



COMMERCIAL WALK-IN COOLERS AND FREEZERS

LSA Models

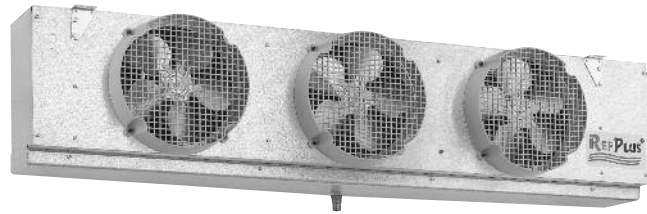
Ideal for coolers above +34°F

- Low Silhouette, draw through, high velocity units
- Capacity from 4,500 to 39,000 Btu/hr./10°F TD

LSE, LSR and LST Models

Ideal for coolers and freezers from -20°F to +34°F

- Low Silhouette, draw through, high velocity units
- Capacity from 4,300 to 37,000 Btu/hr./10°F TD



LPA Models

Ideal for coolers above +34°F

- Low Profile, blow through, medium velocity units
- Capacity from 6,000 to 42,000 Btu/hr./10°F TD

LPE, LPG & LPH Models

Ideal for coolers above +26°F

- Low Profile, blow through, medium velocity units
- Capacity from 5,700 to 40,000 Btu/hr./10°F TD



LAA Models

Ideal for coolers above +34°F

- Low Air, blow through, low velocity units
- Capacity from 6,000 to 46,000 Btu/hr./10°F TD

LAE, LAG & LAH Models

Ideal for coolers above +26°F

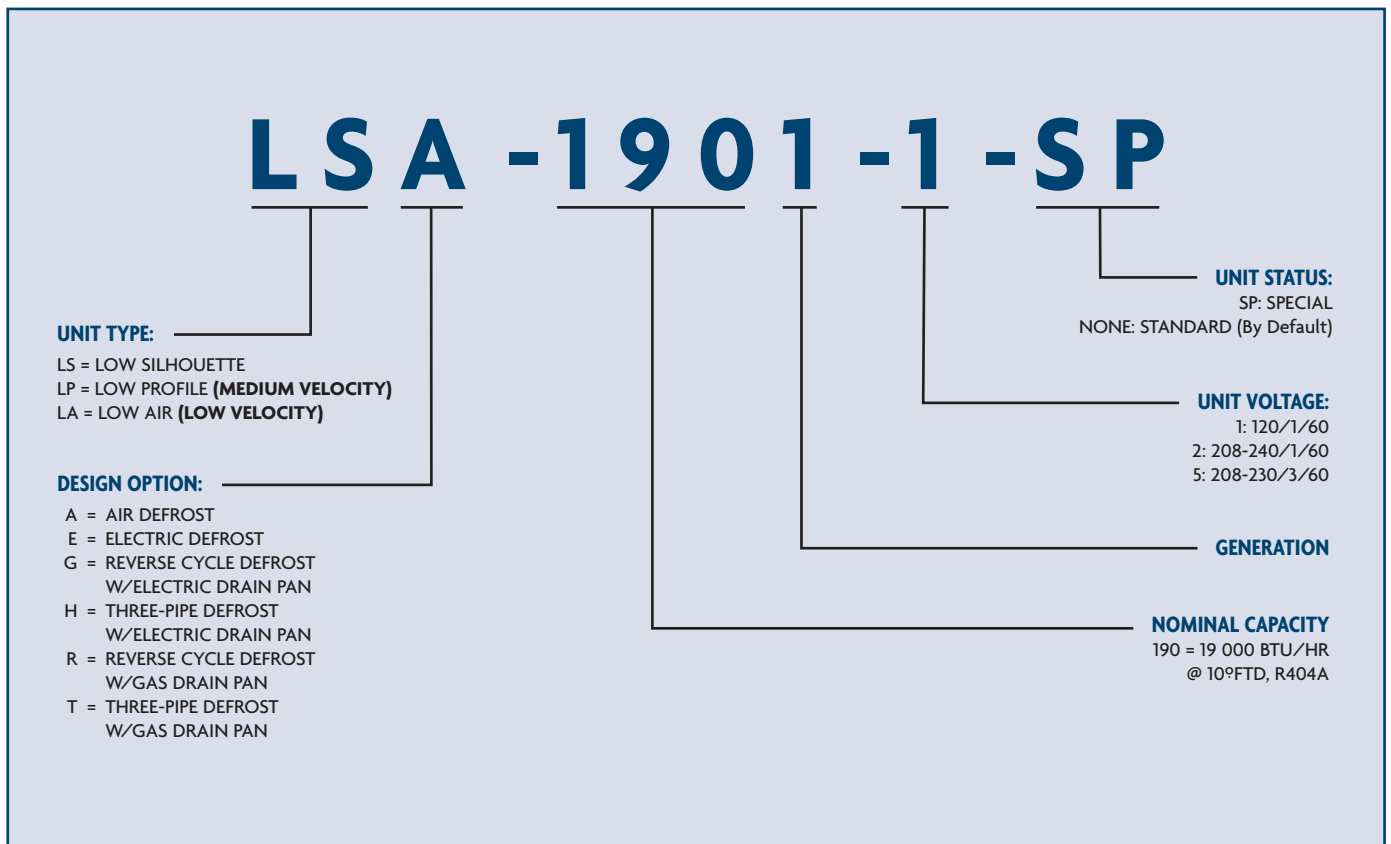
- Low Air, blow through, low velocity units
- Capacity from 5,700 to 44,000 Btu/hr./10°F TD



TABLE OF CONTENTS

Nomenclature	2
Features & Options	3
Capacity Data (LSA, LSE, LSR, LST)	4
Dimensional Data (LSA, LSE, LSR, LST)	5
Capacity Data (LPA, LPE, LPG, LPH)	6
Dimensional Data (LPA, LPE, LPG, LPH)	7
Capacity Data (LAA, LAE, LAG, LAH)	8
Dimensional Data (LAA, LAE, LAG, LAH)	9
Piping Diagrams	10
Electrical Diagrams	11
Specifications	12

UNIT COOLER NOMENCLATURE



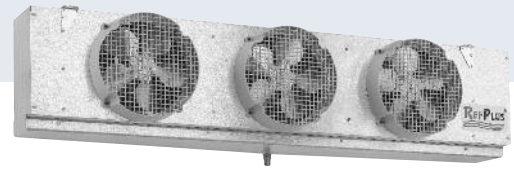
LS SERIES

STANDARD FEATURES

- Front & side access
- PSC motors
- Positive slope drain pan
- Central drain connection on the back of the unit
- Large $7/8$ " ID drain connection
- Ease of modifying, on the job site, to and from any defrost system
- Front-facing electrical board

OPTIONAL FEATURES

- EC motors
- Installed expansion valve
- Black epoxy-coated welded wire guard
- Mounting brackets kit to match mounting holes of preceding generation with the same casing length
- Hot gas defrost kit (LSR or LST models only)



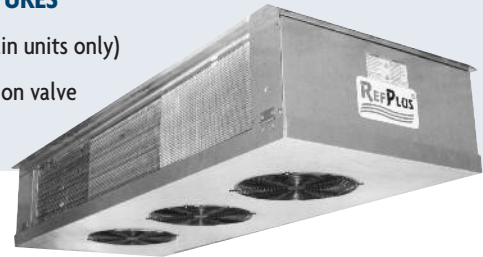
LP & LA SERIES

STANDARD FEATURES

- Low height to maximize storage space
- Shaded pole motors on small fan units
- PSC motors on large fan units
- Black epoxy-coated welded wire guard
- Triple drain pan to almost eliminate condensation under the unit
- Horizontal $3/4$ " FPT aluminum drain connection
- Hinged mounted external drain pan (also removable)
- Ease of modifying, on the job site, to and from any defrost system

OPTIONAL FEATURES

- EC motors (certain units only)
- Installed expansion valve

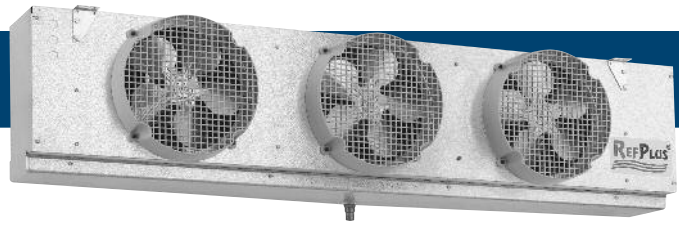


ECM MOTOR OPTION

RefPlus now offers the ECM motor option on several of its commercial walk-in coolers. Our new ECM motor option uses less wattage to achieve the same airflow as our standard motors. As a result, the ECM motor produces less heat in the system, which in turn means less work and wear for the compressor. This combination results in even greater energy savings.

- Eco-friendly electric motors
- Significant energy savings compared to standard motors
- Soft starts and slewed speeds eliminate stress transmitted to hardware

CAPACITY DATA (LSA, LSE, LSR, LST)



LSA - AIR DEFROST

FOR COOLERS ABOVE +34°F

MODEL	CFM	CAPACITY				ELECTRICAL 120/1/60				ELECTRICAL 240/1/60 OPTION				R-404a, R-507 OPERATING CHARGE (LB)
		Btu/hr				FAN MOTOR		MCA	MOP	FAN MOTOR		MCA	MOP	
		8° FTD	10° FTD	12° FTD	15° FTD	QTY	FLA			QTY	FLA			
LSA 0451-1	1060	3600	4500	5400	6750	1	1.0	1.3	15.0	1	0.5	0.6	15	0.6
LSA 0551-1	950	4400	5500	6600	8250	1	1.0	1.3	15.0	1	0.5	0.6	15	0.8
LSA 0651-1	950	5200	6500	7800	9750	1	1.0	1.3	15.0	1	0.5	0.6	15	0.9
LSA 0751-1	1900	6000	7500	9000	11250	2	2.0	2.3	15.0	2	1.0	1.1	15	0.9
LSA 0921-1	1700	7360	9200	11040	13800	2	2.0	2.3	15.0	2	1.0	1.1	15	1.2
LSA 1081-1	1700	8640	10800	12960	16200	2	2.0	2.3	15.0	2	1.0	1.1	15	1.4
LSA 1301-1	1900	10400	13000	15600	19500	2	2.0	2.3	15.0	2	1.0	1.1	15	1.8
LSA 1401-1	3200	11200	14000	16800	21000	3	3.0	3.3	15.0	3	1.5	1.6	15	1.6
LSA 1601-1	2800	12800	16000	19200	24000	3	3.0	3.3	15.0	3	1.5	1.6	15	2.1
LSA 1901-1	2800	15200	19000	22800	28500	3	3.0	3.3	15.0	3	1.5	1.6	15	2.6
LSA 2301-1	3800	18400	23000	27600	34500	4	4.0	4.3	15.0	4	2.0	2.1	15	2.8
LSA 2601-1	3830	20800	26000	31200	39000	4	4.0	4.3	15.0	4	2.0	2.1	15	3.5
LSA 3201-1	4700	25600	32000	38400	48000	5	5.0	5.3	15.0	5	2.5	2.6	15	4.3
LSA 3901-1	5600	31200	39000	46800	58500	6	6.0	6.3	15.0	6	3.0	3.1	15	5.2

For 4 fpi, multiply capacity by 0.8

See Wiring Diagram, Figure 1

LSE - ELECTRIC DEFROST

FOR COOLERS AND FREEZERS FROM -20°F TO +34°F

MODEL	CFM	CAPACITY				240/1/60		DEFROST HEATERS									R-404a, R-507 OPERATING CHARGE (LB)
		BTU/hr @ 10°F TD				FAN MOTOR		240/1/60			208/3/60			240/3/60			
		-30°F	-20°F	0°F	+20°F	QTY	FLA	KW	FLA	MOP	KW	FLA	MOP	KW	FLA	MOP	
LSE 0431-2	1060	3560	3740	4020	4300	1	0.5	0.96	4.0	15	0.96	2.7	15	1.28	3.1	15	0.6
LSE 0521-2	950	4310	4520	4860	5200	1	0.5	0.96	4.0	15	0.96	2.7	15	1.28	3.1	15	0.8
LSE 0621-2	950	5140	5390	5795	6200	1	0.5	0.96	4.0	15	0.96	2.7	15	1.28	3.1	15	0.9
LSE 0721-2	1900	5970	6260	6730	7200	2	1.0	1.50	6.3	15	1.50	4.2	15	2.00	4.8	15	0.9
LSE 0881-2	1700	7290	7650	8225	8800	2	1.0	1.50	6.3	15	1.50	4.2	15	2.00	4.8	15	1.2
LSE 1031-2	1700	8540	8960	9630	10300	2	1.0	1.50	6.3	15	1.50	4.2	15	2.00	4.8	15	1.4
LSE 1241-2	1900	10270	10780	11590	12400	2	1.0	1.92	8.0	15	1.92	5.3	15	2.56	6.2	15	1.8
LSE 1331-2	3200	11120	11670	12485	13300	3	1.5	2.88	12.0	15	2.88	8.0	15	3.84	9.2	15	1.6
LSE 1521-2	2800	12600	13220	14210	15200	3	1.5	2.88	12.0	15	2.88	8.0	15	3.84	9.2	15	2.1
LSE 1801-2	2800	14921	15650	16825	18000	3	1.5	2.88	12.0	15	2.88	8.0	15	3.84	9.2	15	2.6
LSE 2201-2	3800	18230	19130	20565	22000	4	2.0	3.84	16.0	20	3.84	10.7	15	5.12	12.3	20	2.8
LSE 2401-2	3830	19890	20870	22435	24000	4	2.0	3.84	16.0	20	3.84	10.7	15	5.12	12.3	20	3.5
LSE 3001-2	4700	24860	26090	28045	30000	5	2.5	4.80	20.0	25	4.80	13.3	20	6.40	15.4	20	4.3
LSE 3701-2	5600	30660	32170	34585	37000	6	3.0	5.76	24.0	30	5.76	16.0	20	7.68	18.5	25	5.2

For 4 fpi, multiply capacity by 0.8

See Wiring Diagram, Figure 3

LSR / LST - GAS DEFROST

FOR COOLERS AND FREEZERS FROM -20°F TO +34°F

MODEL	CFM	CAPACITY				ELECTRICAL 120/1/60				ELECTRICAL 240/1/60 OPTION				R-404a, R-507 OPERATING CHARGE (LB)
		BTU/hr @ 10°F TD				FAN MOTOR		MCA	MOP	FAN MOTOR		MCA	MOP	
		-30°F	-20°F	0°F	+20°F	QTY	FLA			QTY	FLA			
LS(R)(T) 0431-1	1060	3560	3740	4020	4300	1	1.0	1.3	15.0	1	0.5	0.6	15	0.6
LS(R)(T) 0521-1	950	4310	4520	4860	5200	1	1.0	1.3	15.0	1	0.5	0.6	15	0.8
LS(R)(T) 0621-1	950	5140	5390	5795	6200	1	1.0	1.3	15.0	1	0.5	0.6	15	0.9
LS(R)(T) 0721-1	1900	5970	6260	6730	7200	2	2.0	2.3	15.0	2	1.0	1.1	15	0.9
LS(R)(T) 0881-1	1700	7290	7650	8225	8800	2	2.0	2.3	15.0	2	1.0	1.1	15	1.2
LS(R)(T) 1031-1	1700	8540	8960	9630	10300	2	2.0	2.3	15.0	2	1.0	1.1	15	1.4
LS(R)(T) 1241-1	1900	10270	10780	11590	12400	2	2.0	2.3	15.0	2	1.0	1.1	15	1.8
LS(R)(T) 1331-1	3200	11120	11670	12485	13300	3	3.0	3.3	15.0	3	1.5	1.6	15	1.6
LS(R)(T) 1521-1	2800	12600	13220	14210	15200	3	3.0	3.3	15.0	3	1.5	1.6	15	2.1
LS(R)(T) 1801-1	2800	14921	15650	16825	18000	3	3.0	3.3	15.0	3	1.5	1.6	15	2.6
LS(R)(T) 2201-1	3800	18230	19130	20565	22000	4	4.0	4.3	15.0	4	2.0	2.1	15	2.8
LS(R)(T) 2401-1	3830	19890	20870	22435	24000	4	4.0	4.3	15.0	4	2.0	2.1	15	3.5
LS(R)(T) 3001-1	4700	24860	26090	28045	30000	5	5.0	5.3	15.0	5	2.5	2.6	15	4.3
LS(R)(T) 3701-1	5600	30660	32170	34585	37000	6	6.0	6.3	15.0	6	3.0	3.1	15	5.2

For 4 fpi, multiply capacity by 0.8

See Wiring Diagram, Figure 2

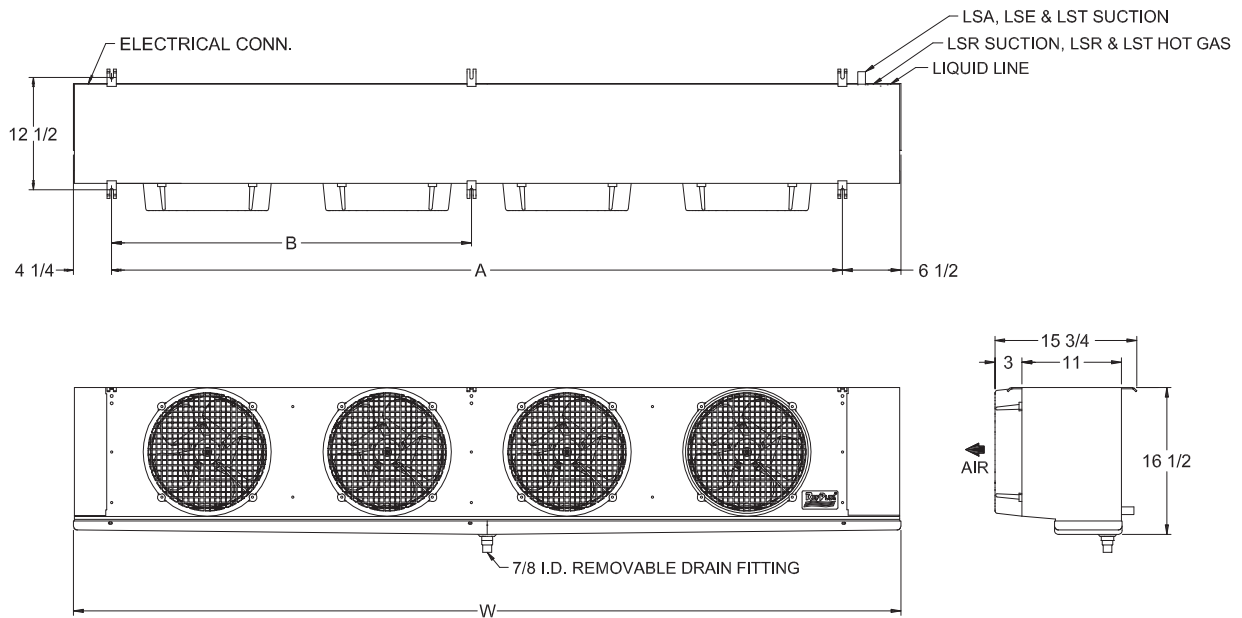
Use LSR model for reverse cycle defrost with gas drain pan (See piping diagram on page 10)
Use LST model for three-pipe cycle defrost with gas drain pan (See piping diagram on page 10)

NOTE :

- Operating charge based on 30% liquid and 70% vapor at 25°F suction
- Fan Motor heat is not included in rating, add for PSC motor (100W) 342 BTU/HR
- Fan Motor heat is not included in rating, add for EC motor (60W) 205 BTU/HR
- For 200-240/1/50 use suffix 2 and multiply capacity by 0.92
- For R134a refrigerant charge, multiply R-404a by 1.09
- Air throw for LS series is 25 to 35 ft.

LS SERIES

MODEL	SHIPPING WEIGHT (lb)	MODEL	SHIPPING WEIGHT (lb)	MODEL	SHIPPING WEIGHT (lb)	UNIT DIMENSIONS (inches)			CONNECTION (inches)		
						W	A	B	LIQUID	SUCTION	LST HOT GAS
LSA 0451	26	LSE 0431	27	LS(R)(T) 0431	28	32	21 ¹ / ₄	-	1/2	5/8	1/2
LSA 0551	29	LSE 0521	30	LS(R)(T) 0521	31	32	21 ¹ / ₄	-	1/2	5/8	1/2
LSA 0651	30	LSE 0621	31	LS(R)(T) 0621	32	32	21 ¹ / ₄	-	1/2	5/8	1/2
LSA 0751	38	LSE 0721	40	LS(R)(T) 0721	41	44	33 ¹ / ₄	-	1/2	5/8	1/2
LSA 0921	42	LSE 0881	44	LS(R)(T) 0881	45	44	33 ¹ / ₄	-	1/2	7/8	1/2
LSA 1081	42	LSE 1031	44	LS(R)(T) 1031	45	44	33 ¹ / ₄	-	1/2	7/8	1/2
LSA 1301	47	LSE 1241	49	LS(R)(T) 1241	51	52	41 ¹ / ₄	-	1/2	7/8	1/2
LSA 1401	58	LSE 1331	60	LS(R)(T) 1331	63	72	61 ¹ / ₄	-	1/2	7/8	1/2
LSA 1601	67	LSE 1521	70	LS(R)(T) 1521	72	72	61 ¹ / ₄	-	1/2	7/8	1/2
LSA 1901	68	LSE 1801	71	LS(R)(T) 1801	73	72	61 ¹ / ₄	-	1/2	7/8	1/2
LSA 2301	88	LSE 2201	92	LS(R)(T) 2201	95	92	81 ¹ / ₄	40	1/2	7/8	5/8
LSA 2601	89	LSE 2401	93	LS(R)(T) 2401	96	92	81 ¹ / ₄	40	1/2	1 ¹ / ₈	5/8
LSA 3201	108	LSE 3001	112	LS(R)(T) 3001	116	112	101 ¹ / ₄	40	1/2	1 ¹ / ₈	5/8
LSA 3901	127	LSE 3701	132	LS(R)(T) 3701	136	132	121 ¹ / ₄	60	1/2	1 ¹ / ₈	5/8



CAPACITY DATA (LPA, LPE, LPG, LPH)



LPA - AIR DEFROST

FOR COOLERS ABOVE +34°F

MODEL	CFM	CAPACITY				ELECTRICAL 120/1/60				ELECTRICAL 240/1/60 OPTION				R-404a, R-507 OPERATING CHARGE (LB)
		BTU/hr				FAN MOTOR		MCA	MOP	FAN MOTOR		MCA	MOP	
		8° FTD	10° FTD	12° FTD	15° FTD	QTY	FLA			QTY	FLA			
LPA 0601-1	800	4800	6000	7200	9000	2	1.5	1.7	15	2	0.7	0.8	15	0.9
LPA 0701-1	880	5600	7000	8400	10500	2	1.5	1.7	15	2	0.7	0.8	15	1.1
LPA 0801-1	850	6400	8000	9600	12000	2	1.5	1.7	15	2	0.7	0.8	15	1.6
LPA 1001-1	1350	8000	10000	12000	15000	3	2.2	2.4	15	3	1.1	1.2	15	1.6
LPA 1201-1	1250	9600	12000	14400	18000	3	2.2	2.4	15	3	1.1	1.2	15	2.3
LPA 1601-1	1660	12800	16000	19200	24000	4	3.0	3.2	15	4	1.5	1.5	15	3.0
LPA 2001-1	2090	16000	20000	24000	30000	5	3.7	3.9	15	5	1.8	1.9	15	3.8
LPA 2101-1	3200	16800	21000	25200	31500	3	3.0	3.3	15	3	1.5	1.6	15	3.6
LPA 2401-1	2500	19200	24000	28800	36000	6	4.5	4.6	15	6	2.2	2.3	15	4.5
LPA 2801-1	4200	22400	28000	33600	42000	4	4.0	4.3	15	4	2.0	2.1	15	4.8
LPA 3501-1	5400	28000	35000	42000	52500	5	5.0	5.3	15	5	2.5	2.6	15	5.9
LPA 4201-1	6500	33600	42000	50400	63000	6	6.0	6.3	15	6	3.0	3.1	15	7.1

For 4 fpi, multiply capacity by 0.8

See Wiring Diagram, Figure 1

LPE - ELECTRIC DEFROST

FOR COOLERS FROM +26°F TO +34°F

MODEL	CFM	CAPACITY				240/1/60		DEFROST HEATERS									R-404a, R-507 OPERATING CHARGE (LB)
		BTU/hr				FAN MOTOR		240/1/60			208/3/60			240/3/60			
		8° FTD	10° FTD	12° FTD	15° FTD	QTY	FLA	KW	FLA	MOP	KW	FLA	MOP	KW	FLA	MOP	
LPE 0571-2	800	4560	5700	6840	8550	2	0.7	1.50	6.3	15	1.50	4.2	15	2.00	4.8	15	0.9
LPE 0671-2	880	5360	6700	8040	10050	2	0.7	1.92	8.0	15	1.92	5.3	15	2.56	6.2	15	1.1
LPE 0761-2	850	6080	7600	9120	11400	2	0.7	1.92	8.0	15	1.92	5.3	15	2.56	6.2	15	1.6
LPE 0951-2	1350	7600	9500	11400	14250	3	1.1	2.88	12.0	15	2.88	8.0	15	3.84	9.2	15	1.6
LPE 1151-2	1250	9200	11500	13800	17250	3	1.1	2.88	12.0	15	2.88	8.0	15	3.84	9.2	15	2.3
LPE 1521-2	1660	12160	15200	18240	22800	4	1.5	3.84	16.0	20	3.84	10.7	15	5.12	12.3	20	3
LPE 1901-2	2090	15200	19000	22800	28500	5	1.8	4.80	20.0	25	4.80	13.3	20	6.40	15.4	20	3.8
LPE 2001-2	3200	16000	20000	24000	30000	3	1.5	2.88	12.0	15	2.88	8.0	15	3.84	9.2	15	3.6
LPE 2301-2	2500	18400	23000	27600	34500	6	2.2	5.76	24.0	30	5.76	16.0	20	7.68	18.5	25	4.5
LPE 2701-2	4200	21600	27000	32400	40500	4	2.0	3.84	16.0	20	3.84	10.7	15	5.12	12.3	20	4.8
LPE 3341-2	5400	26720	33400	40080	50100	5	2.5	4.80	20.0	25	4.80	13.3	20	6.40	15.4	20	5.9
LPE 4001-2	6500	32000	40000	48000	60000	6	3.0	5.76	24.0	30	5.76	16.0	20	7.68	18.5	25	7.1

For 4 fpi, multiply capacity by 0.8

See Wiring Diagram, Figure 3

LPG/LPH - GAS DEFROST

FOR COOLERS FROM +26°F TO +34°F

MODEL	CFM	CAPACITY				120/1/60		240/1/60		DEFROST HEATERS						R-404a, R-507 OPERATING CHARGE (LB)
		BTU/hr				FAN MOTOR		FAN MOTOR		120/1/60			240/1/60			
		8° FTD	10° FTD	12° FTD	15° FTD	QTY	FLA	QTY	FLA	KW	FLA	MOP	KW	FLA	MOP	
LP(G)(H) 0571-1	800	4560	5700	6840	8550	2	1.5	2	0.7	0.50	4.2	15	0.50	2.1	15	0.9
LP(G)(H) 0671-1	880	5360	6700	8040	10050	2	1.5	2	0.7	0.64	5.3	15	0.64	2.7	15	1.1
LP(G)(H) 0761-1	850	6080	7600	9120	11400	2	1.5	2	0.7	0.64	5.3	15	0.64	2.7	15	1.6
LP(G)(H) 0951-1	1350	7600	9500	11400	14250	3	2.2	3	1.1	0.96	8.0	15	0.96	4.0	15	1.6
LP(G)(H) 1151-1	1250	9200	11500	13800	17250	3	2.2	3	1.1	0.96	8.0	15	0.96	4.0	15	2.3
LP(G)(H) 1521-1	1660	12160	15200	18240	22800	4	3.0	4	1.5	1.28	10.7	15	1.28	5.3	15	3
LP(G)(H) 1901-1	2090	15200	19000	22800	28500	5	3.7	5	1.8	1.60	13.3	20	1.60	6.7	15	3.8
LP(G)(H) 2001-1	3200	16000	20000	24000	30000	3	3.0	3	1.5	0.96	8.0	15	0.96	4.0	15	3.6
LP(G)(H) 2301-1	2500	18400	23000	27600	34500	6	4.5	6	2.2	1.92	16.0	20	1.92	8.0	15	4.5
LP(G)(H) 2701-1	4200	21600	27000	32400	40500	4	4.0	4	2.0	1.28	10.7	15	1.28	5.3	15	4.8
LP(G)(H) 3341-1	5400	26720	33400	40080	50100	5	5.0	5	2.5	1.60	13.3	20	1.60	6.7	15	5.9
LP(G)(H) 4001-1	6500	32000	40000	48000	60000	6	6.0	6	3.0	1.92	16.0	20	1.92	8.0	15	7.1

For 4 fpi, multiply capacity by 0.8

See Wiring Diagram, Figure 4

Use LPG model for reverse cycle defrost with electric drain pan (See piping diagram on page 10)

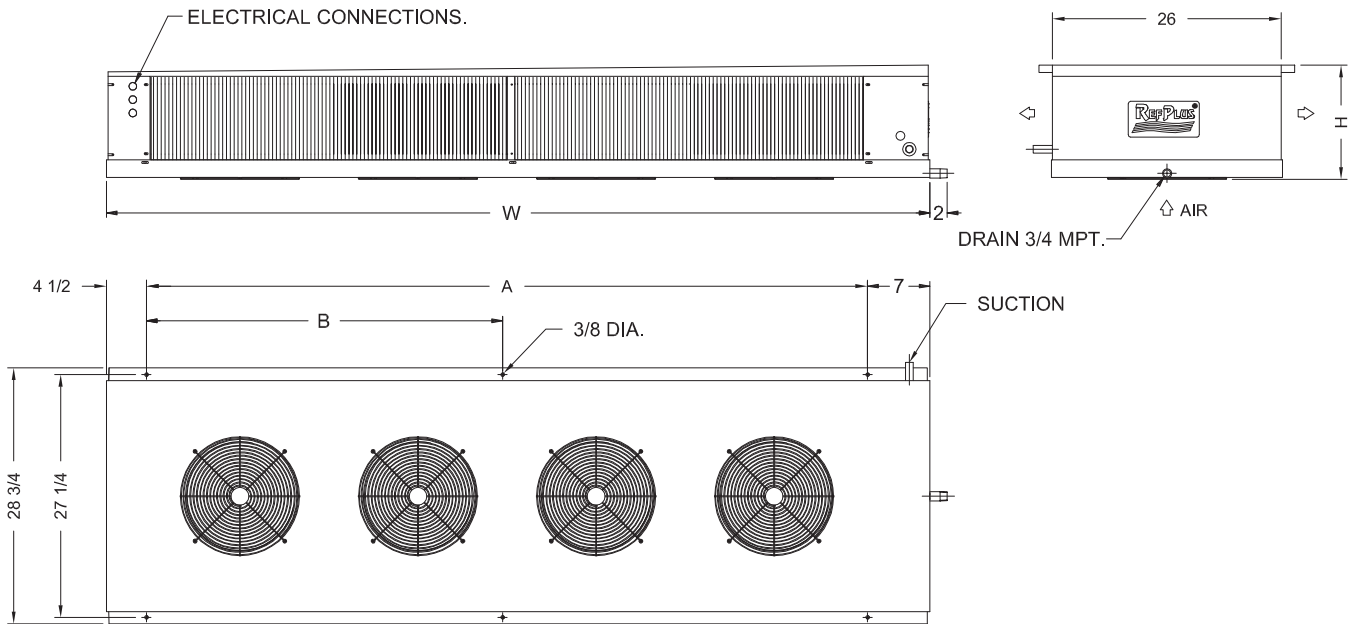
Use LPH model for three-pipe cycle defrost with electric drain pan (See piping diagram on page 10)

NOTE :

- Operating charge based on 30% liquid and 70% vapor at 25°F suction
- Fan Motor heat is not included in rating
Unit 0601 to 2001 and 2401, add for Shaded Pole motor (58W) 198 BTU/HR
Unit 2101 and 2801 to 4201, add for PSC motor (100W) 342 BTU/HR
Unit 2101 and 2801 to 4201, add for EC motor (60W) 205 BTU/HR
- For 200-240/1/50 use suffix 2 and multiply capacity by 0.92
- For R134a refrigerant charge, multiply R-404a by 1.09
- Air throw for LP series is 12 to 18 ft.

LP SERIES

MODEL	SHIPPING WEIGHT (lb)	MODEL	SHIPPING WEIGHT (lb)	MODEL	SHIPPING WEIGHT (lb)	UNIT DIMENSIONS (inches)				CONNECTION (inches)		
						W	H	A	B	LIQUID	SUCTION	LPH HOT GAS
LPA 0601	95	LPE 0571	105	LP(G)(H) 0571	96	44 1/2	7 5/8	33	-	1/2	5/8	1/2
LPA 0701	105	LPE 0671	118	LP(G)(H) 0671	107	52 1/2	7 5/8	41	-	1/2	5/8	1/2
LPA 0801	110	LPE 0761	123	LP(G)(H) 0761	112	52 1/2	7 5/8	41	-	1/2	5/8	1/2
LPA 1001	145	LPE 0951	161	LP(G)(H) 0951	149	72 1/2	7 7/8	61	-	1/2	5/8	1/2
LPA 1201	152	LPE 1151	168	LP(G)(H) 1151	156	72 1/2	7 7/8	61	-	1/2	7/8	1/2
LPA 1601	195	LPE 1521	221	LP(G)(H) 1521	200	92 1/2	7 7/8	81	40	1/2	7/8	1/2
LPA 2001	240	LPE 1901	273	LP(G)(H) 1901	247	112 1/2	8 1/8	101	40	1/2	7/8	1/2
LPA 2101	168	LPE 2001	184	LP(G)(H) 2001	172	72 1/2	12 7/8	61	-	1/2	7/8	1/2
LPA 2401	282	LPE 2301	322	LP(G)(H) 2301	290	132 1/2	8 1/8	121	60	1/2	7/8	1/2
LPA 2801	216	LPE 2701	242	LP(G)(H) 2701	221	92 1/2	12 7/8	81	40	1/2	7/8	1/2
LPA 3501	266	LPE 3341	299	LP(G)(H) 3341	273	112 1/2	13 1/8	101	40	1/2	1 1/8	5/8
LPA 4201	315	LPE 4001	355	LP(G)(H) 4001	323	132 1/2	13 1/8	121	60	1/2	1 1/8	5/8



CAPACITY DATA (LAA, LAE, LAG, LAH)



LAA - AIR DEFROST

FOR COOLERS ABOVE +34°F

MODEL	CFM	CAPACITY BTU/hr				ELECTRICAL 120/1/60				ELECTRICAL 240/1/60 OPTION				R-404a, R-507 OPERATING CHARGE (LB)
		8° FTD	10° FTD	12° FTD	15° FTD	FAN MOTOR		MCA	MOP	FAN MOTOR		MCA	MOP	
						QTY	FLA			QTY	FLA			
LAA 0601-1	1040	4800	6000	7200	9000	2	1.5	1.7	15	2	0.7	0.8	15	1.1
LAA 0751-1	1000	6000	7500	9000	11250	2	1.5	1.7	15	2	0.7	0.8	15	1.8
LAA 0951-1	980	7600	9500	11400	14250	2	1.5	1.7	15	2	0.7	0.8	15	2.5
LAA 1201-1	1620	9600	12000	14400	18000	3	2.2	2.4	15	3	1.1	1.2	15	2.6
LAA 1501-1	1560	12000	15000	18000	22500	3	2.2	2.4	15	3	1.1	1.2	15	3.6
LAA 1801-1	1920	14400	18000	21600	27000	4	3.0	3.2	15	4	1.5	1.5	15	4.8
LAA 2401-1	2510	19200	24000	28800	36000	5	3.7	3.9	15	5	1.8	1.9	15	5.9
LAA 2801-1	2880	22400	28000	33600	42000	6	4.5	4.6	15	6	2.2	2.3	15	7.1
LAA 3001-1	3810	24000	30000	36000	45000	3	3.0	3.3	15	3	1.5	1.6	15	5.9
LAA 3601-1	4930	28800	36000	43200	54000	4	4.0	4.3	15	4	2.0	2.1	15	7.1
LAA 4201-1	6162	33600	42000	50400	63000	5	5.0	5.3	15	5	2.5	2.6	15	9.2
LAA 4601-1	7400	36800	46000	55200	69000	6	6.0	6.3	15	6	3.0	3.1	15	11.0

For 4 fpi, multiply capacity by 0.8

See Wiring Diagram, Figure 1

LAE - ELECTRIC DEFROST

FOR COOLERS FROM +26°F TO +34°F

MODEL	CFM	CAPACITY BTU/hr				240/1/60		DEFROST HEATERS									R-404a, R-507 OPERATING CHARGE (LB)
		8° FTD	10° FTD	12° FTD	15° FTD	FAN MOTOR		240/1/60			208/3/60			240/3/60			
						QTY	FLA	KW	FLA	MOP	KW	FLA	MOP	KW	FLA	MOP	
LAE 0571-2	1040	4560	5700	6840	8550	2	0.7	1.92	8.0	15	1.92	5.3	15	2.56	6.2	15	1.1
LAE 0721-2	1000	5760	7200	8640	10800	2	0.7	1.92	8.0	15	1.92	5.3	15	2.56	6.2	15	1.8
LAE 0901-2	980	7200	9000	10800	13500	2	0.7	1.92	8.0	15	1.92	5.3	15	2.56	6.2	15	2.5
LAE 1141-2	1620	9120	11400	13680	17100	3	1.1	2.88	12.0	15	2.88	8.0	15	3.84	9.2	15	2.6
LAE 1431-2	1560	11440	14300	17160	21450	3	1.1	2.88	12.0	15	2.88	8.0	15	3.84	9.2	15	3.6
LAE 1701-2	1920	13600	17000	20400	25500	4	1.5	3.84	16.0	20	3.84	10.7	15	5.12	12.3	20	4.8
LAE 2301-2	2510	18400	23000	27600	34500	5	1.8	4.80	20.0	25	4.80	13.3	20	6.40	15.4	20	5.9
LAE 2701-2	2880	21600	27000	32400	40500	6	2.2	5.76	24.0	30	5.76	16.0	20	7.68	18.5	25	7.1
LAE 2861-2	3810	22880	28600	34320	42900	3	1.5	4.80	20.0	25	4.80	13.3	20	6.40	15.4	20	5.9
LAE 3431-2	4930	27440	34300	41160	51450	4	2.0	5.76	24.0	30	5.76	16.0	20	7.68	18.5	25	7.1
LAE 4001-2	6162	32000	40000	48000	60000	5	2.5	4.80	20.0	25	4.80	13.3	20	6.40	15.4	20	9.2
LAE 4381-2	7400	35040	43800	52560	65700	6	3.0	5.76	24.0	30	5.76	16.0	20	7.68	18.5	25	11.0

For 4 fpi, multiply capacity by 0.8

See Wiring Diagram, Figure 3

LAG/LAH - GAS DEFROST

FOR COOLERS FROM +26°F TO +34°F

MODEL	CFM	CAPACITY BTU/hr				120/1/60		240/1/60		DEFROST HEATERS						R-404a, R-507 OPERATING CHARGE (LB)
		8° FTD	10° FTD	12° FTD	15° FTD	FAN MOTOR		FAN MOTOR		120/1/60			240/1/60			
						QTY	FLA	QTY	FLA	KW	FLA	MOP	KW	FLA	MOP	
LA(G)(H) 0571-1	1040	4560	5700	6840	8550	2	1.5	2	0.7	0.64	5.3	15	0.64	2.7	15	1.1
LA(G)(H) 0721-1	1000	5760	7200	8640	10800	2	1.5	2	0.7	0.64	5.3	15	0.64	2.7	15	1.8
LA(G)(H) 0901-1	980	7200	9000	10800	13500	2	1.5	2	0.7	0.64	5.3	15	0.64	2.7	15	2.5
LA(G)(H) 1141-1	1620	9120	11400	13680	17100	3	2.2	3	1.1	0.96	8.0	15	0.96	4.0	15	2.6
LA(G)(H) 1431-1	1560	11440	14300	17160	21450	3	2.2	3	1.1	0.96	8.0	15	0.96	4.0	15	3.6
LA(G)(H) 1701-1	1920	13600	17000	20400	25500	4	3.0	4	1.5	1.28	10.7	15	1.28	5.3	15	4.8
LA(G)(H) 2301-1	2510	18400	23000	27600	34500	5	3.7	5	1.8	1.60	13.3	20	1.60	6.7	15	5.9
LA(G)(H) 2701-1	2880	21600	27000	32400	40500	6	4.4	6	2.2	1.92	16.0	20	1.92	8.0	15	7.1
LA(G)(H) 2861-1	3810	22880	28600	34320	42900	3	3.0	3	1.5	1.60	13.3	20	1.60	6.7	15	5.9
LA(G)(H) 3431-1	4930	27464	34330	41196	51495	4	4.0	4	2.0	1.92	16.0	20	1.92	8.0	15	7.1
LA(G)(H) 4001-1	6162	32000	40000	48000	60000	5	5.0	5	2.5	1.60	13.3	20	1.60	6.7	15	9.2
LA(G)(H) 4381-1	7400	35040	43800	52560	65700	6	6.0	6	3.0	1.92	16.0	20	1.92	8.0	15	11.0

For 4 fpi, multiply capacity by 0.8

See Wiring Diagram, Figure 4

Use LAG model for reverse cycle defrost with electric drain pan (See piping diagram on page 10)

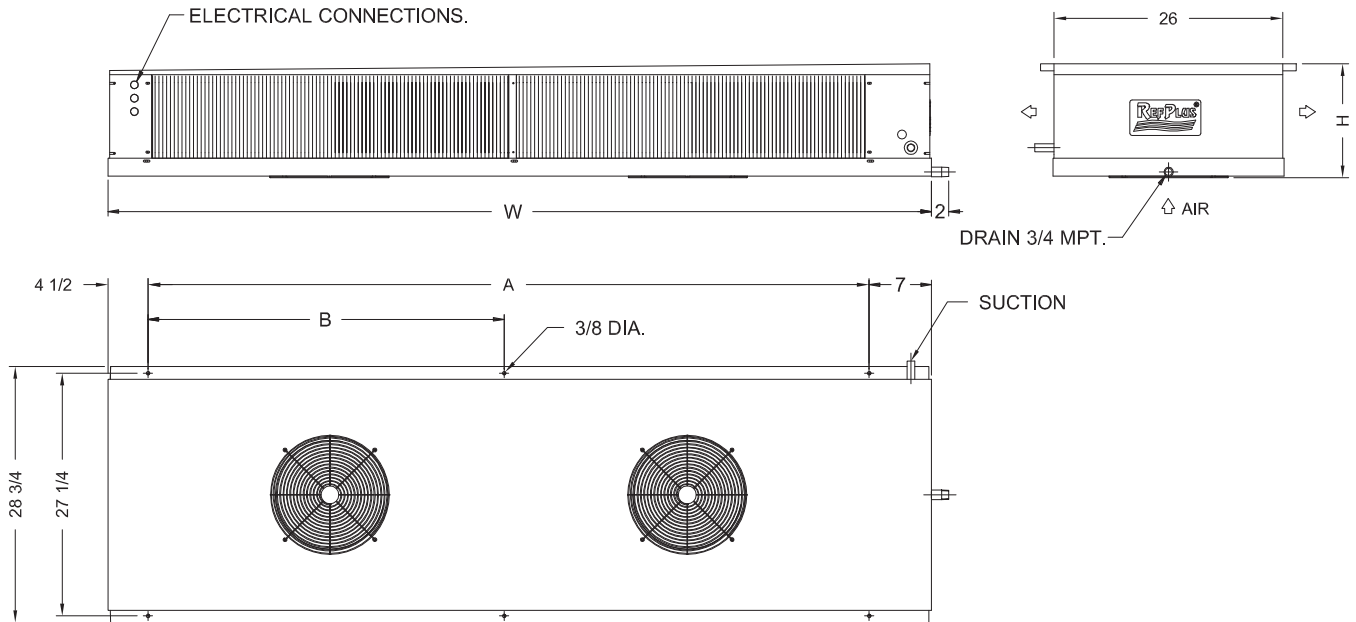
Use LAH model for three-pipe cycle defrost with electric drain pan (See piping diagram on page 10)

NOTE :

- Operating charge based on 30% liquid and 70% vapor at 25°F suction
- Fan Motor heat is not included in rating
Unit 0601 to 2801, add for Shaded Pole motor (58W) 198 BTU/hr
Unit 3001 to 4601, add for PSC motor (100W) 341 BTU/hr
Unit 3001 to 4601, add for EC motor (60W) 2051 BTU/hr
- For 200-240/1/50 use suffix 2 and multiply capacity by 0.92
- For R134a refrigerant charge, multiply R-404a by 1.09
- Air throw for LA series is 10 to 15 ft.

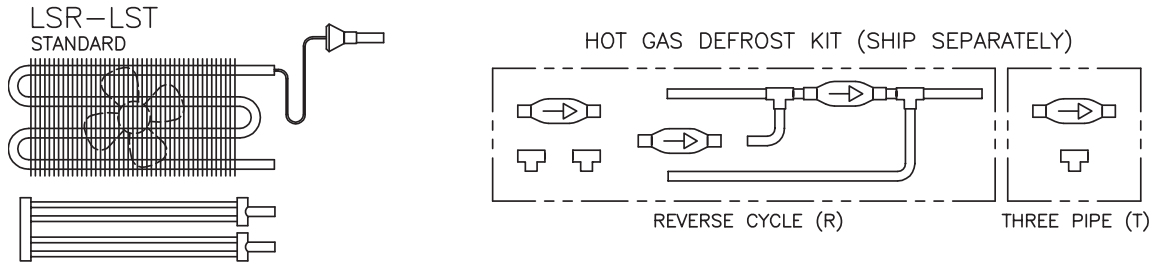
LA SERIES

MODEL	SHIPPING WEIGHT (lb)	MODEL	SHIPPING WEIGHT (lb)	MODEL	SHIPPING WEIGHT (lb)	UNIT DIMENSIONS (inches)				CONNECTION (inches)		
						W	H	A	B	LIQUID	SUCTION	LAH HOT GAS
LAA 0601	96	LAE 0571	107	LA(G)(H) 0571	99	44 1/2	10 1/8	33	-	1/2	5/8	1/2
LAA 0751	113	LAE 0721	126	LA(G)(H) 0721	116	52 1/2	10 1/8	41	-	1/2	5/8	1/2
LAA 0951	120	LAE 0901	133	LA(G)(H) 0901	123	52 1/2	10 1/8	41	-	1/2	5/8	1/2
LAA 1201	158	LAE 1141	174	LA(G)(H) 1141	165	72 1/2	10 3/8	61	-	1/2	7/8	1/2
LAA 1501	168	LAE 1431	184	LA(G)(H) 1431	173	72 1/2	10 3/8	61	-	1/2	7/8	1/2
LAA 1801	215	LAE 1701	241	LA(G)(H) 1701	222	92 1/2	10 3/8	81	40	1/2	7/8	1/2
LAA 2401	265	LAE 2301	298	LA(G)(H) 2301	277	112 1/2	10 3/8	101	40	1/2	7/8	1/2
LAA 2801	310	LAE 2701	350	LA(G)(H) 2701	335	132 1/2	10 3/8	121	60	1/2	7/8	1/2
LAA 3001	255	LAE 2861	288	LA(G)(H) 2861	268	112 1/2	13 1/8	101	40	1/2	1 1/8	1/2
LAA 3601	302	LAE 3431	342	LA(G)(H) 3431	327	132 1/2	13 1/8	121	60	1/2	1 1/8	1/2
LAA 4201	302	LAE 4001	335	LA(G)(H) 4001	315	112 1/2	18 1/8	101	40	1/2	1 1/8	5/8
LAA 4601	355	LAE 4381	395	LA(G)(H) 4381	380	132 1/2	18 1/8	121	60	1/2	1 1/8	5/8

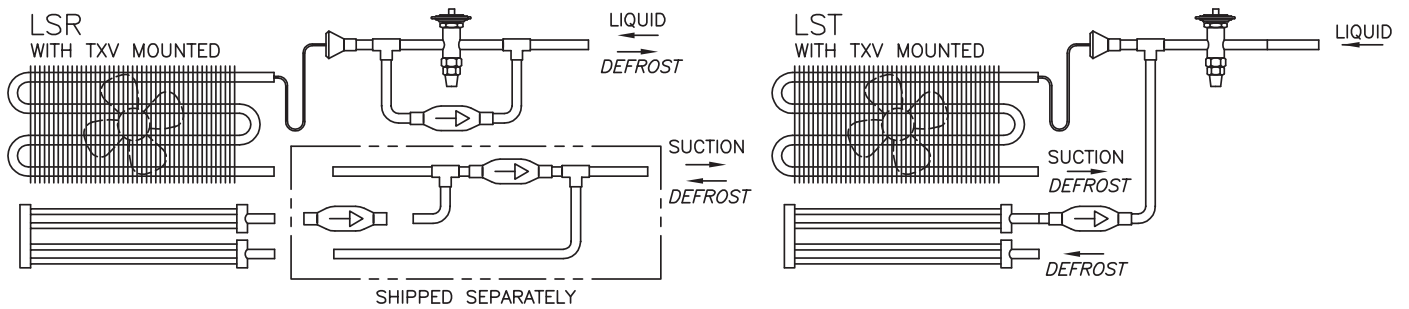


PIPING DIAGRAMS

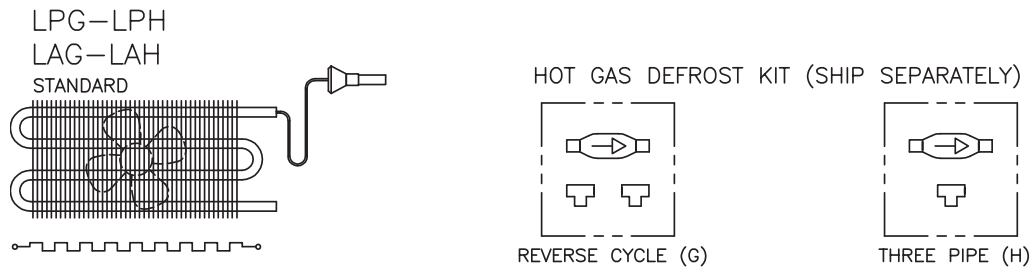
LSR/LST STANDARD PIPING DIAGRAMS



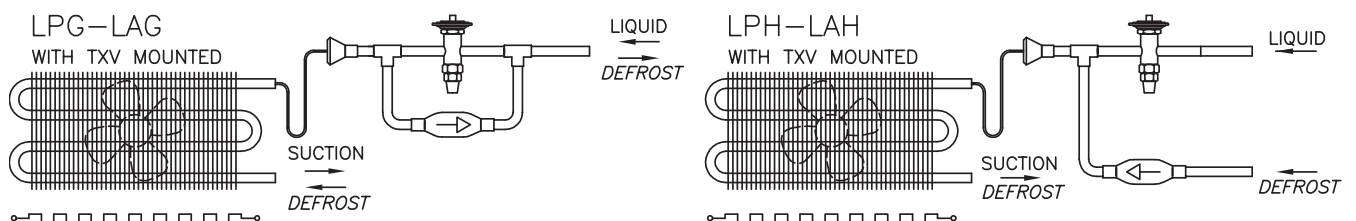
LSR/LST PIPING DIAGRAMS WITH OPTIONAL TXV MOUNTED



LPG/LPH/LAG/LAH STANDARD PIPING DIAGRAMS



LPG/LAG PIPING DIAGRAMS WITH OPTIONAL TXV MOUNTED

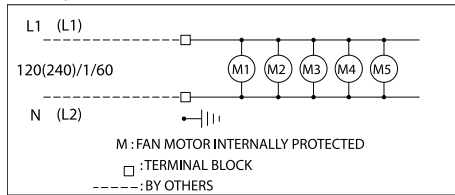


WIRING DIAGRAMS

Use copper conductor only

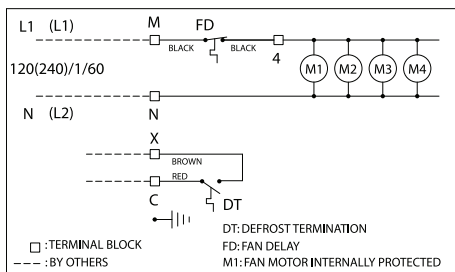
LSA, LPA & LAA

FIGURE 1



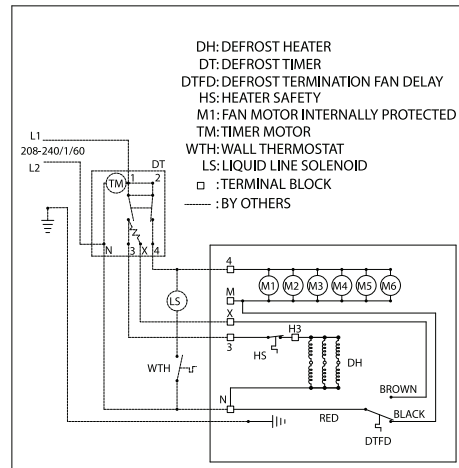
LSR & LST

FIGURE 2



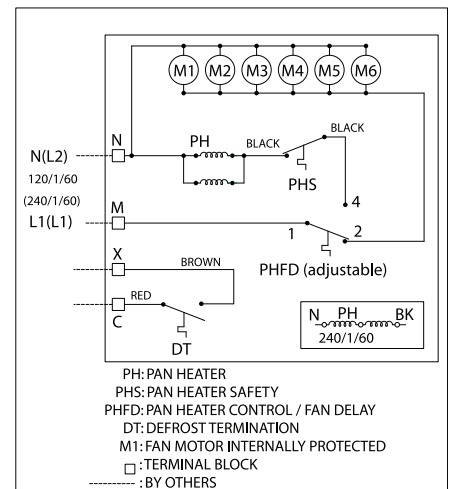
LSE, LPE & LAE

FIGURE 3



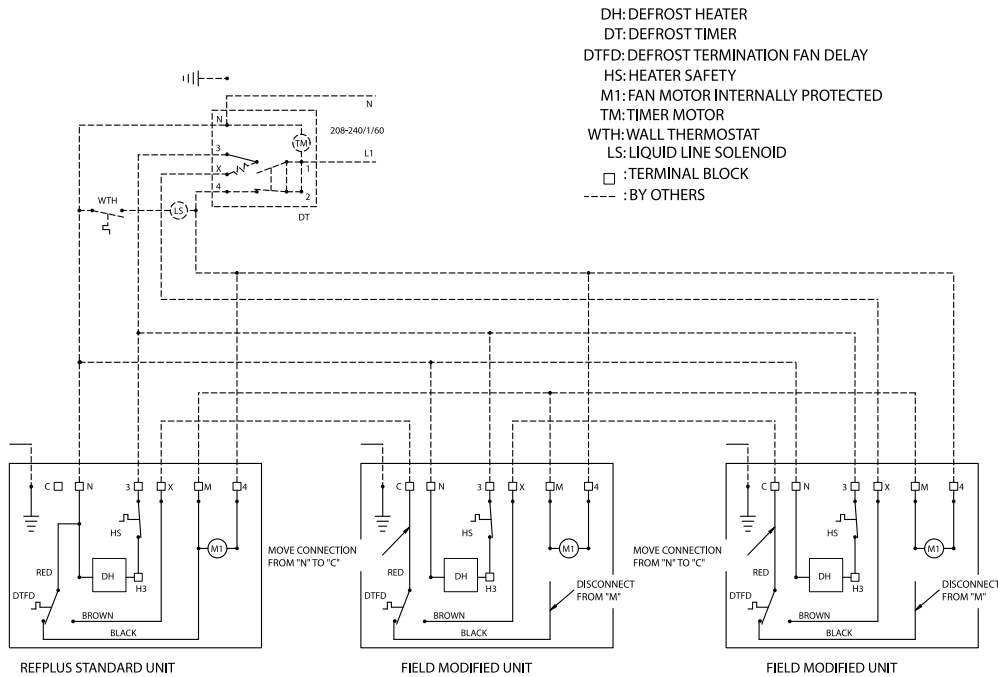
LPG, LAG, LPH & LAH

FIGURE 4



WIRING DIAGRAM FOR MULTIPLE ELECTRIC DEFROST UNITS

Use copper conductor only



COMMERCIAL WALK-IN UNIT COOLERS AND FREEZERS

APPLICATIONS

- **LSA, LPA** and **LAA** Models are for coolers +34°F and above
- **LPE, LAE, LPG, LAG, LPH,** and **LAH** Models are for coolers +26°F and above
- **LSE, LSR** and **LST** Models are for coolers and freezers ranging from -20°F to +34°F

SPECIFICATIONS

High velocity **LS** Series are of a single coil construction for an air distribution directed towards the center of the cooler or the freezer. Fans draw air through the evaporator coil and discharge it through the fan guards on the front of the unit.

Medium velocity **LP** Series and low velocity **LA** Series are of a dual coil construction for an equal air distribution on both sides of the unit. The fans draw air upward through the fan guards and discharge it through each evaporator coil.

Coils are manufactured with seamless deoxidized heavy wall copper tubes and aluminum plate fins. For maximum heat transfer, tubes are mechanically expanded into self-spaced plate fins with full collar for a permanent bond. Connections and bends are brazed with a high temperature brazing alloy. Coils are factory leak tested at 400 psig and purged with -40°F dew point dry air. Coils are pressurized and sealed at 20 psig before assembly. Coils are circuited for HCFC and HFC refrigerants.

The casing material for **LS, LP** and **LA** Series is heavy-gauge textured aluminum. All units come with stainless steel or plated hardware for corrosion-free assembly. **LP** and **LA** Series are provided with triple drain pans to prevent condensation and sweating. The outside drain pan is hinged mounted and can be easily removed.

LS units are provided with a removable 7/8" I.D. copper drain fitting.

LP and **LA** series are provided with welded 3/4 FPT fitting.

Heavy-duty fan motors are provided for long life and dependable service. These motors are permanently lubricated, totally enclosed and thermally protected.

They are available for 120/1/60 or 208-240/1/60. Note: 208/240/1/60 volt motors can also be used for 200-230/1/50. Fan assemblies are statically and dynamically balanced for smooth and vibration-free operation.

Fan guards on **LS** series are injection-molded polymers for consistency of dimensions and full protection of moving parts. Fan guards are shaped

to improve air throw and to reduce noise level. Epoxy-coated welded wire guards are optional. Fan guards for **LP** and **LA** series are epoxy-coated welded wire.

All units are provided with large access panels. **LS** Series have front and side doors, **LP** and **LA** Series have a side access door.

LSE, LPE and **LAE** Models are provided with a sealed non-adjustable, fan delay / defrost termination thermostat, and a heater safety thermostat. All units feature incoloy low-watt density tubular heaters. They are imbedded within the coil for positive defrost and high-energy efficiency. This reduces heat gain in coolers and freezers. All units use six heaters for 208-240/1/60 or 208-240/3/60 supply. These units can be factory or field wired for either single or three-phase supply without reducing watt input and unbalancing the phases.

LSR and **LST** Models are provided with a sealed non-adjustable fan delay, defrost termination thermostat and a hot gas drain pan loop. An **LSR** Model can be used for reverse cycle defrost, or **LST** Model for three-pipe defrost.

LPG, LPH, LAG and **LAH** Models are provided with an adjustable fan delay thermostat and a non-adjustable defrost termination thermostat, heater safety thermostat, and electric drain pan heaters. **LPG** and **LAG** Models must be used for reverse cycle defrost, or **LPH** and **LAH** Models for three-pipe defrost.

All models are provided with terminal blocks for easier field wiring. Terminals are clearly identified to match wiring diagram supplied with the unit.

All *Commercial* Walk-In Unit Coolers are of modular design using a minimum number of parts to simplify replacement and to reduce inventory.

LS, LP and **LA** series can be easily modified at job site, to and from any defrost system.

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