LENNOX

ENGINEERING DATA

CB29M

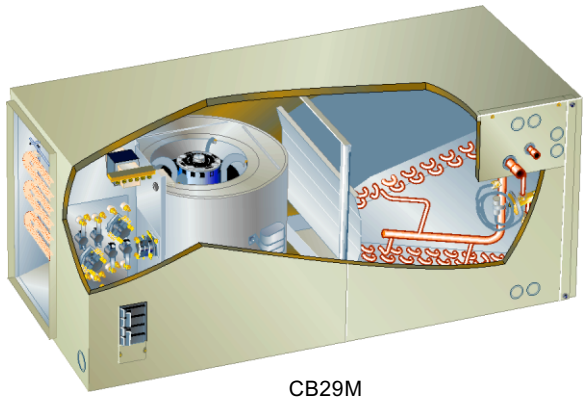
ELITE® SERIES

Multi-Position

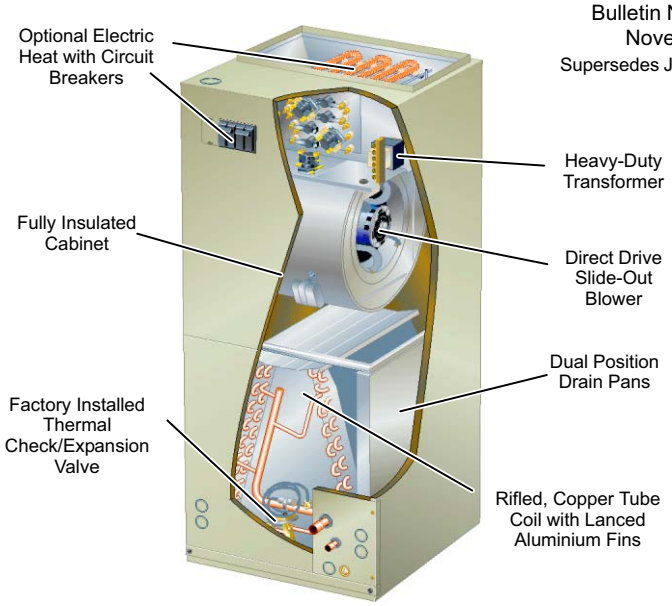
Nominal Capacity - 1.5 to 5 Tons

Optional Electric Heat - 2.5 to 30.0 kW

Bulletin No. 210105
November 2003
Supersedes January 2003



CB29M
Horizontal Left Hand Position
(With Optional Electric Heat)



CB29M
Up-flow Position
(With Optional Electric Heat)

UL® LISTED

ISO 9001 REGISTERED QUALITY SYSTEMS

c UL® LISTED

MODEL NUMBER IDENTIFICATION

CB 29 M - 41 - 1 P

Unit Type
CB - Blower / Evaporator Coil

Series

Configuration
M = Multi-Position

Voltage
P = 208/230v-1 phase-60hz
G = 460v-3 phase-60hz
J = 575v-3 phase-60hz

Minor Revision Number

Nominal Cooling Capacity
21/26 = 1.5 to 2 tons (5.3 to 7.0 kW)
31 = 2.5 tons (8.8 kW)
41 = 3 tons (10.6 kW)
46 = 3.5 tons (12.3 kW)
51 = 4 tons (14.1 kW)
65 = 5 tons (17.6 kW)

FEATURES

CONTENTS

WARRANTY

All covered components - five years in residential applications, one year in non-residential applications.
Refer to Lennox Limited Warranty Certificate included with each unit for additional details.

APPLICATIONS

1.5 to 5 ton (5.3 to 17.6 kW) nominal sizes.
Multi-position (up-flow, down-flow or horizontal) applications.
Applicable to expansion valve systems in cooling applications and check and expansion valve systems in heat pump applications.
Wide range check and expansion valve factory installed.
See bulletins in section, Condensing Units for cooling capacities.
See bulletins in section, Heat Pump Outdoor Units for cooling and heating capacities.
Optional field installed electric heaters available in several sizes for additive heating capacity.

Visit us at www.lennox.com
For the latest technical information, www.davenet.com

NOTE - Due to Lennox' ongoing committment to quality, Specifications, Ratings and Dimensions subject to change without notice and without incurring liability.
Improper installation, adjustment, alteration, service or maintenance can cause property damage or personal injury.
Installation and service must be performed by a qualified installer and servicing agency.

FEATURES

APPROVALS

Tested with matching condensing and heat pump units in the Lennox Research Laboratory environmental test room in accordance with ARI Standard 210/240.
Optional electric heaters rated in accordance with US Department of Energy (DOE) test procedures and Federal Trade Commission (FTC) labeling regulations.
Blower performance data according to unit tests conducted in Lennox air test chamber.
Blower-coil units are UL Listed to US and Canadian safety standards and components within are bonded for grounding to meet safety standards for servicing required by CEC and NEC.
ISO 9001 Registered Manufacturing Quality System.

CABINET

Constructed of heavy gauge galvanized steel.
Completely insulated with thick fiberglass insulation.
Pre-painted steel cabinets have mildly textured enamel finish with primer coat on unpainted side of all panels.
No external screw heads on sides of cabinet for tight installations without damage to walls or woodwork.
Removable panels provide complete service access.
Electrical inlets provided in sides and top of cabinet. See dimension drawings for locations.

Multi-Position Capability

Shipped for up-flow and horizontal right hand discharge.
Quickly converted to down-flow or horizontal left hand air discharge.

Dual Position Drain Pans

Drain pans designed for up-flow, down-flow or horizontal applications.
Deep, corrosion resistant plastic drain pans have dual pipe drains.
See dimension drawings.

BLOWER

Lennox designed and built direct drive blower.
Statically and dynamically balanced before installation in unit.
Resiliently mounted multi-speed leadless motor with plug-in connections.
Choice of blower speeds. See blower performance tables.
Speed changes easily accomplished by a simple wiring change.
Blower slides out of cabinet for servicing.

REFRIGERATION SYSTEM

Refrigerant Line Connections

Suction (vapor) and liquid lines have sweat connections.
Extended outside of the cabinet for ease of connection.
See dimension drawings for locations.

Check and Expansion Valve Furnished

Wide range valve.
Chatleff style fitting.
Factory installed on all models internal to cabinet.

Copper Tube/Enhanced Fin Evaporator Coil

Lennox designed and fabricated twin coils.
Assembled in “A” configuration.
Provides extra large surface and contact area, excellent heat transfer and low air resistance for maximum efficiency.
Precise circuiting for uniform refrigerant distribution.
Precisely spaced ripple-edged aluminum fins fitted to durable seamless copper tubes.
Fins are strengthened to resist bending and are equipped with collars that grip tubing for maximum contact area.
Lanced fins provide maximum exposure of fin surface to air stream.
Long life copper tubing easy to service.
Rifled tubing provides superior heat transfer.
Flared shoulder tubing joints and silver soldering provide tight, leakproof joints.
Coil thoroughly factory tested under high pressure to insure leakproof construction.

TRANSFORMER AND BLOWER COOLING RELAY

24 volt transformer with in-line fuse and blower cooling relay furnished as standard.
Factory installed in the unit control box.
Terminal strip furnished.

FILTER

Tool-less access to filter area for quick and easy servicing.
Disposable frame type filter furnished and factory installed in rails in cabinet.
See Specifications tables for sizes.

OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA

CABINET

Down-Flow Additive Base

Additive base required for models with electric heat installed in down-flow position on combustible floors.

Side Return Unit Stand (Optional for Up-Flow Only)

Raises unit 16 in. (406 mm) above floor for side return air duct connection.
Eliminates need for wooden platform construction.
All aluminum construction.
Two adjustable frames fit all sizes.

Wall Hanging Bracket Kit (Optional for Up-Flow Only)

Allows unit to be hung on wall at any height.
Consists of heavy gauge steel support brackets (one for blower coil unit, one for wall mount).
Screws furnished for fastening one bracket to unit.
Bolts for fastening one bracket to wall are field provided.

HORIZONTAL SUPPORT FRAME KIT

Provides support of unit in horizontal applications.
Consists of (2) 1 x 1-1/2 x 32-5/8 in. (25 x 38 x 829 mm) and (2) 1 x 3 x 53-7/8 in. (25 x 76 x 1368 mm) painted heavy gauge cold rolled steel support channels with assembly and suspending holes.
Bolts and nuts furnished for field assembly.
Suspending rods must be field provided.

SINGLE-POINT POWER SOURCE CONTROL BOX

Control Box may be used with optional electric heat when single power supply is connected to multi-circuit electric heat.
Field installs external to the unit cabinet on either side or top.
Constructed of heavy gauge steel, baked enamel finish, pre-punched mounting holes, electrical inlet knockouts, and terminal strip.
Removeable cover provides easy access.
Dimensions (H x W x D) : 7 x 7 x 4 in. (178 x 178 x 102 mm)

STEP-DOWN TRANSFORMER (575V APPLICATIONS)

460V-3 phase units can be used in 575V applications.
575V electric heaters are shipped with a 575V to 460V step-down transformer.
If no electric heat is used, order a 575V Step-down Transformer Kit.

OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA

ELECTRIC HEAT

Field install internal to unit cabinet.
Available in several voltages and kw sizes.
See Electric Heat tables.
Helix wound nichrome heating elements exposed directly in air stream resulting in instant heat transfer, low element temperatures and long service life.
Each element equipped with accurately located limit control with fixed temperature off setting and automatic reset.
Supplemental thermal cutoff limit control, provides positive protection in case of excessive temperatures.
Thermal sequencer relay brings elements on and off line, in sequence and equal increments, with time delay between each.
Initiates and terminates blower operation.
Heating control relay(s) furnished as standard.
Control box and access cover constructed of heavy gauge galvanized steel.
Factory assembled with controls installed and wired.
Electric heat low voltage controls plug-in to blower coil unit.
575V electric heaters are shipped with a 575V to 460V step-down transformer.

Circuit Breaker Models

ECB29-5CB, -6CB, -8CB, -9CB, -10CB, -12.5CB, -15CB, -20CB, -25CB and -30CB (208/240v-1ph) and ECB29-15CB, -20CB and -25CB (208/240v-3ph) heaters are equipped with circuit breakers for overload and short circuit protection.
Factory wired and mounted on electric heat unit.
Current sensitive and temperature actuated.
Manual reset.
Circuit breakers qualify as disconnect means at unit in many areas, eliminate the need for field provided disconnect.
Consult local electrical code in your area.

EvenHeater™ Models

Electric heat is staged to provide supplemental heat to meet desired comfort levels.
EHC control board stages the heat on and off based on the demand of the provided (field installed) supply plenum thermistor.
Temperature set point [85, 100, 115 or 130°F (30, 38, 46 or 54°C)] is selected by use of a jumper pin on the EHC control board.
ECB29EH-9CB, -12.5CB, -15CB and -20CB heaters are equipped with circuit breakers for overload and short circuit protection.
Factory provided and field mounted in electric heat unit.
Current sensitive and temperature actuated.
Manual reset.
Circuit breakers qualify as disconnect means at unit in many areas, eliminate the need for field provided disconnect.
Consult local electrical code in your area.

SPECIFICATIONS

General Data	**Model Number**	**CB29M-21/26**	**CB29M-31**	**CB29M-41**	**CB29M-46**	**CB29M-51**	**CB29M-65**
	Nominal tonnage	1.5 - 2	2.5	3	3.5	4	5
	Refrigerant	R-22	R-22	R-22	R-22	R-22	R-22
Connections	Suction (vapor) line (o.d.) - in. (mm) sweat	5/8 (16)	3/4 (19)	3/4 (19)	7/8 (22.2)	1-1/8 (28)	1-1/8 (28)
	Liquid line (o.d.) - 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 - in. (mm) fpt	(2) 3/4 (19)	(2) 3/4 (19)	(2) 3/4 (19)	(2) 3/4 (19)	(2) 3/4 (19)	(2) 3/4 (19)
Evaporator Coil	Net face area - ft.^{2} (m^2)	3.11 (0.29)	3.56 (0.33)	4.44 (0.41)	4.44 (0.41)	5.0 (0.46)	5.0 (0.46)
	Tube outside 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)
	Number of rows	2	2	2	3	3	3
	Fins per inch (fins per m)	14 (551)	14 (551)	14 (551)	12 (472)	12 (472)	12 (472)
Blower	Wheel nominal diameter x width - in.	10 x 7	10 x 7	10 x 8	10 x 9	11-1/2 x 9	11-1/2 x 9
	mm	254 x 178	254 x 178	254 x 203	254 x 229	292 x 229	292 x 229
	Blower motor output - hp (W)	1/5 (149)	1/3 (249)	1/3 (249)	1/2 (373)	3/4 (560)	3/4 (560)
[1] **Filters**	Size of filter - in.	15 x 20 x 1	15 x 20 x 1	20 x 20 x 1	20 x 20 x 1	20 x 22 x 1	20 x 22 x 1
	mm	381x508x25	381x508x25	508x508x25	508x508x25	508x559x25	508x559x25
Shipping Data -1 package	lbs. (kg)	121 (55)	123 (56)	156 (71)	160 (73)	181 (83)	181 (83)

ELECTRICAL DATA

Electrical Data (60hz)	Voltage - phase	208/230 - 1	208/230 - 1	208/230-1 [2] 460-3	208/230 - 1	208/230 - 1 [2] 460 - 3	208/230 - 1 [2] 460 - 3
[3] Maximum overcurrent protection (unit only) all voltages		15	15	15	15	15	15
Minimum circuit ampacity (unit only) - 208/230V		2	3	3	6	6	6
- 460V		- - -	- - -	2	- - -	3	3

OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA

Down-Flow Combustible Base	Shipping weight - lbs. (kg)	**34J72** - 8 (4)	**34J72** - 8 (4)	**34J73** - 8 (4)	**34J73** - 8 (4)	**34J73** - 8 (4)	**34J73** - 8 (4)
Electric Heat		2.5 to 30 kW - See Electric Heat Data tables					
Horizontal Support Frame Kit - Shipping Weight - lbs. (kg)		**56J18 -** 18 (8)	**56J18 -** 18 (8)	**56J18 -** 18 (8)	**56J18 -** 18 (8)	**56J18 -** 18 (8)	**56J18 -** 18 (8)
Side Return Unit Stand (Up-Flow Only) - Ship. weight - lbs. (kg)		**45K31** - 5 (2)	**45K31** - 5 (2)	**45K32** - 6 (3)	**45K32 -** 6 (3)	**45K32 -** 6 (3)	**45K32 -** 6 (3)
Single Point Power Source Control Box - Ship. wt. - lbs. (kg)		- - -	**21H39 -** 5 (2)	**21H39 -** 5 (2)	**21H39 -** 5 (2)	**21H39 -** 5 (2)	**21H39 -** 5 (2)
Step-Down Transformer Kit For 575V applications		- - -	- - -	**66K90**	- - -	**66K90**	**66K90**
Wall Hanging Bracket Kit (Up-Flow Only) - Ship. wt. - lbs. (kg)		**45K30** - 3 (1)	**45K30** - 3 (1)	**45K30** - 3 (1)	**45K30** - 3 (1)	**45K30** - 3 (1)	**45K30** - 3 (1)

[1] One disposable frame type filter furnished.
[2] Blower motor is 460V - 1 phase. Optional electric heat is 460V - 3 phase.
[3] HACR type breaker or fuse.

BLOWER DATA

CB29M-21/26 BLOWER PERFORMANCE (208/230V)

External Static Pressure		Air Volume and Motor Watts at Specific Blower Taps								
		High			Medium			Low		
in. w.g.	Pa	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts
.00	0	1025	485	375	885	415	305	690	325	240
.05	10	1010	480	370	880	415	305	690	325	240
.10	25	995	470	365	870	410	300	685	325	240
.15	35	975	460	360	855	405	295	680	320	235
.20	50	955	450	350	840	395	290	670	315	230
.25	60	935	440	345	825	390	280	660	310	230
.30	75	910	430	335	805	380	275	645	305	225
.40	100	855	405	320	750	355	255	605	285	210
.50	125	790	375	305	690	325	240	555	260	195
.60	150	720	340	290	615	290	220	495	235	180
.70	175	635	300	270	530	250	205	420	200	165
.75	185	595	280	260	485	230	195	380	180	160

NOTE — All air data is measured external to unit with air filter in place.
Electric heaters have no appreciable air resistance.

CB29M-31 BLOWER PERFORMANCE (208/230V)

External Static Pressure		Air Volume and Motor Watts at Specific Blower Taps								
		High			Medium			Low		
in. w.g.	Pa	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts
.00	0	1210	570	445	1105	520	400	980	465	370
.05	10	1200	565	445	1100	520	395	980	460	370
.10	25	1185	560	440	1095	515	390	975	460	365
.15	35	1170	550	430	1080	510	385	965	455	360
.20	50	1150	540	425	1065	500	375	955	450	350
.25	60	1125	530	420	1045	495	370	940	445	340
.30	75	1100	520	410	1020	480	360	920	435	330
.40	100	1035	490	390	960	455	335	870	410	310
.50	125	955	450	370	890	420	315	805	380	285
.60	150	865	410	350	800	380	290	725	345	260
.70	175	760	360	325	695	330	265	635	300	235
.75	185	705	335	315	640	300	250	580	275	225

NOTE — All air data is measured external to unit with air filter in place.
Electric heaters have no appreciable air resistance.

CB29M-41 BLOWER PERFORMANCE (208/230V)

External Static Pressure		Air Volume and Motor Watts at Specific Blower Taps								
		High			Medium			Low		
in. w.g.	Pa	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts
.00	0	1495	705	650	1110	525	510	895	420	415
.05	10	1485	700	640	1120	530	510	910	430	415
.10	25	1475	695	625	1130	530	510	920	435	410
.15	35	1460	690	615	1130	535	510	925	435	400
.20	50	1445	680	600	1130	535	505	930	440	390
.25	60	1425	670	585	1130	535	475	930	440	380
.30	75	1405	660	570	1125	530	465	925	435	370
.40	100	1355	640	540	1100	520	435	905	425	350
.50	125	1295	610	510	1060	500	405	870	410	330
.60	150	1230	580	480	1010	475	380	820	385	310
.70	175	1150	545	450	945	445	350	750	355	290
.75	185	1110	525	435	905	430	335	715	335	280

NOTE — All air data is measured external to unit with air filter in place.
Electric heaters have no appreciable air resistance.

CB29M-41 BLOWER PERFORMANCE (460V - 1 ph)

External Static Pressure		Air Volume and Motor Watts at Specific Blower Taps								
		High			Medium			Low		
in. w.g.	Pa	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts
.00	0	1455	685	665	1120	530	535	925	435	420
.05	10	1445	680	655	1120	530	530	935	440	420
.10	25	1430	675	645	1120	530	520	945	445	415
.15	35	1420	670	635	1115	525	510	950	450	410
.20	50	1400	660	620	1110	525	500	950	450	405
.25	60	1385	655	605	1105	520	485	950	450	385
.30	75	1365	645	590	1095	515	475	945	445	380
.40	100	1325	625	555	1080	510	450	925	435	360
.50	125	1275	600	520	1055	495	425	890	420	345
.60	150	1220	575	475	1025	485	400	845	400	325
.70	175	1160	545	430	990	465	375	785	370	310
.80	200	1090	515	375	950	450	350	715	340	290

NOTE — All air data is measured external to unit with air filter in place.
Electric heaters have no appreciable air resistance.

CB29M-46 BLOWER PERFORMANCE (208/230V)

External Static Pressure		Air Volume and Motor Watts at Specific Blower Taps								
		High			Medium			Low		
in. w.g.	Pa	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts
.00	0	1750	825	725	1495	705	580	1250	590	520
.05	10	1740	820	720	1495	705	580	1255	595	520
.10	25	1725	815	710	1490	700	575	1255	590	500
.15	35	1700	805	700	1475	695	565	1250	590	490
.20	50	1675	790	690	1460	690	550	1235	585	475
.25	60	1645	775	680	1435	675	535	1220	575	460
.30	75	1610	760	665	1405	665	520	1200	565	445
.40	100	1525	720	635	1335	630	490	1140	540	415
.50	125	1420	670	605	1245	585	455	1065	505	385
.60	150	1295	610	570	1135	535	420	970	455	355
.70	175	1155	545	535	1000	470	380	850	400	325
.80	200	995	470	495	850	400	345	715	340	295
.85	210	905	430	475	765	360	325	640	300	280

NOTE — All air data is measured external to unit with air filter in place.
Electric heaters have no appreciable air resistance.

CB29M-51 BLOWER PERFORMANCE (208/230V)

External Static Pressure		Air Volume and Motor Watts at Specific Blower Taps								
		High			Medium			Low		
in. w.g.	Pa	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts
.00	0	2050	970	1005	1785	845	800	1590	750	660
.05	10	2030	955	990	1770	835	795	1570	740	655
.10	25	2005	945	980	1750	825	785	1550	735	650
.15	35	1975	935	970	1730	815	775	1530	725	645
.20	50	1950	920	955	1710	805	765	1510	715	640
.25	60	1920	905	940	1685	795	755	1490	705	635
.30	75	1890	890	930	1660	785	745	1465	690	630
.40	100	1820	860	900	1605	760	725	1415	670	615
.50	125	1745	825	875	1545	730	705	1365	645	600
.60	150	1665	785	845	1485	700	680	1305	615	580
.70	175	1580	745	820	1415	665	660	1245	585	555
.75	185	1535	725	805	1375	650	650	1210	570	540

NOTE — All air data is measured external to unit with air filter in place.
Electric heaters have no appreciable air resistance.

BLOWER DATA

CB29M-51 BLOWER PERFORMANCE (460V - 1 ph)

External Static Pressure		Air Volume and Motor Watts at Specific Blower Taps								
		High			Medium			Low		
in. w.g.	Pa	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts
.00	0	2135	1010	960	1895	895	800	1695	800	680
.05	10	2110	995	945	1875	885	785	1675	790	675
.10	25	2080	980	935	1855	875	775	1660	785	665
.15	35	2055	970	920	1830	865	765	1640	775	655
.20	50	2025	955	910	1805	850	755	1620	765	645
.25	60	1995	940	895	1780	840	740	1595	755	640
.30	75	1965	930	885	1755	830	730	1575	740	630
.40	100	1905	900	860	1700	800	710	1525	720	610
.50	125	1840	870	835	1640	775	685	1470	695	590
.60	150	1770	835	810	1580	745	665	1415	670	575
.70	175	1700	805	785	1515	715	640	1355	640	555
.80	200	1630	770	760	1445	680	620	1295	610	535
.85	210	1595	750	745	1410	665	605	1260	595	525

NOTE — All air data is measured external to unit with air filter in place.
Electric heaters have no appreciable air resistance.

CB29M-65 BLOWER PERFORMANCE (460V - 1 ph)

External Static Pressure		Air Volume and Motor Watts at Specific Blower Taps								
		High			Medium			Low		
in. w.g.	Pa	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts
.00	0	2230	1055	1145	2050	965	925	1790	845	750
.05	10	2200	1040	1135	2030	955	915	1770	835	740
.10	25	2170	1025	1120	2005	945	910	1745	825	735
.15	35	2140	1010	1110	1980	935	900	1725	815	725
.20	50	2110	995	1095	1960	925	890	1705	805	715
.25	60	2080	980	1085	1930	910	880	1680	795	705
.30	75	2045	965	1075	1905	900	870	1655	780	695
.40	100	1980	935	1050	1845	870	845	1605	755	675
.50	125	1910	900	1025	1785	840	825	1550	730	660
.60	150	1835	865	1000	1715	810	800	1490	705	640
.70	175	1760	830	975	1645	775	775	1425	675	620
.80	200	1680	795	950	1565	740	745	1360	640	600
.90	225	1600	755	925	1485	700	720	1290	610	585

NOTE — All air data is measured external to unit with air filter in place.
Electric heaters have no appreciable air resistance.

CB29M-65 BLOWER PERFORMANCE (208/230V)

External Static Pressure		Air Volume and Motor Watts at Specific Blower Taps														
		High			Medium-High			Medium			Medium-Low			Low		
in. w.g.	Pa	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts	cfm	L/s	Watts
.00	0	2245	1060	1080	2130	1005	930	2000	945	820	1800	850	695	1565	740	570
.05	10	2220	1045	1070	2105	995	920	1980	935	815	1780	840	690	1550	730	570
.10	25	2190	1035	1060	2080	985	915	1955	925	805	1760	830	680	1535	725	565
.15	35	2165	1020	1050	2055	970	905	1935	910	795	1735	820	670	1520	715	560
.20	50	2135	1005	1040	2030	960	895	1910	900	785	1715	810	665	1500	710	555
.25	60	2105	995	1030	2000	945	885	1880	890	780	1690	795	655	1480	700	550
.30	75	2070	980	1020	1970	930	875	1855	875	770	1665	785	645	1460	690	540
.40	100	2005	945	995	1910	900	855	1795	850	750	1610	760	630	1415	670	530
.50	125	1935	910	975	1845	870	830	1735	820	730	1555	735	610	1365	645	515
.60	150	1855	875	950	1775	835	810	1665	785	710	1495	705	595	1310	615	500
.70	175	1775	840	925	1695	800	785	1595	755	690	1430	675	580	1245	590	485
.80	200	1690	800	900	1615	765	755	1520	715	665	1365	645	560	1180	555	470
.90	225	1600	755	875	1530	725	730	1440	680	645	1290	610	545	1105	520	455
.95	235	1555	735	865	1490	700	715	1395	660	635	1255	590	535	1070	505	450

NOTE — All air data is measured external to unit with air filter in place. Electric heaters have no appreciable air resistance.

INSTALLATION CLEARANCES

Cabinet	0 inch (0 mm)
Plenum and Outlet duct on blower/coil units	1 inch (25 mm)
Plenum and Warm air duct within 3 feet (914mm) of cabinet	1 inch (25 mm)
Floor	[1] Combustible

[1] When unit is installed in the down-flow position with electric heat on a combustible floor an optional down flow base is required.

CB29M-21/26 AND CB29M-31 - ELECTRIC HEAT DATA

SINGLE PHASE ELECTRIC HEAT						CB29M-21/26			CB29M-31					
	Model Number	No. Steps	Input Volt	Input kW	Input [1] Btuh	[2] Blower Motor Full Load Amps	[3] Minimum Circuit Ampacity	[5] Maximum Overcurrent Protection	[2] Blower Motor Full Load Amps	[3] Minimum Circuit Ampacity Circuit 1	[3] Minimum Circuit Ampacity Circuit 2	[5] Maximum Overcurrent Protection Circuit 1	[5] Maximum Overcurrent Protection Circuit 2
2.5 kW 4 lbs.	ECB29-2.5 **(28K30)** Terminal block	1	208	1.9	6,400	1.5	13	15	Not Available				
			220	2.1	7,200	1.5	15	15					
			230	2.3	7,800	1.5	15	15					
			240	2.5	8,500	1.5	15	15					
5 kW 4 lbs.	ECB29-5 **(28K31)** Terminal Block ECB29-5CB **(28K32)** 30A Circuit breaker	1	208	3.8	12,800	1.5	24	**[4] 25**	2.4	26	- - -	30	- - -
			220	4.2	14,300	1.5	28	30	2.4	29	- - -	30	- - -
			230	4.6	15,700	1.5	28	30	2.4	29	- - -	30	- - -
			240	5.0	17,100	1.5	28	30	2.4	29	- - -	30	- - -
6 kW 4 lbs.	ECB29-6 **(47L22)** Terminal block ECB29-6CB **(47L23)** 35A Circuit breaker	1	208	4.5	15,400	1.5	29	**[4] 30**	2.4	30	- - -	**[4] 30**	- - -
			220	5.0	17,100	1.5	33	35	2.4	34	- - -	35	- - -
			230	5.5	18,800	1.5	33	35	2.4	34	- - -	35	- - -
			240	6.0	20,500	1.5	33	35	2.4	34	- - -	35	- - -
8 kW 5 lbs.	ECB29-8 **(28K33)** Terminal block ECB29-8CB **(28K34)** 45A Circuit breaker	2	208	6.0	20,500	1.5	40	**[4] 40**	2.4	40	- - -	**[4] 40**	- - -
			220	6.7	22,900	1.5	44	45	2.4	45	- - -	45	- - -
			230	7.3	25,100	1.5	44	45	2.4	45	- - -	45	- - -
			240	8.0	27,300	1.5	44	45	2.4	45	- - -	45	- - -
9 kW 5 lbs.	ECB29-9CB **(10L11)** 50A Circuit breaker ECB29EH-9CB **(91K67)** 50A Circuit breaker	2	208	6.8	23,100	1.5	42	**[4] 45**	2.4	44	- - -	**[4] 45**	- - -
			220	7.6	25,800	1.5	49	50	2.4	50	- - -	50	- - -
			230	8.3	28,200	1.5	49	50	2.4	50	- - -	50	- - -
			240	9.0	30,700	1.5	49	50	2.4	50	- - -	50	- - -
10 kW 6 lbs.	ECB29-10 **(28K35)** Terminal block ECB29-10CB **(28K36)** 60A Circuit breaker	2	208	7.5	25,600	1.5	47	**[4] 50**	2.4	48	- - -	**[4] 50**	- - -
			220	8.4	28,700	1.5	54	60	2.4	55	- - -	60	- - -
			230	9.2	31,400	1.5	54	60	2.4	55	- - -	60	- - -
			240	10.0	34,100	1.5	54	60	2.4	55	- - -	60	- - -
12.5 kW 10 lbs.	ECB29-12.5CB **(28K37)** (1) 25A & (1) 50A Circuit breaker ECB29EH-12.5CB **(91K68)** (1) 25A & (1) 50A Circuit breaker	3	208	9.4	32,000	Not Available			2.4	22	31	25	**[4] 45**
			220	10.5	35,800				2.4	25	35	25	50
			230	11.5	39,200				2.4	25	35	25	50
			240	12.5	42,600				2.4	25	35	25	50
15 kW 12 lbs.	ECB29-15CB **(28K38)** (1) 30A & (1) 60A Circuit breaker ECB29EH-15CB (**91K69**) (1) 30A & (1) 60A Circuit breaker	3	208	11.3	38,400	Not Available			2.4	26	37	30	**[4] 50**
			220	12.6	43,000				2.4	29	42	30	60
			230	13.5	47,000				2.4	29	42	30	60
			240	15.0	51,200				2.4	29	42	30	60

NOTE - Circuit 1 Minimum Circuit Ampacity includes the Blower Motor Full Load Amps.

[1] Electric heater capacity only — does not include additional blower motor heat capacity.

[2] Amps shown are for blower motor only.

[3] Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F (75°C).

[4] Bold text indicates that the circuit breaker on "CB" circuit breaker models must be replaced with size noted.

[5] HACR type circuit breaker or fuse.

CB29M-41 AND CB29M-46 - ELECTRIC HEAT DATA

SINGLE PHASE ELECTRIC HEAT						CB29M-41					CB29M-46				
			Input			[2] Blower Motor Full Load Amps	[3] Minimum Circuit Ampacity Circuit		[5] Maximum Overcurrent Protection Circuit		[2] Blower Motor Full Load Amps	[3] Minimum Circuit Ampacity Circuit		[5] Maximum Overcurrent Protection Circuit	
	Model Number	No. Steps	Volts	kW	[1] Btuh		1	2	1	2		1	2	1	2
5 kW 4 lbs.	ECB29-5 **(28K31)** Terminal block ECB29-5CB **(28K32)** 30A Circuit breaker	1	208	3.8	12,800	2.4	26	- - -	30	- - -	4.4	29	- - -	30	- - -
			220	4.2	14,300	2.4	29	- - -	30	- - -	4.4	32	- - -	35	- - -
			230	4.6	15,700	2.4	29	- - -	30	- - -	4.4	32	- - -	35	- - -
			240	5.0	17,100	2.4	29	- - -	30	- - -	4.4	32	- - -	35	- - -
6 kW 4 lbs.	ECB29-6 **(47L22)** Terminal block ECB29-6CB **(47L23)** 35A Circuit breaker	1	208	4.5	15,400	2.4	30	- - -	**[4] 30**	- - -	4.4	33	- - -	35	- - -
			220	5.0	17,100	2.4	34	- - -	35	- - -	4.4	37	- - -	40	- - -
			230	5.5	18,800	2.4	34	- - -	35	- - -	4.4	37	- - -	40	- - -
			240	6.0	20,500	2.4	34	- - -	35	- - -	4.4	37	- - -	40	- - -
8 kW 5 lbs.	ECB29-8 **(28K33)** Terminal block ECB29-8CB **(28K34)** 45A Circuit breaker	2	208	6.0	20,500	2.4	40	- - -	**[4] 40**	- - -	4.4	42	- - -	45	- - -
			220	6.7	22,900	2.4	45	- - -	45	- - -	4.4	47	- - -	50	- - -
			230	7.3	25,100	2.4	45	- - -	45	- - -	4.4	47	- - -	50	- - -
			240	8.0	27,300	2.4	45	- - -	45	- - -	4.4	47	- - -	50	- - -
9 kW 5 lbs.	ECB29-9CB **(10L11)** 50A Circuit breaker ECB29EH-9CB **(91K67)** 50A Circuit breaker	2	208	6.8	23,100	2.4	44	- - -	**[4] 45**	- - -	4.4	47	- - -	50	- - -
			220	7.6	25,800	2.4	50	- - -	50	- - -	4.4	53	- - -	60	- - -
			230	8.3	28,200	2.4	50	- - -	50	- - -	4.4	53	- - -	60	- - -
			240	9.0	30,700	2.4	50	- - -	50	- - -	4.4	53	- - -	60	- - -
10 kW 6 lbs.	ECB29-10 **(28K35)** Terminal block ECB29-10CB **(28K36)** 60A Circuit breaker	2	208	7.5	25,600	2.4	48	- - -	**[4] 50**	- - -	4.4	55	- - -	60	- - -
			220	8.4	28,700	2.4	55	- - -	60	- - -	4.4	58	- - -	60	- - -
			230	9.2	31,400	2.4	55	- - -	60	- - -	4.4	58	- - -	60	- - -
			240	10.0	34,100	2.4	55	- - -	60	- - -	4.4	58	- - -	60	- - -
12.5 kW 10 lbs.	ECB29-12.5CB **(28K37)** (1) 25A & (1) 50A Circuit breaker ECB29EH-12.5CB **(91K68)** (1) 25A & (1) 50A Circuit breaker	3	208	9.4	32,000	2.4	22	31	25	**[4] 45**	4.4	25	31	25	**[4] 45**
			220	10.5	35,800	2.4	25	35	25	50	4.4	28	35	30	50
			230	11.5	39,200	2.4	25	35	25	50	4.4	28	35	30	50
			240	12.5	42,600	2.4	25	35	25	50	4.4	28	35	30	50
15 kW 12 lbs.	ECB29-15CB **(28K38)** (1) 30A & (1) 60A Circuit breaker ECB29EH-15CB (**91K69)** (1) 30A & (1) 60A Circuit breaker	3	208	11.3	38,400	2.4	26	37	30	**[4] 50**	4.4	29	37	30	**[4] 50**
			220	12.6	43,000	2.4	29	42	30	60	4.4	32	42	35	60
			230	13.5	47,000	2.4	29	42	30	60	4.4	32	42	35	60
			240	15.0	51,200	2.4	29	42	30	60	4.4	32	42	35	60
20 kW 19 lbs.	ECB29-20CB **(11L31)** (1) 50A & (1) 60A Circuit breaker ECB29EH-20CB **(91K70)** (1) 50A & (1) 60A Circuit breaker	4	208	15.0	51,200	2.4	45	41	**[4] 45**	60	4.4	47	41	50	60
			220	16.8	57,300	2.4	50	46	50	60	4.4	52	46	60	60
			230	18.4	62,700	2.4	50	46	50	60	4.4	52	46	60	60
			240	20.0	68,200	2.4	50	46	50	60	4.4	52	46	60	60
THREE PHASE ELECTRIC HEAT						**CB29M-41**					**CB29M-46**				
8 kW 5 lbs.	ECB29-8 **(28K42)** Terminal Block	3	208	6.0	20,500	2.4	24	- - -	25	- - -	4.4	27	- - -	30	- - -
			220	6.7	22,900	2.4	27	- - -	30	- - -	4.4	30	- - -	30	- - -
			230	7.3	25,100	2.4	27	- - -	30	- - -	4.4	30	- - -	30	- - -
			240	8.0	27,300	2.4	27	- - -	30	- - -	4.4	30	- - -	30	- - -
10 kW 6 lbs.	ECB29-10 **(28K43)** Terminal block	3	208	7.5	25,600	2.4	29	- - -	30	- - -	4.4	32	- - -	35	- - -
			220	8.4	28,700	2.4	33	- - -	35	- - -	4.4	36	- - -	40	- - -
			230	9.2	31,400	2.4	33	- - -	35	- - -	4.4	36	- - -	40	- - -
			240	10.0	34,100	2.4	33	- - -	35	- - -	4.4	36	- - -	40	- - -
	ECB29-10 **(28K47)** (3) 20A Fuses	3	440	8.4	28,700	1.3	17	- - -	20	- - -	Not Available				
			460	9.2	31,400	1.3	17	- - -	20	- - -					
			480	10.0	34,100	1.3	17	- - -	20	- - -					
15 kW 12 lbs.	ECB29-15CB **(28K44)** (1) 50A Circuit breaker	3	208	11.3	38,400	2.4	42	- - -	**[4] 45**	- - -	4.4	45	- - -	**[4] 45**	- - -
			220	12.6	43,000	2.4	48	- - -	50	- - -	4.4	51	- - -	60	- - -
			230	13.5	47,000	2.4	48	- - -	50	- - -	4.4	51	- - -	60	- - -
			240	15.0	51,200	2.4	48	- - -	50	- - -	4.4	51	- - -	60	- - -
	ECB29-15 **(28K48)** (3) 25A Fuses	3	440	12.6	43,000	1.3	24	- - -	25	- - -	Not Available				
			460	13.8	47,000	1.3	24	- - -	25	- - -					
			480	15.0	51,200	1.3	24	- - -	25	- - -					
20 kW 19 lbs.	ECB29-20CB **(28K45)** (2) 35A Circuit breaker	6	208	15.0	51,200	2.4	29	21	**[4] 30**	**[4] 30**	4.4	32	21	35	**[4] 30**
			220	16.8	57,300	2.4	33	24	35	35	4.4	36	24	40	35
			230	18.4	62,700	2.4	33	24	35	35	4.4	36	24	40	35
			240	20.0	68,200	2.4	33	24	35	35	4.4	36	24	40	35

NOTE - Circuit 1 Minimum Circuit Ampacity includes the Blower Motor Full Load Amps.

[1] Electric heater capacity only — does not include additional blower motor heat capacity.

[2] Amps shown are for blower motor only.

[3] Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F (75°C).

[4] Bold text indicates that the circuit breaker on "CB" circuit breaker models must be replaced with size noted.

[5] HACR type circuit breaker or fuse.

CB29M-51 AND CB29M-65 - ELECTRIC HEAT DATA

SINGLE PHASE ELECTRIC HEAT

	Model Number	No. of Steps	Input Volts	Input kW	Input [1] Btuh	CB29M-51 [2] Blower Motor Full Load Amps	CB29M-51 [3] Minimum Circuit Ampacity Circuit 1	CB29M-51 [3] Minimum Circuit Ampacity Circuit 2	CB29M-51 [3] Minimum Circuit Ampacity Circuit 3	CB29M-51 [5] Maximum Overcurrent Protection Circuit 1	CB29M-51 [5] Maximum Overcurrent Protection Circuit 2	CB29M-51 [5] Maximum Overcurrent Protection Circuit 3	CB29M-65 [2] Blower Motor Full Load Amps	CB29M-65 [3] Minimum Circuit Ampacity Circuit 1	CB29M-65 [3] Minimum Circuit Ampacity Circuit 2	CB29M-65 [3] Minimum Circuit Ampacity Circuit 3	CB29M-65 [5] Maximum Overcurrent Protection Circuit 1	CB29M-65 [5] Maximum Overcurrent Protection Circuit 2	CB29M-65 [5] Maximum Overcurrent Protection Circuit 3
5 kW 4 lbs.	ECB29-5 **(28K31)** Terminal Block ECB29-5CB **(28K32)** 30A Circuit breaker	1	208	3.8	12,800	4.5	29	---	---	30	---	---	4.6	29	---	---	30	---	---
			220	4.2	14,300	4.5	32	---	---	35	---	---	4.6	32	---	---	35	---	---
			230	4.6	15,700	4.5	32	---	---	35	---	---	4.6	32	---	---	35	---	---
			240	5.0	17,100	4.5	32	---	---	35	---	---	4.6	32	---	---	35	---	---
6 kW 4 lbs.	ECB29-6 **(47L22)** Terminal Block ECB29-6CB **(47L23)** 35A Circuit breaker	1	208	4.5	15,400	4.5	33	---	---	35	---	---	4.6	33	---	---	35	---	---
			220	5.0	17,100	4.5	37	---	---	40	---	---	4.6	37	---	---	40	---	---
			230	5.5	18,800	4.5	37	---	---	40	---	---	4.6	37	---	---	40	---	---
			240	6.0	20,500	4.5	37	---	---	40	---	---	4.5	37	---	---	40	---	---
8 kW 5 lbs.	ECB29-8 **(28K33)** Terminal Block ECB29-8CB **(28K34)** 45A Circuit breaker	2	208	6.0	20,500	4.5	42	---	---	45	---	---	4.6	42	---	---	45	---	---
			220	6.7	22,900	4.5	48	---	---	50	---	---	4.6	48	---	---	50	---	---
			230	7.3	25,100	4.5	48	---	---	50	---	---	4.6	48	---	---	50	---	---
			240	8.0	27,300	4.5	48	---	---	50	---	---	4.6	48	---	---	50	---	---
9 kW 5 lbs.	ECB29-9CB **(10L11)** 50A Circuit breaker ECB29EH-9CB **(91K67)** 50A Circuit breaker	2	208	6.8	23,100	4.5	47	---	---	50	---	---	4.6	47	---	---	50	---	---
			220	7.6	25,800	4.5	53	---	---	60	---	---	4.6	53	---	---	60	---	---
			230	8.3	28,200	4.5	53	---	---	60	---	---	4.6	53	---	---	60	---	---
			240	9.0	30,700	4.5	53	---	---	60	---	---	4.6	53	---	---	60	---	---
10 kW 6 lbs.	ECB29-10 **(28K35)** Terminal Block ECB29-10CB **(28K36)** 60A Circuit breaker	2	208	7.5	25,600	4.5	51	---	---	60	---	---	4.6	51	---	---	60	---	---
			220	8.4	28,700	4.5	58	---	---	60	---	---	4.6	58	---	---	60	---	---
			230	9.2	31,400	4.5	58	---	---	60	---	---	4.6	58	---	---	60	---	---
			240	10.0	34,100	4.5	58	---	---	60	---	---	4.6	58	---	---	60	---	---
12.5 kW 10 lbs.	ECB29-12.5CB **(28K37)** (1)25A &(1) 50A Circuit Breaker ECB29EH-12.5CB **(91K68)** (1)25A &(1) 50A Circuit Breaker	3	208	9.4	32,000	4.5	25	31	---	25	**[4] 45**	---	4.6	25	31	---	25	**[4] 45**	---
			220	10.5	35,800	4.5	27	35	---	30	50	---	4.6	28	35	---	30	50	---
			230	11.5	39,200	4.5	27	35	---	30	50	---	4.6	28	35	---	30	50	---
			240	12.5	42,600	4.5	27	35	---	30	50	---	4.6	28	35	---	30	50	---
15 kW 12 lbs.	ECB29-15CB **(28K38)** (1)30A & (1)60A Circuit breaker ECB29EH-15CB (**91K69)** (1)30A & (1)60A Circuit breaker	3	208	11.3	38,400	4.5	29	37	---	30	**[4] 50**	---	4.6	29	37	---	30	**[4] 50**	---
			220	12.6	43,000	4.5	32	42	---	35	60	---	4.6	32	42	---	35	60	---
			230	13.5	47,000	4.5	32	42	---	35	60	---	4.6	32	42	---	35	60	---
			240	15.0	51,200	4.5	32	42	---	35	60	---	4.6	32	42	---	35	60	---
20 kW 19 lbs.	ECB29-20CB **(11L31)** (1)50A & (1)60A Circuit breaker ECB29EH-20CB **(91K70)** (1)50A & (1)60A Circuit breaker	4	208	15.0	51,200	4.5	47	41	---	50	60	---	4.6	47	41	---	50	60	---
			220	16.8	57,300	4.5	53	46	---	60	60	---	4.6	53	46	---	60	60	---
			230	18.4	62,700	4.5	53	46	---	60	60	---	4.6	53	46	---	60	60	---
			240	20.0	68,200	4.5	53	46	---	60	60	---	4.6	53	46	---	60	60	---
25 kW 19 lbs.	ECB29-25CB **(28K40)** (3) 50A Circuit breaker	6	208	18.8	64,100	4.5	44	31	31	**[4] 45**	**[4] 45**	**[4] 45**	4.6	44	31	31	**[4] 45**	**[4] 45**	**[4] 45**
			220	21.0	71,700	4.5	49	35	35	50	50	50	4.6	50	35	35	50	50	50
			230	23.0	78,300	4.5	49	35	35	50	50	50	4.6	50	35	35	50	50	50
			240	25.0	85,300	4.5	49	35	35	50	50	50	4.6	50	35	35	50	50	50
30 kW 19 lbs.	ECB29-30CB **(28K41)** (3) 60A Circuit breaker	6	208	22.5	76,900	Not Available							4.6	51	37	37	60	**[4] 50**	**[4] 50**
			220	25.2	86,000								4.6	58	42	42	60	60	60
			230	27.5	94,000								4.6	58	42	42	60	60	60
			240	30.0	102,400								4.6	58	42	42	60	60	60

NOTE - Circuit 1 Minimum Circuit Ampacity includes the Blower Motor Full Load Amps.

[1] Electric heater capacity only — does not include additional blower motor heat capacity.

[2] Amps shown are for blower motor only.

[3] Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F (75°C).

[4] Bold text indicates that the circuit breaker on "CB" circuit breaker models must be replaced with size noted.

[5] HACR type circuit breaker or fuse.

CB29M-51 AND CB29M-65 - ELECTRIC HEAT DATA

THREE PHASE ELECTRIC HEAT						CB29M-51					CB29M-65				
	Model Number	No. Steps	Input Volts	Input kW	[1] Btuh	[2] Blower Motor Full Load Amps	[3] Minimum Circuit Ampacity Circuit 1	Circuit 2	[7] Maximum Overcurrent Protection Circuit 1	Circuit 2	[2] Blower Motor Full Load Amps	[3] Minimum Circuit Ampacity Circuit 1	Circuit 2	[7] Maximum Overcurrent Protection Circuit 1	Circuit 2
8 kW 5 lbs.	ECB29-8 **(28K42)** Terminal Block	3	208	6.0	20,500	4.5	27	- - -	30	- - -	4.6	27	- - -	30	- - -
			220	6.7	22,900	4.5	30	- - -	30	- - -	4.6	30	- - -	30	- - -
			230	7.3	25,100	4.5	30	- - -	30	- - -	4.6	30	- - -	30	- - -
			240	8.0	27,300	4.5	30	- - -	30	- - -	4.6	30	- - -	30	- - -
10 kW 6 lbs.	ECB29-10 **(28K43)** Terminal Block	3	208	7.5	25,600	4.5	32	- - -	35	- - -	4.6	32	- - -	35	- - -
			220	8.4	28,700	4.5	36	- - -	40	- - -	4.6	36	- - -	40	- - -
			230	9.2	31,400	4.5	36	- - -	40	- - -	4.6	36	- - -	40	- - -
			240	10.0	34,100	4.5	36	- - -	40	- - -	4.6	36	- - -	40	- - -
	ECB29-10 **(28K47)** (3) 20A Fuses	3	440	8.4	28,700	1.9	17	- - -	20	- - -	2.3	18	- - -	20	- - -
			460	9.2	31,400	1.9	17	- - -	20	- - -	2.3	18	- - -	20	- - -
			480	10.0	34,100	1.9	17	- - -	20	- - -	2.3	18	- - -	20	- - -
15 kW 12 lbs.	ECB29-15CB **(28K44)** (1) 50A Circuit breaker	3	208	11.3	38,400	4.5	45	- - -	**[4] 45**	- - -	4.6	45	- - -	**[4] 45**	- - -
			220	12.6	43,000	4.5	51	- - -	60	- - -	4.6	51	- - -	60	- - -
			230	13.5	47,000	4.5	51	- - -	60	- - -	4.6	51	- - -	60	- - -
			240	15.0	51,200	4.5	51	- - -	60	- - -	4.6	51	- - -	60	- - -
	ECB29-15 **(28K48)** (3) 25A Fuses	3	440	12.6	43,000	1.9	25	- - -	25	- - -	2.3	25	- - -	25	- - -
			460	13.8	47,000	1.9	25	- - -	25	- - -	2.3	25	- - -	25	- - -
			480	15.0	51,200	1.9	25	- - -	25	- - -	2.3	25	- - -	25	- - -
20 kW 19 lbs.	ECB29-20CB **(28K45)** (2) 35A Circuit breaker	6	208	15.0	51,200	4.5	32	21	35	**[4] 30**	4.6	32	21	35	**[4] 30**
			220	16.8	57,300	4.5	36	24	40	35	4.6	36	24	40	35
			230	18.4	62,700	4.5	36	24	40	35	4.6	36	24	40	35
			240	20.0	68,200	4.5	36	24	40	35	4.6	36	24	40	35
	ECB29-20 **(28K49)** (3) 35A Fuses	3	440	16.8	57,300	1.9	32	- - -	35	- - -	2.3	33	- - -	35	- - -
			460	18.4	62,700	1.9	32	- - -	35	- - -	2.3	33	- - -	35	- - -
			480	20.0	68,200	1.9	32	- - -	35	- - -	2.3	33	- - -	35	- - -
	[5] ECB29-20 **(28K51)** (3) 25A Fuses	3	550	16.8	57,300	[6] 1.9	26	- - -	30	- - -	[6] 2.3	27	- - -	30	- - -
			575	18.4	62,700	[6] 1.9	26	- - -	30	- - -	[6] 2.3	27	- - -	30	- - -
			600	20.0	68,200	[6] 1.9	26	- - -	30	- - -	[6] 2.3	27	- - -	30	- - -
25 kW 19 lbs.	ECB29-25CB **(28K46)** (2) 45A Circuit Breaker	6	208	18.8	64,100	4.5	39	27	**[4] 40**	**[4] 40**	4.6	39	27	**[4] 40**	**[4] 40**
			220	21.0	71,700	4.5	43	30	45	45	4.6	43	30	45	45
			230	23.0	78,300	4.5	43	30	45	45	4.6	43	30	45	45
			240	25.0	85,300	4.5	43	30	45	45	4.6	43	30	45	45
	ECB29-25 **(28K50)** (3) 40A Fuses	3	440	21.0	71,700	1.9	40	- - -	45	- - -	2.3	40	- - -	45	- - -
			460	23.0	78,300	1.9	40	- - -	45	- - -	2.3	40	- - -	45	- - -
			480	25.0	85,300	1.9	40	- - -	45	- - -	2.3	40	- - -	45	- - -
	[5] ECB29-25 **(28K52)** (3) 35A Fuses	3	550	21.0	71,700	[6] 1.9	32	- - -	35	- - -	[6] 2.3	33	- - -	35	- - -
			575	23.0	78,300	[6] 1.9	32	- - -	35	- - -	[6] 2.3	33	- - -	35	- - -
			600	25.0	85,300	[6] 1.9	32	- - -	35	- - -	[6] 2.3	33	- - -	35	- - -

NOTE - Circuit 1 Minimum Circuit Ampacity includes the Blower Motor Full Load Amps.

[1] Electric heater capacity only — does not include additional blower motor heat capacity.

[2] Amps shown are for blower motor only.

[3] Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements. Use wires suitable for at least 167°F (75°C).

[4] Bold text indicates that the circuit breaker on "CB" circuit breaker models must be replaced with size noted.

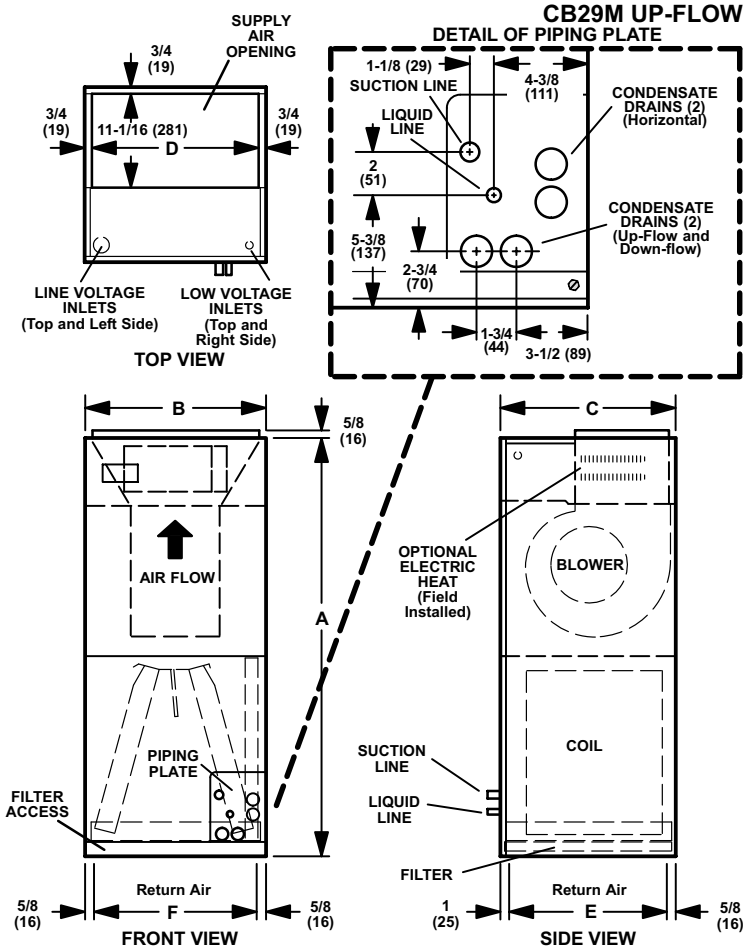
[5] All 575V electric heaters are used with 460V blower coil units. A 575V to 460V Step-down transformer for the blower coil unit is furnished with all 575V electric heaters.

[6] Blower motor is rated at **460V.**

[7] HACR type circuit breaker or fuse.

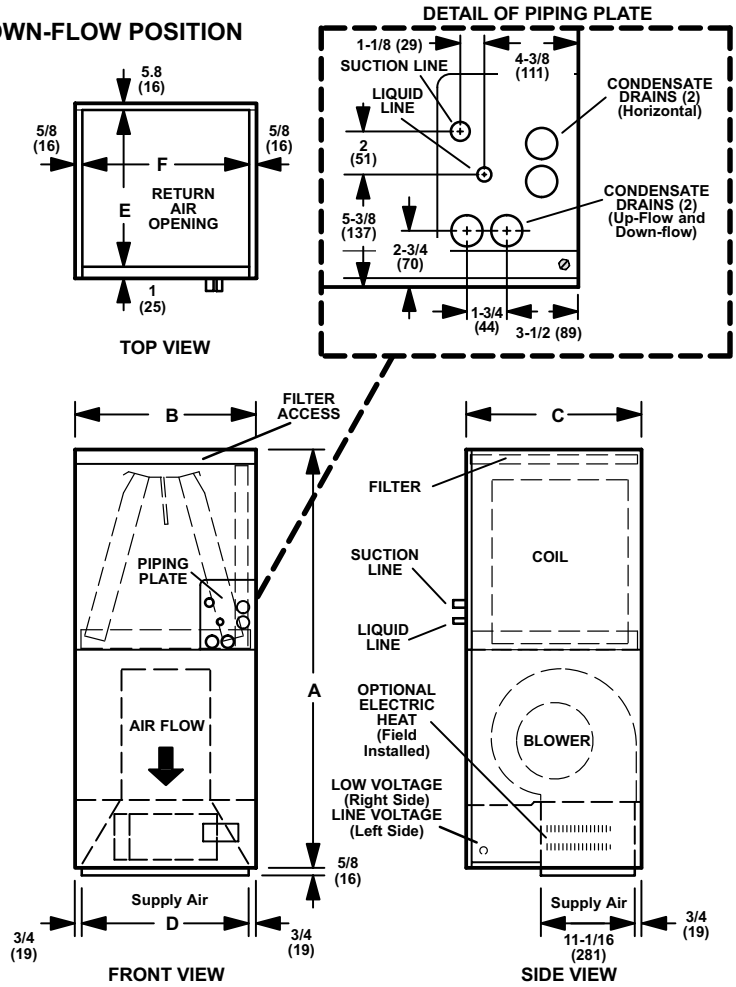
DIMENSIONS - INCHES (MM)

CB29M UP-FLOW POSITION



Model No.	CB29M-21/26 CB29M-31		CB29M-41 CB29M-46		CB29M-51 CB29M-65	
	inch	mm	inch	mm	inch	mm
A	45-1/4	1149	49-1/4	1251	52-1/2	1334
B	16-1/4	413	21-1/4	540	21-1/4	540
C	20-5/8	524	20-5/8	524	22-5/8	575
D	14-3/4	375	19-3/4	502	19-3/4	502
E	19	483	19	483	21	533
F	15	381	20	508	20	508

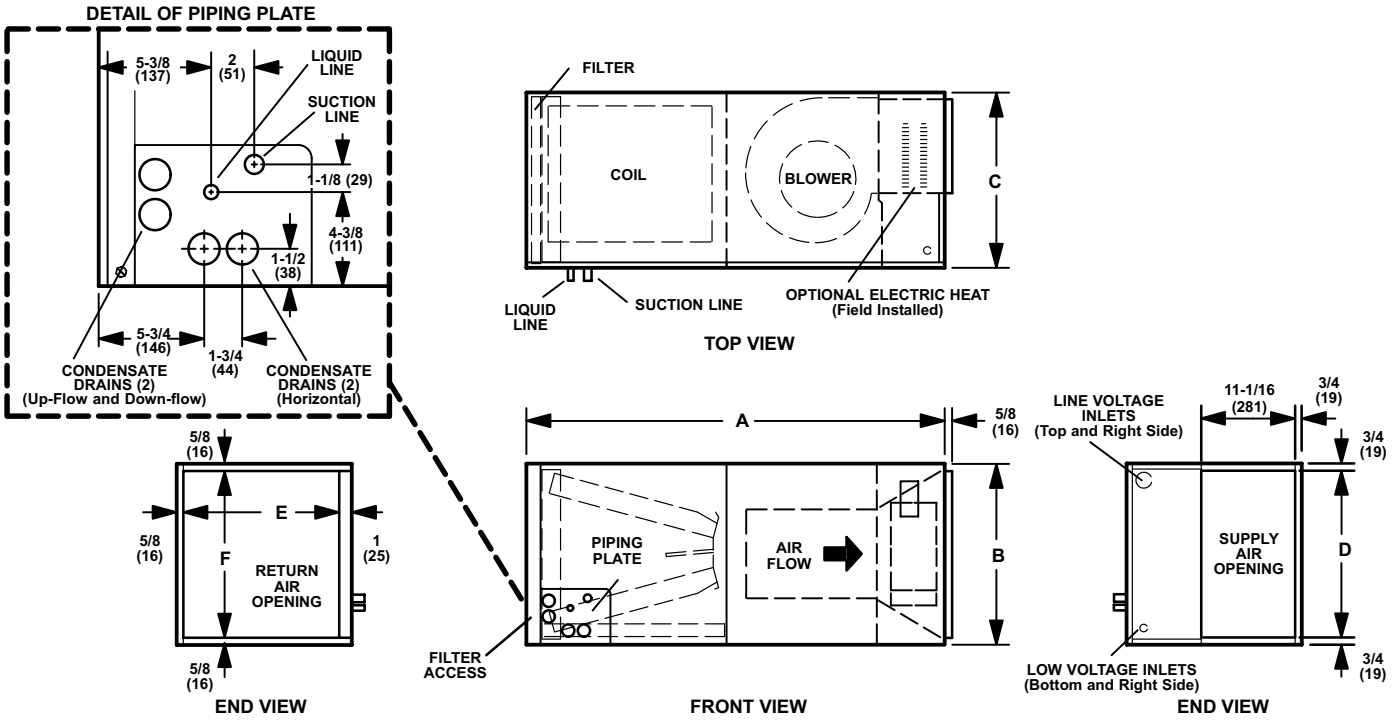
CB29M DOWN-FLOW POSITION



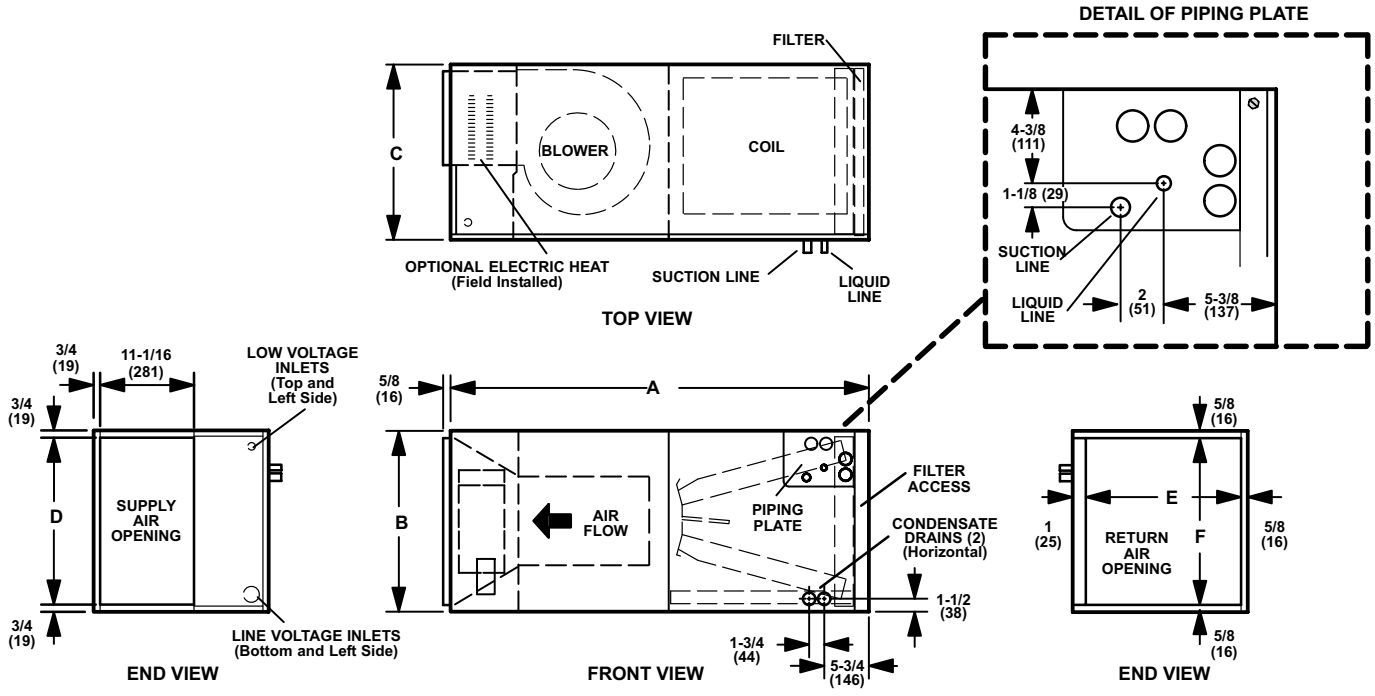
Model No.	CB29M-21/26 CB29M-31		CB29M-41 CB29M-46		CB29M-51 CB29M-65	
	inch	mm	inch	mm	inch	mm
A	45-1/4	1149	49-1/4	1251	52-1/2	1334
B	16-1/4	413	21-1/4	540	21-1/4	540
C	20-5/8	524	20-5/8	524	22-5/8	575
D	14-3/4	375	19-3/4	502	19-3/4	502
E	19	483	19	483	21	533
F	15	381	20	508	20	508

DIMENSIONS - INCHES (MM)

CB29M HORIZONTAL POSITION (RIGHT-HAND AIR DISCHARGE)



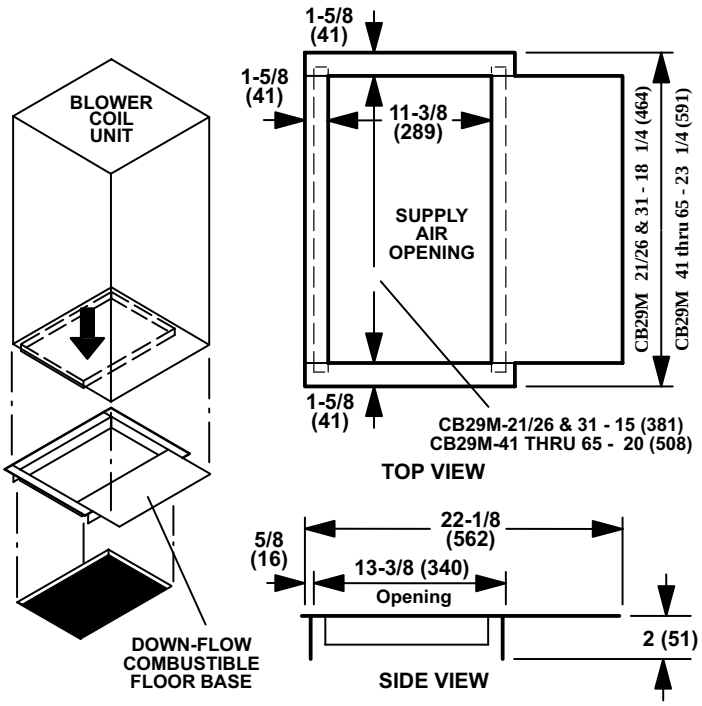
CB29M HORIZONTAL POSITION (LEFT-HAND AIR DISCHARGE)



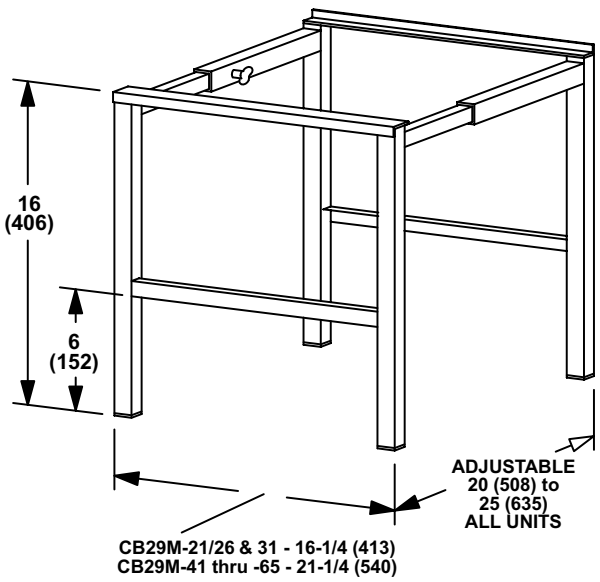
Model No.	A		B		C		D		E		F	
	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
CB29M-21/26 CB29M-31	45-1/4	1149	16-1/4	413	20-5/8	524	14-3/4	375	19	483	15	381
CB29M-41 CB29M-46	49-1/4	1251	21-1/4	540	20-5/8	524	19-3/4	502	19	483	20	508
CB29M-51 CB29M-65	52-1/2	1334	21-1/4	540	22-5/8	575	19-3/4	502	21	533	20	508

DIMENSIONS - INCHES (MM)

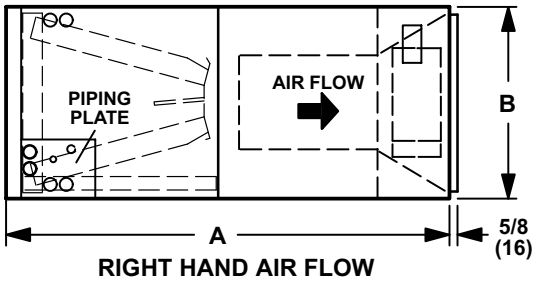
DOWN-FLOW COMBUSTIBLE FLOOR BASE



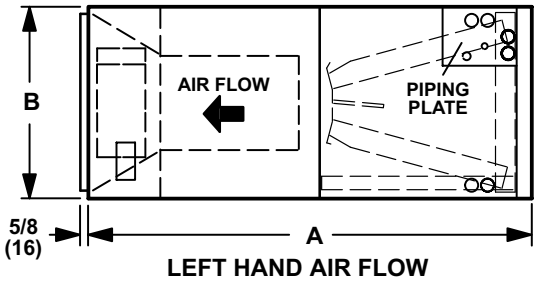
SIDE RETURN UNIT STAND (Up-Flow Only)



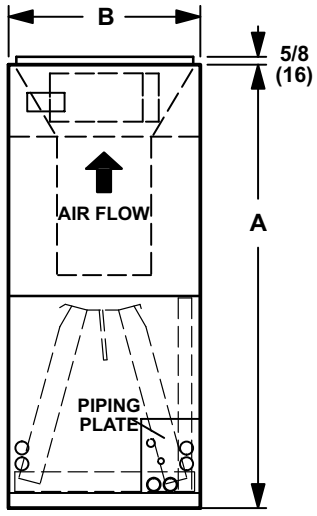
AIR FLOW



RIGHT HAND AIR FLOW

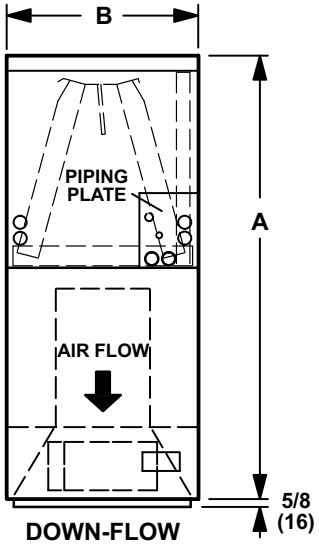


LEFT HAND AIR FLOW



UP-FLOW

Blower Coil Model No.	A		B	
	in.	mm	in.	mm
CB29M-21/26 CB29M-31	45-1/4	1149	16-1/4	413
CB29M-41 CB29M-46	49-1/4	1251	21-1/4	540
CB29M-51 CB29M-65	52-1/2	1334	21-1/4	540



DOWN-FLOW