

LIST PRICES

Prices effective 7/2/18

Add appropriate expansion valve price(s) from page 13 of this price sheet when unit coolers are for use with KramerSaver or Thermobank condensing units. Liquid line solenoid and mechanical room T-Stat prices (shipped loose) are already included in the list price for KramerSaver or Thermobank condensing units. All system accessories and optional component prices must be added when evaporators are used with Next-Gen and Next-Gen II condensing units.

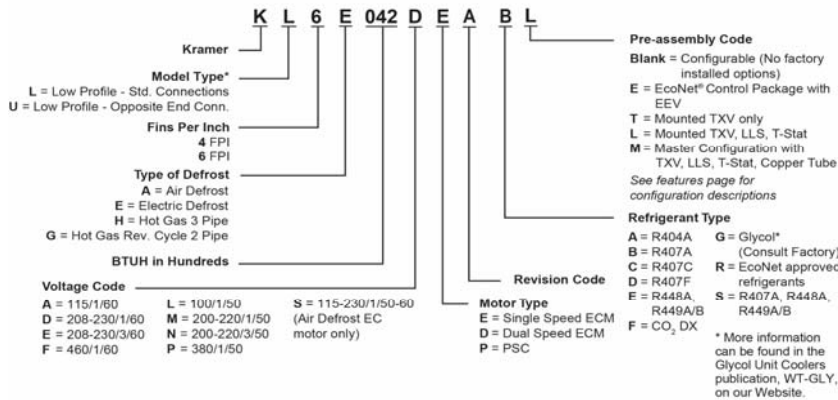
ALL PRODUCTS, EXCEPT SURFACE COILS AND PARTS, ARE SHIPPED F.O.B. POINT OF SHIPMENT WITH FULL FREIGHT ALLOWED ON SINGLE ORDERS WITH A NET PRICE VALUE OF \$10,000 OR MORE, WITHIN THE CONTINENTAL USA (EXCLUDING ALASKA AND HAWAII). BUYER WILL BEAR ALL ADDITIONAL COSTS FOR SPECIAL ROUTING AND HANDLING REQUESTS. (See page 41).

SEE THE BACK COVER FOR "CONDITIONS OF SALE AND WARRANTY"

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Due to ongoing product development, specification and prices are subject to change without notice.

**NEXT-GEN ALL-TEMP
LOW PROFILE UNIT COOLERS**



* NOTE: Refrigerant and electrical connection locations have been changed for the Next-Gen All-Temp design. Standard connections ("L") are now opposite of the legacy All-Temp models. Mirror image connections ("U" - same end as legacy All-Temp models) are available only as built-to-order base units with no installed options.

STANDARD FEATURES

- Textured aluminum construction
- Flush ceiling mount with slotted hangers and hinged access end panels
- Face mounted heaters and fixed defrost termination, fan delay and heater safety controls
- Single or dual voltage EC motors. Optional Dual speed available

- All units are provided with sweat refrigerant connections
- U. L. approved black plastic fan guards and deep draw venturi provide optimal air flow
- All units suitable for use with R404A, R407A, R407C, R407F, R448A, R449A/B. Can be configured for use with CO₂ DX or Glycol

ORDERING INFORMATION

1. Model number
2. Motor Type
3. Motor electrical (voltage/phase/frequency)
4. Heater electrical (voltage/phase/frequency)
5. Units with mounted components require the following information: Refrigerant type, evaporator temperature and T.D.

NEXT-GEN ALL-TEMP • AIR DEFROST MODELS - 6 FPI																
NO. OF FANS	MODEL NUMBER	Electronically Commutated Motors†				Single Speed PSC Motors					Baked Epoxy Coil Coating (Other coatings are also available. Contact Applications for a special quote). See note 6 below.	Insulated Drain Pan	Heat Exchanger (Shipped loose) selected @10" T.D./R407A		Unit Cooler Approx. Ship Wt (LBS)	
		Configurable Model - Single speed operation (Motor code "E". No accessories mounted)	Configurable Model - Dual speed operation (Motor code "D". No accessories mounted)	EcoNet® Control Package^ Pre-Assembled with factory mounted accessories - Assembly Code E (Motor code "D") See note 8 below.	Pre-Assembled with factory mounted accessories - Assembly Code L or M (Motor code "E" or "D"). See notes 1, 2 & 3 below.	Configurable Model - Single speed operation (Motor code "P". No accessories mounted)	Pre-Assembled with factory mounted accessories - Assembly Code L or M (Motor code "P"). See notes 1, 2 & 3 below.	Configurable Model - Single speed operation (Motor code "P". No accessories mounted)	Pre-Assembled with factory mounted accessories - Assembly Code L or M (Motor code "P"). See notes 1, 2 & 3 below.	Configurable Model - Single speed operation (Motor code "P". No accessories mounted)			460V/1 (Voltage code "F")	Model		List Price
		115V/208-230V/1 (Voltage code "S")	115V/208-230V/1 (Voltage code "S")	115V/208-230V/1 (Voltage code "S")	115V/1 (Voltage code "A")	115V/1 (Voltage code "A")	115V/1 (Voltage code "A")	208-230V/1 (Voltage code "D")	208-230V/1 (Voltage code "D")	208-230V/1 (Voltage code "D")			460V/1 (Voltage code "F")			
1	KL6A041*	\$1,761	\$1,761	\$3,627	\$2,792	\$1,393	\$2,424	\$1,447	\$2,478	\$1,621	\$413	\$567	HX-25	\$163	41	
	KL6A052*	1,809	1,809	3,675	2,840	1,445	2,476	1,467	2,498	1,648	423	567	HX-25	163	44	
	KL6A066*	2,099	2,099	3,965	3,143	1,735	2,766	1,864	2,895	2,045	453	567	HX-50	192	47	
2	KL6A073*	2,742	2,742	4,608	3,773	1,993	3,024	2,151	3,182	2,521	617	716	HX-50	192	52	
	KL6A094*	3,106	3,106	4,972	4,137	2,357	3,388	2,394	3,425	2,767	639	716	HX-50	192	55	
	KL6A117*	3,264	3,264	5,130	4,295	2,564	3,595	2,598	3,629	2,942	671	716	HX-75	264	58	
3	KL6A130*	3,485	3,485	5,351	4,516	2,809	3,840	2,850	3,881	3,207	702	716	HX-75	264	62	
	KL6A141*	4,216	4,216	6,082	5,247	3,131	4,162	3,176	4,207	3,711	951	869	HX-75	264	72	
	KL6A161*	4,682	4,682	6,548	5,713	3,569	4,600	3,629	4,660	4,176	977	869	HX-75	264	78	
4	KL6A181*	5,103	5,103	6,969	6,134	4,013	5,044	4,071	5,102	4,613	1,004	869	HX-100	337	85	
	KL6A195*	5,497	5,497	7,363	6,528	4,331	5,362	4,388	5,419	4,964	1,043	999	HX-100	337	115	
	KL6A235*	6,667	6,667	8,533	7,698	5,044	6,075	5,445	6,476	6,249	1,094	999	HX-150	389	124	
5	KL6A260*	7,265	7,265	9,131	8,296	5,290	6,321	5,699	6,730	6,377	1,145	999	HX-150	389	147	
	KL6A295*	8,332	8,332	10,198	9,363	6,295	7,674	6,801	8,180	7,804	1,351	1,140	HX-150	389	218	
	KL6A330*	8,943	8,943	10,809	9,974	6,665	8,044	7,198	8,577	8,325	1,672	1,296	HX-250	538	257	
6	KL6A390*	10,041	10,041	11,907	11,072	7,770	9,149	8,257	9,636	9,383	1,735	1,296	HX-250	538	262	

†Electronically Commutated motors are not available for 380V, 460V, or 575V. Use PSC motors for 460V volts. Use EC motors for 100-230V 50Hz operations.

‡These models utilize dual voltage EC motors that are configurable for single or dual speed operation. Dual speed EC motors are compliant with California Title 24 regulations.

§Dual speed motor operation employs a relay to control motor speed. LLS voltage must match the voltage applied to the motor. Electric default: dual speed relay voltage is 230V.

¶Specify motor speed: single (motor code E) or dual speed (motor code D) at time of order. (115 and 230 volt dual speed relays are both included with S voltage code.)

* Refer to nomenclature example to complete the model number.

‡ Reference the catalog for 3 phase heater availability.

1. Pre-Assembly code L indicates that the unit includes factory mounted txv, liquid line solenoid, mechanical room t-stat.

2. Pre-Assembled code M designates a Master unit for a 2 evaporator Master / Slave evaporator setup. A master unit includes a mounted txv, liquid line solenoid, mechanical room t-stat and copper tee. Code M models are to be matched with an identical model, suffix code T, in order to complete the Master/Slave combination. See note 3 for description of code T models.

3. For Pre-Assembled code T (mounted TXV only), select a configurable model then add \$393 for up to 3 ton requirement or \$691 for 4 to 9 ton mounted txv to price of the configurable unit.

4. See page 16 for expansion valve pricing.

5. \$332 List adder for adjustable termination/fan delay control in lieu of a fixed controls.

6. Baked epoxy coating covers the coil only. Contact Application Engineering for coated housing or alternate coil coating. ElectroFin, Bronz-Glow and Heresite are available coating options.

7. Electric default: Dual speed relay voltage is 230V.

8. EcoNet® Control package includes: Sporlan EEV; suction pressure transducer; suction, entering air, coil temp thermistors; local on-board two-row LCD display and push button adjustments. Controller replaces TXV, liquid solenoid valve, room thermostat, defrost termination and fan delay, and time clock.

AIR DEFROST EVAPORATORS

MEDIUM SILHOUETTE

Model Number	BTU/HR @ 10° TD	Electronically Commutated Motors†						PSC Motors					
		Single Speed		Dual Speed		Variable Speed		Single Speed					
		115V/1	230V/1	115V/1	230V/1	460V/1**	115V/1	230V/1	460V/1	575V/1			
4 FPI													
MSA-126	12,600	\$5,014	\$5,099	\$5,459	\$5,614	\$6,018	No longer available	\$4,386	\$4,483	\$4,644	\$4,737		
MSA-169	16,900	6,079	6,186	6,525	6,701	7,105		4,908	5,019	5,170	5,273		
MSA-224	22,400	7,488	7,645	8,157	8,418	9,024		6,113	6,282	6,908	7,046		
MSA-287	28,700	9,241	9,592	9,910	10,365	10,971		7,936	8,313	8,744	8,918		
MSA-340	34,000	11,685	11,941	12,235	12,490	12,861		9,773	10,018	10,331	10,538		
MSA-395	39,500	13,202	13,852	13,751	14,401	14,771		11,442	12,079	12,670	12,925		
MSA-465	46,500	16,298	16,489	17,123	17,314	17,868		13,479	13,664	14,475	14,764		
MSA-585	58,500	17,105	17,647	17,930	18,471	19,026		14,557	15,086	16,076	16,399		

6 FPI													
CSA-145	14,500	\$5,219	\$5,287	\$5,665	\$5,802	\$6,207	No longer available	\$4,550	\$4,628	\$4,819	\$4,915		
CSA-191	19,100	6,317	6,330	6,763	6,845	7,250		5,066	5,078	5,299	5,405		
CSA-240	24,000	7,784	7,955	8,453	8,727	9,334		6,375	6,558	6,921	7,061		
CSA-305	30,500	9,588	9,846	10,256	10,617	11,225		8,206	8,480	8,764	8,940		
CSA-370	37,000	12,168	12,507	12,718	13,056	13,426		10,110	10,431	10,787	11,002		
CSA-415	41,500	13,772	13,995	14,595	14,820	15,374		11,816	12,043	12,300	12,547		
CSA-490	49,000	16,918	17,274	17,742	18,099	18,653		14,057	14,401	15,024	15,325		
CSA-620	62,000	17,763	18,049	18,588	18,873	19,428		15,044	15,320	16,130	16,453		

8 FPI													
DSA-151	15,100	\$5,399	\$5,480	\$5,845	\$5,995	\$6,399	No longer available	\$4,732	\$4,825	\$5,012	\$5,113		
DSA-210	21,000	6,511	6,592	6,958	7,106	7,511		5,375	5,457	5,533	5,644		
DSA-260	26,000	8,060	8,184	8,728	8,956	9,563		6,699	6,834	7,185	7,331		
DSA-320	32,000	9,858	10,252	10,527	11,024	11,631		8,641	9,071	9,164	9,348		
DSA-410	41,000	12,538	13,037	13,087	13,587	13,957		10,506	10,982	11,209	11,433		
DSA-450	45,000	14,206	14,533	14,756	15,082	15,452		12,122	12,434	12,811	13,069		
DSA-540	54,000	17,499	18,099	18,323	18,923	19,478		14,583	15,159	15,472	15,781		
DSA-690	69,000	18,327	18,712	19,152	19,536	20,091		15,897	16,277	16,821	17,158		

EC = Electronically Commutated Motors PSC = Permanent Split Capacitor

Units with dual speed motors include a relay which controls motor speed when wired to the room T-stat. Field wiring is required unless the T-Stat is mounted on the unit.

Dual speed EC motors are compliant with California Title 24 regulations.

** These 460V/1 models use 1/3 HP motors for all units.

Contact Application Engineering for coated housing prices.

† EC motors are not available in 575V.

\$332 List adder for adjustable termination/fan delay control in lieu of a fixed controls.

Specify voltage and motor type when ordering. See CSA, DSA and MSA Series brochures for nomenclature, voltage code and motor codes.

	MODEL NUMBER	Insulated Drain Pan	HEAT. EXCHANGER @ 10° T.D./R404A		APPROX SHIP WT. (LBS)
			MODEL	LIST	
4 FPI	MSA-126	\$1,933	HX-50	\$192	115
	MSA-169	1,933	HX-75	264	130
	MSA-224	2,168	HX-100	337	280
	MSA-287	2,168	HX-150	389	310
	MSA-340	1,933	HX-150	389	345
	MSA-395	1,933	HX-150	389	375
	MSA-465	2,168	HX-250	538	400
	MSA-585	2,168	HX-250	538	505
6 FPI	CSA-145	\$1,933	HX-75	\$264	120
	CSA-191	1,933	HX-75	264	140
	CSA-240	2,168	HX-100	337	290
	CSA-305	2,168	HX-150	389	320
	CSA-370	1,933	HX-150	389	360
	CSA-415	2,168	HX-150	389	395
	CSA-490	2,168	HX-250	538	415
	CSA-620	2,168	HX-250	538	520
8 FPI	DSA-151	\$1,933	HX-75	\$264	125
	DSA-210	1,933	HX-75	264	145
	DSA-260	2,168	HX-100	337	295
	DSA-320	2,168	HX-150	389	330
	DSA-410	1,933	HX-150	389	370
	DSA-450	1,933	HX-250	538	390
	DSA-540	2,168	HX-250	538	430
	DSA-690	2,168	HX-250	538	540

AIR DEFROST EVAPORATORS

HEIGHT SAVER						
Model Number	BTU/HR @ 10° TD	Single Speed EC Motors [†]		Single Speed PSC Motors	Insulated Drain Pan	Approx. Ship WT. (LBS)
		115V/1	230V/1	115V PSC ¹		

6 FPI

HSA-65	6,500	\$3,027	\$3,149	\$2,177	\$4,364	90
HSA-85	8,500	3,838	3,907	2,655	4,364	95
HSA-95	9,500	4,233	4,462	2,968	4,364	100
HSA-103	10,300	4,473	4,632	3,316	5,181	120
HSA-123	12,300	5,232	5,405	3,674	5,181	125
HSA-142	14,200	5,739	5,921	3,915	5,181	130
HSA-159	15,900	6,229	6,453	4,404	5,820	145
HSA-193	19,300	7,282	7,487	4,862	5,181	150
HSA-218	21,800	8,078	8,340	5,458	5,820	160
HSA-233	23,300	9,682	9,936	6,640	7,013	180

8 FPI

HSA-74	7,400	\$3,089	\$3,401	\$2,220	\$4,364	95
HSA-90	9,000	3,914	4,220	2,708	4,364	100
HSA-100	10,000	4,317	4,819	3,027	4,364	105
HSA-110	11,000	4,562	5,002	3,382	5,181	125
HSA-130	13,000	4,721	5,838	3,748	5,181	130
HSA-156	15,600	5,853	6,395	3,993	5,181	135
HSA-164	16,400	6,352	6,969	4,493	5,820	150
HSA-212	21,200	7,428	8,087	4,960	5,181	155
HSA-240	24,000	8,233	10,414	5,567	5,820	165
HSA-250	25,000	9,876	10,731	6,774	7,013	185

1. PSC motors are not available for models with 230V/1 requirements. Use models with EC motors for 230V/1 applications.

[†] EC motors are not Available in 460V/1.

Dual speed EC motors are not available for HSA models.

All units are provided with sweat refrigerant connections.

230V/1/60 models also valid for 208V/1/60

EC = Electronically Commutated Motors PSC = Permanent Split Capacitor

460V motors are not available for HSA models.

Use EC motors for 50HZ operation.

Specify voltage (A = 115/1 or D = 230/1) and motor type (P = PSC or E =ECM) when ordering.

COOLMASTER					
MODEL NUMBER	BTU/HR @ 10° TD	LIST PRICE 208-230 or 460/3	HEAT EXCHANGER		Approx. Ship WT. (LBS)
			MODEL	PRICE	

4 FPI

CM-450D	45,500	\$12,168	HX-250	\$538	500
CM-620D	62,700	14,219	HX-250	538	600
CM-850D	85,500	18,772	HX-350	551	900
CM-1100D	107,900	21,695	HX-500	875	1,000
CM-1250D	123,500	29,010	HX-500	875	1,150
CM-1350D	136,600	30,541	HX-500	875	1,500
CM-1600D	159,900	33,317	LHX-15	2,399	1,700
CM-1800D	182,200	35,698	LHX-20	2,568	2,000
CM-2100D	212,500	43,687	LHX-20	2,568	2,200

6 FPI

CCM-520D	51,400	\$12,674	HX-250	\$538	510
CCM-710D	70,825	14,967	HX-350	551	615
CCM-970D	97,125	19,554	HX-350	551	920
CCM-1220D	122,250	22,598	HX-500	875	1,025
CCM-1390D	139,400	30,415	HX-500	875	1,180
CCM-1550D	154,500	32,147	LHX-15	2,399	1,530
CCM-1810D	180,450	34,705	LHX-15	2,399	1,740
CCM-2060D	205,650	37,185	LHX-20	2,568	2,600
CCM-2400D	239,900	45,506	LHX-20	2,568	2,700

8 FPI

DCM-560D	55,975	\$12,802	HX-250	\$538	535
DCM-770D	77,075	15,266	HX-350	551	640
DCM-1060D	105,750	22,291	HX-350	551	950
DCM-1330D	133,050	25,763	HX-500	875	1,055
DCM-1520D	151,750	31,328	HX-500	875	1,225
DCM-1680D	167,950	32,791	LHX-15	2,399	1,580
DCM-1960D	196,450	37,482	LHX-15	2,399	1,800
DCM-2240D	223,850	40,718	LHX-20	2,568	2,650
DCM-2620D	261,500	47,783	LHX-20	2,568	2,800

ELECTRIC DEFROST EVAPORATORS

NEXT-GEN ALL-TEMP • ELECTRIC DEFROST MODELS

NO. OF FANS	MODEL NUMBER	Electronically Commutated Motors††				Single Speed PSC Motors			Contact Applications for Coil Coating prices for electric defrost models	Insulated Drain Pan	Heat Exchanger (Shipped loose) selected @10" T.D./R407A		Unit Cooler Approx. Ship Wt. (LBS)	
		Configurable Model Single speed operation (Motor code "E". No accessories mounted)	Configurable Model Dual speed operation (Motor code "D". No accessories mounted)	EcoNet® Control Package Pre-Assembled with factory mounted accessories - Assembly Code E (Motor code "D") See note 8 below.	Pre-Assembled with factory mounted accessories - Assembly Code L or M (Motor code "E" or "D"). See notes 1, 2 & 3.	Configurable Model - Single speed operation (Motor code "P". No accessories mounted)	Pre-Assembled with factory mounted accessories - Assembly Code L or M (Motor code "P"). See notes 1, 2 & 3 below.	Configurable Model - Single speed operation (Motor code "P". No accessories mounted)			Model			List Price
											208-230V/1 or 3ph‡ (Voltage code "D" or "E")	208-230V/1 or 3ph‡ (Voltage code "D" or "E")		

4 FPI													
1	KL4E027*	\$1,575	\$1,575	\$3,441	\$2,606	\$1,404	\$2,435	\$1,673	C/F	\$567	HX-25	\$163	40
	KL4E032*	1,968	1,968	3,834	2,999	1,665	2,696	1,934	C/F	567	HX-25	163	42
	KL4E038*	2,475	2,475	4,341	3,506	2,142	3,173	2,419	C/F	567	HX-25	163	46
2	KL4E051*	3,019	3,019	4,885	4,050	2,679	3,710	2,960	C/F	716	HX-25	163	50
	KL4E064*	3,790	3,790	5,656	4,821	3,113	4,144	3,429	C/F	716	HX-50	192	52
	KL4E080*	4,318	4,318	6,184	5,349	3,600	4,631	3,899	C/F	716	HX-50	192	55
3	KL4E094*	4,856	4,856	6,722	5,887	3,864	4,895	4,612	C/F	869	HX-50	192	79
	KL4E110*	5,684	5,684	7,550	6,715	4,521	5,552	5,347	C/F	869	HX-50	192	84
4	KL4E125*	6,404	6,404	8,270	7,435	5,086	6,117	6,094	C/F	999	HX-75	264	124
	KL4E141*	7,225	7,225	9,091	8,256	5,736	6,767	6,759	C/F	999	HX-75	264	144
5	KL4E155*	8,028	8,028	9,894	9,109	6,392	7,771	7,456	C/F	1,140	HX-75	264	191
	KL4E195*	9,622	9,622	11,488	10,703	8,041	9,419	9,431	C/F	1,296	HX-100	337	257
6	KL4E230*	11,080	11,080	12,946	12,117	8,971	10,350	10,364	C/F	1,296	HX-150	389	262

6 FPI													
1	KL6E035*	\$2,449	\$2,449	\$4,315	\$3,480	\$2,104	\$3,135	\$2,397	C/F	\$567	HX-25	\$163	41
	KL6E042*	2,724	2,724	4,590	3,755	2,347	3,378	2,614	C/F	567	HX-25	163	44
	KL6E049*	2,998	2,998	4,864	4,029	2,623	3,654	2,980	C/F	567	HX-25	163	47
2	KL6E066*	3,778	3,778	5,644	4,809	3,049	4,080	3,405	C/F	716	HX-50	192	52
	KL6E077*	3,974	3,974	5,840	5,005	3,236	4,267	3,830	C/F	716	HX-50	192	55
	KL6E090*	4,091	4,091	5,957	5,122	3,389	4,420	4,025	C/F	716	HX-50	192	58
3	KL6E105*	4,792	4,792	6,658	5,823	3,955	4,986	4,311	C/F	716	HX-50	192	62
	KL6E121*	5,359	5,359	7,225	6,390	4,272	5,303	5,089	C/F	869	HX-75	264	78
4	KL6E142*	6,115	6,115	7,981	7,146	5,022	6,053	5,871	C/F	869	HX-75	264	85
	KL6E162*	7,171	7,171	9,037	8,202	5,717	6,748	6,718	C/F	999	HX-75	264	124
5	KL6E182*	7,913	7,913	9,779	8,944	6,460	7,491	7,544	C/F	999	HX-100	337	147
	KL6E200*	8,900	8,900	10,766	9,931	7,195	8,574	8,362	C/F	1,140	HX-100	337	195
6	KL6E244*	10,441	10,441	12,307	11,820	8,245	9,624	9,614	C/F	1,296	HX-150	389	238
	KL6E281*	11,559	11,559	13,425	12,938	9,395	10,774	10,901	C/F	1,296	HX-150	389	238

†† Electronically Commutated motors are not available for 380V, 460V, or 575V. Use PSC motors for 460V volts. Use EC motors for 100-230V 50HZ operations.

†† These models utilize dual voltage EC motors that are configurable for single or dual speed operation. **Dual speed EC motors are compliant with California Title 24 regulations.**

†† Dual speed motor operation employs a relay to control motor speed. LLS voltage must match the voltage applied to the motor. **Electric default: Dual speed relay voltage is 230V.**

†† Specify operating voltage 230V/1 (voltage code D) or 230/3 (voltage code E) and motor speed, single (motor code E) or dual speed (motor code D) operation at time of order. (All motors are single phase.)

* Refer to nomenclature example - page 2 - to complete the model number.

‡ Reference the catalog for 3 phase heater availability.

1. Pre-Assembly code L indicates that the unit includes factory mounted txv, liquid line solenoid, mechanical room t-stat.

2. Pre-Assembled code M designates a **Master unit** for a 2 evaporator Master / Slave evaporator setup. A master unit includes a mounted txv, liquid line solenoid, mechanical room t-stat and copper tee. Code M models are to be matched with an identical model, suffix code T, in order to complete the Master/Slave combination. See note 3 for description of code T models.

3. For Pre-Assembled code T (mounted TXV only), select a configurable model then add \$393 for up to 3 ton requirement or \$691 for 4 to 9 ton mounted txv to price of the configurable unit.

4. See page 13 for expansion valve pricing.

5. \$332 List adder for adjustable termination/fan delay control in lieu of a fixed controls.

6. Contact Application Engineering for coated housing or coil coating. ElectroFin, Bronz-Glow and Heresite are available coating options.

7. Electric default: Dual speed relay voltage is 230V.

8. EcoNet® Control package includes: Sporlan EEV; suction pressure transducer; suction, entering air, coil temp thermistors; local on-board two-row LCD display and push button adjustments. Controller replaces TXV, liquid solenoid valve, room thermostat, defrost termination and fan delay, and time clock.

MEDIUM SILHOUETTE											
MODEL NUMBER	Electronically Commutated Motors†				Single Speed PSC Motors			Insulated Drain Pan	Heat Exchanger (Shipped loose)		Approx Ship Wt. (LBS)
	Single Speed 230/1 (A)	Dual Speed 230/1 (A) 460V/1 (B) **		Variable Speed 230/1 (A) 460V/1 (B) **	230/1 (A)	460/1 (B)	575V/1		MODEL	LIST	
4 FPI											
MSE-105	\$5,455	\$5,970	\$6,374	No longer available	\$4,675	\$4,954	\$5,053	\$1,933	HX 150	\$389	120
MSE-140	7,040	7,555	7,959		5,294	5,480	5,590	1,933	HX 150	389	135
MSE-175	8,011	8,783	8,930		6,648	7,165	7,308	2,168	HX 150	389	285
MSE-230	11,012	11,589	11,931		9,224	9,961	10,160	1,933	HX 250	538	315
MSE-325	15,428	16,006	16,348		13,060	13,849	14,125	1,933	HX 350	551	350
MSE-390	16,313	17,180	17,692		14,310	15,273	15,580	2,168	HX 350	551	425
MSE-510	18,573	19,440	19,952		17,395	18,696	19,072	2,168	HX 500	875	530
6 FPI											
CSE-130	\$5,839	\$6,353	\$6,758	No longer available	\$4,776	\$5,015	\$5,116	1,933	HX 150	\$389	125
CSE-150	6,127	6,641	7,046		5,430	5,684	5,797	1,933	HX 150	389	140
CSE-185	9,184	9,957	10,563		7,301	7,977	8,137	2,168	HX 150	389	295
CSE-270	11,470	12,047	12,390		10,266	10,824	11,041	1,933	HX 250	538	320
CSE-320	12,968	13,545	13,887		11,120	11,907	12,146	1,933	HX 350	551	365
CSE-385	16,186	17,052	17,565		13,655	14,309	14,595	2,168	HX 350	551	450
CSE-460	16,813	17,679	18,192		14,972	16,035	16,355	2,168	HX 500	875	490
CSE-520	19,066	19,933	20,445		17,067	17,932	18,290	2,168	HX 500	875	535

(A) 230/1 Volt motors and 230/1 or 230/3 Volt heaters. Adjustable DTFD List price add per unit - \$332

(B) 460/1 Volt motors and 460/1 or 460/3 Volt heaters. Air Straightener List price add per fan - \$350

1. Electric defrost models include fixed defrost termination and fan delay controls. Use EC motors for 50HZ operation.

2. Standard motor wiring is single phase.

3. Standard heater wiring is 3 phase.

4. ** These 460V/1 models use 1/3 HP motors for all units.

† Electronically Commutated motors are not available for 575V applications.

Dual speed EC motors are compliant with California Title 24 regulations.

Specify voltage and motor type when ordering. See MSE and CSE Series brochure for nomenclature, voltage code and motor codes.

ELECTRIC DEFROST EVAPORATORS

HEIGHT SAVER

MODEL NUMBER	BTU/HR @ 10° TD	Single Speed EC Motor ¹	Insulated Drain Pan	APPROX. SHIP WT. (LBS)	MODEL NUMBER	BTU/HR @ 10° TD	Single Speed EC Motor ¹	Insulated Drain Pan	APPROX. SHIP WT. (LBS)
		230/1 (A)					230/1 (A)		
4 FPI					6 FPI				
HSE-50	5,000	\$3,537	\$4,364	90	HSE-55	5,500	\$4,897	\$4,364	95
HSE-60	6,000	4,915	4,364	95	HSE-63	6,300	5,056	4,364	100
HSE-66	6,600	5,065	4,364	100	HSE-71	7,100	5,046	4,364	105
HSE-74	7,400	5,800	5,181	120	HSE-79	7,900	5,809	5,181	125
HSE-86	8,600	6,467	5,181	125	HSE-91	9,100	6,500	5,181	130
HSE-94	9,400	6,482	5,181	130	HSE-103	10,300	6,793	5,181	135
HSE-116	11,600	6,766	5,820	145	HSE-125	12,500	7,057	5,820	150
HSE-130	13,000	7,022	5,181	150	HSE-143	14,300	8,141	5,181	155
HSE-144	14,400	8,131	5,820	160	HSE-163	16,300	9,120	5,820	165
HSE-174	17,400	9,133	7,013	180	HSE-219	21,900	11,212	7,013	185

(A) 230/1 Volt motors and heaters.

All models are supplied with a non-adjustable defrost termination and fan delay thermostat mounted and wired.

Adjustable DTFD list add per unit. **\$332**

EC = Electronically Commutated Motors

All units are provided with sweat refrigerant connections.

¹ 460V motors are not available for HSE models.

230V/1/60 models also valid for 208V/1/60

Use EC motors for 50HZ operation. Dual speed EC motors are not available for HSE models.

COOLMASTER

MODEL NUMBER	BTU/HR @ 10° TD	LIST PRICE 208-230/460/3	HEAT EXCHANGER		APPROX. SHIP WT. (LBS)
			MODEL	PRICE	
4 FPI - Standard Fan					
KED-400D	40,000	\$14,233	HX-350	\$551	450
KED-550D	55,000	18,305	HX-500	875	520
KED-750D	75,000	26,733	LHX-15	2,399	790
KED-950D	95,000	30,554	LHX-20	2,568	890
KED-1200D	120,000	35,065	LHX-20	2,568	1,410
KED-1600D	160,000	49,263	LHX-30	3,034	1,810
4 FPI - Pressure Propeller					
KED-400PP	40,000	\$16,478	HX-350	\$551	490
KED-550PP	55,000	20,560	HX-500	875	550
KED-750PP	75,000	28,990	LHX-15	2,399	810
KED-950PP	95,000	32,957	LHX-20	2,568	900
KED-1200PP	120,000	38,446	LHX-20	2,568	1,430
KED-1600PP	160,000	53,771	LHX-30	3,034	1,900
6 FPI - Standard Fan					
CED-450D	45,200	\$14,960	HX-350	\$551	470
CED-620D	62,200	19,167	HX-500	875	540
CED-850D	84,800	27,846	LHX-15	2,399	815
CED-1070D	107,400	31,498	LHX-20	2,568	920
CED-1360D	135,600	36,336	LHX-25	2,750	1,460
CED-1800D	180,800	50,681	LHX-30	3,034	2,170
6 FPI - Pressure Propeller					
CED-450PP	45,200	\$16,926	HX-350	\$551	520
CED-620PP	62,200	21,422	HX-500	875	570
CED-850PP	84,800	30,101	LHX-15	2,399	835
CED-1070PP	107,400	33,753	LHX-20	2,568	930
CED-1360PP	135,600	39,717	LHX-25	2,750	1,480
CED-1800PP	180,800	55,189	LHX-30	3,034	2,260

All models have 3 phase motors and heaters.

Models "KED-1200" and larger and models "CED-1360" and larger are equipped with fused defrost heaters.

All models are supplied with an adjustable defrost termination / fan delay thermostat mounted and wired.

Air Straighteners list adder pe **\$470**

Models with Pressure Propeller fans are for use in Blast Freezers with air pressure drop up to 0.5" static pressure.

Models with PP fans are not for use above +25°F room temperature.

NEXT-GEN ALL-TEMP HOT GAS DEFROST EVAPORATORS

HOT GAS DEFROST / REVERSE CYCLE MODELS													
FINS PER INCH (FPI)	NO. OF FANS	MODEL NUMBER	Electronically Commutated Motors†				PSC Motors			Insulated Drain Pan	Heat Exchanger (Shipped loose) selected @10" T.D./R407A		Unit Cooler Approx. Ship Wt. (LBS)
			Configurable Model - <u>Single</u> speed operation (Motor code "E". No accessories mounted)		Configurable Model - <u>Dual</u> speed motor operation (Motor code "D". No accessories mounted.)		Configurable Model - <u>Single</u> speed operation (Motor code "P". No accessories mounted)				Model	List Price	
			115V/1 (Voltage code "A")	208-230V/1 (Voltage code "D")	115V/1 (Voltage code "A")	208-230V/1 (Voltage code "D")	115V/1 (Voltage code "A")	208-230V/1 (Voltage code "D")	460V/1 (Voltage code "F")				
4 F P I	1	KL4G027*	\$1,642	\$1,706	\$1,642	\$1,706	\$1,404	\$1,467	\$2,001	\$567	HX-25	\$163	40
		KL4G032*	1,938	2,000	1,938	2,000	1,659	1,721	2,256	567	HX-25	163	42
		KL4G038*	2,452	2,508	2,452	2,508	2,097	2,153	2,342	567	HX-25	163	46
	2	KL4G051*	3,114	3,221	3,114	3,221	2,575	2,851	3,126	716	HX-25	163	50
		KL4G064*	3,907	4,014	3,907	4,014	3,231	3,330	3,584	716	HX-25	163	52
		KL4G080*	4,392	4,519	4,392	4,519	3,673	3,800	4,071	716	HX-50	192	55
	3	KL4G094*	4,728	5,060	4,728	5,060	3,737	4,150	4,562	869	HX-50	192	79
		KL4G110*	5,533	5,864	5,533	5,864	4,371	4,718	5,156	869	HX-50	192	84
	4	KL4G125*	6,159	6,580	6,159	6,580	4,839	5,384	5,928	999	HX-50	192	124
		KL4G141*	6,947	7,368	6,947	7,368	5,458	5,879	6,433	999	HX-75	264	144
	5	KL4G155*	7,552	8,069	7,552	8,069	5,914	6,380	6,998	1,140	HX-75	264	191
		KL4G195*	9,270	9,876	9,270	9,876	7,203	7,778	8,557	1,296	HX-100	337	257
6	KL4G230*	10,685	11,421	10,685	11,421	8,576	9,290	10,085	1,296	HX-100	337	262	
6 F P I	1	KL6G035*	\$2,384	\$2,439	\$2,384	\$2,439	\$2,026	\$2,080	\$2,261	\$567	HX-25	\$163	41
		KL6G042*	2,693	2,756	2,693	2,756	2,315	2,377	2,566	567	HX-25	163	44
		KL6G049*	3,039	3,110	3,039	3,110	2,664	2,736	2,927	567	HX-25	163	47
	2	KL6G066*	3,648	3,882	3,648	3,882	2,918	3,152	3,513	716	HX-25	163	52
		KL6G077*	4,039	4,271	4,039	4,271	3,303	3,535	3,896	716	HX-50	192	55
		KL6G090*	4,280	4,568	4,280	4,568	3,564	3,853	4,216	716	HX-50	192	58
	3	KL6G105*	5,017	5,306	5,017	5,306	4,179	4,547	4,914	716	HX-50	192	62
		KL6G121*	5,269	5,605	5,269	5,605	4,193	4,518	5,056	869	HX-75	264	78
	4	KL6G142*	6,167	6,388	6,167	6,388	5,074	5,295	5,835	869	HX-75	264	85
		KL6G162*	6,848	7,280	6,848	7,280	5,393	5,825	6,553	999	HX-75	264	124
	5	KL6G182*	7,670	8,238	7,670	8,238	6,218	6,786	7,510	999	HX-75	264	147
		KL6G200*	8,108	8,621	8,108	8,621	6,321	6,834	7,740	1,140	HX-100	337	195
	6	KL6G244*	9,819	10,539	9,819	10,539	7,618	8,353	9,468	1,296	HX-100	337	238
		KL6G281*	10,935	11,799	10,935	11,799	8,772	9,628	10,726	1,296	HX-100	337	262

1. \$395 List adder for liquid txv bypass check valve, shipped loose.

\$606 list price adder for liquid txv bypass check valve - factory mounted.

2. Consult factory for installed suction check valve prices.

3. Hot Gas reverse cycle includes a fixed defrost termination control and a fixed fan delay control, factory wired.

HOT GAS DEFROST / 3 PIPE DEFROST MODELS													
FINS PER INCH (FPI)	NO. OF FANS	MODEL NUMBER	Electronically Commutated Motors†				PSC Motors			Insulated Drain Pan	Unit Cooler Approx. Ship Wt. (LBS)		
			Configurable Model - <u>Single</u> speed operation (Motor code "E". No accessories mounted)		Configurable Model - <u>Dual</u> speed motor operation (Motor code "D". No accessories mounted.)		Configurable Model - <u>Single</u> speed operation (Motor code "P". No accessories mounted)						
			115V/1 (Voltage code "A")	208-230V/1 (Voltage code "D")	115V/1 (Voltage code "A")	208-230V/1 (Voltage code "D")	115V/1 (Voltage code "A")	208-230V/1 (Voltage code "D")	460V/1 (Voltage code "F")				
4 F P I	1	KL4H027*	\$1,642	\$1,706	\$1,642	\$1,706	\$1,404	\$1,467	\$2,001	\$567	40		
		KL4H032*	1,938	2,000	1,938	2,000	1,659	1,721	2,256	567	42		
		KL4H038*	2,452	2,508	2,452	2,508	2,097	2,153	2,342	567	46		
	2	KL4H051*	3,114	3,221	3,114	3,221	2,575	2,851	3,126	716	50		
		KL4H064*	3,907	4,014	3,907	4,014	3,231	3,330	3,584	716	52		
		KL4H080*	4,392	4,519	4,392	4,519	3,673	3,800	4,071	716	55		
	3	KL4H094*	4,728	5,060	4,728	5,060	3,737	4,150	4,562	869	79		
		KL4H110*	5,533	5,864	5,533	5,864	4,371	4,718	5,156	869	84		
	4	KL4H125*	6,159	6,580	6,159	6,580	4,839	5,384	5,928	999	124		
		KL4H141*	6,947	7,368	6,947	7,368	5,458	5,879	6,433	999	144		
	5	KL4H155*	7,552	8,069	7,552	8,069	5,914	6,380	6,998	1,140	191		
		KL4H195*	9,270	9,876	9,270	9,876	7,203	7,778	8,557	1,296	257		
6	KL4H230*	10,685	11,421	10,685	11,421	8,576	9,290	10,085	1,296	262			
6 F P I	1	KL6H035*	\$2,384	\$2,439	\$2,384	\$2,439	\$2,026	\$2,080	\$2,261	\$567	41		
		KL6H042*	2,693	2,756	2,693	2,756	2,315	2,377	2,566	567	44		
		KL6H049*	3,039	3,110	3,039	3,110	2,664	2,736	2,927	567	47		
	2	KL6H066*	3,648	3,882	3,648	3,882	2,918	3,152	3,513	716	52		
		KL6H077*	4,039	4,271	4,039	4,271	3,303	3,535	3,896	716	55		
		KL6H090*	4,280	4,568	4,280	4,568	3,564	3,853	4,216	716	58		
	3	KL6H105*	5,017	5,306	5,017	5,306	4,179	4,547	4,914	716	62		
		KL6H121*	5,269	5,605	5,269	5,605	4,193	4,518	5,056	869	78		
	4	KL6H142*	6,167	6,388	6,167	6,388	5,074	5,295	5,835	869	85		
		KL6H162*	6,848	7,280	6,848	7,280	5,393	5,825	6,553	999	124		
	5	KL6H182*	7,670	8,238	7,670	8,238	6,218	6,786	7,510	999	147		
		KL6H200*	8,108	8,621	8,108	8,621	6,321	6,834	7,740	1,140	195		
	6	KL6H244*	9,819	10,539	9,819	10,539	7,618	8,353	9,468	1,296	238		
		KL6H281*	10,935	11,799	10,935	11,799	8,772	9,628	10,726	1,296	262		

1. Hot Gas 3 Pipe Defrost models include a fixed defrost termination control and a fixed fan delay control, factory wired.

† Electronically Commutated motors are not available for 380V, 460V, or 575V. Use PSC motors for 460V volts. Use EC motors for 100-230V 50HZ operations.

† These models utilize single voltage EC motors that are configurable for single or dual speed operation. **Dual speed EC motors are compliant with California Title 24 regulations.**

† Dual speed motor operation employs a relay to control motor speed. LLS voltage must match the voltage applied to the motor. Electric default: dual speed relay voltage is 230V.

† Specify operating voltage and motor speed at time of order.

\$332 List adder for adjustable termination/fan delay control in lieu of a fixed controls.

Contact Application Engineering for coated housing or coil coating. ElectroFin, Bronz-Glow and Heresite are available coating options.

HOT GAS DEFROST EVAPORATORS

MEDIUM SILHOUETTE - HOT GAS REVERSE CYCLE

Model Number	Single Speed EC Motors [†]		Dual Speed EC Motors		Variable Speed EC Motors			Single Speed PSC Motors				Insulated Drain Pan	HEAT EXCHANGER		APPROX. SHIP WT. (LBS)
	115V/1	230V/1	230V/1	460V/1**	115V/1	230V/1	460V/1**	115V/1	230V/1	460V/1	575V/1		MODEL	LIST	
6 FPI															
CSG-130R	\$7,047	\$7,443	\$7,562	\$7,966	No longer available			\$5,552	\$5,958	\$6,257	\$6,380	\$1,933	HX 150	\$389	125
CSG-150R	8,878	8,976	9,393	9,798				7,116	7,211	7,575	7,726	1,933	HX 150	389	140
CSG-185R	9,801	9,955	10,573	11,180				8,320	8,490	9,159	9,342	2,168	HX 150	389	295
CSG-270R	12,715	12,941	13,292	13,634				11,378	11,612	12,342	12,589	1,933	HX 250	538	320
CSG-320R	14,380	14,725	14,958	15,299				12,246	12,583	13,564	13,835	1,933	HX 350	551	365
CSG-385R	16,808	17,048	17,675	18,188				14,679	14,924	15,967	16,286	2,168	HX 350	551	450
CSG-460R	18,961	19,379	19,828	20,340				16,164	16,579	17,906	18,263	2,168	HX 500	875	490
CSG-520R	20,818	21,266	21,684	22,197				18,047	18,490	19,795	20,191	2,168	HX 500	875	535

4 FPI

MSG-105R	\$6,731	\$7,112	\$7,246	\$7,650	No longer available			\$5,337	\$5,731	\$6,189	\$6,313	\$1,933	HX 150	\$389	120
MSG-140R	8,190	8,571	8,705	9,109				6,848	7,243	7,823	7,979	1,933	HX 150	389	135
MSG-175R	9,414	9,553	10,186	10,333				7,955	8,108	8,797	8,973	2,168	HX 150	389	285
MSG-230R	12,371	12,596	12,948	13,290				10,945	11,178	11,530	11,760	1,933	HX 250	538	315
MSG-325R	16,235	16,474	16,813	17,155				14,353	14,589	15,060	15,363	1,933	HX 350	551	350
MSG-390R	18,438	18,760	19,304	19,817				15,917	16,241	17,067	17,409	2,168	HX 350	551	425
MSG-510R	20,157	20,516	21,024	21,536				17,279	17,627	18,919	19,297	2,168	HX 500	875	530

For adjustable DTFD add - \$332 list per unit.

Reverse Cycle Evaps have TXV bypass check valve and pan circuit/coil check valve installed. Suction check valve is to be supplied & installed by others.

ECM = Electronically Commutated Motors PSC = Permanent Split Capacitor

† These EC Motors are not available in 460V or 575V.

** These 460V/1 models use 1/3 HP motors for all units.

Units with dual speed motors include a relay which controls motor speed when wired to the room T-stat. Field wiring is required unless the T-Stat is mounted on the unit.

Dual speed EC motors are compliant with California Title 24 regulations.

HOT GAS DEFROST EVAPORATORS

MEDIUM SILHOUETTE - THERMOBANK

Model Number	Single Speed EC Motors [†]		Dual Speed EC Motors [†]		Variable Speed EC Motors [†]			Single Speed PSC Motors				Insulated Drain Pan	HEAT EXCHANGER		APPROX. SHIP WT. (LBS)
	115V/1	230V/1	230V/1	460V/1**	115V/1	230V/1	460V/1**	115V/1	230V/1	460V/1	575V/1		MODEL	LIST	
4 FPI															
MSG-105T	\$7,551	\$7,936	\$8,066	\$8,471	No longer available			\$6,157	\$6,556	\$7,010	\$7,150	\$1,933	HX 150	\$389	120
MSG-140T	9,018	9,396	9,533	9,937				7,675	8,068	8,644	8,818	1,933	HX 150	389	135
MSG-175T	11,523	11,729	12,295	12,443				10,064	10,285	10,947	11,166	2,168	HX 150	389	285
MSG-230T	14,662	14,844	15,239	15,581				13,236	13,425	13,992	14,272	1,933	HX 250	538	315
MSG-325T	18,486	18,812	19,063	19,405				16,605	16,927	17,896	18,256	1,933	HX 350	551	350
MSG-390T	21,207	21,527	22,073	22,586				18,685	19,007	20,194	20,598	2,168	HX 350	551	425
MSG-510T	22,050	22,405	22,916	23,429				19,171	19,516	20,807	21,223	2,168	HX 500	875	530
6 FPI															
CSG-130T	\$7,872	\$8,268	\$8,387	\$8,791	No longer available			\$6,375	\$6,783	\$7,077	\$7,218	\$1,933	HX 150	\$389	125
CSG-150T	9,701	9,798	10,216	10,620				7,938	8,033	8,396	8,536	1,933	HX 150	389	140
CSG-185T	11,967	12,168	12,740	13,346				10,486	10,704	11,282	11,492	2,168	HX 150	389	295
CSG-270T	14,916	15,285	15,493	15,835				13,579	13,956	14,661	14,801	1,933	HX 250	538	320
CSG-320T	16,654	17,075	17,232	17,573				14,519	14,932	15,893	15,973	1,933	HX 350	551	365
CSG-385T	19,258	19,466	20,124	20,637				17,128	17,343	18,382	18,607	2,168	HX 350	551	450
CSG-460T	22,705	23,055	23,572	24,084				19,909	20,253	21,492	21,763	2,168	HX 500	875	490
CSG-520T	24,482	24,931	25,348	25,861				21,710	22,156	23,375	23,665	2,168	HX 500	875	535

THERMOBANK Medium Silhouette evaporator prices do not include DTFD or other controls.

EC = Electronically Commutated Motors PSC = Permanent Split

† EC motors are not available for 575V applications.

** These 460V/1 models use 1/3 HP motors for all units.

1. See page 13 for prices to add appropriate system accessories.

Units with dual speed motors include a relay which controls motor speed when wired to the room T-stat. Field wiring is required unless the T-Stat is mounted on the unit.

Dual speed EC motors are compliant with California Title 24 regulations.

Specify voltage and motor type when ordering. See MSG and CSG Series brochure for nomenclature, voltage code and motor codes.

HOT GAS DEFROST EVAPORATORS - THERMOBANK

COOLMASTER					
MODEL NUMBER	BTU/HR @ 10° TD	LIST PRICE 208-230/460/3	HEAT EXCHANGER		APPROX. SHIP WT. (LBS)
			MODEL	LIST PRICE	

4 FPI - Standard Fan

TV-400D	40,000	\$17,194	HX-350	\$551	760
TV-550D	55,000	19,699	HX-500	875	860
TV-750D	75,000	26,417	LHX-15	2,399	1,150
TV-950D	95,000	33,790	LHX-15	2,399	1,260
TV-1100D	108,000	35,080	LHX-20	2,568	1,350
TV-1200D	120,000	37,841	LHX-20	2,568	2,130
TV-1400D	140,000	45,067	LHX-25	2,750	2,280
TV-1600D	160,000	58,328	LHX-30	3,034	2,370
TV-1900D	186,000	64,560	LHX-40	3,374	2,580

4 FPI - Pressure Propeller*

TV-400PP	40,000	\$19,449	HX-350	\$551	850
TV-550PP	55,000	21,952	HX-500	875	950
TV-750PP	75,000	28,672	LHX-15	2,399	1,360
TV-950PP	95,000	36,043	LHX-15	2,399	1,440
TV-1100PP	108,000	37,334	LHX-20	2,568	1,580
TV-1200PP	120,000	41,222	LHX-20	2,568	2,430
TV-1400PP	140,000	48,448	LHX-25	2,750	2,530
TV-1600PP	160,000	62,836	LHX-30	3,034	2,670
TV-1900PP	186,000	68,776	LHX-40	3,374	2,780

6 FPI - Standard Fan

CTV-450D	45,200	\$17,802	HX-350	\$551	770
CTV-620D	62,200	20,361	HX-500	875	880
CTV-850D	84,800	29,822	LHX-15	2,399	1,170
CTV-1070D	107,400	35,169	LHX-15	2,399	1,285
CTV-1220D	122,000	39,893	LHX-20	2,568	1,380
CTV-1360D	135,600	43,753	LHX-20	2,568	2,170
CTV-1580D	158,200	47,204	LHX-25	2,750	2,330
CTV-1800D	180,800	59,791	LHX-30	3,034	2,420
CTV-2100D	210,200	67,329	LHX-40	3,374	2,630

6 FPI - Pressure Propeller*

CTV-450PP	45,200	\$20,055	HX-350	\$551	860
CTV-620PP	62,200	22,616	HX-500	875	965
CTV-850PP	84,800	32,077	LHX-15	2,399	1,390
CTV-1070PP	107,400	37,422	LHX-15	2,399	1,465
CTV-1220PP	122,000	42,147	LHX-20	2,568	1,610
CTV-1360PP	135,600	47,134	LHX-20	2,568	2,470
CTV-1580PP	158,200	50,585	LHX-25	2,750	2,580
CTV-1800PP	180,800	64,298	LHX-30	3,034	2,720
CTV-2100PP	210,200	71,837	LHX-40	3,374	2,830

THERMOBANK evaporator price does not include DTFD or other controls.

Air Straighteners list adder per fan. **\$470**

Models with Pressure Propeller fans are for use in Blast Freezers with air pressure drop up to 0.5" static pressure.

Models with PP fans are not for use above +25°F room temperature.

LOW AIR VELOCITY UNIT COOLERS

LOW VELOCITY UNIT COOLER NOMENCLATURE

K W F 050 A E 1 B 1 1 A 1 A
I II III IV V VI VII VIII IX X XI XII XIII

I. Model Series

K – Kramer

II. Unit type

W – Walk In Unit Cooler

III. Series

F – Low Air Velocity

IV. Capacity – Three Number Characters

050, 075, 100, 130, 160, 190, 220, 270, 340

V. Voltage Code

A – 115/1/60
D – 208-230/1/60
F – 460/1/60
L – 100/1/50
M – 200-220/1/50
P – 380/1/50
X – Other

VI. Motor/Fan Type

E – (EC) Electronically Commutated
P – (PSC) Permanent Split Capacitor
X – Other

VII. Length in Fans

1, 2, 3, 4, 5, 6

VIII. Coil Density

B – 6 fpi

IX. Coil Material and Coating Options

1 – Aluminum Fins (Al)
2 – Copper Fins (Cu)
3 – Al + AST Coating
4 – Al + Blygold
5 – Al + Bronz-Glow
6 – Al + Heresite
8 – Baked Epoxy Coating
X – Other

Post Coat Materials

X. Housing Material and Coatings

1 – Aluminum, Embossed
3 – White Painted
6 – Stainless Steel 304
X – Other

XI. Unit Design Configuration

A – Air Defrost
E – Electric Defrost
G – Hot Gas Reverse Cycle Defrost with Drain Pan Loop
H – Hot Gas Re-Evaporative Defrost with Drain Pan Loop
K – Hot Gas Reverse Cycle Defrost with 115V Heater
L – Hot Gas Reverse Cycle Defrost with 208/230V Heater
X – Other

XII. Not Currently used

XIII. Revision Code – Single Alphanumeric Character

A – Initial Release

* Shaded Pole motors are no longer available.

LOW AIR VELOCITY UNIT COOLERS

BASE MODELS

Model Number	Air Defrost 115/1/60	Fan Configuration	Approx. Net Weight (lbs)
KWF050AE1B11A1A	\$4,040	1 x 1	50
KWF075AE2B11A1A	4,634	1 x 2	75
KWF100AE2B11A1A	5,847	1 x 2	85
KWF130AE3B11A1A	6,681	1 x 3	100
KWF160AE3B11A1A	7,429	1 x 3	110
KWF190AE4B11A1A	9,265	1 x 4	120
KWF220AE4B11A1A	10,651	1 x 4	130
KWF270AE5B11A1A	11,761	1 x 5	150
KWF340AE6B11A1A	15,017	1 x 6	180

POSITION V

Voltage options

Note: "N/A" = Not available, "N/C" = No additional charge, "—" = Base model features, "C/F" = Contact Factory

Voltage Code	Adder/(Deduct) Per Fan Section	Available Based Upon Position VI Motor Options
A – 115/1/60	—	Available for motor codes E, P, S
D – 208-230/1/60	\$52	Available for motor codes E, P, S
F – 460/1/60	17	Available for motor code P only
L – 100/1/50	—	Available for motor codes E, P, S
M – 200-220/1/50	52	Available for motor codes E, P, S
P – 380/1/50	17	Available for motor code P only

POSITION VI

Motor / Fan Type options

Note: "N/A" = Not available, "N/C" = No additional charge, "—" = Base model features, "C/F" = Contact Factory

Motor / Fan Type	Adder/(Deduct) Per Fan Section	Available Based Upon Position V
E - Electronically Commutated - Single Speed	-	Available for A,D,L,M
D - Electronically Commutated - Dual Speed	\$258	Available for A,L
	258	Available for D,M
P - Permanent Split Capacitor - price deduct	477	Available for A,L,D,M,F,P

POSITION VII Length in Fans - No additional charge

POSITION VIII Coil Density - 6 FPI - No additional charge

Position - IX

Coil Material and Coating options

Contact Application Engineering to obtain price quotes for special fin materials or coatings.

Position - X

Housing Material and Coating options

Contact Application Engineering to obtain price quotes for special housing materials or coatings.

LOW AIR VELOCITY UNIT COOLERS

Position - XI

Unit Design Configuration - Horizontal Air Discharge Only

Note: "N/A" = Not available, "N/C" = No additional charge, "—" = Base model features, "C/F" = Contact Factory

ELECTRIC DEFROST - Code E		
Voltage Code	Adder/(Deduct) Per Fan Section	Available Based Upon Position VI Motor Options
A - 115/1/60	N/A	N/A
D - 208-230/1/60	\$260	Available for motor codes E, P, S
F - 460/1/60	352	Available for motor code P only
L - 100/1/50	N/A	N/A
M - 200-220/1/50	260	Available for motor codes E, P, S
P - 380/1/50	352	Available for motor code P only

HOT GAS DEFROST - Reverse Cycle with Hot Gas drain pan loop - Code G		
Voltage Code	Adder/(Deduct) Per Fan Section	Available Based Upon Position VI Motor Options
A - 115/1/60	\$456	Available for motor codes E, P, S
D - 208-230/1/60	456	Available for motor codes E, P, S
F - 460/1/60	456	Available for motor code P only
L - 100/1/50	456	Available for motor codes E, P, S
M - 200-220/1/50	456	Available for motor codes E, P, S
P - 380/1/50	456	Available for motor code P only

HOT GAS DEFROST - Reverse Cycle with electric drain pan heater - Code K or L		
Voltage Code	Adder/(Deduct) Per Fan Section	Available Based Upon Position VI Motor Options
A - 115/1/60	\$297	Available for motor codes E, P, S
D - 208-230/1/60	297	Available for motor codes E, P, S
F - 460/1/60	N/A	N/A
L - 100/1/50	297	Available for motor codes E, P, S
M - 200-220/1/50	297	Available for motor codes E, P, S
P - 380/1/50	N/A	N/A

HOT GAS DEFROST - 3 pipe with Drain Pan loop - Code H		
Voltage Code	Adder/(Deduct) Per Fan Section	Available Based Upon Position VI Motor Options
A - 115/1/60	\$387	Available for motor codes E, P, S
D - 208-230/1/60	387	Available for motor codes E, P, S
F - 460/1/60	387	Available for motor code P only
L - 100/1/50	387	Available for motor codes E, P, S
M - 200-220/1/50	387	Available for motor codes E, P, S
P - 380/1/50	387	Available for motor code P only

Heat Exchanger/Accumulator (HEA) No Longer Available.

Position - XII

INSULATED DRAIN PAN		
Fan Configuration	No Insulation	Insulated Drain Pan ¹
1 X 1	—	\$2,659
1 X 2	—	3,412
1 X 3	—	4,412
1 X 4	—	5,013
1 X 5	—	5,946
1 X 6	—	6,880

1. Insulated Drain Pan not available with stainless steel or galvanized steel pans.

Position - XIII Revision Code: A - Initial Release

Optional Expansion Valves

Balanced Port Expansion Valve - Loose	1/4 thru 3 Tons	\$34
	4 thru 9 Tons	444
Balanced Port Expansion Valve - Mounted	1/4 thru 3 Tons	393
	4 thru 9 Tons	691

Optional Room T-Stat

Type	RANGE	LIST
Mechanical - Loose	-30 to + 100	\$297
Mechanical - Mounted @ Evap	-30 to + 100	322
Electronic - Loose	-30 to + 100	383
Electronic - Mounted @ Evap	-30 to + 100	402

Optional Liquid Line Solenoid Valve

HORSEPOWER RANGE	LOOSE*	MTD*
1/2 thru 3 HP	\$281	\$316
4 thru 8 HP	315	366

SYSTEM PRICING EXAMPLES

Example 1:

5 HP, R-404A +35°F cooler matched with 2 unit coolers,
95°F summer ambient, 10°F winter ambient.

<u>QTY.</u>		<u>LIST PRICE</u>
1	KFDS05M4SEA Outdoor Condensing Unit 230/3/60 53,000 BTUH @ 25° S.T. and 95°F ambient	\$22,430
2	KL6A235-AE Unit Coolers 115V/1/60	13,335
<u>Field installed components</u>		
2	Thermostatic expansion valves	684
1	Liquid line solenoid valve (loose)	328
1	Room thermostat (loose)	297
<u>Optional accessories</u>		
1	Air defrost timer installed	<u>577</u>
TOTAL LIST PRICE		\$37,651
1	4 year Compressor Protection Plan	NET PRICE \$472

Example 2:

10HP, R404A, -10°F Freezer, matched with 2 unit coolers
95°F Summer ambient, 35°F winter ambient

<u>QTY.</u>		
1	KFDS10L4SEA Outdoor Condensing 230/3/60 50,300 BTUH @ -20° S.T. and 95° ambient	\$39,022
1	DMB35 Electric defrost provisions, factory installed	2,217
2	MSE-325 unit coolers, 230/1/60 EC motors, 230/3/60 defrost 25,150 BTUH each @ 9 T.D.	30,856
<u>Field installed components</u>		
2	Thermostatic expansion valves (loose)	1,148
1	Liquid line solenoid valve (loose)	474
1	Room thermostat (loose)	297
<u>Optional accessories</u>		
1	Suction Accumulator (mounted)	1,201
1	Oil separator (mounted)	1,481
2	HX-350 Heat exchangers (field installed)	<u>1,104</u>
TOTAL LIST PRICE		\$77,800
1	4 year Compressor Protection Plan	NET PRICE \$854

OPTIONAL SYSTEM COMPONENTS

HEAT EXCHANGERS - Shipped Loose

MODEL NUMBER	PART NUMBER	LIST PRICE	CONNECTIONS (inches)		APPROXIMATE LENGTH (inches)
			LIQUID	SUCTION	
HX-25	105065001	\$163	1/4	1/2	12
HX-50	105065003	192	3/8	5/8	13
HX-75	105065004	264	3/8	7/8	14
HX-100	105065005	337	3/8	1-1/8	14
HX-150	105065006	389	1/2	1-1/8	14
HX-250	105065007	538	5/8	1-3/8	14
HX-350	105065008	552	5/8	1-5/8	16
HX-500	105065009	875	7/8	2-1/8	17
LHX-15	105065010	2,400	7/8	2-1/8	30
LHX-20	105065011	2,568	1-1/8	2-1/8	30
LHX-25	105065012	2,750	1-1/8	2-5/8	38

EcoNet Enabled Unit Coolers Available on Page 2 & 5

KE2 EVAP- OEM EVAPORATOR DEFROST CONTROL *

DESCRIPTION	PART NUMBER	LIST EACH
Factory Installed - For NEXT-GEN ALL-TEMP Low Profile 115V or 230V/1 (Air or Electric Defrost Models)	0829632	\$3,944

*1Ø units only. **Internally mounted control board**, external display, mounted sensors and EEV.

SURVEILLANT EVAPORATOR DEFROST CONTROL *

DESCRIPTION	PART NUMBER	LIST EACH
Factory Installed - For HSA models - 115V (Air Defrost Only)	08219551	\$5,727
Factory Installed - For HSA/HSE models - 230V/1 (Air or Electric Defrost)	08219552	
Smartgate Router (Shipped Loose)	08219541	\$3,006

*1Ø units only. **Externally mounted control enclosure**, mounted sensors and EEV

EXPANSION VALVES

BALANCED PORT TXV'S		LIST
1/4 - 3 Tons	Loose	\$347
	Installed	393
4 - 9 Tons	Loose	444
	Installed	691
10 - 30 Tons	Loose	771
	Installed	1,141
Electronic Expansion Valves		LIST
1 to 15 Tons	Loose	\$1,061
	Installed	1,402
16 to 25 Tons	Loose	1,524
	Installed	1,865

1. EEV prices include cable.
2. EEV prices DO NOT include controller.

ROOM THERMOSTATS

TYPE	RANGE	LIST EACH
Mechanical - Loose	-30°F to + 100°F	\$297
Mechanical - Installed @ Evap		\$322
Electronic - Loose	-30°F to + 100°F	\$383
Electronic - Installed @ Evap		\$402

LIQUID LINE SOLENOID VALVE - LIST PRICE EACH

HORSEPOWER RANGE	LOOSE	MTD*
1/2 thru 3 HP	\$293	\$316
4 thru 8 HP	328	366
9 thru 10 HP	474	605
12 thru 15 HP	585	754
22 HP	746	865

NEXT-GEN K-SERIES KOMPACT • AIR COOLED CONDENSING UNITS

1/2 THRU 6 H.P.

Standard Features (all models)

- Hermetic or Scroll compressors
- Weather resistant painted galvanized steel housing on a raised galvanized steel base
- Generously sized condenser. Enhanced Copper tubing / Aluminum fins
- Integrated subcooling loop increases system efficiency
- Easy access liquid & suction line shut off valves mounted external to cabinet
- Liquid receiver with isolation valve and pressure relief plug
- **Liquid line filter/drier and sight glass with moisture indicator**
- Suction line piping (filter optional)
- Encapsulated auto reset high pressure control

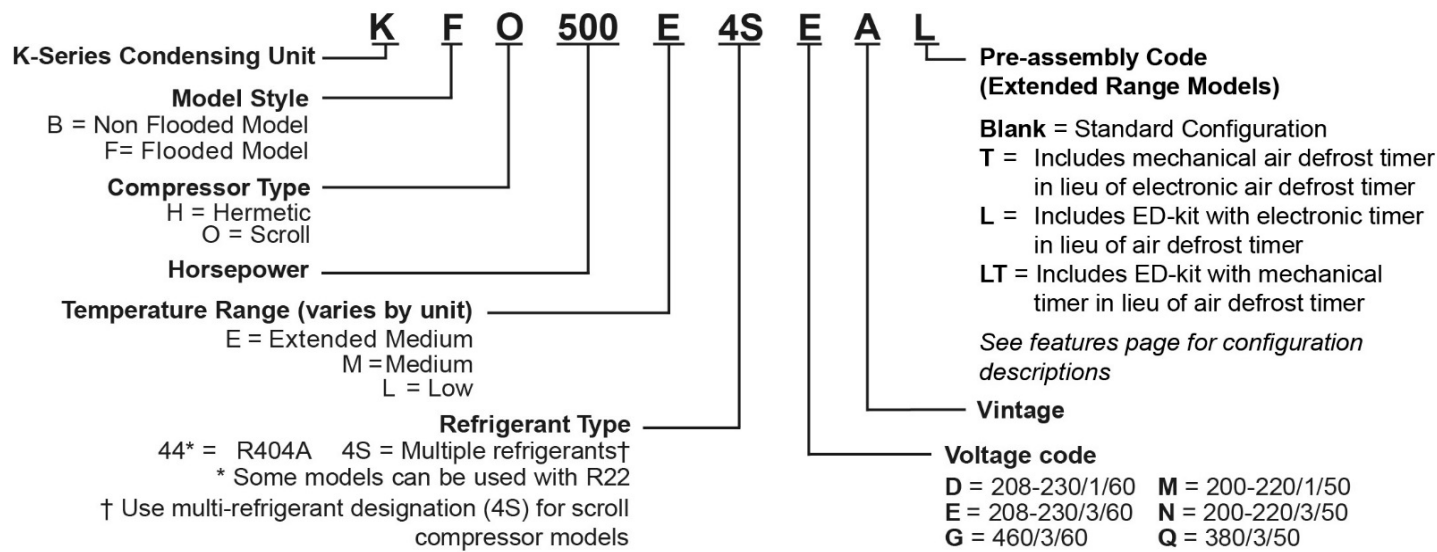
- Mild Ambient Fan Cycle control (2 fan KB models only)
- Large electrical control panel with hinged/lift off door
- Color coded wiring with point-to-point wiring diagram
- Crankcase heater
- PSC condenser fan motor(s)
- **Air Defrost Timer on all Medium Temp. models**
- **All Low temp. models include Electric Defrost provisions**
- UL and cUL listed for indoor / outdoor use
- Encapsulated auto reset low pressure control (medium temps)
- Adjustable low pressure control for low temp models

KF models also include a Flooded Head Pressure Control Valve (70°F) as a standard feature

Optional Components

- Electric Defrost on Extended range med. temp models
- Suction line filter
- Mounted replaceable core liquid or suction line filter (4 to 6 HP)
- Suction Accumulator
- Oil Separator (may not be available with accumulator)
- Liquid line piping only (no filter)
- Copper or polyester coated fins
- Electro-Fin coated condenser coil
- Single Speed EC condenser mtr.
- Pump down toggle switch
- Thru-the-door disconnect switch (some models)
- External fused or non-fused disconnect
- Paragon Mechanical timer
- CPC timer
- Phase loss monitor
- Snow / Hail guards

NOMENCLATURE:



NEXT-GEN K-SERIES KOMPACT • HERMETIC COMPRESSOR MODELS

§REF TYPE	NOM. H.P.	Model Number	Compressor	KF OUTDOOR FLOODED LIST PRICE (Includes Flooded Head Pressure Control Valve, Liquid Line Kit with Filter/Drier and Sight Glass with Moisture Indicator, and Defrost Timer or Kit)			KB INDOOR / OUTDOOR BASE UNIT LIST PRICE (Includes Fan Cycle Head Pressure Control Valve, Liquid Line Kit with Filter/Drier and Sight Glass with Moisture Indicator, and Defrost Timer or Kit)			†ECM Cond. Motor Add.	4 Year Compressor Protection Plan	Approx. Ship Wt. (LBS)
				208-230V/3	208-230V/1	460V/3	208-230V/3	208-230V/1	460V/3			
EXTENDED RANGE	0.50	K*H055E4S	RST45C1E	N/A	\$6,932	N/A	N/A	\$6,495	N/A	\$258	\$109 NET	152
	0.75	K*H080E4S	RST55C1E	N/A	6,990	N/A	N/A	6,580	N/A	258	109 NET	156
	0.75	K*H090E4S	RST64C1E	N/A	7,429	N/A	N/A	6,975	N/A	258	109 NET	160
	1.00	K*H100E4S	RST70C1E	\$7,691	7,778	N/A	\$7,205	7,293	N/A	258	109 NET	167
MEDIUM TEMP	1.25	K*H125E4S	RST97C1E	8,055	8,146	N/A	7,577	7,650	N/A	516	123 NET	195
	1.50	K*H150E44	CS10K6E	8,348	8,374	\$8,869	7,876	7,885	\$8,300	516	123 NET	205
	2.00	K*H200E44	CS12K6E	8,952	8,790	N/A	8,463	8,313	N/A	516	134 NET	228
LOW TEMP R404A	2.50	K*H250E44	CS14K6E	9,299	9,454	10,275	8,783	8,939	9,763	516	134 NET	235
	3.00	K*H300E44	CS18K6E	9,207	9,402	10,199	8,752	8,948	9,749	516	148 NET	253
	3.00	K*H325E44	CS20K6E	9,708	9,902	10,723	9,253	9,442	10,272	516	148 NET	273
LOW TEMP R404A	1.00	K*H100L44	CF04K6E	7,712	7,586	N/A	7,234	7,192	N/A	516	123 NET	195
	1.50	K*H150L44	CF06K6E	7,751	7,617	8,067	7,276	7,222	7,609	516	123 NET	195
	2.00	K*H200L44	CF09K6E	8,673	8,322	8,814	8,181	7,926	8,352	516	134 NET	243
	3.00	K*H300L44	CF12K6E	11,015	10,866	11,548	10,576	10,417	11,099	516	148 NET	255

§ For R507 models, use equivalent R404A model prices.

* Models 055E4S, 080E4S, and 090E4S are not suitable for use with R507. Use Scroll compressors for refrigerants other than R404A/507.

†Additional price to order optional ECM condenser fan motors. Not available for 460V.

NOTE: An optional Electric Defrost kit must be ordered in lieu of the standard Air Defrost Timer when Extended range medium temperature models are used for low temperature applications.

NEXT-GEN KOMPACT • AIR COOLED CONDENSING UNITS
1/2 THRU 6 H.P. SCROLL COMPRESSORS

Next-Gen **Komcompact** Air Cooled Condensing Units are configured with quiet and reliable scroll compressors.

Models range from 1/2 to 6 horsepower. Refer to page 16 for a list of optional components and publication number KM-KFH for detailed specifications.



NEXT-GEN KOMPACT • SCROLL COMPRESSOR MODELS												
Temp Range	NOM H.P.	Model Number	Compressor	KF Flooded Unit LIST PRICE			KB Non Flooded Unit LIST PRICE			4 Year Compressor Protection Plan	Approx. Ship Wt. (LBS)	EC ¹ Motor Adder
				(Includes Flooded Head Pressure Control Valve, Liquid Line Kit with Filter/Drier and Sight Glass with Moisture Indicator, and Defrost Timer or Kit)*			(Includes Fan Cycle Head Pressure Control Valve, Liquid Line Kit with Filter/Drier and Sight Glass with Moisture Indicator, and Defrost Timer or Kit)*					
				208-230V/3	208-230V/1	460/3	208-230V/3	208-230V/1	460/3			
Medium Temp	0.5	K*O060M4S	ZB06KAE	\$7,726	\$7,635	N/A	\$7,341	\$7,255	N/A	\$202 NET	195	\$258
	0.75	K*O080M4S	ZB07KAE	8,273	8,062	N/A	7,893	7,681	N/A	202 NET	195	258
	1.0	K*O100M4S	ZB08KAE	8,372	8,213	N/A	7,991	7,828	N/A	202 NET	195	258
	1.0	K*O130E4S	ZS09KAE	8,669	8,696	\$9,543	8,277	8,268	\$9,155	202 NET	195	258
	1.25	K*O150E4S	ZS11KAE	8,812	8,755	9,774	8,416	8,330	9,379	202 NET	205	258
	1.5	K*O180E4S	ZS13KAE	9,523	9,683	10,243	9,039	9,068	9,805	202 NET	210	258
	2.0	K*O200E4S	ZS15KAE	9,760	9,694	10,360	9,294	9,229	9,921	202 NET	215	258
	2.5	K*O250E4S	ZS19KAE	10,006	9,876	10,507	9,548	9,408	10,068	202 NET	230	258
	3.0	K*O300E4S	ZS21KAE	10,755	10,572	11,205	10,349	10,178	10,824	263 NET	305	460
	3.5	K*O350E4S	ZS26KAE	11,794	11,612	12,213	11,335	11,149	11,770	263 NET	325	460
	4.0	K*O400E4S	ZS29KAE	11,540	11,771	12,693	11,127	11,319	12,284	275 NET	352	460
	4.5	K*O450E4S	ZS33KAE	12,450	12,702	13,703	12,006	12,274	13,162	282 NET	375	460
5.0	K*O500E4S	ZS38K4E	13,437	13,291	13,853	13,044	12,894	13,432	282 NET	383	460	
6.0	K*O600E4S	ZS45K4E	14,910	N/A	15,329	14,395	N/A	14,886	282 NET	405	460	
Low Temp	1.0	K*O100L4S	ZF03KAE	8,918	8,800	N/A	8,326	8,323	N/A	202 NET	195	258
	1.3	K*O130L4S	ZF04KAE	9,306	9,183	N/A	8,782	8,739	N/A	202 NET	195	258
	1.5	K*O160L4S	ZF05KAE	9,723	9,594	N/A	9,247	9,171	N/A	202 NET	195	258
	2.3	K*O230L4S	ZF07K4E	10,318	10,180	N/A	9,915	9,781	N/A	202 NET	230	258
	2.5	K*O250L4S	ZF08K4E	11,190	10,994	12,065	10,810	10,613	11,462	202 NET	240	258
	3.0	K*O300L4S	ZF09K4E	11,598	11,386	12,271	11,217	11,259	11,837	263 NET	245	258
	3.5	K*O350L4S	ZF11K4E	12,722	12,580	13,140	12,341	12,161	12,760	263 NET	255	258
	4.0	K*O400L4S	ZF13K4E	14,317	14,174	14,518	13,936	13,794	14,138	275 NET	352	460
	5.0	K*O500L4S	ZF15K4E	14,726	14,647	14,969	14,346	14,200	14,588	275 NET	367	460
	6.0	K*O600L4S	ZF18K4E	15,582	N/A	15,832	15,202	N/A	15,451	282 NET	383	460

¹Additional list price to order optional Electronically Commutated condenser fan motors. Not available for 460V.

* See page 14 for a complete list of features, voltage codes and an example of nomenclature layout.

NOTE: An optional Electric Defrost kit must be ordered in lieu of the standard Air Defrost Timer when Extended Range Medium Temperature Models are used for low temperature applications.

LEGACY KOMPACT • AIR COOLED CONDENSING UNITS

Standard features for Legacy KE style Indoor / Outdoor models:

- Semi-hermetic compressors
- Heavy gauge galvanized steel weather-proof housing on a raised base
- Compressor Contactor (three phase) or Start Kit (single phase)
- Main Power Block and Control Circuit Fuses
- High-low Pressure Control and Oil Pressure Control (when required)
- Liquid Receiver with Shut-off Valve and Pressure Relief Plug
- Liquid and suction line piping (filters are optional)
- PSC condenser fan motor(s)
- UL and cUL listed.

Standard features for Legacy KL style models:

- Same features as KE models, plus:
- Liquid Line Filter/Drier, Sight Glass & Pre-bent Piping
- Crankcase Heater
- Low ambient Head Pressure Valve
- Air Defrost Timer on 2-1/2 to 3 H.P. Medium & High Temp models
- Electric Defrost Timer with Defrost Contactor/Relay on Low Temp models (ED10-230/1 on 1/2 thru 3 HP)

SEMI-HERMETIC COMPRESSOR MODELS												
REF TYPE	NOM H.P.	Model Number	Compressor	KL OUTDOOR PACKAGE LIST PRICE			KE INDOOR/ OUTDOOR LIST PRICE			4 Year Compressor Protection Plan	Approx. Ship Wt. (LBS)	EC ¹ Motor Adder
				208-230V/3	208-230V/1	460V/3	208-230V/3	208-230V/1	460V/3			
				MEDIUM TEMP R404A	0.75	K*S075M44	KAN-007E	\$8,336	\$8,336			
1.0	K*S100M44	KAR-010E	8,583		8,583	N/A	7,076	7,076	N/A	202 NET	220	258
1.5	K*S150M44	KAG-010E	10,388		N/A	N/A	8,484	N/A	N/A	202 NET	245	516
2.0	K*S200M44	KAK-02xE	12,197		12,197	N/A	10,556	10,556	N/A	202 NET	270	516
2.5	K*S250M44	ERC-02xE	12,680		N/A	13,867	12,188	N/A	\$13,296	202 NET	385	516
3.0	K*S300M44	ERF-031E	14,196		14,565	14,863	13,042	13,408	13,891	263 NET	415	516
LOW TEMP R404A	0.50	K*S050L44	KAN-005E	8,927	8,927	N/A	6,500	6,276	N/A	202 NET	189	258
	0.75	K*S075L44	KAM-007E	9,585	9,585	N/A	6,847	6,658	N/A	202 NET	205	258
	1.0	K*S100L44	KAJ-01xE	10,024	10,024	10,376	7,548	7,534	7,840	202 NET	220	258
	1.5	K*S150L44	KAL-01xE	10,459	10,296	11,440	8,813	8,670	10,296	202 NET	248	516
	2.0	K*S200L44	EAV-021E	12,906	12,976	13,669	10,727	10,886	12,837	202 NET	290	516
	3.0	K*S300L44*	LAH-032E	14,344	14,344	14,759	12,898	13,190	13,917	263 NET	383	516

* Model K*S300L44 is not available for 208V/1 (230V only).

¹Additional list price to order optional Electronically Commutated condenser fan motors. Not available for 460V.

LEGACY KOMPACT WITH DISCUS COMPRESSOR

No Longer Available. Select Next Gen II model - See Page 17

NEXT-GEN KOMPACT / LEGACY K-SERIES • AIR COOLED CONDENSING UNITS

1/2 THRU 6 H.P. - OPTIONS

FACTORY INSTALLED OPTIONS

OPTIONS / ACCESSORIES	OPTION NUMBER	H.P. RANGE	KF MODELS	KB MODELS	KL PACKAGE	KE MODELS
CRANKCASE HEATER	CCH-1	1/2 - 6 H.P.	STD.	STD.	STD.	\$215
DEDUCT CRANKCASE HEATER	CCH-DED	1/2 - 6 H.P.	-\$215	-\$215	-\$215	N/A
LIQUID LINE COMPONENTS	LK-MC1	1/2 - 3 H.P.	STD.	STD.	STD.	539
- Filter drier, sight-glass and piping	LK-MC2	4 - 6 H.P.	STD.	STD.	STD.	626
LIQUID LINE ONLY (Deduct liquid line filter and sight glass)	LL-MC1	1/2 - 3 H.P.	-344	-344	N/A	STD.
	LL-MC2	4 - 6 H.P.	-409	-409	N/A	STD.
Replaceable Core Liquid Filter/Dryer (4 - 6 H.P. only) Must add LK for KE unit	RPL-4	4 - 6 H.P.	506	506	506	506
SUCTION LINE COMPONENTS	SK-MC1	1/2 - 3 H.P.	344	344	344	344
- Filter and Piping	SK-MC2	4 - 6 H.P.	409	409	409	409
REPLACEABLE CORE SUCTION FILTER (4 - 6 H.P. only)	RPS-4	4 - 6 H.P.	489	489	489	489
SUCTION LINE ACCUMULATOR - Must add SK option	ASK-3	1/2 - 2 HP	529†	529†	529†	529†
	ASK-4	2½ - 6 H.P.	817†	817†	817†	817†
OIL SEPARATOR 4-6 HP (Due to space limits, may not be available with ASK opt)	OS-4	4 - 6 H.P.	1,391	1,391	1,391	1,391
OVER-SIZED RECEIVER – Refers to Next-Gen CU frame sizes FM1 through FM4. See product catalogue for details. Contact factory for Legacy model oversized receiver prices.	OSR-1	FM1	439	439	Contact Application Engineering for pricing this option	
	OSR-2	FM2	523	523		
	OSR-3	FM3	1,251	1,251		
	OSR-4	FM4	1,284	1,284		
SPRING MOUNT AND DISCHARGE VIBRASORBER - Semi-Hermetics only.	SPR-VB	1/2 - 3 H.P.	N/A	N/A	264	264
- Standard on 4 - 6 H.P. models,		4 - 6 H.P.	N/A	N/A	NLA	NLA
LOW AMBIENT FLOODED HEAD PRESSURE CONTROL	FLD-SF	1/2 - 2 H.P.	STD.	N/A	STD.	382
	FLD-F	2½ - 3 H.P.	STD.	N/A	STD.	382
MILD AMBIENT FAN CYCLE	FC-1	KB all, KE 2 fan only	N/A	STD	N/A	374
ADJUSTABLE LOW PRESSURE CONTROL (For medium temperature units)	ADJ-LP	1/2 - 6 H.P.	160	160	160	160
ADJUSTABLE HI/LOW PRESSURE CONTROL	204464041	1/2 - 6 H.P.	358	358	358	358
PUMPDOWN TOGGLE SWITCH	PDS	1/2 - 6 H.P.	337	337	337	337
AIR DEFROST TIMER ¹ (Electronic timer is standard. No additional charge to substitute mechanical timer. Specify at time of order.)	TMR ¹	1/2 - 6 H.P.	STD.	STD.	577	577
DEDUCT AIR DEFROST TIMER ¹	DEDUCT TMR ¹	2 1/2 - 6 H.P.	-577	-577	-577	N/A
SUBSTITUTE ED KIT (ED5 THRU ED10) FOR AIR DEFROST TIMER ²	REPLACE TMR ²	1 - 6 H.P. ²	119	119	N/A	N/A
ELEC. DEFR. TIMER WITH BLOCK-OUT RELAY 230/1 ^{††}	ED-5 THRU ED-10	1/2 - 6 H.P.	STD.*	STD.*	STD.*	695
* 2 EVAP ELEC. DEFR. TIMER WITHOUT BLOCK-OUT RELAY 230/1 ^{††}	ED-210-A2	1/2 - 6 H.P.	SPECIFY	SPECIFY	SPECIFY	695
ELECTRIC DEFR. TIMER WITH BLOCK-OUT AND CONTACTOR 230/3 ^{††}	ED-11-B2	1/2 - 6 H.P.	STD.*	STD.*	STD.*	695
DEDUCT STANDARD EVAP ELECTRIC DEFROST COMPONENTS		1/2 - 6 H.P.	-695	-695	-695	N/A
** 2 EVAP ELEC. DEFR. TMR WITH ONE 30 AMP DEFR. CONTACTOR 230/3 ^{††}	ED-211-B2	1/2 - 6 H.P.	SPECIFY	SPECIFY	SPECIFY	695
2 EVAP ELEC. DEFR. TMR WITH ONE 50 AMP DEFR. CONTACTOR 230/3 ^{††}	ED-213-B2	1/2 - 6 H.P.	772	772	772	1,348
2 EVAP. ELEC. DEFR. WITH SEQUENCING & B.O. RELAYS 230/1 ^{††}	ED-20-A2	4 - 6 H.P.	1,230	1,230	1,230	1,925
2 EVAP. ELEC. DEFR. WITH SEQ. & B.O. W/ CONTACTORS 230/3 ^{††}	ED-21-B2	4 - 6 H.P.	1,230	1,230	1,230	1,925
HEATED AND INSULATED RECEIVER	HIR	1/2 - 6 H.P.	717	717	717	717
PHASE LOSS MONITOR	PLM	1/2 - 6 H.P.	1,175	1,175	1,175	1,175
CRANKCASE PRESSURE REGULATING VALVE - (LOOSE ONLY)	CPR-1	1/2 - 6 H.P.	782	782	782	782
POLYESTER COATED CONDENSER FINS	PCF	1/2 - 3 H.P.	996	996	996	996
		4 - 6 H.P.	1,295	1,295	1,295	1,295
COPPER FINS OR ELECTRO FIN COATED COIL	CONTACT APPLICATIONS ENGINEERING FOR PRICING					
THRU THE DOOR NON - FUSED DISCONNECT SWITCH	TDNM-1	1/2 - 3 H.P.	504	504	504	504
	TDNM-2	4 - 6 H.P.	669	669	669	669
THRU THE DOOR FUSED DISCONNECT SWITCH	TDFM-1	1/2 - 3 H.P.	N/A	N/A	N/A	N/A
	TDFM-2	4 - 6 H.P.	1,371	1,371	1,371	1,371
EXTERNAL FUSED DISCONNECT (Mounted)	EFDM-1	1/2 - 3 H.P.	567	567	567	567
	EFDM-2	4 - 6 H.P.	1,043	1,043	1,043	1,043

FIELD INSTALLED OPTIONS

OPTIONS AND ACCESSORIES		H.P. RANGE	KF MODELS	KB MODELS	KL MODELS	KE MODELS
EXTERNAL FUSED DISCONNECT (Shipped loose)	EFDL-2	4 - 6 H.P.	\$938	\$938	\$938	\$938
TWO TIERED STACKING RACK	08357263	1/2 - 3 H.P.	10,322	10,322	C/F	C/F
	08357286	4 - 6 H.P.	10,322	10,322	C/F	C/F
SNOW / HAIL GUARDS (Shipped loose)	SG-A	Config. A, FM1	385	385	385	385
	SG-B	Config. B, FM2	424	424	424	424
	SG-C	Config. C, FM3	459	459	459	459
	SG-D	Config. D, FM4	563	563	563	563

Negative numbers represent the price to be deducted from base price if a standard feature is removed.

¹ AIR DEFROST TIMER IS STANDARD ON 2-1/2 - 6 HP HIGH/MEDIUM TEMP **KL** MODELS AND STANDARD FOR ALL KF AND KB MED. TEMP. MODELS

² SUBSTITUTE ED KIT (ED5 THRU ED10) FOR AIR DEFROST TIMER. VALID FOR NEXT-GEN EXTENDED RANGE KOMPACT ONLY. APPLIES TO PRE-ASSEMBLY CODES L AND LT. SEE NOMENCLATURE.

*ELECTRIC DEFROST PROVISIONS (ED KIT) FOR ONE EVAP IS A STANDARD FEATURE ON LOW TEMPERATURE UNITS (ED Kits are optional for KE models).

†† REFER TO THE APPROPRIATE EVAPORATOR PRODUCT BULLETIN TO IDENTIFY THE CORRECT E.D. KIT FOR YOUR REQUIREMENT.

NOT ALL E.D. KITS FIT INTO ALL CONTROL PANELS. CONTACT APPLICATIONS ENGINEERING WITH QUESTIONS.

† MUST ADD SK OPTION TO ADD A SUCTION LINE ACCUMULATOR IF SK IS NOT ALREADY INCLUDED (See Kompact-Series publication for details).

NEXT-GEN II AIR COOLED CONDENSING UNITS

3 THRU 22 H.P.



Unit is shown with optional components mounted

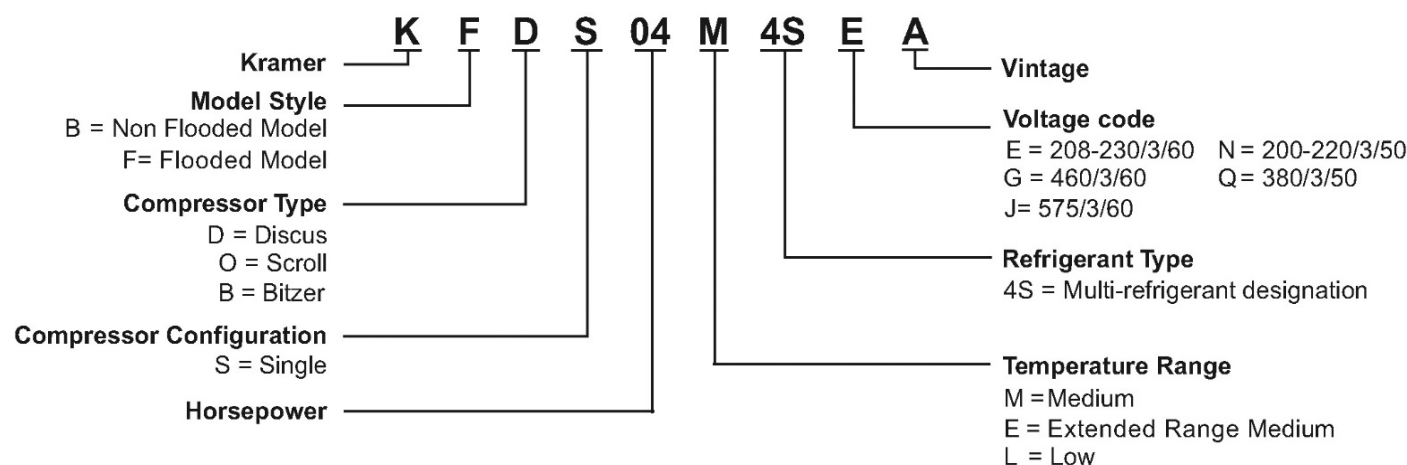
Standard Features (all models):

- Copeland Discus™, Copeland Scroll™ or Bitzer Semi-Hermetic Compressor
- All weather G90 galvanized steel painted enclosure
- Removable side panels for ease of service
- Generously sized high efficiency condenser, with enhanced copper tubes/and aluminum fins
- Liquid line kit with sealed filter/drier and sight glass with moisture indicator
- Easy access base mounted service valves placed external to cabinet
- Dual pressure (auto reset) controls with flexible Reflex® hoses
- Vertical receiver with isolation valves
- Refrigerant pressure relief valve (Larger models in FD2 and FD3 cabinets)
- Integral liquid subcooling circuit
- Suction line piping (filter optional)
- Heavy duty three phase condenser fan motor(s)
- Crankcase heater
- Control circuit fuses
- Pump down toggle switch
- Large electrical panel with hinged door
- 208-230V control voltage
- Color coded point-to-point wiring
- Fan cycling on KB models
- Liquid injection / Demand Cooling™ for low temp compressors

KF models also include a Flooded Head Pressure Control Valve (70°F) as a standard feature

Optional Features (all models):

- Electronic air defrost timer
- Electric defrost kits
- Mechanical timer in lieu of electronic timer
- 50 Hz timer and/or defrost kit
- Current sensing relay
- Thru the door Non-fused disconnect
- Suction line filter (sealed)
- Suction accumulator
- Oil separator
- Replaceable core liquid filter with bypass
- Replaceable core suction filter with bypass
- External fused or non-fused disconnect - loose or mounted
- Heated and insulated receiver (Temp controlled with low pressure bypass timer)
- Refrigerant pressure relief valve (for models in FD1 cabinet).
- Oversized receiver
- Insulated receiver
- Hail / Snow Guard - shipped loose (only)
- 316 Grade stainless steel housing
- Crankcase pressure regulator



Temp Range	Compressor (Discus)	H.P.	Model Number	KF Flooded Unit List Price	VOLTAGE	Model Number	KB Non Flooded List Price	4 Year Compressor Protection Plan	Approx. Ship Wt. (LBS)
Medium Temp Discus	2DC3R53K	04	KFDS04M4SEA	\$22,032	208/230/3/60	KBDS04M4SEA	\$21,012	\$472 NET	825
			KFDS04M4SGA	23,404	460/3/60	KBDS04M4SGA	22,383		
			KFDS04M4SJA	23,873	575/3/60	KBDS04M4SJA	22,853		
	2DD3R63K	05	KFDS05M4SEA	22,430	208/230/3/60	KBDS05M4SEA	21,408	472 NET	850
			KFDS05M4SGA	23,745	460/3/60	KBDS05M4SGA	22,724		
			KFDS05M4SJA	24,342	575/3/60	KBDS05M4SJA	23,321		
	2DL3R78K	06	KFDS06M4SEA	27,857	208/230/3/60	KBDS06M4SEA	26,836	572 NET	1,075
			KFDS06M4SGA	29,796	460/3/60	KBDS06M4SGA	28,776		
			KFDS06M4SJA	30,389	575/3/60	KBDS06M4SJA	29,369		
	2DA3R89K	07	KFDS07M4SEA	28,448	208/230/3/60	KBDS07M4SEA	27,427	580 NET	1,100
			KFDS07M4SGA	30,188	460/3/60	KBDS07M4SGA	29,167		
			KFDS07M4SJA	30,782	575/3/60	KBDS07M4SJA	29,761		
	3DA3R10M	08	KFDS08M4SEA	31,904	208/230/3/60	KBDS08M4SEA	30,884	580 NET	1,130
			KFDS08M4SGA	33,816	460/3/60	KBDS08M4SGA	32,794		
			KFDS08M4SJA	34,505	575/3/60	KBDS08M4SJA	33,484		
	3DB3R12M	10	KFDS10M4SEA	34,212	208/230/3/60	KBDS10M4SEA	33,191	750 NET	1,330
			KFDS10M4SGA	35,983	460/3/60	KBDS10M4SGA	34,962		
			KFDS10M4SJA	36,646	575/3/60	KBDS10M4SJA	35,625		
	3DF3R15M	12	KFDS12M4SEA	37,060	208/230/3/60	KBDS12M4SEA	36,039	900 NET	1,330
			KFDS12M4SGA	38,511	460/3/60	KBDS12M4SGA	37,490		
			KFDS12M4SJA	N/A	575/3/60	KBDS12M4SJA	N/A		
	3DS3R17M	15	KFDS15M4SEA	38,612	208/230/3/60	KBDS15M4SEA	37,592	1,161 NET	1,350
			KFDS15M4SGA	39,916	460/3/60	KBDS15M4SGA	38,895		
			KFDS15M4SJA	40,594	575/3/60	KBDS15M4SJA	39,573		

Voltage codes: E = 208-230/3/60, G = 460V/3/60, J = 575V/3/6

* See next page for condensing units with low temp Discus™ or Scroll™ compressors.

NEXT-GEN II AIR COOLED CONDENSING UNITS
3 THRU 22 H.P. - DISCUS and SCROLL

Temperature Range	Compressor (Discus)	H.P.	Model Number	KF Flooded List Price	VOLTAGE	Model Number	KB Non Flooded List Price	4 Year Compressor Protection Plan	Approx. Ship Wt. (LBS)
Low Temp Discus	2DF3F16K	03	KFDS03L4SEA	\$24,483	208/230/3/60	KBDS03L4SEA	\$23,461	\$318 NET	710
			KFDS03L4SGA	25,997	460/3/60	KBDS03L4SGA	24,976		
			KFDS03L4SJA	26,549	575/3/60	KBDS03L4SJA	25,529		
	2DL3F20K	04	KFDS04L4SEA	26,589	208/230/3/60	KBDS04L4SEA	25,567	472 NET	760
			KFDS04L4SGA	28,125	460/3/60	KBDS04L4SGA	27,103		
			KFDS04L4SJA	28,622	575/3/60	KBDS04L4SJA	27,601		
	2DA3F23K	05	KFDS05L4SEA	27,167	208/230/3/60	KBDS05L4SEA	26,146	472 NET	805
			KFDS05L4SGA	28,912	460/3/60	KBDS05L4SGA	27,891		
			KFDS05L4SJA	29,433	575/3/60	KBDS05L4SJA	28,412		
	3DA3F28K	06	KFDS06L4SEA	29,387	208/230/3/60	KBDS06L4SEA	28,367	572 NET	870
			KFDS06L4SGA	31,145	460/3/60	KBDS06L4SGA	30,125		
			KFDS06L4SJA	31,845	575/3/60	KBDS06L4SJA	30,824		
	3DB3F33K	08	KFDS08L4SEA	32,585	208/230/3/60	KBDS08L4SEA	31,564	580 NET	1,130
			KFDS08L4SGA	34,004	460/3/60	KBDS08L4SGA	32,983		
			KFDS08L4SJA	35,079	575/3/60	KBDS08L4SJA	34,058		
	3DF3F40K	09	KFDS09L4SEA	36,152	208/230/3/60	KBDS09L4SEA	35,132	750 NET	1,275
			KFDS09L4SGA	38,135	460/3/60	KBDS09L4SGA	37,113		
			KFDS09L4SJA	38,838	575/3/60	KBDS09L4SJA	37,816		
	3DS3F46K	10	KFDS10L4SEA	39,022	208/230/3/60	KBDS10L4SEA	38,001	854 NET	1,275
			KFDS10L4SGA	39,651	460/3/60	KBDS10L4SGA	38,630		
			KFDS10L4SJA	40,579	575/3/60	KBDS10L4SJA	39,557		
	4DBNF54K	12	KFDS12L4SEA	39,745	208/230/3/60	KBDS12L4SEA	38,724	900 NET	1,290
			KFDS12L4SGA	40,592	460/3/60	KBDS12L4SGA	39,571		
			KFDS12L4SJA	41,356	575/3/60	KBDS12L4SJA	40,334		
4DHNF63K	15	KFDS15L4SEA	41,638	208/230/3/60	KBDS15L4SEA	40,621	1,161 NET	1,310	
		KFDS15L4SGA	42,259	460/3/60	KBDS15L4SGA	41,239			
		KFDS15L4SJA	43,092	575/3/60	KBDS15L4SJA	42,071			
4DJNF76K	22	KFDS22L4SEA	46,842	208/230/3/60	KBDS22L4SEA	45,820	1,437 NET	1,420	
		KFDS22L4SGA	47,582	460/3/60	KBDS22L4SGA	46,561			
		KFDS22L4SJA	48,726	575/3/60	KBDS22L4SJA	47,706			

Temperature Range	Compressor (Scroll)	H.P.	Model Number	KF Flooded LIST PRICE	VOLTAGE	Model Number	KB Non Flooded List Price	4 Year Compressor Protection Plan	Approx. Ship Wt. (LBS)
Medium Temp Scroll	ZS29KAE	04	KFOS04E4SEA	\$20,249	208/230/3/60	KBOS04E4SEA	\$19,229	\$275 NET	700
			KFOS04E4SGA	21,848	460/3/60	KBOS04E4SGA	20,828		
			KFOS04E4SJA	22,322	575/3/60	KBOS04E4SJA	21,300		
	ZS33KAE	05	KFOS05E4SEA	20,610	208/230/3/60	KBOS05E4SEA	19,588	275 NET	710
			KFOS05E4SGA	22,181	460/3/60	KBOS05E4SGA	21,160		
			KFOS05E4SJA	22,718	575/3/60	KBOS05E4SJA	21,696		
	ZS38K4E	06	KFOS06E4SEA	23,485	208/230/3/60	KBOS06E4SEA	22,464	282 NET	710
			KFOS06E4SGA	25,369	460/3/60	KBOS06E4SGA	24,347		
			KFOS06E4SJA	25,902	575/3/60	KBOS06E4SJA	24,882		
	ZS45K4E	07	KFOS07E4SEA	23,943	208/230/3/60	KBOS07E4SEA	22,922	466 NET	870
			KFOS07E4SGA	25,726	460/3/60	KBOS07E4SGA	24,705		
			KFOS07E4SJA	26,261	575/3/60	KBOS07E4SJA	25,240		
	ZB58K5E	08	KFOS08E4SEA	24,416	208/230/3/60	KBOS08E4SEA	23,396	466 NET	915
			KFOS08E4SGA	26,220	460/3/60	KBOS08E4SGA	25,199		
			KFOS08E4SJA	26,790	575/3/60	KBOS08E4SJA	25,769		
	ZB66K5E	09	KFOS09E4SEA	25,769	208/230/3/60	KBOS09E4SEA	24,749	504 NET	980
			KFOS09E4SGA	27,382	460/3/60	KBOS09E4SGA	26,361		
			KFOS09E4SJA	27,926	575/3/60	KBOS09E4SJA	26,905		
	ZB76K5E	10	KFOS10E4SEA	30,127	208/230/3/60	KBOS10E4SEA	29,105	504 NET	1,085
			KFOS10E4SGA	31,272	460/3/60	KBOS10E4SGA	30,250		
			KFOS10E4SJA	31,914	575/3/60	KBOS10E4SJA	30,893		
	ZB95K5E	13	KFOS13E4SEA	33,365	208/230/3/60	KBOS13E4SEA	32,345	582 NET	1,105
			KFOS13E4SGA	33,442	460/3/60	KBOS13E4SGA	32,421		
			KFOS13E4SJA	34,535	575/3/60	KBOS13E4SJA	33,514		
ZB114K5E	15	KFOS15E4SEA	37,254	208/230/3/60	KBOS15E4SEA	36,233	594 NET	1,200	
		KFOS15E4SGA	38,955	460/3/60	KBOS15E4SGA	37,934			
		KFOS15E4SJA	39,716	575/3/60	KBOS15E4SJA	38,694			

Low Temp Scroll	ZF25K4E	08	KFOS08L4SEA	\$23,073	208/230/3/60	KBOS08L4SEA	\$22,052	\$466 NET	850
			KFOS08L4SGA	24,438	460/3/60	KBOS08L4SGA	23,417		
			KFOS08L4SJA	24,916	575/3/60	KBOS08L4SJA	23,895		
	ZF34K5E	10	KFOS10L4SEA	28,640	208/230/3/60	KBOS10L4SEA	27,618	504 NET	1,025
			KFOS10L4SGA	30,324	460/3/60	KBOS10L4SGA	29,303		
			KFOS10L4SJA	30,946	575/3/60	KBOS10L4SJA	29,925		
	ZF41K5E	13	KFOS13L4SEA	32,370	208/230/3/60	KBOS13L4SEA	31,349	582 NET	1,050
			KFOS13L4SGA	32,924	460/3/60	KBOS13L4SGA	31,903		
			KFOS13L4SJA	33,821	575/3/60	KBOS13L4SJA	32,800		
	ZF49K5E	15	KFOS15L4SEA	33,445	208/230/3/60	KBOS15L4SEA	32,425	594 NET	1,105
			KFOS15L4SGA	34,200	460/3/60	KBOS15L4SGA	33,180		
			KFOS15L4SJA	34,884	575/3/60	KBOS15L4SJA	33,862		

Voltage codes: E = 208-230/3/60, G = 460V/3/60, J = 575V/3/60

* See next Page for Condensing units with Bitzer Compressors

**NEXT-GEN II AIR COOLED CONDENSING UNITS
3 THRU 22 H.P. - BITZER**

Temperature Range	Compressor (Bitzer)	H.P.	Model Number	KF Flooded List Price	VOLTAGE	Model Number	KB Non Flooded List Price	4 Year Compressor Protection Plan	Approx. Ship Wt. (LBS)
Medium Temp Bitzer	2DES-3	03	KFBS03E4SEA	\$24,177	208/230/3/60	KBBS03E4SEA	\$23,156	\$472 NET	800
			KFBS03E4SGA	25,762	460/3/60	KBBS03E4SGA	24,741		
			KFBS03E4SJA	26,001	575/3/60	KBBS03E4SJA	24,980		
	2CES-4	04	KFBS04E4SEA	24,558	208/230/3/60	KBBS04E4SEA	23,536	472 NET	825
			KFBS04E4SGA	26,086	460/3/60	KBBS04E4SGA	25,065		
			KFBS04E4SJA	26,457	575/3/60	KBBS04E4SJA	25,435		
	4FES-5	05	KFBS05E4SEA	24,954	208/230/3/60	KBBS05E4SEA	23,934	472 NET	850
			KFBS05E4SGA	26,427	460/3/60	KBBS05E4SGA	25,406		
			KFBS05E4SJA	26,914	575/3/60	KBBS05E4SJA	25,893		
	4EES-6	06	KFBS06E4SEA	27,352	208/230/3/60	KBBS06E4SEA	26,331	572 NET	1,075
			KFBS06E4SGA	28,385	460/3/60	KBBS06E4SGA	27,363		
			KFBS06E4SJA	30,218	575/3/60	KBBS06E4SJA	29,197		
	4DES-7	07	KFBS07E4SEA	29,716	208/230/3/60	KBBS07E4SEA	28,696	580 NET	1,100
			KFBS07E4SGA	30,309	460/3/60	KBBS07E4SGA	29,288		
			KFBS07E4SJA	33,489	575/3/60	KBBS07E4SJA	32,468		
	4CES-9	08	KFBS08E4SEA	33,489	208/230/3/60	KBBS08E4SEA	32,468	580 NET	1,130
			KFBS08E4SGA	35,163	460/3/60	KBBS08E4SGA	34,142		
			KFBS08E4SJA	35,920	575/3/60	KBBS08E4SJA	34,898		
	4TES-12	10	KFBS10E4SEA	33,893	208/230/3/60	KBBS10E4SEA	32,871	750 NET	1,330
			KFBS10E4SGA	35,895	460/3/60	KBBS10E4SGA	34,873		
			KFBS10E4SJA	36,557	575/3/60	KBBS10E4SJA	35,537		
	4PES-15	12	KFBS12E4SEA	35,333	208/230/3/60	KBBS12E4SEA	34,312	900 NET	1,330
			KFBS12E4SGA	37,175	460/3/60	KBBS12E4SGA	36,155		
			KFBS12E4SJA	37,838	575/3/60	KBBS12E4SJA	36,817		
4NES-20	15	KFBS15E4SEA	36,137	208/230/3/60	KBBS15E4SEA	35,116	1,161 NET	1,350	
		KFBS15E4SGA	37,905	460/3/60	KBBS15E4SGA	36,885			
		KFBS15E4SJA	38,564	575/3/60	KBBS15E4SJA	37,543			

Low Temp Bitzer	4FES-3	03	KFBS03L4SEA	\$24,060	208/230/3/60	KBBS03L4SEA	\$23,040	\$292 NET	710
			KFBS03L4SGA	24,901	460/3/60	KBBS03L4SGA	23,880		
			KFBS03L4SJA	25,438	575/3/60	KBBS03L4SJA	24,417		
	4EES-4	04	KFBS04L4SEA	26,183	208/230/3/60	KBBS04L4SEA	25,162	292 NET	760
			KFBS04L4SGA	27,023	460/3/60	KBBS04L4SGA	26,002		
			KFBS04L4SJA	27,561	575/3/60	KBBS04L4SJA	26,540		
	4DES-5	05	KFBS05L4SEA	27,379	208/230/3/60	KBBS05L4SEA	26,358	324 NET	805
			KFBS05L4SGA	28,307	460/3/60	KBBS05L4SGA	27,286		
			KFBS05L4SJA	28,827	575/3/60	KBBS05L4SJA	27,805		
	4CES-6	06	KFBS06L4SEA	32,283	208/230/3/60	KBBS06L4SEA	31,262	337 NET	870
			KFBS06L4SGA	33,486	460/3/60	KBBS06L4SGA	32,465		
			KFBS06L4SJA	33,841	575/3/60	KBBS06L4SJA	32,819		
	4TES-9	08	KFBS08L4SEA	34,348	208/230/3/60	KBBS08L4SEA	33,327	337 NET	1,130
			KFBS08L4SGA	35,504	460/3/60	KBBS08L4SGA	34,483		
			KFBS08L4SJA	35,965	575/3/60	KBBS08L4SJA	34,944		
	4PES-12	09	KFBS09L4SEA	36,590	208/230/3/60	KBBS09L4SEA	35,569	337 NET	1,275
			KFBS09L4SGA	37,681	460/3/60	KBBS09L4SGA	36,660		
			KFBS09L4SJA	38,706	575/3/60	KBBS09L4SJA	37,684		
	4NES-14	10	KFBS10L4SEA	38,865	208/230/3/60	KBBS10L4SEA	37,844	337 NET	1,275
			KFBS10L4SGA	39,956	460/3/60	KBBS10L4SGA	38,934		
			KFBS10L4SJA	40,980	575/3/60	KBBS10L4SJA	39,959		
	4JE-15	12	KFBS12L4SEA	41,686	208/230/3/60	KBBS12L4SEA	40,665	457 NET	1,290
			KFBS12L4SGA	42,777	460/3/60	KBBS12L4SGA	41,757		
			KFBS12L4SJA	43,802	575/3/60	KBBS12L4SJA	42,781		
4HE-18	15	KFBS15L4SEA	44,573	208/230/3/60	KBBS15L4SEA	43,552	567 NET	1,310	
		KFBS15L4SGA	45,661	460/3/60	KBBS15L4SGA	44,640			
		KFBS15L4SJA	46,689	575/3/60	KBBS15L4SJA	45,667			
4GE-23	22	KFBS22L4SEA	46,098	208/230/3/60	KBBS22L4SEA	42,459	645 NET	1,420	
		KFBS22L4SGA	47,251	460/3/60	KBBS22L4SGA	46,230			
		KFBS22L4SJA	48,279	575/3/60	KBBS22L4SJA	47,258			

Voltage codes: E = 208-230/3/60, G = 460V/3/60, J = 575V/3/60

3 THRU 22 H.P. CONDENSING UNITS - FACTORY INSTALLED DEFROST KITS

1 EVAPORATOR PER CU	Max Defrost Load (Amps per evap.)	List Price
DMA15	15	\$1,324
DMA20	20	
DMA24	24	
DMA30	30	
DMA35	35	\$1,478
DMA40	40	
DMA48	48	\$2,884
DMB60	60	
DMB96	96	

2 EVAPS PER CU	Max Defrost Load (Amps per evap.)	List Price
DMB35	35	\$2,005
DMB40	40	
DMB48	48	
DMB60	60	\$2,884
DMB96	96	

3 EVAPS PER CU	Max Defrost Load (Amps per evap.)	List Price
DMC35	35	\$3,016
DMC40	40	
DMC48	48	
DMC60	60	\$3,729
DMC96	96	

AIR DEFROST TIMER: \$577

Note: All electric defrost kits include 1 fan contactor and are suitable for single or three phase loads. Defrost amp values are the maximum load for a kit. Smaller loads may be attached.

3 THRU 22 H.P. CONDENSING UNITS - FACTORY INSTALLED OPTIONS

All options are factory mounted unless otherwise noted.	OPTION NUMBER	H.P. RANGE	LIST PRICE†
Electrical Options			
THROUGH THE DOOR NON-FUSED DISCONNECT SWITCH	TDNM-3	3-10	\$1,614
	TDNM-4	12-22	1,804
EXTERNAL FUSED DISCONNECT - Loose or Mounted	EFDM-2 (230V)	3 - 6	1,043
	EFDM-3 (230V)	7 - 10	1,242
	EFDM-4 (230V)	12 - 22	2,648
	EFDM-2 (460V)	3 - 6	1,226
	EFDM-3 (460V)	7 - 10	2,207
	EFDM-4 (460V)	12 - 22	3,641
MAIN CIRCUIT BREAKER	BKR-2	3 - 6	1,491
	BKR-3	7 - 10	1,877
	BKR-4	12 - 22	2,362
PHASE LOSS MONITOR	PLM	ALL	1,174
ANTI SHORT CYCLE TIMER	ASC	ALL	694
CURRENT SENSING RELAY (Run proof)	CSR	All	769
COMPRESSOR UNLOADERS (Suction pressure control. Medium Temp reciprocating compressors only. 1 Step for 3D and larger compressors.)	UNL-1	When Available	2,158

See Page 19 for defrost kit prices.

Mechanical Options

SUCTION LINE FILTER (Sealed)	SK-5	3 - 8	\$506
	SK-6	9 - 10	858
	SK-7	12 - 22	1,369
REPLACEABLE CORE SUCTION FILTER (With Bypass)	RSK-5	3 - 8	1,138
	RSK-6	9 - 10	1,456
	RSK-7	12 - 22	2,053
REPLACEABLE CORE LIQUID FILTER (With Bypass)	RLK-5	3 - 8	1,194
	RLK-6	9 - 10	1,490
	RLK-7	12 - 22	2,156
SUCTION LINE ACCUMULATOR (Must add Suction line filter option.)	ASK-4	3 - 8	817
	ASK-5	9 - 10	1,201
	ASK-6	12 - 22	2,508
OIL SEPARATOR	OS-1	3 - 6	1,391
	OS-2	7 - 10	1,481
	OS-3	12 - 22	1,741
OVERSIZED RECEIVERS	OSR-1	1 FAN	1,228
	OSR-2	2 FAN	688
	OSR-3	2 FAN TALL	695
PRESSURE RELIEF VALVE (For models built on FD1 cabinet base. Requires Oversized Receiver OSR-1 option)	RV	FD1 Cabinet	311
HEATED AND INSULATED RECEIVER (Temperature controlled with low pressure bypass timer)	HIR	ALL	808
CRANKCASE PRESSURE REGULATOR (Do not use with MOP style TXV's. Must provide refrigerant type, holding temperature, suction temperature, and maximum design capacity.)	CPR VALVE	3 - 5	1,601
		6 - 9	1,775
		10 - 15	3,306
		22	5,175
LIQUID INJECTION / DEMAND COOLING™ PRICE DEDUCT - to optionally remove the feature from low temperature models (not available for Scroll™ compressors)	LNJ-deduct	ALL	2,619
HAIL / SNOW GUARDS (Shipped loose to prevent shipping damage. Requires field installation)	SG-E	1 FAN	971
	SG-F	2 FAN	1,328
	SG-G	2 FAN TALL	1,487
2 UNIT STACKING RACK (Shipped empty. Condensing units must be field installed.)	SR-2	1 or 2 FAN	C/A
3 UNIT STACKING RACK (Shipped empty. Condensing units must be field installed.)	SR-3	1 or 2 FAN	C/A

Contact Application Engineering for a special quote on options not found in the price list.

† Phase Loss monitor is a standard feature for K5 Scroll Series CoreSense modules. Extended Range models

*OS8E4S thru OS15E4s and Low Temp OS10L4L thru *OS15L4S use K5 Series Scroll compressors.

QV-SERIES AIR COOLED CONDENSING UNITS

15 THRU 100 H.P.



Standard Features (all models)

- Copeland Discus compressor
- Available in single, dual or parallel compressor configurations
- Prepaint gray exterior/ G60 galvanized steel outdoor cabinet construction
- Heavy gauge G90 galvanized steel frame
- Award-winning floating coil design with generously sized condensers for energy savings
- Integral subcooling circuit boosts energy efficiency
- Mechanically formed pre-bent tubing reduces potential leaks
- Compatible with multiple refrigerants
- Optimized for high glide refrigerants
- Separate power and control electrical panels
- Swept wing fan/Venturi improves airflow and sound
- Hinged and removable access panels
- Flip top hinged Venturi panels for easy servicing
- Floored compressor cabinet with removable compressor tray
- Color-coded control wiring diagram with diagnostic terminals/ color-coded high and low pressure hoses
- LED control and compressor panel lighting
- 110V service convenience outlet
- Service gauge hooks
- 3 Phase condenser fan motors
- Electronic oil failure control
- Horizontal receiver
- Receiver isolation valves
- Refrigerant relief valve
- Replaceable core liquid line filter
- Suction line and discharge line vibrasorbors
- Liquid line isolation valve with sight glass
- Single point alarm with liquid line solenoid lockout
- Control circuit and condenser fan fusing
- Condenser fan contactors
- UL and cUL listed for outdoor use

Flooded (KF) Models include an adjustable head pressure control valve

Non-Flooded (KB) Models include electronic fan cycling control and a minimum charge monitor

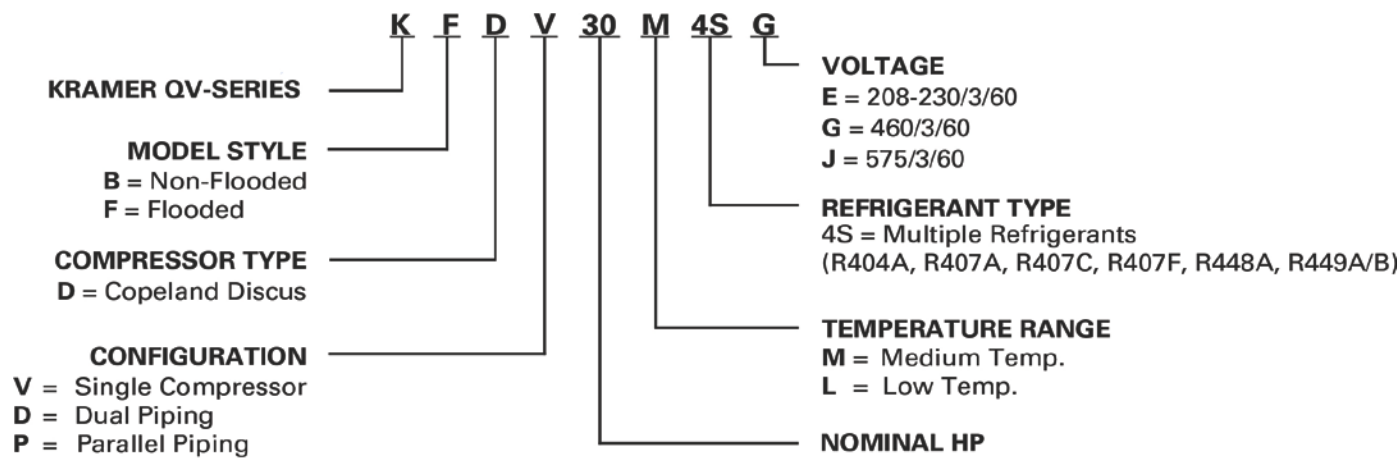
Parallel Compressor Models (KF*P/ KB*P) include an oil management system

Options

- EC fan motors for variable speed
- Air defrost timer or electric defrost components
- Electric defrost kits available for up to 4 evaporators
- Oversized receiver
- ElectroFin[®], polyester coated fins or Bronz-Glow coil coating
- Liquid injection on low temp. compressors
- Heated and insulated receiver
- Oil separator with check valve
- Fan cycling control (RF models)
- Suction accumulator
- Liquid filter isolation valve
- Suction isolation valve
- Suction filter isolation valve
- Replaceable core suction filter
- Crankcase pressure regulator
- Hot gas bypass (Discharge tee, regulator or ball valve)
- Heat reclaim (Sporlan 3 way valve)
- Thru-the-door non-fused disconnect switch
- Thru-the-door fused disconnect (200 amp Max)
- Thru-the-door breaker disconnect (200 amp Max)
- Phase loss monitor
- Anti short cycle timer

QV-SERIES AIR COOLED CONDENSING UNITS

MODEL NUMBER NOMENCLATURE



NOMINAL COMPRESSOR HP		
SINGLE COMP.	DUAL PIPING	PARALLEL PIPING
15 HP	30 (2) 15 HP	-
20 HP	40 (2) 20 HP	-
22 HP	44 (2) 22 HP	44 (2) 22 HP
25 HP	50 (2) 25 HP	50 (2) 25 HP
27 HP	54 (2) 27 HP	54 (2) 27 HP
30 HP	60 (2) 30 HP	60 (2) 30 HP
35 HP	70 (2) 35 HP	70 (2) 35 HP
40 HP	80 (2) 40 HP	80 (2) 40 HP
50 HP	100 (2) 50 HP	100 (2) 50 HP

QV-SERIES • SINGLE DISCUS COMPRESSOR MODELS

TEMP. RANGE	NOM H.P.	MODEL NUMBER	COMPRESSOR NUMBER (1 Compressor)	FLOODED MODELS (KF)			NON-FLOODED MODELS (KB)			4 Year Compressor Protection Plan (NET PRICE)
				208-230V/3	460V/3	575V/3	208-230V/3	460V/3	575V/3	
Medium Temp.	15	K*DV015M4S	3DS3R17ME	\$43,610	\$44,324	\$45,393	\$43,346	\$44,084	\$44,887	\$1,161
	20	K*DV020M4S	4DBNR20ME	48,267	48,948	49,811	47,241	48,207	49,288	1,437
	25	K*DV025M4S	4DHNR22ME	57,637	58,269	59,468	56,466	57,442	58,516	1,606
	30	K*DV030M4S	4DJNR28ME	67,368	68,102	69,576	63,719	64,509	65,618	1,722
	35	K*DV035M4S	6DHNR35ME	76,298	76,734	78,511	73,482	73,683	75,244	1,814
	40	K*DV040M4S	6DJNR40ME ¹	83,964	85,130	86,516	80,722	81,905	83,636	1,894
Low Temp.	50	K*DV050M4S	6DUNR49ME	N/A	101,630	N/A	N/A	96,517	N/A	2,143
	22	K*DV022L4S	4DJNF76KE	54,218	55,359	56,505	54,210	54,895	56,100	1,437
	27	K*DV027L4S	6DHNF93KE	62,760	63,261	64,358	61,545	62,655	63,410	1,606
	30	K*DV030L4S	6DJNF11ME	69,339	69,978	71,407	67,910	69,046	70,548	1,722
40	K*DV040L4S	6DUNF13ME	N/A	87,133	N/A	N/A	85,710	N/A	2,073	

QV-SERIES • DUAL DISCUS COMPRESSOR MODELS

TEMP. RANGE	NOM H.P.	MODEL NUMBER	COMPRESSOR NUMBER (2 Compressor)	FLOODED MODELS (KF)			NON-FLOODED MODELS (KB)			4 Year Compressor Protection Plan (NET PRICE)
				208-230V/3	460V/3	575V/3	208-230V/3	460V/3	575V/3	
Medium Temp.	30	K*DD030M4S	3DS3R17ME	\$87,221	\$88,648	\$90,786	\$86,692	\$88,167	\$89,775	\$2,321
	40	K*DD040M4S	4DBNR20ME	96,535	97,895	99,622	94,482	96,414	98,575	2,875
	50	K*DD050M4S	4DHNR22ME	115,274	116,538	118,936	112,932	114,885	117,031	3,212
	60	K*DD060M4S	4DJNR28ME	134,736	136,205	139,152	127,437	129,018	131,236	3,444
	70	K*DD070M4S	6DHNR35ME	152,595	153,469	157,021	146,964	147,366	150,488	3,628
	80	K*DD080M4S	6DJNR40ME ¹	167,929	170,260	173,031	161,443	163,810	167,272	3,788
Low Temp.	100	K*DD100M4S	6DUNR49ME	N/A	203,260	N/A	N/A	193,034	N/A	4,287
	44	K*DD044L4S	4DJNF76KE	108,437	110,718	113,011	108,420	109,791	112,199	2,875
	54	K*DD054L4S	6DHNF93KE	125,520	126,522	128,717	123,090	125,310	126,820	3,212
	60	K*DD060L4S	6DJNF11ME	138,678	139,957	142,815	135,820	138,091	141,097	3,444
80	K*DD080L4S	6DUNF13ME	N/A	174,267	N/A	N/A	171,419	N/A	4,145	

QV-SERIES • PARALLEL PIPED DISCUS COMPRESSOR MODELS

TEMP. RANGE	NOM H.P.	MODEL NUMBER	COMPRESSOR NUMBER (2 Compressor)	FLOODED MODELS (KF)			NON-FLOODED MODELS (KB)			4 Year Compressor Protection Plan (NET PRICE)
				208-230V/3	460V/3	575V/3	208-230V/3	460V/3	575V/3	
Medium Temp.	50	K*DP050M4S	4DHNR22ME	\$129,531	\$130,640	\$133,252	\$126,845	\$128,759	\$131,083	\$3,212
	60	K*DP060M4S	4DJNR28ME	147,787	149,130	152,113	139,323	140,823	142,938	3,444
	70	K*DP070M4S	6DHNR35ME	166,164	166,911	170,249	159,798	159,999	162,858	3,628
	80	K*DP080M4S	6DJNR40ME ¹	180,228	183,037	186,697	172,988	175,830	180,268	3,788
	100	K*DP100M4S	6DUNR49ME	N/A	225,618	N/A	N/A	213,667	N/A	4,287
Low Temp.	44	K*DP044L4S	4DJNF76KE	123,005	125,264	127,770	122,986	124,206	126,846	2,875
	54	K*DP054L4S	6DHNF93KE	139,151	139,978	142,777	136,404	138,624	140,642	3,212
	60	K*DP060L4S	6DJNF11ME	151,443	152,580	155,631	148,256	150,518	153,736	3,444
	80	K*DP080L4S	6DUNF13ME	N/A	193,436	N/A	N/A	190,222	N/A	4,145

¹6DJ3R40ME on 575/3

QV-SERIES AIR COOLED CONDENSING UNITS • OPTIONS AND ACCESSORIES

QV-SERIES • SINGLE COMPRESSOR MODEL OPTIONS

OPTION FAMILY	OPTION NAME	OPTION AVAILABLE ON MODELS:	LIST PRICE
Compressor Options	Compressor Unloading with Pressure Control for 1 Cycle Bank	020M-30M, 50M; 022L - 040L	\$2,162
	Compressor Unloading with Pressure Control for 2 Cycle Bank	035M & 045M	3,113
	Head Cooling Fan	All Models	1,790
	Liquid Injection	022L - 040L	3,930
Electrical and Control Panel Options	Air Defrost Time Clock	All Medium Temperature Models	576
	Anti-Short Cycle Timer	All Models	499
	Condenser Fan Breaker	015M -030M; 022L - 040L	754
	Condenser Fan Breaker	035M -050M	1,144
	Control Circuit Breaker	All Models	245
	EC Fan Motors with Electronic Variable Speed Control	015M -030M; 022L - 040L	Call Factory
	EC Fan Motors with Electronic Variable Speed Control	035M -050M	Call Factory
	Thru-the-door Fused Disconnect	Models with MOPD < 61A	1,523
	Thru-the-door Fused Disconnect	Models with 61A < MOPD < 101A	2,254
	Thru-the-door Fused Disconnect	Models with 101A < MOPD < 201A	3,862
	Thru-the-door Main Breaker	Models with MOPD ≤ 100A	1,946
	Thru-the-door Main Breaker	Models with 101A < MOPD < 201A	3,157
	Thru-the-door Non-Fused Disconnect	Models with MCA < 59A	1,371
	Thru-the-door Non-Fused Disconnect	Models with 59A < MCA > 99A	1,990
	Thru-the-door Non-Fused Disconnect	Models with 99A < MCA < 199A	3,291
	Phase-Loss Monitor - 250A	230V & 460V	962
	Phase-Loss Monitor - ICM450	230V	1,404
Phase-Loss Monitor - ICM450	460V	998	
Refrigeration Options	Crankcase Pressure Regulator Valves	015M	3,380
	Crankcase Pressure Regulator Valves	020M - 040M; 022L - 030L	4,257
	Crankcase Pressure Regulator Valves	050M & 040L	8,446
	Fan Cycling - Temperature or Pressure	All Flooded Models; Standard on Non-Flooded Models	1,518
	Heat Reclaim Valve	All Models	3,514
	Heated & Insulated Receiver	All Models	2,672
	Hot Gas Bypass Tee & Ball Valve	All Models	824
	Hot Gas Bypass Tee, Ball Valve & Regulator	All Models	4,776
	Liquid-line Filter Isolation Valve (Single Valve)	All Models	475
	Oil Separator with Check Valve	015 - 030	1,931
	Oil Separator with Check Valve	035 - 050	3,439
	Oil Separator with Check Valve & Oil Return Service Kit	015 - 030	3,625
	Oil Separator with Check Valve & Oil Return Service Kit	035 - 050	5,133
	Oversized Receiver	All Models	1,137
	Receiver Level Gauge	All Models	1,411
	Suction Accumulator - Standard	015	2,548
	Suction Accumulator - Standard	020-050	2,946
	Suction Accumulator - Heat Exchanger	015	3,157
	Suction Accumulator - Heat Exchanger	020-050	4,888
	Suction-line Filter - Replaceable Core	015M	1,112
	Suction-line Filter - Replaceable Core	020M - 040M; 022L - 030L	1,386
	Suction-line Filter - Replaceable Core	050M & 040L	1,440
	Suction-line Filter Isolation Valves	015M	780
	Suction-line Filter Isolation Valves	020M - 040M; 022L - 030L	1,255
	Suction-line Filter Isolation Valves	050M & 040L	2,184
	Suction-line Insulation	All Models	1,382

QV-SERIES AIR COOLED CONDENSING UNITS • OPTIONS AND ACCESSORIES

QV-SERIES • DUAL COMPRESSOR MODEL OPTIONS

OPTION FAMILY	OPTION NAME	OPTION AVAILABLE ON MODELS:	LIST PRICE
Compressor Options	Compressor Unloading with Pressure Control for 1 Cycle Bank	D040M - D060M, D100M; D044L - D080L	\$4,324
	Compressor Unloading with Pressure Control for 2 Cycle Bank	D070M & D080M	6,225
	Head Cooling Fan	All Models	3,580
	Liquid Injection	D044L - D080L	7,860
Electrical and Control Panel Options	Air Defrost Time Clock	All Medium Temperature Models	1,152
	Anti-Short Cycle Timer	All Models	998
	Condenser Fan Breaker	D030M -D060M; D044L - D080L	1,508
	Condenser Fan Breaker	D070M -D100M	2,288
	Control Circuit Breaker	All Models	245
	EC Fan Motors with Electronic Variable Speed Control	D030M -D060M; D044L - D080L	Call Factory
	EC Fan Motors with Electronic Variable Speed Control	D070M -D100M	Call Factory
	Thru-the-door Fused Disconnect	Models with MOPD < 61A	1,523
	Thru-the-door Fused Disconnect	Models with 61A < MOPD < 101A	2,254
	Thru-the-door Fused Disconnect	Models with 101A < MOPD < 201A	3,862
	Thru-the-door Main Breaker	Models with MOPD ≤ 100A	1,946
	Thru-the-door Main Breaker	Models with 101A < MOPD < 201A	3,157
	Thru-the-door Non-Fused Disconnect	Models with MCA < 59A	1,371
	Thru-the-door Non-Fused Disconnect	Models with 59A < MCA > 99A	1,990
	Thru-the-door Non-Fused Disconnect	Models with 99A < MCA < 199A	3,291
	Phase-Loss Monitor -250A	230V & 460V	962
Phase-Loss Monitor - ICM450	460V	1,997	
Refrigeration Options	Crankcase Pressure Regulator Valves	D030M	6,760
	Crankcase Pressure Regulator Valves	D040M - D080M; D044L - D060L	8,513
	Crankcase Pressure Regulator Valves	D100M & D080L	16,892
	Fan Cycling - Temperature or Pressure	All Flooded Models; Standard on Non-Flooded Models	3,037
	Heat Reclaim Valve	All Models	7,028
	Heated & Insulated Receiver	All Models	5,344
	Hot Gas Bypass Tee & Ball Valve	All Models	1,647
	Hot Gas Bypass Tee, Ball Valve & Regulator	All Models	9,551
	Liquid-line Filter Isolation Valve (Single Valve per Circuit)	All Models	951
	Oil Separator with Check Valve	D030 - D060	3,863
	Oil Separator with Check Valve	D070 - D100	6,879
	Oil Separator with Check Valve & Oil Return Service Kit	D030 - D060	7,251
	Oil Separator with Check Valve & Oil Return Service Kit	D070 - D100	10,267
	Oversized Receiver	All Models	2,273
	Receiver Level Gauge	All Models	2,823
	Suction Accumulator - Standard	D030	5,096
	Suction Accumulator - Standard	D040-D100	5,893
	Suction Accumulator - Heat Exchanger	D030	6,315
	Suction Accumulator - Heat Exchanger	D040-D100	9,776
	Suction-line Filter - Replaceable Core	D030M	2,224
	Suction-line Filter - Replaceable Core	D040M - D080M; D044L - D060L	2,773
	Suction-line Filter - Replaceable Core	D100M & D080L	2,881
	Suction-line Filter Isolation Valves	D030M	1,560
	Suction-line Filter Isolation Valves	D040M - D080M; D044L - D060L	2,511
	Suction-line Filter Isolation Valves	D100M & D080L	4,368
	Suction-line Insulation	All Models	2,764

QV-SERIES AIR COOLED CONDENSING UNITS • OPTIONS AND ACCESSORIES

QV-SERIES • PARALLEL COMPRESSOR MODEL OPTIONS

OPTION FAMILY	OPTION NAME	OPTION AVAILABLE ON MODELS:	LIST PRICE
Compressor Options	Compressor Unloading with Pressure Control for 1 Cycle Bank	P050M - P060M, P100M; P044L - P080L	\$4,324
	Compressor Unloading with Pressure Control for 2 Cycle Bank	P070M & P080M	6,225
	Head Cooling Fan	All Models	3,580
	Liquid Injection	P044L - P080L	7,860
Electrical and Control Panel Options	Air Defrost Time Clock	All Medium Temperature Models	576
	Anti-Short Cycle Timer	All Models	499
	Condenser Fan Breaker	P050M -P060M; P044L - P080L	754
	Condenser Fan Breaker	P070M -P100M	1,144
	Control Circuit Breaker	All Models	245
	EC Fan Motors with Electronic Variable Speed Control	P050M -P060M; P044L - P080L	Call Factory
	EC Fan Motors with Electronic Variable Speed Control	P070M -P100M	Call Factory
	Thru-the-door Fused Disconnect	Models with MOPD < 61A	1,523
	Thru-the-door Fused Disconnect	Models with 61A < MOPD < 101A	2,254
	Thru-the-door Fused Disconnect	Models with 101A < MOPD < 201A	3,862
	Thru-the-door Main Breaker	Models with MOPD ≤ 100A	1,946
	Thru-the-door Main Breaker	Models with 101A < MOPD < 201A	3,157
	Thru-the-door Non-Fused Disconnect	Models with MCA < 59A	1,371
	Thru-the-door Non-Fused Disconnect	Models with 59A < MCA > 99A	1,990
	Thru-the-door Non-Fused Disconnect	Models with 99A < MCA < 199A	3,291
	Phase-Loss Monitor - 250A	230V & 460V	962
Phase-Loss Monitor - ICM450	460V	1,997	
Refrigeration Options	Crankcase Pressure Regulator Valves	P050M-P60M	8,446
	Crankcase Pressure Regulator Valves	P070M-P100M; P044L - P080L	9,939
	Fan Cycling - Temperature or Pressure	All Flooded Models; Standard on Non-Flooded Models	2,122
	Heat Reclaim Valve	All Models	3,514
	Heated & Insulated Receiver	All Models	2,672
	Hot Gas Bypass Tee & Ball Valve	All Models	824
	Hot Gas Bypass Tee, Ball Valve & Regulator	All Models	4,776
	Liquid-line Filter Isolation Valve (Single Valve)	All Models	475
	Oversized Receiver	All Models	1,137
	Receiver Level Gauge	All Models	1,411
	Suction Accumulator - Standard	P050M-P60M	3,536
	Suction Accumulator - Standard	P070M-P100M; P044L - P080L	3,848
	Suction Accumulator - Heat Exchanger	P050M-P60M	4,888
	Suction Accumulator - Heat Exchanger	P070M-P100M; P044L - P080L	5,401
	Suction-line Filter - Replaceable Core	P050M-P60M	1,560
	Suction-line Filter - Replaceable Core	P070M-P100M; P044L - P080L	1,728
	Suction-line Filter Isolation Valves	P050M-P60M	2,184
	Suction-line Filter Isolation Valves	P070M-P100M; P044L - P080L	3,447
Suction-line Insulation	All Models	2,764	

QV-SERIES AIR COOLED CONDENSING UNITS • DEFROST KITS

ELECTRIC DEFROST KIT NOMENCLATURE

DL	A	24	-
Defrost Kit Large Condenser	Heater Contactor Quantity A: 1 Heater Contactor B: 2 Heater Contactor C: 3 Heater Contactor D: 4 Heater Contactor	Max Total Heater Amp Value	Special Kit Codes -1: 1 Evaporator with Multiple Heater Feeds -2: 2 Evaporators with Multiple Heater Feeds PP: Pressure Prop Kits for Large Evaporators Kits beginning with "K" are for use with large Kramer evaporators. Models include internal heater branch fusing.

When selecting defrost kit, use the next higher amp value above the defrost load.

All kits include 1 fan contactor and are suitable for 1 or 3 phase loads.

Electrical resistance loads greater than 48 amps must be split into multiple circuits.

ELECTRIC DEFROST KIT OPTIONS • SINGLE AND PARALLEL COMPRESSOR MODELS

1 HEATER CONTACTOR		2 HEATER CONTACTORS		3 HEATER CONTACTORS		4 HEATER CONTACTORS	
Defrost Kit Model	List Price (\$US)	Defrost Kit Model	List Price (\$US)	Defrost Kit Model	List Price (\$US)	Defrost Kit Model	List Price (\$US)
DLA24 ¹	\$1,591						
DLA30 ¹	1,654						
DLA35 ¹	1,862	DLB35 ¹	\$2,376	DLC35	\$3,245		
DLA40 ¹	1,862	DLB40 ¹	2,376	DLC40	3,245		
DLA48 ¹	1,862	DLB48 ^{1 4}	2,376	DLC48	3,245		
KDLA53 ¹	1,980						
		DLB60 ^{1 2 4}	2,470	DLC60 ¹	3,245	DLD60	\$3,838
KDLA76 ¹	3,212						
		DLB96 ^{1 2}	2,990	DLC96 ¹	3,442	DLD96	3,869
KDLA100 ¹	3,406					⁵	
		KDLB106 ¹	3,558				
		KDLB152 ¹	3,656	DLC144 ¹	4,690	DLD144 ^{3 5}	4,722
		KDLB200 ¹	4,584			DLD192 ³	4,961

Kramer Large Evaporator Kits include internal heater branch fusing.

Defrost Kit selected for Single and Parallel compressor models is for entire unit. Up to 4 contactors.

¹Defrost Kit Available with Pressure Prop Kit for Large Evaporators (Special Kit Code: PP)

²Defrost Kit Available for Evaporator with Multiple Heater Feeds (Special Kit Code: -1)

³Defrost Kit Available for 2 Evaporators with Multiple Heater Feeds (Special Kit Code: -2)

Defrost Kit Available for Evaporator with Multiple Heater Feeds & Pressure Prop Kit (Special Kit Code: -1PP)

Defrost Kit Available for 2 Evaporators with Multiple Heater Feeds & Pressure Prop Kit (Special Kit Code: -2PP)

ELECTRIC DEFROST KIT OPTIONS • DUAL COMPRESSOR MODELS

1 HEATER CONTACTOR PER		2 HEATER CONTACTORS PER	
Defrost Kit Model	List Price (\$US)	Defrost Kit Model	List Price (\$US)
DLA24 ¹	\$3,182		
DLA30 ¹	3,307		
DLA35 ¹	3,723	DLB35 ¹	\$4,753
DLA40 ¹	3,723	DLB40 ¹	4,753
DLA48 ¹	3,723	DLB48 ¹	4,753
KDLA53 ¹	3,960		
		DLB60 ^{1 2 3}	4,940
KDLA76 ¹	6,423		
		DLB96 ^{1 2 3}	5,980
KDLA100 ¹	6,812		
		KDLB106 ¹	7,116
		KDLB152 ¹	7,311
		KDLB200 ¹	9,169

Kramer Large Evaporator Kits include internal heater branch fusing.

Defrost Kit selected is per compressor for Dual compressor models. Up to 2 contactors/compressor.

¹Defrost Kit Available with Pressure Prop Kit for Large Evaporators (Special Kit Code: PP)

²Defrost Kit Available for Evaporator with Multiple Heater Feeds (Special Kit Code: -1)

³Defrost Kit Available for Evaporator with Multiple Heater Feeds & Pressure Prop Kit (Special Kit Code: -1PP)

QV-SERIES AIR COOLED CONDENSING UNITS • DEFROST KITS

ELECTRIC DEFROST KIT OPTIONS • FUSEBLOCK AND CIRCUIT BREAKERS

MAX HEATER AMPS	1 HEATER CONTACTOR		2 HEATER CONTACTORS		3 HEATER CONTACTORS		4 HEATER CONTACTORS	
	Fuseblock List Price Adder	Circuit Breaker List Price Adder	Fuseblock List Price Adder	Circuit Breaker List Price Adder	Fuseblock List Price Adder	Circuit Breaker List Price Adder	Fuseblock List Price Adder	Circuit Breaker List Price Adder
24	\$111	\$839						
30	149	1,307						
35	149	1,307	\$149	\$1,551	\$223	\$1,664		
40	149	1,307	149	1,551	223	1,664		
48	149	1,307	149	1,551	223	1,664		
53	230	1,575						
60			208	2,607	319	2,751	\$343	\$2,881
76	461	2,815						
96			267	2,622	364	3,506	442	3,614
100	520	3,025						
106			557	3,302				
144					461	3,625	603	4,353
152			629	3,450				
192							606	4,398
200			1,278	4,494				

Dual Compressor Units require 2 Fuseblocks & 2 Circuit Breaker, 1 per compressor. Up to 2 contactors/compressor.

FAN CONTACTOR KIT OPTIONS • SINGLE AND PARALLEL COMPRESSOR MODELS

1 FAN CONTACTOR		
Kit Number	Max Motor Amps	List Price (\$US)
TMR-EF-15A	15	\$879
TMR-EF-30A	30	931

Kit Includes: Defrost Timer & Evaporator Fan Contactor

"C" MODEL AIR COOLED CONDENSING UNITS 15 THRU 70 H.P.

Legacy C Models are discontinued. Last day orders were accepted was July 1, 2018. Use QV-Series Air Cooled Condensing Units instead.

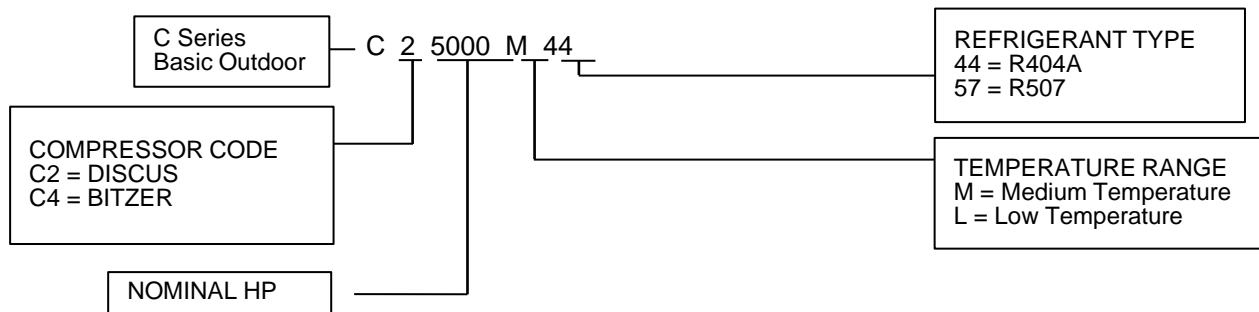
REFR.	MODEL "C"	BASIC UNITS			4 Year Compressor Protection Plan (Net Price)† †	(1) LIQUID LINE SOL.	SUCTION ACCUM.	OIL SEP.	FLOOD CONTROL	FAN CYCLE	(2) HOT GAS BYPASS	(3) CYLIND. UNLOAD
		230V/3/60	460V/3/60	575V/3/60								
MEDIUM TEMP R507 R404A	C21500M44	No Longer Available. Use QV-Series Air-Cooled Condensing Units Instead.										
	C22000M44											
	C22500M44											
	C23000M44											
	C23500M44											
	C24000M44											
	† C25000M44											
	† C26000M44											
	† C27000M44											
LOW TEMP R507 R404A	C21500L44	No Longer Available. Use QV-Series Air-Cooled Condensing Units Instead.										
	C22000L44											
	C22700L44											
	C23100L44											
	† C24400L44											
	† C25400L44											
	† C26200L44											

† Parallel piped units are supplied with oil equalization system and oil separator. Contact applications for a quote for units with (2) independent compressor systems.

† † Compressor Protection Plan Net prices are not to be discounted.

Medium Temp Units available for R404A (M44), R507 (M57), or R407C (H47). Add the appropriate suffix to the model number.

Nomenclature for Large Condensing Units



NOTES

1. Item shipped loose.
2. Condenser FLOOD CONTROL must be used with HOT GAS BYPASS or cylinder unloading option. HOT GAS BYPASS requires field installed hot gas line to side port distributor on evaporator.
3. One bank of unloading for single compressor models. Parallel compressor units are configured for 1 bank unloading per compressor.
4. HOT GAS BYPASS and cylinder unloading are typically used in medium temperature applications.

"C" MODEL AIR COOLED CONDENSING UNITS 15 THRU 70 H.P.

Legacy C Models are discontinued. Last day orders were accepted was July 1, 2018. Use QV-Series Air Cooled Condensing Units instead.

REFR.	MODEL "C"	TIMER		(1) NON FUSED DISCONNECT			(1) TWO TEMP VALVE
		(2)	30 AMP CONTACTOR	50 AMP CONTACTOR	230V/3/60	460V/3/60	
MEDIUM TEMP R404A R507 R407C	C21500M44	No Longer Available. Use QV-Series Air-Cooled Condensing Units Instead.					
	C22000M44						
	C22500M44						
	C23000M44						
	C23500M44						
	C24000M44						
	† C25000M44						
	† C26000M44						
	† C27000M44						
LOW TEMP R507 R404A	C21500L44	No Longer Available. Use QV-Series Air-Cooled Condensing Units Instead.					
	C22000L44						
	C22700L44						
	C23100L44						
	† C24400L44						
	† C25400L44						
	† C26200L44						

† Parallel piped units are supplied with oil equalization system and oil separator. Contact applications for a quote for units with (2) independent compressor systems.

NOTES

1. Item shipped loose.
2. Factory mounted Mechanical Air Defrost Timer

ADDITIONAL OPTIONS

DESCRIPTION	LIST PRICE
ANTI-SHORT CYCLE TIMER (PRICE IS PER COMPRESSOR)	\$694
EVAPORATOR FAN CONTACTOR	330
GAUGE KIT - HIGH, LOW, AND OIL PRESSURE (PER COMPRESSOR)	1,941
OVERSIZED RECEIVER - 1200 — 3000 LOW TEMP MODELS	762
OVERSIZED RECEIVER - 1200 — 2500 HIGH/MED TEMP MODELS	2,150
OVERSIZED RECEIVER - 3000 HIGH/MED. TEMP AND LARGER MODELS	1072 ‡
PHASE LOSS MONITOR (PRICE IS BASED ON 1 PER UNIT)	1,174
SPRING LOADED PRESSURE RELIEF VALVE	311
SINGLE POINT ALARM	386
ELECTRONIC ROOM T-STAT (A419ABC-1C) Part# 204464206 (shipped loose)	383

*E = POE Oil or 0 = Mineral Oil. All current models have POE oil.

‡ = NOT AVAILABLE FOR THE 7000 MODELS

Limited Extended Compressor Protection Plan covers defects in factory material or workmanship. Defective compressor, with serial number tag intact, must be returned to an authorized wholesaler. Warranty does not include external parts, controls, refrigerant, shipping, labor or product loss.

KRAMERSAVER 15 THRU 70 H.P. - AIR DEFROST

Legacy KramerSaver Models are discontinued. Last day orders were accepted was
July 1, 2018. Use QV-Series Air Cooled Condensing Units instead.

REFR.	MODEL "KS"	BASIC UNITS			4 Year Compressor Protection Plan (Net Price)† †	SUCTION ACCUM.	OIL SEP.	(c) CYLIND. UNLOAD	NON FUSED (a) DISCONNECT		
		230V/3/60	460V/3/60	575V/3/60					230V/3/60	460V/3/60	575V/3/60
MEDIUM TEMP R407C R507 R404A	KS21500M44	No Longer Available. Use QV-Series Air-Cooled Condensing Units Instead.									
	KS22000M44										
	KS22500M44										
	KS23000M44										
	KS23500M44										
	KS24000M44										
	† KS25000M44										
	† KS26000M44										
† KS27000M44											

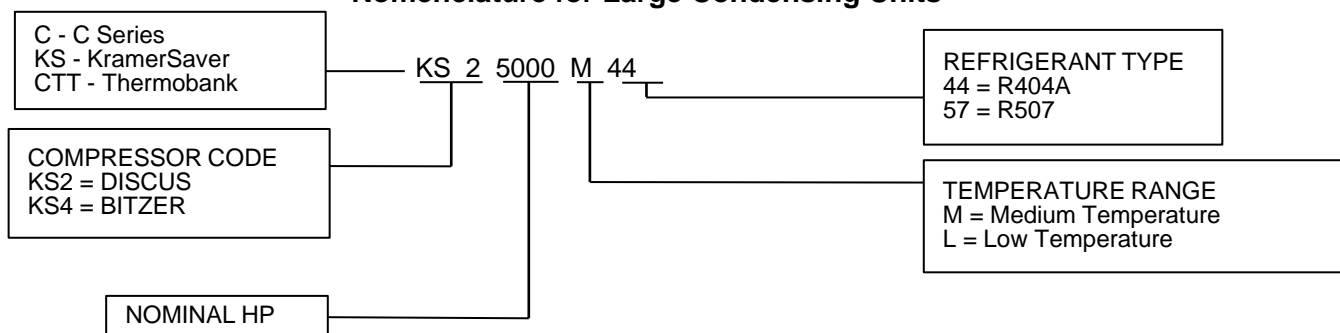
Units are available for R404A (M44), R507 (M57) OR R407C (H47). Add the appropriate suffix to the model number.

Contact Application Engineering for quotes when units will use other refrigerants.

† Parallel units include oil equalization system and oil separator. Contact applications for a quote for units with (2) independent compressor systems.

† † Compressor Protection Plan Net prices are not to be discounted.

Nomenclature for Large Condensing Units



KRAMERSAVER AIR DEFROST - STANDARD FEATURES

1. HI-LO PRESSURE SWITCH, AUTO RESET LOW / MANUAL RESET HIGH
2. ELECTRONIC OIL PRESSURE CONTROL
3. CONTACTORS & OVERLOAD PROTECTORS
4. SUCTION & DISCHARGE VIBRATION ELIMINATORS
5. MANUAL COMPRESSOR SWITCH AND PUMPDOWN SWITCH
6. CRANKCASE HEATER
7. WEATHER PROOF HOUSING
8. RECEIVER WITH SERVICE VALVE
9. FUSIBLE PLUG
10. MINIMUM CHARGE MONITOR - DUAL SIGHT GLASSES W/ MOISTURE INDICATOR
11. SUCTION LINE FILTER - REPLACEABLE CORE TYPE
12. LIQUID LINE DRIER - REPLACEABLE CORE TYPE
13. DEFROST TIMER (Factory Mounted)
14. LIQUID LINE SOLENOID VALVE (Shipped Loose)
15. ROOM THERMOSTAT (Shipped Loose)
16. THERMOSTATIC EXPANSION VALVE (FOR 1 EVAP.) (Shipped Loose)
17. FLEXIBLE CONTROL HOSES
18. CONTROL CIRCUIT TRANSFORMER (460V UNITS ONLY)
19. SUB CIRCUIT FUSING

NOTES:

- a. Non Fused Disconnect shipped loose.
- b. See page 29 for additional options
- c. One bank of unloading for single compressor models. Parallel compressor units configured for 1 bank unloading per compressor.

KRAMERSAVER 15 THRU 70 H.P. - ELECTRIC DEFROST

Legacy KramerSaver Models are discontinued. Last day orders were accepted was
July 1, 2018. Use QV-Series Air Cooled Condensing Units instead.

REFR.	MODEL "KS"	BASIC UNITS			4 Year Compressor Protection Plan (Net Price)† †	SUCTION ACCUM.	OIL SEP.	CYLINDER UNLOADING*	NON FUSED (a) DISCONNECT		
		230V/3/60	460V/3/60	575V/3/60					230V/3/60	460V/3/60	575V/3/60
MEDIUM TEMP R407C R507 R404A	KS21500M44	No Longer Available. Use QV-Series Air-Cooled Condensing Units Instead.									
	KS22000M44										
	KS22500M44										
	KS23000M44										
	KS23500M44										
	KS24000M44										
	† KS25000M44										
	† KS26000M44										
† KS27000M44											
LOW TEMP R507 R404A	KS21500L44	No Longer Available. Use QV-Series Air-Cooled Condensing Units Instead.									
	KS22000L44										
	KS22700L44										
	KS23100L44										
	† KS24400L44										
	† KS25400L44										
	† KS26200L44										

Units are available for R404A (M44), R507 (M57) OR R407C (H47). Add the appropriate suffix to the model number.

Contact Application Engineering for quotes when units will use other refrigerants.

† Parallel units include oil equalization system and oil separator. Contact applications for a quote for units with (2) independent compressor systems.

† † Compressor Protection Plan Net prices are not to be discounted.

* One bank of unloading for single compressor models. Parallel compressor units are configured for 1 bank unloading per compressor.

KS2 = Copeland DISCUS Compressor

KS4 = BITZER Compressor

SEE NOMENCLATURE EXAMPLE ON PAGE 30

KRAMER SAVER ELECTRIC DEFROST - STANDARD FEATURES

1. HI-LO PRESSURE SWITCH, AUTO RESET LOW / MANUAL RESET HIGH
2. ELECTRONIC OIL PRESSURE CONTROL
3. CONTACTORS & OVERLOAD PROTECTORS
4. SUCTION AND DISCHARGE VIBRATION ELIMINATORS
5. MANUAL COMPRESSOR PUMPDOWN SWITCH
6. CRANKCASE HEATER
7. WEATHER PROOF HOUSING
8. RECEIVER W/ SERVICE VALVE
9. FUSIBLE PLUG
10. MINIMUM CHARGE MONITOR - DUAL SIGHT GLASSES W/ MOISTURE INDICATOR
11. SUCTION LINE FILTER - REPLACEABLE CORE TYPE
12. LIQUID LINE DRIER - REPLACEABLE CORE TYPE
13. DEFROST TIMER W/ CONTACTORS (AS REQUIRED)
14. LIQUID LINE SOLENOID VALVE (Shipped Loose)
15. MECHANICAL ROOM THERMOSTAT (Shipped Loose)
16. THERMOSTATIC EXPANSION VALVE (FOR 1 EVAP.) (Shipped Loose)
17. FLEXIBLE CONTROL HOSES
18. CONTROL CIRCUIT TRANSFORMER (460V UNITS ONLY)
19. SUB CIRCUIT FUSING

NOTES:

- a. Non Fused Disconnect shipped loose.
- b. Cylinder unloading is typically used in medium temperature applications.
- c. See page 29 for additional options.

CTT THERMOBANK CONDENSING UNITS

When ordered as Condensing unit only

REFRIG.	HP	MODEL "CTT" HOT GAS DEFROST	BASIC UNITS			4 Year Compressor Protection Plan (Net Price)† †	SUCTION ACCUM.	OIL SEP.	NON FUSED (1) DISCONNECT		
			230V/3/60	460V/3/60	575V/3/60				230V/3/60	460V/3/60	575V/3/60
MEDIUM TEMP R507 R404A	5	CTT20500M44	\$48,428	\$50,946	\$51,964	\$572	\$816	\$1,390	\$882	\$1,066	\$1,066
	7.5	CTT20700M44	56,838	60,700	61,915	580	816	1,424	1,038	1,226	1,226
	8	CTT20800M44	61,521	64,289	65,842	580	816	1,424	1,038	1,226	1,226
	10	CTT21000M44	73,025	74,857	76,355	750	1,200	1,424	1,038	1,226	1,226
	12	CTT21200M44	76,177	78,344	79,839	900	2,507	1,741	2,068	2,269	2,269
	15	CTT21500M44	\$59,052	\$60,283	\$61,488	\$1,161	\$2,507	\$1,741	\$2,194	\$2,697	\$2,697
	20	CTT22000M44	66,154	70,584	72,219	1,437	2,507	2,885	2,194	2,697	2,697
	25	CTT22500M44	84,004	86,585	88,318	1,606	3,141	2,885	2,194	2,697	2,697
	30	CTT23000M44	90,537	93,663	95,539	1,722	3,141	2,885	3,683	4,133	4,133
	35	CTT23500M44	100,814	103,630	105,702	1,814	3,141	2,885	3,683	4,133	4,133
	40	CTT24000M44	109,485	113,125	115,389	1,894	3,141	2,885	3,683	4,133	4,133
	50	† CTT25000M44	166,497	169,495	172,885	3,232	4,547	INCL	-	4,963	4,963
	60	† CTT26000M44	197,369	200,359	204,366	3,444	4,547	INCL	-	4,963	4,963
	70	† CTT27000M44	247,411	253,178	258,241	3,628	4,547	INCL	-	-	-
LOW TEMP R507 R404A	4	CTT20400L44	\$48,669	\$52,061	\$53,100	\$472	\$816	\$1,390	\$882	\$1,066	\$1,066
	5	CTT20500L44	51,016	54,326	55,411	472	816	1,390	882	1,066	1,066
	6	CTT20600L44	54,059	57,194	58,339	572	816	1,390	882	1,066	1,066
	8	CTT20800L44	62,348	65,285	66,592	580	816	1,481	1,038	1,226	1,226
	9	CTT20900L44	68,634	70,912	72,332	750	1,200	1,481	1,038	1,226	1,226
	10	CTT21000L44	72,877	74,304	75,791	854	1,200	1,481	1,038	1,226	1,226
	12	CTT21200L44	77,588	79,726	81,322	900	2,507	1,741	2,068	2,269	2,269
	15	CTT21500L44	\$62,128	\$64,117	\$65,399	\$1,161	\$2,507	\$1,741	\$2,194	\$2,697	\$2,697
	22	CTT22200L44	72,174	74,298	75,784	1,437	2,507	1,741	2,194	2,697	2,697
	27	CTT22700L44	85,320	88,044	89,806	1,606	3,141	2,885	2,194	2,697	2,697
	30	CTT23100L44	97,171	100,161	102,165	1,722	3,141	2,885	3,683	4,133	4,133
	44	† CTT24400L44	141,385	143,840	146,717	2,875	4,547	INCL	3,683	4,133	4,133
	50	† CTT25400L44	165,260	169,170	172,553	3,232	4,547	INCL	-	4,963	4,963
	60	† CTT26200L44	184,474	186,190	189,915	3,444	4,547	INCL	-	-	-

When ordered with Evaporators and system accessories

REFRIG.	HP	MODEL "CTT" HOT GAS DEFROST	BASIC UNITS			4 Year Compressor Protection Plan (Net Price)† †	SUCTION ACCUM.	OIL SEP.	NON FUSED (1) DISCONNECT		
			230V/3/60	460V/3/60	575V/3/60				230V/3/60	460V/3/60	575V/3/60
MEDIUM TEMP R507 R404A	5	CTT20500M44	\$36,687	\$38,594	\$39,365	\$572	\$816	\$1,390	\$882	\$1,066	\$1,066
	7.5	CTT20700M44	43,059	45,984	46,904	580	816	1,424	1,038	1,226	1,226
	8	CTT20800M44	50,704	53,147	54,210	580	816	1,424	1,038	1,226	1,226
	10	CTT21000M44	55,322	56,709	57,844	750	1,200	1,424	1,038	1,226	1,226
	12	CTT21200M44	59,157	60,601	61,812	900	2,507	1,741	2,068	2,269	2,269
	15	CTT21500M44	\$49,210	\$50,235	\$51,240	\$1,161	\$2,507	\$1,741	\$2,194	\$2,697	\$2,697
	20	CTT22000M44	55,128	58,819	58,819	1,437	2,507	2,885	2,194	2,697	2,697
	25	CTT22500M44	70,002	72,154	73,598	1,606	3,141	2,885	2,194	2,697	2,697
	30	CTT23000M44	75,448	78,053	79,615	1,722	3,141	2,885	3,683	4,133	4,133
	35	CTT23500M44	84,011	86,357	88,085	1,814	3,141	2,885	3,683	4,133	4,133
	40	CTT24000M44	91,238	94,271	96,157	1,894	3,141	2,885	3,683	4,133	4,133
	50	† CTT25000M44	142,671	145,240	148,145	3,232	4,547	INCL	-	4,963	4,963
	60	† CTT26000M44	169,125	171,687	175,121	3,444	4,547	INCL	-	4,963	4,963
	70	† CTT27000M44	212,006	216,947	221,286	3,628	4,547	INCL	-	-	-
LOW TEMP R507 R404A	4	CTT20400L44	36,869	39,439	40,228	472	816	1,390	882	1,066	1,066
	5	CTT20500L44	38,648	41,154	41,978	472	816	1,390	882	1,066	1,066
	6	CTT20600L44	40,953	43,327	44,194	572	816	1,390	882	1,066	1,066
	8	CTT20800L44	47,233	49,459	50,448	580	816	1,481	1,038	1,226	1,226
	9	CTT20900L44	51,995	53,721	54,797	750	1,200	1,481	1,038	1,226	1,226
	10	CTT21000L44	55,208	56,291	57,417	854	1,200	1,481	1,038	1,226	1,226
	12	CTT21200L44	65,724	65,976	68,674	900	2,507	1,741	2,068	2,269	2,269
	15	CTT21500L44	51,772	54,499	55,796	1,161	\$2,507	\$1,741	\$2,194	\$2,697	\$2,697
	22	CTT22200L44	60,144	61,914	63,153	1,437	2,507	1,741	2,194	2,697	2,697
	27	CTT22700L44	71,100	73,370	74,837	1,616	3,141	2,885	2,194	2,697	2,697
	30	CTT23100L44	80,975	83,467	85,138	1,722	3,141	2,885	3,683	4,133	4,133
	44	† CTT24400L44	117,821	119,866	132,047	2,875	4,547	INCL	3,683	4,133	4,133
	50	† CTT25400L44	137,717	140,974	155,298	3,232	4,547	INCL	-	4,963	4,963
	60	† CTT26200L44	153,729	155,159	170,924	3,444	4,547	INCL	-	-	-

THERMOBANK HOT GAS DEFROST

STANDARD FEATURES

- HI-LO PRESSURE SWITCH, SYSTEM 450 ELECTRONIC CONTROLLER – CONTROLS LOW-PRESSURE; FAN CYCLING PRESSURE;
1. DISCHARGE SOLENOID VALVE; POST DEFROST; DEFROST TERMINATION AND DEFROST TERMINATION SWITCH
2. ELECTRONIC OIL PRESSURE CONTROL
3. CONTACTORS AND OVERLOAD PROTECTORS
4. SUCTION AND DISCHARGE VIBRATION ELIMINATORS
5. SYSTEM PUMP-DOWN SWITCH
6. CRANKCASE HEATER
7. THERMOBANK IMMERSION HEATER WITH INTEGRAL/ADJUSTABLE THERMOSTAT
8. FUSED CONTROL CIRCUIT TRANSFORMER (460V UNITS)
9. WEATHERPROOF HOUSING
10. OVERSIZED LIQUID RECEIVER W/ SERVICE VALVE
11. PRESSURE RELIEF VALVE
12. SUCTION LINE FILTER - REPLACEABLE CORE TYPE (4 to 70 H.P. models)
13. LIQUID LINE DRIER - REPLACEABLE CORE TYPE (4 to 70 H.P. models)
14. DEFROST TIMER WITH REQUIRED HOT GAS DEFROST CONTROLS
15. LIQUID LINE SOLENOID VALVE (Shipped Loose)
16. HOT GAS SOLENOID (Shipped Loose)
17. ELECTRONIC ROOM THERMOSTAT (Shipped Loose)
18. REFFLEX FLEXIBLE CONTROL HOSES
19. CONTROL CIRCUIT TRANSFORMER (460V UNITS ONLY)
20. SUB CIRCUIT FUSING
21. PERFORATED CONTROL PANEL INSERT AND WIRING TRAYS
22. ADJUSTABLE FLOODED HEAD PRESSURE CONTROL VALVES
23. DISCHARGE CHECK VALVE
24. HIGH EFFICIENCY CONDENSER COIL WITH 3/8" O.D. ENHANCED TUBES AND INTEGRAL SUBCOOLING CIRCUIT
25. ENERGY EFFICIENT 1 HP 850 RPM CONDENSER FAN MOTORS
26. HIGH PRESSURE OIL MANAGEMENT SYSTEM (PARALLEL PIPED COMPRESSOR UNITS)

NOTES:

When ordering Thermobank Systems with Evaporators – The price of the Thermostatic Expansion Valve needs to be added to the price of the selected evaporator – see page 13 for system accessories.

See page 29 for additional options.

KRAMERSAVER / THERMOBANK OPTIONS

DESCRIPTION	H.P RANGE	LIST PRICE
ANTI - SHORT CYCLE TIMER (PRICE IS PER COMPRESSOR)	All	\$694
EVAPORATOR FAN CONTACTOR	All	330
GAUGE KIT, HIGH, LOW, AND OIL PRESSURE (PRICE IS PER COMPRESSOR)	All	1,670
OVERSIZED RECEIVER - 1500 THROUGH 2200 MODELS	15 - 22 H.P.	762
OVERSIZED RECEIVER - 2500 THROUGH 4400 MODELS	25 - 44 H.P.	2,150
OVERSIZED RECEIVER - 5000 AND LARGER MODELS	40 - 80 H.P.	1,072
PHASE LOSS MONITOR (PRICE IS BASED ON 1 PER UNIT)	All	1,174
SPRING LOADED PRESSURE RELIEF VALVE	All	311
SINGLE POINT ALARM	All	386
MECHANICAL ROOM THERMOSTAT (A19AAA-49C) Part# 204464001 (shipped loose)	All	296
ELECTRONIC ROOM THERMOSTAT (A419ABC-1C) Part# 204464206 (shipped loose)	All	383
TIMER INSTALL CHARGE FOR AIR DEFROST SYSTEMS	All	296
CRANKCASE PRESSURE REGULATOR (Mounted)	4 - 5 H.P.	1,601
	6 - 9 H.P.	1,775
	10 - 12 H.P.	3,306

4 YEAR COMPRESSOR PROTECTION PLAN

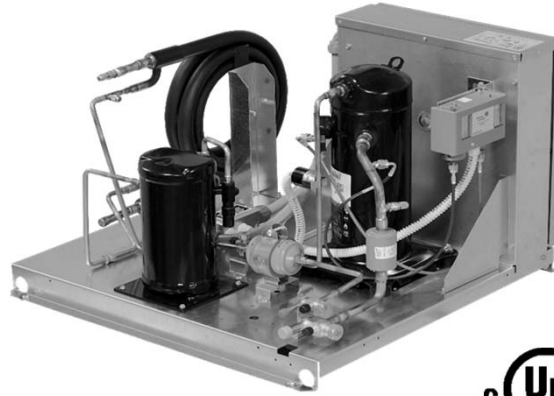
4 Year Compressor Protection Plan covers defects in factory material or workmanship.
 Defective compressor, with serial number tag intact, must be returned to an authorized wholesaler.
 Compressor Protection Plan does not include external parts, controls, refrigerant, shipping, labor or product loss.

NEXT-GEN WC-SERIES™ • INDOOR WATER COOLED CONDENSING UNITS

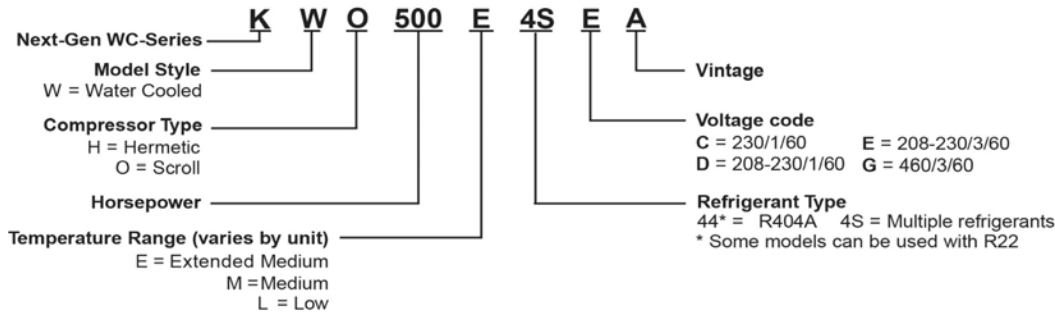
1/2 THRU 6 H.P.

Standard Features (all models)

- Hermetic or Scroll compressors
- Galvanized steel base
- High efficiency water cooled coaxial condenser and heat exchange
- Mechanically formed pre-bent tubing for reduced leak potential
- **Liquid line kit with filter/drier and sight glass with moisture indicator**
- Suction line piping (filter optional)
- Suction and discharge service valves (as required)
- Base mounted shut-off valves
- Color-coded point-to-point wiring
- Large electrical control panel with hinged/removable door
- Refrigerant receiver with isolation valve and pressure relief plug
- Adjustable high and low pressure controls
- Control transformer (460V to 230V) as required
- Compressor contactor (1Ø or 3Ø), start kit (1Ø)
- Crankcase heater
- **Electronic defrost timer with defrost contactor/ relay on low temp. models (2 evaps. Maximum)**
- **Electronic air defrost timer (Medium temperature models)**



For defrost provisions see pages 40 & 41



NEXT-GEN WC-SERIES • HERMETIC COMPRESSOR MODELS

Temp Range	NOM H.P.	Model Number	Compressor	BASE LIST PRICE (Includes Liquid Line Kit with Filter/Drier and Sight Glass with Moisture Indicator, and Defrost Timer or Kit)			Water Reg. Valve‡	Sealed Suction Line Filter	Suction Accum. ^	Pump Down Switch	4 Year Comp. Protection Plan	Approx. Ship Wt. (LBS)
				208-230V/3	208-230V/1	460V/3						
Medium Temp	1/2	KWH055E4S	RST45C1E	N/A	\$4,592	N/A	\$451	\$344	\$529	\$337	\$109 NET	152
	1/2	KWH080E4S	RST55C1E	N/A	4,687	N/A	451	344	529	337	109 NET	156
	3/4	KWH090E4S	RST64C1E	N/A	4,827	N/A	451	344	529	337	109 NET	160
	3/4	KWH100E4S	RST70C1E	\$5,391	5,214	N/A	451	344	529	337	109 NET	167
	1	KWH125E4S	RST97C1E	5,544	5,588	N/A	451	344	529	337	123 NET	195
	1-1/2	KWH150E44	CS10K6E	5,700	5,434	6,359	451	344	529	337	123 NET	205
	2	KWH200E44	CS12K6E	6,518	6,000	N/A	451	344	529	337	134 NET	228
	2-1/2	KWH250E44	CS14K6E	6,906	6,440	7,335	489	344	529	337	134 NET	235
Low Temp	3	KWH300E44	CS18K6E	7,893	7,620	8,205	489	409	817	337	148 NET	253
	3	KWH325E44	CS20K6E	8,285	7,986	8,557	489	409	817	337	148 NET	273
	1-1/2	KWH150L44	CF06K6E	5,609	5,463	N/A	451	344	529	337	123 NET	195
	2	KWH200L44	CF09K6E	5,819	5,674	6,276	451	344	529	337	134 NET	243
	3	KWH300L44	CF12K6E	8,247	8,053	8,381	489	409	817	337	148 NET	255

ADDITIONAL OPTIONS FOR NEXT-GEN WC-SERIES UNITS

DESCRIPTION	LIST PRICE
ANTI-SHORT CYCLE TIMER	\$694
GAUGE KIT, HIGH, LOW, AND OIL PRESSURE	1,941
PHASE LOSS MONITOR	1,175
CUPRONICKEL HEAT EXCHANGER AND WATER PIPING	CF
ELECTRONIC OIL PRESSURE CONTROL (SOPC)	847
TWO-TIERED STACKING RACK	CF

^ For pre-piped Suction Accumulator, the Sealed Suction Line Filter option must also be ordered.

CF = Contact Factory for pricing

‡ OPTIONAL FIELD INSTALLED WATER REGULATING VALVE (ALL MODELS) SHIPPED LOOSE

The V46 pressure-actuated water-regulating valve size estimates are based on 65°F to 85°F coil inlet water temperature and the refrigerant pressure at 105°F saturated condensing. An adjustable water-pressure reducing valve (0 to 50 psi) is required upstream from the V46 valve, to reduce the inlet water pressure and achieve the required flowrates. Refer to the V46 Pressure-Actuated Water-Regulating Valve Product Bulletin, LIT-125687 on the Johnson Control QuickLIT website for complete information on sizing and adjusting V46 valves.

Water Flowrates (GPM)	Water Regulating Valve
1.5 to 11.5	V46AA-1C
11.5 to 21	V46AB-1C

NEXT-GEN WC-SERIES™ • INDOOR WATER COOLED CONDENSING UNITS
1/2 THRU 6 H.P.

NEXT-GEN WC-SERIES • SCROLL COMPRESSOR MODELS

Temp Range	NOM H.P.	Model Number	Compressor	BASE LIST PRICE (Includes Liquid Line Kit with Filter/Drier and Sight Glass with Moisture Indicator, and Defrost Timer or Kit)*			Water Reg. Valve‡	Sealed Suction Line Filter	Suction Accum.^	Pump Down Switch	4 Year Comp. Protection Plan		Approx. Ship Wt. (LBS)
				208-230V/3	208-230V/1	460V/3							
Medium Temp	1/2	KWO060M4S	ZB06KAE	\$8,687	\$8,675	N/A	\$451	\$344	\$529	\$337	\$202	NET	195
	1/2	KWO080M4S	ZB07KAE	8,790	8,760	N/A	451	344	529	337	202	NET	195
	1	KWO100M4S	ZB08KAE	8,904	8,846	N/A	451	344	529	337	202	NET	195
	1-1/3	KWO130E4S	ZS09KAE	9,034	8,944	\$9,364	451	344	529	337	202	NET	195
	1-1/2	KWO150E4S	ZS11KAE	9,659	9,568	9,989	451	344	529	337	202	NET	205
	1-3/4	KWO180E4S	ZS13KAE	9,886	9,795	10,216	451	344	529	337	202	NET	210
	2	KWO200E4S	ZS15KAE	10,056	9,966	10,386	451	344	529	337	202	NET	215
	2-1/2	KWO250E4S	ZS19KAE	10,191	10,080	10,583	489	344	529	337	202	NET	230
	3	KWO300E4S	ZS21KAE	10,364	10,233	10,818	489	409	817	337	263	NET	305
	3-1/2	KWO350E4S	ZS26KAE	11,012	10,873	11,335	489	409	817	337	263	NET	325
	4	KWO400E4S	ZS29KAE	11,375	11,219	11,687	549	409	817	337	275	NET	352
	4-1/2	KWO450E4S	ZS33KAE	11,233	11,075	11,641	549	409	817	337	282	NET	375
6	KWO500E4S	ZS38K4E	11,790	11,631	12,294	849	409	817	337	282	NET	383	
6 1/2	KWO600E4S	ZS45K4E	13,610	N/A	13,828	849	409	817	337	282	NET	405	
Low Temp	1	KWO100L4S	ZF03KAE	9,591	9,090	N/A	451	344	529	337	202	NET	230
	1-1/3	KWO130L4S	ZF04KAE	9,758	9,313	N/A	451	344	529	337	202	NET	230
	1-1/2	KWO160L4S	ZF05KAE	9,987	9,601	N/A	451	344	529	337	202	NET	230
	2	KWO230L4S	ZF07KAE	10,278	10,144	10,600	451	344	529	337	202	NET	230
	2-1/2	KWO250L4S	ZF08K4E	10,642	10,495	10,756	489	344	529	337	202	NET	240
	3	KWO300L4S	ZF09K4E	10,907	10,749	12,214	489	409	817	337	263	NET	245
	3-1/2	KWO350L4S	ZF11K4E	11,396	11,235	11,663	489	409	817	337	263	NET	255
	4	KWO400L4S	ZF13K4E	11,871	11,720	12,140	549	409	817	337	275	NET	352
	5	KWO500L4S	ZF15K4E	12,017	11,871	12,297	849	409	817	337	275	NET	367
6	KWO600L4S	ZF18K4E	13,548	N/A	14,285	849	409	817	337	282	NET	383	

ADDITIONAL OPTIONS FOR NEXT-GEN WC-SERIES UNITS

DESCRIPTION	LIST PRICE
ANTI-SHORT CYCLE TIMER	\$694
GAUGE KIT, HIGH, LOW, AND OIL PRESSURE	1,941
PHASE LOSS MONITOR	1,175
CUPRONICKEL HEAT EXCHANGER AND WATER PIPING	CF
ELECTRONIC OIL PRESSURE CONTROL (SOPC)	847
TWO-TIERED STACKING RACK	CF

* See page 35 for a complete list of features, voltage codes and an example of nomenclature layout.

^ For pre-piped Suction Accumulator, the Sealed Suction Line Filter option must also be ordered.

CF = Contact Factory for pricing

‡ OPTIONAL FIELD INSTALLED WATER REGULATING VALVE (ALL MODELS) SHIPPED LOOSE

The V46 pressure-actuated water-regulating valve size estimates are based on 65°F to 85°F coil inlet water temperature and the refrigerant pressure at 105°F saturated condensing. An adjustable water-pressure reducing valve (0 to 50 psi) is required upstream from the V46 valve, to reduce the inlet water pressure and achieve the required flowrates. Refer to the V46 Pressure-Actuated Water-Regulating Valve Product Bulletin, LIT-125687 on the Johnson Control QuickLIT website for complete information on sizing and adjusting V46 valves.

Water Flowrates (GPM)	Water Regulating Valve
1.5 to 11.5	V46AA-1C
11.5 to 21	V46AB-1C

KW SERIES WATER COOLED COMPRESSOR UNITS 1/2 THRU 5 H.P.

KW Series 1/2 to 5 H.P. models are no longer available. Use Next-Gen WC-Series models instead.

§ REF TYPE	NOM H.P.	MODEL NUMBER	BASE LIST PRICE			WATER REG. VALVE†	CLEANABLE CONDENSER	LIQUID LINE KIT (LK)	* SUCTION LINE KIT (SK)	^ SUCTION ACCUM.	4 YEAR COMP. PROTECTION PLAN	APPROX. WT. LBS
			230/3	230/1	460/3							
MED. TEMP. R404A	0.5	KWH055M44	<h2 style="margin: 0;">KW Series 1/2 to 5 H.P. models are no longer available. Use Next-Gen WC-Series models instead.</h2>									
	0.5	KWH080M44										
	0.75	KWH090M44										
	0.75	KWH100M44										
	1.0	KWH125M44										
	1.5	KWH151M44										
	1.5	KWH200M44										
	1.75	KWH251M44										
2.0	KWH301M44											
3.0	KWH325M44											
LOW TEMP. R404A	0.75	KWH075L44										
	1.0	KWH100L44										
	1.5	KWH165L44										
	2.0	KWH215L44										
	3.0	KWH315L44										
MED. TEMP. R404A	0.75	KWS075M44										
	1.0	KWS100M44										
	1.5	KWS150M44										
	2.0	KWS200M44										
	2.5	KWS250M44										
	3.0	KWS300M44										
LOW TEMP. R404A	0.5	KWS050L44										
	0.75	KWS075L44										
	1.0	KWS100L44										
	1.5	KWS150L44										
	2.0	KWS200L44										
	3.0	†KWS300L44										

KW SERIES INDOOR WATER COOLED CONDENSING UNITS 3 THRU 40 H.P. AND KW SCROLL MODELS

REFR. TYPE	NOM. H.P.	MODEL NUMBER	LIST PRICE			WATER REG. VALVE‡	LK	* SK	^ SUCTION LINE ACCUM.	OIL SEPERATOR	4 YEAR COMP. PROTECTION PLAN	APPRX. SHIP WT (LBS)
			230/3	460/3								
DISCUS COMPRESSOR												
MED. TEMP R404A	5.0	KWD5M44	\$19,276	\$21,338	\$849	\$631	\$506	\$817	\$1,391	\$580 NET	485	
	5.0	KWD6M44	20,745	22,878	849	631	506	817	1,391	580 NET	495	
	7.5	KWD7M44	22,208	24,544	1,163	631	506	817	1,481	580 NET	540	
	7.5	KWD8M44	24,320	26,426	1,163	631	506	817	1,481	580 NET	590	
	10.0	KWD10M44	28,580	29,548	1,163	849	858	1,201	1,481	750 NET	780	
	12.0	KWD12M44	30,967	31,521	1,502	1,065	1,369	2,508	1,741	900 NET	790	
	15.0	KWD15M44	31,912	32,864	1,502	1,065	1,369	2,508	1,741	1,129 NET	800	
	20.0	KWD20M44	36,656	37,361	1,502	1,065	1,369	2,508	1,741	1,437 NET	835	
	25.0	KWD25M44	42,307	42,896	1,502	1,244	1,369	3,141	2,885	1,616 NET	1,050	
	30.0	KWD30M44	50,347	50,804	1,502	1,244	1,369	3,141	2,885	1,722 NET	1,105	
35.0	KWD35M44	56,845	57,298	1,502	1,244	1,369	3,141	2,885	1,814 NET	1,150		
40.0	KWD40M44	62,290	63,019	1,502	1,244	1,369	3,141	2,885	1,894 NET	1,200		
LOW TEMP. R404A	3.0	KWD3L44	16,600	18,458	849	631	506	817	1,391	318 NET	390	
	4.0	KWD4L44	17,792	19,587	849	631	506	817	1,391	472 NET	465	
	5.0	KWD5L44	18,645	20,032	849	631	506	817	1,391	472 NET	485	
	6.0	KWD6L44	20,919	22,068	849	631	506	817	1,391	572 NET	530	
	8.0	KWD8L44	22,808	24,387	1,163	631	506	817	1,481	580 NET	590	
	9.0	KWD9L44	25,241	26,977	1,163	849	858	1,201	1,481	750 NET	620	
	10.0	KWD10L44	27,844	28,491	1,163	849	858	1,201	1,481	750 NET	795	
	12.0	KWD12L44	30,923	31,296	1,163	1,065	1,369	2,508	1,741	900 NET	820	
	15.0	KWD15L44	33,680	34,081	1,502	1,065	1,369	2,508	1,741	1,161 NET	845	
	22.0	KWD22L44	39,676	39,977	1,502	1,065	1,369	2,508	1,741	1,437 NET	1,030	
27.0	KWD27L44	55,775	56,160	1,502	1,244	1,369	3,141	2,885	1,616 NET	1,255		
30.0	KWD30L44	57,860	58,647	1,502	1,244	1,369	3,141	2,885	1,722 NET	1,310		
SEMI-HERMETIC COMPRESSOR												
MED. TEMP R404A	3.0	KWS3M44	Models no longer available.									
LOW TEMP. R404A	3.0	KWS3L44										

KW Series 1/2 to 6 H.P. Scroll models are no longer available. Use Next-Gen WC-Series models instead.

SCROLL COMPRESSOR													
REFR. TYPE	NOM. H.P.	MODEL NUMBER	LIST PRICE			WATER REG. VALVE‡	CLEANABLE CONDENSER	LK	* SK	^ SUCTION LINE ACCUM.	OIL SEPERATOR	4 YEAR COMP. PROTECTION PLAN	APPRX. SHIP WT (LBS)
			230/3	230/1	460/3								
MED. TEMP R404A	1.0	KWO100M44	KW Series 1/2 to 6 H.P. Scroll models are no longer available. Use Next-Gen WC-Series models instead.										
	1.5	KWO150M44											
	2.0	KWO200M44											
	2.5	KWO250M44											
	3.0	KWO315M44											
	3.0	KWO350M44											
	4.0	KWO400M44											
	6.0	KWO600M44											
	6.5	KWO650M44											
	7.5	KWO7M44											
7.5	KWO8M44	22,868	N/A	24,520	1,163	C/F	631	506	817	1,481	466 NET	450	
10.0	KWO10M44	28,397	N/A	29,210	1,163	C/F	849	858	1,201	1,481	504 NET	665	
13.0	KWO13M44	28,901	N/A	29,775	1,502	C/F	1,065	1,369	2,508	1,741	582 NET	675	
LOW TEMP. R404A	2.0	KWO200L44	KW Series 1/2 to 6 H.P. Scroll models are no longer available. Use Next-Gen WC-Series models instead.										
	2.5	KWO250L44											
	3.0	KWO300L44											
	3.0	KWO301L44											
	4.0	KWO400L44											
	5.0	KWO500L44											
	6.0	KWO600L44											
	7.5	KWO8L44											
10.0	KWO10L44	23,053	N/A	24,762	1,163	C/F	849	858	1,201	1,481	504 NET	645	
13.0	KWO13L44	25,786	N/A	26,630	1,502	C/F	1,065	1,369	2,508	1,741	582 NET	670	

§ For R507 models, use equivalent R404A model prices. Models 055M44, 065M44, and 070M44 not suitable for use with R507.

* Suction line assembly option must be ordered to receive the Suction Accumulator pre-piped.

^ For pre-piped Suction Accumulator, the SK option must also be ordered.

C/F = Consult the factory for pricing.

‡ Water Reg. Valve shipped Loose for field installation.

See page 39 for optional piping components and additional items

KR SERIES REMOTE COMPRESSOR UNITS 3 THRU 40 H.P.

REFR. TYPE	NOM. H.P.	MODEL NUMBER	LIST PRICE		LK	* SK	^ SUCTION LINE ACCUM.	OIL SEPERATOR	4 YEAR COMP. PROTECTION PLAN	APPRX. SHIP WT. (lbs)
			230/3	460/3						
DISCUS COMPRESSOR										
MED. TEMP. R404A	5.0	KRD5M44	<h1 style="font-size: 2em;">KR Series models are no longer available</h1>							
	6.0	KRD6M44								
	7.5	KRD7M44								
	7.5	KRD8M44								
	10.0	KRD10M44								
	12.0	KRD12M44								
	15.0	KRD15M44								
	20.0	KRD20M44								
	25.0	KRD25M44								
	30.0	KRD30M44								
35.0	KRD35M44									
40.0	KRD40M44									
LOW TEMP. R404A	3.0	KRD3L44								
	4.0	KRD4L44								
	5.0	KRD5L44								
	6.0	KRD6L44								
	8.0	KRD8L44								
	9.0	KRD9L44								
	10.0	KRD10L44								
	12.0	KRD12L44								
MED. TEMP. R404A	15.0	KRD15L44								
	22.0	KRD22L44								
	27.0	KRD27L44								
LOW TEMP. R404A	30.0	KRD30L44								
	3.0	KRNS3M44								
	3.0	KRNS3L44								

OPTIONAL PIPING COMPONENTS			
*LIQUID LINE KIT		* SUCTION LINE KIT	
HP	Kit Num	HP	Kit Num
3 - 8	LK-4	3 - 8	SK-4
9 - 10	LK-5	9 - 10	SK-5
12 - 22	LK-6	12 - 22	SK-6
25 - 40	LK-7	25 - 40	SK-7

See pages 16 & 20 for piping component pricing.

ADDITIONAL OPTIONS FOR KR SERIES UNITS	
DESCRIPTION	LIST PRICE
ANTI-SHORT CYCLE TIMER	\$694
GAUGE KIT, HIGH, LOW, AND OIL PRES.	1,941
PHASE LOSS MONITOR	1,175
OVERSIZED CONTROL PANEL (OCP)	663
ELECTRONIC OIL PRESSURE CONTROL (SOPC)	847
TWO-TIERED STACKING OPTION - RWH and RWS	C/F
TWO-TIERED STACKING OPTION - RWD	C/F

ELECTRIC DEFROST KIT COMPONENTS

(See page 19 for Next-Gen II and page 26-27 for QV-Series Defrost Kits)

The Kramer **Electric Defrost System** provides unique features that other defrost systems lack. These energy saving features are as follows:

- The auxiliary switch on 3 phase systems and block-out relays on 1 phase systems prevents the defrost heaters from energizing when the compressor is in operation. This feature holds the maximum amp draw to the largest single load that the system will draw, and therefore reduces the electrical service requirement to the condensing unit.
- On multiple evaporator systems, individual defrost contactors are used in conjunction with sequencing relays* to allow each evaporator to terminate defrost independently. This efficient method of defrost saves electricity, and reduces the potential of overheating and steaming the evaporators. In addition, the amount of heat added to the room is kept to a minimum, reducing the run time of the condensing unit.

KIT NUMBER	TIMER	AUXILIARY SWITCH	BLOCK-OUT RELAY	† DEFROST HEATER CONTACTOR (1)	‡ FAN CONTACTOR	SEQUENCING RELAY
ED-5	1	—	1-15A	—	—	—
ED-6	1	—	1-20A	—	—	—
ED-7	1	—	1-25A	—	—	—
ED-10	1	—	1-30A	—	—	—
ED-210	1	—	1-30A	—	—	—
ED-11	1	1	—	1-30A	—	—
ED-211	1	1	—	1-30A	—	—
ED-12	1	1	—	1-30A	1-25A	—
ED-13	1	1	—	1-50A	—	—
ED-213	1	1	—	1-50A	—	—
ED-14	1	1	—	1-50A	1-25A	—
ED-15	1	1	—	2-75A	—	—
ED-16	1	1	—	2-75A	1-25A	—
ED-17	1	1	—	1-15A	1-25A	—
ED-18	1	1	—	1-20A	1-20A	—
ED-20	1	—	1-30A	—	—	2
ED-21	1	1	—	2-15A	—	2
ED-22	1	1	—	2-15A	1-25A	2
ED-23	1	1	—	2-25A	—	2
ED-24	1	1	—	2-25A	1-25A	2
ED-25	1	1	—	2-50A	—	2
ED-26	1	1	—	2-50A	1-25A	2
ED-27	1	1	—	2-75A	—	2
ED-28	1	1	—	2-75A	1-25A	2
ED-30	1	—	1-30A	—	—	3
ED-31	1	1	—	3-10A	—	3
ED-32	1	1	—	3-10A	1-25A	3
ED-33	1	1	—	3-15A	—	3
ED-34	1	1	—	3-15A	1-25A	3
ED-35	1	1	—	3-30A	—	3
ED-36	1	1	—	3-30A	1-25A	3
ED-37	1	1	—	3-75A	—	3
ED-38	1	1	—	3-75A	1-40A	3

TIMER

Initiates the defrost cycle. Also used as over ride protection for defrost termination.

AUXILIARY SWITCH

Mounted on the compressor contactor, it prevents the defrost contactor from operating whenever the compressor is energized.

BLOCK-OUT RELAY

Serves the same function as auxiliary switch, except used when defrost contactor is not required (single phase only).

FAN CONTACTOR

Used with 460V motors or when 230V motors are wired for 3 phase power.

DEFROST CONTACTOR

Carries amperage load for heaters. Contactor selection is based on the maximum resistive load rating of the contactor.

SEQUENCING RELAYS

Provides interconnection of multiple unit coolers on a single system so that each unit cooler is allowed to individually terminate defrost on temperature.

* Except for ED-210, ED-211, ED-213

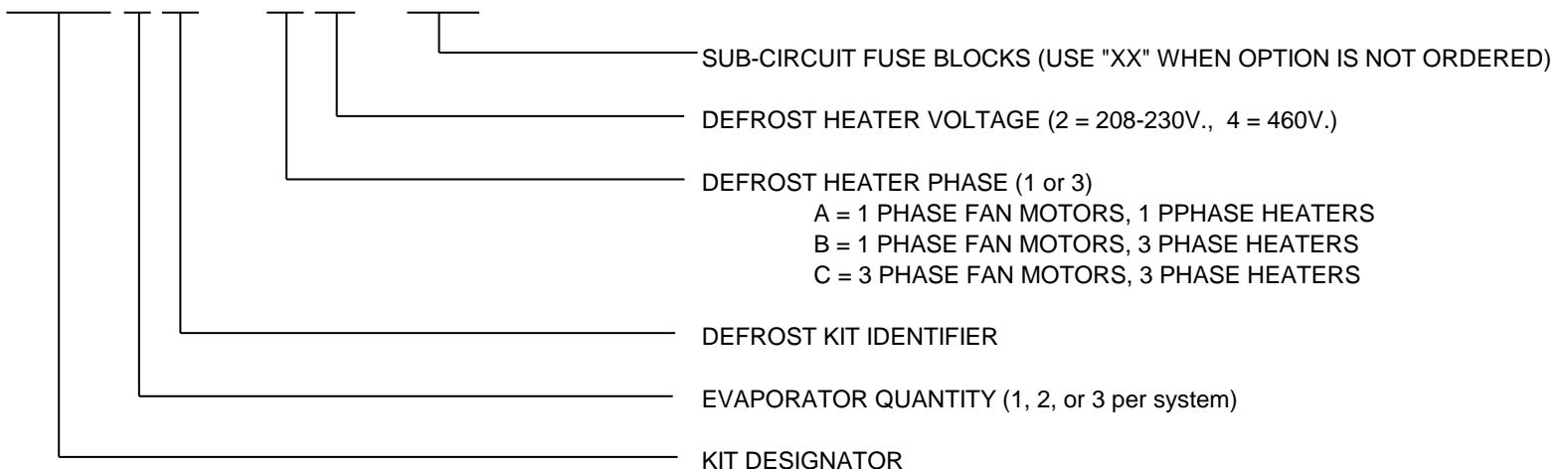
† Heater contactor amperage is based on its resistive rating.

‡ Fan motor contactor amperage is based on its inductive rating.

ELECTRIC DEFROST KIT NOMENCLATURE

(See page 19 for Next-Gen II and page 26-27 for QV-Series Defrost Kits)

E D 1 2 - A 2 - F B



ELECTRIC DEFROST PROVISIONS

(See page 19 for Next-Gen II and page 26-27 for QV-Series Defrost Kits)

QTY OF UNIT COOLERS	DESCRIPTION	† DEFROST KIT NUMBER				LIST PRICE	
		1 PH. FANS 1 PH. HTRS	1 PH. FANS 3 PH. HTRS	230 V.	460 V.	LOOSE OR MOUNTED	‡ SUB-CIRC. FUSE BLOCKS (LESS FUSES)
				3 PH. FANS 3 PH. HTRS	3 PH. FANS 3 PH. HTRS		

DEFROST KITS WHEN THE EVAPORATOR FAN MOTORS ARE WIRED FOR 230/1.

ONE UNIT COOLER PER SYSTEM	Up to 15 Amps Heater (w/ relay)	ED5-A2-XX	N/A	N/A	N/A	\$695	N/A
	20 Amps Heater (w/ relay)	ED6-A2-XX	N/A	N/A	N/A	695	N/A
	25 Amps Heater (w/ relay)	ED7-A2-XX	N/A	N/A	N/A	695	N/A
	Up to 30 Amps Heater (w/ relay)	ED10-A2-XX	N/A	N/A	N/A	695	N/A
	30 Amps - Heater (w/ contactors)	N/A	ED11-B2-XX	N/A	N/A	695	\$174
	50 Amps - Heater	ED13-A2-XX	ED13-B2-XX	N/A	N/A	1,348	174
	75 Amps Heater	ED15-A2-XX	ED15-B2-XX	N/A	N/A	2,066	203
TWO UNIT COOLERS PER SYSTEM	Up to 30 Amps Heater (w/ relay)	ED210-A2-XX	N/A	N/A	N/A	695	N/A
	30 Amps Heater	ED211-A2-XX	ED211-B2-XX	N/A	N/A	695	174
	50 Amps Heater	ED213-A2-XX	ED213-B2-XX	N/A	N/A	1,348	211
	Up to 15 Amps Heaters each (w/ relays)	ED20-A2-XX	N/A	N/A	N/A	1,925	N/A
	15 Amps Heaters each	ED21-A2-XX	ED21-B2-XX	N/A	N/A	1,925	312
	25 Amps Heaters each (w/ relays)	ED23-A2-XX	N/A	N/A	N/A	1,977	312
	25 Amps Heaters each (w/ contactors)	N/A	ED23-B2-XX	N/A	N/A	1,977	312
	50 Amps Heaters each	ED25-A2-XX	ED25-B2-XX	N/A	N/A	2,217	312
75 Amps Heaters each	ED27-A2-XX	ED27-B2-XX	N/A	N/A	3,019	406	
THREE UNIT COOLERS PER SYSTEM	Up to 10 Amps Heaters each (w/ relays)	ED30-A2-XX	N/A	N/A	N/A	2,620	N/A
	16 Amps Heaters each (w/ relays)	ED31-A2-XX	N/A	N/A	N/A	2,620	385
	16 Amps Heaters each (w/ relays)	ED33-A2-XX	N/A	N/A	N/A	2,620	385
	16 Amps Heaters each (w/ contactors)	N/A	ED33-B2-XX	N/A	N/A	2,620	385
	30 Amps Heaters each (w/ relays)	ED35-A2-XX	N/A	N/A	N/A	2,940	385
	30 Amps Heaters each (w/ contactors)	N/A	ED35-B2-XX	N/A	N/A	2,940	385
50 Amps Heaters each	ED37-A2-XX	ED37-B2-XX	N/A	N/A	3,342	457	

DEFROST KITS WHEN THE EVAPORATOR FAN MOTORS ARE WIRED FOR 230/3, 460/3, OR 460/1.

ONE UNIT COOLER	Up to 25 Amps Heater	ED17-A4-XX	N/A	N/A	N/A	\$1,405	\$288
	30 Amps Heater	ED12-A4-XX	ED12-BX-XX	ED12-C2-XX	ED12-C4-XX	1,405	288
	50 Amps Heater	N/A	ED14-BX-XX	ED14-C2-XX	ED14-C4-XX	1,643	288
	75 Amps Heater	N/A	N/A	ED16-C2-XX	ED16-C4-XX	2,260	336
TWO UNIT COOLERS	Up to 15 Amps Heaters per Unit Cooler	N/A	ED22-BX-XX	ED22-C2-XX	ED22-C4-XX	2,363	385
	25 Amps Heaters per Unit Cooler	N/A	ED24-BX-XX	ED24-C2-XX	ED24-C4-XX	2,363	385
	50 Amps Heaters per Unit Cooler	N/A	ED26-BX-XX	ED26-C2-XX	ED26-C4-XX	2,491	440
	75 Amps Heaters per Unit Cooler	N/A	N/A	ED28-C2-XX	N/A	3,216	535
THREE UNIT COOLERS	Up to 10 Amps Heaters per Unit Cooler	N/A	ED32-BX-XX	ED32-C2-XX	ED32-C4-XX	3,016	511
	16 Amps Heaters per Unit Cooler	N/A	ED34-BX-XX	ED34-C2-XX	ED34-C4-XX	3,016	511
	30 Amps Heaters per Unit Cooler	N/A	ED36-BX-XX	ED36-C2-XX	ED36-C4-XX	3,729	511
	50 Amps Heaters per Unit Cooler	N/A	ED38-BX-XX	ED38-C2-XX	ED38-C4-XX	4,142	612

† Replace "XX" with "FB" when ordering the sub-circuit fuse block option. For description of "ED" kit nomenclature see page 40.

‡ Sub-circuit fuse block price includes fuse blocks installed in the condensing unit, **less fuses**, for evaporator(s) motors and defrost heaters.

Sub-circuit fusing option is not available for 1/2 to 6 HP Minicon models due to space limitations in the control panel.

* Add "FB" suffix to ED kit part number when pricing sub-circuit fuse block option.

†† ED-Kits are supplied as mounted components and not available as a "ship loose" accessory.

FREIGHT SURCHARGES

The following freight surcharges will be applied to orders when applicable. For delivery and post delivery issues, the customer will be notified and a second invoice will be generated.

BASIC LTL SURCHARGES	NET †
Delivery Notification / Call before delivery	\$74
Lift Gate Service	231
Saturday Delivery Request	524
*Failed/Refused delivery attempt (minimum)	106
*Failed/Refused delivery attempt (Maximum)	1,314
Re-Consignment fee	99
Storage (Per 100 LBS for each calendar day)	5.20

* Refused Delivery fee will be calculated @ 12.56 cents per 100 LBS, subject to Minimum and Maximum charges shown above (per incident).

† Net prices are not to be discounted.

BASIC CONTRACT HAUL SURCHARGES	NET †
Cancelled truck not used	\$2,337
Reconsignment fee	838
Reconsignment cost per mile (\$1566 Minimum)	3.49
Delay in unloading (4 hours or more past an appointment)	1,629

† Net prices are not to be discounted.

APEX • TOP MOUNTED REFRIGERATION SYSTEM

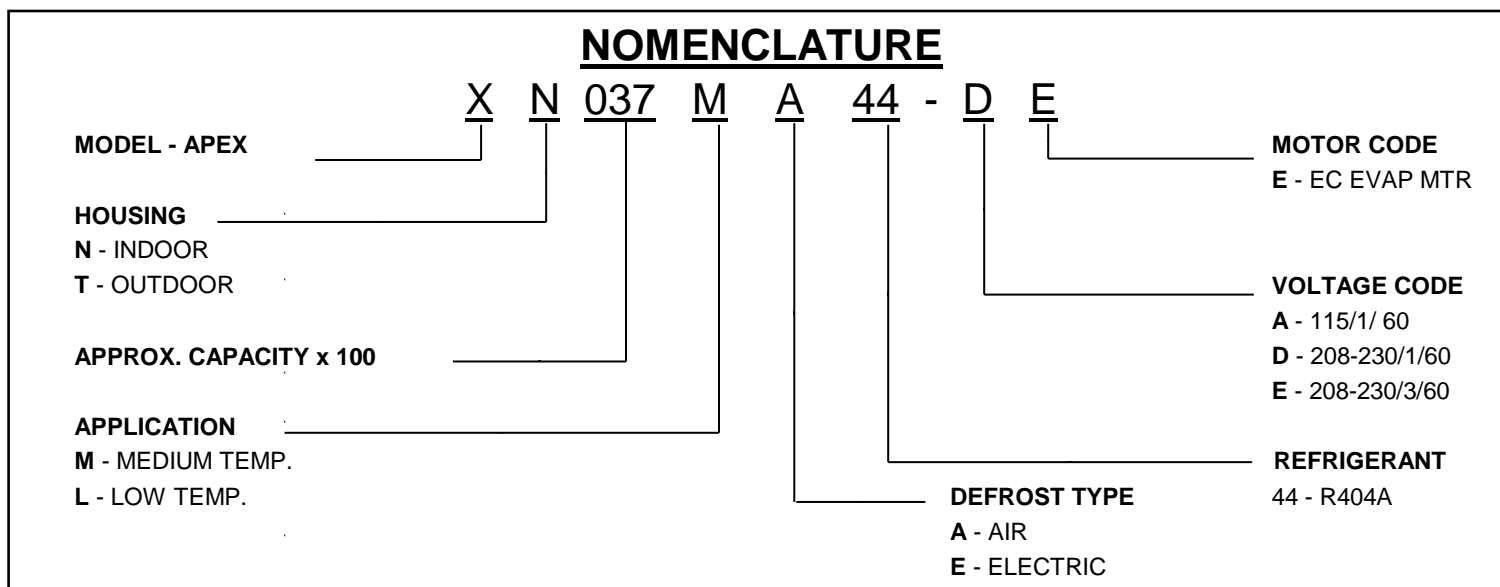
Medium Temperature - Air Defrost

Model Number	Indoor List Price EC Evap Mtr	Outdoor List Price EC Evap Mtr	Indoor Power Cord	Volts/Ph./Hz	INDOOR NET / SHIP WT. (LBS.)	OUTDOOR NET / SHIP WT. (LBS.)	4 Year Compressor Protect. Plan Net Price
XN026MA44AE	\$5,718	N/A	Yes	115/1/60	120 / 185	N/A	\$81
XN029MA44AE	6,263	N/A	Yes	115/1/60	120 / 185	N/A	81
XN037MA44AE	6,459	N/A	Yes	115/1/60	125 / 190	N/A	81
XN050MA44AE	8,545	N/A	Yes	115/1/60	210 / 305	N/A	81
X*050MA44DE	8,552	\$9,712	Yes	208-230/1/60	210 / 305	220 / 360	81
X*068MA44DE	9,891	10,635	Yes	208-230/1/60	220 / 315	230 / 370	81
X*076MA44DE	10,567	11,578	Yes	208-230/1/60	220 / 315	230 / 375	81
X*106MA44DE	12,588	13,021	Yes	208-230/1/60	295 / 420	310 / 485	83
X*106MA44EE	11,810	12,978	No	208-230/3/60	305 / 430	320 / 495	83
X*134MA44DE	14,092	14,255	No	208-230/1/60	310 / 435	325 / 500	100
X*134MA44EE	12,915	14,172	No	208-230/3/60	310 / 435	325 / 500	100

Low Temperature - Electric Defrost

Model Number	Indoor List Price EC Evap Mtr	Outdoor List Price EC Evap Mtr	Indoor Power Cord	Volts/Ph./Hz	INDOOR NET / SHIP WT. (LBS.)	OUTDOOR NET / SHIP WT. (LBS.)	4 Year Compressor Protect. Plan Net Price
XN018LE44AE	\$9,355	N/A	Yes	115/1/60	140 / 200	N/A	\$81
X*024LE44AE	10,635	N/A	Yes	115/1/60	210 / 305	N/A	81
X*024LE44DE	11,275	\$11,158	Yes	208-230/1/60	210 / 305	225 / 365	81
X*031LE44DE	11,231	12,543	Yes	208-230/1/60	245 / 340	255 / 400	81
X*043LE44DE	12,505	14,370	Yes	208-230/1/60	245 / 340	255 / 400	83
X*051LE44DE	14,350	16,224	Yes	208-230/1/60	315 / 445	320 / 510	83
X*051LE44EE	14,346	16,093	No	208-230/3/60	315 / 445	320 / 510	83
X*068LE44DE	15,397	17,279	No	208-230/1/60	320 / 450	335 / 515	98
X*068LE44EE	15,385	17,268	No	208-230/3/60	320 / 450	335 / 515	98

NOMENCLATURE



Saving Time and Money

- Fully factory assembled, charged and tested.
 - No piping or loose components to install which saves you labor cost \$\$\$.
 - PSC condenser motors for all units.
 - Adjustable digital controller is preset for typical cooler or freezer applications.
 - **Two-year warranty on all parts***
See Apex IOM M900 for full Warranty Statement
- * Insert character for housing code or motor code as applicable

Quick Installation

- Installs in a fraction of the time it takes for a typical split refrigeration systems.
- The supply/return register mounts flush with a standard 4" ceiling panel which provides for more storage in your cooler or freezer.
- Condensate is evaporated so no drain line is required on indoor models.
- Outdoor models come standard with a roof and drain line connection (see drawing in Catalog 509).



Standard Features

- Inverter Duty rail mounted motors
- Vertical air flow
- Motors with inherent thermal overload protection
- 3/8" refrigerant saving copper tube, aluminum fin coils*
- 650 PSIG working pressure
- Vinyl coated heavy gauge steel fan guards
- Swept wing fan/Venturi improves airflow and sound
- Hinged Venturi panels for easy servicing
- Hinged leg design for simple installation
- Proprietary floating coil design
- Thru-the-door non-fused disconnect switch
- Heavy gauge painted galvanized steel construction
- Heavy duty lifting eyes for equipment rigging
- UL and cUL listed for outdoor use
- LED control panel lighting
- California Title 24 compliant - see pages 43-44 for applicable models and details

Options

- Fan cycling head pressure control
- Flooded head pressure control
- Subcooling circuit
- Horizontal air flow
- Multi-circuited coils
- Wide selection of fin coatings and materials
- Individual motor fusing
- Individual or paired motor contactors
- EMS control options
- Variable frequency drives
- Multiple control panel locations
- Multiple refrigerant options
- Thru-the-door fused disconnect
- Main circuit breaker disconnect
- Leg height up to 46" (18" standard)
- Fixed box style legs (25")

QUANTUM AIR™ LARGE AIR COOLED CONDENSERS NOMENCLATURE (Pages 46-49)

K	D	D	0	8	7	G	D	3	A	
1	2	3	4	5	6	7	8	9	10	
Position Number and Description										
1	Model Series - K = Kramer				8	Motor				
2	Unit Type - D = Condenser					B – 1140 RPM, 1.5 HP Motor				
3	Width S = Single Wide D = Double Wide					D – 850 RPM, 1.5 HP Motor				
4-6	Capacity (MBTUH)**					L – 850 RPM 1 HP Motor				
7	Voltage Code E – 208-230V/3/60 G – 460V/3/60 J – 575V/3/60				N – 200-220V/3/50 Q – 380V/3/50 X – Other - Non-catalogued	9	E – 550 RPM, 1/3 HP Motor			
						10	G – 900 RPM Variable Speed EC Motor (Rail Mtd.) K – 1200 RPM Variable Speed EC Motor (Rail Mtd.) (Enclosed Motors are an option available for certain Voltage/RPM combinations)			
							Number of Fans Long - 1 to 7			
							Vintage Code			

SMALL AIR COOLED CONDENSERS NOMENCLATURE (Page 45)

K	D	S	007	D	A	2	B	1	2	A	1	A
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII
I. Model Series K – Kramer							IX. Coil Material and Coating Options* 1 – Aluminum fins 2 – Copper fins 3 – Al + AST coating 6 – Al + Heresite 7 – Al + Polyester coat - Pre Coated Fin Material X – Other					
II. Unit Type D – Condenser							X. Housing Material and Coatings* 1 – Aluminum 2 – Galvanized 7 – Stainless Steel 316L X – Other					
III. Series S – Single fan wide							XI. Unit Design Configuration A – Vertical Fan Discharge, Standard Legs E – Vertical Fan Discharge, 30" Legs N – Horizontal Fan Discharge, Standard Legs					
IV. Capacity – Three Number Characters							XII. Circuit Splitting Options 1 – Full 2 – 50/50 X – Other					
V. Voltage Code A – 115V/1/60 D – 208-230V/1/60 E – 208-230V/3/60 F – 460V/1/60 G – 460V/3/60				H – 575V/1/60 X – Other			XIII. Revision Code – Single Alphanumeric Character A – Initial Release					
VI. Motor/Fan Type A – 1140 RPM, 0.33 HP, Metal Blade C – 850 RPM, 0.25 HP, Metal Blade H – 1140 RPM, 0.5 HP Totally Enclosed, Metal Blade X – Other					Codes D, E, F, and G can be used with 50 or 60 Hz power							
VII. Length in Fans – 1 or 2												
VIII. Coil Density A – 8 fpi B – 10 fpi C – 12 fpi				D – 14 fpi X – Other								

* Contact Application Engineering to obtain price quotes for special fin materials or coatings.

When ordering please specify: Motor Voltage, Control Voltage (24, 115V or 208V), Internal or External Control Power, Design Ambient Temperature, the number of compressor systems and FPI required. Also provide the Refrigerant type, THR, T.D. for each compressor system.

SMALL AIR COOLED CONDENSERS

1075 RPM .33 HP MOTORS			
Model Number	10 FPI List Price	Fan Configuration	Approx. Net Weight (lbs.)
KDS001DA1B12A1A	\$2,267	1 x 1	80
KDS002DA1B12A1A	2,974	1 x 1	86
KDS003DA1B12A1A	3,323	1 x 1	107
KDS005DA1B12A1A	6,072	1 x 1	116
KDS007DA2B12A1A	7,604	1 x 2	164
KDS009DA2B12A1A	9,308	1 x 2	179
KDS011DA2B12A1A	10,450	1 x 2	195

850 RPM .25 HP MOTORS			
Model Number	10 FPI List Price	Fan Config.	Approx. Net Weight (lbs.)
KDS001DC1B12A1A	\$2,486	1 x 1	80
KDS002DC1B12A1A	3,566	1 x 1	86
KDS003DC1B12A1A	4,078	1 x 1	107
KDS004DC1B12A1A	6,437	1 x 1	116
KDS006DC2B12A1A	7,938	1 x 2	164
KDS008DC2B12A1A	9,981	1 x 2	179
KDS009DC2B12A1A	10,848	1 x 2	195

1075 RPM .33 HP MOTORS - Totally Enclosed			
Model Number	10 FPI List Price	Fan Config.	Approx. Net Weight (lbs.)
KDS001DH1B12A1A	\$3,299	1 x 1	80
KDS002DH1B12A1A	4,007	1 x 1	86
KDS003DH1B12A1A	4,356	1 x 1	107
KDS005DH1B12A1A	7,103	1 x 1	116
KDS007DH2B12A1A	9,668	1 x 2	164
KDS009DH2B12A1A	11,371	1 x 2	179
KDS011DH2B12A1A	12,513	1 x 2	195

POSITION V - Available Voltage Options*

Voltage Code	Adders Per Fan Section	Available Based Upon Position VI - Motor Options
A-115/1/60	N/C	Only available with motor option A
D-208-230/1/60	—	Available with motor options A & C
E-208-230/3/60	\$128	Available with motor options A, C, & H
F-460/1/60	N/C	Available with motor options A & C
G-460/3/60	128	Available with motor options A, C, & H
H-575/1/60	50	Only available with motor option A

Note: "N/A" = Not available, "N/C" = No additional charge, "—" = Base Model Feature

POSITION VI - Available Motor / Fan Type Options

Motor Type	Adder Per Fan	Available Based Upon Position V - Voltage Options
A- 1075, 0.33HP	—	Available in Voltage codes A, D, E, F, G, H
C- 850 RPM, 0.25HP	—	Available in Voltage codes D, E, F, G
H - 1075, 0.5 HP	—	Available in Voltage codes E, G

Note: "N/A" = Not available, "N/C" = No additional charge, "—" = Base Model Feature

Position - VII - Indicates Length in Fans (1 or 2)

Position - VIII - Coil Density Options Price Add or Deduct (8FPI)

Fan Configuration	A - 8 FPI	B - 10 FPI	C - 12 FPI	D - 14 FPI
1 X 1	(\$391)	—	\$393	\$786
1 X 2	(\$782)	—	\$786	\$1,570

Note: "N/A" = Not available, "N/C" = No additional charge, "—" = Base Model Feature

Position - IX - Coil Material and Coating Options**

Aluminum fins (Standard) / Copper fins / Other

No Coating (Standard) / Al + AST coating / Al + Heresite coating / Al + Polyester coat - Pre Coated Fin Material / Other

Position - X - Housing Material and Coating Options**

Galvanized (Standard) / Aluminum / Stainless Steel 316L / Other

Position - XI - Unit Design Configuration

Leg Configuration	Fan Config. 1 x 1	Fan Config. 1 x 2
A – Vertical Fan Discharge, Standard 15" Legs	—	—
E – Vertical Fan Discharge, 30" Legs	\$142	\$284
N – Horizontal Fan Discharge, Standard Legs	—	—

Position - XII - Circuit Splitting Options**

Full (Standard) / 50/50 / Multi-Circuiting / Subcooling Circuit / Other

Available Options**

Fan cycling head pressure control (2 fan model only)

Variable speed fan control (header end fan only)

Flooded head pressure control (shipped loose)

Notes:

* Codes D, E, F and G can be used with 50 or 60 Hz power.

** Contact Application Engineering to obtain price quotes for special fin materials, coatings, circuit splitting and available options.

1. Horizontal discharge orientation is available using standard leg arrangement code A.

2. Floating coil is not available for small condensers.

QUANTUM AIR™ LARGE CONDENSERS

1140 RPM 1.5 HP MOTORS (Code B)

SINGLE FAN WIDTH						
Model Number	8 FPI	10 FPI	12 FPI	14 FPI	Fans	Approx. Net Weight (lbs.)
KDS004^B1	\$7,040	\$7,460	\$7,867	\$8,273	1 x 1	350
KDS006^B1	8,963	9,383	9,791	10,197	1 x 1	375
KDS007^B1	10,009	10,429	10,836	11,242	1 x 1	400
KDS012^B2	14,722	15,564	16,377	17,190	1 x 2	725
KDS015^B2	20,264	21,106	21,919	22,732	1 x 2	750
KDS018^B2	24,014	24,855	25,668	26,482	1 x 2	775
KDS022^B3	29,635	30,897	32,117	33,337	1 x 3	1,125
KDS027^B3	34,503	35,766	36,986	38,205	1 x 3	1,150
KDS030^B4	41,403	43,086	44,713	46,339	1 x 4	1,500
KDS036^B4	46,835	48,518	50,145	51,771	1 x 4	1,525
KDS039^B5	51,656	53,760	55,793	57,826	1 x 5	1,875
KDS047^B5	60,101	62,204	64,238	66,271	1 x 5	1,900
KDS056^B6	71,923	74,448	76,888	79,328	1 x 6	2,275
KDS065^B7	84,511	87,457	90,303	93,150	1 x 7	2,650

850 RPM 1.5 HP MOTORS (Code D)

SINGLE FAN WIDTH						
Model Number	8 FPI	10 FPI	12 FPI	14 FPI	Fans	Approx. Net Weight (lbs.)
KDS004^D1	\$6,966	\$7,387	\$7,794	\$8,200	1 x 1	350
KDS005^D1	8,906	9,326	9,732	10,139	1 x 1	375
KDS007^D1	9,923	10,344	10,750	11,157	1 x 1	400
KDS010^D2	15,057	15,898	16,713	17,526	1 x 2	725
KDS014^D2	20,204	21,045	21,859	22,672	1 x 2	750
KDS015^D2	22,405	23,246	24,059	24,873	1 x 2	775
KDS021^D3	29,813	31,075	32,295	33,515	1 x 3	1,125
KDS024^D3	33,754	35,016	36,237	37,457	1 x 3	1,150
KDS028^D4	40,491	42,174	43,801	45,427	1 x 4	1,500
KDS032^D4	45,406	47,089	48,716	50,342	1 x 4	1,525
KDS035^D5	49,509	51,613	53,646	55,681	1 x 5	1,875
KDS043^D5	59,432	61,536	63,569	65,603	1 x 5	1,900
KDS052^D6	71,316	73,840	76,280	78,721	1 x 6	2,275
KDS060^D7	83,616	86,561	89,408	92,254	1 x 7	2,650

DOUBLE FAN WIDTH

Model Number	8 FPI	10 FPI	12 FPI	14 FPI	Fans	Approx. Net Weight (lbs.)
KDD022^B2	\$30,406	\$32,089	\$33,716	\$35,343	2 x 2	1,500
KDD030^B2	40,459	42,142	43,768	45,395	2 x 2	1,525
KDD036^B2	47,116	48,799	50,425	52,052	2 x 2	1,550
KDD045^B3	60,519	63,043	65,483	67,922	2 x 3	2,275
KDD054^B3	70,806	73,330	75,771	78,211	2 x 3	2,300
KDD059^B4	81,028	84,395	87,648	90,901	2 x 4	3,025
KDD072^B4	93,526	96,893	100,146	103,399	2 x 4	3,050
KDD078^B5	103,315	107,522	111,589	115,656	2 x 5	3,775
KDD094^B5	120,384	124,591	128,658	132,725	2 x 5	3,800
KDD113^B6	143,830	148,878	153,759	158,638	2 x 6	4,550
KDD131^B7	169,438	175,327	181,021	186,715	2 x 7	5,300

DOUBLE FAN WIDTH

Model Number	8 FPI	10 FPI	12 FPI	14 FPI	Fans	Approx. Net Weight (lbs.)
KDD019^D2	\$29,294	\$30,976	\$32,603	\$34,230	2 x 2	1,500
KDD028^D2	40,341	42,024	43,651	45,277	2 x 2	1,525
KDD031^D2	44,056	45,739	47,366	48,992	2 x 2	1,550
KDD041^D3	60,001	62,526	64,966	67,406	2 x 3	2,275
KDD048^D3	68,127	70,651	73,092	75,532	2 x 3	2,300
KDD055^D4	81,070	84,436	87,689	90,943	2 x 4	3,025
KDD065^D4	91,002	94,368	97,622	100,875	2 x 4	3,050
KDD069^D5	98,978	103,185	107,252	111,318	2 x 5	3,775
KDD086^D5	119,075	123,283	127,349	131,416	2 x 5	3,800
KDD103^D6	142,702	147,751	152,630	157,511	2 x 6	4,550
KDD121^D7	167,254	173,144	178,837	184,531	2 x 7	5,300

^ Insert voltage code here.

\$228 List price adder per fan 575/3/60 motors.

\$876 List Price adder (per fan) for Totally Enclosed Motor. 1.5 HP 1140 or 850 RPM, or 1.0 HP 850 RPM only. Not available for 550 RPM models.

^ Insert voltage code here.

575V motors are not available for units with 850RPM, 1.5 HP motors.

QUANTUM AIR™ LARGE CONDENSERS

850 RPM 1.0 HP MOTORS (Code L)[†]

SINGLE FAN WIDTH

Model Number	8 FPI	10 FPI	12 FPI	14 FPI	Fans	Approx. Net Weight (lbs.)
KDS004 [^] L1	\$6,510	\$6,932	\$7,338	\$7,745	1 x 1	350
KDS006 [^] L1	8,429	8,850	9,257	9,664	1 x 1	375
KDS008 [^] L1	10,076	10,497	10,903	11,310	1 x 1	400
KDS010 [^] L2	14,140	14,982	15,796	16,609	1 x 2	725
KDS012 [^] L2	17,840	18,682	19,495	20,309	1 x 2	750
KDS015 [^] L2	21,570	22,411	23,224	24,038	1 x 2	775
KDS019 [^] L3	28,183	29,444	30,665	31,885	1 x 3	1,125
KDS023 [^] L3	32,254	33,516	34,736	35,956	1 x 3	1,150
KDS026 [^] L4	39,019	40,702	42,329	43,956	1 x 4	1,500
KDS030 [^] L4	44,255	45,938	47,565	49,192	1 x 4	1,525
KDS032 [^] L5	47,522	49,626	51,659	53,692	1 x 5	1,875
KDS040 [^] L5	58,534	60,638	62,671	64,705	1 x 5	1,900
KDS048 [^] L6	70,625	73,150	75,590	78,030	1 x 6	2,275
KDS056 [^] L7	82,645	85,590	88,436	91,283	1 x 7	2,650

550 RPM 1/3 HP MOTORS (Code E)[†]

SINGLE FAN WIDTH

Model Number	8 FPI	10 FPI	12 FPI	14 FPI	Fans	Approx. Net Weight (lbs.)
KDS004 [^] E1	\$7,519	\$7,939	\$8,346	\$8,753	1 x 1	350
KDS005 [^] E1	8,851	9,272	9,678	10,085	1 x 1	375
KDS006 [^] E1	9,972	10,393	10,799	11,206	1 x 1	400
KDS008 [^] E2	14,821	15,662	16,476	17,289	1 x 2	725
KDS011 [^] E2	19,533	20,375	21,188	22,001	1 x 2	750
KDS012 [^] E2	21,602	22,443	23,258	24,071	1 x 2	775
KDS016 [^] E3	29,896	31,158	32,378	33,598	1 x 3	1,125
KDS018 [^] E3	32,763	34,026	35,246	36,466	1 x 3	1,150
KDS021 [^] E4	40,979	42,662	44,288	45,916	1 x 4	1,500
KDS025 [^] E4	45,947	47,630	49,256	50,883	1 x 4	1,525
KDS028 [^] E5	52,062	54,166	56,200	58,233	1 x 5	1,875
KDS032 [^] E5	57,703	59,807	61,840	63,875	1 x 5	1,900
KDS040 [^] E6	73,421	75,945	78,385	80,826	1 x 6	2,275
KDS046 [^] E7	85,835	88,781	91,627	94,474	1 x 7	2,650

DOUBLE FAN WIDTH

Model Number	8 FPI	10 FPI	12 FPI	14 FPI	Fans	Approx. Net Weight (lbs.)
KDD017 [^] L2	\$27,245	\$28,928	\$30,554	\$32,182	2 x 2	1,500
KDD026 [^] L2	39,004	40,687	42,313	43,940	2 x 2	1,525
KDD030 [^] L2	44,273	45,956	47,582	49,209	2 x 2	1,550
KDD038 [^] L3	58,977	61,501	63,941	66,381	2 x 3	2,275
KDD046 [^] L3	68,816	71,341	73,781	76,221	2 x 3	2,300
KDD051 [^] L4	79,196	82,562	85,816	89,069	2 x 4	3,025
KDD060 [^] L4	90,199	93,566	96,819	100,072	2 x 4	3,050
KDD063 [^] L5	96,134	100,341	104,409	108,475	2 x 5	3,775
KDD080 [^] L5	118,636	122,843	126,910	130,977	2 x 5	3,800
KDD097 [^] L6	142,484	147,533	152,413	157,294	2 x 6	4,550
KDD113 [^] L7	166,997	172,888	178,582	184,274	2 x 7	5,300

DOUBLE FAN WIDTH

Model Number	8 FPI	10 FPI	12 FPI	14 FPI	Fans	Approx. Net Weight (lbs.)
KDD016 [^] E2	\$31,769	\$33,453	\$35,079	\$36,706	2 x 2	1,500
KDD021 [^] E2	40,979	42,662	44,288	45,916	2 x 2	1,525
KDD025 [^] E2	45,538	47,221	48,848	50,474	2 x 2	1,550
KDD032 [^] E3	62,883	65,407	67,848	70,287	2 x 3	2,275
KDD037 [^] E3	68,868	71,393	73,833	76,273	2 x 3	2,300
KDD043 [^] E4	84,134	87,499	90,754	94,007	2 x 4	3,025
KDD050 [^] E4	93,731	97,096	100,351	103,604	2 x 4	3,050
KDD055 [^] E5	107,329	111,536	115,603	119,670	2 x 5	3,775
KDD063 [^] E5	117,833	122,041	126,107	130,175	2 x 5	3,800
KDD080 [^] E6	149,414	154,463	159,343	164,223	2 x 6	4,550
KDD093 [^] E7	173,739	179,630	185,323	191,017	2 x 7	5,300

[^] Insert voltage code here.

\$228 List price adder per fan 575/3/60 motors.

\$876 List Price adder (per fan) for Totally Enclosed Motor. 1.5 HP 1140 or 850 RPM, or 1.0 HP 850 RPM only. Not available for 550 RPM models.

[†] These models fulfill California Title 24 condenser efficiency requirements when utilizing Variable Frequency Drives and 10 FPI coils.

[^] Insert voltage code here.

575V motors are not available for units with 550RPM, 1/3 HP motors.

QUANTUM AIR™ LARGE CONDENSERS

VSEC 1200 RPM (Code K)

SINGLE FAN WIDTH

Model Number	8 FPI	10 FPI	12 FPI	14 FPI	Fans	Approx. Net Weight (LBS.)
KDS005^K1	\$12,772	\$13,192	\$13,599	\$14,006	1 x 1	350
KDS006^K1	14,695	15,115	15,523	15,930	1 x 1	375
KDS008^K1	15,741	16,162	16,568	16,975	1 x 1	400
KDS013^K2	26,187	27,029	27,842	28,655	1 x 2	725
KDS016^K2	31,729	32,571	33,384	34,197	1 x 2	750
KDS019^K2	35,479	36,320	37,133	37,946	1 x 2	775
KDS024^K3	46,832	48,095	49,315	50,535	1 x 3	1,125
KDS028^K3	51,700	52,963	54,183	55,403	1 x 3	1,150
KDS032^K4	64,333	66,016	67,643	69,269	1 x 4	1,500
KDS038^K4	69,765	71,448	73,075	74,701	1 x 4	1,525
KDS041^K5	80,318	82,422	84,455	86,488	1 x 5	1,875
KDS049^K5	88,763	90,867	92,900	94,933	1 x 5	1,900
KDS059^K6	106,318	108,843	111,283	113,723	1 x 6	2,275
KDS069^K7	124,639	127,584	130,431	133,277	1 x 7	2,650

VSEC 900 RPM (Code L)

SINGLE FAN WIDTH

Model Number	8 FPI	10 FPI	12 FPI	14 FPI	Fans	Approx. Net Weight (LBS.)
KDS004^G1	\$12,772	\$13,192	\$13,599	\$14,006	1 x 1	350
KDS005^G1	14,695	15,115	15,523	15,930	1 x 1	375
KDS007^G1	15,741	16,162	16,568	16,975	1 x 1	400
KDS010^G2	26,187	27,029	27,842	28,655	1 x 2	725
KDS014^G2	31,729	32,571	33,384	34,197	1 x 2	750
†KDS015^G2*	35,479	36,320	37,133	37,946	1 x 2	775
KDS021^G3	46,832	48,095	49,315	50,535	1 x 3	1,125
†KDS025^G3*	51,700	52,963	54,183	55,403	1 x 3	1,150
KDS028^G4	64,333	66,016	67,643	69,269	1 x 4	1,500
†KDS033^G4*	69,765	71,448	73,075	74,701	1 x 4	1,525
KDS035^G5	80,318	82,422	84,455	86,488	1 x 5	1,875
†KDS044^G5*	88,763	90,867	92,900	94,933	1 x 5	1,900
†KDS052^G6*	106,318	108,843	111,283	113,723	1 x 6	2,275
†KDS061^G7*	124,639	127,584	130,431	133,277	1 x 7	2,650

DOUBLE FAN WIDTH

Model Number	8 FPI	10 FPI	12 FPI	14 FPI	Fans	Approx. Net Weight (LBS.)
KDD023^K2	\$53,336	\$55,019	\$56,646	\$58,273	2 x 2	1,500
KDD032^K2	63,389	65,072	66,698	68,325	2 x 2	1,525
KDD038^K2	70,046	71,729	73,355	74,982	2 x 2	1,550
KDD047^K3	94,914	97,438	99,877	102,317	2 x 3	2,275
KDD057^K3	105,201	107,725	110,166	112,606	2 x 3	2,300
KDD063^K4	126,888	130,255	133,508	136,761	2 x 4	3,025
KDD075^K4	139,386	142,752	146,006	149,259	2 x 4	3,050
KDD082^K5	160,639	164,847	168,914	172,981	2 x 5	3,775
KDD099^K5	177,709	181,916	185,983	190,050	2 x 5	3,800
KDD118^K6	212,620	217,668	222,549	227,428	2 x 6	4,550
KDD138^K7	249,700	255,590	261,283	266,977	2 x 7	5,300

DOUBLE FAN WIDTH

Model Number	8 FPI	10 FPI	12 FPI	14 FPI	Fans	Approx. Net Weight (LBS.)
KDD020^G2	\$53,336	\$55,019	\$56,646	\$58,273	2 x 2	1,500
KDD028^G2	63,389	65,072	66,698	68,325	2 x 2	1,525
†KDD032^G2*	70,046	71,729	73,355	74,982	2 x 2	1,550
KDD042^G3	94,914	97,438	99,877	102,317	2 x 3	2,275
†KDD049^G3*	105,201	107,725	110,166	112,606	2 x 3	2,300
KDD056^G4	126,888	130,255	133,508	136,761	2 x 4	3,025
†KDD065^G4*	139,386	142,752	146,006	149,259	2 x 4	3,050
KDD070^G5	160,639	164,847	168,914	172,981	2 x 5	3,775
†KDD087^G5*	177,709	181,916	185,983	190,050	2 x 5	3,800
KDD105^G6*	212,620	217,668	222,549	227,428	2 x 6	4,550
†KDD122^G7*	249,700	255,590	261,283	266,977	2 x 7	5,300

^ Insert voltage code here.

^ Insert voltage code here.

† These selected models fulfill California Title 24 condenser efficiency requirements when utilizing 10 FPI coils.

Large Air Cooled Condenser Options

Fan configuration

	1X1	1X2	1X3	1X4	1X5	1X6	1X7	2X2	2X3	2X4	2X5	2X6	2X7
Disconnect Options													
Through the door non-fused disconnect	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD	STD
Through the door fused disconnect	\$460	528	779	884	972	1,063	1,151	884	1,063	1,371	1,682	1,994	2,303
Main Power Circuit Breaker	\$944	944	1,168	1,168	1,168	1,168	1,168	1,168	1,168	1,252	1,252	1,252	1,252
Bladed Safety Switch, Non-fused	\$841	841	1,620	1,620	1,620	1,620	1,620	1,620	1,620	2,044	2,044	2,044	2,044
110 VAC - 20 Amp Convenience Outlet powered by separate building feed or transformer	\$339	339	339	339	339	339	339	339	339	339	339	339	339

Fan Cycling Options - Requires Contactor Option													
Ambient fan cycling [†]	—	\$938	1,279	1,704	2,128	2,554	2,981	937	1,279	1,704	2,128	2,554	2,981
Mechanical Pressure fan cycling (per circuit) W/O Header [†]	—	\$1,411	1,544	2,058	2,573	3,088	3,600	1,411	1,544	2,058	2,573	3,088	3,600
Mechanical Pressure fan cycling (per circuit) W/ Header [†]	—	\$1,798	2,314	2,832	3,350	3,867	4,394	1,798	2,314	2,832	3,350	3,867	4,394
Electronic Pressure fan cycling (per circuit) W/O Header [†]	—	\$1,464	1,835	3,047	4,261	5,472	6,427	1,464	1,835	3,047	4,261	5,472	6,427
Electronic Pressure fan cycling (per circuit) W/ Header [†]	—	\$2,079	3,291	4,503	5,717	6,661	7,827	2,079	3,291	4,503	5,717	6,661	7,827

Note: Header fan is continuous run and not cycled.

Electronic Header End Fan Speed Control - Req. Contactor & Fan Cycle on 1x2 and larger													
Variable speed header end fan (1 or 2 Circuit) ambient controlled [†]	\$2,332	2,655	2,994	3,421	3,847	4,274	4,699	2,653	3,079	3,509	3,935	4,363	4,789
Variable speed header end fan (1 or 2 Circuit) Mechanical control - pressure [†]	\$2,780	2,986	3,303	3,816	4,333	4,847	5,359	2,986	3,303	3,816	4,333	4,847	5,359
Variable speed header end fan (1 or 2 Circuit) Electronic control - pressure [†]	\$2,944	3,261	3,593	4,806	6,020	6,952	8,120	3,261	3,593	4,806	6,020	6,952	8,120

Variable Frequency Drive (VFD)													
VFD Package - Shipped Loose [†]	C/F	C/F	C/F	C/F	C/F	C/F	C/F	C/F	C/F	C/F	C/F	C/F	C/F
VFD Package - Factory Mounted [†]	C/F	C/F	C/F	C/F	C/F	C/F	C/F	C/F	C/F	C/F	C/F	C/F	C/F

Control Boards - Items with this mark also ‡ require the contactor option													
CPC relay board + xfmr (1x1 thru 2x4 config) ‡	\$3,028	3,028	3,028	3,028	3,028	3,028	3,028	3,028	3,028	3,028	—	—	—
CPC relay boards (2)+ xfmr (2x5 thru 2x7 config) ‡	—	—	—	—	—	—	—	—	—	—	\$5,678	5,678	5,678
CPC relay board condenser split 50/50 (1 board + relay)	\$3,151	3,151	3,151	3,151	3,151	3,151	3,151	3,151	3,151	3,151	3,151	3,151	3,151
CPC analog speed control board and transformer	\$3,170	3,170	3,170	3,170	3,170	3,170	3,170	3,170	3,170	3,170	3,170	3,170	3,170
DANFOSS relay board + xfmr (1x1 thru 2x4 config) ‡	\$3,040	3,040	3,040	3,040	3,040	3,040	3,040	3,040	3,040	3,040	—	—	—
DANFOSS relay boards (2) + xfmr (2x5 thru 2x7 config) ‡	—	—	—	—	—	—	—	—	—	—	\$6,231	6,231	6,231
DANFOSS relay board condenser split 50/50 (relay) ‡	\$4,464	4,464	4,464	4,464	4,464	4,464	4,464	4,464	4,464	4,464	4,464	4,464	4,464
DANFOSS analog speed control board and transformer	\$3,510	3,510	3,510	3,510	3,510	3,510	3,510	3,510	3,510	3,510	3,510	3,510	3,510
VSEC Stand alone motor control (C450)	\$4,608	4,608	4,608	4,608	4,608	4,608	4,608	4,608	4,608	4,608	4,608	4,608	4,608

Consult Application Engineering For Other Relay Board Options

Control Options													
Control Circuit Breaker (2P - 15A)	\$303	303	303	303	303	303	303	303	303	303	303	303	303
Control circuit transformer [†]	\$573	573	573	573	573	573	573	573	573	573	573	573	573

Fan Control Options (Contactors)													
Individual Motor Contactors [†]	\$241	482	721	961	1,200	1,440	1,680	961	1,440	1,919	2,399	2,879	3,358
Paired Motor Contactors [†]	—	—	—	—	—	—	—	\$482	722	962	1,202	1,442	1,683
NEMA rated Contactors - Individual [†]	\$988	1,976	2,963	3,950	4,937	5,925	6,912	3,950	5,925	7,899	9,874	11,848	13,823
NEMA rated Contactors - PAIRED [†]	—	—	—	—	—	—	—	\$1,976	2,963	3,950	4,937	5,925	6,912
Individual motor fuses [†]	\$243	486	727	969	1,212	1,453	1,695	969	1,453	1,938	2,422	2,906	3,390
Paired motor fuses [†]	—	—	—	—	—	—	—	\$486	727	969	1,212	1,453	1,695
Individual circuit breakers ^{††}	\$674	967	1,439	1,928	2,400	2,889	3,336	1,928	2,889	3,834	4,799	5,762	6,444
Paired circuit breakers ^{††}	—	—	—	—	—	—	—	\$967	1,439	1,928	2,400	2,889	3,336
Individual motor terminal boards [†]	\$171	338	506	674	844	1,012	1,179	674	1,012	1,618	1,956	2,290	2,628
Paired motor terminal blocks [†]	—	—	—	—	—	—	—	\$338	506	674	844	1,012	1,179
Fan toggle switches - per fan (to control contactors) [†]	\$101	203	301	401	501	602	702	401	602	803	1,003	1,202	1,402
Fan toggle switches - PAIRED (to control contactors) [†]	—	—	—	—	—	—	—	\$203	301	401	501	602	702
Fan toggle switches - per fan (to control Motors) [†]	\$460	460	460	460	460	460	460	1,616	2,423	3,231	4,039	4,846	5,654
Fan toggle switches - PAIRED (to control Motors) [†]	—	—	—	—	—	—	—	\$808	1,212	1,616	2,020	2,423	2,828

Build Options**													
Horizontal Air Discharge	\$680	996	1,466	1,799	2,116	2,434	2,731	1,992	2,901	3,598	4,231	4,866	5,466
Aluminum Housing	\$270	541	811	1,081	1,351	1,621	1,891	1,081	1,621	2,161	2,702	3,242	3,781
Stainless Steel Housing	C/A	C/A	C/A	C/A	C/A	C/A	C/A	C/A	C/A	C/A	C/A	C/A	C/A
Leg length - 21" or 30" - Standard Vertical air discharge	\$142	284	424	424	424	523	665	284	424	424	424	523	665
Leg length - 46" (Vertical air discharge only)	\$170	336	502	502	502	618	784	336	502	502	502	618	784
Box Style Leg at every location- 25" (Vertical air discharge only)	\$494	740	987	1,233	1,480	1,726	1,973	740	987	1,233	1,480	1,726	1,973
Sealtite wiring to motor rail	\$212	263	398	536	662	798	931	536	798	1,063	1,331	1,595	1,851
Sealtite wiring to electrical box	\$702	1,404	2,106	2,807	3,509	4,211	4,913	2,807	4,211	5,614	7,018	8,421	9,825
Condenser Base with 18" legs (Vertical air discharge only)	\$1,722	2,485	3,250	4,654	5,631	6,456	7,498	2,485	3,250	4,654	5,631	6,714	7,799
Condenser Base with 30" or 46" legs (Vertical air discharge only)	\$1,843	2,729	3,614	4,609	6,240	7,158	8,318	2,729	3,614	5,142	6,240	7,444	8,651
Condenser / Receiver Assembly (Vertical air discharge only)	C/A	C/A	C/A	C/A	C/A	C/A	C/A	C/A	C/A	C/A	C/A	C/A	C/A
Header End control panel mounting (Specify location change)	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C

Flooded Head Pressure Controls (Shipped loose only)	Number of Controls							
	1X1	1X2	1X3	1X4	1X5	1X6	1X7	2X2
List Price per compressor system [†]	C/A	C/A	C/A	C/A	C/A	C/A	C/A	C/A
Number of Controls per compressor system [†]	C/A	C/A	C/A	C/A	C/A	C/A	C/A	C/A
Manifold included [†]	C/A	C/A	C/A	C/A	C/A	C/A	C/A	C/A

* Multiple valves or manifolds are required for multi-circuit condensers.

** Contact Application Engineering to obtain price quotes for special fin materials or coatings.

N/C = No additional charge for this feature.

C/A = Contact Application engineering for custom price quote.

† This option is not available for condensers with VSEC motors.

†† Units with VSEC motors **include** individual circuit breaker. Paired circuit breakers are not available.

PRINCIPAL TERMS AND CONDITIONS OF SALE

Prices effective 7/2/18

1. **Applicable Law and Terms of Sale:** All orders shall be subject to the following terms and conditions notwithstanding any additional or contrary printed terms and conditions of Buyer. Such additional or contrary terms shall not bind Seller unless accepted in writing even though such terms do not materially alter the terms hereof. No oral statements, warranties, stipulations, representations or terms shall have any binding effect or be any part of the contract whatsoever.
2. **Orders:** All orders must be in writing and will be binding when our order acknowledgment is mailed. Orders are accepted subject to strikes, fires, accidents, and other causes beyond our reasonable control. Acceptance of your order is conditioned upon an agreement to hold us harmless by reason of delivery delays.
3. **Prices:** Prices are subject to change without notice, and all quotations, unless otherwise specified, are binding only for immediate acceptance. Prices are based on material made to Seller's standard tolerances, unless otherwise specified.
4. **Freight:** All products are shipped FOB Point of Shipment with full freight allowed on single orders with a net price value of \$10,000.00 or more, except surface coils and parts, within the continental USA (excluding Alaska and Hawaii). Shipments to destinations outside the continental USA, that meet freight allowance requirements, will incur charges for the additional transport beyond the USA border. Seller reserves the choice of transportation mode (DRY VAN, FLATBED, LTL, AND PARCEL), carrier, and shipping point. For special routing requests, Buyer will bear all additional costs for such routing. The responsibility of the Seller shall cease upon delivery of the product in good condition to a common carrier (TL, LTL, FLATBED, etc.). Since all goods are shipped at Buyer's risk, they should carefully examine before signing delivery receipt. If common carrier tenders delivery of goods in damaged condition or if packages delivered do not correspond with the number called for on the freight bill, Buyer should insist on common carrier's agent (DRIVER) making notation of the condition of shortages of damage on delivery receipt. The Buyer should never refuse freight from the common carrier. Filing freight claims are under the responsibility of the Buyer, and this will enable them to secure prompt payment of claim for damaged or lost material. Refer to HTPG's freight policy for further information.
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6. **Limited Warranty:** Seller warrants against defect in materials and workmanship in products which it manufactures for (1) year from date of installation or up to (18) eighteen months from the date of shipment, whichever event occurs first, when properly installed and operated under normal use. This guarantee does not include any labor or other charges made outside of the Seller's factory for replacement or repair of defective parts unless specifically stated in the body of the Seller's invoice. On parts not manufactured by Seller, such as motors, controls, valves and compressors we extend to the Buyer the same warranties made to us by the manufacturer. Seller's only liability under this warranty or otherwise shall be the repair or replacement (at Seller's option) of non-conforming goods or parts. Seller assumes no liability for incidental or consequential damages such as injury to person or property, or lost profits.
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9. **Cancellations and Returned Goods:** Permission to return any part or product must be obtained from Seller and may be subject to a restocking charge. Credits for new material accepted for return will be at the original sales price or current market price, whichever is lower, less handling and restocking charges. Buyer must prepay all transportation charges. Any costs for putting material in condition for resale will be charged to the Buyer. Shipment of material returned without factory authorization or not properly tagged with a Return Material Authorization Number or not freight prepaid cannot be received by Seller. Obsolete products or material made to special order are not returnable.
10. **Catalog Materials and Drawings:** Seller is not responsible for typographical errors or other errors of omission in Seller's catalogs or drawings.
11. **Late Charge Provision:** Buyer agrees to pay a late charge of 1-1/2% per month (18% per year) for any invoice or bill not paid within (30) thirty days of the date of the billing invoice.
12. **Choices of law, Disputes:** This agreement and the performance of the parties hereunder shall be construed in accordance with and governed by the laws of the State of Georgia and shall be deemed made in the state. Buyer irrevocably consents to the exclusive jurisdiction of the courts of Fulton County, on all matters arising out of or relating to this sale and Buyer further irrevocably consents to service of process by certified mail, return receipt requested, at Buyer's address set forth in the order acknowledgment.

The above terms and conditions apply to all orders placed with the Seller. Buyer acknowledges having read and understood these terms and conditions and agrees to abide by them upon placement of any order with the Seller. In the event it becomes necessary to refer the account to a collection agency or to institute legal action to obtain payment of the account, Buyer agrees to pay all reasonable attorney fees and court costs incurred by such action.



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