surface away from damaging moisture.
- Unit lifting holes and forklift slots furnished in base rails. See dimension drawings.

Control Box

- Control box located in separate compartment in unit cabinet (072, 090, 120 models).
- Hinged panel with quarter turn fastener for easy access.
- Slide out control box allows easy access to controls (180, 240 models).
- All controls are pre-wired at the factory.

Outdoor Fan(s)

- HS29-072, HS29-090 units have one outdoor fan.
- HS29-120 units have two outdoor fans.
- HS29-180, HS29-240 units have four outdoor fans.
- Direct drive fan(s) moves large volumes of air uniformly through entire condenser coil(s) for high refrigerant cooling capacity.
- Upward discharge of air reduces operating sound levels and prevents damage to lawns, shrubs and walkways.
- Fan motors are totally enclosed, inherently protected and equipped with a rain shield.
- Fan service access is accomplished by removal of fan guards.

FEATURES

Copper Tube/Enhanced Fin Coil(s)

- HS29-072 equipped with single "L" shaped coil.
- HS29-090 equipped with single "U" shaped coil.
- HS29-120 equipped with two slab coils.
- HS29-180, HS29-240 equipped with four slab coils.
- Lennox designed and fabricated coils constructed of precisely spaced ripple-edge aluminum fins machine fitted to seamless copper tubes.
- Lanced fins provide maximum exposure of fin surface to air stream resulting in excellent heat transfer.
- Fins equipped with collars that grip tubing for maximum contact area.
- Flared shoulder tubing connections and silver soldering provide tight, leakproof joints.
- Long life copper tubing is corrosion-resistant and easy to field service.
- Thoroughly factory tested under high pressure to insure leakproof construction.
- Completely accessible for cleaning.

Coil Guard

- Corrosion resistant PVC (polyvinyl chloride) coated steel wire guard(s) furnished as standard.

Minimum Run Time Control

- Prevents compressor short cycling and assures oil return to compressor.
- 5 minute minimum run time regardless of cooling demand.

Refrigerant Lines and Service Valves

- Sweat connections.
- Fully serviceable liquid and suction line service valves provide complete service access to refrigerant system. Suction valve can be fully shut off, while liquid valve can be front seated to manage refrigerant charge while servicing system.

Hi-Capacity Drier

- Furnished for field installation. Drier traps any moisture or dirt that could contaminate the refrigerant system.

High Pressure Switch

- Shuts off unit if abnormal operating conditions cause discharge pressure to rise above setting.
- Protects the compressor from excessive condensing pressure.
- Manual reset.

Low Pressure Switch

- Shuts off unit if suction pressure falls below setting.
- Provides loss of charge and freeze-up protection.
- Automatic reset.

Low Ambient Operation

- Units will operate satisfactorily down to -18°C (0°F) outdoor air temperature without any additional controls.

OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA

Thermostat

- Thermostat is not furnished with unit and must be ordered extra.
- See Lennox Price Book.

Hail Guard Protection

- Heavy duty field installed coil guard protects coils from damage.
- HS29-072 uses **(86K90)**.
 - HS29-090 uses **(83K36)**.
 - HS29-120, HS29-180, HS29-240 use **(79K91)**.

Hot Gas Bypass

- Available for HS29-072, HS29-090, HS29-120 only.
- HS29-072 and HS29-090 may use hot gas by-pass for low ambient operation down to -18°C (0°F).
- Field installed kit **(79K90)** contains hot gas bypass valve and superheat valve for reduced capacity control of condensing units.

Line Monitor

- Protects units from phase reversal, single phasing, low voltage and voltage unbalance **(25J98)**.

ELECTRICAL DATA

Model Number		HS29-072	HS29-090	HS29-120	HS29-180	HS29-240
Line voltage data - 50 hz 3 phase with neutral		380/420V				
Voltage range (minimum - maximum)		342 - 462V	360 - 440V			
Compressors	Number of Compressors	1			2	
	Rated load amps (total)	9	14.7	17.2	14.7 (29.4)	17.2 (34.4)
	Locked rotor amps (total)	75	95	125	95 (190)	125 (250)
Condenser Coil Fan Motor(s) (1 phase)	Full load amps (total)	1.5	1.5	1.3 (2.6)	1.3 (5.2)	1.3 (5.2)
	Locked rotor amps (total)	3	3	2.4 (4.8)	2.4 (9.6)	2.4 (9.6)

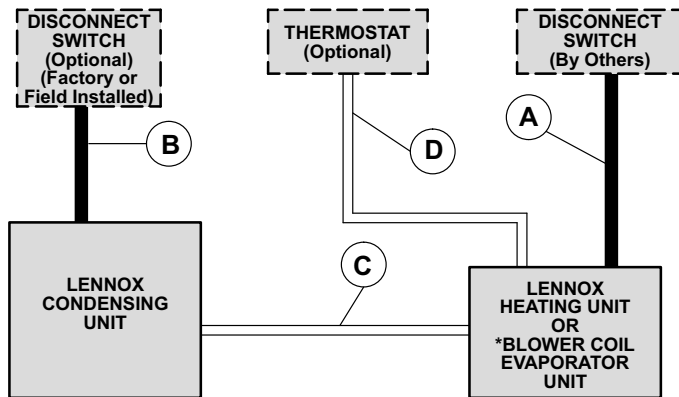
NOTE - Refer to local electrical codes to determine wire, fuse and disconnect size requirements.

SPECIFICATIONS											
Model Number			HS29-072	HS29-090	HS29-120	HS29-180	HS29-240				
Nominal Size - kW (Tons)			21 (6)	26 (7.5)	35 (10)	53 (15)	70 (20)				
Liquid line (outside diameter) - mm (in.) connection (sweat)			15.9 (5/8)			(2) 15.9 (5/8)					
Suction line (outside diameter) - mm (in.) connection (sweat)			28.6 (1-1/8)	34.9 (1-3/8)		(2) 34.9 (1-3/8)					
Condenser Coil	Net face area — m ² (sq. ft.)	Outer coil	1.20 (12.92)	1.52 (16.35)	2.73 (29.36) total		5.45 (58.68) total				
		Inner coil	1.17 (12.59)	1.46 (15.70)	-----						
	Tube diameter — mm (in.) & number of rows		9.5 (3/8) - 2				9.5 (3/8) - 1	9.5 (3/8) - 2			
	Fins per m (inch)		787 (20)			630 (15)	787 (20)	630 (15)			
Condenser Fan(s)	Diameter — mm (in.) and number of blades		(1) 610 (24) - 4		(2) 610 (24) - 3	(4) 610 (24) - 3					
	Motor output — W (hp)		(1) 373 (1/2)		(2) 249 (1/3)	(4) 249 (1/3)					
	m ³ /s (cfm) total air volume		1.77 (3750)	1.89 (4000)	3.22 (6830)	6.29 (13 300)					
	Rev/min		1060			1100	1075				
	Motor input - W		500	375	585 total	1500 total	1250 total				
Refrigerant charge			dry air								
Shipping weight — kg (lbs.) 1 package			161 (354)	198 (437)	257 (567)	453 (998)	539 (1189)				

RATINGS													
Condensing Unit Model Number (*Sound Rating Number-db)	★Cooling Ratings								Evaporator Unit			**Expansion Valve	
	Total Cooling Capacity		†Net Cooling Capacity		Total Power Input kW	Coefficient of Performance (Output/Input)	Energy Efficiency Ratio (Btuh/Watt)	Integrated Part Load Value	Up-Flow	Down-Flow	Horizontal		
	kW	Btuh	kW	Btuh									
HS29-072 (86)	17.5	59 600	16.6	56 600	6.16	2.7	9.2	-----	C23-51/65	-----	-----	LB-85663K (26K35)	
	17.1	58 400	16.2	55 400	6.14	2.6	9.0	-----	-----	CR26-65	-----		
	18.1	61 700	17.2	58 700	6.19	2.8	9.5	-----	-----	-----	CH23-68		
		kW	Btuh	kW	Btuh	kW	C.O.P.	EER	IPLV	Blower Coil Units			Valve
	16.9	57 700	15.5	53 000	6.61	2.3	8.0	-----	CB29M-65 (Multi-position)			●Factory Installed	
19.1	65 000	18.5	63 100	5.97	3.1	10.6	-----	CB17-95V	-----	CBH17-95V			
□HS29-090 (86)		kW	Btuh	kW	Btuh	kW	C.O.P.	EER	IPLV	Blower Coil Units			Valve
	24.6	84 000	23.7	81 000	8.3	2.9	9.7	-----	CB17-95V	-----	CBH17-95V	●Factory Installed	
	25.1	86 000	24.6	84 000	8.4	2.9	10.0	-----	CB17-135V	-----	CBH17-135V		
□HS29-120 (90)		kW	Btuh	kW	Btuh	kW	C.O.P.	EER	IPLV	Blower Coil Units			Valve
	30.7	105 000	29.6	101 000	10.4	2.8	9.7	-----	CB17-95V	-----	CBH17-95V	●Factory Installed	
	32.2	110 000	31.0	106 000	10.6	3.0	10.1	-----	CB17-135V	-----	CBH17-135V		
□HS29-180		kW	Btuh	kW	Btuh	kW	C.O.P.	EER	IPLV	Blower Coil Units			Valve
	48.6	166 000	47.4	162 000	16.0	3.0	10.1	10.5	CB17-185V	-----	CBH17-185V	●Factory Installed	
□HS29-240		kW	Btuh	kW	Btuh	kW	C.O.P.	EER	IPLV	Blower Coil Units			Valve
	66.2	226 000	63.8	218 000	22.2	2.9	9.8	10.8	CB17-275V	-----	CBH17-275V	●Factory Installed	

*Sound rating number rated at test conditions for Air-Conditioning and Refrigeration Institute (ARI) Standard 270.
 ★The rating test conditions are those included in Air-Conditioning and Refrigeration Institute (ARI) Standard 210/240 or □340/360 while operating at rated voltage and air volumes; Cooling Ratings — 35°C (95°F) outdoor air temperature, 26.7°C (80°F) dry bulb and 19.4°C (67°F) wet bulb entering evaporator air (>minimum external duct static pressure) with 7.5 m (25 feet) of connecting refrigerant lines.
 ●Furnished as standard with coil.
 ** Kit is required and must be ordered extra, unless shown as factory installed.
 †Net Cooling Capacity = Gross Cooling Capacity minus heat added by indoor blower motor (365W per 1000 cfm (0.47 m³/s or 3.413 Btu/W on blower coils).

FIELD WIRING



- A — Three Phase With Neutral (not furnished)
- B — Three Phase With Neutral (not furnished) — See Electrical Data
- C — Two Wire 24V (not furnished)
- D — Four Wire 24V (not furnished)

NOTE - Field wiring not furnished by Lennox.

All wiring must conform to local electrical codes.

*CB17/CBH17 applications without electric heat require a separate 70VA (minimum rating) transformer.

GUIDE SPECIFICATIONS

Prepared for the guidance of architects, consulting engineers and mechanical contractors.

General

- Furnish and install an air cooled condensing unit.
- Unit shall be shipped completely factory assembled, piped and wired internally ready for field connections.
- Manufacturer shall test operate unit at the factory before shipment.
- Unit shall be a standard product of a firm regularly engaged in the manufacture of heating-cooling equipment.
- Manufacturer shall have parts and service available throughout the United States and Canada.

Compressor

- HS29-072, HS29-090 and HS29-120 shall have single speed scroll compressor. HS29-180, HS29-240 shall have two single speed scroll compressors.
- Compressors shall be resiliently mounted, suction cooled, overload protected, and have internal excessive current and temperature protection.
- All compressors shall have crankcase heater.

Refrigerant System

- Shall include fully serviceable liquid and suction line service valves, gauge ports, hi-capacity driers (field installed), high pressure switch, low pressure switch and minimum run time control.
- Control options available shall include thermostat.

Outdoor Coil(s)

- Coil(s) shall be non-ferrous construction with aluminum enhanced fins mechanically bonded to copper tubes.
- Coil(s) shall be pressure leak tested.
- Coil(s) shall be protected with steel guard(s).

Cabinet

- Shall be constructed of galvanized steel which has been through a metal wash preparation and have a pre-painted finish.
- Openings shall be provided for refrigerant lines and power connection entry.

Air Mover

- Shall be direct drive propeller type fan(s).
- Motor(s) shall have inherent protection devices and shall be protected from moisture.
- Fan(s) shall be protected with steel guard(s).

OPTIONAL ACCESSORIES

Hot Gas Bypass

- Available for HS29-072, HS29-090, HS29-120 models only.
- Furnish and field install hot gas bypass kit.
- Two kits shall be available: hot gas bypass to suction kit containing hot gas bypass valve and de-superheating valve or hot gas bypass to evaporator kit containing hot gas bypass valve.

Hail Guards

- Furnish and field install heavy duty coil guard to protect coils.

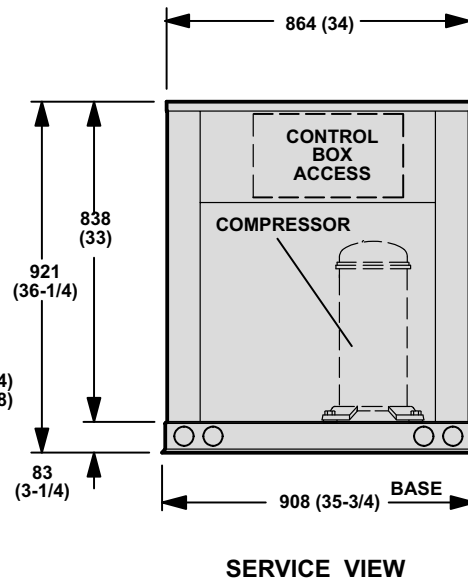
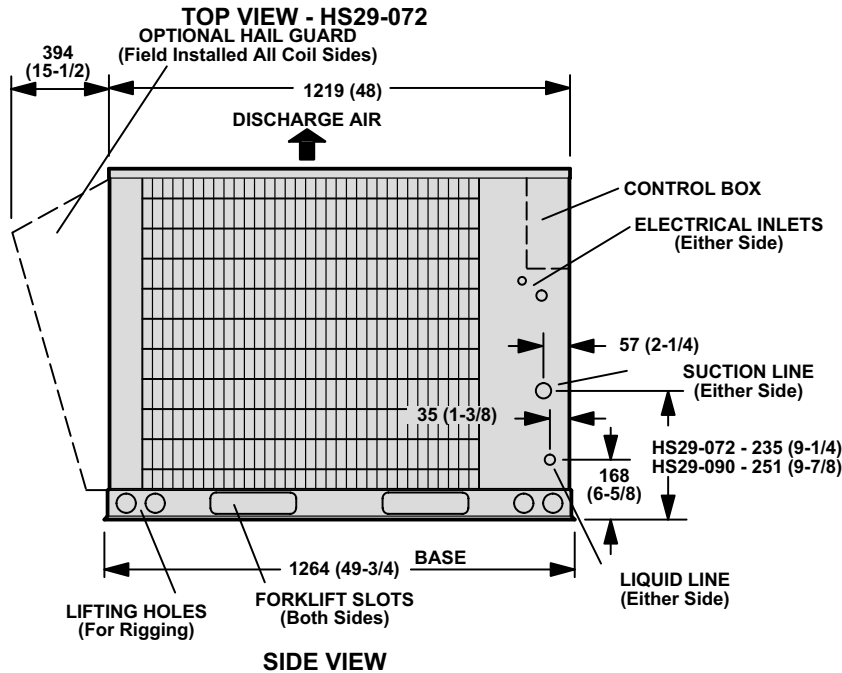
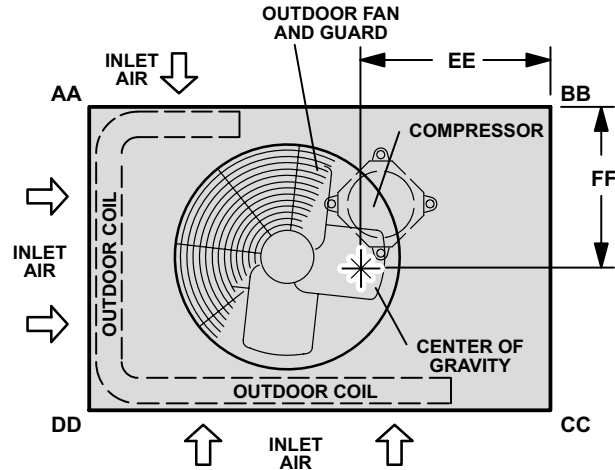
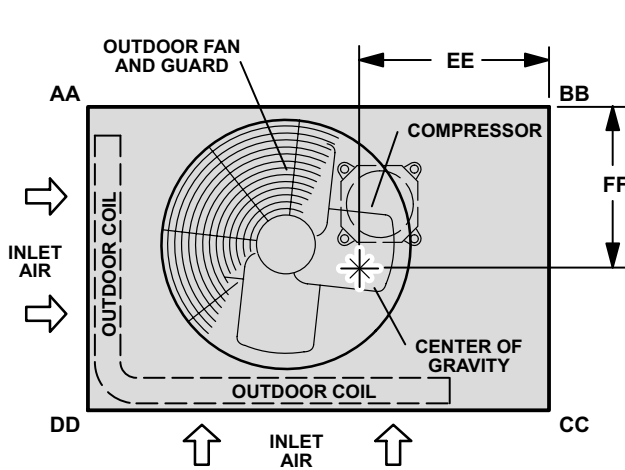
DIMENSIONS - HS29-072 & HS29-090

CORNER WEIGHT

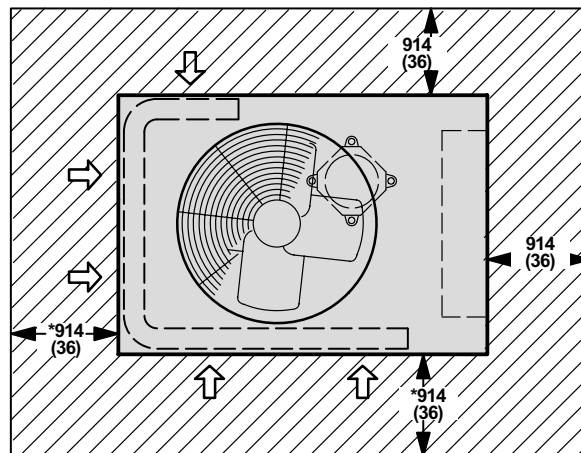
Model No.	AA		BB		CC		DD	
	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.
HS29-072	36	79	42	93	38	83	32	70
HS29-090	41	91	39	86	49	107	52	114

CENTER OF GRAVITY

Model No.	EE		FF	
	mm	inch	mm	inch
HS29-072	575	22-5/8	422	16-5/8
HS29-090	648	25-1/2	406	16



INSTALLATION CLEARANCES - HS29-072 & HS29-090



NOTE—48 inches (1219 mm) clearance required on top of unit.
 *NOTE—One side of coil may be 12 inches (305 mm).

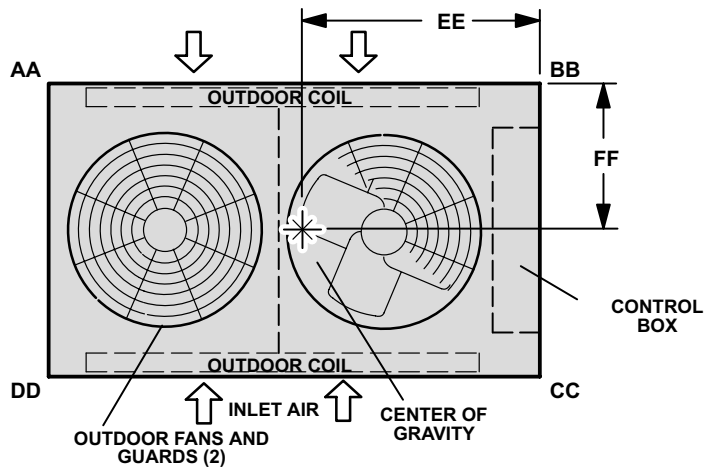
DIMENSIONS - HS29-120

CORNER WEIGHT

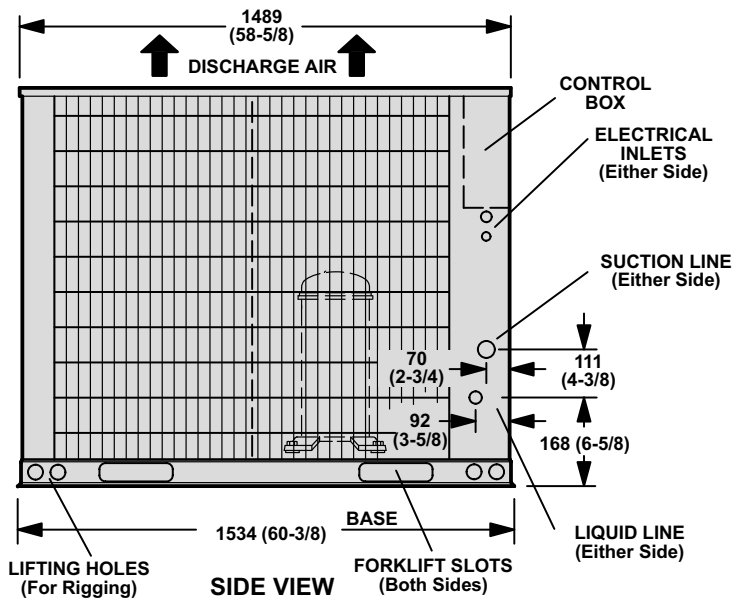
Model No.	AA		BB		CC		DD	
	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.
HS29-120	53	117	67	148	64	140	50	111

CENTER OF GRAVITY

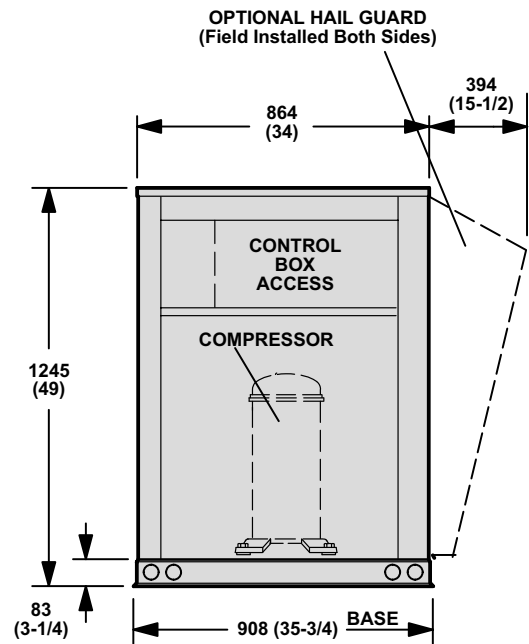
Model No.	EE		FF	
	mm	inch	mm	inch
HS29-120	673	26-1/2	464	18-1/4



TOP VIEW

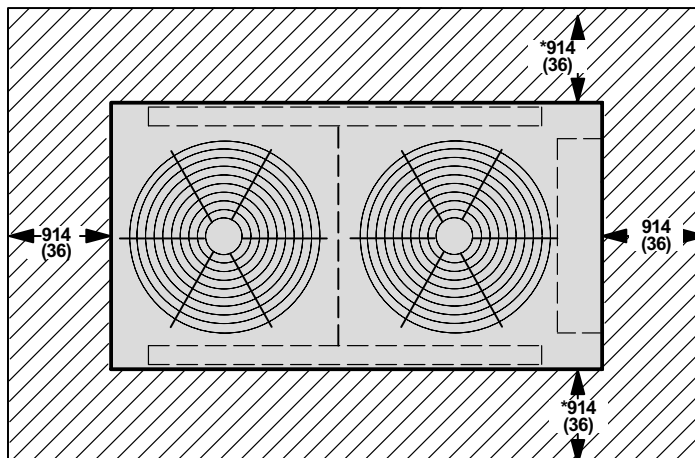


SIDE VIEW



SERVICE VIEW

INSTALLATION CLEARANCES - HS29-120



NOTE— 1219 mm (48 inches) clearance required on top of unit.

*NOTE— One side of coil may be 305 mm (12 inches).

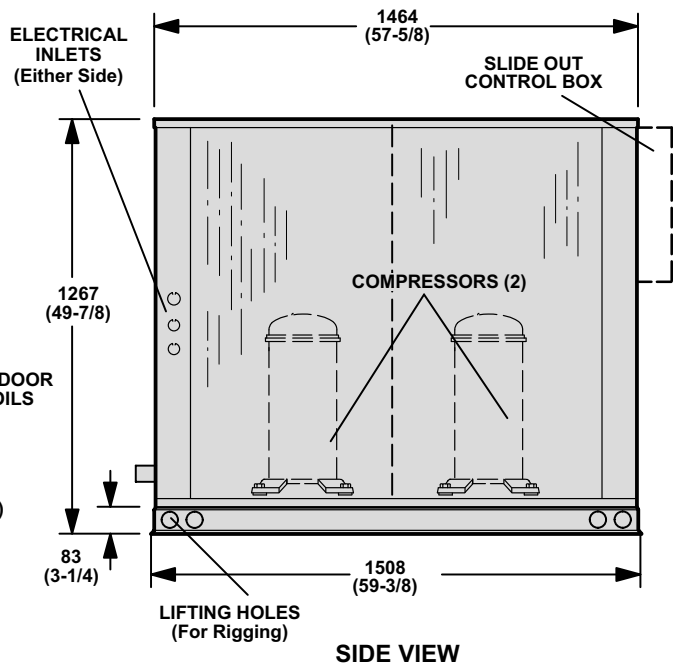
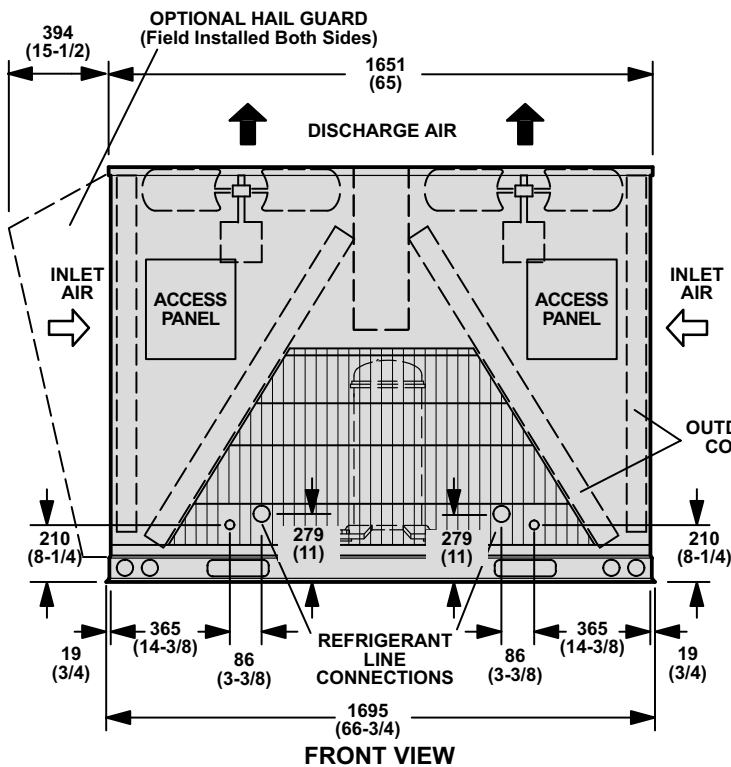
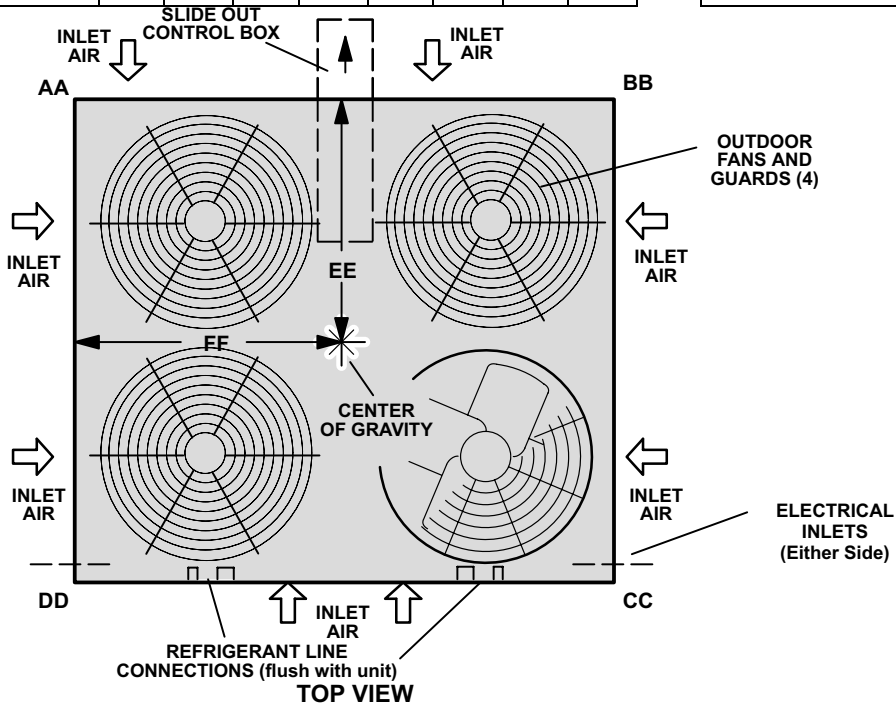
DIMENSIONS - HS29-180 & HS29-240

CORNER WEIGHT

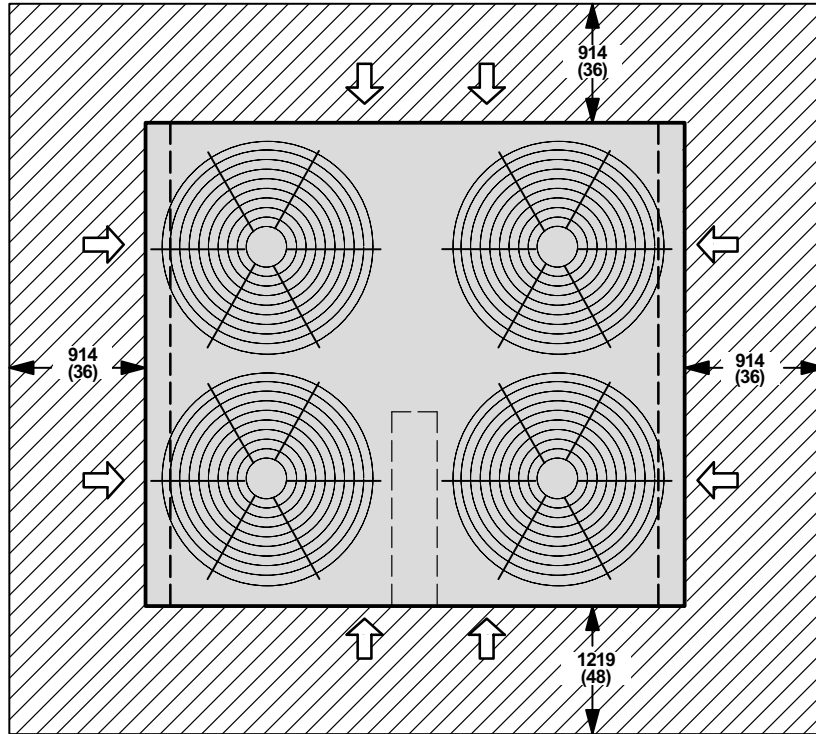
Model No.	AA		BB		CC		DD	
	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.
HS29-180	105	232	103	227	103	227	105	232
HS29-240	130	287	130	287	122	268	122	268

CENTER OF GRAVITY

Model No.	EE		FF	
	inch	mm	inch	mm
HS29-180	29-1/4	743	33-1/4	845
HS29-240	28-1/2	724	33-1/4	845



INSTALLATION CLEARANCES - HS29-180 & HS29-240



NOTE— 1219 mm (48 inches) clearance required on top of unit.

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.

HS29-072 — C23-51/65

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Temperature																							
			27°C (80°F)						35°C (95°F)						43°C (110°F)						52°C (125°F)					
			Total Cooling Capacity		Compressor Motor kW	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor kW	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor kW	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor kW	Sensible To Total Ratio (S/T)		
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb		
m ³ /s	cfm	kW	Btuh	kW	24°C 75°F	27°C 80°F	29°C 85°F	kW	Btuh	kW	24°C 75°F	27°C 80°F	29°C 85°F	kW	Btuh	kW	24°C 75°F	27°C 80°F	29°C 85°F	kW	Btuh	kW	24°C 75°F	27°C 80°F	29°C 85°F	
17.2°C (63°F)	0.91	1920	17.0	58 000	3.98	.74	.89	1.0	16.1	54 800	4.71	.76	.92	1.0	15.0	51 300	5.59	.79	.95	1.0	14.0	47 600	6.60	.82	.98	1.0
	1.13	2400	17.6	60 100	4.02	.80	.96	1.0	16.7	56 900	4.75	.82	.98	1.0	15.7	53 500	5.63	.85	1.0	1.0	14.6	49 800	6.66	.89	1.0	1.0
	1.36	2880	18.2	62 100	4.05	.86	1.0	1.0	17.3	59 000	4.79	.88	1.0	1.0	16.3	55 500	5.67	.91	1.0	1.0	15.2	51 700	6.70	.95	1.0	1.0
19.4°C (67°F)	0.91	1920	18.0	61 500	4.04	.57	.72	.86	17.0	58 000	4.77	.59	.74	.88	15.9	54 200	5.65	.60	.76	.92	14.7	50 000	6.66	.62	.79	.95
	1.13	2400	18.5	63 200	4.07	.61	.78	.93	17.5	59 600	4.81	.62	.80	.96	16.3	55 600	5.68	.64	.83	.98	15.0	51 300	6.69	.67	.87	1.0
	1.36	2880	18.9	64 500	4.09	.64	.83	.99	17.8	60 800	4.83	.66	.86	1.0	16.6	56 700	5.70	.68	.90	1.0	15.3	52 300	6.73	.71	.94	1.0
21.7°C (71°F)	0.91	1920	19.2	65 500	4.11	.43	.56	.69	18.1	61 800	4.85	.43	.57	.71	16.9	57 700	5.72	.44	.59	.74	15.6	53 300	6.75	.44	.61	.77
	1.13	2400	19.7	67 200	4.15	.44	.60	.76	18.6	63 300	4.88	.44	.61	.78	17.3	59 000	5.76	.45	.63	.81	16.0	54 500	6.78	.46	.66	.85
	1.36	2880	20.0	68 300	4.17	.45	.64	.81	18.8	64 300	4.90	.46	.65	.84	17.6	60 000	5.78	.47	.68	.88	16.2	55 200	6.80	.48	.71	.92

NOTE - All values are gross capacities and do not include evaporator coil blower motor heat deduction.

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.

HS29-072 — CR26-65

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Temperature																								
			27°C (80°F)						35°C (95°F)						43°C (110°F)						52°C (125°F)						
			Total Cooling Capacity		Compressor Motor kW	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor kW	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor kW	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor kW	Sensible To Total Ratio (S/T)			
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb			
m ³ /s	cfm	kW	Btuh	24°C 75°F	27°C 80°F	29°C 85°F	kW	Btuh	kW	Btuh	24°C 75°F	27°C 80°F	29°C 85°F	kW	Btuh	kW	Btuh	24°C 75°F	27°C 80°F	29°C 85°F	kW	Btuh	kW	Btuh	24°C 75°F	27°C 80°F	29°C 85°F
17.2°C (63°F)	0.91	1920	16.7	56 900	3.97	.77	.92	1.0	15.8	53 800	4.70	.79	.94	1.0	14.7	50 300	5.55	.81	.97	1.0	13.7	46 600	6.57	.85	1.0	1.0	
	1.13	2400	17.3	59 000	4.01	.83	.98	1.0	16.4	55 800	4.73	.85	1.0	1.0	15.4	52 500	5.60	.88	1.0	1.0	14.3	48 900	6.62	.92	1.0	1.0	
	1.36	2880	17.9	61 000	4.04	.88	1.0	1.0	17.0	57 900	4.77	.91	1.0	1.0	16.0	54 500	5.65	.94	1.0	1.0	14.9	50 700	6.67	.98	1.0	1.0	
19.4°C (67°F)	0.91	1920	17.7	60 300	4.03	.59	.74	.88	16.7	56 900	4.75	.61	.76	.91	15.6	53 100	5.62	.62	.79	.94	14.4	49 000	6.63	.64	.82	.98	
	1.13	2400	18.1	61 900	4.05	.63	.81	.96	17.1	58 400	4.79	.65	.83	.98	16.0	54 500	5.65	.67	.86	1.0	14.7	50 200	6.67	.69	.90	1.0	
	1.36	2880	18.5	63 100	4.08	.67	.86	1.0	17.4	59 500	4.81	.69	.89	1.0	16.3	55 500	5.68	.71	.92	1.0	15.0	51 200	6.70	.74	.96	1.0	
21.7°C (71°F)	0.91	1920	18.8	64 200	4.10	.44	.58	.72	17.8	60 600	4.83	.44	.59	.74	16.6	56 500	5.70	.45	.61	.77	15.3	52 200	6.71	.46	.63	.80	
	1.13	2400	19.3	65 800	4.13	.45	.62	.78	18.2	62 000	4.86	.46	.64	.81	16.9	57 800	5.73	.47	.66	.84	15.6	53 200	6.74	.48	.68	.88	
	1.36	2880	19.6	66 900	4.15	.47	.66	.84	18.4	62 900	4.89	.48	.68	.87	17.2	58 700	5.75	.48	.70	.90	15.8	54 000	6.77	.50	.73	.94	

NOTE - All values are gross capacities and do not include evaporator coil blower motor heat deduction.

HS29-072 — CH23-68

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Temperature																								
			27°C (80°F)						35°C (95°F)						43°C (110°F)						52°C (125°F)						
			Total Cooling Capacity		Compressor Motor kW	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor kW	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor kW	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor kW	Sensible To Total Ratio (S/T)			
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb			
m ³ /s	cfm	kW	Btuh	24°C 75°F	27°C 80°F	29°C 85°F	kW	Btuh	kW	Btuh	24°C 75°F	27°C 80°F	29°C 85°F	kW	Btuh	kW	Btuh	24°C 75°F	27°C 80°F	29°C 85°F	kW	Btuh	kW	Btuh	24°C 75°F	27°C 80°F	29°C 85°F
17.2°C (63°F)	0.91	1920	17.7	60 300	4.01	.76	.91	1.0	16.6	56 800	4.73	.78	.93	1.0	15.5	53 000	5.60	.81	.97	1.0	14.4	49 100	6.61	.84	1.0	1.0	
	1.13	2400	18.3	62 600	4.05	.82	.98	1.0	17.3	59 200	4.78	.85	1.0	1.0	16.3	55 600	5.65	.88	1.0	1.0	15.2	51 700	6.67	.92	1.0	1.0	
	1.36	2880	19.0	65 000	4.09	.88	1.0	1.0	18.1	61 600	4.83	.91	1.0	1.0	16.9	57 800	5.70	.94	1.0	1.0	15.7	53 700	6.72	.98	1.0	1.0	
19.4°C (67°F)	0.91	1920	18.7	63 800	4.07	.59	.74	.88	17.6	60 100	4.80	.60	.76	.90	16.4	56 000	5.67	.62	.78	.94	15.1	51 500	6.67	.64	.82	.98	
	1.13	2400	19.2	65 600	4.11	.63	.80	.95	18.1	61 700	4.84	.64	.83	.98	16.8	57 400	5.70	.67	.86	1.0	15.5	52 900	6.71	.69	.90	1.0	
	1.36	2880	19.6	67 000	4.14	.67	.86	1.0	18.5	63 000	4.86	.69	.89	1.0	17.2	58 700	5.73	.71	.93	1.0	15.8	54 000	6.74	.74	.96	1.0	
21.7°C (71°F)	0.91	1920	19.9	67 900	4.15	.43	.57	.71	18.8	64 000	4.88	.44	.59	.73	17.4	59 500	5.76	.44	.61	.76	16.1	54 800	6.76	.45	.63	.80	
	1.13	2400	20.4	69 700	4.19	.45	.62	.78	19.2	65 500	4.92	.45	.63	.81	17.8	60 900	5.79	.46	.66	.84	16.4	55 900	6.80	.48	.68	.88	
	1.36	2880	20.7	70 800	4.21	.46	.66	.84	19.5	66 500	4.94	.47	.68	.87	18.1	61 800	5.81	.48	.71	.91	16.6	56 700	6.82	.50	.74	.95	

NOTE - All values are gross capacities and do not include evaporator coil blower motor heat deduction.

HS29-072 — CB29M-65

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Temperature																								
			27°C (80°F)						35°C (95°F)						43°C (110°F)						52°C (125°F)						
			Total Cooling Capacity		Compressor Motor kW	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor kW	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor kW	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor kW	Sensible To Total Ratio (S/T)			
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb			
m ³ /s	cfm	kW	Btuh	24°C 75°F	27°C 80°F	29°C 85°F	kW	Btuh	kW	Btuh	24°C 75°F	27°C 80°F	29°C 85°F	kW	Btuh	kW	Btuh	24°C 75°F	27°C 80°F	29°C 85°F	kW	Btuh	kW	Btuh	24°C 75°F	27°C 80°F	29°C 85°F
17.2°C (63°F)	0.90	1900	16.6	56 700	3.97	.76	.90	1.0	15.7	53 700	4.70	.78	.93	1.0	14.7	50 300	5.57	.80	.95	1.0	13.7	46 800	6.58	.83	.98	1.0	
	1.04	2200	17.0	58 100	3.99	.79	.94	1.0	16.1	55 000	4.72	.81	.97	1.0	15.1	51 600	5.60	.84	.99	1.0	14.1	48 100	6.62	.88	1.0	1.0	
	1.18	2500	17.4	59 300	4.01	.83	.97	1.0	16.5	56 200	4.74	.85	.99	1.0	15.5	52 900	5.62	.88	1.0	1.0	14.5	49 400	6.65	.92	1.0	1.0	
19.4°C (67°F)	0.90	1900	17.6	60 100	4.02	.59	.73	.87	16.6	56 700	4.75	.60	.75	.90	15.6	53 100	5.62	.61	.78	.93	14.4	49 000	6.65	.63	.81	.96	
	1.04	2200	17.9	61 100	4.04	.61	.77	.92	16.9	57 700	4.77	.62	.79	.94	15.8	53 900	5.64	.64	.82	.97	14.6	49 800	6.67	.66	.86	.99	
	1.18	2500	18.1	61 900	4.05	.63	.81	.95	17.1	58 500	4.78	.65	.83	.98	16.0	54 600	5.66	.66	.86	.99	14.8	50 500	6.68	.69	.90	1.0	
21.7°C (71°F)	0.90	1900	18.7	63 900	4.08	.43	.57	.71	17.7	60 400	4.82	.44	.58	.73	16.6	56 500	5.70	.44	.60	.75	15.3	52 200	6.73	.45	.62	.79	
	1.04	2200	19.0	64 900	4.10	.44	.59	.75	18.0	61 300	4.84	.45	.61	.77	16.8	57 300	5.72	.45	.63	.80	15.5	52 900	6.74	.46	.65	.83	
	1.18	2500	19.3	65 700	4.12	.45	.62	.79	18.2	62 000	4.85	.46	.64	.81	17.0	57 900	5.73	.46	.66	.84	15.7	53 500	6.76	.47	.68	.88	

NOTE - All values are gross capacities and do not include evaporator coil blower motor heat deduction.

HS29-072 — CB17/CBH17-95V

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Temperature																								
			27°C (80°F)						35°C (95°F)						43°C (110°F)						52°C (125°F)						
			Total Cooling Capacity		Compressor Motor kW	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor kW	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor kW	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor kW	Sensible To Total Ratio (S/T)			
						Dry Bulb						Dry Bulb						Dry Bulb						Dry Bulb			
m ³ /s	cfm	kW	Btuh	24°C 75°F	27°C 80°F	29°C 85°F	kW	Btuh	kW	Btuh	24°C 75°F	27°C 80°F	29°C 85°F	kW	Btuh	kW	Btuh	24°C 75°F	27°C 80°F	29°C 85°F	kW	Btuh	kW	Btuh	24°C 75°F	27°C 80°F	29°C 85°F
17.2°C (63°F)	0.91	1920	18.5	63 200	4.06	.73	.88	1.0	17.4	59 500	4.79	.75	.91	1.0	16.2	55 400	5.67	.78	.95	1.0	15.0	51 100	6.69	.81	.99	1.0	
	1.13	2400	19.3	65 700	4.11	.79	.96	1.0	18.1	61 900	4.84	.82	.99	1.0	17.0	58 100	5.72	.85	1.0	1.0	15.8	54 000	6.75	.89	1.0	1.0	
	1.36	2880	20.0	68 200	4.15	.85	1.0	1.0	18.9	64 600	4.89	.88	1.0	1.0	17.8	60 600	5.77	.92	1.0	1.0	16.5	56 200	6.80	.96	1.0	1.0	
19.4°C (67°F)	0.91	1920	19.7	67 300	4.13	.57	.71	.85	18.6	63 300	4.87	.58	.73	.88	17.3	58 900	5.74	.59	.75	.91	15.9	54 100	6.75	.61	.79	.96	
	1.13	2400	20.3	69 400	4.17	.60	.77	.93	19.1	65 100	4.91	.62	.79	.97	17.7	60 500	5.78	.64	.83	.99	16.3	55 500	6.80	.66	.87	1.0	
	1.36	2880	20.7	70 800	4.20	.64	.83	.99	19.5	66 500	4.94	.66	.86	1.0	18.1	61 800	5.81	.68	.90	1.0	16.6	56 800	6.83	.71	.95	1.0	
21.7°C (71°F)	0.91	1920	21.0	71 800	4.21	.42	.55	.68	19.8	67 600	4.96	.42	.56	.70	18.4	62 800	5.83	.43	.58	.73	16.9	57 800	6.85	.44	.60	.76	
	1.13	2400	21.7	73 900	4.26	.43	.59	.74	20.3	69 300	5.00	.44	.61	.77	18.9	64 400	5.87	.45	.63	.80	17.3	59 100	6.89	.46	.65	.85	
	1.36	2880	22.0	75 200	4.28	.45	.63	.81	20.7	70 600	5.02	.46	.65	.84	19.2	65 500	5.90	.47	.67	.88	17.6	60 000	6.92	.48	.71	.93	

NOTE - All values are gross capacities and do not include evaporator coil blower motor heat deduction.

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.

HS29-090 — CB17/CBH17-95V COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			27°C (80°F)						35°C (95°F)						43°C (110°F)						52°C (125°F)					
			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		
m ³ /s	cfm	kW	kBtu/h	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtu/h	Comp Motor kW Input	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtu/h	Comp Motor kW Input	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtu/h	Comp Motor kW Input	24°C 75°F	27°C 80°F	29°C 85°F		
17°C (63°F)	1.13	2400	23.9	81.6	5.97	.71	.85	.98	22.6	77.0	6.96	.72	.88	1.00	21.0	71.7	8.18	.75	.92	1.00	19.3	65.9	9.65	.78	.96	1.00
	1.41	3000	24.8	84.6	6.05	.76	.93	1.00	23.4	79.8	7.05	.78	.96	1.00	21.9	74.6	8.26	.82	.99	1.00	20.2	69.0	9.75	.86	1.00	1.00
	1.70	3600	25.6	87.2	6.11	.82	.99	1.00	24.2	82.5	7.12	.84	1.00	1.00	22.7	77.5	8.35	.88	1.00	1.00	21.0	71.8	9.85	.93	1.00	1.00
19°C (67°F)	1.13	2400	25.4	86.6	6.10	.55	.68	.82	23.9	81.6	7.10	.56	.70	.84	22.3	76.0	8.31	.58	.72	.88	20.4	69.7	9.79	.59	.76	.93
	1.41	3000	26.1	89.1	6.17	.58	.74	.90	24.6	84.0	7.17	.60	.76	.93	22.9	78.1	8.38	.61	.79	.96	21.0	71.5	9.86	.64	.84	1.00
	1.70	3600	26.7	91.0	6.23	.61	.79	.96	25.1	85.6	7.22	.63	.82	.99	23.3	79.6	8.43	.65	.86	1.00	21.4	73.0	9.91	.68	.91	1.00
22°C (71°F)	1.13	2400	27.0	92.2	6.25	.41	.54	.66	25.5	86.9	7.26	.42	.55	.68	23.7	81.0	8.47	.42	.56	.70	21.8	74.4	9.96	.43	.58	.73
	1.41	3000	27.8	94.7	6.32	.42	.57	.72	26.1	89.2	7.32	.43	.58	.74	24.3	83.0	8.54	.44	.60	.77	22.3	76.0	10.02	.45	.63	.81
	1.70	3600	28.3	96.4	6.37	.44	.61	.77	26.6	90.7	7.37	.44	.62	.80	24.7	84.3	8.59	.45	.64	.84	22.6	77.1	10.07	.46	.67	.89

HS29-090 — CB17/CBH17-135 COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			27°C (80°F)						35°C (95°F)						43°C (110°F)						52°C (125°F)					
			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		
m ³ /s	cfm	kW	kBtu/h	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtu/h	Comp Motor kW Input	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtu/h	Comp Motor kW Input	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtu/h	Comp Motor kW Input	24°C 75°F	27°C 80°F	29°C 85°F		
17°C (63°F)	1.13	2400	24.6	83.8	5.98	.74	.88	1.00	23.1	78.9	6.97	.76	.90	1.00	21.5	73.5	8.17	.78	.94	1.00	19.8	67.5	9.63	.82	.98	1.00
	1.41	3000	25.5	87.0	6.07	.80	.95	1.00	24.0	82.0	7.06	.82	.98	1.00	22.5	76.7	8.27	.85	1.00	1.00	20.8	71.1	9.75	.89	1.00	1.00
	1.70	3600	26.4	90.1	6.14	.85	1.00	1.00	25.0	85.3	7.15	.88	1.00	1.00	23.5	80.1	8.37	.92	1.00	1.00	21.7	74.1	9.85	.96	1.00	1.00
19°C (67°F)	1.13	2400	26.1	89.0	6.12	.58	.71	.85	24.6	83.8	7.11	.59	.73	.87	22.9	78.0	8.31	.60	.76	.91	20.9	71.3	9.77	.62	.79	.95
	1.41	3000	26.9	91.8	6.20	.61	.77	.92	25.3	86.3	7.18	.62	.80	.95	23.5	80.2	8.39	.64	.83	.98	21.5	73.3	9.85	.67	.87	1.00
	1.70	3600	27.5	93.8	6.25	.65	.83	.98	25.8	88.1	7.24	.66	.86	1.00	24.0	81.9	8.45	.69	.89	1.00	22.0	75.0	9.91	.72	.94	1.00
22°C (71°F)	1.13	2400	27.8	94.8	6.28	.43	.56	.69	26.2	89.4	7.27	.43	.57	.71	24.4	83.2	8.48	.44	.59	.73	22.3	76.1	9.95	.45	.61	.77
	1.41	3000	28.6	97.5	6.35	.44	.60	.75	26.9	91.7	7.35	.45	.61	.78	25.0	85.2	8.56	.46	.63	.81	22.8	77.9	10.02	.47	.66	.85
	1.70	3600	29.1	99.4	6.41	.46	.64	.81	27.3	93.2	7.40	.46	.66	.84	25.4	86.5	8.61	.47	.68	.88	23.2	79.1	10.07	.49	.71	.92

HS29-120 — CB17/CBH17-95V COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			27°C (80°F)						35°C (95°F)						43°C (110°F)						52°C (125°F)					
			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		
m ³ /s	cfm	kW	kBtu/h	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtu/h	Comp Motor kW Input	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtu/h	Comp Motor kW Input	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtu/h	Comp Motor kW Input	24°C 75°F	27°C 80°F	29°C 85°F		
17°C (63°F)	1.51	3200	29.6	101.0	7.36	.73	.87	.98	28.2	96.1	8.55	.74	.89	.99	26.6	90.6	10.03	.77	.91	1.00	24.7	84.4	11.81	.79	.94	1.00
	1.89	4000	30.7	104.6	7.44	.78	.93	1.00	29.2	99.5	8.64	.80	.95	1.00	27.5	93.9	10.09	.82	.98	1.00	25.7	87.7	11.92	.86	1.00	1.00
	2.26	4800	31.5	107.6	7.51	.83	.98	1.00	30.0	102.5	8.70	.85	1.00	1.00	28.5	97.1	10.19	.88	1.00	1.00	26.7	91.0	12.02	.91	1.00	1.00
19°C (67°F)	1.51	3200	31.4	107.2	7.49	.57	.70	.84	29.8	101.8	8.68	.58	.72	.86	28.1	95.8	10.15	.59	.74	.88	26.1	89.0	11.97	.61	.77	.92
	1.89	4000	32.3	110.2	7.56	.60	.76	.90	30.7	104.6	8.75	.61	.78	.93	28.8	98.3	10.23	.63	.80	.95	26.8	91.3	12.03	.65	.83	.98
	2.26	4800	32.9	112.3	7.61	.63	.81	.96	31.2	106.6	8.81	.65	.83	.98	29.3	100.1	10.27	.67	.86	1.00	27.3	93.1	12.08	.69	.89	1.00
22°C (71°F)	1.51	3200	33.4	114.0	7.65	.43	.55	.68	31.7	108.3	8.85	.43	.56	.70	29.9	101.9	10.32	.43	.58	.72	27.7	94.6	12.15	.44	.59	.75
	1.89	4000	34.3	116.9	7.72	.44	.59	.74	32.5	110.9	8.92	.44	.60	.76	30.5	104.2	10.40	.45	.62	.78	28.4	96.8	12.20	.46	.64	.82
	2.26	4800	34.9	119.0	7.77	.45	.62	.79	33.1	112.8	8.96	.46	.64	.82	31.0	105.9	10.45	.46	.66	.84	28.8	98.2	12.26	.47	.68	.88

HS29-120 — CB17/CBH17-135V COOLING CAPACITY

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			27°C (80°F)						35°C (95°F)						43°C (110°F)						52°C (125°F)					
			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		
m ³ /s	cfm	kW	kBtu/h	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtu/h	Comp Motor kW Input	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtu/h	Comp Motor kW Input	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtu/h	Comp Motor kW Input	24°C 75°F	27°C 80°F	29°C 85°F		
17°C (63°F)	1.51	3200	31.2	106.5	7.48	.73	.87	.99	29.6	101.1	8.68	.75	.89	1.00	27.9	95.2	10.14	.77	.92	1.00	25.9	88.4	11.95	.80	.95	1.00
	1.89	4000	32.4	110.5	7.57	.79	.94	1.00	30.7	104.9	8.77	.81	.96	1.00	29.0	98.9	10.24	.84	.99	1.00	27.1	92.4	12.07	.87	1.00	1.00
	2.26	4800	33.4	114.0	7.65	.84	.99	1.00	31.8	108.6	8.86	.87	1.00	1.00	30.1	102.7	10.35	.90	1.00	1.00	28.1	96.0	12.17	.93	1.00	1.00
19°C (67°F)	1.51	3200	33.1	112.9	7.62	.57	.71	.84	31.4	107.0	8.83	.58	.73	.86	29.5	100.6	10.29	.60	.75	.89	27.3	93.3	12.11	.61	.77	.92
	1.89	4000	34.1	116.3	7.71	.61	.77	.91	32.3	110.1	8.90	.62	.79	.94	30.3	103.3	10.38	.63	.81	.97	28.0	95.7	12.18	.66	.85	.99
	2.26	4800	34.8	118.7	7.76	.64	.82	.97	32.9	112.4	8.97	.66	.85	.99	30.9	105.4	10.45	.68	.88	1.00	28.6	97.6	12.25	.70	.91	1.00
22°C (71°F)	1.51	3200	35.2	120.1	7.80	.43	.56	.68	33.4	113.8	9.00	.43	.57	.70	31.4	107.0	10.47	.44	.58	.72	29.0	99.1	12.29	.44	.60	.75
	1.89	4000	36.1	123.3	7.88	.44	.59	.74	34.2	116.8	9.08	.45	.61	.77	32.1	109.5	10.56	.45	.62	.79	29.7	101.3	12.37	.46	.65	.83
	2.26	4800	36.8	125.6	7.94	.45	.63	.80	34.8	118.8	9.14	.46	.65	.83	32.6	111.2	10.61	.47	.67	.86	30.2	102.9	12.42	.48	.70	.90

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.

HS29-180 — CB17/CBH17-185V - ONE COMPRESSOR OPERATING

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			18°C (65°F)						24°C (75°F)						29°C (85°F)						35°C (95°F)					
			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)		
			kW	kBtuh		Dry Bulb			kW	kBtuh		Dry Bulb			kW	kBtuh		Dry Bulb			kW	kBtuh		Dry Bulb		
m³/s	cfm	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtuh	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtuh	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtuh	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtuh	24°C 75°F	27°C 80°F	29°C 85°F		
17°C (63°F)	2.26	4800	24.0	81.8	4.94	.75	.89	1.00	23.3	79.5	5.45	.76	.90	1.00	22.6	77.0	6.05	.77	.92	1.00	21.8	74.3	6.75	.78	.93	1.00
	2.83	6000	24.9	85.1	5.01	.81	.96	1.00	24.2	82.7	5.52	.82	.98	1.00	23.5	80.1	6.12	.83	.99	1.00	22.7	77.3	6.81	.85	1.00	1.00
	3.40	7200	25.8	87.9	5.06	.86	1.00	1.00	25.1	85.5	5.58	.87	1.00	1.00	24.3	82.9	6.18	.89	1.00	1.00	23.5	80.1	6.88	.91	1.00	1.00
19°C (67°F)	2.26	4800	25.5	87.0	5.04	.59	.73	.86	24.8	84.5	5.56	.59	.73	.87	24.0	81.8	6.15	.60	.75	.88	23.1	78.8	6.84	.61	.76	.90
	2.83	6000	26.3	89.8	5.10	.62	.78	.93	25.6	87.2	5.61	.63	.79	.94	24.7	84.3	6.22	.64	.81	.96	23.8	81.2	6.91	.65	.82	.98
	3.40	7200	26.9	91.9	5.14	.66	.84	1.00	26.1	89.2	5.66	.67	.85	1.00	25.3	86.2	6.26	.67	.87	1.00	24.4	83.1	6.95	.69	.89	1.00
22°C (71°F)	2.26	4800	27.2	92.8	5.16	.44	.57	.70	26.4	90.2	5.68	.44	.58	.71	25.6	87.3	6.28	.45	.58	.72	24.6	84.1	6.97	.45	.59	.73
	2.83	6000	28.0	95.6	5.21	.45	.61	.76	27.2	92.8	5.73	.46	.61	.77	26.3	89.7	6.33	.46	.62	.78	25.3	86.4	7.03	.46	.63	.80
	3.40	7200	28.6	97.5	5.25	.47	.65	.82	27.7	94.5	5.77	.47	.65	.83	26.8	91.4	6.38	.48	.66	.85	25.8	88.0	7.07	.48	.68	.86

HS29-180 — CB17/CBH17-185V - BOTH COMPRESSORS OPERATING

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			27°C (80°F)						35°C (95°F)						43°C (110°F)						52°C (125°F)					
			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)		
			kW	kBtuh		Dry Bulb			kW	kBtuh		Dry Bulb			kW	kBtuh		Dry Bulb			kW	kBtuh		Dry Bulb		
m³/s	cfm	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtuh	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtuh	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtuh	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtuh	24°C 75°F	27°C 80°F	29°C 85°F		
17°C (63°F)	2.26	4800	47.0	160.5	10.99	.74	.88	1.00	44.7	152.5	12.92	.76	.90	1.00	41.9	143.1	15.25	.78	.93	1.00	38.9	132.7	17.92	.81	.97	1.00
	2.83	6000	48.9	166.8	11.13	.80	.95	1.00	46.5	158.6	13.03	.82	.97	1.00	43.8	149.3	15.37	.85	1.00	1.00	40.7	139.0	18.07	.88	1.00	1.00
	3.40	7200	50.5	172.4	11.22	.86	1.00	1.00	48.2	164.3	13.15	.88	1.00	1.00	45.5	155.1	15.50	.91	1.00	1.00	42.4	144.6	18.22	.94	1.00	1.00
19°C (67°F)	2.26	4800	50.0	170.5	11.19	.58	.72	.85	47.4	161.7	13.10	.59	.73	.87	44.4	151.6	15.43	.60	.76	.90	41.1	140.2	18.12	.62	.79	.94
	2.83	6000	51.5	175.8	11.29	.61	.78	.92	48.8	166.6	13.23	.63	.80	.95	45.8	156.2	15.53	.64	.82	.98	42.3	144.2	18.24	.67	.86	1.00
	3.40	7200	52.7	179.7	11.38	.65	.83	.98	49.9	170.3	13.30	.67	.86	1.00	46.8	159.6	15.62	.69	.89	1.00	43.2	147.4	18.33	.71	.93	1.00
22°C (71°F)	2.26	4800	53.3	181.8	11.41	.43	.56	.69	50.6	172.5	13.35	.44	.57	.71	47.4	161.7	15.67	.44	.59	.73	43.8	149.6	18.34	.45	.60	.76
	2.83	6000	54.8	186.9	11.52	.45	.60	.75	51.9	177.1	13.45	.45	.61	.78	48.6	166.0	15.76	.46	.63	.80	44.9	153.2	18.45	.47	.66	.84
	3.40	7200	55.8	190.4	11.59	.46	.64	.81	52.8	180.3	13.53	.47	.66	.84	49.5	168.8	15.83	.48	.68	.87	45.6	155.6	18.52	.49	.71	.91

HS29-240 — CB17/CBH17-275V - ONE COMPRESSOR OPERATING

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			18°C (65°F)						24°C (75°F)						29°C (85°F)						35°C (95°F)					
			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)		
			kW	kBtuh		Dry Bulb			kW	kBtuh		Dry Bulb			kW	kBtuh		Dry Bulb			kW	kBtuh		Dry Bulb		
m³/s	cfm	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtuh	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtuh	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtuh	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtuh	24°C 75°F	27°C 80°F	29°C 85°F		
17°C (63°F)	3.02	6400	33.4	114.1	6.67	.69	.84	.97	32.5	110.8	7.33	.70	.85	.98	31.5	107.4	8.08	.71	.86	.99	30.4	103.7	8.93	.72	.88	1.00
	3.77	8000	34.8	118.6	6.77	.75	.91	1.00	33.8	115.2	7.43	.76	.93	1.00	32.7	111.6	8.18	.77	.95	1.00	31.6	107.8	9.03	.79	.96	1.00
	4.53	9600	35.8	122.3	6.86	.81	.98	1.00	34.9	119.0	7.51	.82	.99	1.00	33.8	115.4	8.26	.84	1.00	1.00	32.7	111.7	9.12	.85	1.00	1.00
19°C (67°F)	3.02	6400	35.5	121.2	6.82	.54	.67	.80	34.5	117.7	7.48	.55	.68	.81	33.4	113.8	8.23	.55	.69	.83	32.2	109.8	9.07	.56	.70	.85
	3.77	8000	36.7	125.1	6.91	.57	.72	.88	35.5	121.3	7.56	.58	.73	.90	34.4	117.3	8.31	.59	.75	.91	33.1	113.0	9.17	.60	.77	.93
	4.53	9600	37.5	127.9	6.97	.61	.78	.95	36.3	123.9	7.63	.61	.80	.96	35.1	119.8	8.38	.62	.81	.98	33.8	115.5	9.22	.63	.83	.99
22°C (71°F)	3.02	6400	37.9	129.2	7.00	.41	.53	.65	36.8	125.4	7.66	.41	.53	.65	35.5	121.3	8.40	.41	.54	.66	34.3	117.0	9.26	.41	.55	.68
	3.77	8000	38.9	132.9	7.09	.42	.56	.70	37.8	128.9	7.74	.42	.57	.71	36.5	124.6	8.49	.43	.58	.73	35.2	120.0	9.34	.43	.59	.74
	4.53	9600	39.7	135.5	7.15	.43	.60	.76	38.5	131.3	7.80	.44	.61	.78	37.2	126.8	8.54	.44	.62	.79	35.8	122.1	9.39	.44	.63	.81

HS29-240 — CB17/CBH17-275V - BOTH COMPRESSORS OPERATING

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Air Temperature Entering Outdoor Coil																							
			27°C (80°F)						35°C (95°F)						43°C (110°F)						52°C (125°F)					
			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)		
			kW	kBtuh		Dry Bulb			kW	kBtuh		Dry Bulb			kW	kBtuh		Dry Bulb			kW	kBtuh		Dry Bulb		
m³/s	cfm	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtuh	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtuh	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtuh	24°C 75°F	27°C 80°F	29°C 85°F	kW	kBtuh	24°C 75°F	27°C 80°F	29°C 85°F		
17°C (63°F)	3.02	6400	63.8	217.6	15.61	.74	.88	.98	60.6	206.8	18.13	.75	.90	.99	57.1	194.7	21.24	.78	.92	1.00	53.1	181.3	25.01	.80	.95	1.00
	3.77	8000	66.3	226.1	15.81	.80	.94	1.00	63.0	215.1	18.34	.82	.96	1.00	59.5	203.0	21.43	.84	.98	1.00	55.5	189.5	25.28	.87	.99	1.00
	4.53	9600	68.5	233.9	15.98	.85	.98	1.00	65.3	222.8	18.52	.87	.99	1.00	61.7	210.6	21.64	.90	1.00	1.00	57.7	196.8	25.50	.93	1.00	1.00
19°C (67°F)	3.02	6400	67.6	230.7	15.91	.58	.71	.85	64.2	218.9	18.41	.59	.73	.87	60.3	205.7	21.52	.60	.75	.89	55.9	190.8	25.34	.61	.78	.93
	3.77	8000	69.7	237.8	16.06	.61	.77	.92	66.0	225.3	18.59	.62	.79	.94	62.0	211.7	21.70	.64	.82	.96	57.5	196.3	25.51	.66	.85	.98
	4.53	9600	71.2	243.0	16.20	.65	.83	.97	67.5	230.3	18.72	.66	.85	.98	63.4	216.2	21.81	.68	.88	.99	58.7	200.4	25.66	.71	.92	1.00
22°C (71°F)	3.02	6400	72.0	245.8	16.26	.43	.56	.69	68.3	233.1	18.79	.43	.57	.71	64.2	219.0	21.90	.44	.58	.73	59.5	203.1	25.72	.44	.60	.76
	3.77	8000	74.0	252.5	16.43	.44	.60	.75	70.1	239.2	18.93	.45	.61	.77	65.7	224.3	22.07	.45	.63	.80	60.9	207.8	25.88	.46	.65	.83