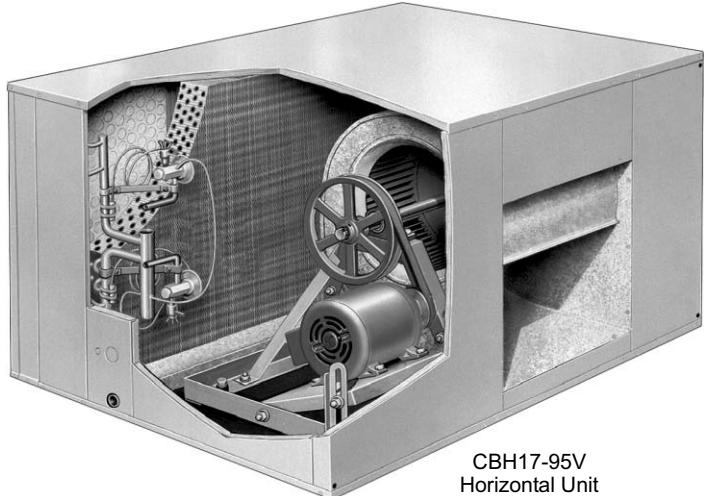
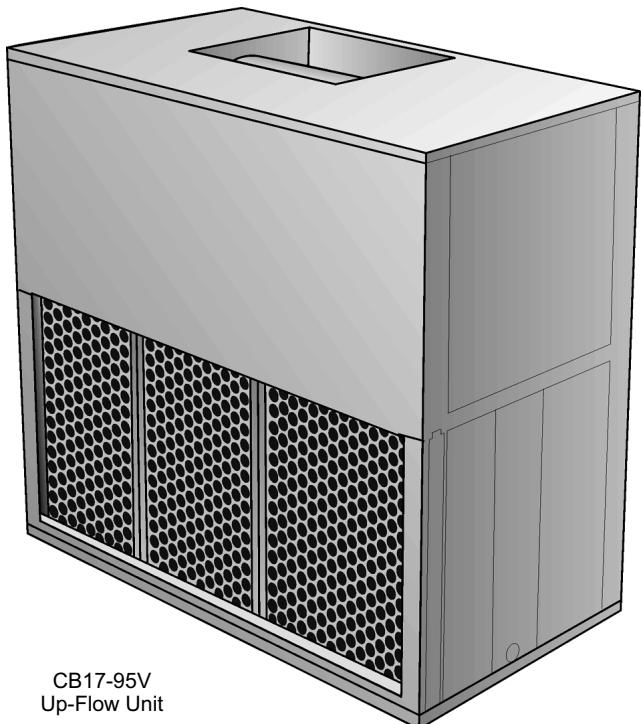


LENNOX®**ENGINEERING DATA****BLOWER COIL UNITS - 50HZ****CB17/CBH17****UP-FLOW/HORIZONTAL****Nominal Capacity - 26.3 to 70 kW (7.5 to 20 Tons)****Optional Hot Water Coil Net Heating Capacity - 35.1 to 146.4 kW (120 000 to 500 000 Btuh)****Optional Electric Heat - 10 to 60 kW**

Bulletin No. 490018

September 2002

Supersedes September 1994

CBH17-95V
Horizontal UnitCB17-95V
Up-Flow UnitREGISTERED
QUALITY
SYSTEMS**MODEL NUMBER IDENTIFICATION****CBH 17 - 135 V - 2**

CB = Up-Flow Blower / Evaporator Coil
 CBH = Horizontal Blower / Evaporator Coil
 Series

Unit Type

Nominal Cooling Capacity

- 95 = 26.3 kW (7.5 tons)
- 135 = 35 kW (10 tons)
- 185 = 52.5 kW (15 tons)
- 275 = 70 kW (20 tons)

Minor Revision Number

Factory Installed Expansion Valve(s)

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FEATURES

Application

- Provides installation versatility and maximum efficiency in cooling performance, air handling and filtering in cooling or heat pump applications.
- Available in two model styles, up-flow supply air discharge (CB17) or horizontal supply air discharge (CBH17).
- Equipped with multi-circuit evaporator coils, suitable for application with Lennox 6 to 20 ton condensing units or 7.5 to 10 ton heat pump outdoor units.
- Each indoor coil circuit has a separate expansion valve and distribution system for two stage capacity control during cooling cycles.
- Blower coil units are shipped factory assembled ready to install. Blower drives are shipped separately and must be ordered extra.
- See Condensing Unit bulletins in Condensing Units section for cooling capacities.
- See Heat Pump Outdoor Unit Bulletins in Heat Pump Outdoor Units section for cooling and heating capacities.

Completely Tested

- All blower-coil models are thoroughly tested with matching outdoor units in the Lennox Research Laboratory environmental test rooms which meet the 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 test conditions while operating at rated voltage and air volumes.
- 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 (I.E.C.).
- Blower performance data is from actual unit tests conducted in the Lennox air test chamber.
- Manufactured in accordance with ISO 9002 quality standards.

Cabinet

- Cabinet is constructed of heavy-gauge, pre-painted, galvanized steel.
- Cabinet is completely lined with thick, fiberglass insulation resulting in quiet and efficient operation due to the excellent sound deadening and insulating qualities of fiberglass.
- Large removable panels provide complete service access.
- Electrical inlets are conveniently located in the cabinet.

Multi-Circuit, Copper Tube Coil

- Extra large surface area of Lennox designed coil provides maximum cooling efficiency, excellent heat transfer and low air resistance.
- Coil is face split with separate circuits; each circuit has its own expansion valve.
- Precise circuiting gives uniform refrigerant distribution.
- Lennox fabricated coil is constructed of precisely spaced, lanced aluminum fins fitted to durable, seamless, rifled copper tubes.
- Rifled tubing provides superior refrigerant flow resulting in maximum heat transfer.
- Fins are strengthened to resist bending and are equipped with collars that grip tubing for maximum contact area.
- Flared tubing connections and silver soldering provide tight, leakproof joints.
- Long life copper tubing is corrosion-resistant and easy to field service.
- Coil is thoroughly factory tested under high pressure to ensure leakproof construction.

Drain Pan

- Deep, corrosion resistant drain pan is constructed of heavy-gauge, galvanized steel.
- Equipped with a drain connection on each side of the cabinet for installation versatility.

Belt Drive Blowers

- .95V models are equipped with a single blower wheel, -135V, -185V and -275V models have dual blower wheels.
- Centrifugal belt driven blowers deliver large air volumes quietly and with low power consumption.
- Blower wheels are heavy-duty, with forward curved blades and double inlet.
- Wheels are statically and dynamically balanced to eliminate vibration and designed to give maximum air delivery.
- Bearings are heavy-duty, self-aligning, permanently sealed and lubricated.
- All moving parts (blower wheels, drives and motor) are mounted on a rugged frame, resiliently mounted and isolated from the rest of the cabinet.
- Motor mounting frame allows simple belt adjustment and motor mounting.
- Adjustable motor pulley allows speed adjustments.
- A choice of motor outputs and drives are available and must be ordered extra. See drive kit table.

Expansion Valve

- Factory installed and piped.
- Multi-circuit coils are equipped with one thermal expansion valve per circuit.
- Valves are sized for best performance.

Piping and Drain Connections

- Refrigerant line inlets and drain connections are provided on both sides of the cabinet.
- Refrigerant lines require sweat connections and are made internal to the cabinet.
- Condensate drain outlets extend outside the cabinet for ease of connection.

Air Filters

- 25 mm (1 inch) thick, throwaway fiberglass media filters are furnished as standard.
- Filter rack is adjustable to accommodate up to 51 mm (two inch) thick throwaway or cleanable filters (not furnished).
- Filter rack design permits quick and easy removal of filters for servicing.

OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA

Blower Contactor Kit

- Required for applications without EH17 electric heaters. Kit is not required with EH17 electric heaters.
- Kit requires a separate 20VA (minimum rating) transformer (not furnished).

Commercial Controls Platform Kit

- Allows CB17/CBH17 to be used with economizer and various electronic thermostat control systems with plug-in connections.
- Kit contains control box with relay, terminal strip, and wiring harness.

Differential Enthalpy Control (CB17/CBH17-95V & CB17/CBH17-135V only)

- A solid-state return air enthalpy sensor is available to be used with the outdoor air enthalpy control to determine which air has the lowest enthalpy. The air with the lowest enthalpy will be selected.
- Return air enthalpy sensor field installs in the economizer damper section.

Continued on Next Page ►

OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA

Economizer Damper Section - EMD17M

- Factory assembled and wired economizer dampers and controls are available for field installation.
- Heavy-gauge, pre-painted steel cabinet is completely insulated with thick, matte-faced fiberglass insulation.
- Large removable panels on both sides of cabinet provide complete service access.
- Mounting flanges provide ease of connection to blower-coil unit.
- Flanges on outdoor air opening and return air opening permit easy duct connection.
- Economizer has mechanically linked outdoor air and recirculated air dampers.
- Formed dampers rotate smoothly in nylon bearings.
- Outdoor air dampers are reinforced and gasketed for tight seal and quiet operation.
- Damper linkage and shafts are plated.
- The positioning of the dampers is accomplished by a 24V fully-modulating, electronic spring return damper motor with adjustable minimum position potentiometer and controlled by the room thermostat, adjustable mixed air sensor and adjustable enthalpy control.
- The enthalpy control allows 0 to 100% outdoor air to be used for "free cooling" when outdoor temperature and humidity are acceptable.

Electric Heat - EH17

- Furnished in a separate add-on matching cabinet. Bolts, nuts and washers are furnished to secure cabinets together. Holes are pre-punched.
- Cabinet is constructed of heavy-gauge, pre-painted galvanized steel and completely insulated with thick, fiberglass insulation.
- Removable panel permits service access.
- Electrical inlet provides wiring entry.
- Factory installed electric heaters are available in several sizes, see Electric Heat Data table.
- Helix wound, nichrome heating elements are exposed directly in the air stream resulting in instant heat transfer, lower coil temperatures and long service life.
- Elements are accurately located and insulated from the heavy-gauge steel support frame by high quality insulators.
- Time delay relays bring elements on and off line, in sequence and equal increments, with time delay between each.
- Elements are equipped with individual limit controls providing positive protection in case of overheating.
- Heaters may be two-stage controlled with each stage being energized only when required.
- Sub-fusing, contactors, control relays, 24V transformer, terminal block, and blower motor contactor are furnished.

Empty Spacer Cabinet - "00"

- Matching empty spacer cabinets give additional height required for plenum and grille in up-flow store cooler applications and provides spacing between unit and plenum and grille in horizontal installations not using an electric heat or hot water heat cabinet.
- Constructed of heavy-gauge, pre-painted galvanized steel.
- Completely lined with thick, matte-faced fiberglass insulation.

Heat Pump Check Valve Kit

- Field installed kit contains check valves with connecting tubing.

Hot Water Coil - HW17

- Furnished in a separate add-on matching cabinet. Bolts, nuts and washers are furnished to secure cabinets together. Holes are pre-punched.
- Cabinet is constructed of heavy-gauge, pre-painted galvanized steel and completely insulated with thick, matte-faced fiberglass insulation.
- Removable panel permits service access.
- Piping inlets are furnished in both sides of cabinet.
- Factory installed, Lennox designed and built coil has large face area, excellent heat transfer and low air resistance.
- Constructed of precisely spaced ripple-edged aluminum fins fitted to durable copper tubes.
- 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 easy to field service.
- Coil is thoroughly factory tested under high pressure to ensure leakproof construction.
- Valves and pumps must be furnished by installer.

Outdoor Thermostat Kit

- Used to lock out some of the electric heating elements on indoor units where two stage control is applicable.
- Outdoor thermostat maintains the heating load on the low power input as long as possible before allowing the full power load to come on line.

Return Air Grille - RG17

- Anodized aluminum grille field installs in return air opening of blower-coil unit.

Supply Air Plenum & Grille - SPG17 and SPGH17

- Constructed of heavy-gauge, pre-painted galvanized steel and completely lined with thick, matte-faced fiberglass insulation.
- Equipped with anodized aluminum grille with double deflection and four-way directional control in vertical and horizontal planes for precise control of discharge air.
- Bolts, nuts and washers are furnished to secure plenum to cabinet.

Suspension Kits (CBH17-95V & CBH17-135V only)

- Provides support of units in suspended horizontal applications.
- Kit consists of 2 angle iron channels with holes at each end.
- Kits are not available for the CBH17-185V & CBH17-275V models and must be field provided.

INSTALLATION CLEARANCES

Model Number - Up-Flow Model Number - Horizontal	CB17-95V CBH17-95V	mm inches	CB17-135V CBH17-135V	mm inches	CB17-185V CBH17-185V	mm inches	CB17-275V CBH17-275V
Cabinet	0	0	0	0	0	0	0
Plenum	25	1	25	1	25	1	25
Duct	*25	*1	**25	**1	*25	*1	*25

*Within 1 m (3 feet) of the unit.

**Within 1.2 m (4 feet) of the unit.

OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA

General Data	Model Number - Up-Flow	CB17-95	CB17-135	CB17-185	CB17-275
	Model Number - Horizontal	CBH17-95	CBH17-135	CBH17-185	CBH17-275
Blower Contactor Kit		25G42	25G42	25G42	25G42
Commercial Controls Platform Kit		55H53	55H53	55H53	55H53
Differential Enthalpy Control		54G44	54G44	Not Available	Not Available
Economizer Dampers	Model Number	EMD17M-95	EMD17M-135	EMD17M-185	EMD17M-275
	Catalog Number	74G20	74G21	43G63	43G64
	Shipping Weight - kg (lbs.)	66 (145)	84 (185)	179 (395)	246 (542)
Electric Heat			See Electric Heat Data Tables		
Empty Spacer Cabinet	Model Number	CB17-95-00	CB17-135-00	CB17-185/275-00	CB17-185/275-00
	Catalog Number	50F06	50F07	27G76	27G76
	Shipping weight - kg (lbs.)	25 (55)	27 (60)	37 (82)	37 (82)
Heat Pump Check Valve Kit		53F21 (contains 2 valves)	53F21 (contains 2 valves)	29G19 (contains 2 valves)	29G20 (contains 4 valves)
Hot Water Coil	Model Number	HW17-95	HW17-135	HW17-185/275	HW17-185/275
	Catalog Number	41F20	41F21	27G75	27G75
	Heating capacity range	See Hot Water Heating Capacity Curves Pages 15 - 16			
Water line connections sweat	Inlet o.d. - mm (in.)	34.9 (1-3/8)	34.9 (1-3/8)	41.3 (1-5/8)	41.3 (1-5/8)
	Outlet o.d. - mm (in.)	34.9 (1-3/8)	34.9 (1-3/8)	41.3 (1-5/8)	41.3 (1-5/8)
	Tube diameter - mm (in.)	12.7 (1/2)	12.7 (1/2)	12.7 (1/2)	12.7 (1/2)
	Fins per meter (in.) - Number of Rows	472 (12) - 2	472 (12) - 2	472 (12) - 2	472 (12) - 2
	Net Face Area - m ² (ft. ²)	0.59 (6.4)	0.79 (8.5)	14.5 (15.6)	14.5 (15.6)
	Shipping Weight - kg (lbs.)	43 (95)	47 (104)	73 (160)	73 (160)
Outdoor Thermostat	Thermostat	56A87	56A87	56A87	56A87
	Mounting Box	31461	31461	31461	31461
Refrigerant Solenoid Valve		37672	37672	Not Available	Not Available
Refrigerant Solenoid Valve Control Relay		31960	31960	Not Available	Not Available
Return Air Grille	Model Number	RG17-95	RG17-135	RG17-185	RG17-275
	Catalog Number	68F14	68F15	25G97	25G98
	Shipping Weight - kg (lbs.)	13 (29)	17 (37)	29 (65)	37 (82)
	Grille Free Area - m ² (sq. ft.)	0.68 (7.3)	0.84 (9.0)	1.53 (16.5)	1.97 (21.2)
Supply Air Plenum and Grille	Horizontal	SPGH17-95	SPGH17-135	SPGH17-185/275	SPGH17-185/275
	Catalog Number	68F10	68F11	25G88	25G88
	Shipping Weight - kg (lbs.)	41 (19)	50 (23)	86 (39)	86 (39)
	Grille Free Area - sq. ft. (m ²)	4.5 (0.42)	5.6 (0.52)	9.7 (0.90)	9.7 (0.90)
	Up-Flow	SPG17-95	SPG17-135	SPG17-185/275	SPG17-185/275
	Catalog Number	68F08	68F09	25G89	25G89
	Shipping Weight - kg (lbs.)	56 (124)	67 (148)	110 (242)	110 (242)
	Grille Free Area - m ² (sq. ft.)	0.42 (4.5)	0.52 (5.6)	0.90 (9.7)	0.90 (9.7)
Suspension Kit - Horizontal	Catalog Number	44F93	44F94	Field Fabricate	Field Fabricate
	Shipping Weight - kg (lbs.)	10 (21)	11 (25)	---	---
	Length - m (in.)	1.5 (60)	1.8 (72)	---	---

¹Not required with electric heat.

SPECIFICATIONS

General Data	Model Number - Up-Flow Model Number - Horizontal Nominal kW (Tonnage)	CB17-95 CBH17-95 26.3 (7.5)	CB17-135 CBH17-135 35 (10)	CB17-185 CBH17-185 122.5 (15)	CB17-275 CBH17-275 70 (20)
Connections	Suction/Vapor line o.d. - mm (in.) sweat	34.9 (1-3/8)	34.9 (1-3/8)	(2) 34.9 (1-3/8)	(2) 34.9 (1-3/8)
	Liquid line o.d. - mm (in.) sweat	(2) 9.5 (3/8)	(2) 9.5 (3/8)	(2) 12.7 (1/2)	(4) 9.5 (3/8)
	Condensate drain (fpt) - mm (in.)	(2) 31.8 (1-1/4)	(2) 31.8 (1-1/4)	(2) 31.8 (1-1/4)	(2) 31.8 (1-1/4)
Evaporator Coil	Net face area - m ² (sq. ft.)	0.74 (7.98)	0.94 (10.07)	1.61 (17.38)	2.15 (23.16)
	Coil Split - 1st stage/2nd stage (%)	60/40	61.9/38.1	53.8/46.2	52.9/47.1
	Tube diameter - mm (in.)	9.5 (3/8)	9.5 (3/8)	12.7 (1/2)	12.7 (1/2)
	Number of rows	4	4	4	4
Refrigerant	Fins per m (inch)	551 (14)	551 (14)	512 (13)	512 (13)
	Not Furnished	HCFC-22	HCFC-22	HCFC-22	HCFC-22
Filter	#Number and size (throwaway) - mm	(2) 406 x 635 x 25 (1) 508 x 635 x 25	(4) 406 x 635 x 25	(6) 406 x 508 x 25 (2) 406 x 635 x 25	(6) 508 x 508 x 25 (2) 508 x 635 x 25
	in.	(2) 16 x 25 x 1 (1) 20 x 25 x 1	(4) 16 x 25 x 1	(6) 16 x 20 x 1 (2) 16 x 25 x 1	(6) 20 x 20 x 1 (2) 20 x 25 x 1
Shipping Data	□CB17 - kg (lbs.)	159 (350)	190 (418)	327 (720)	370 (815)
	□CBH17 - kg (lbs.)	142 (312)	172 (379)	345 (760)	390 (860)
Blower Wheel	Nominal diameter & width - mm	(1) 381 x 381	(2) 381 x 229	(2) 381 x 279	(2) 381 x 381
	in.	15 x 15	15 x 9	15 x 11	15 x 15

DRIVE KIT SELECTION

1.1 kW Blower Motor Drive Kits	Model Number - 380/420V-50hz-3ph	DKB17-95/135-1.5-5	DKB17-95/135-1.5-5	---	---
Motor Drive Kits	Nominal kW (Horsepower)	1.1 (1.5)	1.1 (1.5)	---	---
	③ Rev/Min Range	600 - 780	600 - 780	---	---
	Shipping Weight	19 kg (42 lbs.)	19 kg (42 lbs.)	---	---
	Minimum Circuit Ampacity / Maximum Fuse Size	4 / 15	4 / 15	---	---
1.5 kW Blower Motor Drive Kits	Model Number - 380/420V-50hz-3ph	② DKB17-95/135-2-9	② DKB17-95/135-2-9	DKB17-185/275-2-16	DKB17-185/275-2-16
	*Nominal kW (Horsepower)	1.5 (2)	1.5 (2)	1.5 (2)	1.5 (2)
	③ Rev/Min Range	710 - 890	710 - 890	520 - 640	520 - 640
	Shipping Weight	22 kg (49 lbs.)			
	Minimum Circuit Ampacity / Maximum Fuse Size	5 / 15	5 / 15	5 / 15	5 / 15
2.2 kW Blower Motor Drive Kits	Model Number - 380/420V-50hz-3ph	---	---	DKB17-185/275-3-17	DKB17-185/275-3-17
	*Nominal kW (Horsepower)	---	---	2.2 (3)	2.2 (3)
	③ Rev/Min Range	---	---	590 - 710	590 - 710
	Shipping Weight	---	---	25 kg (55 lbs.)	25 kg (55 lbs.)
	Minimum Circuit Ampacity / Maximum Fuse Size	---	---	6 / 15	6 / 15
3.7 kW Blower Motor Drive Kits	Model Number - 380/420V-50hz-3ph	---	---	DKB17-185/275-5-18	DKB17-185/275-5-18
	*Nominal kW (Horsepower)	---	---	3.7 (5)	3.7 (5)
	③ Rev/Min Range	---	---	700 - 850	700 - 850
	Shipping Weight	---	---	34 kg (75 lbs.)	34 kg (75 lbs.)
	Minimum Circuit Ampacity / Maximum Fuse Size	---	---	10 / 15	10 / 15

①Weight shown is for blower-coil unit only. For total shipping weight, add the weight of the desired drive kit (See Drive Kit Selection Table) to the weight of the blower-coil unit. The blower-coil and the drive kit are shipped separately.

②Drive Kit includes belt to be field installed in place of belt shipped in blower coil unit.

③At 1440 Rev/Min motor speed.

‡Standard filters are 25 mm (1 inch) thick. Optional 51 mm (2 inch) filters may be used.

*Service Factor = 1.15

NOTE — Motors do not have internal overload protectors.

NOTE — Magnetic Starters and Overload Protectors are available and must be ordered extra. See Lennox Price Book.

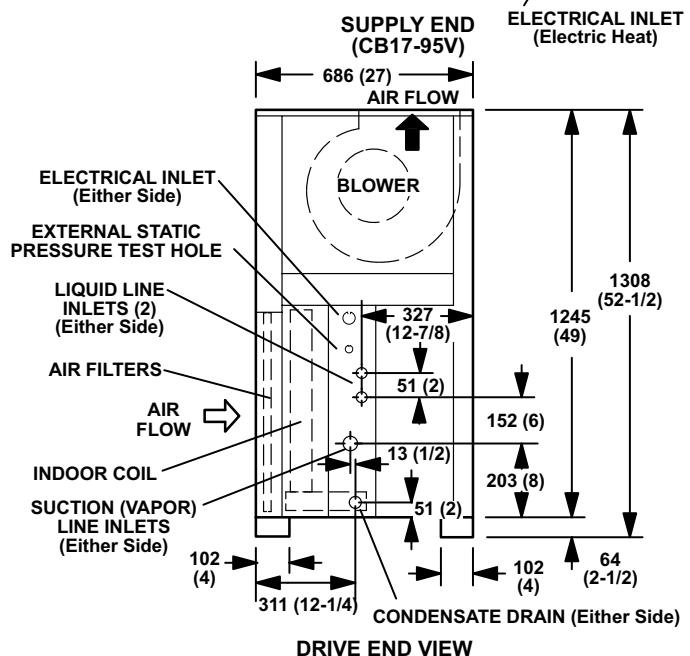
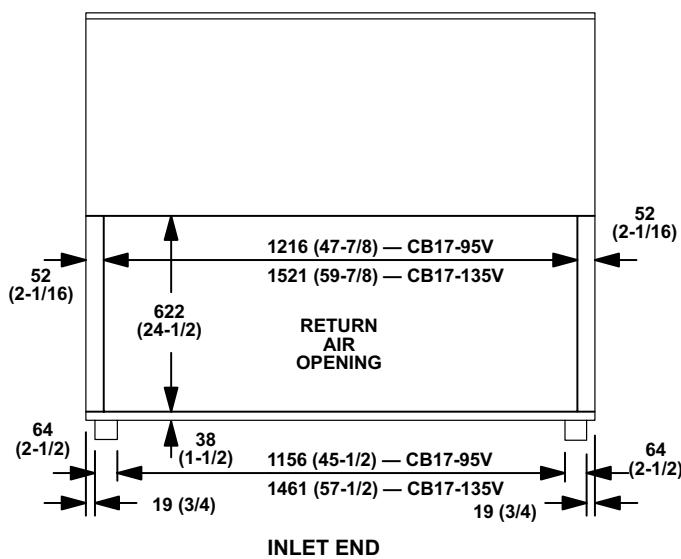
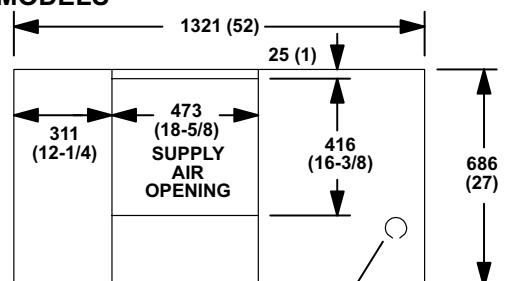
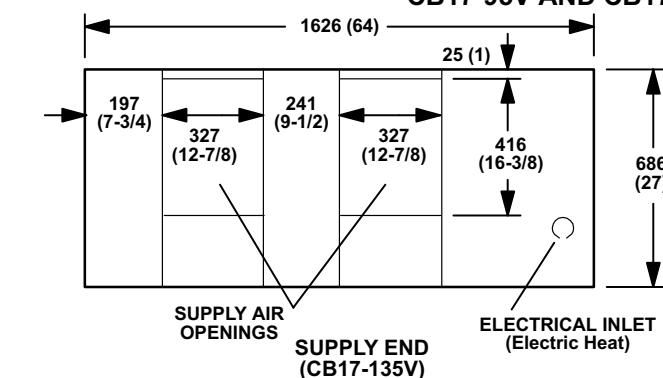
ELECTRIC HEAT DATA

Electric Heat Model Number and Shipping Weight	Number of Steps	Volts Input	Heating Capacity		Total Unit + Electric Heat Minimum Circuit Ampacity				Total Unit + Electric Heat Maximum Fuse Size				
			kW	Btuh	1.5 hp (1.1 kW)	2 hp (1.5 kW)	3 hp (2.2 kW)	5 hp (3.7 kW)	1.5 hp (1.1 kW)	2 hp (1.5 kW)	3 hp (2.2 kW)	5 hp (3.7 kW)	
CB/CBH17-95V													
15 kW EH17-95-15 63F22 77 kg (170 lbs.)	2	380	9.4	32 100	27	27	---	---	30	30	---	---	---
		400	10.4	35 500	27	27	---	---	30	30	---	---	---
		420	11.5	39 200	27	27	---	---	30	30	---	---	---
30 kW EH17-95-30 63F23 80 kg (176 lbs.)	1	380	18.8	64 100	49	50	---	---	50	50	---	---	---
		400	20.8	71 000	49	50	---	---	50	50	---	---	---
		420	23.0	78 500	49	50	---	---	50	50	---	---	---
45 kW EH17-95-45 63F24 83 kg (182 lbs.)	†2	380	28.2	96 100	72	72	---	---	80	80	---	---	---
		400	31.3	106 800	72	72	---	---	80	80	---	---	---
		420	34.5	117 700	72	72	---	---	80	80	---	---	---
CB/CBH17-135V													
15 kW EH17-135-15 63F34 88 kg (193 lbs.)	1	380	9.4	32 100	27	27	---	---	30	30	---	---	---
		400	10.4	38 200	27	27	---	---	30	30	---	---	---
		420	11.5	39 200	27	27	---	---	30	30	---	---	---
30 kW EH17-135-30 63F35 91 kg (200 lbs.)	1	380	18.8	64 100	49	50	---	---	50	50	---	---	---
		400	20.8	71 000	49	50	---	---	50	50	---	---	---
		420	23.0	78 500	49	50	---	---	50	50	---	---	---
45 kW EH17-135-45 63F36 94 kg (207 lbs.)	†2	380	28.2	96 200	72	72	---	---	80	80	---	---	---
		400	31.3	106 800	72	72	---	---	80	80	---	---	---
		420	34.5	117 700	72	72	---	---	80	80	---	---	---
60 kW EH17-135-60 63F37 97 kg (214 lbs.)	†2	380	37.6	128 300	76	77	---	---	80	80	---	---	---
		400	41.7	142 300	76	77	---	---	80	80	---	---	---
		420	45.9	156 600	76	77	---	---	80	80	---	---	---
CB/CBH17-185V-275V													
15 kW EH17-185/275-15 27G01 88 kg (193 lbs.)	1	380	9.4	32 100	---	27	29	32	---	30	30	35	
		400	10.4	35 500	---	27	29	32	---	30	30	35	
		420	11.5	39 200	---	27	29	32	---	30	30	35	
30 kW EH17-185/275-30 27G02 91 kg (200 lbs.)	1	380	18.8	64 100	---	50	52	55	---	50	60	60	
		400	20.8	71 000	---	50	52	55	---	50	60	60	
		420	23.0	78 500	---	50	52	55	---	50	60	60	
45 kW EH17-185/275-45 27G03 94 kg (207 lbs.)	†2	380	28.2	96 200	---	72	74	78	---	80	80	80	
		400	31.3	106 800	---	72	74	78	---	80	80	80	
		420	34.5	117 700	---	72	74	78	---	80	80	80	
60 kW EH17-185/275-60 27G04 97 kg (214 lbs.)	†2	380	37.6	128 300	---	77	79	82	---	80	80	90	
		400	41.7	142 300	---	77	79	82	---	80	80	90	
		420	45.9	156 600	---	77	79	82	---	80	80	90	

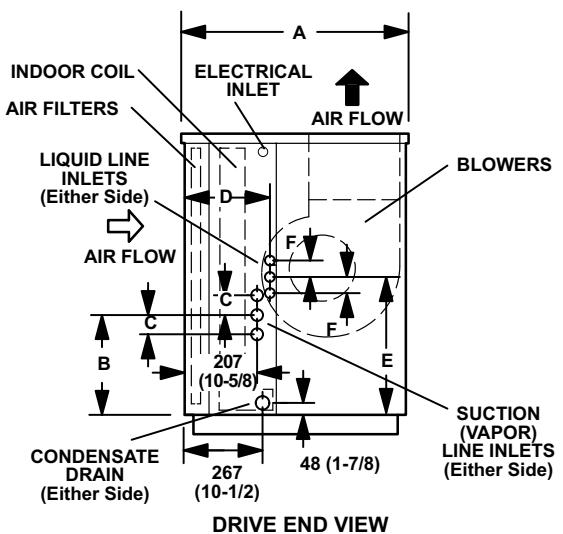
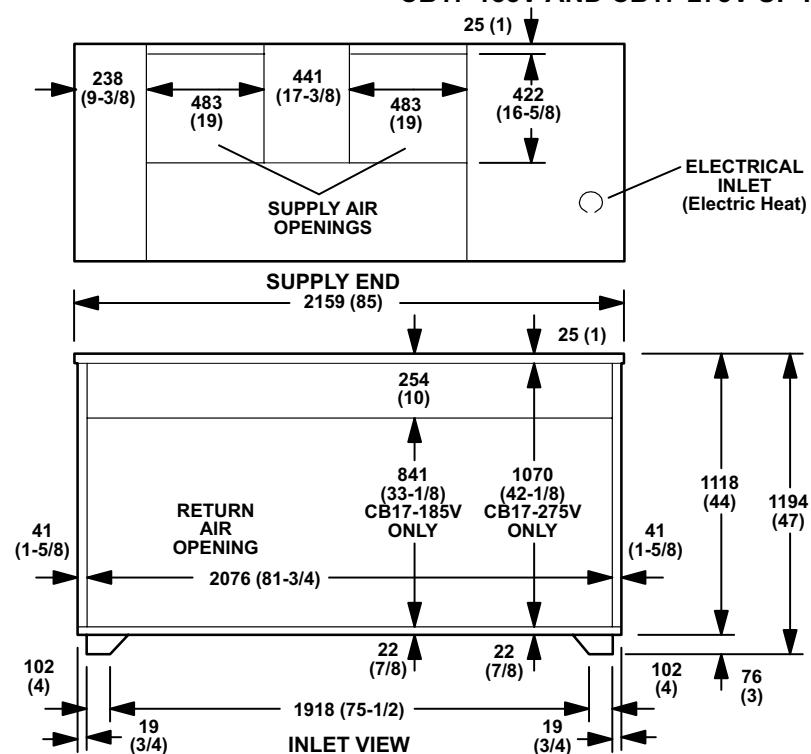
†May be used with two stage control.

DIMENSIONS - MM (INCHES)

CB17-95V AND CB17-135V UP-FLOW MODELS



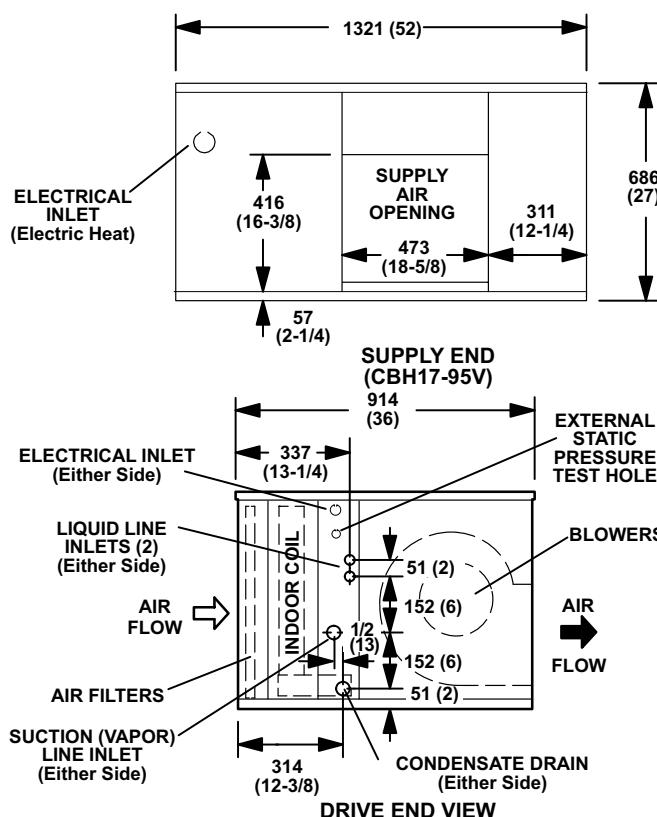
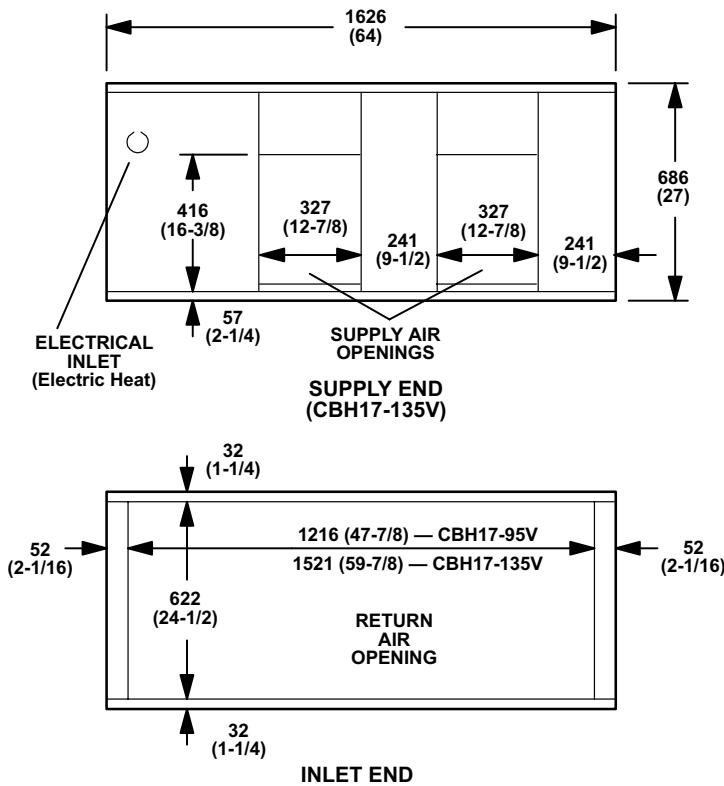
CB17-185V AND CB17-275V UP-FLOW MODELS



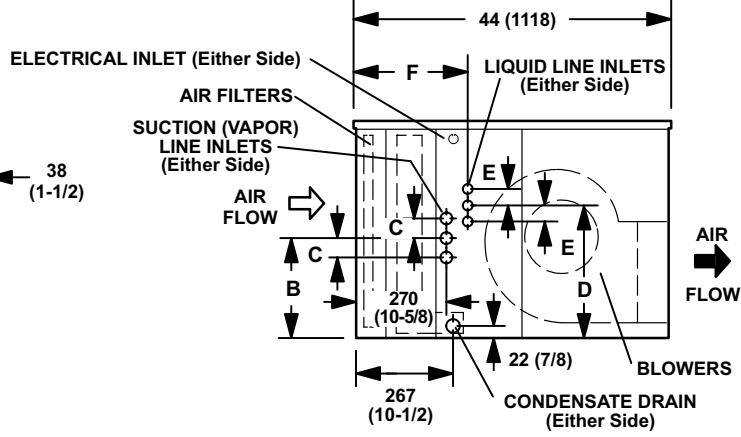
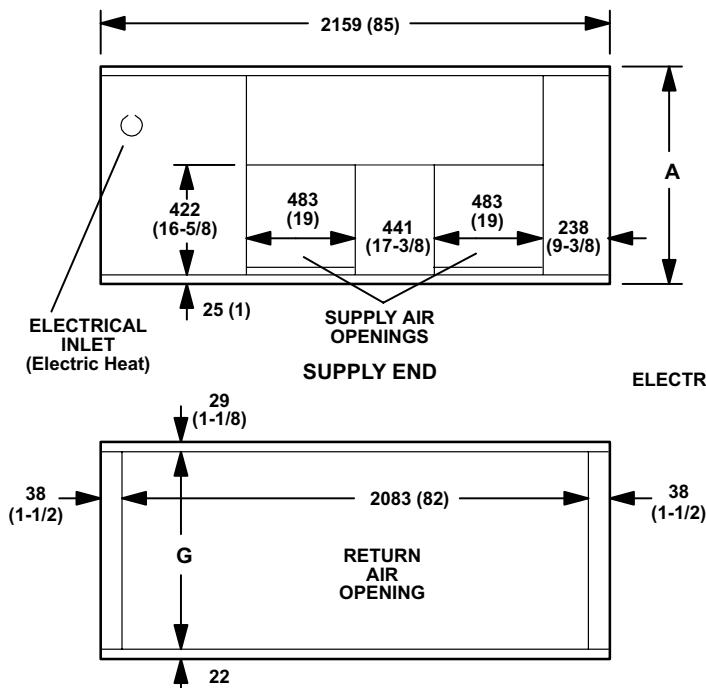
Model Number	A mm	A in.	B mm	B in.	C mm	C in.	D mm	D in.	E mm	E in.	F mm	F in.
CB17-185V	889	35	467	18-3/8	57	2-1/2	318	12-1/2	575	22-5/8	32	1-1/4
CB17-275V	1118	44	578	22-3/4	67	2-5/8	362	14-1/4	572	22-1/2	124	4-7/8

DIMENSIONS - MM (INCHES)

CBH17-95V AND CBH17-135V HORIZONTAL MODELS



CBH17-185V AND CBH17-275V HORIZONTAL MODELS

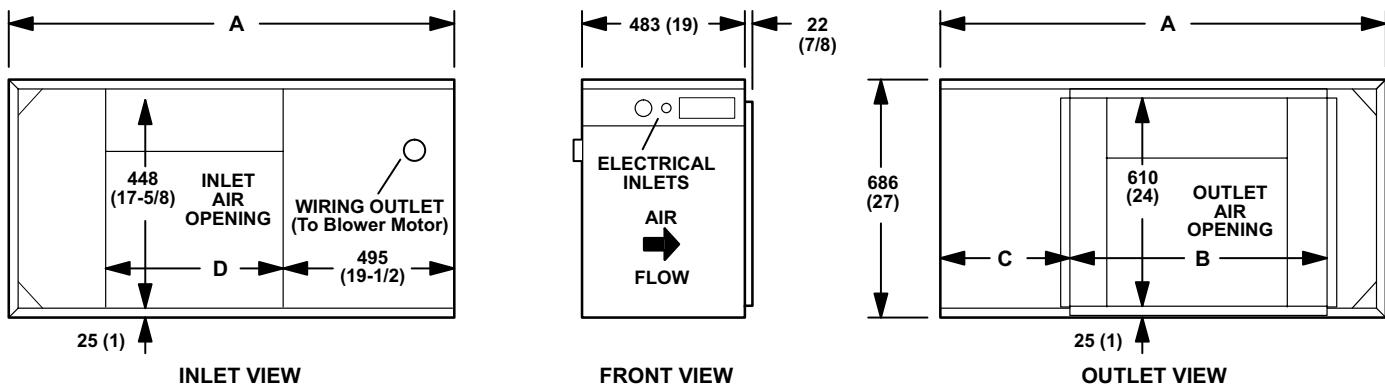


INLET END

Model Number	A mm	A in.	B mm	B in.	C mm	C in.	D mm	D in.	E mm	E in.	F mm	F in.	G mm	G in.
CBH17-185V	889	35	467	18-3/8	57	2-1/4	575	22-5/8	32	1-1/4	333	13-1/8	838	33
CBH17-275V	1118	44	576	22-11/16	67	2-5/8	570	22-7/16	124	4-7/8	378	14-7/8	1067	42

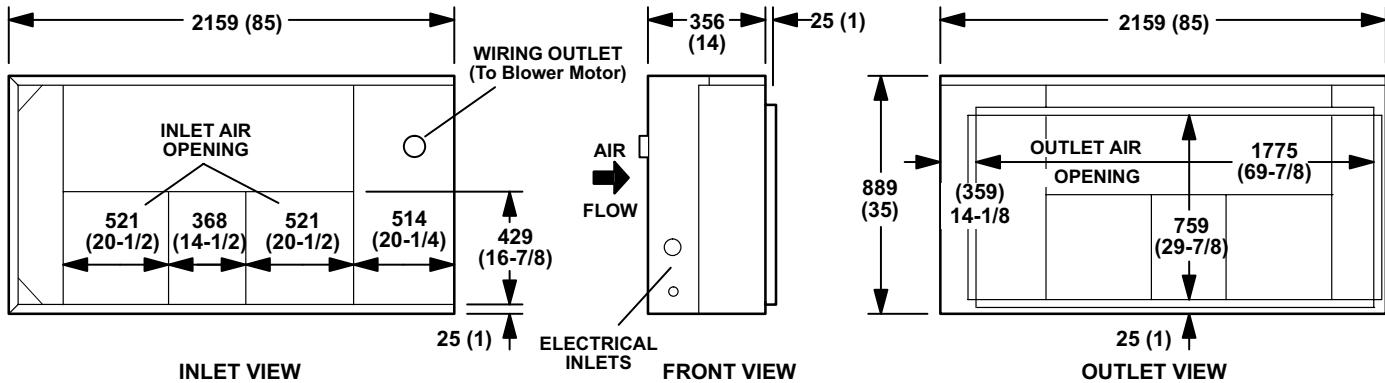
ACCESSORY DIMENSIONS - MM (INCHES)

EH17-95 AND EH17-135 ELECTRIC HEAT SECTION

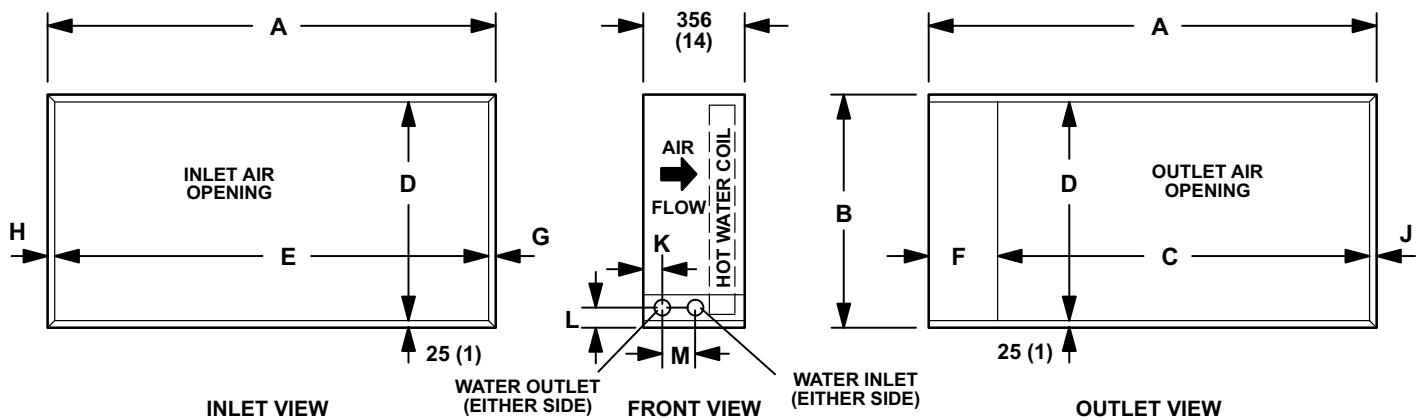


Model Number	A mm	A in.	B mm	B in.	C mm	C in.	D mm	D in.
EH17-95	1321	52	759	29-7/8	370	14-9/16	535	21-1/16
EH17-135	1626	64	1013	39-7/8	470	18-1/8	948	37-15/16

EH17-185/275 ELECTRIC HEAT SECTION



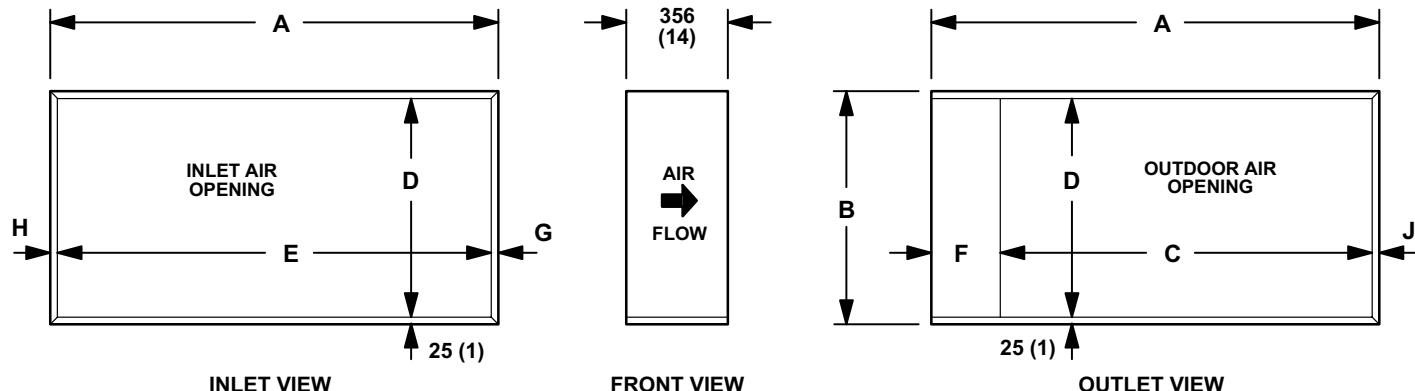
HW17 SERIES HOT WATER HEAT SECTION



Model Number	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	J mm	K mm	L mm	M mm
HW17-95	1321	686	1054	635	1270	241	25	25	25	76	60	102
	52	27	41-1/2	25	50	9-1/2	1	1	1	3	2-3/8	4
HW17-135	1626	686	1359	635	1575	241	25	25	25	76	60	102
	64	27	53-1/2	25	62	9-1/2	1	1	1	3	2-3/8	4
HW17-185/275	2159	889	1753	838	1778	330	330	51	76	57	51	70
	85	35	69	33	70	13	13	2	3	2-1/4	2	2-3/4

ACCESSORY DIMENSIONS - MM (INCHES)

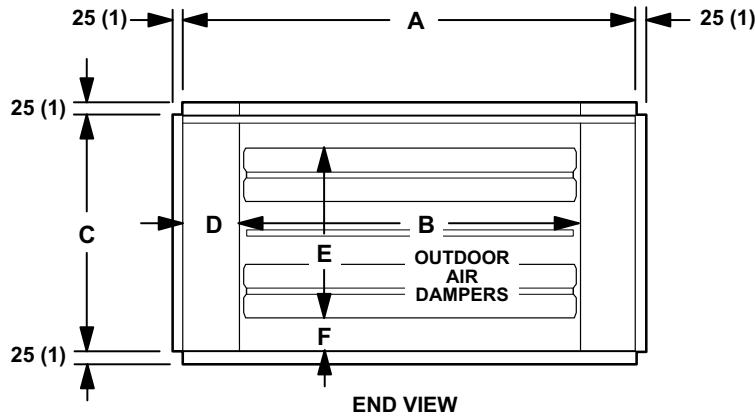
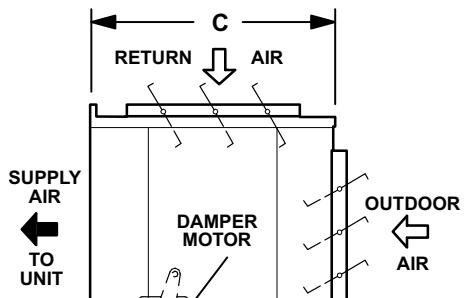
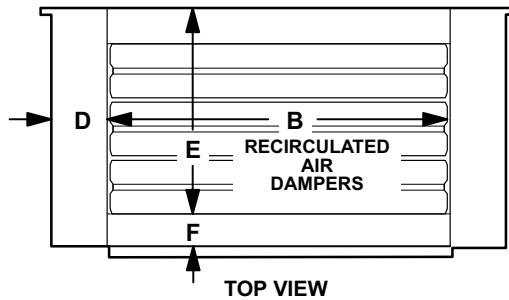
CB17-00 SERIES EMPTY SPACER CABINETS



Model Number	A mm	B in.	C mm	D in.	E mm	F in.	G mm	H in.	J mm	J in.
CB17-95-00	1321	52	686	27	1054	41-1/2	635	25	1270	50
CB17-135-00	1626	64	686	27	1359	53-1/2	635	25	1575	62
CB17-185/275-00	2159	85	889	35	1753	69	838	33	1778	70

EMD17 SERIES ECONOMIZER DAMPERS

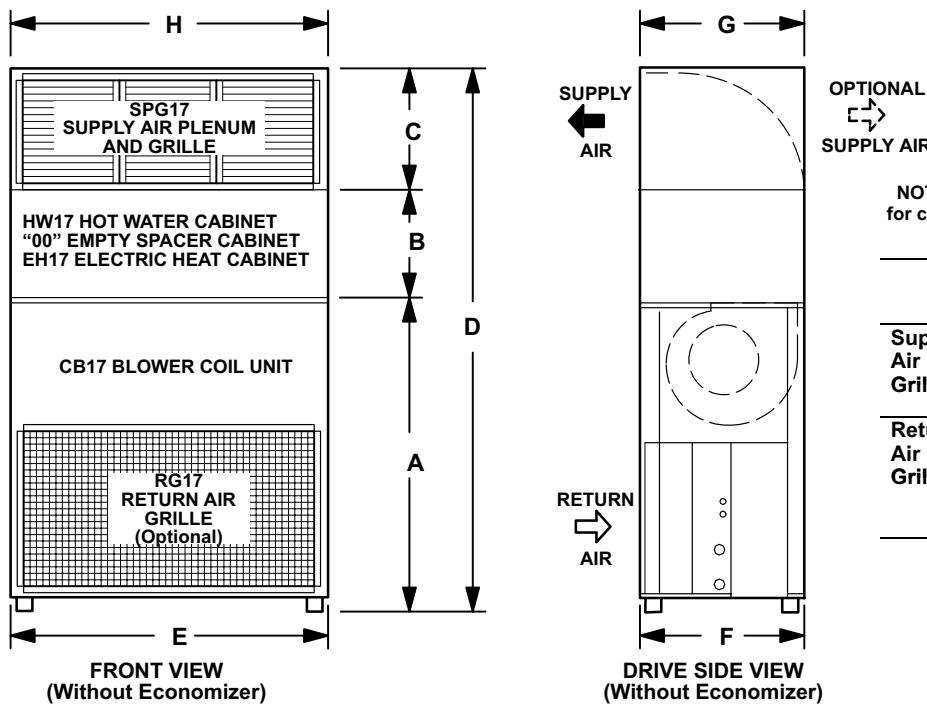
NOTE — Economizer section may be rotated 180° for bottom return air connection.



Model Number	A mm	B in.	C mm	D in.	E mm	F in.
EMD17-95	1219	48	914	36	635	25
EMD17-135	1524	60	1219	48	635	25
EMD17-185	2108	83	1524	60	838	33
EMD17-275	2108	83	1524	60	1067	42

ACCESSORY DIMENSIONS - MM (INCHES)

CB17 UP-FLOW MODELS WITH OPTIONAL ACCESSORY SECTIONS

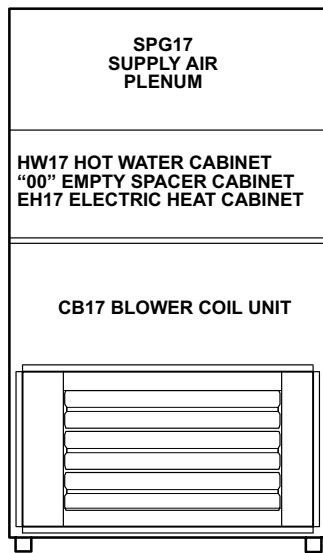


NOTE — Plenum may be rotated 180° for change in direction of discharge air.

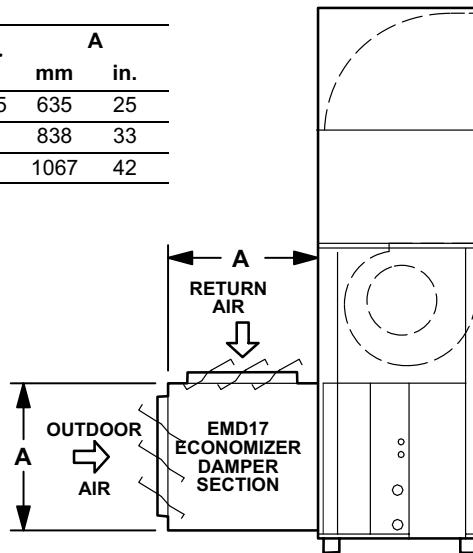
Model Number	Grille Free Area m ²	Grille Free Area sq. ft.
Supply Air Grille	SPG17-95	0.42
	SPG17-135	0.52
	SPG17-185/275	0.90
Return Air Grille	RG17-95	0.68
	RG17-135	0.84
	RG17-185	1.53
	RG17-275	1.97
		21.2

Model Number	A	B	C	D	E	F	G	H
	mm	in.	mm	in.	mm	in.	mm	in.
Basic Unit	CB17-95V	1308	51-1/2	---	---	---	1321	52
	CB17-135V	1305	51-1/2	---	---	---	1626	64
	CB17-185V	1194	47	---	---	---	2159	85
	CB17-275V	1194	47	---	---	---	2159	85
Electric Heat Section	EH17-95	---	483	19	2400	94-1/2	---	686
	EH17-135	---	483	19	2400	94-1/2	---	686
	EH17-185/275	---	356	14	2311	91	---	889
Hot Water Coil Section and Empty Spacer Cabinet	HW17-95 or CB17-95-00	---	356	14	2273	89-1/2	---	686
	HW17-135 or CB17-135-00	---	356	14	2273	89-1/2	---	686
	HW17-185/275 or CB17-185/275-00	---	356	14	2311	91	---	889
	SPG17-95	---	---	610	24	---	---	686
Supply Air Plenum & Grille	SPG17-135	---	---	610	24	---	---	686
	SPG17-185/275	---	---	762	30	2311	91	889

CB17 UP-FLOW MODELS WITH ECONOMIZER DAMPER SECTION



Model Number	A	
	mm	in.
EMD17-95 & 135	635	25
EMD17-185	838	33
EMD17-275	1067	42

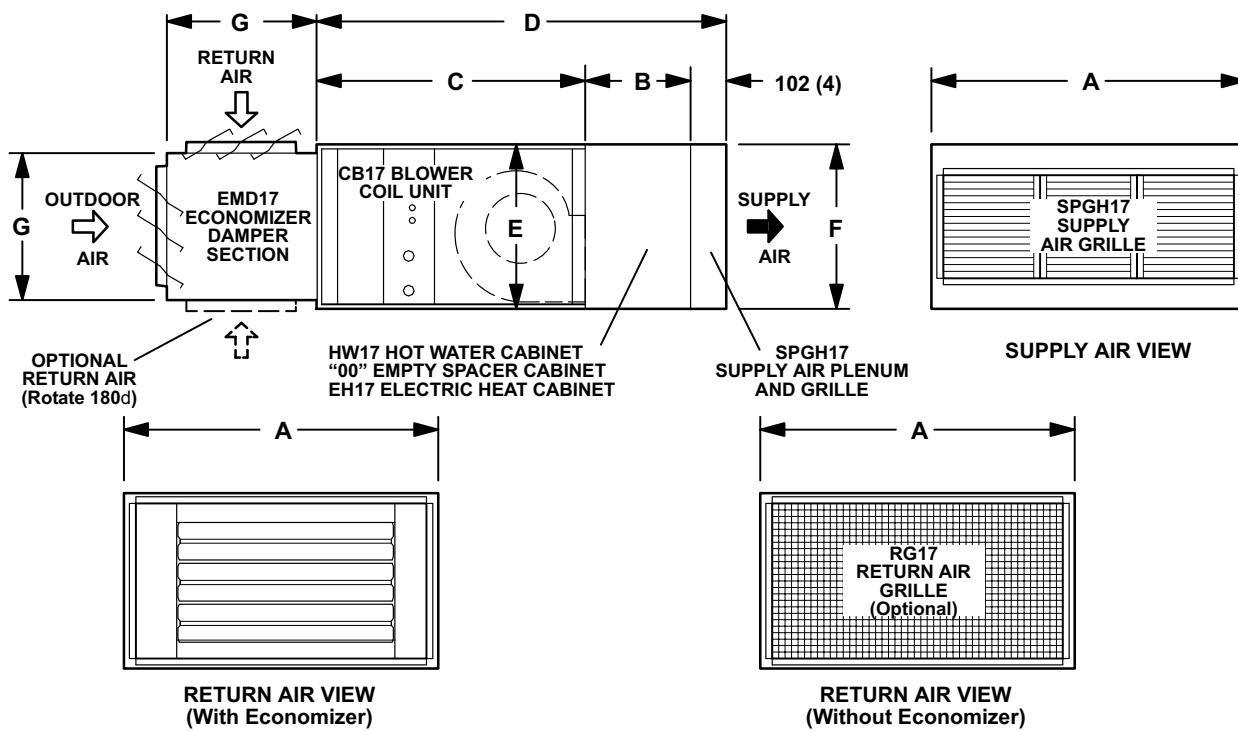


FRONT VIEW
(With Economizer)

DRIVE SIDE VIEW
(With Economizer)

ACCESSORY DIMENSIONS - MM (INCHES)

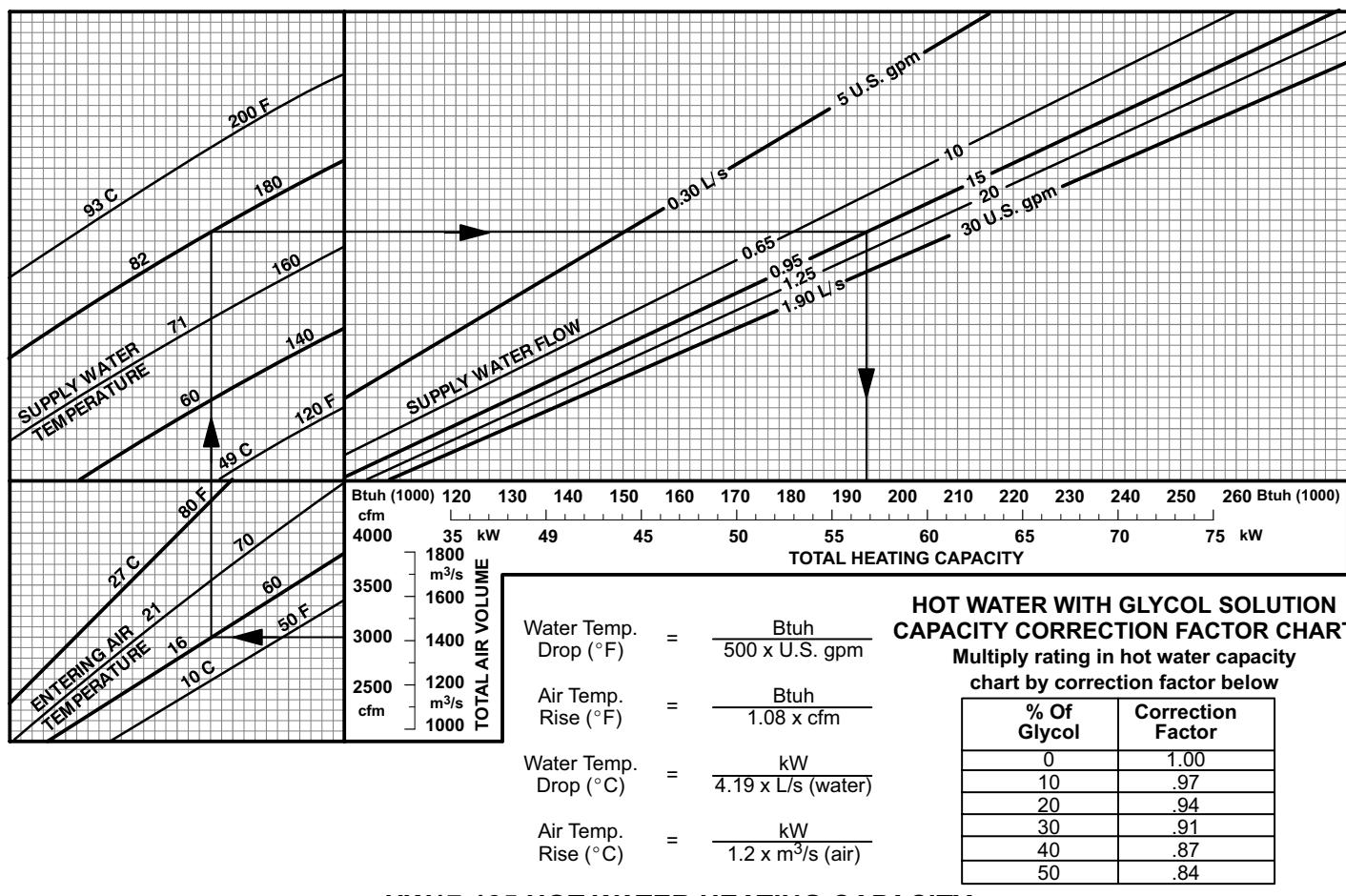
CBH17 HORIZONTAL MODELS WITH OPTIONAL ACCESSORY SECTIONS



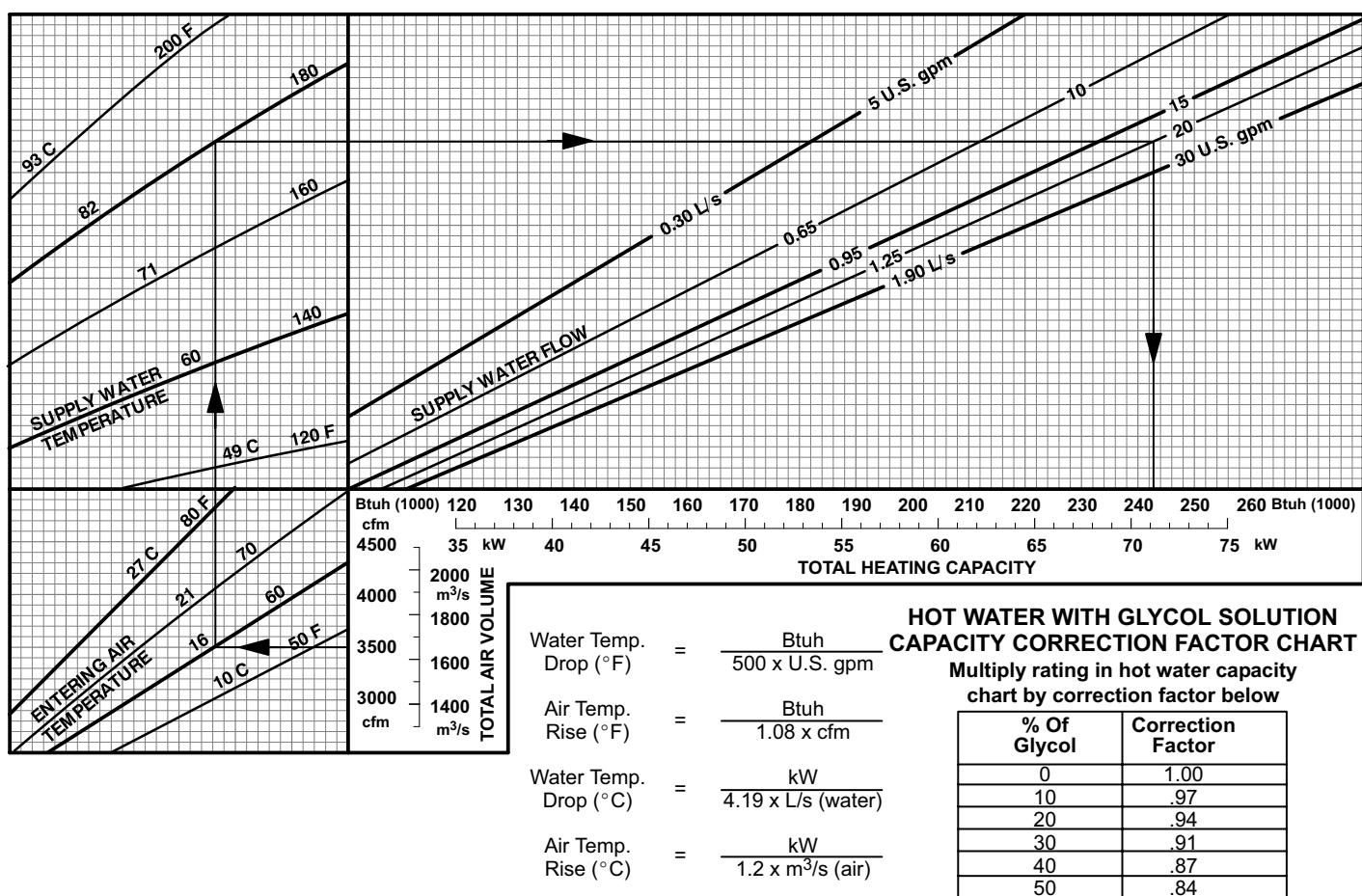
Model Number	A		B		C		D		E		F		G	
	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.
Basic Unit	CBH17-95V	1321	52	---	---	914	36	---	---	686	27	---	---	---
	CBH17-135V	1626	64	---	---	914	36	---	---	686	27	---	---	---
	CBH17-185V	2159	85	---	---	1118	44	---	---	889	35	---	---	---
	CBH17-275V	2159	85	---	---	1118	44	---	---	1118	44	---	---	---
Electric Heat Section	EH17-95	1321	52	483	19	---	---	1499	59	---	---	686	27	---
	EH17-135	1626	64	483	19	---	---	1499	59	---	---	686	27	---
	EH17-185/275	2159	85	356	14	---	---	1575	62	---	---	889	35	---
Hot Water Coil	HW17-95	1321	52	356	14	---	---	1375	54	---	---	686	27	---
	HW17-135	1626	64	356	14	---	---	1375	54	---	---	686	27	---
	HW17-185/275	2159	85	356	14	---	---	1575	62	---	---	889	35	---
Spacer Cabinet	CBH17-95-00	1321	52	356	14	---	---	1375	54	---	---	686	27	---
	CBH17-135-00	1626	64	356	14	---	---	1375	54	---	---	686	27	---
	CBH17-185/275-00	2159	85	356	14	---	---	1575	62	---	---	889	35	---
Supply Air Plenum and Grill	SPGH17-95	1321	52	---	---	---	---	---	---	686	27	---	---	---
	SPGH17-135	1626	64	---	---	---	---	---	---	686	27	---	---	---
	SPGH17-185/275	2159	85	---	---	---	---	---	---	889	35	---	---	---
Economizer Dampers	EMD17-95 or EMD17-135	---	---	---	---	---	---	---	---	---	---	635	25	---
	EMD17-95 or EMD17-135	---	---	---	---	---	---	---	---	---	---	635	25	---
	EMD17-185	---	---	---	---	---	---	---	---	---	---	838	33	---
	EMD17-275	---	---	---	---	---	---	---	---	---	---	1067	42	---

HOT WATER HEATING CAPACITY

HW17-95 HOT WATER HEATING CAPACITY

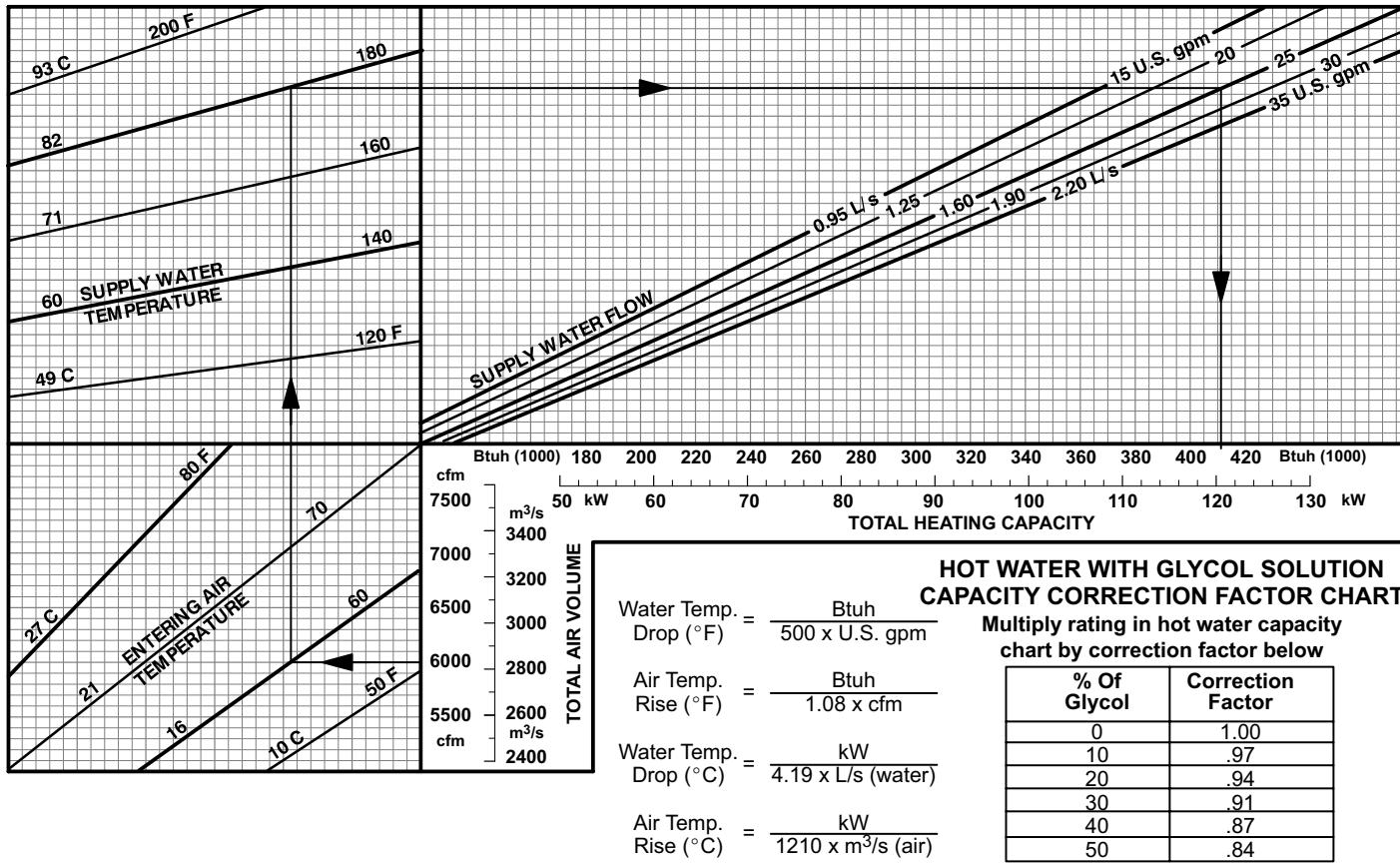


HW17-135 HOT WATER HEATING CAPACITY

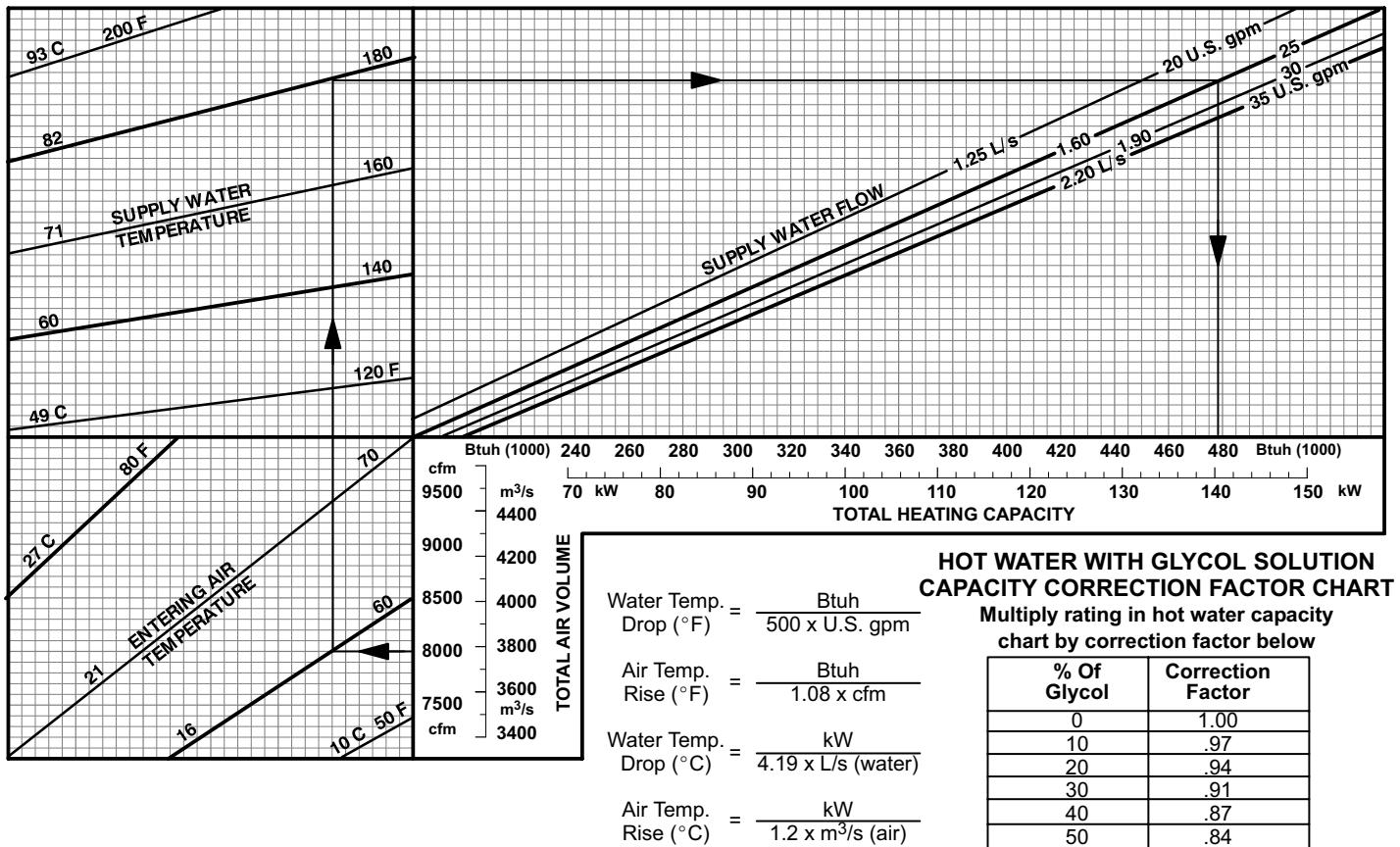


HOT WATER HEATING CAPACITY

HW17-185/275 HOT WATER HEATING CAPACITY with CB17/CBH17-185V



HW17-185/275 HOT WATER HEATING CAPACITY with CB17/CBH17-275V



GUIDE SPECIFICATIONS

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

General

- Furnish and install a blower-coil unit.
- The unit shall be a standard product of a firm regularly engaged in the manufacture of heating-cooling equipment.
- The equipment shall be shipped completely factory assembled, piped and wired internally ready for field connections.
- The manufacturer shall test operate system at the factory before shipment.
- Blower motor and pulley shall be shipped separate and field installed.

Air Distribution

- CB17 models shall be capable of up-flow air distribution.
- CBH17 models shall have horizontal air distribution.

Refrigeration System

- The coils shall be non-ferrous construction with aluminum fins machine fitted to durable copper tubes. Coils shall be pressure leak tested.
- The coil shall be dual circuit with each circuit having an expansion valve.

Cabinet

- Shall be pre-painted galvanized steel.
- Cabinet panels where conditioned air is handled shall be fully insulated to prevent sweating and minimize sound.
- Cabinet shall be equipped with large removable panels providing service access to interior.
- Inlets shall be provided for refrigerant line and power connection entry
- Dual drain connections shall be accessible external to the cabinet.

Supply Air Blowers

- Blower shall be statically and dynamically balanced with forwardly curved, double inlet blower wheels, permanently lubricated bearings, and adjustable belt drives.
- CB17/CBH17-95V models shall be equipped with a single blower.
- CB17/CBH17-135V, 185V and 275V models shall have dual blowers.

Air Filters

- Cleanable 25 mm (1 inch) thick filters shall be furnished.
- Filter rack shall be capable of holding optional 51 mm (two inch) thick throwaway or cleanable filters.

OPTIONAL ACCESSORIES

Electric Heaters

- Shall be available for field installation.
- Heating elements shall be nichrome bare wire exposed directly to the air stream.
- Heaters shall have thermal time delay relay to bring elements on and off in sequence with at time delay between each element.
- Limit controls shall provide overload and short circuit protection.
- Cabinet shall be constructed of pre-painted, galvanized steel and insulated with fiberglass insulation. Shall have electrical inlets and removable access panel.

Hot Water Heat

- Shall be available for field installation in a separate matching cabinet.
- Cabinet shall be constructed of pre-painted galvanized and insulated with fiberglass insulation.
- Shall have removable access panel and piping inlet openings.
- The coil shall be non-ferrous construction with aluminum fins mechanically bonded to copper tubes. Coil shall be factory pressure leak tested.

Economizer Damper

- Furnish and install, complete with controls, an air mixing damper assembly including outdoor air and recirculated air dampers.
- The assembly shall provide for the introduction of outside air for minimum ventilation and free cooling.
- Damper motor shall be 24V fully-modulating, spring return.
- Controls shall include adjustable mixed air sensor, adjustable minimum position potentiometer, and adjustable enthalpy control (EMD17M-95 and EMD17M-135 only).
- Optional differential enthalpy control (return air sensor) shall be available.

Supply Air Plenum and Grille

- Furnish and install plenum and grille.
- Shall be constructed of pre-painted galvanized steel and insulated with fiberglass insulation.
- Shall be equipped with anodized aluminum discharge air grille with double deflection and four-way directional control in the vertical and horizontal planes.

Spacer Cabinet

- Furnish and install empty spacer cabinet to match cabinet sections in size and provide necessary spacing between cabinet sections for varying applications.
- Shall be constructed of pre-painted galvanized steel and insulated with fiberglass insulation.

Return Air Grille

- Furnish and install anodized grille to blower-coil unit.

Suspension Kit

- Shall be available for CBH17-95V and CBH17-135V models in suspended horizontal applications.