REPLACED BY CK/HC SK Series

Bulletin: SK-588 Supersedes: HS-584

# Hite-Saver Unit Coolers



Thirty-five Models 3400 to 31,200 BTUH Air, Electric, or Hot Gas Defrost Low Silhouette—Long Air Throw Ideal For Walk-In Coolers and Freezers

Low-Silhouette is ideal for 8 to 12 foot high coolers and freezers.

High Efficiency four row deep coils utilize 3/8" 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 six fin/inch models are recommended for low temp. Four, six and eight fin/inch models are available for med temp.

Automatic Defrost with air, electricity or hot gas is available for all models.

Housing and Drain Pan are constructed of textured corrosion resistant aluminum. Top and front housing is one piece with removable end panels. Double pitched, hinged drain pans allow units to be hung flush to ceiling.

Individually Compartmented fan sections prevent reverse rotation in event of motor failure. Ten inch diameter fans are positioned 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 have 26 watt output, 1550 RPM, and have plug-in receptacles for quick connection. High efficiency PSC motors are available as an option.

Wire Fan Guards are standard for low temperature applications. Plastic Fan Guards are standard for medium temperature air defrost models.

Low Sound Levels range from 57 decibels generated by one fan units to 63 decibels produced by 6 fan units; as measured on the "A" scale, 6 feet in front of unit.

#### **DESIGN STANDARDS**

- UL Listed
- CSA Approved
- National Electric Code
- NSF With Wire Fan Guards

#### **ACCESSORIES**

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



### **Krack Corporation**



## **SPECIFICATIONS**

#### CAPACITY DATA

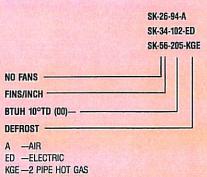
#### MEDIUM TEMPERATURE—AIR DEFROST

ENGINEE SAN	BTUH	NO	N5/574
MODEL	@10° TD	FANS	CFM
SK-14-39	3900	1	808
SK-S4-59	5900	2	1238
SK-24-78	7800	2	1617
SK-34-117	11700	3	2425
SK-44-157	15700	4	3234
SK-54-195	19500	5	4042
SK-64-234	23400	6	4850
SK-16-47	4700		774
SK-S6-72	7200	2	1187
SK-26-94	9400	2	1548
SK-36-141	14100	3	2322
SK-46-188	18800	4	3096
SK-56-235	23500	5	3870
SK-66-282	28200	6	4644
			Margarita
SK-18-52	5200	1	740
SK-S8-80	8000	2	1135
SK-28-104	10400	2	1479

#### LOW TEMPERATURE—ELECTRIC OR GAS DEFROST

MODEL	BTUH @ -20°	10° TD +20°	NO FANS	CFM
SK-14-34	3400	3900	1	808
SK-S4-51	5100	5900	2	1238
SK-24-68	6800	7800	2	1617
SK-34-102	10200	11700	3	2425
SK-44-136	13600	15600	4	3234
SK-54-170	17000	19500	5	4042
SK-64-204	20400	23400	6	4850
	in La			
SK-16-41	4100	4700	1	774
SK-S6-62	6200	7200	2	1187
SK-26-82	8200	9400	2	1548
SK-36-123	12300	14100	3	2322
SK-46-164	16400	18800	4	3096
SK-56-205	20500	23500	5	3870
SK-66-246	24600	28200	6	4644
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#### MODEL KEY



HGE-3 PIPE HOT GAS

HGG-3 PIPE HOT GAS DRAIN PAN

KGG-2 PIPE HOT GAS DRAIN PAN

#### **ELECTRICAL DATA**

15600

20800

26000

31200

SK-38-156

SK-48-208

SK-58-260

SK-68-312

FAN MOTOR AMPS				ELECTRIC DEFROST HEATER AMPS				KGE-HGE PAN AMPS				
MODEL	115/1	230/1	208/1	230/1	208/3	230/3	460/1	460/3	WATTS	115/1	230/1	WATTS
SK-1	1.6	0.8	4.7	5.2	2.7	3	2.6	1.5	1200	2.6	1.3	300
SK-S	3.2	1.6	6.4	6.7	3.6	4	3.5	2.0	1600	4.4	2.2	500
SK-2	3.2	1.6	9.4	10.4	5.4	6	5.3	3.1	2400	5.2	2.6	600
SK-3	4.8	2.4	14.1	15.6	8.2	9.1	7.9	4.6	3600	7.0	3.5	800
SK-4	6.4	3.2	18.8	20.8	10.9	12.1	10.5	6.1	4800	8.7	4.4	1000
SK-5	8.0	4.0	23.6	26.1	13.7	15.1	13.1	7.6	6000	9.6	4.8	1100
SK-6	9.6	4.8	28.3	31.3	16.4	18.1	15.7	9.1	7200	12.2	6.1	1400

#### **COIL DATA**

100 E	FACE	COIL	REFRIG	CONNECTIONS			KG-HG
MODEL	AREA SQ FT	VOL CU FT	CHARGE LBS	LIQ FLARE	SUCT	DRAIN FPT	TEE ODS
SK-1	1.72	.056	1.26	1/2	5/B	3/4	1/2
SK-S	2.58	.084	1.89	1/2	7/8	3/4	1/2
SK-2	3.44	.112	2.52	1/2	7/ <sub>B</sub>	3/4	1/2
SK-3	5.16	.168	3.78	1/2	7/8	3/4	1/2
SK-4	6.88	.224	5.04	1/2	11/8	3/4	1/2
SK-5	8.60	.280	6.30	1/2	11/8	3/4	1/2
SK-6	10.32	.336	7.56	1/2	11/4	3/4	1/2

2219

2958

3698 4438

3

4

5

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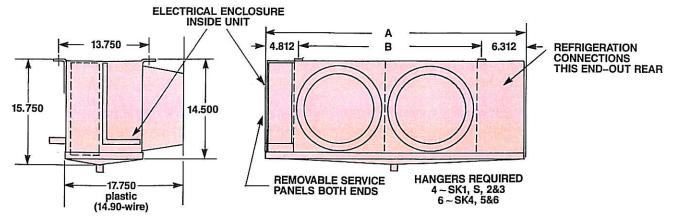
All coils supplied with Schrader Valve for super heat measurement.

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.

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—use 10 to 15°FTD Low temp selection—use 8 to 12°FTD (TD is the temp difference between room and SST)
- · Fan motor heat is not included in rating-add to room load-368 BTUH per 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

## DIMENSIONS



#### **DIMENSIONS (IN)** SK MODEL A В 29 18 S 38 27 2 47 36 3 65 54 4 36/36 83 5 101 36/54 6 119 54/54

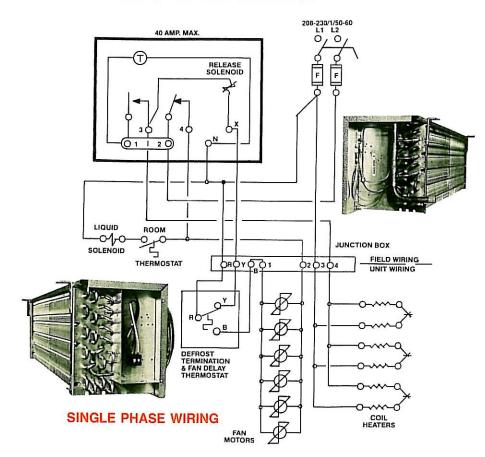
#### Please Specify:

- Complete Model Number
- Refrigerant—R12, R22, R502
- Room Temp
- Sat Suction Temp
- Electrical Characteristics
  Motors—Heaters—Control Voltage
- Accessories
- Plastic Or Wire Fan Guards for air defrost models

Application of Hite-Saver unit coolers is recommended in small walk-in coolers and freezers above -20°F with ceiling heights up to 12 feet. Air throw is 40-50 ft. with plastic guards, 10-20 ft. with wire guards. Locate units 12 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.

## **ELECTRIC DEFROST**



Efficient stainless steel tubular heaters rated for 115 volts, are inserted in fin grooves, two on the face and four on the coil bottom. 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. If 208 volt or lower power abnormally extends defrost cycles, three phase heaters are easily reconnected in star to obtain 230 volt wattage.

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 Hite-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, bypassing the TEV and LSV, to the liquid line which is reduced in pressure.

Sweat ½ ODS by-pass 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 deenergized 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 blowby 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.

Hot Gas Defrost Units are also available with a hot gas loop for the drain pan, in lieu of using electric heaters.

