



# HS17 SERIES CONDENSING UNITS

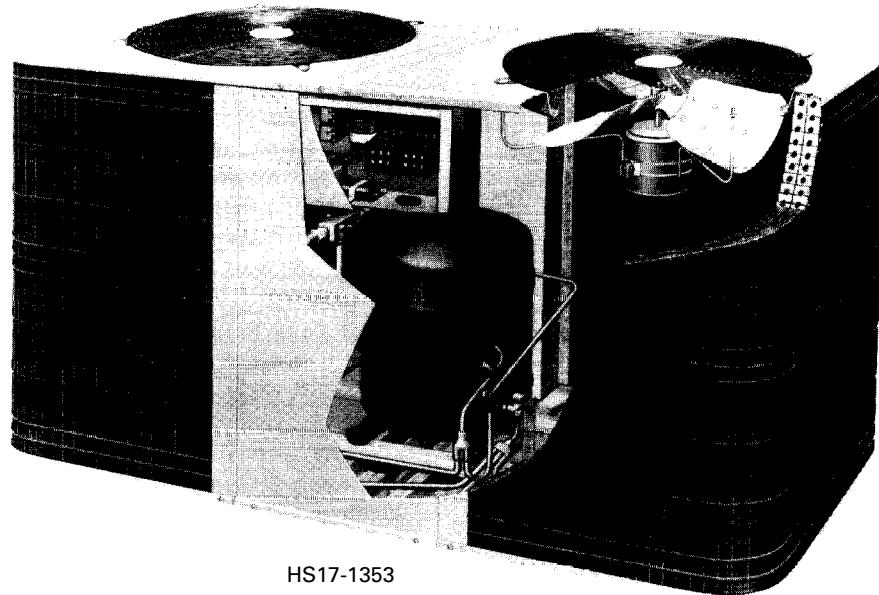
17.6 to 65.2 kW (60 200 to 222 500 Btuh) Cooling Capacity

## HS17

Bulletin #490001

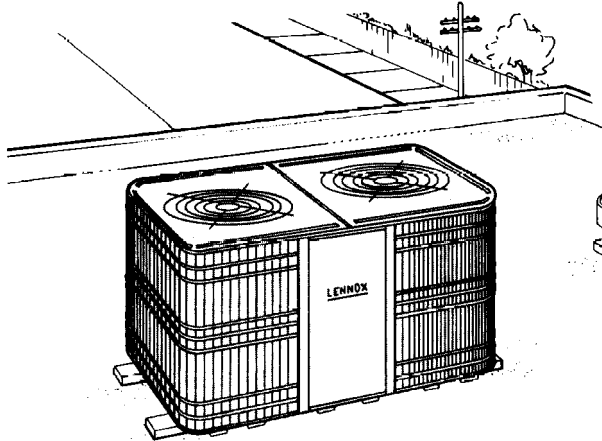
November 1995

Supersedes August 1994

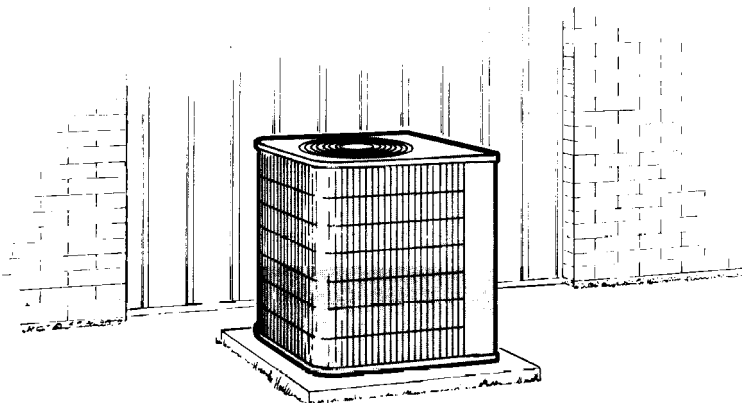


HS17-1353

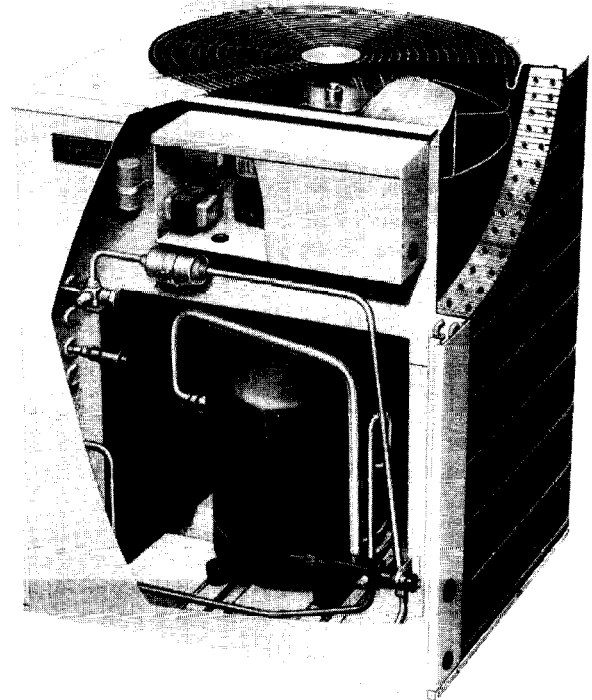
### Typical Applications



Rooftop Installation



Unit on Slab at Ground Level



HS17-953

## FEATURES

**Application** — The HS17 series air-cooled condensing units are designed for application with a remotely located blower-coil unit or a furnace add-on evaporator coil. Compact, low height cabinet design will allow concealed installation on a slab at grade level or behind a parapet wall on a rooftop. Upward discharge of air reduces sound level, protects walkways and prevents lawn damage. A variety of matching blower-powered or furnace add-on evaporator units provides installation flexibility and application versatility. See Ratings table. For evaporator unit data see bulletins indexed in tab section — Coils-Blower Coil Units. Condensing units are shipped factory assembled, piped and wired. In addition, units are test operated at the factory to ensure on the job start-up. Installer has only to connect refrigerant lines, charge system and make electrical connections.

**Completely Tested** — HS17-813, HS17-953 and HS17-1353 units have been tested in the Lennox Research Laboratory Environmental Test Rooms which meet American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) Standard 37 requirements. The rating test conditions are those included in Air-Conditioning and Refrigeration Institute (ARI) Standard 210/240-89 while operating at rated voltages and air volumes. HS17-1853 and HS17-2753 models have been tested in the Lennox Research Laboratory Environmental Test Rooms which meet American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) Standard 37 requirements. The rating test conditions are those included in Air-Conditioning and Refrigeration Institute (ARI) Standard 365-87 while operating at rated voltages and air volumes. In addition, HS17-813, HS17-953 and HS17-1353 units have been sound rated in the Lennox reverberant sound test room in accordance with test conditions for Air-Conditioning and Refrigeration Institute (ARI) Standard 270-84. Condensing units and components within are bonded for grounding to meet safety standards for servicing required by Underwriter's Laboratories (U.L.) and the International Electrotechnical Commission (IEC).

**Steel Cabinet** — Heavy gauge galvanized steel cabinet is subject to a five station metal wash process. This preparation process results in a perfect bonding surface for the finish coat of baked-on outdoor enamel. The attractive enamel finish gives the cabinet long lasting protection from the weather. Drainage holes are furnished in base section for moisture removal. Heavy duty steel base channels raise the unit off of the mounting surface away from damaging moisture. Large removable panel provides service access.

**Control Box** — Large size and conveniently located in the unit cabinet for easy access. All controls are pre-wired at the factory.

**HS17-813, HS17-953 and HS17-1353 Single Speed Compressor** — Single speed compressor is hermetically sealed and provides trouble free operation and long service life. Built in protection devices assure protection from excessive current and temperature. Equipped with internal motor protection, vertical crankshaft, ringed valves and pistons, tuned discharge muffler, efficient oil pump and positive gas venting of lube system. Crankcase heater assures proper compressor lubrication. The entire running gear assembly is internally suspended. In addition, the compressor is installed in the unit on resilient rubber mounts assuring quiet and vibration free operation.

**HS17-1853 and HS17-2753 Two Speed Compressor** — Two speed compressor is hermetically sealed with built-in protection from excessive current and temperatures. During part load conditions the compressor operates in the low speed mode. Equipped with solid-state motor protection, vertical crankshaft, ringed valves and pistons, tuned discharge muffler, two stage oil pump and positive venting of lube system. Crankcase heater assures proper compressor lubrication. The entire running gear assembly is internally suspended. In addition, the compressor is installed in the unit on resilient rubber mounts assuring low sound and vibration free operation.

**Refrigerant Lines and Service Valves** — Suction and liquid lines require sweat connections and are made inside the unit on the HS17-813, -953 & -1353 and are external to the unit on the HS17-1853 & -2753 models. Non-corrosive suction and liquid line service valves with gauge ports provide access to refrigerant system. A thermometer well is provided for checking refrigerant charge. Refrigerant lines and field wiring inlets are located in one central area of the unit cabinet.

**Hi-Capacity Drier** — Furnished and factory installed. Drier traps any moisture or dirt that could contaminate the refrigerant system.

**High Pressure Switch** — Shuts off unit if abnormal operating conditions cause the discharge pressure to rise above setting. Protects the compressor from excessive condensing pressure. Manual reset.

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

**Condenser Fan(s)** — HS17-813 and HS17-953 models have a single fan and the HS17-1353, HS17-1853 and HS17-2753 models have dual fans. Efficient direct drive fan(s) moves large volumes of air uniformly through the entire condenser coil(s) resulting in high refrigerant cooling capacity. Vertical discharge of air minimizes operating sounds and eliminates hot air damage to lawn and shrubs. Fan motor(s) is inherently protected and equipped with a rain shield. HS17-813 thru HS17-1853 models have totally enclosed motors. Fan service access is accomplished by removal of fan guard(s). Corrosion resistant polyvinyl chloride (PVC) coated steel wire guard(s) is furnished as standard.

**Copper Tube Condenser Coil(s)** — HS17-813 and HS17-953 models are equipped with a single "U" shaped coil. HS17-1353, HS17-1853 and HS17-2753 models have dual "U" shaped coils. Lennox designed and fabricated coil(s) is constructed of precisely spaced ripple-edge aluminum fins machine fitted to seamless copper tubes. Wrap-around "U" shaped coil configuration provides extra large surface area for low air resistance and excellent heat transfer. Fins are 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. Coil(s) is thoroughly factory tested under high pressure to insure leakproof construction. Entire coil is accessible for cleaning. A non-corrosive polyvinyl chloride (PVC) coated steel wire coil guard(s) is furnished.

**Timed-Off Control** — Furnished and factory installed. Prevents compressor short-cycling. Automatic reset control will shut the compressor off and hold it off for 5 minutes.

## OPTIONAL ACCESSORIES (Must Be Ordered Extra)

**Low Ambient Control Kit (Optional)** — Units will operate satisfactorily down to 7°C (45°F) outdoor air temperature without any additional controls. For cases where operation of the unit is required at lower ambients, a Low Ambient Control Kit LB-57113BC (24H77) can be added in the field, enabling it to operate properly down to 17.7°C (30°F). Kit must be ordered extra.

**Thermostat (Optional)** — Thermostat is not furnished with the unit and must be ordered extra. See Lennox Price Book.

**Optional SSP11 Remote Switching Status Panel** — The operation of the unit can be controlled and observed on the Switching Status Panel (12F84) conveniently located within the conditioned area. Signal lights on the panel indicate "Cool Mode", "Heat Mode", "Compressor 1", "Compressor 2", "No Heat" and "Filter." The Cool Mode signal light is green when lit and indicates economizer damper operation or DX cooling operation for units without the economizer. Heat Mode light is green and reflects heating operation. Compressor 1 light is green when operating and will turn red if there is an operational malfunction. Compressor 2 light is not required and should be disregarded. The No Heat and Filter lights will show red and indicate a requirement for service. Additionally, panel is equipped with a system selector switch (Off-Heat-Auto-Cool-Emergency Heat) (Heat Pump Only), fan switch (Auto-On) and after hours timer. Fan switch provides a choice of intermittent (Auto) or continuous (On) blower operation. Manually operated after hours timer (0 to 12 hours) overrides night setback controls providing normal operation

for time period set. A momentary push button switch is used to initiate the timer period. The following field installed controls are required for use with the status panel and must be ordered extra. Filter Switch Kit (97C85) is required for operation of the filter light. Status Panel Readout Relay Kit (14F92) is required to interface status panel with unit operation. Status Panel Resistor Kit (31H62) is required for status panel operation. Current Sensing Relay (29F79) is required with electric heat for operation of the No Heat light.

**Optional SP11 Remote Status Panel** — The operation of the unit can be checked at a glance on the Remote Status Panel (12F83) conveniently located within the conditioned area. Signal lights on the panel indicate "Cool Mode", "Heat Mode", "Compressor 1", "Compressor 2", "No Heat" and "Filter." The Cool Mode signal light is green when lit and indicates economizer damper operation or DX cooling operation for units without the economizer. Heat Mode light is green and reflects heating operation. Compressor 1 light is green when operating and will turn red if there is an operational malfunction. Compressor 2 light is not required and should be disregarded. The No Heat and Filter lights will show red and indicate a requirement for service. The following field installed controls are required for use with the status panel and must be ordered extra. Filter Switch Kit (97C85) is required for operation of the filter light. Status Panel Readout Relay Kit (14F92) is required to interface status panel with unit operation. Status Panel Resistor Kit (31H62) is required for status panel operation. Current Sensing Relay (29F79) is required with electric heat for operation of the No Heat light.

## SPECIFICATIONS

Model Number		HS17-813	HS17-953	HS17-1353	HS17-1853	HS17-2753	
Condenser Coil	Net face area — m <sup>2</sup> (ft. <sup>2</sup> )	Outer coil	1.98 (21.36)	1.98 (21.36)	3.11 (33.44)	3.88 (41.8)	4.27 (46.0)
		Inner coil	1.31 (14.12)	1.31 (14.12)	1.86 (20.05)	2.98 (32.08)	4.10 (44.11)
	Tube outside diameter — mm (in.)	9.5 (3/8)	9.5 (3/8)	9.5 (3/8)	9.5 (3/8)	9.5 (3/8)	
	Number of rows	1.7	1.7	1.6	1.8	2	
	Fins per m (inch)	709 (18)	709 (18)	787 (20)	787 (20)	787 (20)	
Condenser Fan	Diameter — mm (in.)	(1) 610 (24)	(1) 610 (24)	(2) 610 (24)	(2) 610 (24)	(2) 610 (24)	
	Number of blades	4	4	4	4	4	
	Motor output — W (hp)	(1) 373 (1/2)	(1) 373 (1/2)	(2) 187 (1/4)	(2) 373 (1/2)	(2) 373 (1/2)	
	Air volume — m <sup>3</sup> /s (cfm)	2.24 (4750)	2.24 (4750)	3.16 (6700)	4.70 (10 000)	4.70 (10 000)	
	Rev/Min	900	900	700	900	900	
	Motor input — W	480	480	500	960	960	
Refrigerant charge furnished (HCFC-22)		Holding charge					
Liquid line connection — outside diameter — mm (in.) sweat		15.9 (5/8)	15.9 (5/8)	15.9 (5/8)	22.2 (7/8)	22.2 (7/8)	
Suction line connection — outside diameter — mm (in.) sweat		28.6 (1-1/8)	34.9 (1-3/8)	34.9 (1-3/8)	41.3 (1-5/8)	41.3 (1-5/8)	
Shipping weight — kg (lbs.) 1 package		150 (330)	168 (370)	236 (520)	254 (560)	299 (660)	

## RATINGS

Condensing Unit Model Number (*Sound Rating Number-bels)	●Cooling Ratings						Evaporator Unit			Expansion Valve
	Total 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								
HS17-813 (8.4)	17.6	60 200	6.27	2.8	9.6	----	C22-65(FC)	----	----	★Factory Installed
	17.7	60 500	7.44	2.4	8.1	----	**CB18-65	----	**CBS18-65	††LB-85663K (26K35)
	18.0	61 300	6.2	2.9	9.9	----	**CB17-95V	----	**CBH17-95V	★Factory Installed
	18.0	61 500	6.4	2.8	9.6	----	†(2) C22-41(FC)	----	----	
	18.2	62 000	6.4	2.8	9.7	----	†(2) C22-46(FC)	----	----	
HS17-953 (9.2)	24.5	83 500	9.3	2.6	9.0	----	**CB17-95V	----	**CBH17-95V	★Factory Installed
	26.3	89 800	9.7	2.7	9.3	----	†(2) C22-65(FC)	----	----	
HS17-1353 (9.0)	31.7	108 100	12.5	2.5	8.7	----	**CB17-95V	----	**CBH17-95V	★Factory Installed
	32.6	111 300	12.7	2.6	8.8	----	**CB17-135V	----	**CBH17-135V	
	34.6	118 000	13.0	2.7	9.0	----	†(2) C22-65(FC)	----	----	
▲HS17-1853	50.4	171 900	18.8	2.7	9.0	11.2	◇**CB17-185V	----	◇**CBH17-185V	★Factory Installed
▲HS17-2753	65.2	222 500	24.7	2.6	9.0	10.9	◇**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 210/240-89 or ▲365-86 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.

†Requires optional Up-flo Coil Twinning Kit (30J76). Must be ordered extra for field installation.

††NOTE — All CB18/CBS18 blower coil units require Flare Adaptor Kit (58J97) for proper match-up of expansion valve to unit.

\*\*Blower powered evaporator unit.

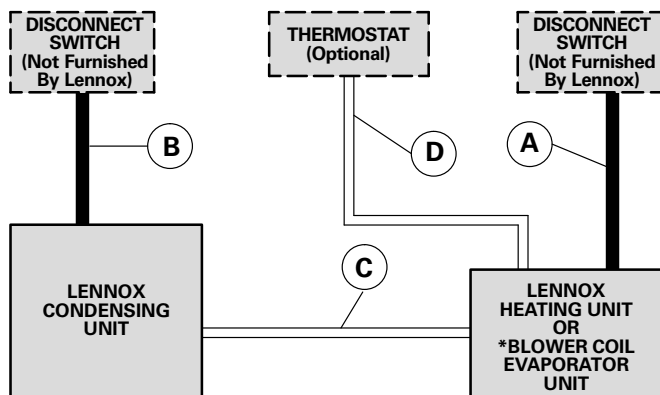
★Furnished as standard with coil.

## ELECTRICAL DATA

Model Number		HS17-813	HS17-953	HS17-1353	HS17-1853	HS17-2753	
Line voltage (50hz) 3 phase with neutral		380/420V	380/420V	380/420V	380/420V	380/420V	
Voltage range (minimum — maximum)		342 — 462V	342 — 462V	342 — 462V	342 — 462V	342 — 462V	
Compressor	Rated load amps	Single Speed or High Speed	10.7	14.2	19.0	25.5	36.5
		Low Speed	----	----	----	13.0	18.5
	Locked rotor amps	Single Speed or High Speed	70.0	91.1	104.0	126.0	188.0
		Low Speed	----	----	----	44.0	63.0
Condenser Coil Fan Motor(s) (1 phase)	Full load amps	(1) 1.5	(1) 1.5	(2) 1.1	(2) 1.5	(2) 1.5	
	Locked rotor amps	(1) 3.1	(1) 3.1	(2) 2.0	(2) 3.1	(2) 3.1	

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

## FIELD WIRING



- A — Single Phase or Three Phase with neutral
- B — Three Phase with neutral — See Electrical Data
- C — Two wire 24V — HS17-813-953-1353
- Three wire 24V — HS17-1853-2753
- D — Five wire 24V — HS17-813-953-1353
- Seven wire 24V — HS17-813-953-1353

NOTE — Field wiring not furnished by Lennox.

All wiring must conform to local electrical codes.

\*CB17/CBH17 applications without electric heat require a 20VA (minimum rating) transformer.

**HS17-813 — HS17-953**

**HS17-1353 — HS17-1853 — HS17-2753**

**GUIDE SPECIFICATIONS**

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

**General** — Furnish and install an air cooled condensing unit. The unit shall be shipped completely factory assembled, piped and wired internally ready for field connections. In addition, manufacturer shall test operate unit at the factory before shipment. The condensing unit shall be a standard product of a firm regularly engaged in the manufacture of heating-cooling equipment.

The installed weight shall not be more than . . . . . kg (lbs.). En-tire unit shall have a width of not more than . . . . . mm (inches), a depth of not more than . . . . . mm (inches) and an overall height of not more than . . . . . mm (inches).

**Cooling Capacity** — The total cooling capacity shall be . . . . . kW (Btuh) at . . . . . °C (°F) evaporator temperature and outdoor air temperature of . . . . . °C (°F). The compressor power input shall not exceed . . . . . kW at the above conditions.

**Compressor** — HS17-813, HS17-953 and HS17-1353 models shall have single speed compressor. HS17-1853 and -2753 models shall be equipped with two speed compressor providing staging control to deliver varying cooling load requirements. Compressor shall be resiliently mounted, suction cooled, overload protected, and have internal excessive current and temperature protection. Shall have vertical crankshaft, ringed valves and pistons, tuned discharge muffler, efficient oil pump and crankcase heater.

**Refrigerant System** — Shall include liquid line service valve, suction line service valve, gauge ports, hi-capacity drier, thermometer well, manual reset high pressure switch, loss of charge switch and timed-off control. Control options available shall include thermostat, low ambient control kit, remote status panel and remote switching status panel.

**Condenser Coil(s)** — Coil(s) shall be non-ferrous construction with aluminum fins mechanically bonded to durable copper tubes. Coil(s) shall be pressure leak tested. Coil face area shall be not less than . . . . . m<sup>2</sup> (ft.<sup>2</sup>). 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 finish coat of baked-on outdoor enamel. Large access panel shall be provided to allow complete service. The base section shall be provided with moisture removal openings. Openings shall be provided for refrigerant lines and power connection entry.

**Air Mover** — Shall be direct drive blade type fan(s). Motor(s) shall have inherent protection devices and shall be protected from moisture. Motor(s) shall be . . . . . kW (hp) output with not more than . . . . . watts input. Fan(s) shall be protected with steel guard(s).

**OPTIONAL ACCESSORIES**

**Optional Remote Status Panel** — Shall be available for installation within the conditioned area to observe equipment operation. The panel shall include signal lights for Cool Mode, Heat Mode, Compressor 1, Compressor 2, No Heat and Filter.

**Optional Remote Switching Status Panel** — Shall be available for installation within the conditioned area to control and observe equipment operation. The panel shall include signal lights for Cool Mode, Heat Mode, Compressor 1, Compressor 2, No Heat and Filter. System selector switch and fan switch shall provide operational mode and blower operation. After hours timer switch shall override night setback controls and provide normal operation for time period set.



**RATINGS – 50hz**

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

**HS17-813 – C22-65(FC)**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Temperature																							
			29°C (85°F)					35°C (95°F)					41°C (105°F)					46°C (115°F)								
			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)		
			kW	Btuh		Dry Bulb			kW	Btuh		Dry Bulb			kW	Btuh		Dry Bulb			kW	Btuh		Dry Bulb		
24°C 75°F	27°C 80°F	29°C 85°F			24°C 75°F	27°C 80°F	29°C 85°F	24°C 75°F			27°C 80°F	29°C 85°F	24°C 75°F	27°C 80°F			29°C 85°F	24°C 75°F	27°C 80°F	29°C 85°F						
17.2°C (63°F)	0.94	2000	17.2	58 800	4.33	.78	.93	1.00	16.4	56 000	4.73	.80	.95	1.00	15.6	53 300	5.11	.82	.97	1.00	14.8	50 500	5.48	.84	.99	1.00
	1.06	2250	17.6	60 100	4.36	.81	.96	1.00	16.8	57 300	4.77	.83	.98	1.00	16.0	54 500	5.17	.85	1.00	1.00	15.2	51 900	5.55	.88	1.00	1.00
	1.18	2500	17.9	61 200	4.39	.84	.99	1.00	17.1	58 500	4.81	.86	1.00	1.00	16.4	55 900	5.22	.89	1.00	1.00	15.6	53 100	5.61	.91	1.00	1.00
19.4°C (67°F)	0.94	2000	18.3	62 400	4.42	.60	.75	.90	17.4	59 400	4.84	.61	.77	.92	16.5	56 300	5.24	.62	.79	.94	15.6	53 100	5.61	.64	.82	.97
	1.06	2250	18.6	63 400	4.44	.62	.79	.94	17.6	60 200	4.87	.63	.81	.96	16.7	57 100	5.27	.64	.83	.98	15.8	53 900	5.65	.66	.85	1.00
	1.18	2500	18.8	64 200	4.46	.64	.82	.97	17.9	61 000	4.89	.65	.84	.99	16.9	57 800	5.30	.67	.86	1.00	16.0	54 600	5.68	.69	.89	1.00
21.7°C (71°F)	0.94	2000	19.5	66 700	4.52	.44	.58	.73	18.6	63 400	4.96	.44	.59	.75	17.6	60 200	5.38	.45	.61	.77	16.6	56 800	5.79	.45	.62	.79
	1.06	2250	19.8	67 700	4.54	.44	.60	.76	18.8	64 300	4.99	.45	.62	.78	17.8	60 900	5.41	.45	.63	.81	16.8	57 400	5.82	.46	.65	.83
	1.18	2500	20.0	68 400	4.56	.45	.62	.79	19.0	65 000	5.01	.46	.64	.82	18.0	61 500	5.44	.46	.66	.84	17.0	58 000	5.84	.47	.68	.87

**HS17-813 – CB18-65 – CBS18-65**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Temperature																							
			29°C (85°F)					35°C (95°F)					41°C (105°F)					46°C (115°F)								
			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)		
			kW	Btuh		Dry Bulb			kW	Btuh		Dry Bulb			kW	Btuh		Dry Bulb			kW	Btuh		Dry Bulb		
24°C 75°F	27°C 80°F	29°C 85°F			24°C 75°F	27°C 80°F	29°C 85°F	24°C 75°F			27°C 80°F	29°C 85°F	24°C 75°F	27°C 80°F			29°C 85°F	24°C 75°F	27°C 80°F	29°C 85°F						
17.2°C (63°F)	0.95	2000	16.4	55 900	5.00	.80	.93	1.00	15.6	53 200	5.28	.82	.95	1.00	14.8	50 600	5.56	.85	.98	1.00	14.0	47 900	5.81	.87	1.00	1.00
	1.05	2250	16.7	57 100	5.05	.83	.97	1.00	16.0	54 500	5.33	.85	.99	1.00	15.1	51 600	5.62	.88	1.00	1.00	14.4	49 300	5.90	.91	1.00	1.00
	1.20	2500	17.0	58 000	5.09	.86	1.00	1.00	16.3	55 500	5.40	.89	1.00	1.00	15.6	53 100	5.70	.91	1.00	1.00	14.9	50 700	5.99	.94	1.00	1.00
19.4°C (67°F)	0.95	2000	17.6	60 200	5.19	.62	.74	.86	16.7	57 100	5.48	.63	.76	.88	15.9	54 100	5.76	.65	.78	.91	15.0	51 300	6.02	.66	.90	.94
	1.05	2250	17.9	61 100	5.23	.64	.77	.90	17.0	58 000	5.52	.65	.79	.92	16.1	54 900	5.80	.67	.81	.95	15.2	52 000	6.06	.69	.84	.98
	1.20	2500	18.2	62 000	5.27	.66	.80	.93	17.2	58 800	5.56	.67	.82	.96	16.3	55 700	5.84	.69	.85	.99	15.4	52 700	6.10	.71	.87	1.00
21.7°C (71°F)	0.95	2000	19.0	65 000	5.40	.46	.57	.68	18.1	61 700	5.70	.47	.58	.70	17.1	58 500	5.99	.47	.60	.72	16.2	55 300	6.26	.48	.61	.74
	1.05	2250	19.3	65 900	5.44	.47	.59	.71	18.3	62 600	5.74	.48	.60	.73	17.3	59 200	6.03	.48	.62	.75	16.4	56 000	6.29	.49	.63	.77
	1.20	2500	19.6	66 800	5.47	.48	.61	.74	18.6	63 300	5.78	.49	.62	.76	17.6	59 900	6.06	.49	.64	.78	16.6	56 500	6.33	.50	.66	.81

**HS17-813 – CB17-95 – CBH17-95**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Temperature																							
			29°C (85°F)					35°C (95°F)					41°C (105°F)					46°C (115°F)								
			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)		
			kW	Btuh		Dry Bulb			kW	Btuh		Dry Bulb			kW	Btuh		Dry Bulb			kW	Btuh		Dry Bulb		
24°C 75°F	27°C 80°F	29°C 85°F			24°C 75°F	27°C 80°F	29°C 85°F	24°C 75°F			27°C 80°F	29°C 85°F	24°C 75°F	27°C 80°F			29°C 85°F	24°C 75°F	27°C 80°F	29°C 85°F						
17.2°C (63°F)	0.94	2000	17.6	60 000	4.36	.79	.94	1.00	16.7	57 100	4.76	.81	.96	1.00	15.9	54 300	5.16	.83	.98	1.00	15.1	51 500	5.54	.85	1.00	1.00
	1.06	2250	18.0	61 400	4.39	.82	.98	1.00	17.2	58 600	4.81	.84	.99	1.00	16.4	55 800	5.22	.87	1.00	1.00	15.6	53 100	5.61	.89	1.00	1.00
	1.18	2500	18.4	62 700	4.43	.86	1.00	1.00	17.6	60 100	4.86	.88	1.00	1.00	16.8	57 300	5.28	.90	1.00	1.00	16.0	54 500	5.68	.93	1.00	1.00
19.4°C (67°F)	0.94	2000	18.6	63 500	4.45	.60	.76	.91	17.7	60 400	4.87	.62	.78	.93	16.8	57 200	5.27	.63	.80	.96	15.8	54 000	5.65	.65	.83	.98
	1.06	2250	18.9	64 500	4.47	.63	.80	.95	18.0	61 300	4.90	.64	.82	.97	17.0	58 100	5.31	.66	.85	.99	16.1	54 800	5.69	.67	.87	1.00
	1.18	2500	19.2	65 400	4.49	.65	.84	.98	18.2	62 100	4.92	.66	.86	1.00	17.2	58 800	5.34	.68	.88	1.00	16.3	55 500	5.73	.70	.91	1.00
21.7°C (71°F)	0.94	2000	19.9	67 800	4.55	.44	.59	.74	18.9	64 400	4.99	.44	.60	.76	17.9	61 000	5.42	.45	.62	.78	16.9	57 600	5.82	.45	.63	.81
	1.06	2250	20.2	68 800	4.57	.45	.61	.78	19.1	65 300	5.02	.45	.63	.80	18.1	61 800	5.45	.46	.64	.82	17.1	58 200	5.86	.47	.66	.85
	1.18	2500	20.4	69 600	4.58	.46	.64	.81	19.3	66 000	5.04	.46	.65	.84	18.3	62 400	5.47	.47	.67	.86	17.3	58 900	5.88	.48	.69	.89

**HS17-813 – (2)C22-41(FC) – C26-41(FC)**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Temperature																							
			29°C (85°F)					35°C (95°F)					41°C (105°F)					46°C (115°F)								
			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)		
			kW	Btuh		Dry Bulb			kW	Btuh		Dry Bulb			kW	Btuh		Dry Bulb			kW	Btuh		Dry Bulb		
24°C 75°F	27°C 80°F	29°C 85°F			24°C 75°F	27°C 80°F	29°C 85°F	24°C 75°F			27°C 80°F	29°C 85°F	24°C 75°F	27°C 80°F			29°C 85°F	24°C 75°F	27°C 80°F	29°C 85°F						
17.2°C (63°F)	0.94	2000	17.6	60 000	4.36	.78	.93	1.00	16.7	57 100	4.76	.80	.95	1.00	15.9	54 200	5.15	.82	.97	1.00	15.1	51 400	5.52	.84	.99	1.00
	1.06	2250	17.9	61 200	4.39	.81	.97	1.00	17.1	58 300	4.80	.83	.98	1.00	16.3	55 500	5.21	.85	1.00	1.00	15.5	52 800	5.60	.88	1.00	1.00
	1.18	2500	18.3	62 500	4.42	.84	.99	1.00	17.5	59 700	4.85	.86	1.00	1.00	16.7	56 900	5.26	.89	1.00	1.00	15.9	54 100	5.66	.91	1.00	1.00
19.4°C (67°F)	0.94	2000	18.7	63 700	4.46	.60	.75	.90	17.7	60 500	4.87	.61	.77	.92	16.8	57 300	5.28	.62	.79	.95	15.9	54 100	5.66	.64	.82	.97
	1.06	2250	19.0	64 700	4.47	.62	.78	.94	18.0	61 500	4.90	.63	.81	.96	17.0	58 100	5.31	.64	.83	.98	16.1	54 800	5.70	.66	.86	1.00
	1.18	2500	19.2	65 600	4.49	.64	.82	.97	18.2	62 200	4.92	.65	.84	.99	17.3	58 900	5.34	.67	.87	1.00	16.3	55 500	5.73	.69	.89	1.00
21.7°C (71°F)	0.94	2000	20.0	68 100	4.56	.44	.58	.73	19.0	64 700	5.00	.44	.59	.75	18.0	61 300	5.43	.45	.61	.77	16.9	57 800	5.84	.45	.62	.79
	1.06	2250	20.3	69 100	4.57	.44	.60	.76	19.2	65 600	5.02	.45	.62	.78	18.2	62 100	5.46	.45	.63	.81	17.1	58 500	5.87	.46	.65	.83
	1.18	2500	20.5																							

**RATINGS — 50hz**

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

**HS17-813 — (2)C22-46(FC)**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Temperature																							
			29°C (85°F)					35°C (95°F)					41°C (105°F)					46°C (115°F)								
			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)		
			m <sup>3</sup> /s	cfm		kW	Btuh	Dry Bulb				kW	Btuh	kW	Dry Bulb			kW	Btuh	kW	Dry Bulb			kW	Btuh	kW
24°C 75°F	27°C 80°F	29°C 85°F			24°C 75°F			27°C 80°F	29°C 85°F	24°C 75°F	27°C 80°F				29°C 85°F	24°C 75°F	27°C 80°F				29°C 85°F	24°C 75°F	27°C 80°F			
17.2°C (63°F)	0.94	2000	17.7	60 500	4.37	.78	.93	1.00	16.9	57 500	4.78	.80	.95	1.00	16.0	54 600	5.17	.82	.98	1.00	15.2	51 800	5.54	.84	1.00	1.00
	1.06	2250	18.1	61 800	4.40	.81	.97	1.00	17.3	58 900	4.82	.83	.99	1.00	16.4	56 000	5.23	.85	1.00	1.00	15.6	53 300	5.62	.88	1.00	1.00
	1.18	2500	18.5	63 100	4.44	.84	.99	1.00	17.6	60 200	4.87	.87	1.00	1.00	16.9	57 500	5.28	.89	1.00	1.00	16.0	54 600	5.69	.92	1.00	1.00
19.4°C (67°F)	0.94	2000	18.8	64 200	4.47	.60	.75	.90	17.9	61 000	4.89	.61	.77	.92	16.9	57 800	5.30	.62	.79	.95	16.0	54 500	5.68	.64	.82	.97
	1.06	2250	19.1	65 300	4.48	.62	.79	.94	18.2	62 000	4.92	.63	.81	.96	17.2	58 700	5.33	.65	.83	.98	16.2	55 300	5.72	.66	.86	1.00
	1.18	2500	19.4	66 200	4.50	.64	.82	.97	18.4	62 800	4.94	.65	.84	.99	17.4	59 400	5.36	.67	.87	1.00	16.4	56 000	5.75	.69	.90	1.00
21.7°C (71°F)	0.94	2000	20.1	68 700	4.57	.44	.58	.73	19.1	65 300	5.01	.44	.59	.75	18.1	61 800	5.45	.45	.61	.77	17.1	58 200	5.85	.45	.62	.79
	1.06	2250	20.4	69 700	4.58	.44	.60	.76	19.4	66 100	5.04	.45	.62	.78	18.3	62 600	5.48	.46	.63	.81	17.3	59 000	5.89	.46	.65	.83
	1.18	2500	20.7	70 500	4.60	.45	.63	.80	19.6	66 800	5.06	.46	.64	.82	18.5	63 200	5.50	.47	.66	.85	17.4	59 500	5.91	.47	.68	.87

**HS17-953 — CB17-95 — CBH17-95**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Temperature																							
			29°C (85°F)					35°C (95°F)					41°C (105°F)					46°C (115°F)								
			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)		
			m <sup>3</sup> /s	cfm		kW	Btuh	Dry Bulb				kW	Btuh	kW	Dry Bulb			kW	Btuh	kW	Dry Bulb			kW	Btuh	kW
24°C 75°F	27°C 80°F	29°C 85°F			24°C 75°F			27°C 80°F	29°C 85°F	24°C 75°F	27°C 80°F				29°C 85°F	24°C 75°F	27°C 80°F				29°C 85°F	24°C 75°F	27°C 80°F			
17.2°C (63°F)	1.32	2800	24.4	83 100	6.95	.77	.94	1.00	23.0	78 400	7.37	.79	.97	1.00	21.6	73 800	7.84	.82	1.00	1.00	20.3	69 100	8.40	.86	1.00	1.00
	1.49	3150	24.9	85 000	7.04	.80	.98	1.00	23.6	80 400	7.48	.83	1.00	1.00	22.2	75 800	7.99	.87	1.00	1.00	20.8	71 000	8.56	.91	1.00	1.00
	1.65	3500	25.5	86 900	7.13	.84	1.00	1.00	24.1	82 300	7.59	.88	1.00	1.00	22.7	77 600	8.12	.91	1.00	1.00	21.3	72 600	8.70	.95	1.00	1.00
19.4°C (67°F)	1.32	2800	25.6	87 500	7.15	.59	.75	.91	24.1	82 300	7.59	.60	.77	.94	22.6	77 000	8.07	.62	.80	.97	20.9	71 400	8.60	.64	.84	1.00
	1.49	3150	26.0	88 800	7.22	.61	.78	.95	24.5	83 500	7.67	.63	.81	.98	22.9	78 100	8.15	.65	.84	1.00	21.2	72 500	8.69	.67	.89	1.00
	1.65	3500	26.3	89 900	7.27	.63	.82	.99	24.8	84 600	7.73	.65	.85	1.00	23.2	79 100	8.23	.67	.89	1.00	21.5	73 400	8.78	.70	.93	1.00
21.7°C (71°F)	1.32	2800	27.3	93 100	7.43	.43	.58	.73	25.6	87 500	7.90	.43	.59	.75	24.0	81 800	8.42	.44	.61	.78	22.2	75 700	8.99	.45	.63	.81
	1.49	3150	27.6	94 200	7.48	.43	.60	.76	25.9	88 500	7.96	.44	.62	.79	24.2	82 600	8.49	.45	.64	.82	22.4	76 600	9.06	.46	.66	.86
	1.65	3500	27.9	95 100	7.53	.44	.63	.80	26.2	89 300	8.02	.45	.65	.83	24.4	83 400	8.55	.46	.67	.87	22.6	77 200	9.12	.47	.70	.91

**HS17-953 — (2)C22-65(FC)**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Temperature																							
			29°C (85°F)					35°C (95°F)					41°C (105°F)					46°C (115°F)								
			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)		
			m <sup>3</sup> /s	cfm		kW	Btuh	Dry Bulb				kW	Btuh	kW	Dry Bulb			kW	Btuh	kW	Dry Bulb			kW	Btuh	kW
24°C 75°F	27°C 80°F	29°C 85°F			24°C 75°F			27°C 80°F	29°C 85°F	24°C 75°F	27°C 80°F				29°C 85°F	24°C 75°F	27°C 80°F				29°C 85°F	24°C 75°F	27°C 80°F			
17.2°C (63°F)	1.32	2800	26.1	88 900	7.23	.75	.92	1.00	24.5	83 500	7.67	.77	.96	1.00	22.9	78 200	8.15	.80	.99	1.00	21.4	72 900	8.74	.84	1.00	1.00
	1.49	3150	26.6	90 800	7.31	.78	.97	1.00	25.1	85 500	7.78	.81	1.00	1.00	23.6	80 400	8.32	.85	1.00	1.00	22.0	75 100	8.92	.89	1.00	1.00
	1.65	3500	27.2	92 700	7.41	.82	1.00	1.00	25.7	87 700	7.91	.85	1.00	1.00	24.1	82 400	8.47	.89	1.00	1.00	22.5	76 900	9.09	.94	1.00	1.00
19.4°C (67°F)	1.32	2800	27.7	94 400	7.50	.58	.73	.89	25.9	88 500	7.96	.59	.75	.92	24.1	82 400	8.47	.61	.78	.96	22.3	76 100	9.02	.63	.82	1.00
	1.49	3150	28.1	95 800	7.57	.60	.76	.93	26.3	89 800	8.04	.61	.79	.97	24.5	83 600	8.56	.63	.82	1.00	22.6	77 200	9.11	.65	.87	1.00
	1.65	3500	28.5	97 100	7.63	.62	.79	.98	26.6	90 900	8.11	.63	.83	1.00	24.8	84 600	8.63	.65	.87	1.00	22.9	78 100	9.20	.68	.91	1.00
21.7°C (71°F)	1.32	2800	29.5	100 500	7.82	.42	.56	.70	27.6	94 300	8.33	.42	.58	.73	25.8	87 900	8.89	.43	.59	.76	23.8	81 100	9.48	.44	.62	.79
	1.49	3150	29.9	101 900	7.89	.43	.58	.74	28.0	95 500	8.41	.43	.60	.76	26.1	88 900	8.97	.44	.62	.80	24.0	82 000	9.56	.45	.65	.84
	1.65	3500	30.2	103 000	7.95	.44	.61	.77	28.3	96 400	8.47	.44	.62	.80	26.3	89 700	9.04	.45	.65	.84	24.2	82 700	9.63	.46	.67	.89

**HS17-1353 — CB17-95 — CBH17-95**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Temperature																							
			29°C (85°F)					35°C (95°F)					41°C (105°F)					46°C (115°F)								
			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)		
			m <sup>3</sup> /s	cfm		kW	Btuh	Dry Bulb				kW	Btuh	kW	Dry Bulb			kW	Btuh	kW	Dry Bulb			kW	Btuh	kW
24°C 75°F	27°C 80°F	29°C 85°F			24°C 75°F			27°C 80°F	29°C 85°F	24°C 75°F	27°C 80°F				29°C 85°F	24°C 75°F	27°C 80°F				29°C 85°F	24°C 75°F	27°C 80°F			
17.2°C (63°F)	1.70	3600	31.2	106 400	9.70	.79	.94	1.00	29.7	101 400	10.35	.81	.96	1.00	28.2	96 300	10.99	.83	.98	1.00	26.7	91 200	11.63	.86	1.00	1.00
	1.90	4050	31.9	108 700	9.81	.83	.97	1.00	30.4	103 700	10.48	.85	.99	1.00	28.9	98 700	11.14	.87	1.00	1.00	27.4	93 600	11.80	.90	1.00	1.00
	2.12	4500	32.5	110 900	9.92	.86	.99	1.00	31.0	105 900	10.61	.88	1.00	1.00	29.6	101 000	11.29	.90	1.00	1.00	28.1	95 800	11.95	.93	1.00	1.00
19.4°C (67°F)	1.70	3600	32.8	112 000	9.98	.61	.77	.91	31.2	106 500	10.64	.62	.79	.93	29.5	100 800	11.28	.63	.81	.96	27.8	95 000	11.90	.65	.83	.98
	1.90	4050	33.3	113 700	10.06	.63	.80	.95	31.7	108 100	10.73	.64	.82	.97	30.0	102 200	11.38	.66	.85	.99	28.3	96 400	12.00	.68	.88	1.00
	2.12	4500	33.8	115 300	10.13	.65	.84	.98	32.1	109 500	10.80	.67	.86	.99	30.4	103 600	11.45	.68	.88	1.00	28.6	97 600	12.08	.71	.91	1.00
21.7°C (71°F)	1.70	3600	35.0	119 300	10.33	.44	.59	.75	33.2	113 400	11.02	.44	.61	.76	31.4	107 300	11.68	.45	.62	.79	29.6	101 000	12.31	.46	.64	.81
	1.90	4050	35.4	120 900	10.40	.45	.62	.78	33.6	114 800	11.09	.45	.63	.80	31.8	108 500	11.76	.46	.65	.83	29.9	102 100	12.39	.47	.67	.85
	2.12	4500	35.8	122 100	10.46	.46	.64	.82	34.0	115 900	11.15	.46	.66	.84	32.1	109 500	11.82	.47	.68	.86	30.2	102 900	12.46	.48	.70	.89





**RATINGS – 50hz**

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

**HS17-2753 (Low Speed) – CB17-275 – CBH17-275**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Temperature																							
			18°C (65°F)						24°C (75°F)						29°C (85°F)						35°C (95°F)					
			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)		
			kW	Btuh		kW	Dry Bulb			kW		Btuh	kW	Dry Bulb				kW	Btuh	kW	Dry Bulb			kW	Btuh	kW
24°C 75°F	27°C 80°F	29°C 85°F			24°C 75°F		27°C 80°F	29°C 85°F	24°C 75°F		27°C 80°F			29°C 85°F	24°C 75°F	27°C 80°F	29°C 85°F				24°C 75°F	27°C 80°F	29°C 85°F			
17.2°C (63°F)	2.97	6300	45.2	154 200	7.37	.89	1.00	1.00	43.2	147 300	8.23	.92	1.00	1.00	41.1	140 200	9.14	.94	1.00	1.00	38.9	132 800	10.11	.97	1.00	1.00
	3.68	7800	47.4	161 800	7.42	.97	1.00	1.00	45.2	154 300	8.33	.99	1.00	1.00	43.0	146 700	9.29	1.00	1.00	1.00	40.7	138 900	10.31	1.00	1.00	1.00
	4.39	9300	49.1	167 400	7.45	1.00	1.00	1.00	46.8	159 600	8.40	1.00	1.00	1.00	44.4	151 600	9.41	1.00	1.00	1.00	42.0	143 300	10.45	1.00	1.00	1.00
19.4°C (67°F)	2.97	6300	46.9	160 000	7.41	.67	.87	1.00	44.5	151 700	8.29	.69	.89	1.00	42.0	143 300	9.22	.71	.92	1.00	39.5	134 800	10.18	.73	.95	1.00
	3.68	7800	48.1	164 200	7.43	.73	.95	1.00	45.7	155 800	8.35	.75	.98	1.00	43.2	147 500	9.31	.77	1.00	1.00	40.8	139 100	10.32	.80	1.00	1.00
	4.39	9300	49.3	168 200	7.45	.79	1.00	1.00	46.9	159 900	8.41	.81	1.00	1.00	44.5	151 800	9.41	.84	1.00	1.00	42.1	143 500	10.46	.87	1.00	1.00
21.7°C (71°F)	2.97	6300	49.8	169 900	7.47	.47	.66	.85	47.2	161 000	8.43	.48	.68	.87	44.5	151 900	9.42	.49	.70	.90	41.9	142 800	10.44	.50	.72	.93
	3.68	7800	50.8	173 300	7.48	.50	.72	.93	48.1	164 000	8.47	.50	.75	.96	45.3	154 700	9.48	.52	.77	.99	42.6	145 400	10.52	.53	.80	1.00
	4.39	9300	51.5	175 600	7.49	.52	.78	1.00	48.8	166 400	8.49	.53	.81	1.00	46.0	156 800	9.53	.55	.84	1.00	43.2	147 300	10.58	.56	.87	1.00

**HS17-2753 (High Speed) – CB17-275 – CBH17-275**

Entering Wet Bulb Temperature	Total Air Volume		Outdoor Temperature																							
			29°C (85°F)						35°C (95°F)						41°C (105°F)						46°C (115°F)					
			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)			Total Cooling Capacity		Compressor Motor	Sensible To Total Ratio (S/T)		
			kW	Btuh		kW	Dry Bulb			kW		Btuh	kW	Dry Bulb				kW	Btuh	kW	Dry Bulb			kW	Btuh	kW
24°C 75°F	27°C 80°F	29°C 85°F			24°C 75°F		27°C 80°F	29°C 85°F	24°C 75°F		27°C 80°F			29°C 85°F	24°C 75°F	27°C 80°F	29°C 85°F				24°C 75°F	27°C 80°F	29°C 85°F			
17.2°C (63°F)	2.97	6300	63.2	215 600	18.15	.75	.89	1.00	59.9	204 400	19.28	.77	.92	1.00	56.5	192 700	20.43	.79	.94	1.00	52.9	180 500	21.59	.82	.97	1.00
	3.68	7800	65.6	223 900	18.55	.81	.96	1.00	62.3	212 500	19.75	.83	.98	1.00	58.9	200 900	20.99	.85	1.00	1.00	55.4	189 200	22.30	.88	1.00	1.00
	4.39	9300	67.8	231 400	18.93	.86	1.00	1.00	64.6	220 500	20.21	.89	1.00	1.00	61.2	208 900	21.54	.91	1.00	1.00	57.6	196 600	22.90	.94	1.00	1.00
19.4°C (67°F)	2.97	6300	67.0	228 600	18.79	.58	.73	.86	63.4	216 500	19.99	.59	.74	.88	59.7	203 700	21.19	.61	.77	.91	55.8	190 300	22.40	.62	.79	.94
	3.68	7800	69.0	235 400	19.11	.62	.78	.93	65.2	222 500	20.34	.63	.81	.96	61.3	209 300	21.57	.65	.83	.98	57.3	195 400	22.82	.67	.86	1.00
	4.39	9300	70.4	240 300	19.37	.65	.84	.99	66.6	227 100	20.61	.67	.87	1.00	62.6	213 600	21.88	.69	.90	1.00	58.5	199 600	23.16	.71	.93	1.00
21.7°C (71°F)	2.97	6300	71.4	243 600	19.54	.43	.57	.70	67.6	230 500	20.82	.43	.58	.72	63.7	217 200	22.11	.44	.59	.74	59.4	202 700	23.42	.45	.61	.77
	3.68	7800	73.2	249 600	19.85	.44	.60	.76	69.2	236 100	21.14	.45	.62	.79	65.1	222 100	22.46	.46	.64	.81	60.7	207 000	23.79	.46	.66	.84
	4.39	9300	74.4	253 800	20.06	.46	.64	.82	70.3	239 800	21.38	.47	.66	.85	66.0	225 300	22.71	.47	.68	.88	61.6	210 200	24.04	.49	.71	.91