
TECHNICAL SPECIFICATIONS

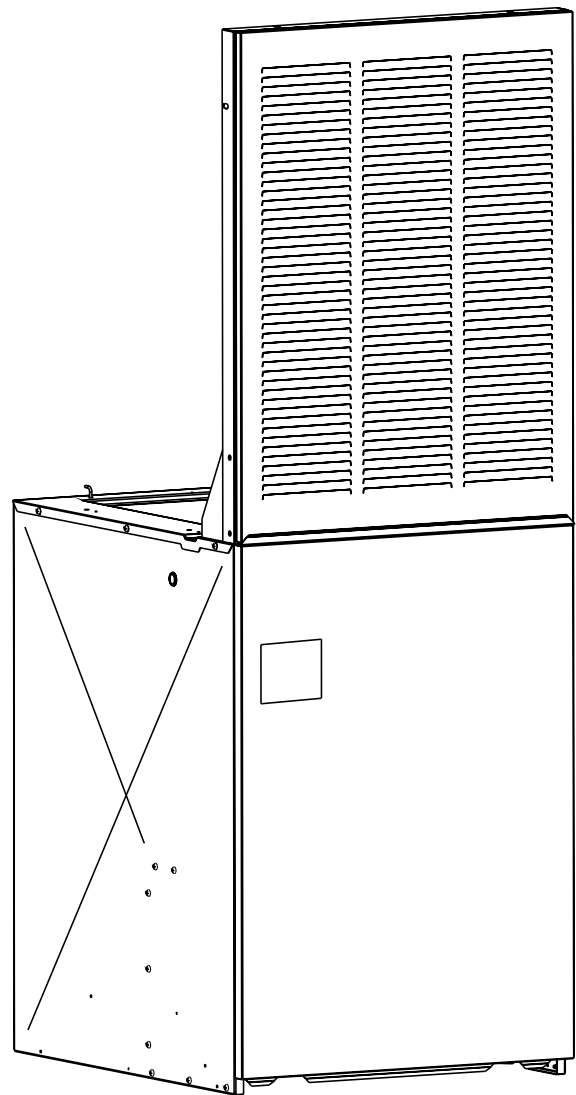
E2 Series

Downflow, Upflow Electric Furnaces

The E2 Series furnace is designed for all sizes of manufactured and modular homes. These units incorporate reliability and low maintenance. Units may be installed free standing in a utility room or enclosed in an alcove or closet. E2 Series furnaces are available A/C adaptable or A/C ready, with multiple blower combinations for cooling requirements.

Features and Benefits

- **Choice of Air Conditioning Options**
From 2 to 5 tons A/C ready.
- **Easy Open Door**
Secures the door firmly for transit, yet allows easy removal for access.
- **Effective Air Filter**
Universal disposable filter is readily available and simple to replace.
- **Nichrome Staged Heating Elements**
Provide long lasting, efficient heating.
- **Appliance Quality Door**
Protects against rust and other corrosion. Baked enamel finish allows for easy cleaning.
- **Fully Insulated Cabinet**
Insures minimized heat loss and quiet operation.
- **Safety and Dependability**
Auto reset controls protect unit's electrical circuitry and help ensure trouble free performance. Circuit breakers replace old style fuses for extra safety.
- **Ventilation Switch**
Conveniently located in the door (heat only models).
- **Adaptable**
Unit can be adapted to provide dependable heating in either downflow or upflow mode.
- **Versatile**
Works with self-contained or split system air conditioners or heat pumps.



MODEL IDENTIFICATION

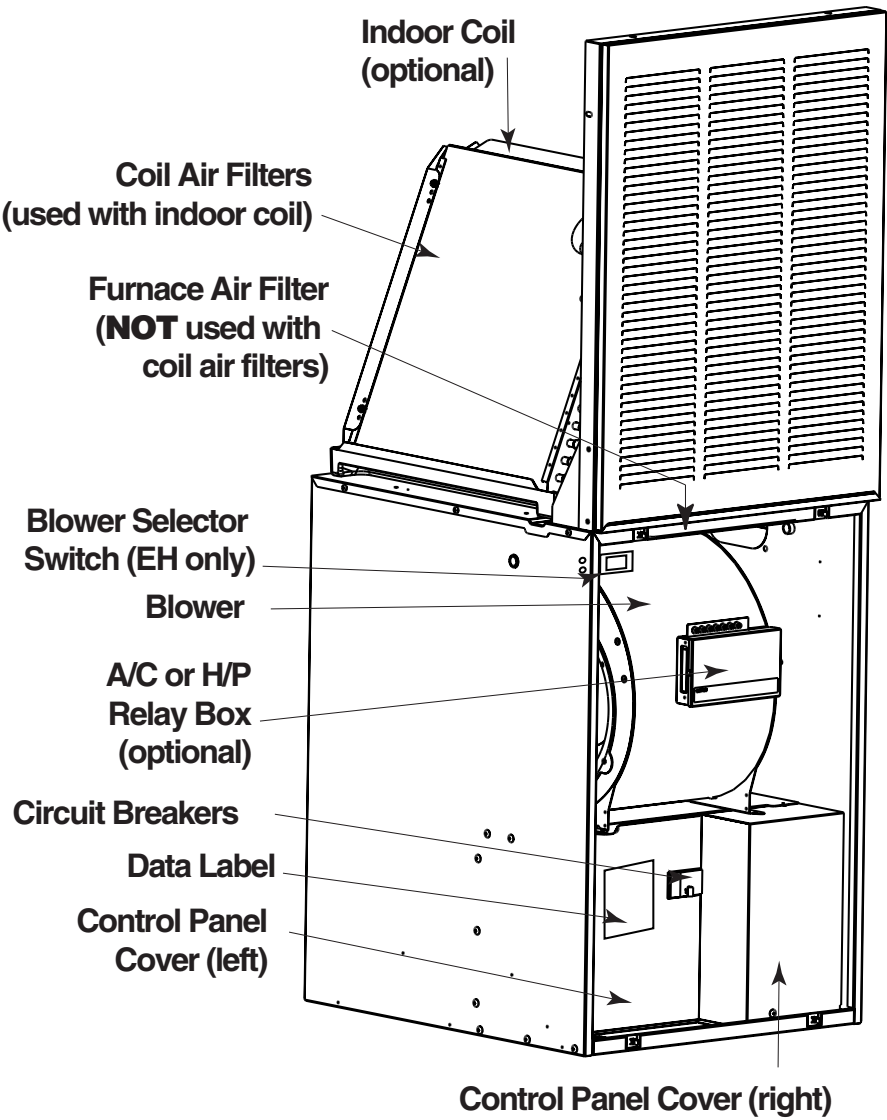
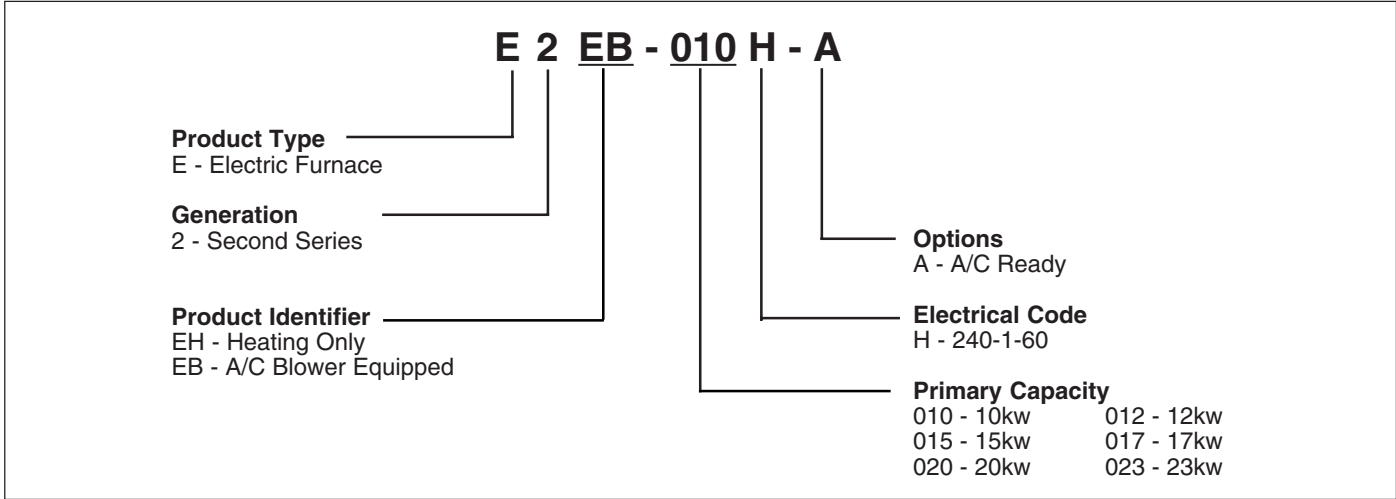
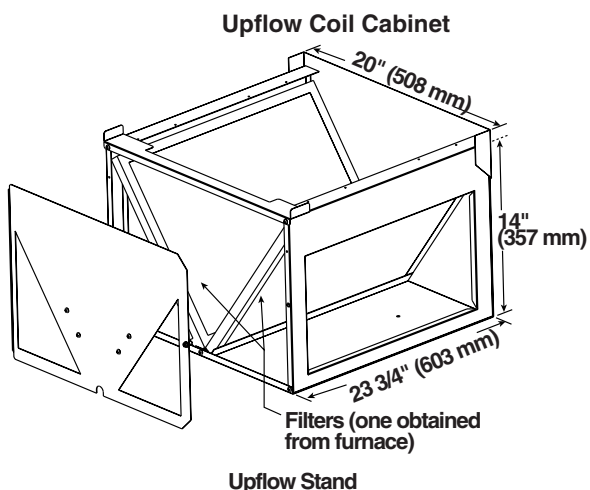
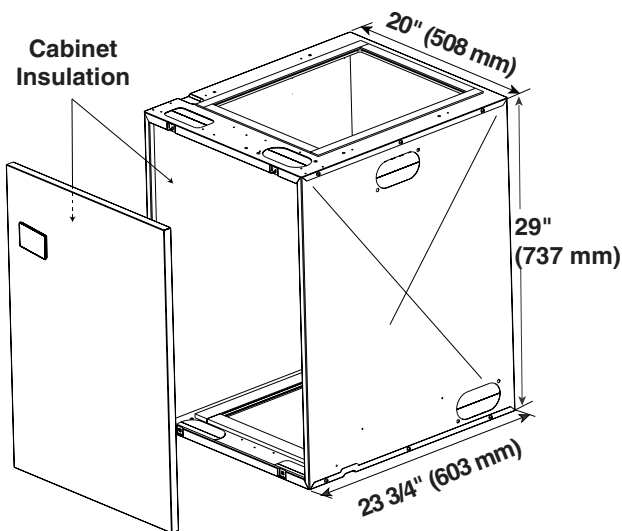
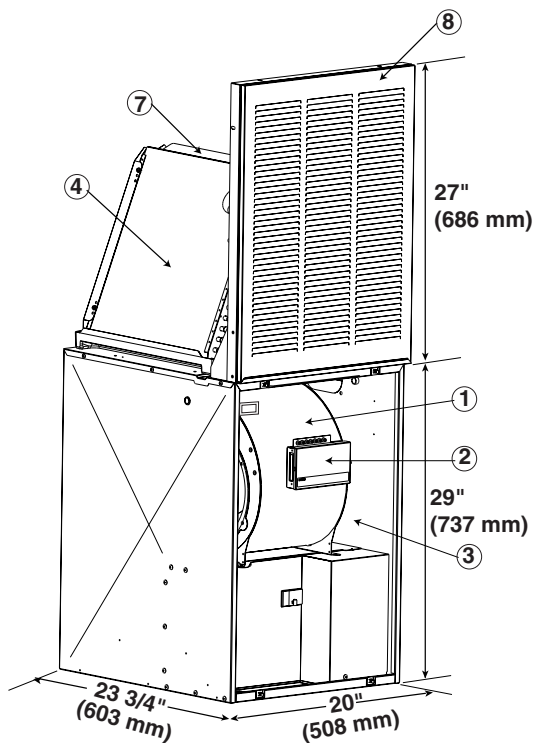


Figure 1. Furnace Parts Identification



NOTE: See Table 2 for descriptions and notes

Figure 2. Optional Accessories

Item Number (See Fig. 1)	Description
1	4-Speed Blower 4 Ton - See Notes: 1 & 5 5 Ton - See Note: 1
2	A.C./H.P. Relay Control See Note: 1
3	Cabinet Insulation Kit See Notes: 1 & 5
4	"A"-Coil Conversion Kit See Note: 2
5	Coil Cabinet See Note: 3
6	Upflow Stand See Note: 4
7	A/C and H/P Indoor Coils
8	Return Air Grille and Frame Assembly

Notes:

- 1) For A/C and H/P use.
- 2) Includes coil filters.
- 3) For upflow or downflow installations.
- 4) For upflow A/C or H/P installations (includes one filter; use filter from furnace to complete filtering system in this accessory).
- 5) Standard in EB models.

Table 2. Optional Air Conditioning and Heat Pump Equipment

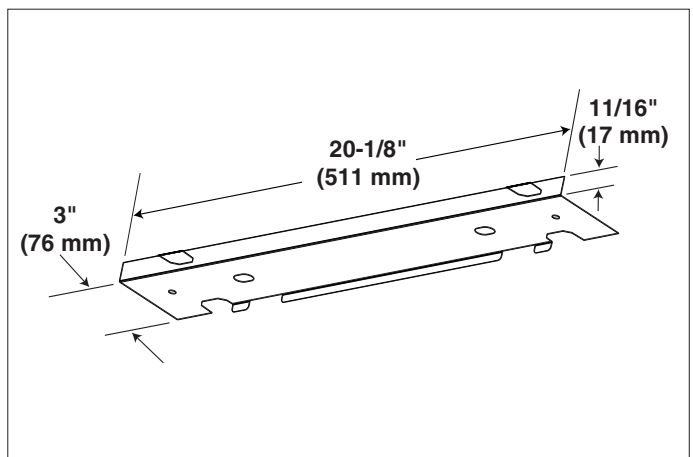


Figure 3. Optional Rear Mounting Plate (P/N 389080)

Electric Furnace Models		E2EH						E2EB							
		010H	012H	015H	017H	020H	023H	010H	012H	015H	017H	020H	023H		
Rated Heating Output, Btuh (see note1)		35,000	41,000	53,000	57,000	70,000	75,000	35,000	41,000	53,000	57,000	70,000	75,000	75,000	
Watts (Total kw, Heating Elements and Blower)		10.4	12.0	15.4	16.6	20.4	22.0	10.4	12.0	15.4	16.6	20.4	22.0	22.0	
Supply Voltage		240 Volts/60Hz/1-Phase													
Heating Elements, No.(Total kw)		2 (10.0)	2 (11.6)	3 (15.0)	3 (16.2)	4 (20.0)	4 (21.6)	2 (10.0)	2 (11.6)	3 (15.0)	3 (16.2)	4 (20.0)	4 (21.6)	4 (21.6)	
Blower: Wheel Size		10.5" Dia., 8" Wide													
Motor Speeds, H.P. Rating, Amps		2 Speed, 1/5 Hp, 2.0 Amps						4 Speed, 1/3 Hp, 2.9 Amps							
Test ESP, in. w.c. Max		0.3													
Optional Cooling Available with factory installed blower		2.0 - 3.0 ton (see note 3)						2.0 - 4.0 ton (see note 4)						2.0 - 5.0 Ton	
Optional Heat Pump Available with factory installed blower		2.0 - 3.0 ton (see note 3)				n/a (see note 3)		2.0 - 4.0 ton (see note 4)						2.0 - 5.0 Ton	
Air Filter (Standard)		16" x 20" x 1" (nominal)													
Furnace Dimensions		Width - 20" (508 mm) Height - 29" (737 mm) (see note 2) Depth - 24-1/2" (623 mm)													

Table 3. Unit Specifications

1. Heating output rated at listed voltage. For outputs at voltages other than 240V, multiply Btuh rating by the following factors: x 0.92 (230V), x 0.84 (220V), x 0.75 (208V)
2. Height is 56" with return air grille installed, 58" with coil cabinet and 72" with coil cabinet and upflow stand.
3. The factory installed blower for the EH models can be replaced with a multi-speed blower allowing the units to accept up to 4 or 5 tons of air conditioning or heat pump.
4. The factory installed blower for the EB models can be replaced with a multi-speed blower allowing the units to accept up to 5 tons of air conditioning or heat pump.

Model E2EH/ E2EB-	Supply Circuit		Total Amperes	Max Over- Current Rating	Min. Circuit Ampacity	Sizes*		Low-Voltage Thermostat Wire Size
						75°C Copper		
						Wire Size	Ground Size	
010	Single		45.5	60	57	6	10	2-Wire system max wire lengths : 24 Ga. = 55' 22 Ga. = 90' 20 Ga. = 140' 18 Ga. = 225'
012	Single		52.1	70	65	6	8	
	Dual	"A"	28.0	40	35	8	10	
		"B"	24.2	30	30	10	10	
015	Single		66.3	90	83	4	8	
	Dual	"A"	45.5	60	57	6	10	
		"B"	20.8	30	26	10	10	
017	Single		71.3	90	89	3	8	
	Dual	"A"	48.8	60	61	6	10	
		"B"	22.5	30	28	10	10	
020	Single		87.1	125	109	2	6	4 or more-Wire system max wire lengths : 24 Ga. = 25' 22 Ga. = 45' 20 Ga. = 70' 18 Ga. = 110'
	Dual	"A"	45.5	60	57	6	10	
		"B"	41.7	60	52	6	10	
023	Single		93.8	125	117	1	6	
	Dual	"A"	45.5	60	57	6	10	
		"B"	48.3	60	60	6	10	

* All wire sizes for copper conductors only, based on NEC Table 310-16. Equivalent wiring may be used per NEC.

Table 6. Electrical Specifications

**Standard 2-Speed Blower,
with filter, @ 0.3" ESP**

Pin No.	Speed	CFM
#1	Low	840
#2	High	1160

Furnace Model	Thermostat Anticipator Setting
010, 012	0.20
015, 017, 020, 023	0.40

Table 8. Anticipator Settings

**4-Ton Blower with Coil and
Coil Filters, @ 0.3" ESP**

Pin No.	Speed	CFM
#1	Low	880
#2	Med.-Low	1170
#3	Med.-High	1310
#4	High	1460

**5-Ton Blower, with Coil and
Coil Filters, @ 0.3" ESP**

Pin No.	Speed	CFM
#1	Low	990
#2	Med.-Low	1320
#3	Med.-High	1620
#4	High	1790

Table 7. Blower Performance

CLEARANCES

ALL MODELS	CLOSET	ALCOVE
Front ‡	6"	18"
Back	0"	0"
Sides	0"†	0"†
Top	0"	0"
Top and Sides of Duct	0"	0"
Bottom of Duct	0"	0"

‡ Service Clearance

† For upflow application using upflow stand,
1" minimum per side.

AIRFLOW DATA

E2EH (010, 012, 015, 017, 020, 023) HA					
Coil		High		Low	
		3-ton	None	2.5 ton	None
Static (ESP) in W.C.	0.1	1280	1259	961	920
	0.2	1228	1212	926	882
	0.3	1182	1159	879	836
	0.4	1118	1092	824	783
	0.5	1056	1027	759	718
	0.6	960	951	687	643

Used On

902961A E2EH 010HA 902962A E2EH 012HA
 902963A E2EH 015HA 902964A E2EH 017HA
 902965A E2EH 020HA 902966A E2EH 023HA

E2EB (010, 012, 015, 017, 020, 023) HA									
Coil		High		Med High		Med Low		Low	
		4-ton	None	3.5 ton	None	3-ton	None	2.5 ton	None
Static (ESP) in W.C.	0.1	1559	1503	1389	1362	1227	1203	923	885
	0.2	1506	1458	1352	1330	1208	1174	906	863
	0.3	1462	1414	1310	1291	1174	1146	882	831
	0.4	1401	1352	1260	1241	1136	1103	845	798
	0.5	1333	1282	1198	1179	1086	1055	805	758
	0.6	1251	1208	1133	1113	1027	996	757	707

Used On

902967A E2EB 010HA 902968A E2EB 012HA
 902969A E2EB 015HA 902970A E2EB 017HA
 902971A E2EB 020HA 902972A E2EB 023HA

E2EB 023HA-5 TON and 5 ton accessory blower									
Coil		High		Med High		Med Low		Low	
		5-ton	None	5-ton	None	5-ton	None	5-ton	None
Static (ESP) in W.C.	0.1	1911	1886	1709	1679	1394	1373	1054	1032
	0.2	1860	1821	1663	1630	1359	1333	1027	1004
	0.3	1795	1768	1617	1585	1323	1296	993	970
	0.4	1741	1700	1563	1526	1279	1252	952	928
	0.5	1671	1643	1511	1473	1229	1201	912	884
	0.6	1613	1584	1444	1400	1182	1147	864	824

Used On

903133A E2EB 023HA-5 TON
 902985 E2 BLOWER 5-TON

ACCESSORIES

Description	Part Number
Blower, 2-4 Ton	902993
Blower, 5 Ton	902985
Relay Kit, 2 wire	903091
Relay Kit, 4-7 wire	902987
Heating Thermostat Intertherm (12 Pac)	903188 (903182)
Heating Thermostat Miller (12 Pac)	903189 (903183)
Thermostat Sub-Base	914146
Heating/Cooling Thermostat CM65 Intertherm (12 Pac)	903190 (903184)
Heating/Cooling Thermostat CM65 Miller (12 Pac)	903191 (903185)
Heating/Cooling Thermostat GE Intertherm (12 Pac)	903192 (903186)
Heating/Cooling Thermostat GE Miller (12 Pac)	903193 (903187)
Automatic Damper for AC or HP Package Unit	901083
"VEE" Box Adapters (10") - 5 / carton	901985
Duct Connector 10" Dia. x 6" Long - 6 / carton	902926
"VEE" Box Adapters (12") - 5 / carton	902149
Single Wide Fitting Kit (12")	911468A
Double Wide Fitting Kit (12")	911469A
Single Wide Fitting Kit (14")	914957
Double Wide Fitting Kit (14")	914956
Y-Fitting (12")	911470
Y-Fitting (14")	917195
Universal Hard Start Kit	912933
H/P Thermostat Connector	903001
Fan Delay Kit (TDR)	918476
Liquid Line Solenoid Kit 2 - 3-1/2 Ton	917264
E2EH Insulation Kit	902991
Top Grille/Frame	902989
Top Grille/Frame (4 pack)	903000
Wall Mount Top Grille (10 pack)	902988
Coil Cabinet Upflow	902976
Coil Cabinet Downflow	903891
Upflow Stand	902992
Electronic Air Filter Kit (up to 4 ton)	903593
Electronic Air Filter Kit (5 ton)	903594

ACCESSORY KITS

Vent Kits	Part Number
Soffit Air Inlet (for VentilAire III only)	917201
Wall Vent Kit (side wall depressurization)	914115
Soffit Vent Kit (soffit depressurization)	914116
Roof Vent Kit (roof depressurization)	914117
VentilAire III - Sloped 3/12	914098
VentilAire IV - Sloped 3/12	914229
VentilAire IV-A - Sloped 3/12 (w/alarm)	914750

Plenum Connectors	Part Number
11.25 x 13.50 x 0.88 12 / carton	901987A
11.25 x 13.50 x 2.00 12 / carton	901988A
11.25 x 13.50 x 4.25 6 / carton	901989A
11.25 x 13.50 x 6.25 6 / carton	901990A
11.25 x 13.50 x 8.25 4 / carton	901991A
11.25 x 13.50 x 10.25 3 / carton	901992A
11.25 x 13.50 x 12.25 3 / carton	901993A
11.25 x 13.50 x 6.25 24 / carton	902681A

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