ELECTRIC FURNACES

Vertical/Horizontal EVAPORATOR COILS

for Traditional Closet and Attic Applications

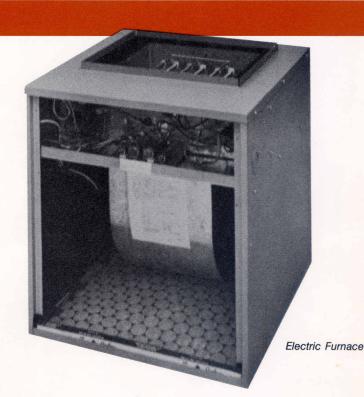


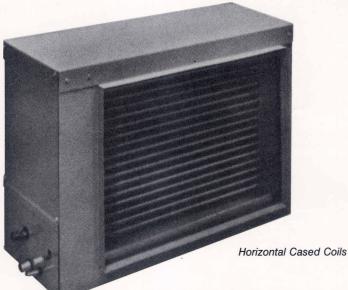
FIRST CO.

Series EBF Electric Furnaces and Series VCB/HCB Evaporator Coils

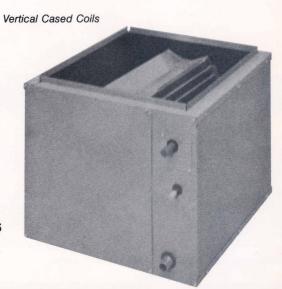
First Electric Furnaces and Evaporator Coils deliver a lot more than just hot and cold air.

- ☐ Easy to install
- ☐ Fit almost anywhere
- ☐ Easy to maintain





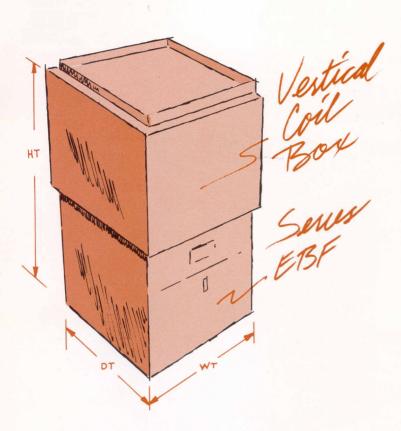
Horizontal and Vertical Designs in 2-ton through 5-ton models



Series EBF/VCB/HCB Technical Bulletin

VERTICAL EVAPORATOR COILS

General
NOTE: These features apply to both



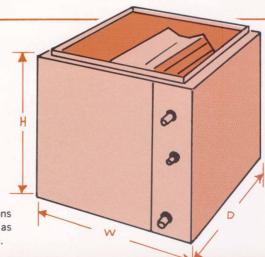
VERTICAL COIL BOX VCB-EBF SERIES EBF First Evaporator Coils offer first class quality and value at an economy class price.

Cabinets are fabricated of heavy gauge galvanized steel with fully insulated interior surfaces to prevent condensation and minimize heat loss.

Painted Surfaces are finished with a durable baked-on epoxy beige finish to make cabinets highly resistant to corrosion under the most severe conditions.

Coils are fabricated of %" O.D. copper tubing mechanically expanded into aluminum fins to assure years of peak efficiency performance ... and maximum heat transfer. All coils are furnished with a capillary tube as standard construction.

Capacity — ratings are based on 80DB/67WB at approximately 45°F suction with an air flow of 400 cfm/ton.



NOTE: Coil connections are same size as "H" series coil.

DIMENS	SIONS	CASED EVAPORATOR							FURNACE/COIL(1)			
MODEL	NOMINAL TONS	Н	w	D	INLET			OUTLET		нт	WT	DT
MODEL					IW	ID	С	OW	OD	пі	VV I	וט
A24C-VCB-EBF	2	15	161/2	21	16	131/4	3/4	16	171/4	393/4	175/8	21
A30C-VCB-EBF	2.5	16½	20	21	16	131/4	23/4	171/8	191/8	413/4	215/8	221/4
A36C-VCB-EBF	3		20									22/4
A42C-VCB-EBF	3.5	20	22	21	20	183/4	3/4	205/8	191/8	483/4	22	281/4
A48C-VCB-EBF	4	20	22	-	20	1074	/4	2078	1078	7074		2074
A60C-VCB-EBF	5	221/2	251/2	221/4	20	18¾	3/4	241/8	191/8	511/4	251/2	281/4

(1)Dimensions for furnace/coil combination are determined by the component with the largest dimension.

Duct

HORIZONTAL EVAPORATOR COILS

Features

vertical and horizontal cased coils.

Drain Pan is made of galvanized steel.

Standard Connections are copper tube for sweat connection. Primary drain connections are 3/4" N.P.T.

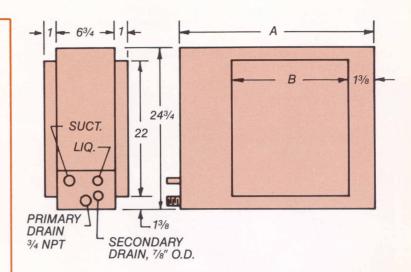
Electrical Furnace/Evaporator Coil Combination

Vertical — Electric furnace outlet matches inlet to VCB vertical evaporator coil for quick and easy installation.

Counter Flow — Evaporator coil top and bottom adapters are field reversible to satisfy counter flow applications.

Horizontal — Electric furnace and "H" series

evaporator coils are installed with a transition duct to provide the typical attic application.



Transitional Horizontal **Attic Application** MMM, Series ED

MODEL	NOMINAL TONS	A	В	SUCTION O.D.	LIQUIE O.D.
H24C-D	2			5/8	
H30C-D	2.5	221/2	18	5/8	3/8
H36C-D	3	22.72	10	7/8	78
H42C-D	3.5			7/8	
	3.5			7/8	
C-D C-D	4 5	30½	26	7/8	

ELECTRIC FURNACE

General Features

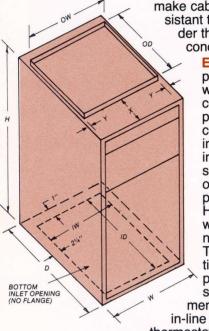
Sizes — available in four sizes with heating capacity ranging from 3KW (10,200 BTUH) to 25KW (85,200 BTUH).

Flexibility — extremely short and compact design makes units ideal for locating almost anywhere. Designed for applications in an upflow, downflow, or horizontal position.

Cabinet constructed of heavy gauge galvanized steel with fully insulated interior surfaces.

Painted Surfaces are finished with a durable baked-on epoxy finish to make cabinets highly resistant to corrosion un-

der the most severe conditions.



Electrical — completely factory wired. Control components completely silent, no contactors banging on or off. Heating elements sequenced on and off to prevent power surges. Heating element wires of top quality nickel-chromium. To provide an optimum over temperature safety system, all elements furnished with in-line over temperature

thermostats and have inline fuse links for back-up pro-

tection. Branch circuit fusing standard on all models exceeding 48 amps.

Motor/Blowers — dynamically balanced blowers assure smooth, quiet performance. Motors provided with oil tubes for periodic oiling to assure maximum life.

Blowers sized to provide for the addition of cooling coils with capacities up to five tons.

All Electric Furnace models U.L. listed.

All technical specifications subject to change without notice.

ELECTRICAL DATA								
FURNACE MODEL	(1) KW	втин	TOTAL AMPS.	MIN. CKT. AMPACITY	MAX. FUSE	STAGING 1ST/2ND		
2EBF-3 -5 -6 -8 -10 -15	3 5 6 8 10 15	10,200 17,000 20,500 27,300 34,100 51,100	15.7 24.0 28.2 36.5 44.9 65.7	20 30 35 46 56 82	20 30 35 50 60 90	N.A. N.A. N.A. N.A. 10/5		
3EBF-5 -6 -8 -10 -15 -20	5 6 8 10 15 20	17,000 20,500 27,300 34,100 51,100 68,200	23.4 27.6 35.9 44.3 65.1 85.9	30 35 45 56 82 108	30 35 45 60 90 110	N.A. N.A. N.A. N.A. 10/5 15/5		
4EBF-8 -10 -15 -20 -25 ⁽²⁾	8 10 15 20 25	27,300 34,100 51,100 68,200 85,200	37.3 45.7 66.5 87.3 (L1-L2) 66.5 (L3-L4) 41.7	47 57 83 109 (L1-L2) 83 (L3-L4) 52	50 60 90 110 (L1-L2) 90 (L3-L4) 60	N.A. N.A. 10/5 15/5 15/10		
5EBF-10 -15 -20 -25 ⁽²⁾	10 15 20 25	34,100 51,100 68,200 85,200	46.7 67.5 88.3 (L1-L2) 67.5 (L3-L4) 41.7	59 85 110 (L1-L2) 85 (L3-L4) 52	60 90 110 (L1-L2) 90 (L3-L4) 60	N.A. 10/5 15/5 15/10		

(1) All units rated at 240V/10 Phase. Transformer modification can be made to convert unit to 208V/10. Derate heaters 25% for 208V operation.

(2) 25KW units require two (2) service circuits as indicated.

DIME	INSI	ON	S						
MODEL	Н	W	D	OW	OD	IW	ID	Х	Y
2EBF	243/4	175/8	201/4	157/8	13	131/8	181/8	61/2	7/8
3EBF	251/4	21%	221/4	157/8	13	171/8	201/8	61/2	27/8
4EBF	283/4	215/8	281/4	197/8	181/2	171/8	261/8	9	7/8
5EBF	283/4	21%	281/4	197/8	181/2	171/8	261/8	9	7/8

BLOWER PERFORMANCE									
FURNACE	MOTOR	FAN	CFM VS. STATIC PRESSURE						
MODEL	H.P.	SPEED	0.1	0.2	0.3	0.4	0.5		
2EBF	1/6	HIGH LOW	830 690	820 685	800 670	780 630	740 550		
3EBF	1/3	HIGH LOW	1370 1165	1320 1130	1260 1090	1200 1040	1120 965		
4EBF	1/2	HIGH MED LOW	1940 1785 1250	1870 1720 1240	1790 1660 1230	1710 1580 1210	1600 1490 1160		
5EBF	3/4	HIGH LOW	2230 1640	2175 1615	2120 1585	2060 1550	1990 1515		



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