LENNOX®
ENGINEERING DATA

B24 SERIES ADD-ON BLOWER UNITS UP-FLO— DOWN-FLO — HORIZONTAL WITH C22FC/CR22/CH22 & C24FC/CH24 COILS

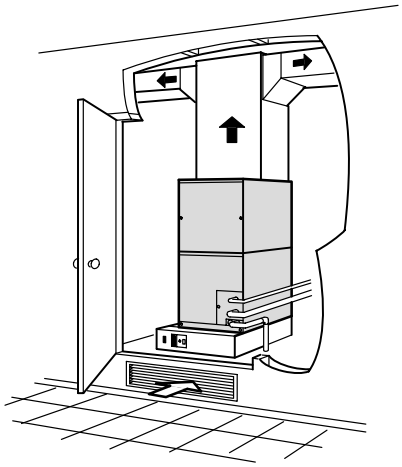
1-1/2 Thru 5 Ton (5.3 thru 17.6 kW) Capacity
6,400 thru 102,400 Btuh (2.5 Thru 30.0 kW) Optional Add-On Electric Heat

B24/C22/24
Bulletin #210021
June 1994
Supersedes August 1993

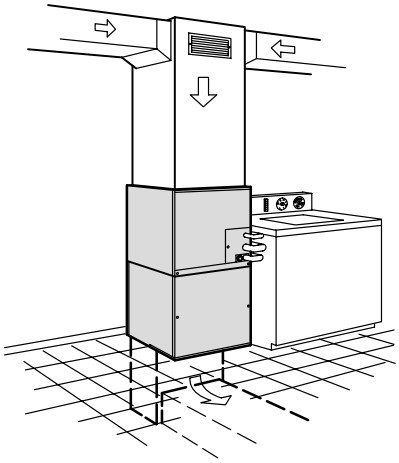
B24 Blower Unit
(With Optional Electric Heat)

B24 Blower Unit
with Optional C22FC/C24FC Coil
(Up-Flo Position)

Typical Applications

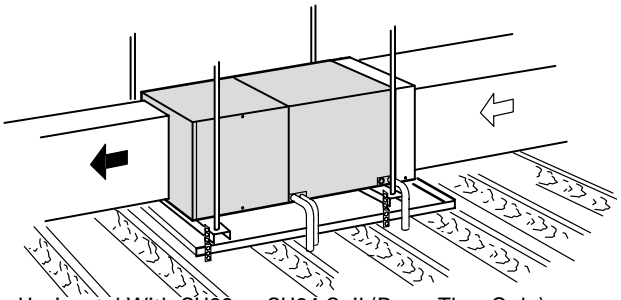


Up-Flo With C22FC or C24FC Coil
(With Optional Electronic Air Cleaner)



Down-Flo With CR22 Coil

B24 Blower Unit
with Optional CR22 Coil
(Down-Flo Position)



Horizontal With CH22 or CH24 Coil (Draw-Thru Only)
(With Optional Horizontal Suspension Kit)

B24 Blower Unit
with Optional CH22/CH24 Coil
(Horizontal Position)

♁ The maple leaf symbol in this bulletin denotes Canadian only usage where applicable
NOTE — Specifications, Ratings and Dimensions subject to change without notice.

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B24 FEATURES

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Applications — B24 series blower units are designed for multi-position installation with C22FC/CR22/CH22 or C24FC/CH24 series coil sections. B24 units can also be used as electric furnaces when cooling is not required. Units may be installed in a basement, utility room, alcove, closet, crawlspace or attic. Four models are available in varying sizes and voltages. Optional field installed electric heaters are available in a wide variety of kw sizes and voltages for additive heating requirements. Filter and filter rails are furnished for up-flo applications with C22FC/C24FC coils only. Optional accessories include: down-flo combustible floor bases, horizontal suspension kit, securing plate/internal seal kit, CCB1 EfficiencyPlus™ humidity control and blower contactor kit.

Approvals — Blower performance data is according to actual unit tests conducted in Lennox air test chamber. Blower-coil units and components within are bonded for grounding to meet safety standards for servicing required by U.L., C.S.A., NEC and CEC. Optional electric heaters are rated in accordance with U.S. Department of Energy (DOE) test procedures and U.S. Federal Trade Commission (FTC) labeling regulations.

Cabinet — Constructed of heavy gauge cold rolled steel. Cabinet is completely insulated with foil faced fiberglass insulation (heat section) and mat faced fiberglass insulation (blower section). Removable panel provides complete service access. Electrical inlets are provided in both sides and top of cabinet. All 460v-60hz-3ph and 575v-60hz-3ph models have a factory installed door interlock switch. Cabinet connectors are furnished for interlocking the B24 blower section with coil sections in up-flo or down-flo applications.

Blower — Equipped with a Lennox designed and built direct drive blower. Each blower is statically and dynamically balanced as an assembly before it is installed in the unit. Multi-speed leadless motor is resiliently mounted. A choice of blower speeds is available on the unit control board. See blower performance tables. Change in blower speeds is easily accomplished by moving quick-connect on control board from one terminal to another.

Unit Control Board — B24 series blower units are equipped with a printed circuit board in the control box to control unit. Solid-state board contains all relays and controls necessary to operate the system. Jumper selectors are furnished on board to control blower speed selection and continuous blower operation during system "off". Built-in blower "off" delay is temperature actuated by thermistor mounted in air stream. Jumpers are also furnished to lockout optional electric heat at preset temperatures of 85 to 100°F (29 to 38°C) without requiring an outdoor thermostat (heat pump operation). Low voltage terminal strip connections are provided for thermostat and outdoor unit connections. Low voltage plug-in control connections are furnished for optional electric heat. An automotive blade type fuse is provided on 208/230v-1ph models for control board protection. Blower motor has supplemental fuse to protect motor and primary side of transformer on 208/230v models (spare fuses furnished). A diagnostic LED is furnished on board as an aid in servicing system.

Control Box — Control box contains: 24 volt transformer blower cooling relay, and solid-state unit control board.

Factory Installed Thermistor — Thermistor is factory installed in the unit air stream to control unit operation. Prevents abnormal operating conditions and controls staging of optional electric heat.

Up-Flow Filters Furnished — Filters are furnished with the blower unit for field installation in the C22FC or C24FC coil section in up-flo applications only. See Specifications table for sizes. Filter rails are also provided with the B24 unit for easy installation in up-flo coil section.

OPTIONAL ACCESSORIES (Must Be Ordered Extra)

Electric Heaters (Optional) — Additive electric heaters field install internal to the unit cabinet and are available in several voltage and kw sizes, see Electric Heat table. The helix wound nichrome bare heating elements are exposed directly in the air stream resulting in instant heat transfer, low element temperatures and long element life. Heater staging is controlled by relays mounted on the element face plate, thermistor mounted in the air stream and control board furnished with B24 blower. Each electric heater is equipped with an accurately located limit control with fixed temperature off setting and automatic reset. On 208/230v heaters, each element has supplemental thermal cutoff safety fuses providing positive protection in case of excessive temperatures. Cutoff fuses are mounted internal to the element face plate. Heaters are factory assembled with controls installed and wired and only require plug-in field connection for low voltage control wiring.

Circuit Breakers Models — ECB24-5CB, ECB24-8CB, ECB24-10CB, ECB24-12.5CB, ECB24-15CB, ECB24-20CB, ECB24-25CB and ECB24-30CB (208/240v-60hz-1ph) electric heaters are equipped with circuit breakers to provide overload and short circuit protection. Breakers are factory wired and mounted on electric heat unit. Reset switches are external to B24 unit cabinet for easy access. Circuit breakers are current sensitive and temperature actuated to shut off heater if current draw is excessive. Must be reset manually. Circuit breakers qualify as the disconnect means at unit in many areas and eliminate the need for a field provided disconnect. Consult local electrical code in your area.

Fuse Models — ECB24-15F, ECB24-20F and ECB24-25F (208/240v-60hz-3ph), ECB24-10F, ECB24-15F, ECB24-20F and ECB24-25F (460v-3ph) and ECB24-15F, ECB24-20F and ECB24-25F (575v-3ph) electric heaters are equipped with fuses to provide overload and short circuit protection. Fuses and fuse holders are factory wired and mounted on electric heat unit. Fuses are current sensitive to shut off heater if current draw is excessive. All 208/240v-3ph "F" model heaters with fuses have a factory installed door interlock switch.

Single-Point Power Source Control Box (Optional For Circuit Breaker Models Only) — Control Box **(21H39)** may be used with optional electric heat (circuit breaker models only) when two or three circuits (if required by code) are specified. Field installs external to the unit cabinet on either side or top. Provides single power service connection to the unit. Constructed of heavy gauge steel with baked enamel finish, prepunched mounting holes, electrical inlet knockouts, and terminal strip. Removeable cover provides easy access. Box is 7" x 7" x 4" deep (178mm x 178mm x 102mm), shipping weight is 5 lbs. (2 kg.)

OPTIONAL ACCESSORIES (Must be Ordered Extra)

CCB1 EfficiencyPlus™ Humidity Control (Optional) — The CCB1 Humidity Control **(35H00)** is an electronic control which installs next to the room thermostat and allows the selection of the desired indoor humidity level in the cooling mode. During the heating season the control is inoperable. The CCB1 controls the indoor humidity by altering the indoor blower speed and the compressor speed. Humidity level desired may be accomplished by adjusting a vertical slide to a set point on a scale of 40% thru 60% with 50% recommended as the initial set point. Five indicator lights (MIN — MAX) in a bar graph configuration indicate the difference in the actual relative humidity and the set point. This indicates the demand imposed on the system equipment, the more lights on, the longer the equipment will operate to obtain the desired humidity level. If no lights are on, the humidity is at or below the set point. Control is not furnished and must be ordered extra. Requires EBR1 Blower Relay Kit

EBR1 Blower Relay Kit (Optional) — EBR1 Blower Relay Kit **(75H90)** allows CCB1 to be used with B24 blower units.

Securing Plate/Internal Seal Kit (Optional) — Kit is required when B24 blower is used with CH22 or CH24 coils in horizontal applications. Kit provides a secure connection and tight seal between the two units. See Specifications table for ordering information.

Blower Contactor Kit (Optional) — Kit **(34J61)** is available for 208/230v-1ph B24 units with two-speed condensing or heat pump units. Allows selection between low and high blower speeds dependent on outdoor unit speed.

Down-Flo Additive Base (Optional) — An optional additive base is required for models with electric heat installed in the down-flo position on combustible floors. Base is not furnished and must be ordered extra for field installation. See Specifications table and dimension drawing.

Horizontal Support Frame Kit (Optional) — Kit **(56J18)** provides support of unit in horizontal applications. Consists of (2) 1″ x 1-1/2″ x 32-5/8″ (25 mm x 38 mm x 829 mm) and (2) 1″ x 3″ x 53-7/8″ (25 mm x 76 mm x 1368 mm) painted, heavy gauge cold rolled steel support channels with assembly and suspending holes. Bolts and nuts are furnished for assembly. Suspending rods must be field furnished.

SPECIFICATIONS

Model No.		B24Q2	B24Q3	B24Q3.5	B24Q4/5	B24Q5
Blower wheel nominal diameter x width	in.	9 x 7	10 x 7	10 x 8	10 x 10	10 x 10
	mm	229 x 178	254 x 178	254 x 203	254 x 254	254 x 254
Blower motor output — hp (W)		1/6 (124)	1/3 (249)	1/2 (373)	3/4 (560)	1 (746)
Nominal capacity — tons (kW)		2 (7.0)	3 (10.6)	3-1/2 (12.3)	4 (14.1)	5 (17.6)
◆Number and size of filters (up-flo position)	in.	(1) 12 x 20 x 1		(1) 16 x 20 x 1	(1) 23 x 20 x 1	(1) 23 x 20 x 1
	mm	(1) 305 x 508 x 25		(1) 406 x 508 x 25	(1) 584 x 508 x 25	(1) 584 x 508 x 25
Electrical characteristics		208/230v–60hz–1ph			208/230v–60hz–1ph ‡460v–60hz–3ph or ‡575v–60hz–3ph	
Shipping weight — lbs. (kg)		53 (24)	58 (26)	69 (31)	78 (35)	78 (35)
Matching Optional Coil Sections (Must Be Ordered Extra)	Up-flo	C22-21FC, C22-26FC, C22-31FC, C24-21FC, C24-26FC, C24-31FC	C22-26FC, C22-31FC, C24-26FC, C24-31FC, C24-41FC	C22-41FC C24-41WFC, C24-46FC	C22-46FC, C22-51FC, C22-65FC, C24-51FC, C24-65FC	C22-46FC, C22-51FC, C22-65FC, C24-51FC, C24-65FC
	Down-flo	CR22-21, CR22-31	CR22-31	CR22-41	CR22-51, CR22-65	CR22-51, CR22-65
	Horizontal	CH22-21, CH22-31, CH24-21, CH24-31	CH22-31, CH24-31	CH22-41, CH24-41	CH22-51, CH22-65, CH24-51, CH24-65	CH22-51, CH22-65, CH24-51, CH24-65

◆Filters and filter rails are furnished with B24 blower section for field installation in the C22/C24 coil section. See dimension drawings. (Up-flo position only).
‡Blower motor is single phase.

OPTIONAL ACCESSORIES (Must Be Ordered Extra)

Model No.			B24Q2	B24Q3	B24Q3.5	B24Q4/5	B24Q5
Down-Flo Combustible Base		Catalog no.	**34J72**		**34J73**	**34J74**	**34J74**
		Ship. Wt. — lbs. (kg)	8 (4)		9 (4)	11 (5)	11 (5)
Horizontal Support Frame Kit			**56J18** (all models) — 18 lbs. (8 kg)				
††Securing Plate and Internal Seal Kit			**62J77**		**59J97**	**62J78**	
Blower Contactor Kit			**34J61** (208/230v-1ph units only)				
CCB1 EfficiencyPlus™ Humidity Control			**35H00**				
EBR1 Blower Relay Kit			**75H90** (required with CCB1 control above)				
Electric Heat Ratings (Single Phase Only)	ECB24-2.5	**Output Btuh (kW)	9,500 (2.8)	- - - -	- - - -	- - - -	- - - -
		†A.F.U.E.	100%	- - - -	- - - -	- - - -	- - - -
	ECB24-5 ECB24-5CB	**Output Btuh (kW)	18,000 (5.3)	18,500 (5.4)	19,000 (5.6)	19,500 (5.7)	19,500 (5.7)
		†A.F.U.E.	100%	100%	100%	100%	100%
	ECB24-6	**Output Btuh (kW)	21,500 (6.3)	22,000 (6.4)	22,500 (6.6)	23,000 (6.7)	23,000 (6.7)
		†A.F.U.E.	100%	100%	100%	100%	100%
	ECB24-7	**Output Btuh (kW)	25,000 (7.3)	25,500 (7.5)	26,000 (7.6)	26,500 (7.8)	26,500 (7.8)
		†A.F.U.E.	100%	100%	100%	100%	100%
	ECB24-8 ECB24-8CB	**Output Btuh (kW)	28,000 (8.2)	29,000 (8.5)	29,500 (8.6)	30,000 (8.8)	30,000 (8.8)
		†A.F.U.E.	100%	100%	100%	100%	100%
	ECB24-10 ECB24-10CB	**Output Btuh (kW)	35,000 (10.3)	35,500 (10.4)	36,000 (10.5)	37,000 (10.8)	37,000 (10.8)
		†A.F.U.E.	100%	100%	100%	100%	100%
	ECB24-12.5CB	**Output Btuh (kW)	- - - -	44,000 (12.9)	45,000 (13.2)	45,500 (13.3)	45,500 (13.3)
		†A.F.U.E.	- - - -	100%	100%	100%	100%
	ECB24-15CB	**Output Btuh (kW)	- - - -	53,000 (15.5)	53,500 (15.7)	54,000 (5.8)	54,000 (5.8)
		†A.F.U.E.	- - - -	100%	100%	100%	100%
	ECB24-20CB	**Output Btuh (kW)	- - - -	- - - -	70,500 (20.7)	71,000 (20.8)	71,000 (20.8)
		†A.F.U.E.	- - - -	- - - -	100%	100%	100%
	ECB24-25CB	**Output Btuh (kW)	- - - -	- - - -	- - - -	88,000 (25.8)	88,000 (25.8)
		†A.F.U.E.	- - - -	- - - -	- - - -	100%	100%
	ECB24-30CB	**Output Btuh (kW)	- - - -	- - - -	- - - -	105,000 (30.8)	105,000 (30.8)
		†A.F.U.E.	- - - -	- - - -	- - - -	100%	100%

†Annual Fuel Utilization Efficiency based on U.S. DOE test procedures and according to FTC labeling regulations (single phase heaters only).
**Includes additional blower motor heat capacity.
††Required for horizontal applications with CH22 or CH24 coils.

OPTIONAL ELECTRIC HEAT DATA (208/240v — 1 Phase)

Blower Unit Model No.	Electric Heat Unit Model No. & Shipping Weight	No. of Stages & Phase	Volts Input	kw Input	**Btuh Input	*Minimum Circuit Ampacity		
						Circuit 1	Circuit 2	Circuit 3
B24Q2	ECB24-2.5 (6 lbs.) (3 kg)	1 Stage 1 Phase	208	1.9	6,400	12.7	- - - -	- - - -
			220	2.1	7,200	13.3	- - - -	- - - -
			230	2.3	7,800	13.9	- - - -	- - - -
			240	2.5	8,500	14.4	- - - -	- - - -
B24Q2 B24Q3 B24Q3.5 B24Q4/5 B24Q5	ECB24-5 (6 lbs.) (3 kg) ECB24-5CB (7 lbs.) (3 kg)	1 Stage 1 Phase	208	3.7	12,600	30.5	- - - -	- - - -
			220	4.1	14,100	31.5	- - - -	- - - -
			230	4.5	15,400	32.7	- - - -	- - - -
			240	4.9	16,700	33.8	- - - -	- - - -
B24Q2 B24Q3 B24Q3.5 B24Q4/5 B24Q5	ECB24-6 (7 lbs.) (3 kg)	2 Stages 1 Phase	208	4.4	15,000	34.7	- - - -	- - - -
			220	4.9	16,800	36.1	- - - -	- - - -
			230	5.4	18,300	37.6	- - - -	- - - -
			240	5.9	20,000	39.0	- - - -	- - - -
B24Q2 B24Q3 B24Q3.5 B24Q4/5 B24Q5	ECB24-7 (7 lbs.) (3 kg)	2 Stages 1 Phase	208	5.1	17,400	38.9	- - - -	- - - -
			220	5.7	19,500	40.6	- - - -	- - - -
			230	6.2	21,300	41.9	- - - -	- - - -
			240	6.8	23,200	43.7	- - - -	- - - -
B24Q2 B24Q3 B24Q3.5 B24Q4/5 B24Q5	ECB24-8 (7 lbs.) (3 kg) ECB24-8CB (8 lbs.) (4 kg)	2 Stages 1 Phase	208	5.8	19,900	43.1	- - - -	- - - -
			220	6.5	22,200	45.2	- - - -	- - - -
			230	7.1	24,300	46.8	- - - -	- - - -
			240	7.8	26,500	48.9	- - - -	- - - -
B24Q2 B24Q3 B24Q3.5 B24Q4/5 B24Q5	ECB24-10 (7 lbs.) (3 kg) ECB24-10CB (8 lbs.) (4 kg)	2 Stages 1 Phase	208	7.5	25,600	53.3	- - - -	- - - -
			220	8.4	28,700	56.0	- - - -	- - - -
			230	9.2	31,400	58.3	- - - -	- - - -
			240	10.0	34,100	60.3	- - - -	- - - -
B24Q3 B24Q3.5 B24Q4/5 B24Q5	ECB24-12.5CB (10 lbs.) (5 kg)	3 Stages 1 Phase	208	9.4	32,000	37.7	27.1	- - - -
			220	10.5	35,800	39.8	28.1	- - - -
			230	11.5	39,200	41.7	29.1	- - - -
			240	12.5	42,600	43.4	30.0	- - - -
B24Q3 B24Q3.5 B24Q4/5 B24Q5	ECB24-15CB (10 lbs.) (5 kg)	3 Stages 1 Phase	208	11.3	38,400	45.3	30.9	- - - -
			220	12.6	43,000	47.7	32.1	- - - -
			230	13.8	47,000	50.0	33.3	- - - -
			240	15.0	51,200	52.1	34.3	- - - -
B24Q3.5 B24Q4/5 B24Q5	ECB24-20CB (12 lbs.) (5 kg)	4 Stages 1 Phase	208	15.0	51,200	45.1	53.3	- - - -
			220	16.8	57,300	47.7	56.0	- - - -
			230	18.4	62,700	50.0	58.3	- - - -
			240	20.0	68,200	52.1	60.3	- - - -
B24Q4/5 B24Q5	ECB24-25CB (16 lbs.) (7 kg)	6 Stages 1 Phase	208	18.8	64,100	37.7	37.7	45.9
			220	21.0	71,700	39.8	39.8	48.0
			230	23.0	78,300	41.7	41.7	49.9
			240	25.0	85,300	43.4	43.4	51.7
B24Q4/5 B24Q5	ECB24-30CB (16 lbs.) (7 kg)	6 Stages 1 Phase	208	22.5	76,900	45.1	45.1	53.3
			220	25.2	86,000	47.7	47.7	56.0
			230	27.5	94,000	49.8	49.8	58.1
			240	30.0	102,400	52.1	52.1	60.3

*Refer to National or Canadian Electrical Code to determine wire, fuse and disconnect size requirements. Use wire suitable for at least 167°F (75°C).
**Electric heater capacity only — does not include additional blower motor heat capacity.

OPTIONAL ELECTRIC HEAT DATA (208/240v — 3 Phase)

Blower Unit Model No.	Electric Heat Unit Model No. & Shipping Weight	No. of Stages & Phase	Volts Input	kw Input	**Btuh Input	*Minimum Circuit Ampacity	
						Circuit 1	Circuit 2
B24Q2 B24Q3 B24Q3.5 B24Q4/5 B24Q5	ECB24-5 (7 lbs.) (3 kg)	3 Stages 3 Phase	208	3.8	12,800	21.4	- - - -
			220	4.2	14,300	22.0	- - - -
			230	4.6	15,700	22.7	- - - -
			240	5.0	17,100	23.3	- - - -
B24Q2 B24Q3 B24Q3.5 B24Q4/5 B24Q5	ECB24-7.5 (7 lbs.) (3 kg)	3 Stages 3 Phase	208	5.6	19,200	27.7	- - - -
			220	6.3	21,500	28.9	- - - -
			230	6.9	23,500	29.9	- - - -
			240	7.5	25,600	30.8	- - - -
B24Q2 B24Q3 B24Q3.5 B24Q4/5 B24Q5	ECB24-10 (7 lbs.) (3 kg)	3 Stages 3 Phase	208	7.5	25,600	34.3	- - - -
			220	8.4	28,700	35.8	- - - -
			230	9.2	31,400	37.1	- - - -
			240	10.0	34,100	38.3	- - - -
B24Q3 B24Q3.5 B24Q4/5 B24Q5	ECB24-15F (9 lbs.) (5 kg)	3 Stages 3 Phase	208	11.3	38,400	47.5	- - - -
			220	12.6	43,000	49.6	- - - -
			230	13.8	47,000	51.6	- - - -
			240	15.0	51,200	53.4	- - - -
B24Q4/5 B24Q5	ECB24-20F (13 lbs.) (6 kg)	6 Stages 3 Phase	208	15.0	51,200	26.1	34.3
			220	16.8	57,300	27.6	35.8
			230	18.4	62,700	28.8	37.1
			240	20.0	68,200	30.1	38.3
B24Q4/5 B24Q5	ECB24-25F (13 lbs.) (6 kg)	6 Stages 3 Phase	208	18.8	64,100	32.6	40.9
			220	21.0	71,700	34.5	42.7
			230	23.0	78,300	36.0	44.3
			240	25.0	85,300	37.6	45.8

*Refer to National or Canadian Electrical Code to determine wire, fuse and disconnect size requirements. Use wire suitable for at least 167°F (75°C).
**Electric heater capacity only — does not include additional blower motor heat capacity.

OPTIONAL ELECTRIC HEAT DATA (460v — 3 Phase)

Blower Unit Model No.	Electric Heat Unit Model No. & Shipping Weight	No. of Stages & Phase	Volts Input	kw Input	**Btuh Input	*Minimum Circuit Ampacity
B24Q4/5 B24Q5	ECB24-10F (12 lbs.) (5 kg)	3 Stages 3 Phase	440	8.4	28,700	16.0
			460	9.2	31,300	16.7
			480	10.0	34,100	17.3
B24Q4/5 B24Q5	ECB24-15F (12 lbs.) (5 kg)	3 Stages 3 Phase	440	12.6	43,000	22.9
			460	13.8	47,000	23.9
			480	15.0	51,200	24.8
B24Q4/5 B24Q5	ECB24-20F (12 lbs.) (5 kg)	3 Stages 3 Phase	440	16.8	57,400	29.8
			460	18.4	62,700	31.1
			480	20.0	68,300	32.3
B24Q4/5 B24Q5	ECB24-25F (12 lbs.) (5 kg)	3 Stages 3 Phase	440	21.0	71,700	36.7
			460	23.0	78,400	38.3
			480	25.0	85,300	39.8

*Refer to National or Canadian Electrical Code to determine wire, fuse and disconnect size requirements. Use wire suitable for at least 167°F (75°C).
**Electric heater capacity only — does not include additional blower motor heat capacity.

OPTIONAL ELECTRIC HEAT DATA (575v — 3 Phase)

Blower Unit Model No.	Electric Heat Unit Model No. & Shipping Weight	No. of Stages & Phase	Volts Input	kw Input	**Btuh Input	*Minimum Circuit Ampacity
B24Q4/5 B24Q5	ECB24-15F (12 lbs.) (5 kg)	3 Stages 3 Phase	550	12.6	43,000	18.8
			575	13.8	47,000	19.5
			600	15.0	51,200	20.3
B24Q4/5 B24Q5	ECB24-20F (12 lbs.) (5 kg)	3 Stages 3 Phase	550	16.8	57,400	24.3
			575	18.4	62,700	25.3
			600	20.0	68,300	26.3
B24Q4/5 B24Q5	ECB24-25F (12 lbs.) (5 kg)	3 Stages 3 Phase	550	21.0	71,700	29.8
			575	23.0	78,400	31.1
			600	25.0	85,300	32.3

*Refer to Canadian Electrical Code to determine wire, fuse and disconnect size requirements. Use wire suitable for at least 167°F (75°C).
**Electric heater capacity only — does not include additional blower motor heat capacity.

BLOWER DATA

B24Q2 BLOWER PERFORMANCE

External Static Pressure		Air Volume at Various Blower Speeds					
		High		Medium		Low	
in. w.g.	Pa	cfm	L/s	cfm	L/s	cfm	L/s
0	0	1090	515	900	425	740	350
.05	12	1080	510	890	420	740	350
.10	25	1060	500	890	420	740	350
.15	37	1050	495	880	415	730	345
.20	50	1030	485	870	410	720	340
.25	62	1020	480	860	405	700	330
.30	75	1000	470	840	395	680	320
.40	100	960	455	790	375	630	295
.50	125	880	415	710	335	560	265
.60	150	740	350	590	280	460	215
.70	175	530	250	440	210	360	170

NOTE — All air data is measured external to the unit without air filter or evaporator coil.
NOTE — Electric heaters have no appreciable air resistance.

B24Q3 BLOWER PERFORMANCE

External Static Pressure		Air Volume at Various Blower Speeds					
		High		Medium		Low	
in. w.g.	Pa	cfm	L/s	cfm	L/s	cfm	L/s
0	0	1480	700	1120	530	900	425
.05	12	1470	695	1120	530	900	425
.10	25	1450	685	1120	530	910	430
.15	37	1440	680	1120	530	910	430
.20	50	1430	675	1120	530	910	430
.25	62	1420	670	1120	530	910	430
.30	75	1410	665	1120	530	910	430
.40	100	1390	655	1120	530	920	435
.50	125	1370	645	1110	525	920	435
.60	150	1300	615	1080	510	910	430
.70	175	1270	600	1040	490	880	415
.80	200	1200	565	1020	480	850	400
.90	225	1130	535	950	450	800	375

All air data is measured external to unit without air filter or evaporator coil.
Electric heaters have no appreciable air resistance.

B24Q4/5 BLOWER PERFORMANCE

External Static Pressure		Air Volume at Various Blower Speeds					
		High		Medium		Low	
in. w.g.	Pa	cfm	L/s	cfm	L/s	cfm	L/s
0	0	2460	1160	2200	1040	1910	900
.05	12	2455	1160	2180	1030	1900	895
.10	25	2450	1155	2160	1020	1890	890
.15	37	2420	1140	2130	1005	1870	880
.20	50	2400	1135	2100	990	1840	870
.25	62	2360	1115	2080	980	1820	860
.30	75	2320	1095	2050	965	1800	850
.40	100	2250	1060	1990	940	1740	820
.50	125	2130	1005	1910	900	1670	790
.60	150	2030	960	1810	855	1600	755
.70	175	1910	900	1700	800	1510	715
.80	200	1750	825	1600	755	1000	470
.90	225	1600	755	1200	570	720	340

All air data is measured external to unit without air filter or evaporator coil.
Electric heaters have no appreciable air resistance.

B24Q3.5 BLOWER PERFORMANCE

External Static Pressure		Air Volume at Various Blower Speeds					
		High		Medium		Low	
in. w.g.	Pa	cfm	L/s	cfm	L/s	cfm	L/s
0	0	2080	980	1540	725	1220	575
.05	12	2060	970	1540	725	1230	580
.10	25	2030	690	1540	725	1240	585
.15	37	2010	950	1540	725	1250	590
.20	50	1980	935	1530	720	1250	590
.25	62	1950	920	1530	720	1250	590
.30	75	1920	905	1520	715	1240	585
.40	100	1840	870	1490	705	1230	580
.50	125	1760	830	1440	680	1220	575
.60	150	1690	800	1400	660	1180	555
.70	175	1620	765	1350	635	1140	540
.80	200	1540	725	1305	615	1080	510
.90	225	1400	660	1250	590	990	465

All air data is measured external to unit without air filter or evaporator coil.
Electric heaters have no appreciable air resistance.

B24Q5 BLOWER PERFORMANCE

External Static Pressure		Air Volume at Various Blower Speeds					
		High		Medium		Low	
in. w.g.	Pa	cfm	L/s	cfm	L/s	cfm	L/s
.30	75	- - - -	- - - -	- - - -	- - - -	1885	890
.40	100	- - - -	- - - -	2160	1020	1850	875
.50	125	2485	1175	2125	1005	1820	860
.60	150	2445	1155	2100	990	1765	835
.70	175	2504	1180	2070	975	1750	825
.80	200	2365	1115	2020	955	1725	815
.90	225	2325	1095	1995	940	1690	800

All air data is measured external to unit without air filter or evaporator coil.
Electric heaters have no appreciable air resistance.

BLOWER DATA

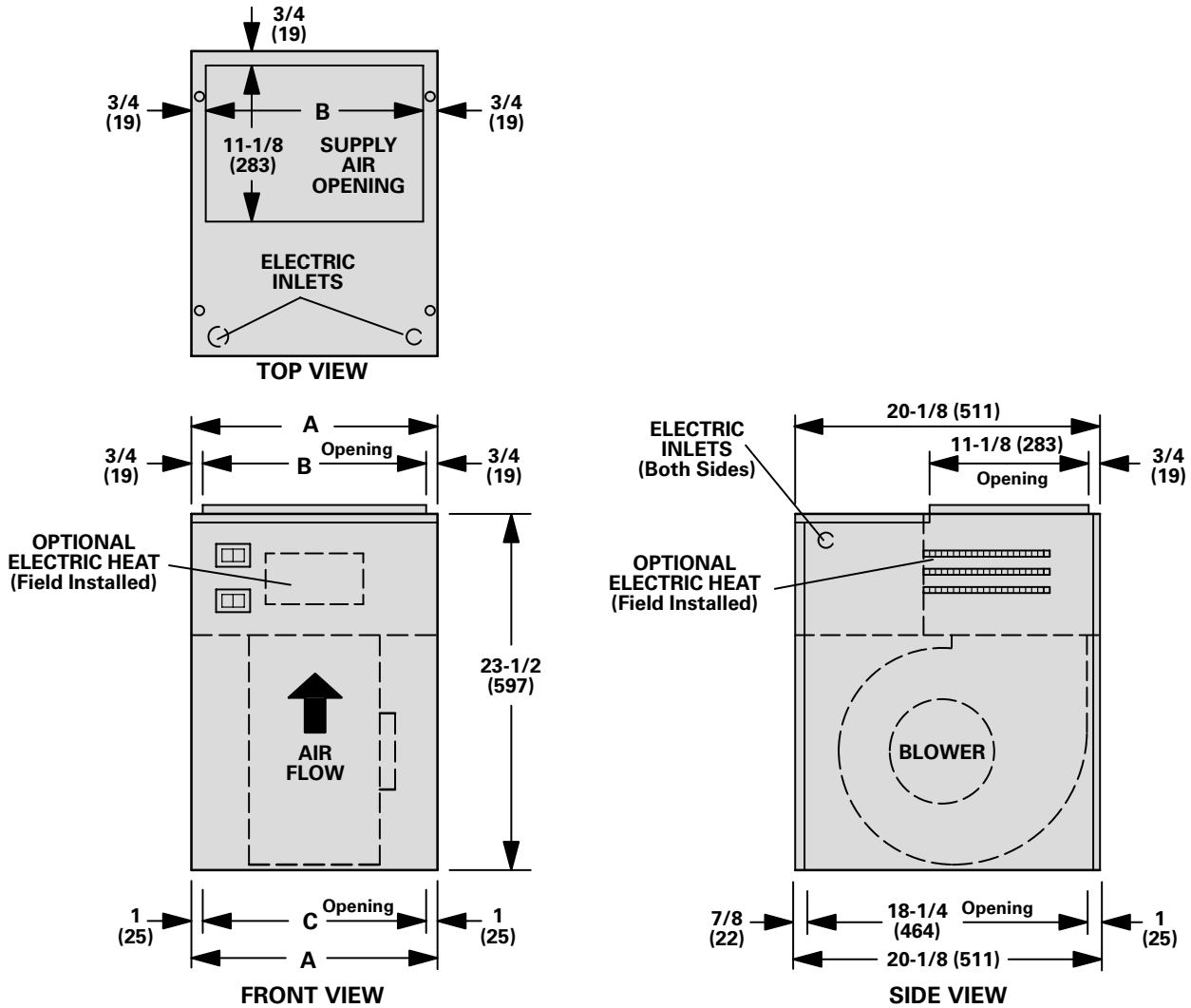
FILTER AIR RESISTANCE

Air Volume		*Up-flo Filter	
		Filter Resistance	
cfm	L/s	in. w.g.	Pa
400	190	.03	7
600	285	.04	10
800	380	.06	15
1000	470	.08	20
1200	565	.11	27
1400	660	.14	35
1600	755	.19	47
1800	850	.24	60
2000	945	.29	72
2200	1040	.34	85
2400	1135	.40	100

*Filter furnished with B24 blower unit for field installation in C22FC or C24FC up-flo coils.

DIMENSIONS — inches (mm)

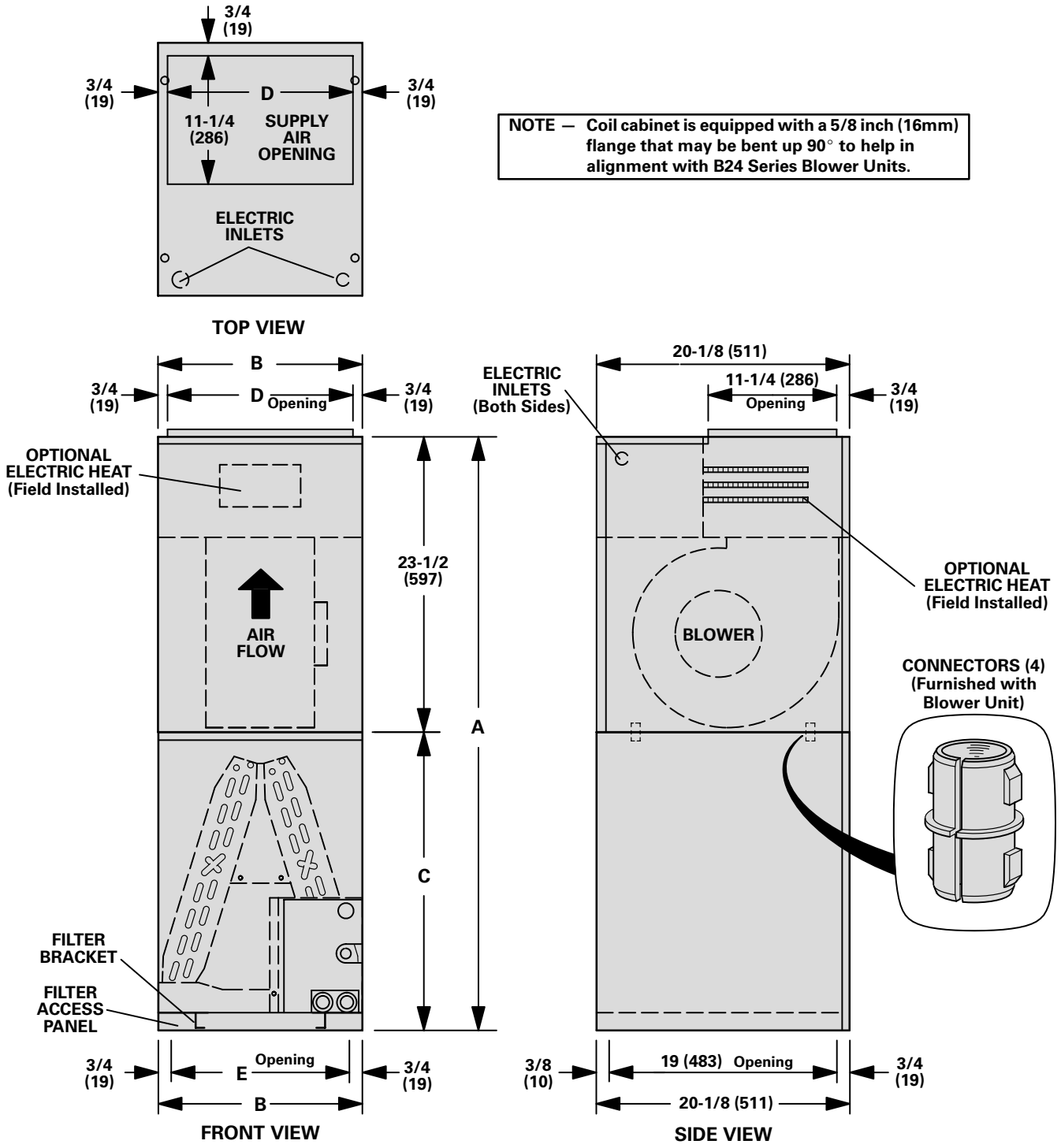
BASIC B24 BLOWER UNIT



Model No.	A		B		C	
	in.	mm	in.	mm	in.	mm
B24Q2 B24Q3	16-1/4	413	14-3/4	375	14-1/4	362
B24Q3.5	21-1/4	540	19-3/4	502	19-1/4	489
B24Q4/5, B24Q5	26-1/4	667	24-3/4	629	24-1/4	616

DIMENSIONS — inches (mm)

B24 UNIT WITH OPTIONAL UP-FLO C22 OR C24 COILS

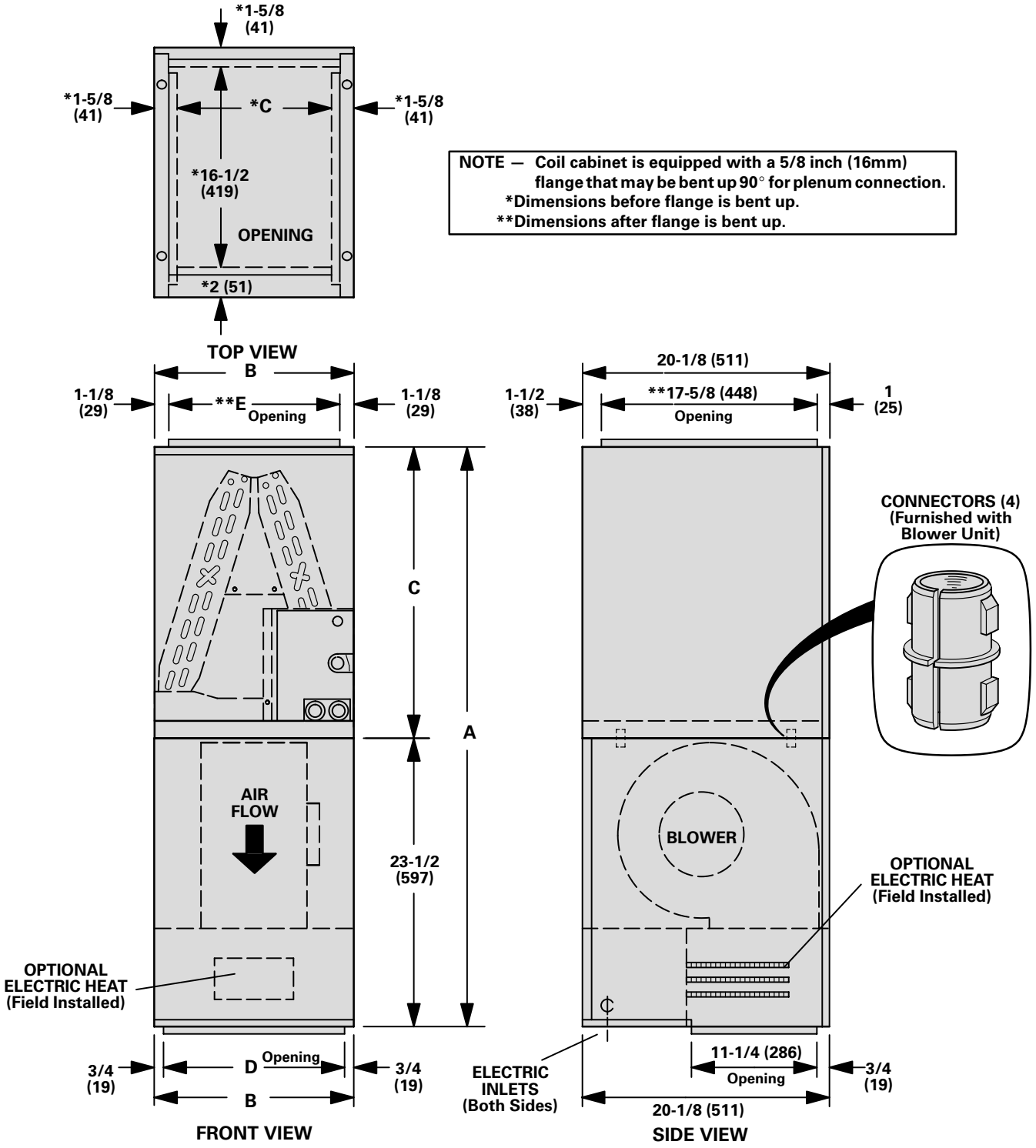


NOTE — Coil cabinet is equipped with a 5/8 inch (16mm) flange that may be bent up 90° to help in alignment with B24 Series Blower Units.

B24 Model No.	C22 Model No.	C24 Model No.	A		B		C		D		E	
			in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
B24Q2	C22-21FC	C24-21FC C24-26FC	40-1/2	1029	16-1/4	413	17	432	14-3/4	375	14-3/4	375
	C22-26FC C22-31FC	C24-31FC	44-1/2	1130	16-1/4	413	21	533	14-3/4	375	14-3/4	375
B24Q3	- - - -	C24-26FC	40-1/2	1029	16-1/4	413	17	432	14-3/4	375	14-3/4	375
	C22-26FC C22-31FC	C24-31FC C24-41FC	44-1/2	1130	16-1/4	413	21	533	14-3/4	375	14-3/4	375
B24Q3.5	- - - -	C24-41WFC	44-1/2	1130	21-1/4	540	21	533	19-3/4	502	19-3/4	502
	C22-41FC	C24-46FC	49-1/4	1251	21-1/4	540	25-3/4	654	19-3/4	502	19-3/4	502
B24Q4/5 B24Q5	C22-46FC	C24-51FC	49-1/4	1251	26-1/4	667	25-3/4	654	24-3/4	629	24-3/4	629
	C22-51FC C22-65FC	C24-65FC	52-1/4	1327	26-1/4	667	28-3/4	730	24-3/4	629	24-3/4	629

DIMENSIONS — inches (mm)

B24 UNIT WITH OPTIONAL DOWN-FLO CR22 COILS

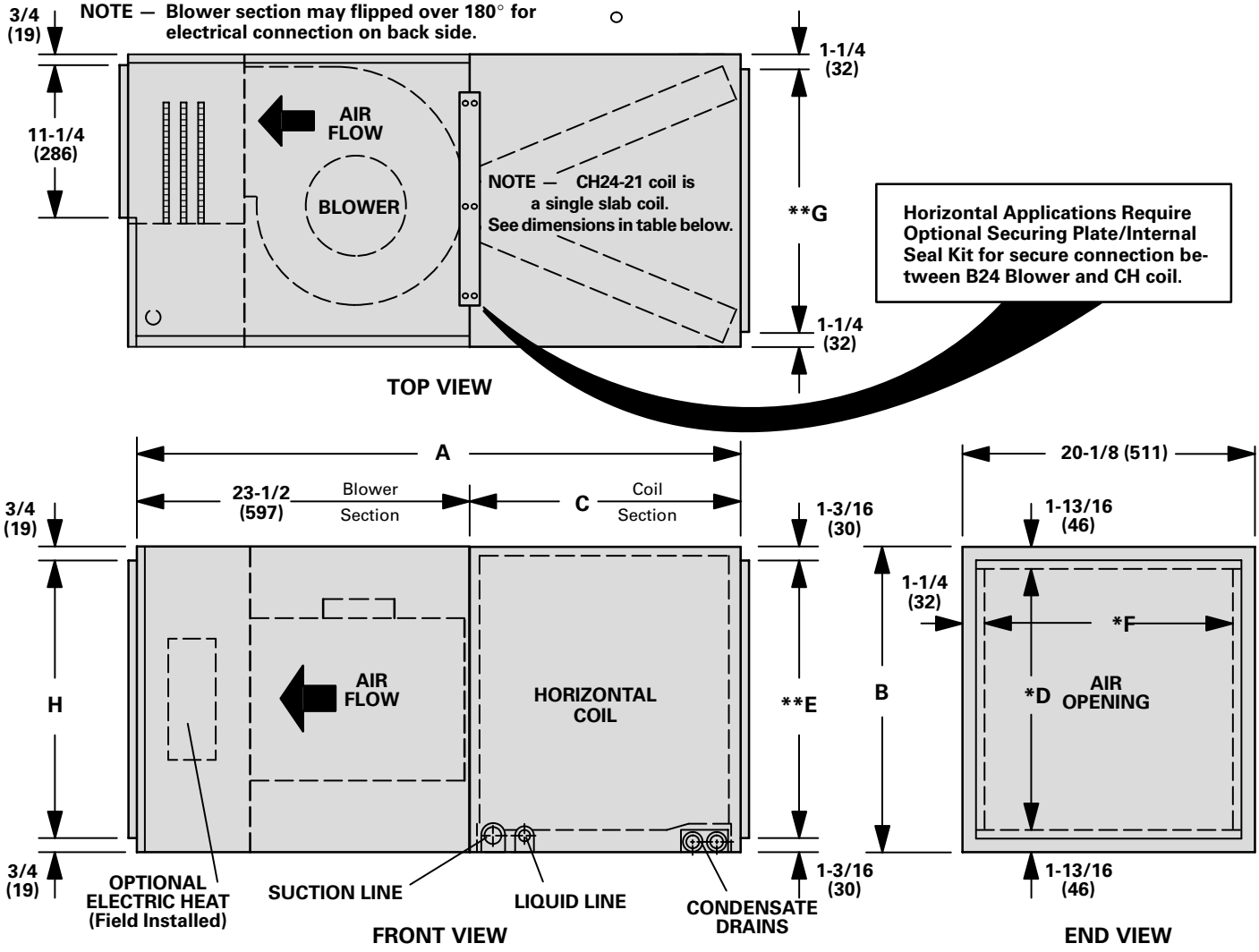


NOTE — Coil cabinet is equipped with a 5/8 inch (16mm) flange that may be bent up 90° for plenum connection.
***Dimensions before flange is bent up.**
****Dimensions after flange is bent up.**

B24 Model No.	CR22 Model No.	A		B		C		D		E	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
B24Q2	CR22-21	40-1/2	1029	16-1/4	413	17	432	14-3/4	375	14	356
	CR22-31	44-1/2	1130	16-1/4	413	21	533	14-3/4	375	14	356
B24Q3	CR22-31	44-1/2	1130	16-1/4	413	21	533	14-3/4	375	14	356
B24Q3.5	CR22-41	49-1/4	1251	21-1/4	540	25-3/4	654	19-3/4	502	19	483
B24Q4/5 B24Q5	CR22-51 CR22-65	52-1/4	1327	26-1/4	667	28-3/4	730	24-3/4	629	24	610

B24 UNIT WITH OPTIONAL HORIZONTAL CH22 OR CH24 COILS

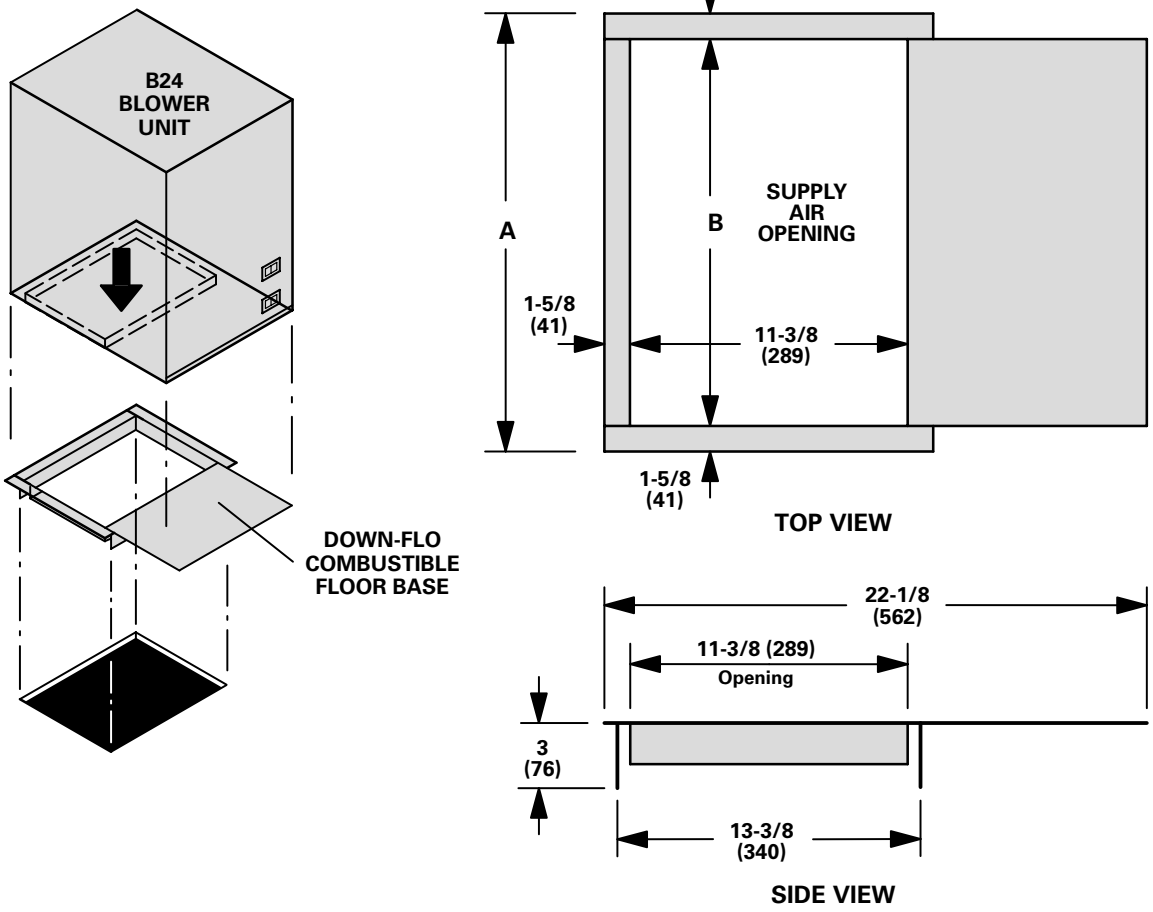
NOTE — Coil cabinets (all models except CH24-21) are equipped with a 5/8 inch (16mm) flange that may be bent out 90° for plenum connection or to help in alignment with B24 Series Blower Units.
***Dimension before flange is bent out.**
****Dimension after flange is bent out.**



B24 Model No.	CH22 Model No.	CH24 Model No.	A		B		C		D		E		F		G		H	
			in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
B24Q2	- - - -	CH24-21	28	711	16-1/4	413	4-1/2	114	- - - -	- - -	13-1/4	337	- - - -	- - -	16	406	14-3/4	375
	CH22-21	CH24-31	44-3/8	1127	16-1/4	413	20-7/8	530	12-5/8	346	13-7/8	380	16-3/8	416	17-5/8	448	14-3/4	375
	CH22-31	- - - -	52-7/8	1343	16-1/4	413	29-3/8	805	12-5/8	346	13-7/8	380	16-3/8	416	17-5/8	448	14-3/4	375
B24Q3	- - - -	CH24-31	44-3/8	1127	16-1/4	413	20-7/8	530	12-5/8	346	13-7/8	380	16-3/8	416	17-5/8	448	14-3/4	375
	CH22-31	- - - -	52-7/8	1343	16-1/4	413	29-3/8	805	12-5/8	346	13-7/8	380	16-3/8	416	17-5/8	448	14-3/4	375
B24Q3.5	- - - -	CH24-41	44-3/8	1127	21-1/4	540	20-7/8	530	17-5/8	483	18-7/8	517	16-3/8	416	17-5/8	448	19-3/4	502
	CH22-41	- - - -	52-7/8	1343	21-1/4	540	29-3/8	805	17-5/8	483	18-7/8	517	16-3/8	416	17-5/8	448	19-3/4	502
B24Q4/5 B24Q5	- - - -	CH24-51	44-3/8	1127	26-1/4	667	20-7/8	530	22-5/8	620	23-7/8	654	16-3/8	416	17-5/8	448	24-3/4	629
	CH22-51	CH24-65	52-7/8	1343	26-1/4	667	29-3/8	805	22-5/8	620	23-7/8	654	16-3/8	416	17-5/8	448	24-3/4	629
	CH22-65	- - - -	52-7/8	1343	26-1/4	667	29-3/8	805	22-5/8	620	23-7/8	654	16-3/8	416	17-5/8	448	24-3/4	629

OPTIONAL ACCESSORY DIMENSIONS — inches (mm)

DOWN-FLO COMBUSTIBLE FLOOR BASE



Blower Cabinet Model No.	A		B	
	in.	mm	in.	mm
B24Q2 B24Q3	18-1/4	464	15	381
B24Q3.5	23-1/4	591	20	508
B24Q4/5 B24Q5	28-1/4	718	25	635

COIL FEATURES

Applications — Lennox designed and built evaporator coils are designed for use with B24 series blower units. See condensing units bulletins (section Cooling Units — Condensing Units) for evaporator unit applications and cooling capacities. See heat pump outdoor unit bulletins (section Heat Pumps — Matched remote Systems) for indoor coil applications and cooling and heating capacities (C22/CR22/CH22 coils only). See FM21 bulletin in Heat Pumps — Matched Remote Systems for more information on heat pump systems.

Cabinet Construction — Cabinets are fully insulated with thick fiberglass insulation and are constructed of heavy gauge steel with a deluxe baked-on enamel paint finish. Bend-out flanges are provided in outlet opening of cabinet for ease of plenum connection and ease of alignment with B24 series blower units. See dimension drawing.

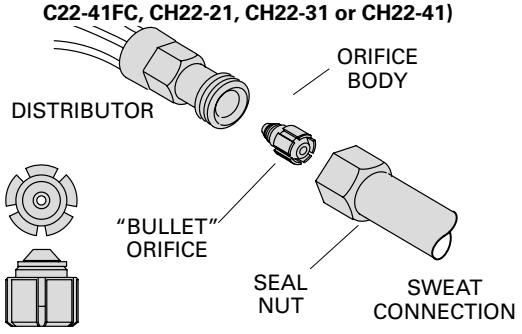
Coil Construction — Lennox designed and fabricated coils are constructed of precisely spaced ripple-edged enhanced aluminum fins machine fitted to rifled copper tubes. Lanced fins allow for maximum exposure of fin surface to air stream. Copper rifled tubing construction provides long coil life and ease of service. Rifled tubing provides superior refrigerant flow resulting in maximum heat transfer. Coils have extra large surface and contact area for maximum efficiency. Fins have collars that grip tubing for maximum contact area resulting in excellent heat transfer. Flared shoulder tubing joints and silver soldering provide tight leakproof joints. Coils are thoroughly tested under pressure to insure leakproof construction. Drainpan for C22/C24/CR22 coils is constructed of a non-corrosive polymer and has dual 3/4 inch (19 mm) fpt drain connections. Drainpan for CH22/CH24 coils is constructed of heavy gauge galvanized steel and has dual 3/4 inch (19 mm) mpt drain connections. Removeable panels allow easy access for coil servicing and cleaning. Refrigerant lines are equipped with sweat connections on suction (vapor) and liquid lines.

Fully Tested — Evaporator units have been thoroughly tested with matching condensing and heat pump units in the Lennox Research Laboratory environmental test room. Air resistance data is from tests conducted in the Lennox air test chamber. Coils are shipped factory assembled and ready for installation.

Refrigerant Control Choice — Coils are available with either field installed expansion valve (C24FC/CH24), factory installed expansion and check valve (C22/CR22/CH22) or RFCIV refrigerant metering device (furnished with all C24FC/CH24 coils, C22-21FC, C22-26FC, C22-31FC, C22-41FC, CH22-21, CH22-31 or CH22-41 coils.)

Refrigerant Flow Control IV — All C24FC coils, all CH24 coils, C22-21FC, C22-26FC, C22-31FC, C22-41FC, CH22-21, CH22-31 or CH22-41 models are applicable to Lennox RFCIV™ systems. RFCIV is a very accurate means of metering refrigerant in system. Refrigerant control is accomplished by the exact sizing of a refrigerant metering orifice. The principle of the Lennox RFCIV system involves matching the evaporator coil with the proper size orifice in the metering device. For heat pump applications in the heating mode, the bullet shaped orifice allows for reverse flow. As the refrigerant flows in the reverse direction, the orifice moves back to a free flow position, eliminating the need for a check valve and related piping in the system. Because the RFCIV system equalizes pressure almost instantaneous after compressor stops, the unit starts unloaded, eliminating the need for any additional controls. See sketch below.

RFCIV SYSTEMS ONLY
(All C24FC coils, all CH24 coils, C22-21FC, C22-26FC, C22-31FC, C22-41FC, CH22-21, CH22-31 or CH22-41)



C22FC SPECIFICATIONS

Model No.		C22-21FC-TXV C22-21FC-RFC	C22-26FC-TXV C22-26FC-RFC	C22-26WFC-TXV	C22-31FC-TXV C22-31FC-RFC	C22-31WFC-TXV
Evaporator Coil	Net face area — sq. ft. (m^2)	3.11 (0.29)	4.0 (0.37)	4.0 (0.37)	4.0 (0.37)	4.0 (0.37)
	Tube diameter — in. (mm)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)
	No. of rows	2	2	2	3	3
	Fins per inch (m)	15 (590)	15 (590)	15 (590)	12 (472)	12 (472)
Suction (vapor) line connection — in. (mm) sweat		5/8 (15.9)	5/8 (15.9)	5/8 (15.9)	3/4 (19)	3/4 (19)
Liquid line connection — in. (mm) sweat		3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)
Condensate drain (fpt) — in. (mm)		(2) 3/4	(2) 3/4	(2) 3/4	(2) 3/4	(2) 3/4
Refrigerant		HCFC-22	HCFC-22	HCFC-22	HCFC-22	HCFC-22
Coil shipping weight — lbs. (kg) 1 package		39 (18)	45 (20)	49 (22)	52 (24)	56 (25)
*Expansion Device Furnished		Expansion and Check Valve or RFCIV		Expansion and Check Valve	Expansion and Check Valve or RFCIV	Expansion and Check Valve

*Furnished and factory installed.

C22FC SPECIFICATIONS

Model No.		C22-41FC-TXV C22-41FC-RFC	C22-46FC-TXV	C22-51FC-TXV	C22-65FC-TXV
Evaporator Coil	Net face area — sq. ft. (m^2)	4.44 (0.41)	6.71 (0.62)	7.58 (0.70)	7.58 (0.70)
	Tube diameter — in. (mm)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)
	No. of rows	3	2	2	3
	Fins per inch (m)	12 (472)	15 (590)	15 (590)	12 (472)
Suction (vapor) line connection — in. (mm) sweat		3/4 (19)	7/8 (22.2)	7/8 (22.2)	1-1/8 (28.6)
Liquid line connection — in. (mm) sweat		3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)
Condensate drain (fpt) — in. (mm)		(2) 3/4	(2) 3/4	(2) 3/4	(2) 3/4
Refrigerant		HCFC-22	HCFC-22	HCFC-22	HCFC-22
Coil shipping weight — lbs. (kg) 1 package		65 (29)	69 (31)	86 (39)	97 (44)
*Expansion Device Furnished		Expansion and Check Valve or RFCIV	Expansion and Check Valve		

*Furnished and factory installed.

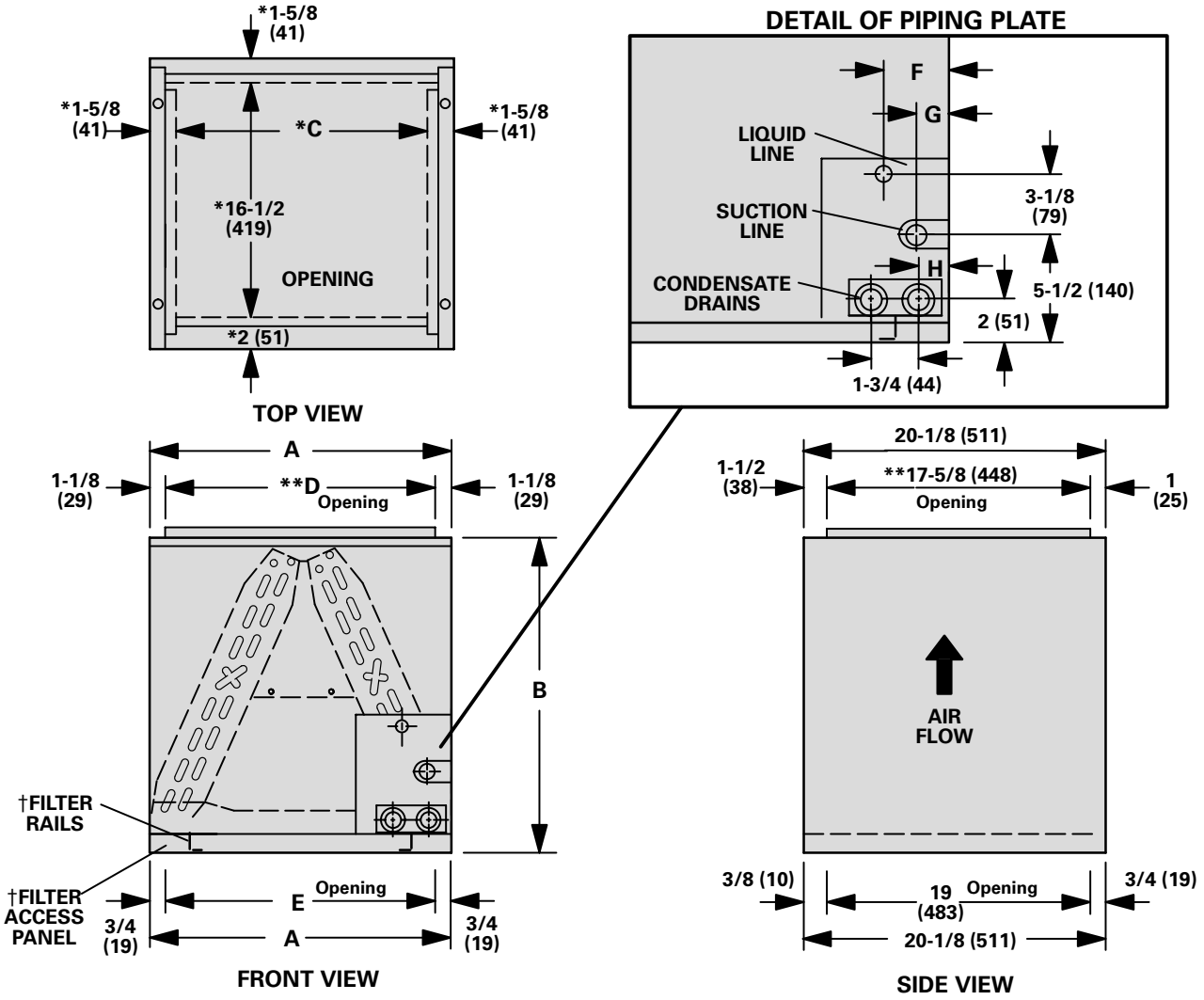
C22FC AIR RESISTANCE

Model No.	Air Volume		Total Resistance	
	cfm	L/s	in. w.g.	Pa
C22-21FC	300	140	.03	7
	400	190	.05	12
	500	235	.07	17
	600	285	.10	25
	700	330	.13	32
C22-26FC	400	190	.04	10
	600	285	.08	20
	800	380	.13	32
	1000	470	.20	50
	1200	570	.27	67
C22-26WFC	400	190	.04	10
	600	285	.08	20
	800	380	.13	32
	1000	470	.20	50
	1200	570	.27	67
C22-31FC	600	285	.09	22
	800	380	.16	40
	1000	470	.24	60
	1200	570	.34	85
	1400	660	.44	109
C22-31WFC	600	285	.09	22
	800	380	.16	40
	1000	470	.24	60
	1200	570	.34	85
	1400	660	.44	109

Model No.	Air Volume		Total Resistance	
	cfm	L/s	in. w.g.	Pa
C22-41FC	800	380	.15	37
	1000	470	.20	50
	1200	570	.26	65
	1400	660	.33	82
	1600	760	.39	97
C22-46FC	1000	470	.07	17
	1200	570	.10	25
	1400	660	.13	32
	1600	760	.17	42
	1800	850	.21	52
	2000	940	.25	62
	2200	1040	.30	75
C22-51FC	1200	570	.09	22
	1400	660	.12	30
	1600	760	.15	37
	1800	850	.19	47
	2000	940	.23	57
	2200	1040	.27	67
C22-65FC	1600	760	.15	37
	1800	850	.18	45
	2000	940	.22	55
	2200	1040	.26	65
	2400	1130	.31	77

C22FC DIMENSIONS — inches (mm)

NOTE — Coil cabinet is equipped with a 5/8 inch (16mm) flange that may be bent up 90° to help in alignment with B24 Series Blower Units.
***Dimensions before flange is bent up.**
****Dimensions after flange is bent up.**



†Filter Rails are furnished with B24 Series Blower Units for field installation in C22 cabinets.

Model No.	A		B		C		D		E		F		G		H	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
C22-21FC	16-1/4	413	17	432	13	330	14	356	14-3/4	375	4-1/8	105	2-1/8	54	1-7/8	48
C22-26FC C22-31FC	16-1/4	413	21	533	13	330	14	356	14-3/4	375	4-1/8	105	2-1/8	54	1-7/8	48
C22-26WFC C22-31WFC	21-1/4	540	21	533	18	457	19	483	19-3/4	502	4-1/8	105	2-1/8	54	1-7/8	48
C22-41FC	21-1/4	540	25-3/4	654	18	457	19	483	19-3/4	502	4-1/8	105	2-1/8	54	1-7/8	48
C22-46FC	26-1/4	667	25-3/4	654	23	584	24	610	24-3/4	629	4-1/8	105	2-1/8	54	1-7/8	48
C22-51FC C22-65FC	26-1/4	667	28-3/4	730	23	584	24	610	24-3/4	629	4-1/8	105	2-1/8	54	1-7/8	48

C24FC SPECIFICATIONS

Model No.		C24-21FC-RFC	C24-26FC-RFC	C24-26WFC-RFC	C24-31FC-RFC	C24-31WFC-RFC
Evaporator Coil	Net face area — sq. ft. (m^2)	3.11 (0.29)	3.11 (0.29)	3.11 (0.29)	3.56 (0.33)	3.56 (0.33)
	Tube diameter — in. (mm)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)
	No. of rows	1	2	2	2	2
	Fins per inch (m)	20 (787)	14 (551)	14 (551)	13 (512)	13 (512)
Suction line connection — in. (mm) sweat		5/8 (15.9)	5/8 (15.9)	5/8 (15.9)	3/4 (19)	3/4 (19)
Liquid line connection — in. (mm) sweat		3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)
Condensate drain (fpt) — in. (mm)		(2) 3/4 (19)	(2) 3/4 (19)	(2) 3/4 (19)	(2) 3/4 (19)	(2) 3/4 (19)
Refrigerant		HCFC-22	HCFC-22	HCFC-22	HCFC-22	HCFC-22
Coil shipping weight — lbs. (kg) 1 package		35 (16)	39 (18)	46 (21)	45 (20)	49 (22)
*Expansion Device Furnished		RFCIV Metering Orifice				

*Furnished and factory installed.

C24FC SPECIFICATIONS

Model No.		C24-41FC-RFC	C24-41WFC-RFC	C24-46FC-RFC	C24-51FC-RFC	C24-65FC-RFC
Evaporator Coil	Net face area — sq. ft. (m^2)	4.00 (0.37)	4.00 (0.37)	4.89 (0.45)	6.13 (0.57)	7.58 (0.70)
	Tube diameter — in. (mm)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)
	No. of rows	2	2	2	2	2
	Fins per inch (m)	13 (512)	13 (512)	14 (551)	13 (512)	13 (512)
Suction line connection — in. (mm) sweat		3/4 (19)	3/4 (19)	7/8 (22.2)	7/8 (22.2)	1-1/8 (28.6)
Liquid line connection — in. (mm) sweat		3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)
Condensate drain (fpt) — in. (mm)		(2) 3/4	(2) 3/4	(2) 3/4	(2) 3/4	(2) 3/4
Refrigerant		HCFC-22	HCFC-22	HCFC-22	HCFC-22	HCFC-22
Coil shipping weight — lbs. (kg) 1 pkg		46 (21)	57 (26)	65 (29)	70 (32)	86 (39)
*Expansion Device Furnished		RFCIV Metering Orifice				

*Furnished and factory installed.

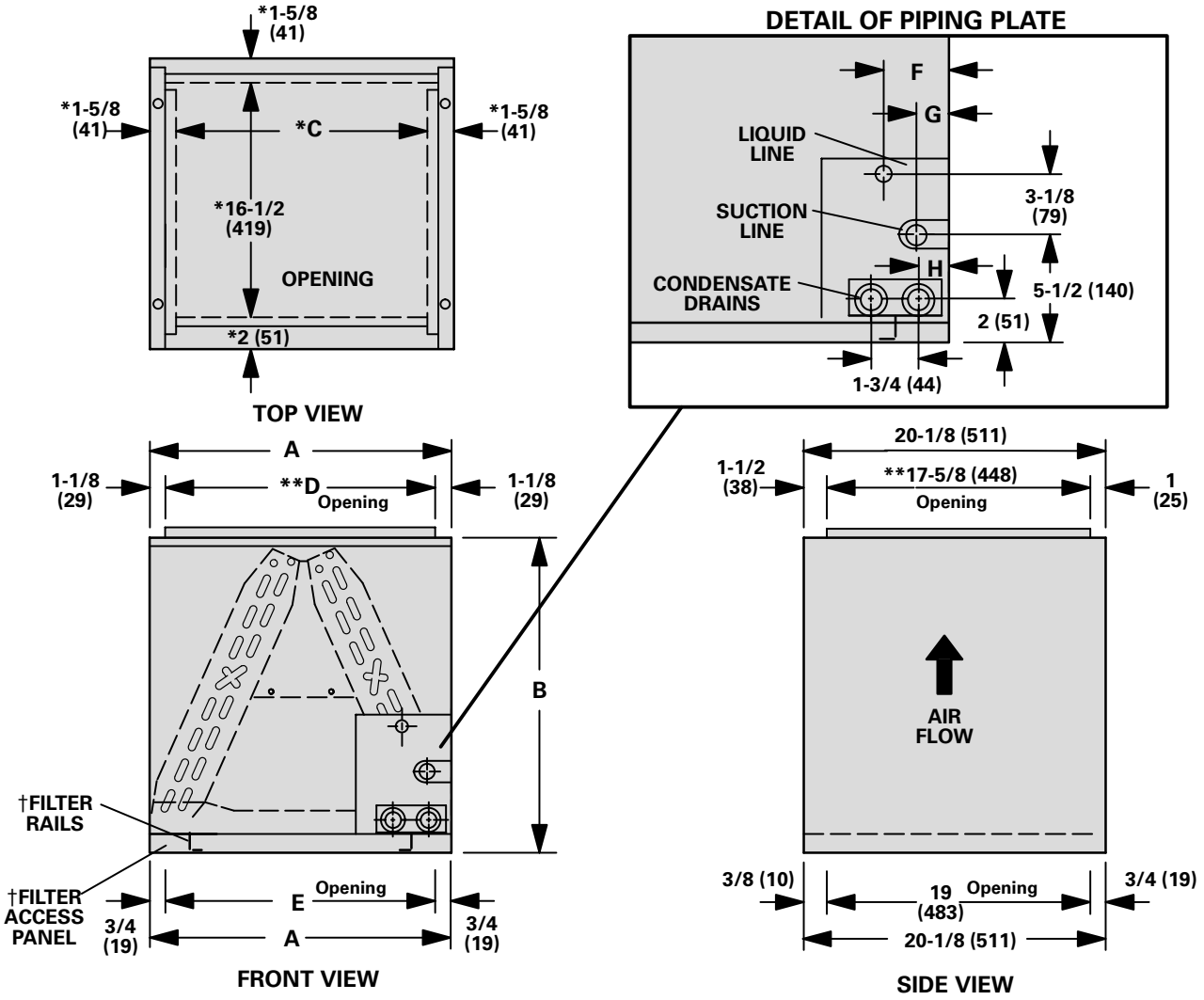
C24FC AIR RESISTANCE

Model No.	Air Volume		Total Resistance	
	cfm	L/s	in. w.g.	Pa
C24-21FC	300	140	.02	5
	400	190	.03	7
	500	235	.05	12
	600	285	.07	17
	700	330	.10	25
C24-26FC	400	190	.04	10
	600	285	.09	22
	800	380	.15	37
	1000	470	.23	57
	1200	570	.32	80
C24-26WFC	400	190	.04	10
	600	285	.09	22
	800	380	.15	37
	1000	470	.23	57
	1200	570	.32	80
C24-31FC	600	285	.07	17
	800	380	.12	30
	1000	470	.18	45
	1200	570	.25	62
	1400	660	.34	85
C24-31WFC	600	285	.07	17
	800	380	.12	30
	1000	470	.18	45
	1200	570	.25	62
	1400	660	.34	85

Model No.	Air Volume		Total Resistance	
	cfm	L/s	in. w.g.	Pa
C24-41FC	800	380	.12	30
	1000	470	.19	47
	1200	570	.26	65
	1400	660	.35	87
	1600	760	.44	109
C24-41WFC	800	380	.12	30
	1000	470	.19	47
	1200	570	.26	65
	1400	660	.35	87
	1600	760	.44	109
C24-46FC	1000	470	.12	30
	1200	570	.16	40
	1400	660	.22	55
	1600	760	.28	70
	1800	850	.34	85
C24-51FC	1200	570	.09	22
	1400	660	.12	30
	1600	760	.15	37
	1800	850	.19	47
	2000	940	.23	57
	2200	1040	.27	67
C24-65FC	1600	760	.11	27
	1800	850	.14	35
	2000	940	.17	42
	2200	1040	.20	50
	2400	1130	.23	57

C24FC DIMENSIONS — inches (mm)

NOTE — Coil cabinet is equipped with a 5/8 inch (16mm) flange that may be bent up 90° to help in alignment with B24 Series Blower Units.
***Dimensions before flange is bent up.**
****Dimensions after flange is bent up.**



†Filter Rails are furnished with B24 Series Blower Units for field installation in C24 cabinets (up-flo applications only).

Model No.	A		B		C		D		E		F		G		H	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
C24-21FC C24-26FC	16-1/4	413	17	432	13	330	14	356	14-3/4	375	4-1/8	105	2-1/8	54	1-7/8	48
C24-31FC C24-41FC	16-1/4	413	21	533	13	330	14	356	14-3/4	375	4-1/8	105	2-1/8	54	1-7/8	48
C24-26WFC C24-31WFC C24-41WFC	21-1/4	540	21	533	18	457	19	483	19-3/4	502	4-1/8	105	2-1/8	54	1-7/8	48
C24-46FC	21-1/4	540	25-3/4	654	18	457	19	483	19-3/4	502	4-1/8	105	2-1/8	54	1-7/8	48
C24-51FC	26-1/4	667	25-3/4	654	23	584	24	610	24-3/4	629	4-1/8	105	2-1/8	54	1-7/8	48
C24-65FC	26-1/4	667	28-3/4	730	23	584	24	610	24-3/4	629	4-1/8	105	2-1/8	54	1-7/8	48

CR22 SPECIFICATIONS

Model No.		CR22-21-TXV	CR22-31-TXV	CR22-31W-TXV	CR22-41-TXV	CR22-51-TXV	CR22-65-TXV
Evaporator Coil	Net face area — sq. ft. (m^2)	3.11 (0.29)	4.0 (0.37)	4.0 (0.37)	4.44 (0.41)	7.58 (0.70)	7.58 (0.70)
	Tube diameter — in. (mm)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)
	No. of rows	2	3	3	3	2	3
	Fins per inch (m)	15 (590)	12 (472)	12 (472)	12 (472)	15 (590)	12 (472)
Suction (vapor) line connection — in. (mm) sweat		5/8 (15.9)	3/4 (19)	3/4 (19)	3/4 (19)	7/8 (22.2)	1-1/8 (28.6)
Liquid line connection — in. (mm) sweat		3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)
Condensate drain (fpt) — in. (mm)		(2) 3/4 (19)	(2) 3/4 (19)	(2) 3/4 (19)	(2) 3/4 (19)	(2) 3/4 (19)	(2) 3/4 (19)
Refrigerant		R-22	R-22	R-22	R-22	R-22	R-22
Coil shipping weight — lbs. (kg) 1 package		39 (18)	52 (24)	56 (25)	65 (29)	86 (39)	97 (44)
*Expansion Device Furnished		Expansion And Check Valve					

*Furnished and factory installed.

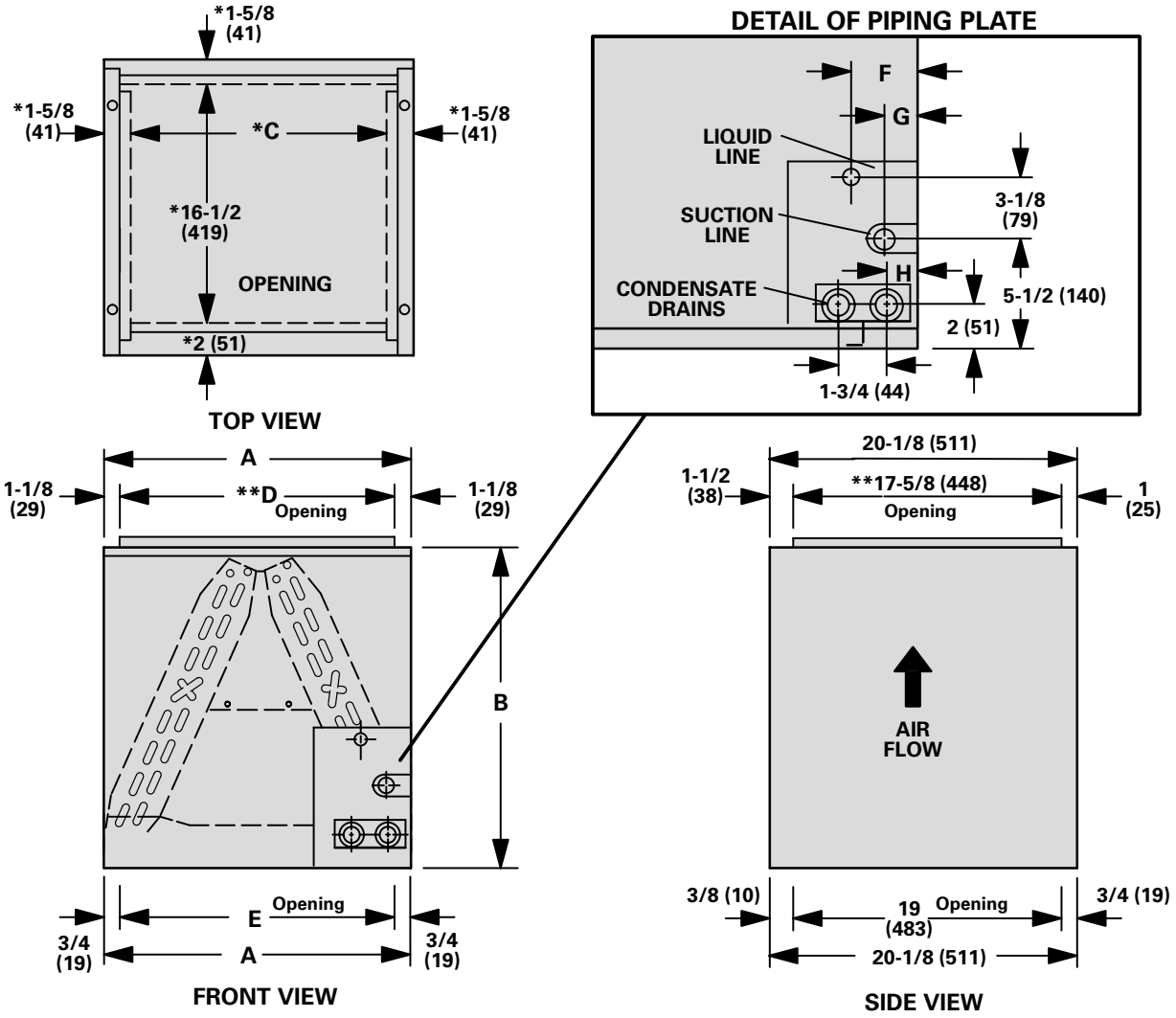
AIR RESISTANCE

Model No.	Air Volume		Total Resistance	
	cfm	L/s	in. w.g.	Pa
CR22-21	300	140	.04	10
	400	190	.07	17
	500	235	.11	27
	600	285	.15	37
	700	330	.20	50
CR22-31	600	285	.13	32
	800	380	.22	55
	1000	470	.33	82
	1200	570	.47	117
	1400	660	.62	154
CR22-31W	600	285	.13	32
	800	380	.22	55
	1000	470	.33	82
	1200	570	.47	117
	1400	660	.62	154

Model No.	Air Volume		Total Resistance	
	cfm	L/s	in. w.g.	Pa
CR22-41	800	380	.15	37
	1000	470	.23	57
	1200	570	.32	80
	1400	660	.42	104
	1600	760	.54	134
CR22-51	1200	570	.17	42
	1400	660	.23	57
	1600	760	.29	72
	1800	850	.36	90
	2000	940	.43	107
	2200	1040	.52	129
CR22-65	1600	760	.23	57
	1800	850	.29	72
	2000	940	.35	87
	2200	1040	.42	104
	2400	1130	.49	122

CR22 DIMENSIONS — inches (mm)

NOTE — Coil cabinet is equipped with a 5/8 inch (16mm) flange on top of cabinet that may be bent up for plenum connection when used with B24 Series Blower Units in down-flo applications.
***Dimensions before flange is bent.**
****Dimensions after flange is bent.**



Model No.	A		B		C		D		E		F		G		H	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
CR22-21	16-1/4	413	17	432	13	330	14	356	14-3/4	375	4-1/8	105	2-1/8	54	1-7/8	48
CR22-31	16-1/4	413	21	533	13	330	14	356	14-3/4	375	4-1/8	105	2-1/8	54	1-7/8	48
CR22-31W	21-1/4	540	21	533	18	457	19	483	19-3/4	502	6-5/8	168	4-5/8	117	4-3/8	111
CR22-41	21-1/4	540	25-3/4	654	18	457	19	483	19-3/4	502	4-1/8	105	2-1/8	54	1-7/8	48
CR22-51 CR22-65	26-1/4	667	28-3/4	730	23	584	24	629	24-3/4	629	4-1/8	105	2-1/8	54	1-7/8	48

CH22 SPECIFICATIONS

Model No.		CH22-21-TXV CH22-21RFC	CH22-31-TXV CH22-31RFC	CH22-41-TXV CH22-41RFC	CH22-51-TXV	CH22-65-TXV
Evaporator Coil	Net face area — sq. ft. (m^2)	3.11 (0.29)	5.45 (0.51)	6.00 (0.56)	8.00 (0.74)	8.00 (0.74)
	Tube diameter — in. (mm)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)
	No. of rows	2	2	2	2	3
	Fins per inch (m)	15 (591)	15 (591)	15 (591)	15 (591)	12 (472)
Suction (vapor) line connection — in. (mm) sweat		5/8 (15.9)	3/4 (19)	3/4 (19)	7/8 (22.2)	1-1/8 (28.6)
Liquid line connection — in. (mm) sweat		3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)
Condensate drain (mpt) — in. (mm)		(2) 3/4 (19)	(2) 3/4 (19)	(2) 3/4 (19)	(2) 3/4 (19)	(2) 3/4 (19)
Refrigerant		HCFC-22	HCFC-22	HCFC-22	HCFC-22	HCFC-22
Coil shipping weight — lbs. (kg) 1 package		55 (25)	62 (28)	65 (29)	72 (33)	95 (43)
*Expansion Device Furnished		Expansion And Check Valve or RFCIV			Expansion And Check Valve	

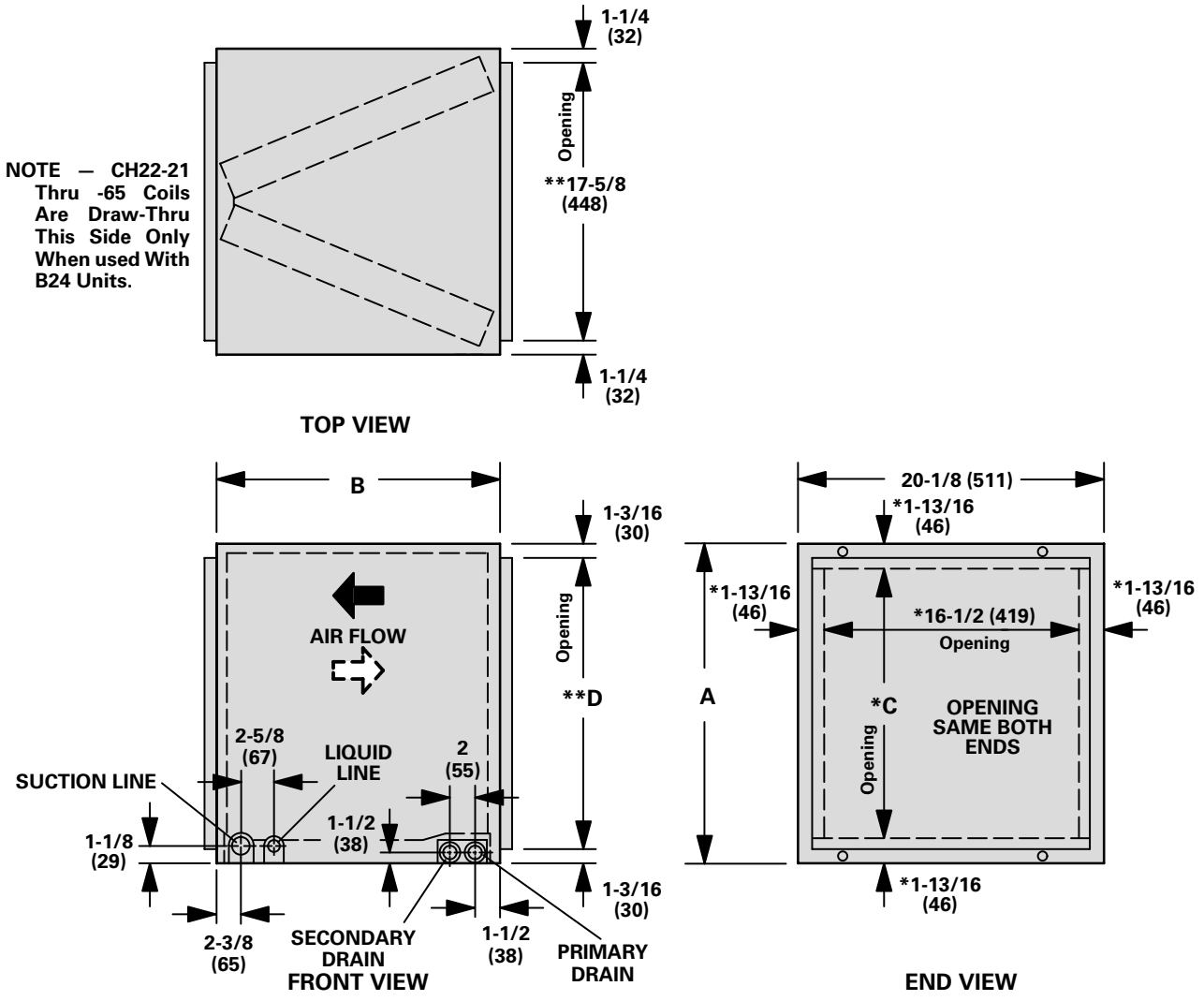
*Furnished and factory installed.

CH22 AIR RESISTANCE

Model No.	Air Volume		Total Resistance	
	cfm	L/s	in. w.g.	Pa
CH22-21	400	190	.04	11
	500	235	.07	16
	600	285	.09	23
	700	330	.12	30
CH22-31	600	285	.09	22
	800	380	.15	36
	1000	470	.22	55
	1200	565	.31	77
	1400	660	.41	102
CH22-41	800	380	.09	24
	1000	470	.14	36
	1200	565	.20	50
	1400	660	.26	66
	1600	755	.34	84
CH22-51	1200	565	.15	37
	1400	660	.20	49
	1600	755	.25	62
	1800	850	.31	77
	2000	945	.38	94
CH22-65	1400	660	.22	54
	1600	755	.28	69
	1800	850	.34	85
	2000	945	.41	103
	2200	1040	.49	123
	2400	1135	.58	145

CH22 DIMENSIONS — inches (mm)

NOTE — Coil cabinet is equipped with a 5/8 inch (16mm) flange that may be bent up 90° to help in alignment with B24 Series Blower Units.
***Dimensions before flange is bent up.**
****Dimensions after flange is bent up.**



Model No.	A		B		C		D	
	in.	mm	in.	mm	in.	mm	in.	mm
CH22-21	16-1/4	413	20-7/8	530	12-5/8	346	13-7/8	380
CH22-31	16-1/4	413	29-3/8	805	12-5/8	346	13-7/8	380
CH22-41	21-1/4	540	29-3/8	805	17-5/8	483	18-7/8	517
CH22-51	26-1/4	667	29-3/8	805	22-5/8	620	23-7/8	654
CH22-65	26-1/4	667	29-3/8	805	22-5/8	620	23-7/8	654

CH24 SPECIFICATIONS

Model No.		CH24-21-RFC	CH24-31-RFC	CH24-41-RFC	CH24-51-RFC	CH24-65-RFC
Evaporator Coil	Net face area — sq. ft. (m^2)	1.56 (0.14)	3.11 (0.29)	4.00 (0.37)	5.33 (0.50)	8.00 (0.74)
	Tube diameter — in. (mm)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)
	No. of rows	3	2	2	2	2
	Fins per inch (m)	12 (472)	14 (551)	13 (512)	14 (551)	15 (591)
Suction line connection — in. (mm) sweat		5/8 (15.9)	3/4 (19)	3/4 (19)	7/8 (22.2)	1-1/8 (28.6)
Liquid line connection — in. (mm) sweat		3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)	3/8 (9.5)
Condensate drain (mpt) — in. (mm)		(2) 3/4 (19)	(2) 3/4 (19)	(2) 3/4 (19)	(2) 3/4 (19)	(2) 3/4 (19)
Refrigerant		HCFC-22	HCFC-22	HCFC-22	HCFC-22	HCFC-22
Coil shipping weight — lbs. (kg) 1 pkg		22 (10)	55 (25)	58 (26)	63 (29)	72 (33)
*Expansion Device Furnished		RFCIV Metering Orifice				

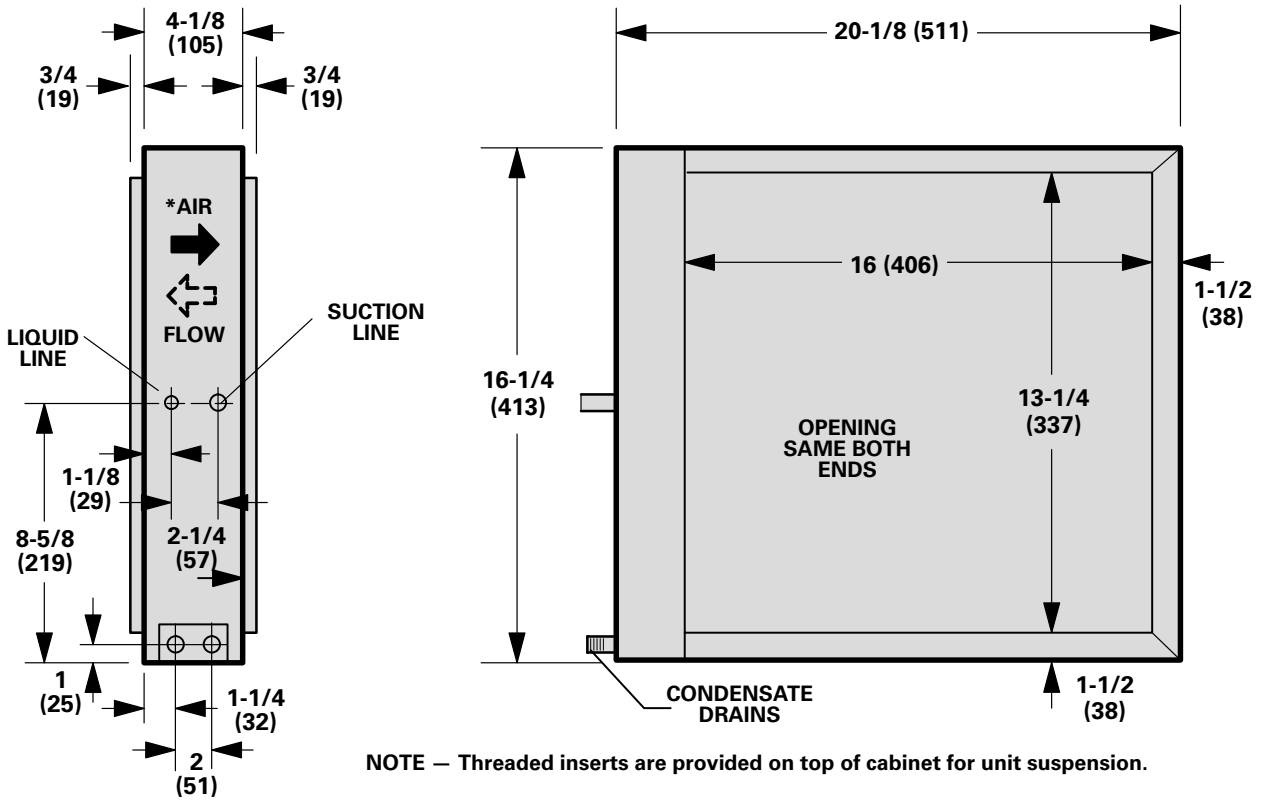
*Furnished and factory installed.

CH24 AIR RESISTANCE

Model No.	Air Volume		Total Resistance	
	cfm	L/s	in. w.g.	Pa
CH24-21	400	190	.08	20
	500	235	.12	30
	600	285	.17	42
	700	330	.22	56
CH24-31	600	285	.11	26
	800	380	.18	45
	1000	470	.27	67
	1200	565	.38	94
	1400	660	.50	125
CH24-41	800	380	.09	21
	1000	470	.13	32
	1200	565	.18	45
	1400	660	.24	60
	1600	755	.30	76

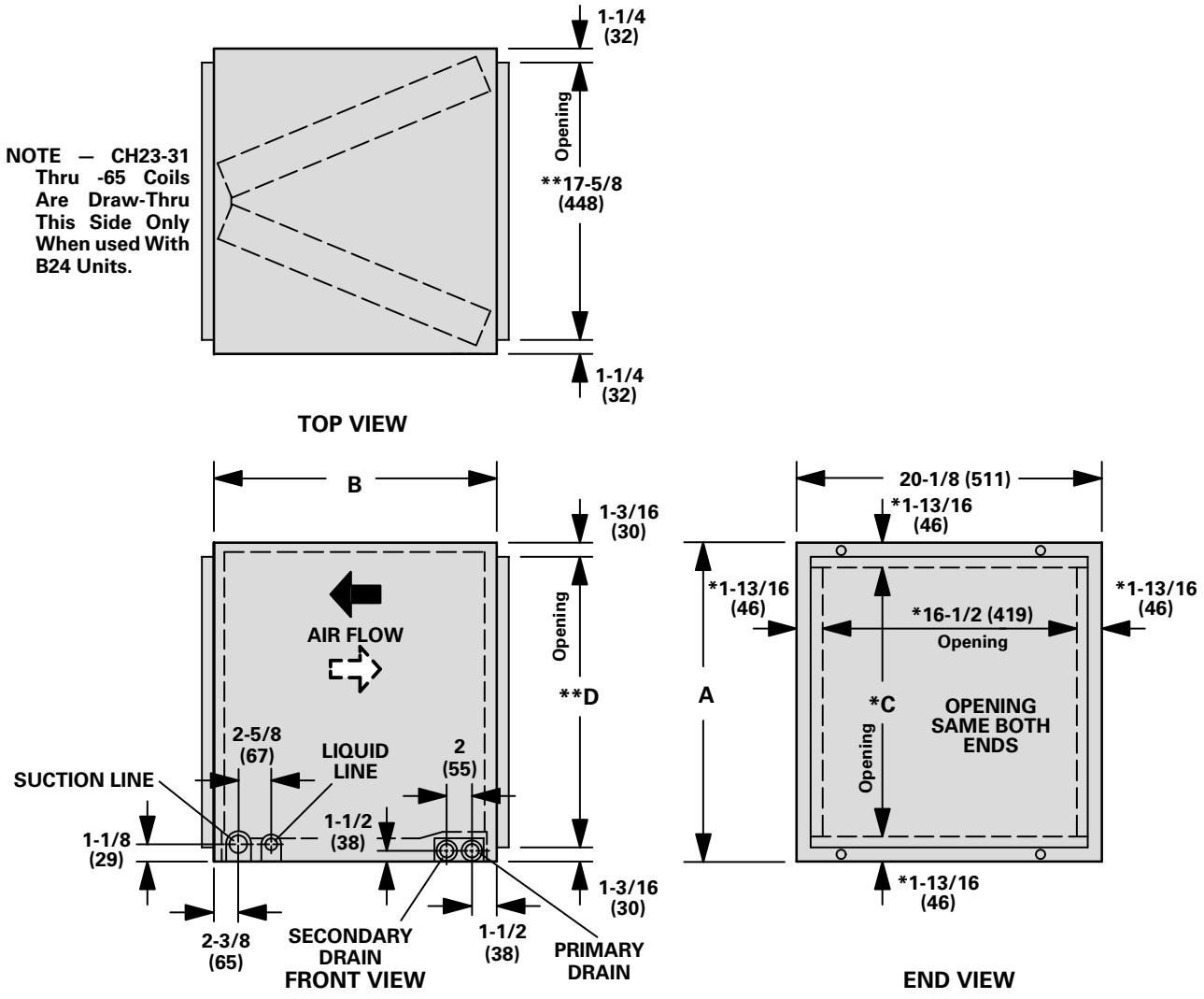
Model No.	Air Volume		Total Resistance	
	cfm	L/s	in. w.g.	Pa
CH24-51	1200	565	.13	31
	1400	660	.17	42
	1600	755	.21	53
	1800	850	.26	66
	2000	945	.32	80
CH24-65	1600	755	.25	64
	1800	850	.32	79
	2000	945	.38	96
	2200	1040	.46	114
	2400	1135	.53	134

CH24-21 DIMENSIONS — inches (mm)



NOTE — Threaded inserts are provided on top of cabinet for unit suspension.

NOTE — Coil cabinet is equipped with a 5/8 inch (16mm) flange that may be bent up 90° to help in alignment with B24 Series Blower Units.
***Dimensions before flange is bent up.**
****Dimensions after flange is bent up.**



Model No.	A		B		C		D	
	in.	mm	in.	mm	in.	mm	in.	mm
CH24-31	16-1/4	413	20-7/8	530	12-5/8	346	13-7/8	380
CH24-41	21-1/4	540	20-7/8	530	17-5/8	483	18-7/8	517
CH24-51	26-1/4	667	20-7/8	530	22-5/8	620	23-7/8	654
CH24-65	26-1/4	667	29-3/8	805	22-5/8	620	23-7/8	654

Technical Publications