

WALK-IN UNIT COOLERS

COMMERCIAL

REFRIGERATION

KOOL-AIR

INC

TOP MOUNTED SINGLE FLOW UNIT

LP Series



Cooler above 34 °F

AIR DEFROST

MODEL	CAPACITY BTU/H		FAN DATA		MOTORS 120V AMPS	R-404A CHARGE LBS	SHIPPING WEIGHT LBS
	10°F TFD	15°F TFD	QTY	CFM			
LPA-18-0380	3850	5775	1	940	2	0.72	32
LPA-18-0520	5200	7800	1	900	2	1.09	34
LPA-18-0610	6100	9150	1	860	2	1.45	36
LPA-28-0860	8600	12900	2	1660	4	1.67	50
LPA-28-1000	10050	15075	2	1780	4	1.97	55
LPA-28-1160	11600	17400	2	1680	4	2.62	60
LPA-38-1570	15700	23550	3	2700	6	2.94	76
LPA-38-1860	18600	27900	3	2560	6	3.92	84
LPA-48-2140	21400	32100	4	3700	8	4.02	100
LPA-58-2630	26300	39450	5	4600	10	5.02	122
LPA-58-3130	31370	47055	5	4300	10	6.66	135
LPA-68-3500	35000	52500	6	5100	12	7.77	150

Freezer from -20 °F to 34 °F

ELECTRIC DEFROST

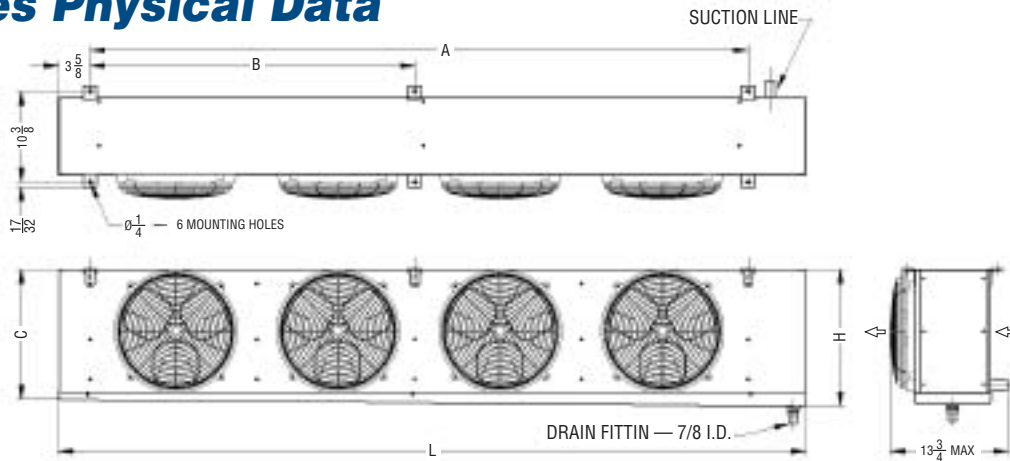
MODEL	CAPACITY BTU/H		FAN DATA		MOTORS 240V AMPS	R-404A CHARGE LBS	SHIPPING WEIGHT LBS	HEATER	
	20°F SST	-20°F SST	QTY	CFM				WATT	240V AMPS
LPE-16-0480	4890	4155	1	900	1	1.09	36	1200	5
LPE-16-0550	5550	4718	1	900	1	1.45	48	1200	5
LPE-26-0780	7880	6698	2	1760	2	1.67	50	2100	8,8
LPE-26-0860	8620	7327	2	1800	2	1.97	58	2700	11,3
LPE-26-1080	10830	9206	2	1760	2	2.62	62	2700	11,3
LPE-36-1300	13070	11110	3	2700	3	2.94	82	3900	16,3
LPE-36-1660	16680	14178	3	2660	3	3.92	88	3900	16,3
LPE-46-2260	22600	19210	4	3520	4	5.36	118	5400	22,5
LPE-56-2890	28940	24600	5	4600	5	6.66	140	6900	28,8
LPE-66-3220	32220	27388	6	5280	6	7.77	155	6900	28,8

Freezer from -20 °F to 34 °F

GAS DEFROST

MODEL	CAPACITY BTU/H		FAN DATA		MOTORS 120V AMPS	R-404A CHARGE LBS	SHIPPING WEIGHT LBS
	10°F TFD	15°F TFD	QTY	CFM			
LP(G,H)-16-0480	4890	7335	1	900	2	1.09	34
LP(G,H)-16-0550	5550	8325	1	900	2	1.45	36
LP(G,H)-26-0780	7880	11820	2	1760	4	1.67	50
LP(G,H)-26-0860	8620	12930	2	1800	4	1.97	55
LP(G,H)-26-1080	10830	16245	2	1760	4	2.62	60
LP(G,H)-36-1300	13070	19605	3	2700	6	2.94	76
LP(G,H)-36-1660	16680	25020	3	2660	6	3.92	84
LP(G,H)-46-2260	22600	33900	4	3520	8	4.02	100
LP(G,H)-56-2890	28940	43350	5	4600	10	5.02	122
LP(G,H)-66-3220	32220	48330	6	5280	12	7.77	150

LP Series Physical Data

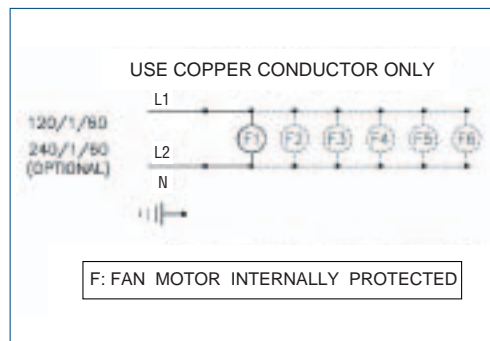


MODEL	UNIT SIZE (INCH)					CONNECTIONS		
	A	B	C	H	L	LIQ O.D.	SUCT O.D.	HOT GAS ¹
LPA-18-0380	21	N/A	15 3/4	16 1/8	31 1/4	1/2	5/8	N/A
LPA-18-0520, LP(E,G,H)-16-0480	21	N/A	15 3/4	16 1/8	31 1/4	1/2	5/8	1/2
LPA-18-0610, LP(E,G,H)-16-0550	21	N/A	15 3/4	16 1/8	31 1/4	1/2	5/8	1/2
LPA-28-0860, LP(E,G,H)-26-0780	33	N/A	15 3/4	16 1/4	43 1/4	1/2	7/8	1/2
LPA-28-1000, LP(E,G,H)-26-0860	39	N/A	15 3/4	16 1/4	49 1/4	1/2	7/8	1/2
LPA-28-1160, LP(E,G,H)-26-1080	39	N/A	15 3/4	16 1/4	49 1/4	1/2	7/8	1/2
LPA-38-1570, LP(E,G,H)-36-1300	59	N/A	15 3/4	16 1/2	69 1/4	1/2	7/8	1/2
LPA-38-1860, LP(E,G,H)-36-1660	59	N/A	15 3/4	16 1/2	69 1/4	1/2	7/8	1/2
LPA-48-2140, LP(E,G,H)-46-2260	81	40	15 3/4	16 5/8	91 1/4	1/2	1 1/8	1/2
LPA-58-2630, LP(E,G,H)-56-2890	101	60	15 3/4	16 7/8	111 1/4	1/2	1 1/8	1/2
LPA-58-3130	101	60	15 3/4	16 7/8	111 1/4	1/2	1 1/8	N/A
LPA-68-3500, LP(E,G,H)-66-3220	101	50	18 1/4	19 3/8	111 1/4	7/8	1 1/8	5/8

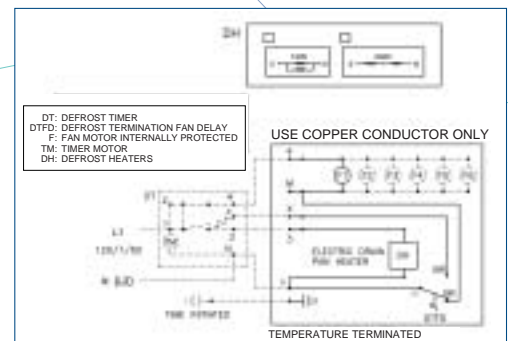
NOTE: Hot Gas Connection only on LPH units

Wiring Diagram

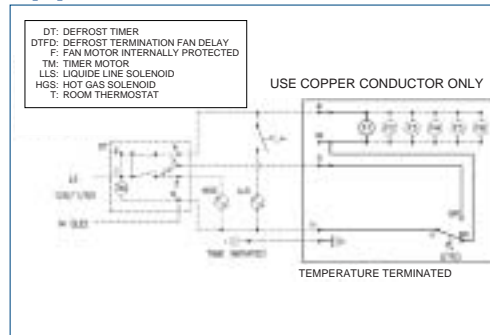
LPA, MVA, BVA : Air Defrost



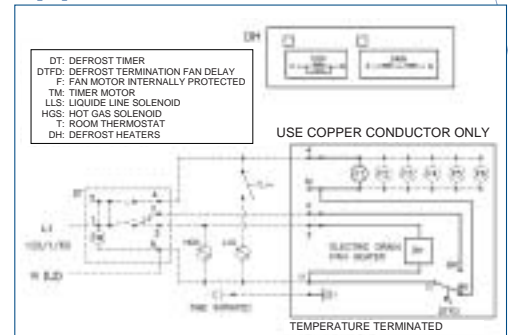
LPE, MVE, BVE : Electric Defrost



LP(G)(H): Reverse cycle & 3 pipes Hot Gas Defrost



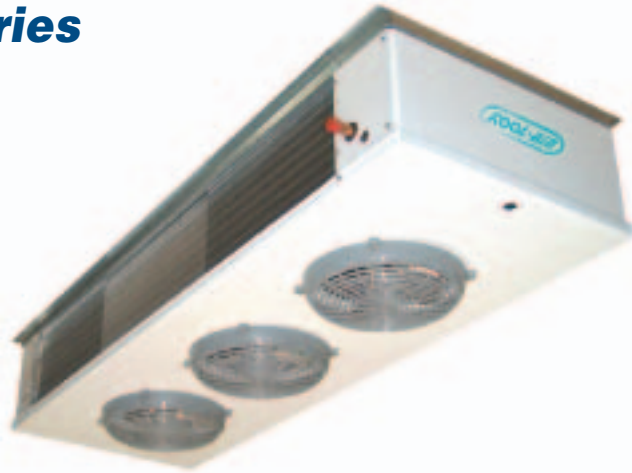
MV(G)(H), BV(G)(H) Reverse cycle & 3 pipes Hot Gas Defrost



- Specify model number with suffix "H" for 3 pipes gas defrost systems
- Add suffix "1" to model number for 120/1/60, suffix "2" for 230/1/60
- Operating refrigerant charges are based on 30% liquid, 70% vapor at 25 °FSST
- Multiply R404A refrigerant charge by 1.09 if R-22 or R-134A is used
- For 50 Hz derate tabulated capacity by 12%
- From 8 FPI to 4 FPI multiply capacity by 0,75
- From 6 FPI to 4 FPI multiply capacity by 0,85

MEDIUM VELOCITY DUAL FLOW UNIT

MV Series



- Specify model number with suffix "H" for 3 pipes gas defrost systems
- Add suffix "1" to model number for 120/1/60, suffix "2" for 230/1/60
- Operating refrigerant charges are based on 30% liquid, 70% vapor at 25 °F SST
- Multiply R404A refrigerant charge by 1.09 if R-22 or R-134A is used
- For 50 Hz derate tabulated capacity by 12%
- For 4 FPI multiply capacity by 0.85



Cooler above 34 °F

AIR DEFROST

MODEL	CAPACITY BTU/H		FAN DATA		MOTORS 120V AMPS	R-404A CHARGE LBS
	10° FTD	15° FTD	QTY	CFM		
MVA-16-0600	6000	9000	1	930	2	1.5
MVA-26-0850	8500	12750	2	1680	4	2.3
MVA-26-1200	12000	18000	2	1580	4	3
MVA-26-1350	13500	20250	2	1750	4	3.5
MVA-36-1800	18000	27000	3	2750	6	4
MVA-36-2000	20000	30000	3	2600	6	5.3
MVA-46-2800	28000	42000	4	3500	8	7.2
MVA-56-3600	36000	54000	5	4500	10	11.1
MVA-66-4500	45000	67500	6	5400	12	13.3

Freezer from 26 °F to 34 °F

ELECTRIC DEFROST

MODEL	CAPACITY BTU/H		FAN DATA		MOTORS 240V AMPS	R-404A CHARGE LBS	HEATER	
	10° FTD	15° FTD	QTY	CFM			WATT	240V AMPS
MVE-16-0600	6000	9000	1	930	2	1.5	1200	5
MVE-26-0850	8500	12750	2	1680	4	2.3	2100	5
MVE-26-1200	12000	18000	2	1580	4	3	2100	8.8
MVE-26-1350	13500	20250	2	1750	4	3.5	2700	11.3
MVE-36-1800	18000	27000	3	2750	6	4	3900	16.3
MVE-36-2000	20000	30000	3	2600	6	5.3	3900	16.3
MVE-46-2800	28000	42000	4	3500	8	7.2	5400	22.4
MVE-56-3600	36000	54000	5	4500	10	11.1	6900	28.8
MVE-66-4500	45000	67500	6	5400	12	13.3	6900	28.8

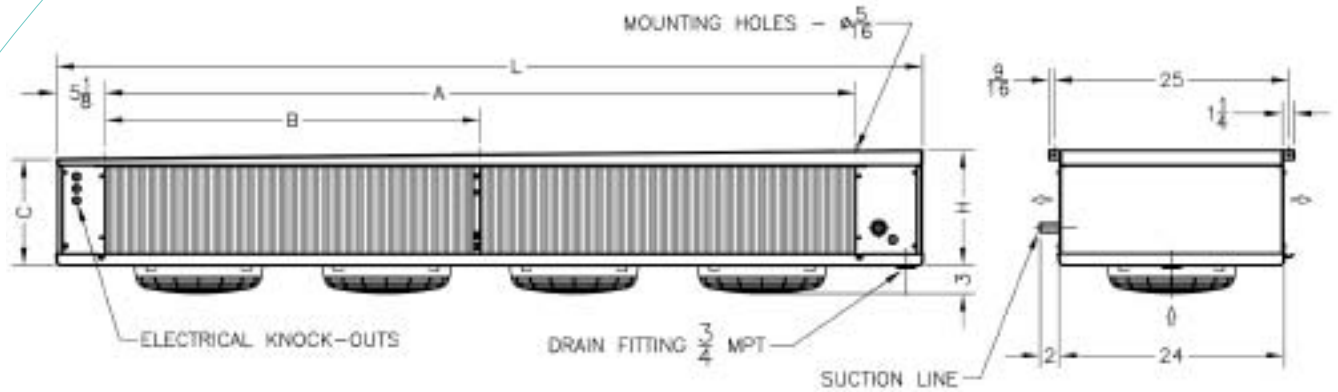
Freezer from 26 °F to 34 °F

GAS DEFROST

MODEL	CAPACITY BTU/H		FAN DATA		MOTORS 120V AMPS	R-404A CHARGE LBS	HEATER	
	10° FTD	15° FTD	QTY	CFM			WATT	120V AMPS
MV(G,H)-16-0600	6000	9000	1	930	2	1.5	400	3.3
MV(G,H)-26-0850	8500	12750	2	1680	4	2.3	700	5.8
MV(G,H)-26-1200	12000	18000	2	1580	4	3	700	5.8
MV(G,H)-26-1350	13500	20250	2	1750	4	3.5	900	7.5
MV(G,H)-36-1800	18000	27000	3	2750	6	4	1300	10.8
MV(G,H)-36-2000	20000	30000	3	2600	6	5.3	1300	10.8
MV(G,H)-46-2800	28000	42000	4	3500	8	7.2	1800	15.0
MV(G,H)-56-3600	36000	54000	5	4500	10	11.1	2300	19.2
MV(G,H)-66-4500	45000	67500	6	5400	12	13.3	2300	19.2

MEDIUM VELOCITY DUAL FLOW UNIT

MV Series Physical Data

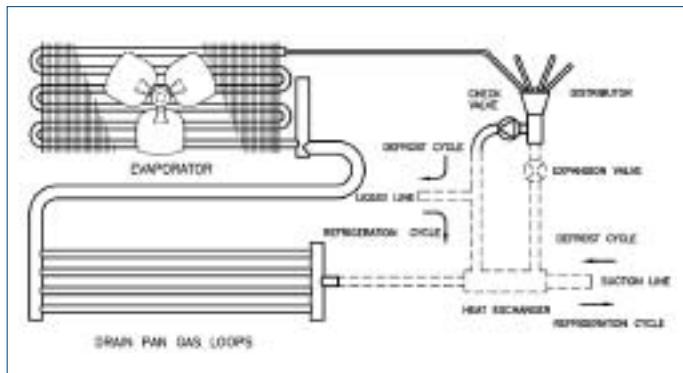


MODEL	SHIPPING WEIGHT LBS	MODEL	SHIPPING WEIGHT LBS	UNIT SIZE (INCH)					CONNECTIONS		
				A	B	C	H	L	LIQ O.D.	SUCT O.D.	HOT GAS ¹
MV(A,G,H)-16-0600	72	MVE-16-0600	74	20	N/A	11 1/4	11 5/8	32 1/4	1/2	5/8	1/2
MV(A,G,H)-26-0850	101	MVE-26-0850	103	32	N/A	11 1/4	11 3/4	44 1/4	1/2	5/8	1/2
MV(A,G,H)-26-1200	108	MVE-26-1200	110	32	N/A	11 1/4	11 3/4	44 1/4	1/2	7/8	1/2
MV(A,G,H)-26-1350	128	MVE-26-1350	130	38	N/A	11 1/4	11 3/4	50 1/4	1/2	7/8	1/2
MV(A,G,H)-36-1800	160	MVE-36-1800	163	58	N/A	11 1/4	12	70 1/4	1/2	7/8	1/2
MV(A,G,H)-36-2000	179	MVE-36-2000	182	58	N/A	11 1/4	12	70 1/4	1/2	7/8	1/2
MV(A,G,H)-46-2800	230	MVE-46-2800	234	80	40	11 1/4	12 1/4	92 1/4	1/2	7/8	1/2
MV(A,G,H)-56-3600	320	MVE-56-3600	325	100	60	13 3/4	14 7/8	112 1/4	7/8	1 1/8	5/8
MV(A,G,H)-66-4500	358	MVE-66-4500	363	100	50	16 1/4	17 3/8	112 1/4	7/8	1 1/8	5/8

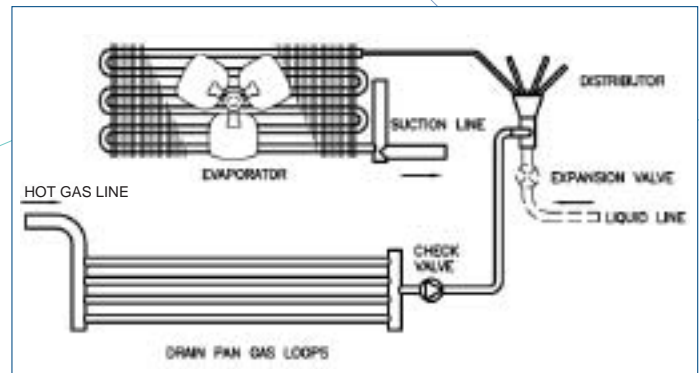
NOTE: Hot Gas Connection only on MVH units

Piping Diagram

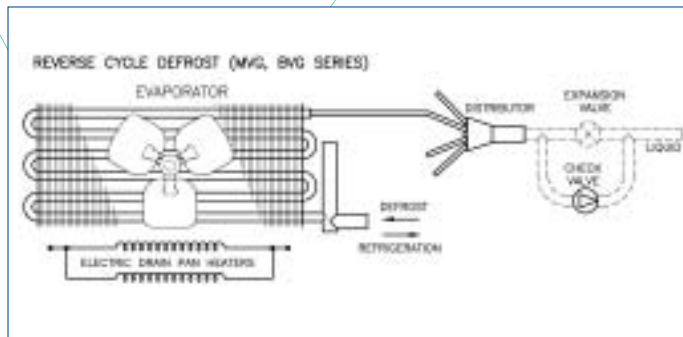
LPG



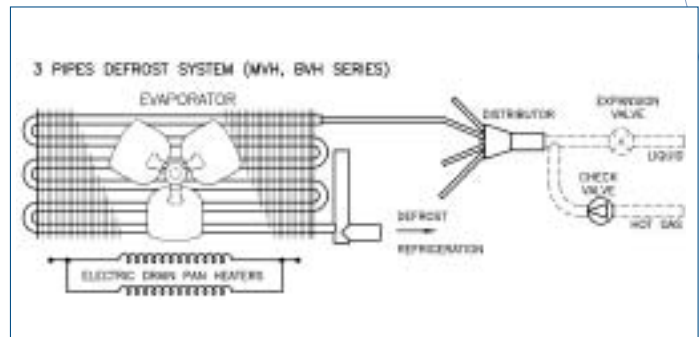
LPH



MVG, BVG



MVH, BVH



LOW VELOCITY DUAL FLOW UNIT

BV Series



Cooler above 34 °F

AIR DEFROST

MODEL	CAPACITY BTU/H		FAN DATA		MOTORS 120V AMPS	R-404A CHARGE LBS
	10YFTD	15YFTD	QTY	CFM		
BVA-16-0650	6500	9750	1	940	2	2.3
BVA-16-0750	7500	11250	1	900	2	3
BVA-26-0900	9000	13500	2	1900	4	2.7
BVA-26-1200	12000	18000	2	1860	4	4
BVA-26-1500	15000	22500	2	1750	4	5.3
BVA-26-1800	18000	27000	2	1875	4	7.2
BVA-36-2700	27000	40500	3	2850	6	8.9
BVA-46-3000	30000	45000	4	3600	8	11.1
BVA-56-3600	36000	54000	5	4400	10	13.3

Freezer from 26 °F to 34 °F

ELECTRIC DEFROST

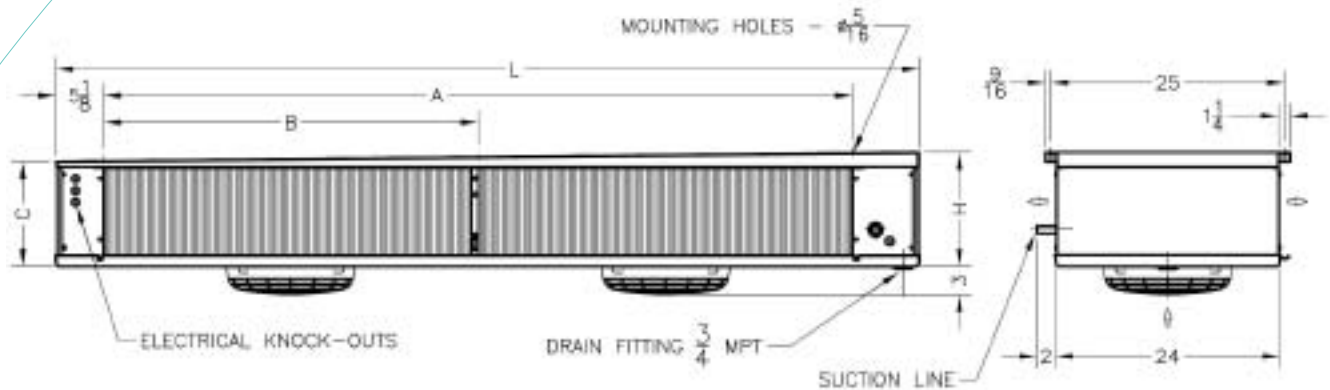
MODEL	CAPACITY BTU/H		FAN DATA		MOTORS 120V AMPS	R-404A CHARGE LBS	HEATER	
	10YFTD	15YFTD	QTY	CFM			WATT	240V AMPS
BVE-16-0650	6500	9750	1	940	2	2.3	2100	8.8
BVE-16-0750	7500	11250	1	900	2	3	2100	8.8
BVE-26-0900	9000	13500	2	1900	4	2.7	3900	16.3
BVE-26-1200	12000	18000	2	1860	4	4	3900	16.3
BVE-26-1500	15000	22500	2	1750	4	5.3	3900	16.3
BVE-26-1800	18000	27000	2	1875	4	7.2	5400	22.5
BVE-36-2700	27000	40500	3	2850	6	8.9	6900	28.8
BVE-46-3000	30000	45000	4	3600	8	11.1	6900	28.8
BVE-56-3600	36000	54000	5	4400	10	13.3	6900	28.8

Freezer from 26 °F to 34 °F

GAS DEFROST

MODEL	CAPACITY BTU/H		FAN DATA		MOTORS 120V AMPS	R-404A CHARGE LBS	HEATER	
	10YFTD	15YFTD	QTY	CFM			WATT	120V AMPS
BV(G,H)-16-0650	6500	9750	1	940	2	2.3	700	5.8
BV(G,H)-16-0750	7500	11250	1	900	2	3	700	5.8
BV(G,H)-26-0900	9000	13500	2	1900	4	2.7	1300	10.8
BV(G,H)-26-1200	12000	18000	2	1860	4	4	1300	10.8
BV(G,H)-26-1500	15000	22500	2	1750	4	5.3	1300	10.8
BV(G,H)-26-1800	18000	27000	2	1875	4	7.2	1800	15.0
BV(G,H)-36-2700	27000	40500	3	2850	6	8.9	2300	19.2
BV(G,H)-46-3000	30000	45000	4	3600	8	11.1	2300	19.2
BV(G,H)-56-3600	36000	54000	5	4400	10	13.3	2300	19.2

BV Series Physical Data

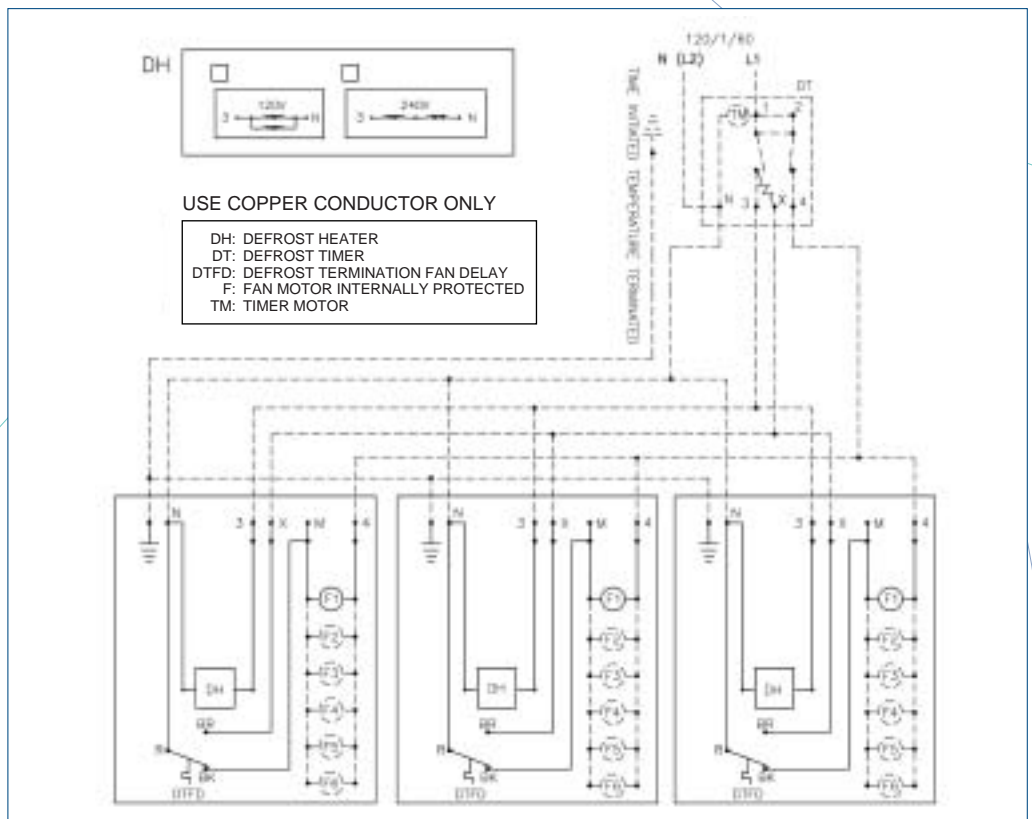


MODEL	SHIPPING WEIGHT LBS (A)	SHIPPING WEIGHT LBS (E)	SHIPPING WEIGHT LBS (G.H)	UNIT SIZE (INCH)					CONNECTIONS		
				A	B	C	H	L	LIQ O.D.	SUCT O.D.	HOT GAS ¹
BV(A,E,G,H)-16-0650	98	115	112	32	N/A	11 1/4	11 3/4	44 1/4	1/2	5/8	1/2
BV(A,E,G,H)-16-0750	104	122	120	32	N/A	11 1/4	11 3/4	44 1/4	1/2	5/8	1/2
BV(A,E,G,H)-26-0900	145	170	167	58	N/A	11 1/4	12	70 1/4	1/2	5/8	1/2
BV(A,E,G,H)-26-1200	156	184	181	58	N/A	11 1/4	12	70 1/4	1/2	7/8	1/2
BV(A,E,G,H)-26-1500	175	205	202	58	N/A	11 1/4	12	70 1/4	1/2	7/8	1/2
BV(A,E,G,H)-26-1800	226	266	266	80	40	11 1/4	12 1/4	92 1/4	1/2	7/8	1/2
BV(A,E,G,H)-36-2700	260	306	302	100	50	11 1/4	12 3/8	112 1/4	1/2	7/8	1/2
BV(A,E,G,H)-46-3000	316	372	367	100	50	13 3/4	14 7/8	112 1/4	7/8	1 1/8	5/8
BV(A,E,G,H)-56-3600	354	416	411	100	60	16 1/4	17 3/8	112 1/4	7/8	1 1/8	5/8

NOTE: Hot Gas Connection only on BVH units

Wiring Diagram for Multiple Electric Defrost Units

- Specify model number with suffix "H" for 3 pipes gas defrost systems
- Add suffix "1" to model number for 120/1/60, suffix "2" for 230/1/60
- Operating refrigerant charges are based on 30% liquid, 70% vapor at 25 °F SST
- Multiply R404A refrigerant charge by 1.09 if R-22 or R-134A is used
- For 50 Hz derate tabulated capacity by 12%
- For 4 FPI multiply capacity by 0,85



Model Nomenclature

LP A — 18 — 0380 - 1

Réfrigération Kool-Air

LP = Low profile single flow
MV = Medium velocity dual flow
BV = Low velocity dual flow

Defrost Type

A = Air defrost
E = Electric
G = Reverse cycle hot gas defrost
H = 3 pipes hot gas defrost

Number of fans

Voltage

1 = 120/1/60
2 = 230/1/60

Capacity BTUH @
+ 20°F SST @ 10°F TD
(60 Hz) x 10

Number of fins per inch

Standard feature

All units have a compact low profile aluminum casing to allow maximum space for product. The casing is painted white with a side pitched drain pan for positive condensate removal. (**LP** models has reversible drain pan) A 3/4 MPT drain connection is provided.

State of the art evaporator coil are made of smooth copper tube mechanically expanded into self-spaced aluminum plate fins for permanent bond and maximum heat transfer. All coils are leak tested at 400 PSIG.

Permanently lubricated and thermally protected motor combined with powerful heavy duty 12" aluminum fans individually balanced provide vibration free operation and a long and dependable service. Fan guards are injection molded polymer for consistency of dimension and corrosion protection.

Casing allows total accessibility to expansion valve and electrical connections. A quick disconnect electrical wiring harness is installed on each motor to ease service. Unit coolers are designed for most HFC and HCFC refrigerant including R-22, R-404A, R-134a and R-507. All models are to be used with an externally equalized expansion valve.

Units with electric defrost are supplied with a factory wired set and fan-delay / defrost termination thermostat. For an efficient defrost and ease of removability, stainless steel heaters are embedded into die formed fin slot in the face of coils and therefore no space is needed on the sides of the units for heater replacement. Drain pan are heated for fast, reliable drainage.

Gas defrost units are supplied with a factory wired and set fan-delay / defrost termination thermostats, an expansion valve by-pass kit including check valve is supplied. There is two choices of hot gas defrost: reverse cycle defrost **suffix "G"** and three pipes defrost system **suffix "H"**.

- Option:**
- Copper fin coil
 - Coated coil
 - Galvanized steel housing
 - Insulated drain pan
 - Custom circuiting for chilled water or glycol applications
 - Adjustable defrost termination, fan delay thermostat (electric & hot gas defrost)



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