

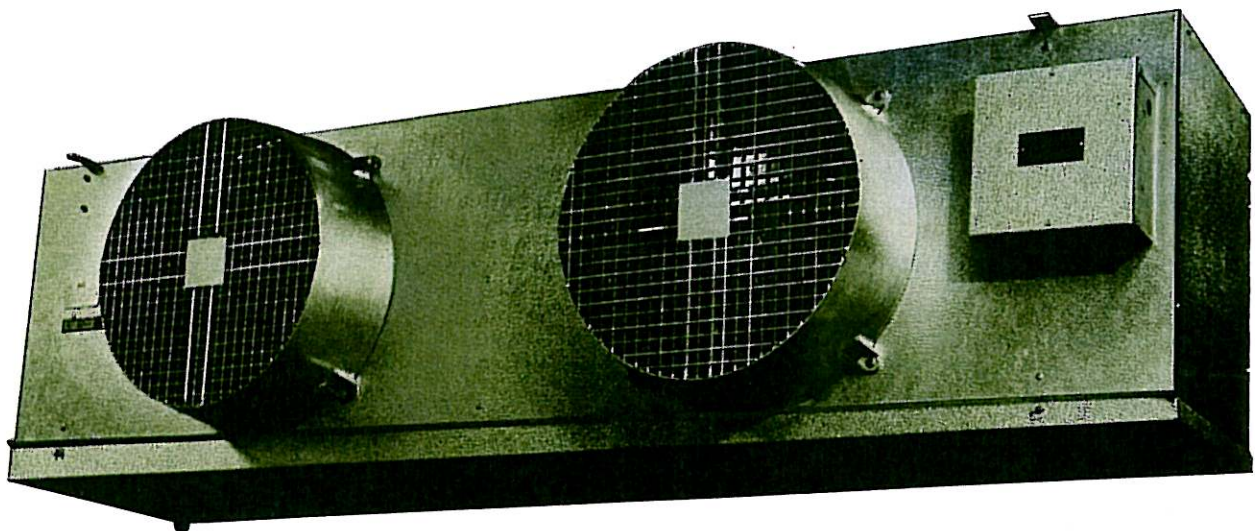
SS SERIES

Bulletin: SS-382

Supersedes: SS-1181

KRACK

Space-Saver Unit Coolers



*24 Medium Temp Models 11500-88000 BTUH
Air, Electric or Hot Gas Defrost*

*24 Low Temp Models 8500-55800 BTUH
Electric or Hot Gas Defrost*

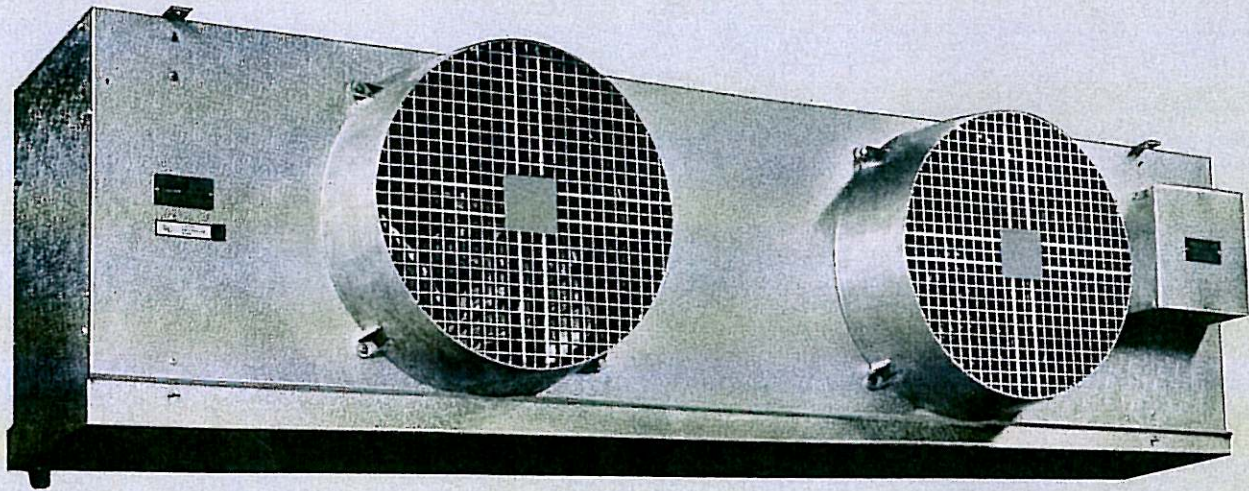
*Compact—Energy Efficient—Long Air Throw
Ideal for Medium Size Coolers and Freezers*

Krack Corporation

401 S. Rohlwing Road (Route 53) • Addison, IL 60101
(312) 629-7500 • Telex 72-1435 • Cable: KRACKOIL



FEATURES



High capacity compactness is created with 4 and 6 row deep coil elements. Coils utilize 1/2" OD staggered copper tubes mechanically expanded into corrugated aluminum fins spaced by tube collars.

Wide fin spacing reduces air blockage caused by frost. Four and five fin/inch models are recommended for low temp. Six and seven fin/inch models are ideal for med temp.

Automatic defrost with air or hot gas is available for all models. Electric defrost models are limited to four row coil elements with 4, 5 or 6 fins/inch.

Housing and drain pan are constructed of textured corrosion resistant aluminum. Top and front are one piece with removable end panels. Double pitched removable drain pans allow units to be hung level.

Individually compartmented fan sections prevent reverse rotation

in event of motor failure. Fans are 18 inch diameter and are located a proper distance from the coil to create efficient draw-thru air flow.

TEAO fan motors are totally enclosed with internal overheat protection and lifetime lubricated ball bearings. Motors are 1/4 HP, 1140 RPM, and are suitable for 115 or 208-230/1/50-60. Individual motors are wired to terminals in the unit junction box.

Plastic fan guards produce 50-60 ft air throw.

Low sound levels range from 60 decibels generated by one fan unit to 68 decibels produced by 3 fan units; as measured on the "A" scale, 6 feet in front of unit.

Quick disconnect valve is provided on the suction header for pressure gauge reading and/or flare connection to a pressuretrol.

DESIGN STANDARDS

- UL Listed
- ASHRAE Testing Procedure
- ARI Rating Standard
- National Electric Code

Capacity ratings are based on sensible heat removal with a TEV fed, medium frosted coil when:

- SST (sat suct temp) is above -20° F
Derate 10% for -30° F
- TEV superheat does not exceed 10° F above SST
- Med temp selection TD is from 10 to 15° F
Low temp selection TD is from 10 to 12° F
(TD is the temp difference between room and SST)
- Fan motor heat is not included in rating—add to room load—SS models 600 BTUH/FAN, SSX models 940 BTUH/FAN
- Derate 12% for 50 HERTZ (0.88 mult) or increase TD to compensate for lower fan RPM—10 to 11.4° TD or 12 to 13.6° TD

ACCESSORIES

- TEV Thermostatic Expansion Valve
- LSV Liquid Line Solenoid Valve
- SLHX Suction Liquid Heat Exchanger
- Defrost Time Clocks
- Defrost Control Panels

SPECIFICATIONS

AIR OR HOT GAS DEFROST—ANY MODEL
ELECTRIC DEFROST—SHADED MODELS ONLY

MEDIUM TEMP MODELS

7 FPI MODEL MED TEMP	BTUH 10°TD	BTUH 15°TD	AIR CFM	NO FANS	SURFACE SQ FT	WEIGHT-LBS A KGE-HGE	
SS-174-130	13000	19500	2200	1	270	105	115
SS-176-145	14500	21750	1900		410	120	130
SSX-174-180	18000	27000	3000	1	360	145	150
SSX-176-195	19500	29250	2700		545	160	165
SS-274-260	26000	39000	4400	2	540	180	185
SS-276-290	29000	43500	3800		820	210	220
SSX-274-360	36000	54000	6000	2	720	240	250
SSX-276-390	39000	58500	5400		1090	280	290
SS-374-390	39000	58500	6600	3	810	325	340
SS-376-435	43500	65250	5700		1230	370	385
SSX-374-540	54000	81000	9000	3	1080	435	450
SSX-376-585	58500	87750	8100		1635	500	510

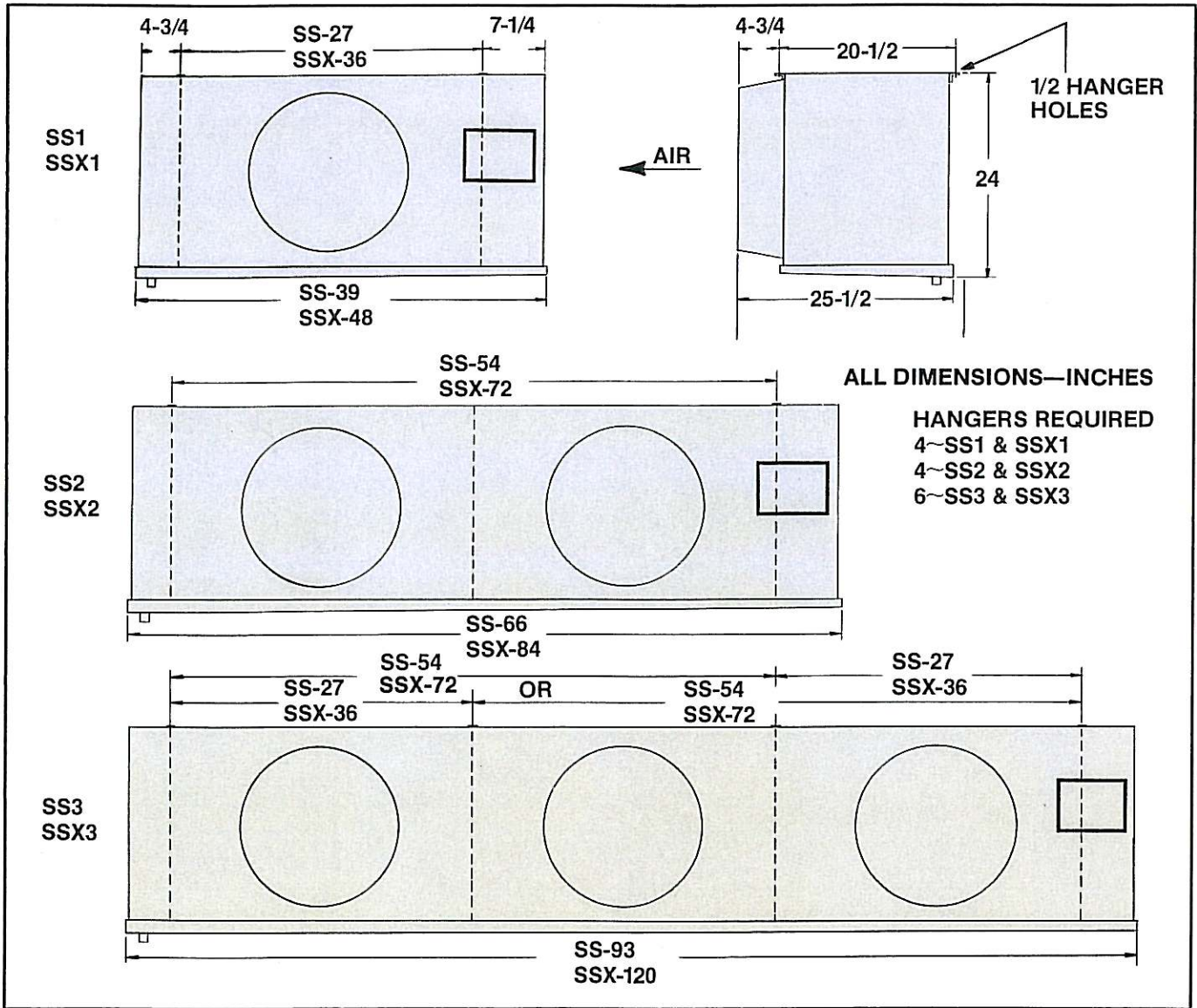
6 FPI MODEL MED TEMP	BTUH 10°TD	BTUH 15°TD	AIR CFM	NO FANS	SURFACE SQ FT	A	WEIGHT-LBS KGE-HGE	EDL
SS-164-115	11500	17250	2300	1	235	100	110	115
SS-166-130	13000	19500	2000		355	115	120	—
SSX-164-160	16000	24000	3100	1	315	135	145	150
SSX-166-175	17500	26250	2800		470	150	160	—
SS-264-230	23000	34500	4600	2	470	175	180	190
SS-266-260	26000	39000	4000		710	205	210	—
SSX-264-320	32000	48000	6200	2	630	235	240	255
SSX-266-350	35000	52500	5600		940	270	280	—
SS-364-345	34500	51750	6900	3	705	320	330	350
SS-366-390	39000	58500	6000		1065	360	370	—
SSX-364-480	48000	72000	9300	3	945	425	435	465
SSX-366-525	52500	78750	8400		1410	480	490	—

LOW TEMP MODELS

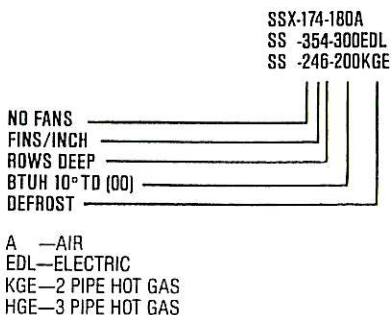
5 FPI MODEL LOW TEMP	BTUH 10°TD	BTUH 12°TD	AIR CFM	NO FANS	SURFACE SQ FT	A	WEIGHT-LBS KGE-HGE	EDL
SS-154-100	10000	12000	2400	1	200	95	100	105
SS-156-115	11500	13800	2100		300	110	115	—
SSX-154-140	14000	16800	3200	1	265	130	135	145
SSX-156-155	15500	18600	2900		400	145	150	—
SS-254-200	20000	24000	4800	2	400	170	175	185
SS-256-230	23000	27600	4200		600	195	200	—
SSX-254-280	28000	33600	6400	2	530	225	235	250
SSX-256-310	31000	37200	5800		800	260	265	—
SS-354-300	30000	36000	7200	3	600	305	315	340
SS-356-345	34500	41400	6300		900	345	355	—
SSX-354-420	42000	50400	9600	3	795	410	425	450
SSX-356-465	46500	55800	8700		1200	460	475	—

4 FPI MODEL LOW TEMP	BTUH 10°TD	BTUH 12°TD	AIR CFM	NO FANS	SURFACE SQ FT	A	WEIGHT-LBS KGE-HGE	EDL
SS-144-85	8500	10200	2500	1	165	90	95	100
SS-146-100	10000	12000	2200		245	100	105	—
SSX-144-120	12000	14400	3300	1	215	120	130	135
SSX-146-135	13500	16200	3000		325	135	145	—
SS-244-170	17000	20400	5000	2	330	165	170	180
SS-246-200	20000	24000	4400		490	190	195	—
SSX-244-240	24000	28800	6600	2	430	220	225	240
SSX-246-270	27000	32400	6000		650	250	255	—
SS-344-255	25500	30600	7500	3	495	300	305	330
SS-346-300	30000	36000	6600		735	330	340	—
SSX-344-360	36000	43200	9900	3	645	395	410	435
SSX-346-405	40500	48500	9000		975	445	455	—

DIMENSIONS



MODEL KEY



PLEASE SPECIFY:

- Complete Model Number
- Refrigerant—R12, R22, R502
- Room Temp
- Sat Suction Temp
- Electrical Characteristics
- Motors—Heaters—Control Voltage
- Accessories

We reserve the right to change or revise specifications and product design in connection with any feature of our products. Such changes do not entitle the buyer to corresponding changes, improvements, additions or replacements for equipment previously sold or shipped.

Application of Space-Saver

unit coolers is recommended in medium size coolers and freezers above -20° F with ceiling heights up to 18 feet. Air throw is 50-60 ft. Locate units 14 inches from walls for best results. Support piping adequately with suction line "P" traps at unit. Locate LSV close to TEV. Condensate drain lines must be adequately heat traced in rooms below freezing. Use externally equalized TEV.

Units circuited for water, glycol brines, or recirculated halocarbon systems are available.

COIL AND CONNECTION DATA

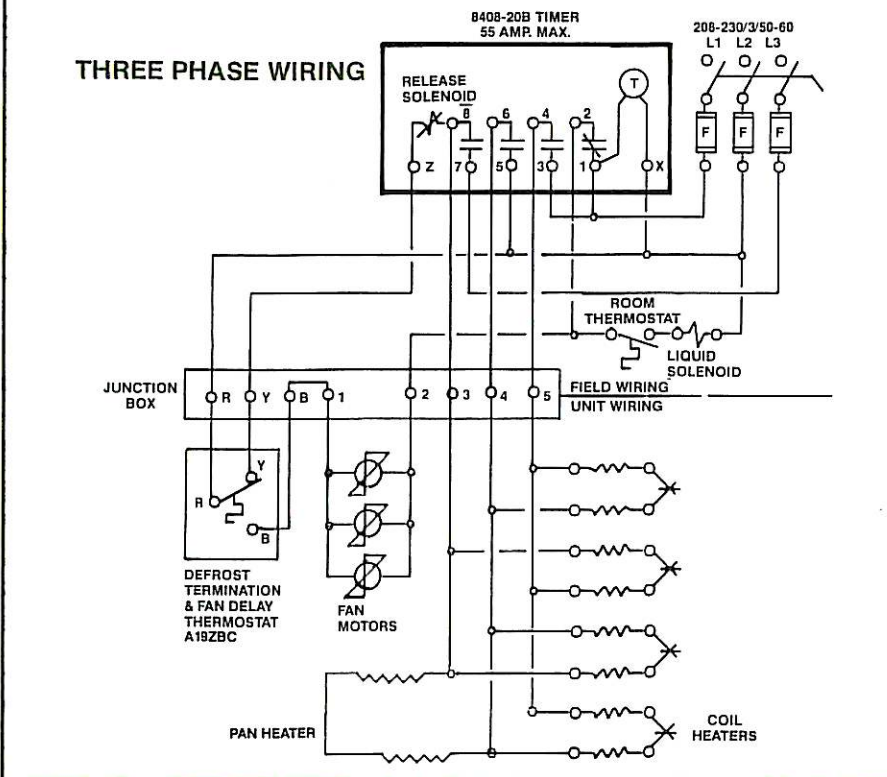
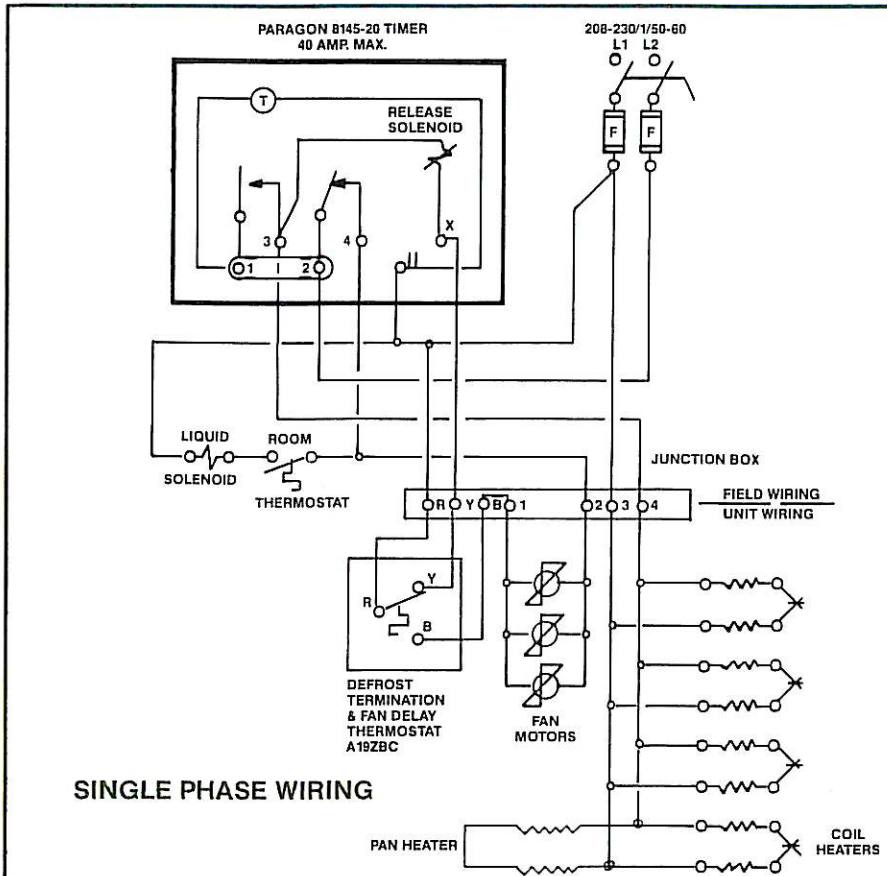
MODEL	MED TEMP 7-6 FPI	LOW TEMP 5-4 FPI	ROW DEPTH	FACE SQFT	VOL CUFT	CHARGE-LBS		DRAIN FPT	MED TEMP		LOW TEMP	
						R22	R502		LIQ	SUCT	LIQ	SUCT
SS 174-164	154-144	4	3.9	0.19	3.8	4.1	3/4	1/2	1-1/8	1/2	1-3/8	
SS 176-166	156-146	6										0.28
SSX 174-164	154-144	4	5.2	0.24	5.0	5.4	3/4	1/2	1-1/8	1/2	1-3/8	
SSX 176-166	156-146	6										0.37
SS 274-264	254-244	4	7.9	0.36	7.3	8.0	3/4	5/8	1-3/8	1/2	1-5/8	
SS 276-266	256-246	6										0.54
SSX 274-264	254-244	4	10.5	0.47	9.6	10.5	3/4	5/8	1-3/8	5/8	2-1/8	
SSX 276-266	256-246	6										0.71
SS 374-364	354-344	4	11.8	0.53	10.8	11.8	1	7/8	1-5/8	7/8	2-1/8	
SS 376-366	356-346	6										0.79
SSX 374-364	354-344	4	15.7	0.70	14.3	15.6	1	7/8	1-5/8	7/8	2-1/8	
SSX 376-366	356-346	6										1.05

ELECTRICAL DATA

MODEL	MED TEMP 7-6 FPI	LOW TEMP 5-4 FPI	NO FANS	MTR AMPS		EDL HEATER AMPS				WATTS 230	HOT GAS PAN AMPS		WATTS 115
				115/1	230/1	208/1	230/1	208/3	230/3		115/1	230/1	
SS 174-164	154-144	1	3.0	1.5	11.4	12.6	8.1	9.0	2900	4.4	2.2	500	
SS 176-166	156-146				—	—	—	—	—				
SSX 174-164	154-144	1	3.0	1.5	14.9	16.5	10.8	12.0	3800	5.2	2.6	600	
SSX 176-166	156-146				—	—	—	—	—				
SS 274-264	254-244	2	6.0	3.0	22.0	24.3	16.2	18.0	5600	7.0	3.5	800	
SS 276-266	256-246				—	—	—	—	—				
SSX 274-264	254-244	2	6.0	3.0	29.1	32.2	21.7	24.1	7400	8.7	4.4	1000	
SSX 276-266	256-246				—	—	—	—	—				
SS 374-364	354-344	3	9.0	4.5	33.1	36.5	24.4	27.1	8400	10.5	5.3	1200	
SS 376-366	356-346				—	—	—	—	—				
SSX 374-364	354-344	3	9.0	4.5	43.3	47.8	32.5	36.1	11000	12.2	6.1	1400	
SSX 376-366	356-346				—	—	—	—	—				

3 FAN UNITS MAY HAVE 230/1 MOTORS WIRED FOR 3 PHASE REQUIRING 2.6 FLA

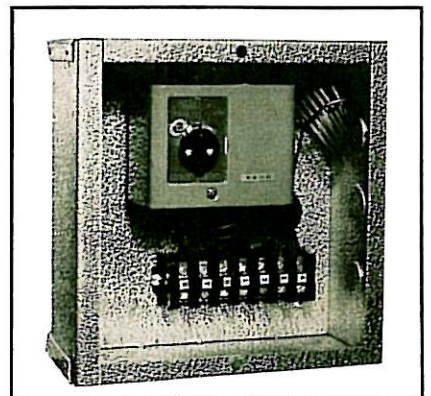
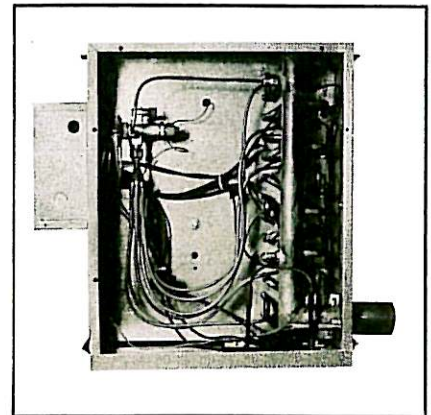
ELECTRIC DEFROST



Efficient stainless steel tubular heaters rated for 115V, are inserted in fin grooves, four on the face and four on the coil bottom. A U-bend heater is provided in the drain pan. Heaters are replaceable from the face or by removing the drain pan. Standard electric defrost configuration is with 208-230/1/50-60 fan motors and heaters wired for 230 volt, single or three phase.

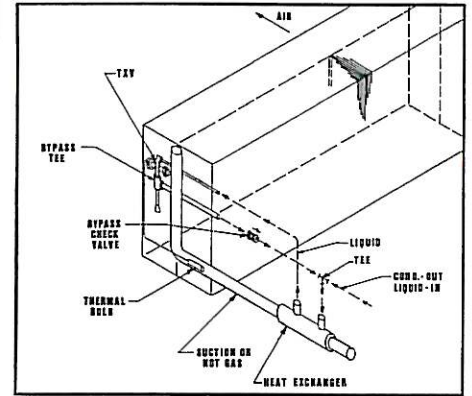
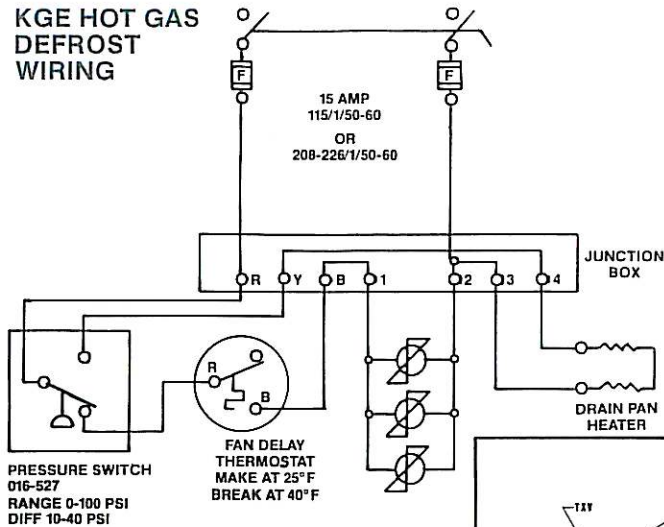
Defrost cycles are time clock initiated and temperature terminated by a factory mounted adjustable thermostat which creates a fan re-starting delay preventing warm air and condensate from being discharged into the space. The timer has a fail-safe feature. Its time setting is longer than necessary resulting in a second termination if the thermostat should fail.

When defrosting two Space-Savers at one time with one time clock; temp termination thermostats must be wired in series.



HOT GAS DEFROST

Reverse cycle (2 pipe) systems distribute compressor discharge gas thru the suction line during defrost. Defrost condensate is relieved thru a check valve, by-passing the TEV and LSV, to the liquid line which is reduced in pressure. Hot gas flared tees and check valves are provided for field assembly with each unit. Defrost cycles are time clock initiated and terminated. A factory mounted pressure switch; senses the rise in suction line pressure; cycles fans off and energizes a drain pan stainless steel tubular heater. A temperature sensing klixon; located in a coil return bend; senses when the coil has been re-cooled after termination; and cycles the fans on. Pan heaters will have been de-energized by the pressure switch. All models require one 15 amp, 115 or 208-230/1/50-60 circuit adequately protected.



Three pipe systems distribute compressor discharge gas in a separate hot gas line, controlled by a solenoid valve, thru a check valve to the liquid distributor tee inlet. Defrost condensate and gas blow-by is collected in a suction trap which may meter liquid to a semi-hermetic compressor suction. Defrost cycles are time clock initiated and terminated. The clock cycles fan motors, drain pan heater, and hot gas solenoid. Suction pressure control may be required to maintain defrost pressure above 40° F or to control compressor crankcase pressure.

