

LIST PRICE BOOK**FEB 2023****SUPERSEDES ALL EARLIER VERSIONS**

KLP-0223

Prices effective 02/20/23

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 or handling requests.

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 EQUIPMENT ORDERS - 1-800-288-9488 or equipment@htpg.com
 PARTS - 1-855-HTPARTS (1-855-487-2787) or parts@htpg.com
 VISIT US ON THE WEB AT <http://kramer.htpg.com>

Reach-In Nomenclature:

SL	A	1	5	9	RP	A	S
Product Line	Defrost Type	Fan QTY	Fin Spacing	Capacity	Coil Coating	Voltage	Motor Type
SL - Slim Temp WE - Wedge Temp FT - Flex Temp MUF - Mullion-Temp (Upflow) MDF - Mullion-Temp (Downflow) TT - T-Temp TW - Twin-Temp MTW - Mini Twin-Temp WA - Wall-Temp	Blank or A - Air Defrost E - Electric Defrost			# x 100 = BTUH	Blank - No Coating RP - Russ-Proof Coil Coating	A - 115/1/60 D - 230/1/60	E - EC P - PSC S - Shaded-Pole

Not all combinations of nomenclature are available. For specific offering consult individual Reach-In Unit Cooler sections of this document.

Slim-Temp Unit Coolers

The "SLA" product line offers 7 air defrost models. Typical installations include; glass display and solid door upright coolers, walk-ins, salad cases, back bars and other tight spaced enclosures operating above +34°F



The "SLE" product line offers eight electric defrost models. Typical installations include; glass display and solid door uprights, walk-ins, salad cases, back bars and other tight spaced enclosures requiring electric defrost.



Slim-Temp - Air Defrost - Cooler Application

Standard Coil			Coated Coil (Russ-Proof)			Dimensions (in)			Approx. Ship Weight (lbs)
Model Number	Shaded Pole Motor		Model Number	Shaded Pole Motor					
	115V	230V		115V	230V	Height	Length	Depth	
SLA 17-10	1,125	1,174	SLA 17-10RP	1,237	1,300	4-3/4	16-1/2	13-1/2	15
SLA 17-13	1,444	1,555	SLA 17-13RP	1,556	1,667	4-3/4	20-1/2	13-1/2	18
SLA 27-17	1,695	1,820	SLA 27-17RP	1,777	1,900	4-3/4	24	14-1/2	22
SLA 27-23	2,116	2,210	SLA 27-23RP	2,268	2,369	4-3/4	31-1/2	14-1/2	29
SLA 37-30	2,585	2,802	SLA 37-30RP	2,795	2,989	4-3/4	40	14-1/2	37
SLA 47-40	3,525	3,804	SLA 47-40RP	3,757	4,019	4-3/4	53-1/2	14-1/2	45
SLA 57-50	4,557	4,864	SLA 57-50RP	4,836	5,131	6-3/4	53-1/2	14-1/2	61

Specify voltage when ordering. A for 115V and D for 230V.

No EC or PSC Motors on SLA Models.

Slim-Temp - Electric Defrost - Freezer Application

Model Number	Single Speed EC Motor		Shaded Pole Motor		Dimensions (in)			Approx. Ship Weight (lbs)
	115V	230V	115V	230V	Height	Length	Depth	
SLE 15-9	—	—	1,856	1,856	4-3/4	16-1/2	13-1/2	16
SLE 15-12	—	—	2,230	2,230	4-3/4	20-1/2	13-1/2	19
SLE 25-16	—	—	2,783	2,783	4-3/4	24	14-1/2	23
SLE 25-21	5,125	5,125	3,146	3,146	6-3/4	24	15-1/2	31
SLE 25-28	5,803	5,803	3,887	3,887	6-3/4	31-1/2	15-1/2	39
SLE 35-36	7,283	7,283	4,375	4,375	6-3/4	38-1/2	15-1/2	48
SLE 45-54	9,900	9,900	6,059	6,059	6-3/4	48-1/4	16-1/2	70
SLE 35-70	—	10,633	—	7,635	6-3/4	76-1/2	20-1/2	105

Specify voltage & motor when ordering. A for 115V & D for 230V and E for EC Motor & S for Shaded Pole.

\$75 List Adder for 3-prong Electrical Connector

"—" = Not Available

REACH-IN UNIT COOLERS

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Wedge-Temp Unit Coolers

Wedge-Temp Reach-ins are Air Defrost for reach-ins, back-bars, beverage cases, salad cases and other applications above 34° F.

Heavy-gauge, all Aluminum housing; front panel and drain-pan assembly hinged to provide easy access. These air defrost units are available with our specially formulated epoxy coil coating.



Wedge-Temp - Air Defrost - Cooler Application

Standard Coil					Coated Coil (Russ-Proof)					Dimensions (in)			App. Ship Weight (lbs)
Model Number	Single Speed EC Motor		Shaded Pole Motor		Model Number	Single Speed EC Motor		Shaded Pole Motor					
	115V	230V	115V	230V		115V	230V	115V	230V	Height	Length	Depth	
WE17-12	2,280	2,307	1,355	1,382	WE17-12RP	2,368	2,441	1,450	1,524	8-5/16	15-1/4	15-7/8	16
WE17-15	2,296	2,307	1,385	1,436	WE17-15RP	2,437	2,514	1,513	1,586	8-5/16	15-1/4	15-7/8	19
WE17-18	2,335	2,346	1,432	1,502	WE17-18RP	2,468	2,573	1,549	1,652	8-5/16	17-3/4	15-7/8	22
WE17-25	2,602	2,408	1,674	1,746	WE17-25RP	2,711	2,835	1,777	1,901	8-5/16	19-7/8	16-7/8	29
WE17-35	2,958	2,672	2,063	2,307	WE17-35RP	3,375	3,520	2,446	2,595	9-1/2	22-7/8	17-7/8	36
WE17-45	3,484	3,198	2,597	2,765	WE17-45RP	4,076	4,344	3,153	3,422	9-5/8	26-3/4	20-1/2	57
WE18-55	4,433	3,652	3,489	3,663	WE18-55RP	4,925	5,100	3,981	4,155	9-5/8	26-3/4	20-1/2	65

Specify voltage & motor when ordering. "A" for 115V & "D" for 230V and "E" for EC Motor & "S" for Shaded Pole.

See page 2 for Nomenclature.

\$75 List Adder for 3-prong Electrical Connector

Flex-Temp Unit Coolers

The Flex-Temp reach-in coil is designed to meet a number of application needs. Its triangular geometry allows for installation in areas with limited available space.

Flex-Temp is well suited for under-counter refrigerators, reach-in back bars and other similar enclosures.



Flex-Temp - Air Defrost - Cooler Application

Standard Coil					Coated Coil (Russ-Proof)					Dimensions (in)			App. Ship Weight (lbs)
Model Number	Single Speed EC Motor		Shaded Pole Motor		Model Number	Single Speed EC Motor		Shaded Pole Motor					
	115V	230V	115V	230V		115V	230V	115V	230V	Height	Length	Depth	
FT18-6	N/A	N/A	1,113	1,153	FT18-6RP	N/A	N/A	1,165	1,193	6-3/4	12-1/2	9	9
FT18-8	N/A	N/A	1,208	1,247	FT18-8RP	N/A	N/A	1,256	1,284	6-3/4	12-1/2	9	9
FT28-12	N/A	N/A	1,374	1,498	FT28-12RP	N/A	N/A	1,522	1,673	7-3/4	18	9	14
FT18-17	2,570	2,707	1,568	1,702	FT18-17RP	2,728	2,865	1,743	1,891	9-5/8	14	10-1/2	15
FT18-23	3,555	3,741	2,519	2,707	FT18-23RP	3,766	3,951	2,698	2,846	11-5/8	16-3/4	13	20
FT18-31	3,928	4,143	2,890	3,109	FT18-31RP	4,161	4,395	3,127	3,352	11-5/8	16-3/4	13	23

Specify voltage & motor when ordering. "A" for 115V & "D" for 230V and "E" for EC Motor & "S" for Shaded Pole.

See page 2 for Nomenclature.

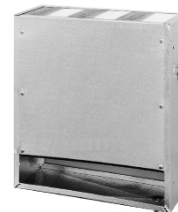
Units are supplied with 3-prong Electrical Connector

Mullion-Temp Unit Coolers

The Mullion-Temp is designed to fit behind the mullion located between under counter or reach-in doors.

Mullion-Temp models are available for two airflow patterns.

- "MDF" models supply a downward flow of air, ideal for beverage coolers.
- "MUF" models provide upward air flow, directing cold air towards drop in food trays.



Mullion-Temp - Air Defrost - Cooler Application - Downward Airflow



Standard Coil			Coated Coil (Russ-Proof)			Dimensions (in)			Approx. Ship Weight (lbs)
Model Number	Shaded Pole Motor		Model Number	Shaded Pole Motor					
	115V	230V		115V	230V	Height	Length	Depth	
MDF 27-13	2,075	2,185	MDF 27-13RP	2,114	2,261	17-1/8	15-5/8	5-5/8	20
MDF 27-17	2,481	2,559	MDF 27-17RP	2,534	2,682	17-1/8	15-5/8	5-5/8	22
MDF 37-23	2,966	3,171	MDF 37-23RP	3,016	3,238	17-1/8	22	5-5/8	30

Specify voltage & motor when ordering. "A" for 115V & "D" for 230V and "S" for Shaded Pole. See page 2 for Nomenclature. Units are supplied with 3-prong Electrical Connector

Mullion-Temp - Air Defrost - Cooler Application - Upward Airflow

Standard Coil			Coated Coil (Russ-Proof)			Dimensions (in)			Approx. Ship Weight (lbs)
Model Number	Shaded Pole Motor		Model Number	Shaded Pole Motor					
	115V	230V		115V	230V	Height	Length	Depth	
MUF 27-13	2,075	2,185	MUF 27-13RP	2,114	2,261	17-1/8	15-5/8	5-5/8	20
MUF 27-17	2,481	2,559	MUF 27-17RP	2,534	2,682	17-1/8	15-5/8	5-5/8	22
MUF 37-23	2,966	3,171	MUF 37-23RP	3,016	3,238	17-1/8	22	5-5/8	30

Specify voltage & motor when ordering. "A" for 115V & "D" for 230V and "S" for Shaded Pole. See page 2 for Nomenclature. Units are supplied with 3-prong Electrical Connector

T-Temp Unit Coolers

The T-Temp model unit cooler is built to mount from the ceiling or wall wherever a compact unit cooler is required.

The versatile T-Temp is designed for use in under counter refrigerators, back bars, reach-ins and other applications.



T-Temp - Air Defrost - Cooler Application

Standard Coil			Coated Coil (Russ-Proof)			Dimensions (in)			Approx. Ship Weight (lbs)
Model Number	Shaded Pole Motor		Model Number	Shaded Pole Motor					
	115V	230V		115V	230V	Height	Length	Depth	
TT18-8	1,042	1,124	TT18-8RP	1,186	1,265	7-1/4	13-3/4	7-1/2	10
TT28-13	1,430	1,526	TT28-13RP	1,520	1,632	7-1/4	19-1/4	7-1/2	15
TT28-17	1,593	1,702	TT28-17RP	1,700	1,825	7-1/4	19-1/4	8-1/2	16

Specify voltage & motor when ordering. "A" for 115V & "D" for 230V and "S" for Shaded Pole. See page 2 for Nomenclature.

REACH-IN UNIT COOLERS

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Twin-Temp Unit Coolers

The Twin-Temp 2-way Unit Cooler is ideal for reach-in and walk-in applications above 34°F where efficient two-way air discharge is required.

These units are designed for easy installation, low maintenance and long life, especially when our uniquely formulated epoxy coating is applied to the coil.



Twin-Temp - Air Defrost - Cooler Application

Standard Coil					Coated Coil (Russ-Proof)					Dimensions (in)			App. Ship Weight (lbs)
Model Number	Single Speed EC Motor		Shaded Pole Motor		Model Number	Single Speed EC Motor		Shaded Pole Motor					
	115V	230V	115V	230V		115V	230V	115V	230V	Height	Length	Depth	
TW17-9	2,042	2,114	1,114	1,189	TW17-9RP	2,224	2,296	1,307	1,381	7-5/8	19	16-1/2	17
TW17-12	2,369	2,114	1,444	1,550	TW17-12RP	2,485	2,602	1,569	1,683	7-5/8	19	16-1/2	19
TW17-18	2,557	2,474	1,658	1,777	TW17-18RP	2,861	2,972	1,954	2,067	9-1/8	19	16-1/2	23
TW17-25	2,931	2,678	2,031	2,159	TW17-25RP	3,333	3,469	2,423	2,557	9-5/8	21	18-1/2	26
TW17-35	3,531	3,057	2,636	2,780	TW17-35RP	3,987	4,139	3,090	3,240	11-1/4	11	18-1/2	28
TW17-45	4,264	3,680	3,353	3,596	TW17-45RP	4,806	5,048	3,892	4,131	10	32	21-1/2	44
TW17-55	5,109	4,505	4,224	4,430	TW17-55RP	5,722	5,937	4,816	5,028	12	32	21-1/2	50
TW18-65	6,012	5,317	5,066	5,066	TW18-65RP	6,367	6,367	5,424	5,424	12	32	21-1/2	55
TW17-75	5,780	5,780	5,239	5,239	TW17-75RP	—	—	5,609	5,609	11	36-1/2	36	109
TW18-85	—	—	6,086	6,086	TW18-85RP	—	—	6,511	6,511	11	36-1/2	36	115
TW17-105	—	—	6,969	6,969	TW17-105RP	—	—	7,457	7,457	13	36-1/2	36	121
TW18-120	—	—	7,769	7,769	TW18-120RP	—	—	7,998	8,319	13	36-1/2	36	128

Specify voltage & motor when ordering. "A" for 115V & "D" for 230V and "E" for EC Motor & "S" for Shaded Pole.

See page 2 for Nomenclature.

"—" = Not Available

Mini Twin-Temp Unit Coolers

The MTW reach-in unit cooler is designed for use in hard to fit places. It's extremely low height allows for installation in areas with limited available space.

The MTW is well suited for under-counter refrigerators, reach-in back bars and other similar enclosures. Our specially formulated protective coil coating is optionally available for all MTW unit coolers



Mini Twin-Temp - Air Defrost - Cooler Application

Standard Coil			Coated Coil (Russ-Proof)			Dimensions (in)			Approx. Ship Weight (lbs)
Model Number	Shaded Pole Motor		Model Number	Shaded Pole Motor					
	115V	230V		115V	230V	Height	Length	Depth	
MTW18-8	1,217	1,217	MTW18-8RP	1,447	1,447	3-1/4	14-1/4	13	14
MTW28-13	1,607	1,607	MTW28-13RP	1,741	1,741	3-1/4	19-1/4	13	15
MTW28-18	1,829	1,829	MTW28-18RP	2,149	2,149	3-1/4	19-1/4	13	18
MTW28-21	2,049	2,048	MTW28-21RP	2,198	2,198	3-1/4	19-1/4	13	20
MTW38-27	2,281	2,284	MTW38-27RP	2,632	2,632	3-1/4	28-1/2	13	23

Specify voltage & motor when ordering. "A" for 115V & "D" for 230V and "S" for Shaded Pole. See page 2 for Nomenclature.

Wall-Temp Unit Coolers

The Wall-Temp panel cooler is designed for use in beverage boxes, reach-ins and other installations where limited space requires a wall-mounted coil of minimum depth. Housing construction is all Aluminum.

The front panel is detachable for quick, easy access to valve, motor and mounting to the wall through back panel.



Wall-Temp - Air Defrost - Cooler Application

Model Number	Standard Coil		Coated Coil (Russ-Proof)			Drain Pan List Price Adder	Dimensions (in)			Approx. Ship Weight (lbs)
	Single Speed EC Motor	Shaded Pole Motor	Model Number	Single Speed EC Motor	Shaded Pole Motor		Height	Length	Depth	
	115V	115V		115V	115V					
WA17-6	2,993	1,908	WA17-6RP	3,139	2,055	185	20-7/8	12	4-3/8	11
WA17-9	3,510	2,426	WA17-9RP	3,658	2,570	185	20-7/8	12	4-3/8	14
WA17-12	4,364	3,164	WA17-12RP	4,508	3,422	185	22-7/8	18	4-3/4	20
WA17-18	4,513	3,413	WA17-18RP	4,657	3,570	185	22-7/8	18	4-3/4	24
WA17-25	4,657	3,576	WA17-25RP	4,813	3,726	217	29	18	8-1/2	28
WA17-35	4,975	3,942	WA17-35RP	5,131	4,044	217	29	18	8-1/2	29
WA17-45	—	4,470	WA17-45RP	—	4,574	217	32-1/8	18	10-1/2	40

Specify voltage & motor when ordering. "A" for 115V & "D" for 230V and "E" for EC Motor & "S" for Shaded Pole.

See page 2 for Nomenclature.

\$75 List Adder for 3-prong Electrical Connector

"—" = Not Available

WALK-IN UNIT COOLERS

KRAMER

ASL Slim-Temp Unit Coolers

The award-winning Slim-Temp ASLA/ASLE Unit Coolers are compact and versatile models specifically designed for cooling small walk-in coolers and freezers, and display cases. Units feature smaller diameter tubing that reduces total refrigerant charge, energy-efficient EC motors that are IP67 rated to protect against dust, sand and water, and added features to make the units easier to install and service. The slim profile takes up less room and maximizes available shelf space. Models meet DOE AWEF performance and California Title 24 regulations. Units are available with air or electric defrost, for low or medium temperature applications and are solidly built with heavy gauge aluminum housings.



ASL Unit Cooler Nomenclature:

ASL	A	2	5	048	A	D	A	
Product Line	Defrost Type	Fan QTY	Fin Spacing	Capacity	Voltage	Motor Type	Vintage	Coil Coating
	A - Air Defrost E - Electric Defrost			# x 100 = BTUH	A - 115/1/60 D - 230/1/60	D - Dual Speed EC		Blank - None RP - Russ-Proof

ASL Unit Cooler - Air Defrost

Standard Coil				Coated Coil (Russ-Proof)				Approx. Ship Weight (lbs)
115/1/60		230-230/1/60		115/1/60		230-230/1/60		
Model Number	List Price (\$US)	Model Numer	List Price (\$US)	Model Number	List Price (\$US)	Model Number	List Price (\$US)	
ASLA25048ADA	5,329	ASLA25048DDA	5,329	ASLA25048ADARP	7,131	ASLA25048DDARP	7,131	83
ASLA25061ADA	5,486	ASLA25061DDA	5,486	ASLA25061ADARP	7,238	ASLA25061DDARP	7,238	105
ASLA35073ADA	5,882	ASLA35073DDA	5,882	ASLA35073ADARP	7,794	ASLA35073DDARP	7,794	125
ASLA45098ADA	7,065	ASLA45098DDA	7,065	ASLA45098ADARP	8,879	ASLA45098DDARP	8,879	151
ASLA55122ADA	8,282	ASLA55122DDA	8,282	ASLA55122ADARP	10,105	ASLA55122DDARP	10,105	185
ASLA65158ADA	9,413	ASLA65158DDA	9,413	ASLA65158ADARP	11,367	ASLA65158DDARP	11,367	222

ASL Unit Cooler - Electric Defrost

Standard Coil		Approx. Ship Weight
230-230/1/60		
Model Numer	List Price (\$US)	
ASLE25046DDA	5,702	83
ASLE25058DDA	5,966	105
ASLE35070DDA	6,413	125
ASLE45094DDA	7,693	151
ASLE55117DDA	8,955	185
ASLE65150DDA	10,155	222

ASL Unit Cooler - Factory Mounted Options

Option	List Price Adder (\$US)
Thermostatic Expansion Valve (TXV)	670
Liquid Line Solenoid Value (LLSV)	486
Mechanical Thermostat	494

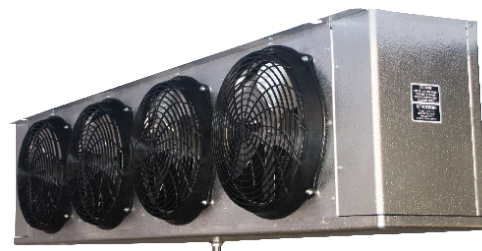
ASL Unit Cooler - Shipped-Loose Options

Option	List Price Adder (\$US)
Thermostatic Expansion Valve (TXV)	545
Liquid Line Solenoid Value (LLSV)	460
Mechanical Thermostat	465

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Next-Gen All-Temp Unit Coolers

All-Temps were the original low profile unit coolers with the air draw-through design that established the industry standard as being the all-purpose model for walk-in coolers, freezers and other applications. We've taken these unit coolers to the next level with the release of the Next-Gen All-Temp models. Next-Gen All-Temps were engineered to meet performance regulations. The units feature a new fan guard design and deep draw venturi to achieve optimal airflow and easy access for serviceability. These models can be used with multiple refrigerants, and are available in air, electric and hot gas defrost configurations.



STANDARD FEATURES

- Textured aluminum construction
- All units are provided with sweat refrigerant connections
- All units suitable for use with R404A, R407A, R407C, R407F, R448A, R449A/B
- Flush ceiling mount with slotted hangers and hinged access end panels
- Face mounted heaters and fixed defrost termination, fan delay and heater safety controls
- Dual Speed EC motors are compliant with California Title 24 regulations for single compressor systems



Next-Gen All-Temp Nomenclature:

CONFIGURABLE BASE MODEL								PRE-CONFIGURATION CODES ²	
K	L	6	E	042	D	D	A	A	L
Brand	Connections ¹	Fins Per Inch	Defrost Type	BTUH in Hundreds	Unit Voltage	Motor Type	Revision	Refrigerant	Pre-assembly Code
K = Kramer	L = Standard U = Reverse	6 FPI 4 FPI	A = Air E = Electric H = Hot Gas 3-Pipe G = Hot Gas Reverse Cycle		A = 115/1/60 D = 208-230/1/60 E = 208-230/3/60	D - Dual Speed EC		A = R404A R = EcoNet Approved Refrigerants ³ S = R407A, R448A, R449A/B	C = Mounted TXV, LLSV & Electronic Thermostat E = EcoNet Control Package ⁴ L = Mounted TXV, LLSV & Mechanical Thermostat ⁵

Note(s):

1. 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 connections "U" are the same end as legacy All-Temp models and are available only as built-to-order base units with no installed options.
2. Pre-Configuration Codes are used to show common Factory Mounted options. Pre-Configuration Codes are not available for every model. For specific model availability, see the respective Pre-Configuration pricing tables in the Russell List Price or contact your local Kramer sales representative.
3. EcoNet approved refrigerants are: R404A, R407A, R407C, R448A, R449A/B, R507A.
4. EcoNet Control Package includes: EEV; suction pressure transducer; suction, entering air coil temp. thermistors; local on-board two-row LCD display and push-button adjustments. (EcoNet replaces TXV, liquid line solenoid valve, room thermostat, defrost termination and fan delay, and time clock.)
5. EcoNet Control Package is not available in 50 Hz.
6. Models with Pre-configured Mechanical Components (TXV, LLSV and Mechanical or Electric Thermostat) are rated for +25°FSS/10°FDT (Air Defrost) and -20°FSS/10°FDT (Electric Defrost).
7. CO₂ and Glycol Next-Gen All-Temp Unit Coolers available. If required, please contact factory.

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

WALK-IN UNIT COOLERS



Next-Gen All-Temp Unit Coolers

Air Defrost Configurable Base Models

Number of Fans	Dual Speed EC Motors - 6 FPI				Approx. Ship Weight (lbs)
	115/1/60		230-230/1/60		
	Model Number	List Price (\$US)	Model Number	List Price (\$US)	
1	KL6A041ADA	2,761	KL6A041DDA	2,761	41
	KL6A052ADA	2,835	KL6A052DDA	2,835	44
	KL6A066ADA	3,290	KL6A066DDA	3,290	47
2	KL6A073ADA	4,300	KL6A073DDA	4,300	52
	KL6A094ADA	4,870	KL6A094DDA	4,870	55
	KL6A117ADA	5,116	KL6A117DDA	5,116	58
	KL6A130ADA	5,463	KL6A130DDA	5,463	62
3	KL6A141ADA	6,610	KL6A141DDA	6,610	72
	KL6A161ADA	7,340	KL6A161DDA	7,340	78
	KL6A181ADA	7,999	KL6A181DDA	7,999	85
4	KL6A195ADA	8,618	KL6A195DDA	8,618	115
	KL6A235ADA	10,452	KL6A235DDA	10,452	124
	KL6A260ADA	11,389	KL6A260DDA	11,389	147
5	KL6A295ADA	13,061	KL6A295DDA	13,061	218
6	KL6A330ADA	14,018	KL6A330DDA	14,018	257
	KL6A390ADA	15,739	KL6A390DDA	15,739	262

1. EC motors are rated for 50HZ operations. Dual speed EC motors are compliant with California Title 24 regulations. Dual speed motor operation employs a relay to control motor speed.
2. Reverse Connections (U) are available at No Charge. Reverse Connection models cannot be ordered with any factory mounted options.

Air Defrost Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)							
	TXV	EEV ³	EcoNet Control Package	KE2 Evaporator Defrost Control ⁴	LLSV ⁵	Mechanical Thermostat	Electronic Thermostat	Insulated Drain Pan
1	670	2,156	2,773	6,064	486	494	741	871
2	670	2,156	2,773	6,064	486	494	741	1,101
3	670	2,156	2,773	6,064	486	494	741	1,336
4	670	2,156	2,773	6,064	486	494	741	1,536
5	670	2,156	2,773	6,064	563	494	741	1,754
6	1,262	2,156	2,773	6,064	563	494	741	1,994

1. Shipped-Loose Accessories are found on Page 20.
2. Alternative Housing, Coil Coating & Housing Coating options are available. Contact Application Engineering for coated housing or alternate coil coating. ElectroFin, Bronz-Glow and Heresite are available coating options.
3. Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.
4. EcoNet Control Package is not available in 50 Hz.
5. KE2 Evaporator Defrost Control requires a Liquid Line Solenoid Valve (LLSV).
6. LLS voltage must match the voltage applied to the motor.

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Next-Gen All-Temp Unit Coolers

Air Defrost Pre-Configured¹ Models - Code C - 115V

Models include mounted TXV, LLSV and Electronic Thermostat²

Number of Fans	Dual Speed EC Motors - 6 FPI			Approx. Ship Weight (lbs)
	115/1/60			
	Model Number R404A	Model Number R407A, R448A, R449A/B	List Price (\$US)	
1	KL6A041ADAAC	KL6A041ADASC	4,658	41
	KL6A052ADAAC	KL6A052ADASC	4,732	44
	KL6A066ADAAC	KL6A066ADASC	5,187	47
2	KL6A073ADAAC	KL6A073ADASC	6,197	52
	KL6A094ADAAC	KL6A094ADASC	6,767	55
	KL6A117ADAAC	KL6A117ADASC	7,013	58
	KL6A130ADAAC	KL6A130ADASC	7,360	62
3	KL6A141ADAAC	KL6A141ADASC	8,507	72
	KL6A161ADAAC	KL6A161ADASC	9,237	78
	KL6A181ADAAC	KL6A181ADASC	9,896	85
4	KL6A195ADAAC	KL6A195ADASC	10,515	115
	KL6A235ADAAC	KL6A235ADASC	12,349	124
	KL6A260ADAAC	KL6A260ADASC	13,286	147
5	KL6A295ADAAC	KL6A295ADASC	15,035	218
6	KL6A330ADAAC	KL6A330ADASC	16,584	257
	KL6A390ADAAC	KL6A390ADASC	18,305	262

1. Pre-Configuration Codes are used to show common Factory Mounted options. Pre-Configuration Codes are not available for every model. For specific model availability, see the respective Pre-Configuration pricing tables in the Kramer List Price or contact your local Kramer sales representative.
2. Models with Pre-configured Mechanical Components (TXV, LLSV and Mechanical or Electric Thermostat) are rated for +25°FSS/10°FDT (Air Defrost) and -20°FSS/10°FDT (Electric Defrost).

WALK-IN UNIT COOLERS



Next-Gen All-Temp Unit Coolers

Air Defrost Pre-Configured¹ Models - Code C - 230V

Models include mounted TXV, LLSV and Electronic Thermostat²

Number of Fans	Dual Speed EC Motors - 6 FPI			Approx. Ship Weight (lbs)
	208-230/1/60			
	Model Number R404A	Model Number R407A, R448A, R449A/B	List Price (\$US)	
1	KL6A041DDAAC	KL6A041DDASC	4,658	41
	KL6A052DDAAC	KL6A052DDASC	4,732	44
	KL6A066DDAAC	KL6A066DDASC	5,187	47
2	KL6A073DDAAC	KL6A073DDASC	6,197	52
	KL6A094DDAAC	KL6A094DDASC	6,767	55
	KL6A117DDAAC	KL6A117DDASC	7,013	58
	KL6A130DDAAC	KL6A130DDASC	7,360	62
3	KL6A141DDAAC	KL6A141DDASC	8,507	72
	KL6A161DDAAC	KL6A161DDASC	9,237	78
	KL6A181DDAAC	KL6A181DDASC	9,896	85
4	KL6A195DDAAC	KL6A195DDASC	10,515	115
	KL6A235DDAAC	KL6A235DDASC	12,349	124
	KL6A260DDAAC	KL6A260DDASC	13,286	147
5	KL6A295DDAAC	KL6A295DDASC	15,035	218
6	KL6A330DDAAC	KL6A330DDASC	16,584	257
	KL6A390DDAAC	KL6A390DDASC	18,305	262

1. Pre-Configuration Codes are used to show common Factory Mounted options. Pre-Configuration Codes are not available for every model. For specific model availability, see the respective Pre-Configuration pricing tables in the Kramer List Price or contact your local Kramer sales representative.
2. Models with Pre-configured Mechanical Components (TXV, LLSV and Mechanical or Electric Thermostat) are rated for +25°FSS/10°FDT (Air Defrost) and -20°FSS/10°FDT (Electric Defrost).

Next-Gen All-Temp Unit Coolers

Air Defrost Pre-Configured¹ Models - Code E - EcoNet Enabled

Models include EcoNet Control Package³

Number of Fans	Dual Speed EC Motors - 6 FPI - 115/1/60		Approx. Ship Weight (lbs)
	EcoNet Control Package ^{2,3,4}		
	Model Number	List Price (\$US)	
1	KL6A041ADARE	5,534	41
	KL6A052ADARE	5,608	44
	KL6A066ADARE	6,063	47
2	KL6A073ADARE	7,073	52
	KL6A094ADARE	7,643	55
	KL6A117ADARE	7,889	58
	KL6A130ADARE	8,236	62
3	KL6A141ADARE	9,383	72
	KL6A161ADARE	10,113	78
	KL6A181ADARE	10,772	85
4	KL6A195ADARE	11,391	115
	KL6A235ADARE	13,225	124
	KL6A260ADARE	14,162	147
5	KL6A295ADARE	15,834	218
6	KL6A330ADARE	16,791	257
	KL6A390ADARE	18,512	262

1. Pre-Configuration Codes are used to show common Factory Mounted options. Pre-Configuration Codes are not available for every model. For specific model availability, see the respective Pre-Configuration pricing tables in the Kramer List Price or contact your local Kramer sales representative.
2. EcoNet approved refrigerants are: R404A, R407A, R407C, R448A, R449A/B, R507A
3. EcoNet Control Package includes: EEV; suction pressure transducer; suction, entering air coil temp. thermistors; local on-board two-row LCD display and push-button adjustments. (EcoNet replaces TXV, liquid line solenoid valve, room thermostat, defrost termination and fan delay, and time clock.)
4. EcoNet Control Package is not available in 50 Hz.

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

WALK-IN UNIT COOLERS



Next-Gen All-Temp Unit Coolers

Air Defrost Pre-Configured¹ Models - Code L

Models include mounted TXV, LLSV and Mechanical Thermostat²

Number of Fans	Dual Speed EC Motors - 6 FPI - 115/1/60				Approx. Ship Weight (lbs)
	Mounted Components (404)		Mounted Components (High-Glide)		
	Model Number	List Price (\$US)	Model Number	List Price (\$US)	
1	KL6A041ADAAL	4,411	KL6A041ADASL	4,411	41
	KL6A052ADAAL	4,485	KL6A052ADASL	4,485	44
	KL6A066ADAAL	4,940	KL6A066ADASL	4,940	47
2	KL6A073ADAAL	5,950	KL6A073ADASL	5,950	52
	KL6A094ADAAL	6,520	KL6A094ADASL	6,520	55
	KL6A117ADAAL	6,766	KL6A117ADASL	6,766	58
	KL6A130ADAAL	7,113	KL6A130ADASL	7,113	62
3	KL6A141ADAAL	8,260	KL6A141ADASL	8,260	72
	KL6A161ADAAL	8,990	KL6A161ADASL	8,990	78
	KL6A181ADAAL	9,649	KL6A181ADASL	9,649	85
4	KL6A195ADAAL	10,268	KL6A195ADASL	10,268	115
	KL6A235ADAAL	12,102	KL6A235ADASL	12,102	124
	KL6A260ADAAL	13,039	KL6A260ADASL	13,039	147
5	KL6A295ADAAL	14,788	KL6A295ADASL	14,788	218
6	KL6A330ADAAL	16,337	KL6A330ADASL	16,337	257
	KL6A390ADAAL	18,058	KL6A390ADASL	18,058	262

1. Pre-Configuration Codes are used to show common Factory Mounted options. Pre-Configuration Codes are not available for every model. For specific model availability, see the respective Pre-Configuration pricing tables in the Kramer List Price or contact your local Kramer sales representative.
2. Models with Pre-configured Mechanical Components (TXV, LLSV and Mechanical or Electric Thermostat) are rated for +25°FSS/10°FDT (Air Defrost) and -20°FSS/10°FDT (Electric Defrost).

Next-Gen All-Temp Unit Coolers

Electric Defrost Configurable Base Models

Number of Fans	Dual Speed EC Motors - 208-230/1/60				Approx. Ship Weight (lbs)
	6 FPI		4 FPI		
	Model Number	List Price (\$US)	Model Number	List Price (\$US)	
1	KL6E035DDA	3,766	KL4E027DDA	3,615	41
	KL6E042DDA	4,189	KL4E032DDA	4,021	44
	KL6E049DDA	4,610	KL4E038DDA	4,427	47
2	KL6E066DDA	5,809	KL4E051DDA	5,575	52
	KL6E077DDA	6,111	KL4E064DDA	5,868	55
	KL6E090DDA	6,290	KL4E080DDA	6,039	58
	KL6E105DDA	7,371	—		62
3	KL6E121DDA	8,241	KL4E094DDA	7,910	78
	KL6E142DDA	9,403	KL4E110DDA	9,028	85
4	KL6E162DDA	11,029	KL4E125DDA	10,586	124
	KL6E182DDA	12,170	KL4E141DDA	11,681	147
5	KL6E200DDA	13,686	KL4E155DDA	13,140	195
6	KL6E244DDA	16,055	KL4E195DDA	15,413	238
	KL6E281DDA	17,776	KL4E230DDA	17,064	238

- EC motors are rated for 50HZ operations. Dual speed EC motors are compliant with California Title 24 regulations. Dual speed motor operation employs a relay to control motor speed.
- Reverse Connections (U) are available at No Charge. Reverse Connection models cannot be ordered with any factory mounted options.
- Five (5) and six (6) fan electric defrost models are also available wired for 208-230/3/60.. EcoNet is not available on 208-230/3/60 Models.

"-" = Not Available

Electric Defrost Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)								
	TXV	EEV	EcoNet Control Package	KE2 Evaporator Defrost Control	LLSV	Mechanical Thermostat	Electronic Thermostat	Adjustable Termination Switch/Fan Delay	Insulated Drain Pan
1	670	2,156	2,773	6,064	486	494	741	511	871
2	670	2,156	2,773	6,064	486	494	741	511	1,101
3	670	2,156	2,773	6,064	486	494	741	511	1,336
4	670	2,156	2,773	6,064	486	494	741	511	1,536
5	670	2,156	2,773	6,064	563	494	741	511	1,754
6	1,262	2,156	2,773	6,064	563	494	741	511	1,994

- Shipped-Loose Accessories are found on Page 20.
- Alternative Housing, Coil Coating & Housing Coating options are available. Contact Application Engineering for coated housing or alternate coil coating. ElectroFin, Bronz-Glow and Heresite are available coating options.
- Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.
- EcoNet Control Package is not available in 50 Hz.
- KE2 Evaporator Defrost Control requires a Liquid Line Solenoid Valve (LLSV).
- LLS voltage must match the voltage applied to the motor.

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

WALK-IN UNIT COOLERS



Next-Gen All-Temp Unit Coolers

Electric Defrost Pre-Configured¹ Models - Code C

Models include mounted TXV, LLSV and Electronic Thermostat²

Number of Fans	Dual Speed EC Motors - 6 FPI			Approx. Ship Weight (lbs)
	208-230/1/60			
	Model Number R404A	Model Number R407A, R448A, R449A/B	List Price (\$US)	
1	KL6E035DDAAC	KL6E035DDASC	5,663	41
	KL6E042DDAAC	KL6E042DDASC	6,086	44
	KL6E049DDAAC	KL6E049DDASC	6,507	47
2	KL6E066DDAAC	KL6E066DDASC	7,706	52
	KL6E077DDAAC	KL6E077DDASC	8,008	55
	KL6E090DDAAC	KL6E090DDASC	8,187	58
	KL6E105DDAAC	KL6E105DDASC	9,268	62
3	KL6E121DDAAC	KL6E121DDASC	10,138	78
	KL6E142DDAAC	KL6E142DDASC	11,300	85
4	KL6E162DDAAC	KL6E162DDASC	12,926	124
	KL6E182DDAAC	KL6E182DDASC	14,067	147
5	KL6E200DDAAC	KL6E200DDASC	15,660	195
6	KL6E244DDAAC	KL6E244DDASC	18,621	238
	KL6E281DDAAC	KL6E281DDASC	20,342	238

1. Pre-Configuration Codes are used to show common Factory Mounted options. Pre-Configuration Codes are not available for every model. For specific model availability, see the respective Pre-Configuration pricing tables in the Kramer List Price or contact your local Kramer sales representative.
2. Models with Pre-configured Mechanical Components (TXV, LLSV and Mechanical or Electric Thermostat) are rated for +25°FSS/10°FDT (Air Defrost) and -20°FSS/10°FDT (Electric Defrost).

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Next-Gen All-Temp Unit Coolers

Electric Defrost Pre-Configured¹ Models - Code E - EcoNet Enabled

Models include EcoNet Control Package³

Number of Fans	Dual Speed EC Motors - 6 FPI - 208-230/1/60		Approx. Ship Weight (lbs)
	EcoNet Control Package ^{2,3,4}		
	Model Number	List Price (\$US)	
1	KL6E035DDARE	6,539	41
	KL6E042DDARE	6,962	44
	KL6E049DDARE	7,383	47
2	KL6E066DDARE	8,582	52
	KL6E077DDARE	8,884	55
	KL6E090DDARE	9,063	58
	KL6E105DDARE	10,144	62
3	KL6E121DDARE	11,014	78
	KL6E142DDARE	12,176	85
4	KL6E162DDARE	13,802	124
	KL6E182DDARE	14,943	147
5	KL6E200DDARE	16,459	195
6	KL6E244DDARE	18,828	238
	KL6E281DDARE	20,549	238

1. Pre-Configuration Codes are used to show common Factory Mounted options. Pre-Configuration Codes are not available for every model. For specific model availability, see the respective Pre-Configuration pricing tables in the Kramer List Price or contact your local Kramer sales representative.
2. EcoNet approved refrigerants are: R404A, R407A, R407C, R448A, R449A/B, R450A, R507A, R513A.
3. EcoNet Control Package includes: EEV; suction pressure transducer; suction, entering air coil temp. thermistors; local on-board two-row LCD display and push-button adjustments. (EcoNet replaces TXV, liquid line solenoid valve, room thermostat, defrost termination and fan delay, and time clock.)
4. EcoNet Control Package is not available in 50 Hz

WALK-IN UNIT COOLERS



Next-Gen All-Temp Unit Coolers

Electric Defrost Pre-Configured¹ Models - Code L

Models include mounted TXV, LLSV and Mechanical Thermostat²

Number of Fans	Dual Speed EC Motors - 6 FPI - 208-230/1/60				Approx. Ship Weight (lbs)
	Model Number R404A		Model Number R407A, R448A, R449A/B		
	Model Number	List Price (\$US)	Model Number	List Price (\$US)	
1	KL6E035DDAAL	5,416	KL6E035DDASL	5,416	41
	KL6E042DDAAL	5,839	KL6E042DDASL	5,839	44
	KL6E049DDAAL	6,260	KL6E049DDASL	6,260	47
2	KL6E066DDAAL	7,459	KL6E066DDASL	7,459	52
	KL6E077DDAAL	7,761	KL6E077DDASL	7,761	55
	KL6E090DDAAL	7,940	KL6E090DDASL	7,940	58
	KL6E105DDAAL	9,021	KL6E105DDASL	9,021	62
3	KL6E121DDAAL	9,891	KL6E121DDASL	9,891	78
	KL6E142DDAAL	11,053	KL6E142DDASL	11,053	85
4	KL6E162DDAAL	12,679	KL6E162DDASL	12,679	124
	KL6E182DDAAL	13,820	KL6E182DDASL	13,820	147
5	KL6E200DDAAL	15,413	KL6E200DDASL	15,413	195
6	KL6E244DDAAL	18,374	KL6E244DDASL	18,374	238
	KL6E281DDAAL	20,095	KL6E281DDASL	20,095	238

1. Pre-Configuration Codes are used to show common Factory Mounted options. Pre-Configuration Codes are not available for every model. For specific model availability, see the respective Pre-Configuration pricing tables in the Kramer List Price or contact your local Kramer sales representative.
2. Models with Pre-configured Mechanical Components (TXV, LLSV and Mechanical or Electric Thermostat) are rated for +25°FSS/10°FDT (Air Defrost) and -20°FSS/10°FDT (Electric Defrost).

Next-Gen All-Temp Unit Coolers

Hot Gas Defrost - Reverse Cycle Configurable Base Models

Number of Fans	Dual Speed EC Motors - 115/1/60				Dual Speed EC Motors - 208-230/1/60				Approx. Ship Weight (lbs)
	6 FPI		4 FPI		6 FPI		4 FPI		
	Model Number	List Price (\$US)	Model Number	List Price (\$US)	Model Number	List Price (\$US)	Model Number	List Price (\$US)	
1	KL6G035ADA	3,667	KL4G027ADA	3,520	KL6G035DDA	3,750	KL4G027DDA	3,602	41
	KL6G042ADA	4,140	KL4G032ADA	3,974	KL6G042DDA	4,237	KL4G032DDA	4,067	44
	KL6G049ADA	4,671	KL4G038ADA	4,487	KL6G049DDA	4,781	KL4G038DDA	4,592	47
2	KL6G066ADA	5,610	KL4G051ADA	5,386	KL6G066DDA	5,970	KL4G051DDA	5,731	52
	KL6G077ADA	6,210	KL4G064ADA	5,962	KL6G077DDA	5,180	KL4G064DDA	6,303	55
	KL6G090ADA	6,582	KL4G080ADA	6,320	KL6G090DDA	7,025	KL4G080DDA	6,743	58
	KL6G105ADA	7,715	—		KL6G105DDA	8,160	—		62
3	KL6G121ADA	8,101	KL4G094ADA	7,775	KL6G121DDA	8,620	KL4G094DDA	8,274	78
	KL6G142ADA	9,483	KL4G110ADA	9,102	KL6G142DDA	9,822	KL4G110DDA	9,430	85
4	KL6G162ADA	10,532	KL4G125ADA	10,108	KL6G162DDA	11,195	KL4G125DDA	10,748	124
	KL6G182ADA	11,796	KL4G141ADA	11,323	KL6G182DDA	12,667	KL4G141DDA	12,159	147
5	KL6G200ADA	12,470	KL4G155ADA	11,972	KL6G200DDA	13,257	KL4G155DDA	12,727	195
6	KL6G244ADA	15,101	KL4G195ADA	14,496	KL6G244DDA	16,205	KL4G195DDA	15,558	238
	KL6G281ADA	16,816	KL4G230ADA	16,143	KL6G281DDA	18,142	KL4G230DDA	17,417	262

All Hot Gas Reverse Cycle Unit Coolers Require a TXV/LLSV/Check Valve or an EEV

1. EC motors are rated for 50HZ operations. Dual speed EC motors are compliant with California Title 24 regulations. Dual speed motor operation employs a relay to control motor speed.
2. Hot Gas Defrost models feature an Electric Drain Pan Heater. Hot Gas Drain Pans are not available at this time.

Hot Gas Defrost Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)						
	TXV ³	EEV ⁴	LLSV ⁵	Mechanical Thermostat	Electronic Thermostat	Adjustable Termination Switch/Fan Delay	Insulated Drain Pan
1	670	2,156	486	494	741	511	871
2	670	2,156	486	494	741	511	1,101
3	670	2,156	486	494	741	511	1,336
4	670	2,156	486	494	741	511	1,536
5	670	2,156	563	494	741	511	1,754
6	1,262	2,156	563	494	741	511	1,994

1. Shipped-Loose Accessories are found on Page 20.
2. Alternative Housing, Coil Coating & Housing Coating options are available. Contact Application Engineering for coated housing or alternate coil coating. ElectroFin, Bronz-Glow and Heresite are available coating options.
3. If ordering a factory mounted TXV with a Hot Gas Defrost Reverse Cycle unit, a factory mounted LLSV must also be ordered. For this option selection, a check valve will also be included.
4. Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.
5. EcoNet Control Package is not available in 50 Hz.
6. LLS voltage must match the voltage applied to the motor.
7. Consult Factory for Factory Mounted Suction Check Valves

“—” = Not Available

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

WALK-IN UNIT COOLERS



Next-Gen All-Temp Unit Coolers

Hot Gas Defrost - 3-Pipe Configurable Base Models

Number of Fans	Dual Speed EC Motors - 115/1/60				Dual Speed EC Motors - 208-230/1/60				Approx. Ship Weight (lbs)
	6 FPI		4 FPI		6 FPI		4 FPI		
	Model Number	List Price (\$US)	Model Number	List Price (\$US)	Model Number	List Price (\$US)	Model Number	List Price (\$US)	
1	KL6H035ADA	3,667	KL4H027ADA	3,520	KL6H035DDA	3,750	KL4H027DDA	3,602	41
	KL6H042ADA	4,140	KL4H032ADA	3,974	KL6H042DDA	4,237	KL4H032DDA	4,067	44
	KL6H049ADA	4,671	KL4H038ADA	4,487	KL6H049DDA	4,781	KL4H038DDA	4,592	47
2	KL6H066ADA	5,610	KL4H051ADA	5,386	KL6H066DDA	5,970	KL4H051DDA	5,731	52
	KL6H077ADA	6,210	KL4H064ADA	5,962	KL6H077DDA	6,568	KL4H064DDA	6,303	55
	KL6H090ADA	6,582	KL4H080ADA	6,320	KL6H090DDA	7,025	KL4H080DDA	6,743	58
	KL6H105ADA	7,715	—		KL6H105DDA	8,160	—		
3	KL6H121ADA	8,101	KL4H094ADA	7,775	KL6H121DDA	8,620	KL4H094DDA	8,274	78
	KL6H142ADA	9,483	KL4H110ADA	9,102	KL6H142DDA	9,822	KL4H110DDA	9,430	85
4	KL6H162ADA	10,532	KL4H125ADA	10,108	KL6H162DDA	11,195	KL4H125DDA	10,748	124
	KL6H182ADA	11,796	KL4H141ADA	11,323	KL6H182DDA	12,667	KL4H141DDA	12,159	147
5	KL6H200ADA	12,470	KL4H155ADA	11,972	KL6H200DDA	13,257	KL4H155DDA	12,727	195
6	KL6H244ADA	15,101	KL4H195ADA	14,496	KL6H244DDA	16,205	KL4H195DDA	15,558	238
	KL6H281ADA	16,816	KL4H230ADA	16,143	KL6H281DDA	18,142	KL4H230DDA	17,417	262

All Hot Gas Defrost 3-Pipe Unit Coolers Require a TXV or an EEV

- EC motors are rated for 50HZ operations. Dual speed EC motors are compliant with California Title 24 regulations. Dual speed motor operation employs a relay to control motor speed.
- Hot Gas Defrost models feature an Electric Drain Pan Heater. Hot Gas Drain Pans are not available at this time.

Hot Gas Defrost Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)							
	TXV	EEV ³	LLSV ⁴	Liquid TXV Bypass Check Valve	Mechanical Thermostat	Electronic Thermostat	Adjustable Termination Switch/Fan Delay	Insulated Drain Pan
1	670	2,156	486	932	494	741	511	871
2	670	2,156	486	932	494	741	511	1,101
3	670	2,156	486	932	494	741	511	1,336
4	670	2,156	486	932	494	741	511	1,536
5	670	2,156	563	932	494	741	511	1,754
6	1,262	2,156	563	932	494	741	511	1,994

- Shipped-Loose Accessories are found on Page 20.
- Alternative Housing, Coil Coating & Housing Coating options are available. Contact Application Engineering for coated housing or alternate coil coating. ElectroFin, Bronz-Glow and Heresite are available coating options.
- Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.
- LLS voltage must match the voltage applied to the motor.
- Consult Factory for Factory Mounted Suction Check Valves

“—” = Not Available

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Next-Gen All-Temp Unit Coolers**Shipped-Loose Accessories****Controls & Thermostats**

Option Name	Option Description	List Price (\$US)
EcoNet Command Center	EcoNet Command Center for EcoNet Enabled Unit Coolers	1,426
Mechanical Thermostat	Mechanical Thermostat: -30°F to + 100°F	465
Electronic Thermostat	Electronic Thermostat: -30°F to + 100°F	600

Valves

Option Name	Range	List Price (\$US)
Electronic Expansion Valve (EEV)	1 to 15 Tons	1,663
Thermostatic Expansion Valve (TXV)	1/4 to 3 Tons	545
	4 to 9 Tons	777
Liquid Line Solenoid Valve (LLSV)	1/2 thru 3 HP	460
	4 thru 8 HP	514

Heat Exchangers

Part Number	Model Number	Length (in)	Liquid Line (in)	Suction Line (in)	List Price (\$US)
HX-25	105065001	12	1/4	1/2	258
HX-50	105065003	13	3/8	5/8	302
HX-75	105065004	14	3/8	7/8	414
HX-100	105065005	14	3/8	1-1/8	528
HX-150	105065006	14	1/2	1-1/8	611

WALK-IN UNIT COOLERS

KRAMER

Center Mount Unit Coolers

The award-winning Center Mount unit coolers are designed for use in walk-in coolers and freezers with very low headroom clearance and are ideal for use in beer caves. Units mount flush to the ceiling to provide for extra storage space. The proprietary independent defrost system technology delivers more stable room temperatures, lowers operating costs, and contributes to less food spoilage and loss. The unit coolers feature two-way air flow to provide for even circulation and temperature, easy serviceability, can be used with multiple refrigerants, and are available in air and electric defrost models. Models meet DOE AWEF performance and California Title 24 regulations.



STANDARD FEATURES

- Dual Speed EC Motors
- Extra low height — mounts flush to ceiling
- Two-way air flow for even air circulation and consistent temperature
- Electric Defrost models feature independently defrosted coils for optimal defrost performance
- High efficiency fan guard design and deep draw venturi provide optimal air flow
- Sloped housing for efficient condensate draining
- Unique design allows for service in confined spaces
- Lightweight and durable embossed aluminum housing
- Dual Speed EC motors are compliant with California Title 24 regulations for single compressor systems

Center Mount Nomenclature:

K	E	6	A	041	A	D	A
Brand	Style	Fins Per Inch	Defrost Type	BTUH in Hundreds	Unit Voltage	Motor Type	Revision
K = Kramer	E = Center Mount	6 FPI 4 FPI	A = Air E = Electric		A = 115/1/60 D = 208-230/1/60	D - Dual Speed EC	

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Center Mount Unit Coolers

Air Defrost Configurable Base Models

Number of Fans	Dual Speed EC Motors - 6 FPI				Approx. Ship Weight (lbs)
	115/1/60		230-230/1/60		
	Model Number	List Price (\$US)	Model Number	List Price (\$US)	
1	KE6A041ADA	3,652	KE6A041DDA	3,837	190
2	KE6A070ADA	5,301	KE6A070DDA	5,536	210
	KE6A084ADA	5,813	KE6A084DDA	6,053	215
3	KE6A104ADA	6,346	KE6A104DDA	6,635	230
	KE6A128ADA	7,931	KE6A128DDA	8,234	240
4	KE6A141ADA	8,744	KE6A141DDA	9,094	280
	KE6A169ADA	10,068	KE6A169DDA	10,432	290
5	KE6A204ADA	10,985	KE6A204DDA	11,403	330
	KE6A258ADA	13,290	KE6A258DDA	15,093	340

1. EC motors are rated for 50HZ operations. Dual speed EC motors are compliant with California Title 24 regulations. Dual speed motor operation employs a relay to control motor speed.

Air Defrost Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)						
	TXV	EEV ³	EcoNet Control Package	LLSV ⁴	Mechanical Thermostat	Electronic Thermostat	Insulated Drain Pan
1	670	2,156	2,773	486	494	741	226
2	670	2,156	2,773	486	494	741	285
3	670	2,156	2,773	486	494	741	345
4	670	2,156	2,773	486	494	741	404
5	670	2,156	2,773	486	494	741	465

1. Shipped-Loose Accessories are found on Page 24.
2. Alternative Housing, Coil Coating & Housing Coating options are available. Contact Application Engineering for coated housing or alternate coil coating. ElectroFin, Bronz-Glow and Heresite are available coating options.
3. Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.
4. EcoNet Control Package is not available in 50 Hz.
5. LLS voltage must match the voltage applied to the motor.

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

WALK-IN UNIT COOLERS



Center Mount Unit Coolers

Electric Defrost Configurable Base Models

Number of Fans	Dual Speed EC Motors 208-230/1/60		Approx. Ship Weight (lbs)
	Model Number	List Price (\$US)	
6 FPI	1	KE6E037DDA	5,754
		KE6E045DDA	7,745
	2	KE6E075DDA	8,000
		KE6E089DDA	10,064
	3	KE6E108DDA	10,925
		KE6E125DDA	11,056
	4	KE6E137DDA	13,285
		KE6E182DDA	14,058
	5	KE6E221DDA	16,744
		KE6E278DDA	18,796
4 FPI	1	KE4E037DDA	5,754
	2	KE4E075DDA	8,000
	3	KE4E107DDA	10,824
	4	KE4E149DDA	13,624
	5	KE4E186DDA	15,413
		KE4E234DDA	17,726

1. EC motors are rated for 50HZ operations. Dual speed EC motors are compliant with California Title 24 regulations. Dual speed motor operation employs a relay to control motor speed.

Electric Defrost Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)						
	TXV	EEV ³	EcoNet Control Package	LLSV ⁴	Mechanical Thermostat	Electronic Thermostat	Insulated Drain Pan
1	670	2,156	2,773	486	494	741	226
2	670	2,156	2,773	486	494	741	285
3	670	2,156	2,773	486	494	741	345
4	670	2,156	2,773	486	494	741	404
5	670	2,156	2,773	486	494	741	465

1. Shipped-Loose Accessories are found on Page 24.
2. Alternative Housing, Coil Coating & Housing Coating options are available. Contact Application Engineering for coated housing or alternate coil coating. ElectroFin, Bronz-Glow and Heresite are available coating options.
3. Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.
4. EcoNet Control Package is not available in 50 Hz.
5. LLS voltage must match the voltage applied to the motor.

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Center Mount Unit Coolers**Shipped-Loose Accessories****Controls & Thermostats**

Option Name	Option Description	List Price (\$US)
EcoNet Command Center	EcoNet Command Center for EcoNet Enabled Unit Coolers	1,426
Mechanical Thermostat	Mechanical Thermostat: -30°F to + 100°F	465
Electronic Thermostat	Electronic Thermostat: -30°F to + 100°F	600

Valves

Option Name	Range	List Price (\$US)
Electronic Expansion Valve (EEV)	1 to 15 Tons	1,663
Thermostatic Expansion Valve (TXV)	1/4 to 3 Tons	545
	4 to 9 Tons	777
Liquid Line Solenoid Valve (LLSV)	1/2 thru 3 HP	460
	4 thru 8 HP	514

Heat Exchangers

Part Number	Model Number	Length (in)	Liquid Line (in)	Suction Line (in)	List Price (\$US)
HX-25	105065001	12	1/4	1/2	258
HX-50	105065003	13	3/8	5/8	302
HX-75	105065004	14	3/8	7/8	414
HX-100	105065005	14	3/8	1-1/8	528
HX-150	105065006	14	1/2	1-1/8	611

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

WALK-IN UNIT COOLERS



Low Velocity Center Mount Unit Coolers

Low Velocity Center Mount unit coolers mount flush to the ceiling to provide for extra storage space and were engineered to meet performance regulations. Units are ideal for florist boxes, produce storage, meat cutting, holding and packing rooms, and similar applications. Features include two-way air flow to provide for even circulation and temperature, easy serviceability, can be used with multiple refrigerants, and are available in air and electric defrost models.



STANDARD FEATURES

- Dual Speed EC Motors
- Extra low height — mounts flush to ceiling
- Two-way air flow for even air circulation and consistent temperature
- Electric Defrost models feature independantly defrosted coils for optimal defrost performance
- High efficiency fan guard design and deep draw venturi provide optimal air flow
- Sloped housing for efficient condensate draining
- Unique design allows for service in confined spaces
- Lightweight and durable embossed aluminum housing
- Dual Speed EC motors are compliant with California Title 24 regulations for single compressor systems



Low Velocity Center Mount Nomenclature:

K	V	6	A	043	A	D	A
Brand	Style	Fins Per Inch	Defrost Type	BTUH in Hundreds	Unit Voltage	Motor Type	Revision
K = Kramer	V = Low Velocity Center Mount	6 FPI	A = Air E = Electric		A = 115/1/60 D = 208-230/1/60	D - Dual Speed EC	

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Low Velocity Center Mount Unit Coolers

Configurable Base Models

Number of Fans	Dual Speed EC Motors - 6 FPI						Approx. Ship Weight (lbs)
	Air Defrost				Electric Defrost		
	115/1/60		230-230/1/60		208-230/1/60		
	Model Number	List Price (\$US)	Model Number	List Price (\$US)	Model Number	List Price (\$US)	
1	KV6A043ADA	5,764	KV6A043DDA	5,993	KV6E043DDA	6,636	195
2	KV6A053ADA	5,970	KV6A053DDA	6,209	KV6E053DDA	6,965	195
	KV6A085ADA	6,953	KV6A085DDA	7,232	KV6E085DDA	8,148	215
3	KV6A106ADA	8,527	KV6A106DDA	8,868	KV6E106DDA	9,855	215
	KV6A129ADA	9,897	KV6A129DDA	10,294	KV6E129DDA	11,568	235
4	KV6A158ADA	11,104	KV6A158DDA	11,551	KV6E158DDA	12,922	235
	KV6A176ADA	13,534	KV6A176DDA	14,075	KV6E176DDA	15,828	285
5	KV6A218ADA	15,304	KV6A218DDA	15,916	KV6E218DDA	17,797	285
	KV6A271ADA	16,783	KV6A271DDA	17,455	KV6E271DDA	19,824	340

- EC motors are rated for 50HZ operations. Dual speed EC motors are compliant with California Title 24 regulations. Dual speed motor operation employs a relay to control motor speed.

Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)						
	TXV	EEV ³	EcoNet Control Package	LLSV ⁴	Mechanical Thermostat	Electronic Thermostat	Insulated Drain Pan
1	670	2,156	2,773	486	494	741	226
2	670	2,156	2,773	486	494	741	285
3	670	2,156	2,773	486	494	741	345
4	670	2,156	2,773	486	494	741	404
5	670	2,156	2,773	486	494	741	465

- Shipped-Loose Accessories are found on Page 27.
- Alternative Housing, Coil Coating & Housing Coating options are available. Contact Application Engineering for coated housing or alternate coil coating. ElectroFin, Bronz-Glow and Heresite are available coating options.
- Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.
- EcoNet Control Package is not available in 50 Hz.
- LLS voltage must match the voltage applied to the motor.

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

WALK-IN UNIT COOLERS



Low Velocity Center Mount Unit Coolers

Shipped-Loose Accessories

Controls & Thermostats

Option Name	Option Description	List Price (\$US)
EcoNet Command Center	EcoNet Command Center for EcoNet Enabled Unit Coolers	1,426
Mechanical Thermostat	Mechanical Thermostat: -30°F to + 100°F	465
Electronic Thermostat	Electronic Thermostat: -30°F to + 100°F	600

Valves

Option Name	Range	List Price (\$US)
Electronic Expansion Valve (EEV)	1 to 15 Tons	1,663
Thermostatic Expansion Valve (TXV)	1/4 to 3 Tons	545
	4 to 9 Tons	777
Liquid Line Solenoid Valve (LLSV)	1/2 thru 3 HP	460
	4 thru 8 HP	514

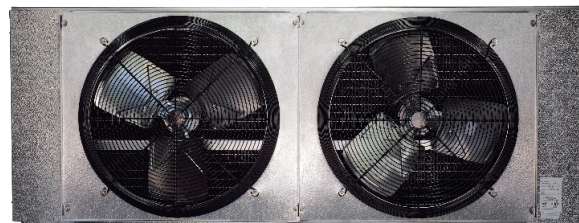
Heat Exchangers

Part Number	Model Number	Length (in)	Liquid Line (in)	Suction Line (in)	List Price (\$US)
HX-25	105065001	12	1/4	1/2	258
HX-50	105065003	13	3/8	5/8	302
HX-75	105065004	14	3/8	7/8	414
HX-100	105065005	14	3/8	1-1/8	528
HX-150	105065006	14	1/2	1-1/8	611

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Medium Profile Unit Coolers

Medium Profile Unit Coolers were engineered to meet performance regulations and are the perfect evaporator solution for medium to large walk-in coolers and freezers. The units feature rail-mount motors, high efficiency fan and venturi designs, enhanced surface coil tubing, easily removable fan guards and modular fan panels, face mounted defrost heaters, hinged drain pans and are optimized for multiple refrigerants.



Available with air, electric or hot gas defrost.

STANDARD FEATURES



- Rail-mounted, energy-efficient dual speed EC motors
- Enhanced copper tube and aluminum fin coil construction
- High efficiency fan and deep draw venturi for optimal air flow
- Slide out end panels
- Easily removable fan guards and modular fan panels
- Hinged drain pan
- Face mounted defrost heaters for optimal performance and easy service access
- Embossed aluminum housing
- Dual Speed EC motors are compliant with California Title 24 regulations for single compressor systems

Medium Profile Nomenclature:

K	M	6	E	153	D	D	A
Brand	Style	Fins Per Inch	Defrost Type	BTUH in Hundreds	Unit Voltage	Motor Type	Revision
K = Kramer	M = Medium Profile	6 FPI 4 FPI	A = Air E = Electric H = Hot Gas 3-Pipe G - Hot Gas Reverse T - ThermoBank*		A = 115/1/60 D = 208-230/1/60 E - 208-230/3/60 F - 460/1/60 G - 460/3/60	D - Dual Speed EC	

* Contact Factory for ThermoBank Pricing

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

WALK-IN UNIT COOLERS



Medium Profile Unit Coolers

Air Defrost Configurable Base Models

	Number of Fans	Dual Speed EC Motors						Approx. Ship Weight (lbs)
		115/1/60		208-230/1/60		460/1/60		
		Model Number	List Price (\$US)	Model Number	List Price (\$US)	Model Number	List Price (\$US)	
6 FPI	1	KM6A182ADA	9,501	KM6A182DDA	9,690	KM6A182FDA	10,262	330
		KM6A220ADA	11,463	KM6A220DDA	11,692	KM6A220FDA	12,382	330
	2	KM6A276ADA	16,116	KM6A276DDA	16,439	KM6A276FDA	17,406	505
		KM6A370ADA	20,371	KM6A370DDA	20,779	KM6A370FDA	22,002	505
		KM6A442ADA	23,631	KM6A442DDA	24,105	KM6A442FDA	25,522	505
	3	KM6A549ADA	28,678	KM6A549DDA	29,253	KM6A549FDA	30,972	691
		KM6A658ADA	30,210	KM6A658DDA	30,815	KM6A658FDA	32,626	691

1. EC motors are rated for 50HZ operations. Dual speed EC motors are compliant with California Title 24 regulations. Dual speed motor operation employs a relay to control motor speed.

Air Defrost Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)						
	TXV	EEV ³	EcoNet Control Package	LLSV	Mechanical Thermostat	Electronic Thermostat	Insulated Drain Pan
1	670	2,156	3,812	965	494	741	696
2	1,262	2,156	3,812	965	494	741	1,147
3	1,262	2,156	3,812	1,201	494	741	1,534

1. Shipped-Loose Accessories are found on Page 33.
2. Alternative Cabinets (Painted or Stainless Steel) and Coil Coating (RussProof, Bronz-Glow & Electrofin) options are available. Contact Application Engineering, or a Sales Representative, if you are interested in these options.
3. Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.
4. EcoNet Control Package is not available in 50 Hz.

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Medium Profile Unit Coolers

Electric Defrost Configurable Base Models

	Number of Fans	Dual Speed EC Motors								Approx. Ship Weight (lbs)
		208-230/1/60		208-230/3/60		460/1/60		460/3/60		
		Model Number	List Price (\$US)	Model Number	List Price (\$US)	Model Number	List Price (\$US)	Model Number	List Price (\$US)	
6 FPI	1	KM6E153DDA	12,142	KM6E153EDA	12,262	KM6E153FDA	13,121	KM6E153GDA	13,245	330
		KM6E184DDA	15,860	KM6E184EDA	16,019	KM6E184FDA	17,140	KM6E184GDA	17,300	330
	2	KM6E311DDA	19,919	KM6E311EDA	20,120	KM6E311FDA	21,528	KM6E311GDA	21,731	505
		KM6E374DDA	25,695	KM6E374EDA	25,955	KM6E374FDA	27,771	KM6E374GDA	28,029	505
	3	—		KM6E469EDA	29,401	KM6E469FDA	31,459	KM6E469GDA	31,752	691
		—		KM6E564EDA	32,220	KM6E564FDA	34,476	KM6E564GDA	34,799	691
4 FPI	1	KM4E110DDA	11,657	KM4E110EDA	11,773	KM4E110FDA	12,598	KM4E110GDA	12,714	330
		KM4E143DDA	15,226	KM4E143EDA	15,380	KM4E143FDA	16,456	KM4E143GDA	16,609	330
	2	KM4E232DDA	19,124	KM4E232EDA	19,316	KM4E232FDA	20,669	KM4E232GDA	20,861	505
		KM4E288DDA	24,667	KM4E288EDA	24,916	KM4E288FDA	26,661	KM4E288GDA	26,910	505
	3	—		KM4E336EDA	28,227	KM4E336FDA	30,203	KM4E336GDA	30,486	691
		—		KM4E419EDA	30,935	KM4E419FDA	33,097	KM4E419GDA	33,409	691

1. EC motors are rated for 50HZ operations. Dual speed motor operation employs a relay to control motor speed.

“—” = Not Available

Electric Defrost Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)							
	TXV	EEV ³	EcoNet Control Package	LLSV	Mechanical Thermostat	Electronic Thermostat	Adjustable Defrost Control / Fan Delay Switch	Insulated Drain Pan
1	670	2,156	3,812	965	494	741	511	696
2	1,262	2,156	3,812	965	494	741	511	1,147
3	1,262	2,156	3,812	1,201	494	741	511	1,534

- Shipped-Loose Accessories are found on Page 33.
- Alternative Cabinets (Painted or Stainless Steel) and Coil Coating (RussProof, Bronz-Glow & Electrofin) options are available. Contact Application Engineering, or a Sales Representative, if you are interested in these options.
- Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.
- EcoNet Control Package is not available in 50 Hz.

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

WALK-IN UNIT COOLERS



Medium Profile Unit Coolers

Hot Gas Defrost - Reverse Cycle Configurable Base Models

	Number of Fans	Dual Speed EC Motors				Approx. Ship Weight (lbs)
		208-230/1/60		460/1/60		
		Model Number	List Price (\$US)	Model Number	List Price (\$US)	
6 FPI	1	KM6G153DDA	17,063	KM6G153FDA	18,442	330
		KM6G184DDA	17,810	KM6G184FDA	19,248	330
	2	KM6G311DDA	25,112	KM6G311FDA	27,141	505
		KM6G374DDA	26,738	KM6G374FDA	28,900	505
	3	KM6G469DDA	33,117	KM6G469FDA	35,793	691
		KM6G564DDA	35,891	KM6G564FDA	38,793	691
4 FPI	1	KM4G110DDA	16,382	KM4G110FDA	17,706	330
		KM4G143DDA	17,097	KM4G143FDA	18,477	330
	2	KM4G232DDA	24,108	KM4G232FDA	26,057	505
		KM4G288DDA	25,671	KM4G288FDA	27,744	505
	3	KM4G336DDA	31,792	KM4G336FDA	34,360	691
		KM4G419DDA	34,458	KM4G419FDA	37,241	691

All Hot Gas Reverse Cycle Unit Coolers Require a TXV/LLSV/Check Valve or an EEV

1. EC motors are rated for 50HZ operations. Dual speed EC motors are compliant with California Title 24 regulations. Dual speed motor operation employs a relay to control motor speed.
2. Hot Gas Defrost Models feature an Electric Drain Pan Heater

Hot Gas Defrost Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)						
	TXV ³	EEV ⁴	LLSV	Mechanical Thermostat	Electronic Thermostat	Adjustable Defrost Control / Fan Delay Switch	Insulated Drain Pan
1	670	2,156	965	494	741	511	696
2	1,262	2,156	965	494	741	511	1,147
3	1,262	2,156	1,201	494	741	511	1,534

1. Shipped-Loose Accessories are found on Page 33.
2. Alternative Cabinets (Painted or Stainless Steel) and Coil Coating (RussProof, Bronz-Glow & Electrofin) options are available. Contact Application Engineering, or a Sales Representative, if you are interested in these options.
3. If ordering a factory mounted TXV with a Hot Gas Defrost Reverse Cycle unit, a factory mounted LLSV must also be ordered. For this option selection, a check valve will also be included.
4. Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Medium Profile Unit Coolers

Hot Gas Defrost - 3-Pipe Configurable Base Models

	Number of Fans	Dual Speed EC Motors				Approx. Ship Weight (lbs)
		208-230/1/60		460/1/60		
		Model Number	List Price (\$US)	Model Number	List Price (\$US)	
6 FPI	1	KM6H153DDA	17,063	KM6H153FDA	18,442	330
		KM6H184DDA	17,810	KM6H184FDA	19,248	330
	2	KM6H311DDA	25,112	KM6H311FDA	27,141	505
		KM6H374DDA	26,738	KM6H374FDA	28,900	505
	3	KM6H469DDA	33,117	KM6H469FDA	35,793	691
		KM6H564DDA	35,891	KM6H564FDA	38,793	691
4 FPI	1	KM4H110DDA	16,382	KM4H110FDA	17,706	330
		KM4H143DDA	17,097	KM4H143FDA	18,477	330
	2	KM4H232DDA	24,108	KM4H232FDA	26,057	505
		KM4H288DDA	25,671	KM4H288FDA	27,744	505
	3	KM4H336DDA	31,792	KM4H336FDA	34,360	691
		KM4H419DDA	34,458	KM4H419FDA	37,241	691

All Hot Gas Defrost 3-Pipe Unit Coolers Require a TXV or an EEV

- EC motors are rated for 50HZ operations. Dual speed EC motors are compliant with California Title 24 regulations. Dual speed motor operation employs a relay to control motor speed.
- Hot Gas Defrost Models feature an Electric Drain Pan Heater

Hot Gas Defrost Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)						
	TXV ³	EEV ⁴	LLSV	Mechanical Thermostat	Electronic Thermostat	Adjustable Defrost Control / Fan Delay Switch	Insulated Drain Pan
1	670	2,156	965	494	741	511	696
2	1,262	2,156	965	494	741	511	1,147
3	1,262	2,156	1,201	494	741	511	1,534

- Shipped-Loose Accessories are found on Page 33.
- Alternative Cabinets (Painted or Stainless Steel) and Coil Coating (RussProof, Bronz-Glow & Electrofin) options are available. Contact Application Engineering, or a Sales Representative, if you are interested in these options.
- Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

WALK-IN UNIT COOLERS



Medium Profile Unit Coolers

Shipped-Loose Accessories

Controls & Thermostats

Option Name	Option Description	List Price (\$US)
EcoNet Command Center	EcoNet Command Center for EcoNet Enabled Unit Coolers	1,426
Mechanical Thermostat	Mechanical Thermostat: -30°F to + 100°F	465
Electronic Thermostat	Electronic Thermostat: -30°F to + 100°F	600

Valves

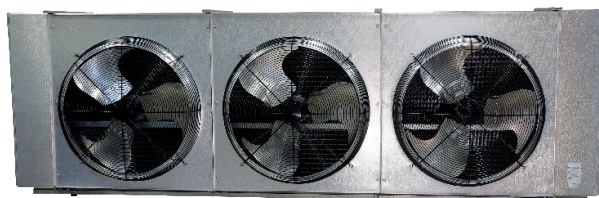
Option Name	Range	List Price (\$US)
Electronic Expansion Valve (EEV)	1 to 15 Tons	1,663
Thermostatic Expansion Valve (TXV)	1/4 to 3 Tons	545
	4 to 9 Tons	777
Liquid Line Solenoid Valve (LLSV)	1/2 thru 3 HP	460
	4 thru 8 HP	514
	9 thru 10 HP	746
	12 thru 15 HP	916

Heat Exchangers

Part Number	Model Number	Length (in)	Liquid Line (in)	Suction Line (in)	List Price (\$US)
HX-25	105065001	12	1/4	1/2	258
HX-50	105065003	13	3/8	5/8	302
HX-75	105065004	14	3/8	7/8	414
HX-100	105065005	14	3/8	1-1/8	528
HX-150	105065006	14	1/2	1-1/8	611
HX-250	105065007	14	5/8	1-3/8	840
HX-350	105065008	16	5/8	1-5/8	864

Heavy Duty Unit Coolers

Heavy Duty Unit Coolers are the ideal evaporator for medium and large walk-in coolers and freezers. Designed with efficiency, performance and service in mind, the Heavy Duty units were engineered to meet performance regulations and feature energy-efficient rail-mount Dual Speed EC Motors. All units have several enhanced service features including rail-mount motors, new high efficiency fan and venturi designs, enhanced surface coil tubing, easily removable fan guards and modular fan panels, face mount defrost heaters, hinged drain pans and shipping pallets designed to facilitate easy installation. One through four fan models are available with air, electric or hot gas defrost.



STANDARD FEATURES

- Rail-mounted, energy-efficient dual speed EC motors
- Enhanced copper tube and aluminum fin coil construction
- High efficiency deep draw venturi for optimal air flow
- Slide out end panels
- Easily removable fan guards and modular fan panels
- Hinged drain pan
- Face mounted defrost heaters for optimal performance and easy service access
- Embossed aluminum housing
- Dual Speed EC motors are compliant with California Title 24 regulations for single compressor systems

Heavy Duty Nomenclature:

K	H	6	E	109	D	D	A
Brand	Style	Fins Per Inch	Defrost Type	BTUH in Thousands	Unit Voltage	Motor Type	Revision
K = Kramer	H = Heavy Duty Y = Reverse Connections	6 FPI 4 FPI	A = Air E = Electric H = Hot Gas 3-Pipe w/ Electric Drain Pan K = Hot Gas 3-Pipe w/ Hot Gas Drain Pan G - Hot Gas Reverse w/ Electric Drain Pan L - Hot Gas Reverse w/ Hot Gas Drain Pan T - ThermoBank		D = 208-230/1/60 E - 208-230/3/60 F - 460/1/60 G - 460/3/60	D - Dual Speed EC	

* Contact Factory for ThermoBank Pricing

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

WALK-IN UNIT COOLERS



Heavy Duty Unit Coolers

Air Defrost Configurable Base Models

	Number of Fans	Dual Speed EC Motors				Approx. Ship Weight (lbs)
		208-230/1/60		460/1/60		
		Model Number	List Price (\$US)	Model Number	List Price (\$US)	
6 FPI	1	KH6A031DDA	23,606	KH6A031FDA	24,077	470
		KH6A043DDA	25,929	KH6A043FDA	26,449	470
		KH6A052DDA	27,177	KH6A052FDA	27,719	470
	2	KH6A063DDA	30,285	KH6A063FDA	30,891	730
		KH6A087DDA	39,622	KH6A087FDA	40,414	730
		KH6A105DDA	44,466	KH6A105FDA	45,357	730
	3	KH6A132DDA	47,465	KH6A132FDA	48,415	1,000
		KH6A156DDA	63,596	KH6A156FDA	64,869	1,000
	4	KH6A175DDA	73,840	KH6A175FDA	75,318	1,130
		KH6A209DDA	82,147	KH6A209FDA	83,792	1,130

1. EC motors are rated for 50HZ operations. Dual speed EC motors are compliant with California Title 24 regulations. Dual speed motor operation employs a relay to control motor speed.

Air Defrost Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)						
	TXV	EEV ³	EcoNet Control Package ⁴	LLSV	Mechanical Thermostat	Electronic Thermostat	Insulated Drain Pan
1	1,262	2,156	7,446	965	494	741	1,026
2	1,923	2,156	7,446	1,201	494	741	1,364
3	1,923	2,978	7,446	1,201	494	741	1,757
4	1,923	2,978	7,446	1,381	494	741	2,018

1. Shipped-Loose Accessories are found on Page 39.
2. Alternative Cabinets (Painted or Stainless Steel) and Coil Coating (RussProof, Bronz-Glow & Electrofin) options are available. Contact Application Engineering, or a Sales Representative, if you are interested in these options.
3. Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.
4. EcoNet Control Package is not available in 50 Hz.
5. Heavy Duty Unit Coolers with EcoNet will also have a Thru-the-Door Disconnect

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Heavy Duty Unit Coolers

Electric Defrost Configurable Base Models

	Number of Fans	Dual Speed EC Motor				Approx. Ship Weight (lbs)
		208-230/3/60		460/3/60		
		Model Number	List Price (\$US)	Model Number	List Price (\$US)	
6 FPI	1	KH6E033EDA	26,816	KH6E033GDA	27,355	470
		KH6E044EDA	32,018	KH6E044GDA	32,658	470
		KH6E053EDA	34,619	KH6E053GDA	35,311	470
	2	KH6E066EDA	41,668	KH6E066GDA	42,502	730
		KH6E089EDA	53,492	KH6E089GDA	54,560	730
		KH6E109EDA	63,771	KH6E109GDA	65,047	730
	3	KH6E134EDA	70,708	KH6E134GDA	72,124	1,000
		KH6E163EDA	92,660	KH6E163GDA	94,514	1,000
	4	KH6E199EDA	106,394	KH6E199GDA	108,523	1,130
4 FPI	1	KH4E035EDA	30,737	KH4E035GDA	31,351	470
		KH4E044EDA	33,232	KH4E044GDA	33,898	470
	2	KH4E071EDA	51,353	KH4E071GDA	52,378	730
		KH4E087EDA	61,220	KH4E087GDA	62,444	730
	3	KH4E107EDA	67,882	KH4E107GDA	69,236	1,000
		KH4E131EDA	88,953	KH4E131GDA	90,731	1,000
	4	KH4E167EDA	102,139	KH4E167GDA	104,179	1,130

1. EC motors are rated for 50HZ operations. Dual speed EC motors are compliant with California Title 24 regulations. Dual speed motor operation employs a relay to control motor speed.

Electric Defrost Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)						
	TXV	EEV ³	EcoNet Control Package ⁴	LLSV	Mechanical Thermostat	Electronic Thermostat	Adjustable Defrost Control / Fan Delay Switch
1	1,262	2,156	7,446	965	494	741	511
2	1,923	2,156	7,446	1,201	494	741	511
3	1,923	2,978	7,446	1,201	494	741	511
4	1,923	2,978	7,446	1,381	494	741	511

1. Shipped-Loose Accessories are found on Page 39.
2. Alternative Cabinets (Painted or Stainless Steel) and Coil Coating (RussProof, Bronz-Glow & Electrofin) options are available. Contact Application Engineering, or a Sales Representative, if you are interested in these options.
3. Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.
4. EcoNet Control Package is not available in 50 Hz.
5. Heavy Duty Unit Coolers with EcoNet will also have a Thru-the-Door Disconnect

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

WALK-IN UNIT COOLERS

KRAMER

Heavy Duty Unit Coolers

Hot Gas Defrost - Reverse Cycle Configurable Base Models

Number of Fans	Dual Speed EC Motors									Approx. Ship Weight (lbs)
	Electric Drain Pan Heater					Hot Gas Drain Pan Heater				
	208-230/1/60		460/1/60		208-230/1/60		460/1/60			
	Model Number	List Price (\$US)	Model Number	List Price (\$US)	Model Number	List Price (\$US)	Model Number	List Price (\$US)		
6 FPI	1	KH6G033DDA	26,547	KH6G033FDA	27,081	KH6L033DDA	26,947	KH6L033FDA	27,487	470
		KH6G044DDA	31,697	KH6G044FDA	32,333	KH6L044DDA	32,173	KH6L044FDA	32,818	470
		KH6G053DDA	34,272	KH6G053FDA	34,958	KH6L053DDA	34,789	KH6L053FDA	35,485	470
	2	KH6G066DDA	41,250	KH6G066FDA	42,076	KH6L066DDA	41,870	KH6L066FDA	42,707	730
		KH6G089DDA	52,955	KH6G089FDA	54,014	KH6L089DDA	53,752	KH6L089FDA	54,825	730
		KH6G109DDA	63,134	KH6G109FDA	64,395	KH6L109DDA	64,079	KH6L109FDA	65,361	730
	3	KH6G134DDA	70,003	KH6G134FDA	71,403	KH6L134DDA	71,052	KH6L134FDA	72,474	1,000
		KH6G163DDA	91,733	KH6G163FDA	93,567	KH6L163DDA	93,109	KH6L163FDA	94,970	1,000
	4	KH6G199DDA	105,330	KH6G199FDA	107,435	KH6L199DDA	106,910	KH6L199FDA	109,046	1,130
4 FPI	1	KH4G035DDA	30,429	KH4G035FDA	31,039	KH4L035DDA	30,887	KH4L035FDA	31,504	470
		KH4G044DDA	32,900	KH4G044FDA	33,558	KH4L044DDA	33,395	KH4L044FDA	34,063	470
	2	KH4G071DDA	50,838	KH4G071FDA	51,855	KH4L071DDA	51,602	KH4L071FDA	52,631	730
		KH4G087DDA	60,606	KH4G087FDA	61,819	KH4L087DDA	61,515	KH4L087FDA	62,747	730
	3	KH4G107DDA	67,200	KH4G107FDA	68,544	KH4L107DDA	68,211	KH4L107FDA	69,572	1,000
		KH4G131DDA	88,062	KH4G131FDA	89,824	KH4L131DDA	89,384	KH4L131FDA	91,170	1,000
	4	KH4G167DDA	101,115	KH4G167FDA	103,139	KH4L167DDA	102,634	KH4L167FDA	104,687	1,130

All Hot Gas Reverse Cycle Unit Coolers Require a TXV/LLSV/Check Valve or an EEV

1. EC motors are rated for 50HZ operations. Dual speed EC motors are compliant with California Title 24 regulations . Dual speed motor operation employs a relay to control motor speed.

Hot Gas Defrost - Reverse Cycle Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)					
	TXV, LLSV and Check Valve ³	EEV ⁴	Mechanical Thermostat	Electronic Thermostat	Adjustable Defrost Control / Fan Delay Switch	Insulated Drain Pan
1	3,161	2,156	494	741	511	996
2	4,058	2,156	494	741	511	1,324
3	4,058	2,978	494	741	511	1,706
4	4,238	2,978	494	741	511	1,959

1. Shipped-Loose Accessories are found on Page 39.
2. Alternative Cabinets (Painted or Stainless Steel) and Coil Coating (RussProof, Bronz-Glow & Electrofin) options are available. Contact Application Engineering, or a Sales Representative, if you are interested in these options.
3. If ordering a factory mounted TXV with a Hot Gas Defrost Reverse Cycle unit, a factory mounted LLSV and Check Valve must also be ordered.
4. Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Heavy Duty Unit Coolers

Hot Gas Defrost - 3-Pipe Configurable Base Models

	Number of Fans	Dual Speed EC Motors								Approx. Ship Weight (lbs)
		Electric Drain Pan Heater				Hot Gas Drain Pan Heater				
		208-230/1/60		460/1/60		208-230/1/60		460/1/60		
		Model Number	List Price (\$US)	Model Number	List Price (\$US)	Model Number	List Price (\$US)	Model Number	List Price (\$US)	
6 FPI	1	KH6H033DDA	26,547	KH6H033FDA	27,081	KH6K033DDA	26,947	KH6K033FDA	27,487	470
		KH6H044DDA	31,697	KH6H044FDA	32,333	KH6K044DDA	32,173	KH6K044FDA	32,818	470
		KH6H053DDA	34,272	KH6H053FDA	34,958	KH6K053DDA	34,789	KH6K053FDA	35,485	470
	2	KH6H066DDA	41,250	KH6H066FDA	42,076	KH6K066DDA	41,870	KH6K066FDA	42,707	730
		KH6H089DDA	52,955	KH6H089FDA	54,014	KH6K089DDA	53,752	KH6K089FDA	54,825	730
		KH6H109DDA	63,134	KH6H109FDA	64,395	KH6K109DDA	64,079	KH6K109FDA	65,361	730
	3	KH6H134DDA	70,003	KH6H134FDA	71,403	KH6K134DDA	71,052	KH6K134FDA	72,474	1000
		KH6H163DDA	91,733	KH6H163FDA	93,567	KH6K163DDA	93,109	KH6K163FDA	94,970	1000
	4	KH6H199DDA	105,330	KH6H199FDA	107,435	KH6K199DDA	106,910	KH6K199FDA	109,046	1130
4 FPI	1	KH4H035DDA	30,429	KH4H035FDA	31,039	KH4K035DDA	30,887	KH4K035FDA	31,504	470
		KH4H044DDA	32,900	KH4H044FDA	33,558	KH4K044DDA	33,395	KH4K044FDA	34,063	470
	2	KH4H071DDA	50,838	KH4H071FDA	51,855	KH4K071DDA	51,602	KH4K071FDA	52,631	730
		KH4H087DDA	60,606	KH4H087FDA	61,819	KH4K087DDA	61,515	KH4K087FDA	62,747	730
	3	KH4H107DDA	67,200	KH4H107FDA	68,544	KH4K107DDA	68,211	KH4K107FDA	69,572	1,000
		KH4H131DDA	88,062	KH4H131FDA	89,824	KH4K131DDA	89,384	KH4K131FDA	91,170	1,000
	4	KH4H167DDA	101,115	KH4H167FDA	103,139	KH4K167DDA	102,634	KH4K167FDA	104,687	1,130

All Hot Gas Defrost 3-Pipe Unit Coolers Require a TXV or an EEV

1. EC motors are rated for 50HZ operations. Dual speed EC motors are compliant with California Title 24 regulations. Dual speed motor operation employs a relay to control motor speed.

Hot Gas Defrost - 3-Pipe Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)						
	TXV	EEV ³	LLSV	Mechanical Thermostat	Electronic Thermostat	Adjustable Defrost Control / Fan Delay Switch	Insulated Drain Pan
1	1,262	2,156	965	494	741	511	1,026
2	1,923	2,156	1,201	494	741	511	1,364
3	1,923	2,978	1,201	494	741	511	1,757
4	1,923	2,978	1,381	494	741	511	2,018

1. Shipped-Loose Accessories are found on Page 39.
2. Alternative Cabinets (Painted or Stainless Steel) and Coil Coating (RussProof, Bronz-Glow & Electrofin) options are available. Contact Application Engineering, or a Sales Representative, if you are interested in these options.
3. Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

WALK-IN UNIT COOLERS



Heavy Duty Unit Coolers

Shipped-Loose Accessories

Controls & Thermostats

Option Name	Option Description	List Price (\$US)
EcoNet Command Center	EcoNet Command Center for EcoNet Enabled Unit Coolers	1,426
Mechanical Thermostat	Mechanical Thermostat: -30°F to + 100°F	465
Electronic Thermostat	Electronic Thermostat: -30°F to + 100°F	600

Valves

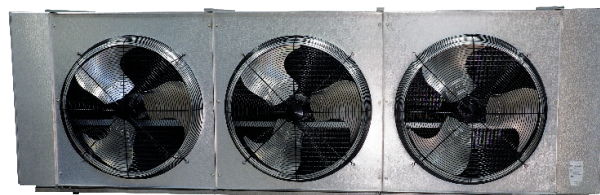
Option Name	Range	List Price (\$US)
Electronic Expansion Valve (EEV)	1 to 15 Tons	1,663
	16 to 25 Tons	2,388
Thermostatic Expansion Valve (TXV)	1/4 to 3 Tons	545
	4 to 9 Tons	777
	10 to 30 Tons	1,365
Liquid Line Solenoid Valve (LLSV)	1/2 thru 3 HP	460
	4 thru 8 HP	514
	9 thru 10 HP	746
	12 thru 15 HP	916
	22 HP	1,169

Heat Exchangers

Part Number	Model Number	Length (in)	Liquid Line (in)	Suction Line (in)	List Price (\$US)
HX-25	105065001	12	1/4	1/2	258
HX-50	105065003	13	3/8	5/8	302
HX-75	105065004	14	3/8	7/8	414
HX-100	105065005	14	3/8	1-1/8	528
HX-150	105065006	14	1/2	1-1/8	611
HX-250	105065007	14	5/8	1-3/8	843
HX-350	105065008	16	5/8	1-5/8	864
HX-500	105065009	17	7/8	2-1/8	1,371
LHX-15	105065010	30	7/8	2-1/8	3,763
LHX-20	105065011	30	1-1/8	2-1/8	4,025
LHX-25	105065012	30	1-1/8	2-5/8	4,311

Warehouse Unit Coolers

Designed with efficiency, performance and service in mind, Kramer's Warehouse Unit Cooler line is optimized to cover Cold Storage applications in the most effective way. Models are designed exclusively for use in walk-in coolers and freezers 3,000 sq. ft and larger. Warehouse Unit Coolers have several enhanced service features including rail-mount motors, new high efficiency fan and venturi designs, enhanced surface coil tubing, easily removable fan guards and modular fan panels, face mount defrost heaters, hinged drain pans and shipping pallets designed to facilitate easy installation. One through four fan models are available with air, electric or hot gas defrost.



Warehouse models are designed exclusively for use in walk-in coolers and freezers 3,000 sq. ft and larger.

STANDARD FEATURES

- Rail-mount three-phase motors with standard or high-static pressure prop fan blades
- Enhanced copper tube and aluminum fin coil construction
- High efficiency deep draw venturi for optimal air flow
- Slide out end panels
- Easily removable fan guards and modular fan panels
- Hinged drain pan
- Face mounted defrost heaters for optimal performance and easy service access
- Embossed aluminum housing

Warehouse Nomenclature:

K	W	6	E	143	E	T	A
Brand	Style	Fins Per Inch	Defrost Type	BTUH in Thousands	Unit Voltage	Motor Type	Revision
K = Kramer	W = Warehouse Z = Reverse Connections	6 FPI 4 FPI	A = Air E = Electric H = Hot Gas 3-Pipe w/ Electric Drain Pan K = Hot Gas 3-Pipe w/ Hot Gas Drain Pan G - Hot Gas Reverse w/ Electric Drain Pan L - Hot Gas Reverse w/ Hot Gas Drain Pan T - ThermoBank		E - 208-230/3/60 G - 460/3/60	T = Three Phase H = Three Phase with High-Static (Pressure Prop) Fan Blades	

* Contact Factory for ThermoBank Pricing

WALK-IN UNIT COOLERS



Warehouse Unit Coolers

Warehouse Unit Coolers are designed exclusively for Applications 3,000 sq. ft and larger
Air Defrost Configurable Base Models

Number of Fans	Three-Phase Motor - Standard Fan					Approx. Ship Weight (lbs)
	208-230/3/60		460/3/60			
	Model NumbeK	List PKice (\$US)	Model NumbeK	List PKice (\$US)		
6 FPI	1	KW6A034ETA	17,487	KW6A034GTA	17,837	480
		KW6A047ETA	19,207	KW6A047GTA	19,590	480
		KW6A058ETA	20,129	KW6A058GTA	20,531	480
	2	KW6A069ETA	22,432	KW6A069GTA	22,881	750
		KW6A094ETA	31,698	KW6A094GTA	32,333	750
		KW6A117ETA	35,572	KW6A117GTA	36,286	750
	3	KW6A143ETA	37,973	KW6A143GTA	38,732	1,030
		KW6A176ETA	50,878	KW6A176GTA	51,897	1,030
	4	KW6A190ETA	59,072	KW6A190GTA	60,256	1,360
		KW6A234ETA	65,717	KW6A234GTA	67,032	1,360

Air Defrost Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)						
	TXV	EEV ³	EcoNet Control Package ⁴	LLSV	Mechanical Thermostat	Electronic Thermostat	Insulated Drain Pan
1	1,262	2,156	7,446	965	494	741	1,026
2	1,923	2,156	7,446	1,201	494	741	1,364
3	1,923	2,978	7,446	1,201	494	741	1,757
4	1,923	2,978	7,446	1,381	494	741	2,018

1. Shipped-Loose Accessories are found on Page 52.
2. Alternative Cabinets (Painted or Stainless Steel) and Coil Coating (RussProof, Bronz-Glow & Electrofin) options are available. Contact Application Engineering, or a Sales Representative, if you are interested in these options.
3. Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.
4. EcoNet Control Package is not available in 50 Hz.
5. Warehouse Unit Coolers with EcoNet will also have a Thru-the-Door Disconnect

Warehouse Unit Coolers

Warehouse Unit Coolers are designed exclusively for Applications 3,000 sq. ft and larger
Electric Defrost Configurable Base Models - Standard Fan

	Number of Fans	Three-Phase Motor - Standard Fan				Approx. Ship Weight (lbs)
		208-230/3/60		460/3/60		
		Model Number	List Price (\$US)	Model Number	List Price (\$US)	
6 FPI	1	KW6E036ETA	19,867	KW6E036GTA	20,261	480
		KW6E047ETA	23,718	KW6E047GTA	24,191	480
		KW6E059ETA	25,643	KW6E059GTA	26,157	480
	2	KW6E072ETA	34,723	KW6E072GTA	35,417	750
		KW6E096ETA	44,578	KW6E096GTA	45,468	750
		KW6E120ETA	53,143	KW6E120GTA	54,206	750
	3	KW6E143ETA	58,924	KW6E143GTA	60,105	1030
		KW6E179ETA	80,574	KW6E179GTA	82,184	1030
4	KW6E216ETA	92,515	KW6E216GTA	94,367	1360	
4 FPI	1	KW4E038ETA	22,767	KW4E038GTA	23,223	480
		KW4E048ETA	24,617	KW4E048GTA	25,111	480
	2	KW4E077ETA	42,794	KW4E077GTA	43,650	750
		KW4E097ETA	51,017	KW4E097GTA	52,036	750
	3	KW4E115ETA	56,568	KW4E115GTA	57,700	1,030
		KW4E145ETA	77,351	KW4E145GTA	78,898	1,030
	4	KW4E182ETA	88,814	KW4E182GTA	90,591	1,360

Electric Defrost Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)							
	TXV	EEV ³	EcoNet Control Package ⁴	LLSV	Mechanical Thermostat	Electronic Thermostat	Adjustable Defrost Control / Fan Delay Switch	Insulated Drain Pan
1	1,262	2,156	7,446	965	494	741	511	1,026
2	1,923	2,156	7,446	1,201	494	741	511	1,364
3	1,923	2,978	7,446	1,201	494	741	511	1,757
4	1,923	2,978	7,446	1,381	494	741	511	2,018

1. Shipped-Loose Accessories are found on Page 52.
2. Alternative Cabinets (Painted or Stainless Steel) and Coil Coating (RussProof, Bronz-Glow & Electrofin) options are available. Contact Application Engineering, or a Sales Representative, if you are interested in these options.
3. Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.
4. EcoNet Control Package is not available in 50 Hz.
5. Warehouse Unit Coolers with EcoNet will also have a Thru-the-Door Disconnect

WALK-IN UNIT COOLERS

KRAMER

Warehouse Unit Coolers

Warehouse Unit Coolers are designed exclusively for Applications 3,000 sq. ft and larger

Electric Defrost Configurable Base Models - High-Static Fan

	Number of Fans	Three-Phase Motor - High-Static Fan				Approx. Ship Weight (lbs)
		208-230/3/60		460/3/60		
		Model Number	List Price (\$US)	Model Number	List Price (\$US)	
6 FPI	1	KW6E036EHA	22,050	KW6E036GHA	22,491	480
		KW6E047EHA	26,326	KW6E047GHA	26,852	480
		KW6E059EHA	28,466	KW6E059GHA	29,034	480
	2	KW6E072EHA	38,543	KW6E072GHA	39,312	750
		KW6E096EHA	49,481	KW6E096GHA	50,470	750
		KW6E120EHA	58,988	KW6E120GHA	60,168	750
	3	KW6E143EHA	65,406	KW6E143GHA	66,715	1,030
		KW6E179EHA	89,435	KW6E179GHA	91,224	1,030
	4	KW6E216EHA	102,693	KW6E216GHA	104,745	1,360
4 FPI	1	KW4E038EHA	25,271	KW4E038GHA	25,776	480
		KW4E048EHA	27,326	KW4E048GHA	27,872	480
	2	KW4E077EHA	47,503	KW4E077GHA	48,451	750
		KW4E097EHA	56,629	KW4E097GHA	57,761	750
	3	KW4E115EHA	62,789	KW4E115GHA	64,045	1,030
		KW4E145EHA	85,857	KW4E145GHA	87,576	1,030
	4	KW4E182EHA	98,584	KW4E182GHA	100,557	1,360

Electric Defrost Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)							
	TXV	EEV ³	EcoNet Control Package ⁴	LLSV	Mechanical Thermostat	Electronic Thermostat	Adjustable Defrost Control / Fan Delay Switch	Insulated Drain Pan
1	1,262	2,156	7,446	965	494	741	511	1,026
2	1,923	2,156	7,446	1,201	494	741	511	1,364
3	1,923	2,978	7,446	1,201	494	741	511	1,757
4	1,923	2,978	7,446	1,381	494	741	511	2,018

1. Shipped-Loose Accessories are found on Page 52.
2. Alternative Cabinets (Painted or Stainless Steel) and Coil Coating (RussProof, Bronz-Glow & Electrofin) options are available. Contact Application Engineering, or a Sales Representative, if you are interested in these options.
3. Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.
4. EcoNet Control Package is not available in 50 Hz.
5. Warehouse Unit Coolers with EcoNet will also have a Thru-the-Door Disconnect

Warehouse Unit Coolers

Warehouse Unit Coolers are designed exclusively for Applications 3,000 sq. ft and larger

Hot Gas Defrost Reverse Cycle Configurable Base Models - Standard Fan - Electric Heater

Number of Fans	Three-Phase Motor - Standard Fan - Electric Drain Pan Heater					Approx. Ship Weight (lbs)
	208-230/3/60		460/3/60			
	Model Number	List Price (\$US)	Model Number	List Price (\$US)		
6 FPI	1	KW6G036ETA	19,667	KW6G036GTA	20,059	480
		KW6G047ETA	23,480	KW6G047GTA	23,950	480
		KW6G059ETA	25,386	KW6G059GTA	25,895	480
	2	KW6G072ETA	34,375	KW6G072GTA	35,063	750
		KW6G096ETA	44,130	KW6G096GTA	45,012	750
		KW6G120ETA	52,610	KW6G120GTA	53,663	750
	3	KW6G143ETA	58,336	KW6G143GTA	59,502	1,030
		KW6G179ETA	79,766	KW6G179GTA	81,364	1,030
	4	KW6G216ETA	91,589	KW6G216GTA	93,421	1,360
4 FPI	1	KW4G038ETA	22,542	KW4G038GTA	22,993	480
		KW4G048ETA	24,372	KW4G048GTA	24,859	480
	2	KW4G077ETA	42,366	KW4G077GTA	43,213	750
		KW4G097ETA	50,507	KW4G097GTA	51,516	750
	3	KW4G115ETA	56,002	KW4G115GTA	57,122	1,030
		KW4G145ETA	76,577	KW4G145GTA	78,111	1,030
	4	KW4G182ETA	87,925	KW4G182GTA	89,684	1,360

All Hot Gas Reverse Cycle Unit Coolers Require a TXV/LLSV/Check Valve or an EEV

Hot Gas Defrost Reverse Cycle Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)					
	TXV, LLSV and Check Valve ³	EEV ⁴	Mechanical Thermostat	Electronic Thermostat	Adjustable Defrost Control / Fan Delay Switch	Insulated Drain Pan
1	3,161	2,156	494	741	511	996
2	4,058	2,156	494	741	511	1,324
3	4,058	2,978	494	741	511	1,706
4	4,238	2,978	494	741	511	1,959

- Shipped-Loose Accessories are found on Page 52.
- Alternative Cabinets (Painted or Stainless Steel) and Coil Coating (RussProof, Bronz-Glow & Electrofin) options are available. Contact Application Engineering, or a Sales Representative, if you are interested in these options.
- If ordering a factory mounted TXV with a Hot Gas Defrost Reverse Cycle unit, a factory mounted LLSV and Check Valve must also be ordered.
- Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.

WALK-IN UNIT COOLERS



Warehouse Unit Coolers

Warehouse Unit Coolers are designed exclusively for Applications 3,000 sq. ft and larger
Hot Gas Defrost Reverse Cycle Configurable Base Models - Standard Fan - Hot Gas Heater

	Number of Fans	Three-Phase Motor - Standard Fan - Hot Gas Drain Pan Heater				Approx. Ship Weight (lbs)
		208-230/3/60		460/3/60		
		Model Number	List Price (\$US)	Model Number	List Price (\$US)	
6 FPI	1	KW6L036ETA	19,960	KW6L036GTA	20,360	480
		KW6L047ETA	23,829	KW6L047GTA	24,310	480
		KW6L059ETA	25,770	KW6L059GTA	26,284	480
	2	KW6L072ETA	34,892	KW6L072GTA	35,592	750
		KW6L096ETA	44,792	KW6L096GTA	45,689	750
		KW6L120ETA	53,401	KW6L120GTA	54,471	750
	3	KW6L143ETA	59,213	KW6L143GTA	60,397	1030
		KW6L179ETA	80,967	KW6L179GTA	82,584	1030
	4	KW6L216ETA	92,964	KW6L216GTA	94,823	1360
4 FPI	1	KW4L038ETA	22,878	KW4L038GTA	23,337	480
		KW4L048ETA	24,734	KW4L048GTA	25,231	480
	2	KW4L077ETA	43,001	KW4L077GTA	43,862	750
		KW4L097ETA	51,265	KW4L097GTA	52,291	750
	3	KW4L115ETA	56,843	KW4L115GTA	57,980	1,030
		KW4L145ETA	77,726	KW4L145GTA	79,280	1,030
	4	KW4L182ETA	89,245	KW4L182GTA	91,030	1,360

All Hot Gas Reverse Cycle Unit Coolers Require a TXV/LLSV/Check Valve or an EEV

Hot Gas Defrost Reverse Cycle Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)					
	TXV, LLSV and Check Valve ³	EEV ⁴	Mechanical Thermostat	Electronic Thermostat	Adjustable Defrost Control / Fan Delay Switch	Insulated Drain Pan
1	3,161	2,156	494	741	511	996
2	4,058	2,156	494	741	511	1,324
3	4,058	2,978	494	741	511	1,706
4	4,238	2,978	494	741	511	1,959

1. Shipped-Loose Accessories are found on Page 52.
2. Alternative Cabinets (Painted or Stainless Steel) and Coil Coating (RussProof, Bronz-Glow & Electrofin) options are available. Contact Application Engineering, or a Sales Representative, if you are interested in these options.
3. If ordering a factory mounted TXV with a Hot Gas Defrost Reverse Cycle unit, a factory mounted LLSV and Check Valve must also be ordered.
4. Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.

Warehouse Unit Coolers

Warehouse Unit Coolers are designed exclusively for Applications 3,000 sq. ft and larger
Hot Gas Defrost Reverse Cycle Configurable Base Models - High-Static Fan - Electric Heater

	Number of Fans	Three-Phase Motor - High-Static Fan - Electric Drain Pan Heater				Approx. Ship Weight (lbs)
		208-230/3/60		460/3/60		
		Model Number	List Price (\$US)	Model Number	List Price (\$US)	
6 FPI	1	KW6G036EHA	21,828	KW6G036GHA	22,264	480
		KW6G047EHA	26,061	KW6G047GHA	26,584	480
		KW6G059EHA	28,180	KW6G059GHA	28,741	480
	2	KW6G072EHA	38,157	KW6G072GHA	38,920	750
		KW6G096EHA	48,986	KW6G096GHA	49,964	750
		KW6G120EHA	58,400	KW6G120GHA	59,567	750
	3	KW6G143EHA	64,753	KW6G143GHA	66,049	1,030
		KW6G179EHA	88,543	KW6G179GHA	90,315	1,030
	4	KW6G216EHA	101,665	KW6G216GHA	103,697	1,360
4 FPI	1	KW4G038EHA	25,020	KW4G038GHA	25,520	480
		KW4G048EHA	27,052	KW4G048GHA	27,593	480
	2	KW4G077EHA	47,027	KW4G077GHA	47,967	750
		KW4G097EHA	56,063	KW4G097GHA	57,185	750
	3	KW4G115EHA	62,163	KW4G115GHA	63,406	1,030
		KW4G145EHA	85,001	KW4G145GHA	86,701	1,030
	4	KW4G182EHA	97,598	KW4G182GHA	99,550	1,360

All Hot Gas Reverse Cycle Unit Coolers Require a TXV/LLSV/Check Valve or an EEV

Hot Gas Defrost Reverse Cycle Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)					
	TXV, LLSV and Check Valve ³	EEV ⁴	Mechanical Thermostat	Electronic Thermostat	Adjustable Defrost Control / Fan Delay Switch	Insulated Drain Pan
1	3,161	2,156	494	741	511	996
2	4,058	2,156	494	741	511	1,324
3	4,058	2,978	494	741	511	1,706
4	4,238	2,978	494	741	511	1,959

1. Shipped-Loose Accessories are found on Page 52.
2. Alternative Cabinets (Painted or Stainless Steel) and Coil Coating (RussProof, Bronz-Glow & Electrofin) options are available. Contact Application Engineering, or a Sales Representative, if you are interested in these options.
3. If ordering a factory mounted TXV with a Hot Gas Defrost Reverse Cycle unit, a factory mounted LLSV and Check Valve must also be ordered.
4. Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.

WALK-IN UNIT COOLERS

KRAMER

Warehouse Unit Coolers

Warehouse Unit Coolers are designed exclusively for Applications 3,000 sq. ft and larger
Hot Gas Defrost Reverse Cycle Configurable Base Models - High-Static Fan - Hot Gas Heater

	Number of Fans	Three-Phase Motor - High-Static Fan - Hot Gas Drain Pan Heater				Approx. Ship Weight (lbs)
		208-230/3/60		460/3/60		
		Model Number	List Price (\$US)	Model Number	List Price (\$US)	
6 FPI	1	KW6L036EHA	22,156	KW6L036GHA	22,600	480
		KW6L047EHA	26,451	KW6L047GHA	26,984	480
		KW6L059EHA	28,602	KW6L059GHA	29,174	480
	2	KW6L072EHA	38,731	KW6L072GHA	39,505	750
		KW6L096EHA	49,720	KW6L096GHA	50,712	750
		KW6L120EHA	59,274	KW6L120GHA	60,461	750
	3	KW6L143EHA	65,724	KW6L143GHA	67,041	1,030
		KW6L179EHA	89,871	KW6L179GHA	91,669	1,030
	4	KW6L216EHA	103,190	KW6L216GHA	105,255	1,360
	4 FPI	1	KW4L038EHA	25,397	KW4L038GHA	25,906
KW4L048EHA			27,457	KW4L048GHA	28,006	480
2		KW4L077EHA	47,730	KW4L077GHA	48,688	750
		KW4L097EHA	56,904	KW4L097GHA	58,042	750
3		KW4L115EHA	63,094	KW4L115GHA	64,357	1,030
		KW4L145EHA	86,275	KW4L145GHA	88,003	1,030
4		KW4L182EHA	99,061	KW4L182GHA	101,045	1,360

All Hot Gas Reverse Cycle Unit Coolers Require a TXV/LLSV/Check Valve or an EEV

Hot Gas Defrost Reverse Cycle Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)					
	TXV, LLSV and Check Valve ³	EEV ⁴	Mechanical Thermostat	Electronic Thermostat	Adjustable Defrost Control / Fan Delay Switch	Insulated Drain Pan
1	3,161	2,156	494	741	511	996
2	4,058	2,156	494	741	511	1,324
3	4,058	2,978	494	741	511	1,706
4	4,238	2,978	494	741	511	1,959

1. Shipped-Loose Accessories are found on Page 52.
2. Alternative Cabinets (Painted or Stainless Steel) and Coil Coating (RussProof, Bronz-Glow & Electrofin) options are available. Contact Application Engineering, or a Sales Representative, if you are interested in these options.
3. If ordering a factory mounted TXV with a Hot Gas Defrost Reverse Cycle unit, a factory mounted LLSV and Check Valve must also be ordered.
4. Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.

Warehouse Unit Coolers

Warehouse Unit Coolers are designed exclusively for Applications 3,000 sq. ft and larger
Hot Gas Defrost 3-Pipe Configurable Base Models - Standard Fan - Electric Heater

	Number of Fans	Three-Phase Motor - Standard Fan - Electric Drain Pan Heater				Approx. Ship Weight (lbs)
		208-230/3/60		460/3/60		
		Model Number	List Price (\$US)	Model Number	List Price (\$US)	
6 FPI	1	KW6H036ETA	19,667	KW6H036GTA	20,059	480
		KW6H047ETA	23,480	KW6H047GTA	23,950	480
		KW6H059ETA	25,386	KW6H059GTA	25,895	480
	2	KW6H072ETA	34,375	KW6H072GTA	35,063	750
		KW6H096ETA	44,130	KW6H096GTA	45,012	750
		KW6H120ETA	52,610	KW6H120GTA	53,663	750
	3	KW6H143ETA	58,336	KW6H143GTA	59,502	1,030
		KW6H179ETA	79,766	KW6H179GTA	81,364	1,030
4	KW6H216ETA	91,589	KW6H216GTA	93,421	1,360	
4 FPI	1	KW4H038ETA	22,542	KW4H038GTA	22,993	480
		KW4H048ETA	24,372	KW4H048GTA	24,859	480
	2	KW4H077ETA	42,366	KW4H077GTA	43,213	750
		KW4H097ETA	50,507	KW4H097GTA	51,516	750
	3	KW4H115ETA	56,002	KW4H115GTA	57,122	1,030
		KW4H145ETA	76,577	KW4H145GTA	78,111	1,030
	4	KW4H182ETA	87,925	KW4H182GTA	89,684	1,360

All Hot Gas Defrost 3-Pipe Unit Coolers Require a TXV or an EEV

Hot Gas Defrost 3-Pipe Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)						
	TXV	EEV ³	LLSV	Mechanical Thermostat	Electronic Thermostat	Adjustable Defrost Control / Fan Delay Switch	Insulated Drain Pan
1	1,300	2,220	990	510	760	511	1,060
2	1,980	2,220	1,240	510	760	511	1,400
3	1,980	3,070	1,240	510	760	511	1,810
4	1,980	3,070	1,420	510	760	511	2,080

1. Shipped-Loose Accessories are found on Page 52.
2. Alternative Cabinets (Painted or Stainless Steel) and Coil Coating (RussProof, Bronz-Glow & Electrofin) options are available. Contact Application Engineering, or a Sales Representative, if you are interested in these options.
3. Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.

WALK-IN UNIT COOLERS

KRAMER

Warehouse Unit Coolers

Warehouse Unit Coolers are designed exclusively for Applications 3,000 sq. ft and larger
Hot Gas Defrost 3-Pipe Configurable Base Models - Standard Fan - Hot Gas Heater

	Number of Fans	Three-Phase Motor - Standard Fan - Hot Gas Drain Pan Heater				Approx. Ship Weight (lbs)
		208-230/3/60		460/3/60		
		Model Number	List Price (\$US)	Model Number	List Price (\$US)	
6 FPI	1	KW6K036ETA	19,960	KW6K036GTA	20,360	480
		KW6K047ETA	23,829	KW6K047GTA	24,310	480
		KW6K059ETA	25,770	KW6K059GTA	26,284	480
	2	KW6K072ETA	34,892	KW6K072GTA	35,592	750
		KW6K096ETA	44,792	KW6K096GTA	45,689	750
		KW6K120ETA	53,401	KW6K120GTA	54,471	750
	3	KW6K143ETA	59,213	KW6K143GTA	60,397	1,030
		KW6K179ETA	80,967	KW6K179GTA	82,584	1,030
	4	KW6K216ETA	92,964	KW6K216GTA	94,823	1,360
4 FPI	1	KW4K038ETA	22,878	KW4K038GTA	23,337	480
		KW4K048ETA	24,734	KW4K048GTA	25,231	480
	2	KW4K077ETA	43,001	KW4K077GTA	43,862	750
		KW4K097ETA	51,265	KW4K097GTA	52,291	750
	3	KW4K115ETA	56,843	KW4K115GTA	57,980	1,030
		KW4K145ETA	77,726	KW4K145GTA	79,280	1,030
	4	KW4K182ETA	89,245	KW4K182GTA	91,030	1,360

All Hot Gas Defrost 3-Pipe Unit Coolers Require a TXV or an EEV

Hot Gas Defrost 3-Pipe Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)						
	TXV	EEV ³	LLSV	Mechanical Thermostat	Electronic Thermostat	Adjustable Defrost Control / Fan Delay Switch	Insulated Drain Pan
1	1,300	2,220	990	510	760	511	1,060
2	1,980	2,220	1,240	510	760	511	1,400
3	1,980	3,070	1,240	510	760	511	1,810
4	1,980	3,070	1,420	510	760	511	2,080

1. Shipped-Loose Accessories are found on Page 52.
2. Alternative Cabinets (Painted or Stainless Steel) and Coil Coating (RussProof, Bronz-Glow & Electrofin) options are available. Contact Application Engineering, or a Sales Representative, if you are interested in these options.
3. Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.

Warehouse Unit Coolers

Warehouse Unit Coolers are designed exclusively for Applications 3,000 sq. ft and larger
Hot Gas Defrost 3-Pipe Configurable Base Models - High-Static Fan - Electric Heater

	Number of Fans	Three-Phase Motor - Standard Fan - Electric Drain Pan Heater				Approx. Ship Weight (lbs)
		208-230/3/60		460/3/60		
		Model Number	List Price (\$US)	Model Number	List Price (\$US)	
6 FPI	1	KW6H036EHA	21,828	KW6H036GHA	22,264	480
		KW6H047EHA	26,061	KW6H047GHA	26,584	480
		KW6H059EHA	28,180	KW6H059GHA	28,741	480
	2	KW6H072EHA	38,157	KW6H072GHA	38,920	750
		KW6H096EHA	48,986	KW6H096GHA	49,964	750
		KW6H120EHA	58,400	KW6H120GHA	59,567	750
	3	KW6H143EHA	64,753	KW6H143GHA	66,049	1,030
		KW6H179EHA	88,543	KW6H179GHA	90,315	1,030
4	KW6H216EHA	101,665	KW6H216GHA	103,697	1,360	
4 FPI	1	KW4H038EHA	25,020	KW4H038GHA	25,520	480
		KW4H048EHA	27,052	KW4H048GHA	27,593	480
	2	KW4H077EHA	47,027	KW4H077GHA	47,967	750
		KW4H097EHA	56,063	KW4H097GHA	57,185	750
	3	KW4H115EHA	62,163	KW4H115GHA	63,406	1,030
		KW4H145EHA	85,001	KW4H145GHA	86,701	1,030
	4	KW4H182EHA	97,598	KW4H182GHA	99,550	1,360

All Hot Gas Defrost 3-Pipe Unit Coolers Require a TXV or an EEV

Hot Gas Defrost 3-Pipe Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)						
	TXV	EEV ³	LLSV	Mechanical Thermostat	Electronic Thermostat	Adjustable Defrost Control / Fan Delay Switch	Insulated Drain Pan
1	1,300	2,220	990	510	760	511	1,060
2	1,980	2,220	1,240	510	760	511	1,400
3	1,980	3,070	1,240	510	760	511	1,810
4	1,980	3,070	1,420	510	760	511	2,080

- Shipped-Loose Accessories are found on Page 52.
- Alternative Cabinets (Painted or Stainless Steel) and Coil Coating (RussProof, Bronz-Glow & Electrofin) options are available. Contact Application Engineering, or a Sales Representative, if you are interested in these options.
- Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.

WALK-IN UNIT COOLERS

KRAMER

Warehouse Unit Coolers

Warehouse Unit Coolers are designed exclusively for Applications 3,000 sq. ft and larger
Hot Gas Defrost 3-Pipe Configurable Base Models - High-Static Fan - Hot Gas Heater

	Number of Fans	Three-Phase Motor - High-Static Fan - Hot Gas Drain Pan Heater				Approx. Ship Weight (lbs)
		208-230/3/60		460/3/60		
		Model Number	List Price (\$US)	Model Number	List Price (\$US)	
6 FPI	1	KW6K036EHA	22,156	KW6K036GHA	22,600	480
		KW6K047EHA	26,451	KW6K047GHA	26,984	480
		KW6K059EHA	28,602	KW6K059GHA	29,174	480
	2	KW6K072EHA	38,731	KW6K072GHA	39,505	750
		KW6K096EHA	49,720	KW6K096GHA	50,712	750
		KW6K120EHA	59,274	KW6K120GHA	60,461	750
	3	KW6K143EHA	65,724	KW6K143GHA	67,041	1,030
		KW6K179EHA	89,871	KW6K179GHA	91,669	1,030
	4	KW6K216EHA	103,190	KW6K216GHA	105,255	1,360
4 FPI	1	KW4K038EHA	25,397	KW4K038GHA	25,906	480
		KW4K048EHA	27,457	KW4K048GHA	28,006	480
	2	KW4K077EHA	47,730	KW4K077GHA	48,688	750
		KW4K097EHA	56,904	KW4K097GHA	58,042	750
	3	KW4K115EHA	63,094	KW4K115GHA	64,357	1,030
		KW4K145EHA	86,275	KW4K145GHA	88,003	1,030
	4	KW4K182EHA	99,061	KW4K182GHA	101,045	1,360

All Hot Gas Defrost 3-Pipe Unit Coolers Require a TXV or an EEV

Hot Gas Defrost 3-Pipe Configurable Options

Number of Fans	Factory Mounted Options - List Price Adder (\$US)						
	TXV	EEV ³	LLSV	Mechanical Thermostat	Electronic Thermostat	Adjustable Defrost Control / Fan Delay Switch	Insulated Drain Pan
1	1,300	2,220	990	510	760	511	1,060
2	1,980	2,220	1,240	510	760	511	1,400
3	1,980	3,070	1,240	510	760	511	1,810
4	1,980	3,070	1,420	510	760	511	2,080

1. Shipped-Loose Accessories are found on Page 52.
2. Alternative Cabinets (Painted or Stainless Steel) and Coil Coating (RussProof, Bronz-Glow & Electrofin) options are available. Contact Application Engineering, or a Sales Representative, if you are interested in these options.
3. Price Adder is for Electronic Expansion Valve (EEV) only. Controller not included and must be field supplied.

Warehouse Unit Coolers

Shipped-Loose Accessories

Controls & Thermostats

Option Name	Option Description	List Price (\$US)
EcoNet Command Center	EcoNet Command Center for EcoNet Enabled Unit Coolers	1,426
Mechanical Thermostat	Mechanical Thermostat: -30°F to + 100°F	465
Electronic Thermostat	Electronic Thermostat: -30°F to + 100°F	600

Valves

Option Name	Range	List Price (\$US)
Electronic Expansion Valve (EEV)	1 to 15 Tons	1,426
	16 to 25 Tons	465
Thermostatic Expansion Valve (TXV)	1/4 to 3 Tons	600
	4 to 9 Tons	754
	10 to 30 Tons	1,325
Liquid Line Solenoid Valve (LLSV)	1/2 thru 3 HP	447
	4 thru 8 HP	499
	9 thru 10 HP	724
	12 thru 15 HP	889
	22 HP	1,135

Heat Exchangers

Part Number	Model Number	Length (in)	Liquid Line (in)	Suction Line (in)	List Price (\$US)
HX-25	105065001	12	1/4	1/2	258
HX-50	105065003	13	3/8	5/8	302
HX-75	105065004	14	3/8	7/8	414
HX-100	105065005	14	3/8	1-1/8	528
HX-150	105065006	14	1/2	1-1/8	611
HX-250	105065007	14	5/8	1-3/8	843
HX-350	105065008	16	5/8	1-5/8	864
HX-500	105065009	17	7/8	2-1/8	1,371
LHX-15	105065010	30	7/8	2-1/8	3,763
LHX-20	105065011	30	1-1/8	2-1/8	4,025
LHX-25	105065012	30	1-1/8	2-5/8	4,311

AIR-COOLED CONDENSING UNITS

KRAMER

Next-Gen MiniCon - 1/2-6 HP Condensing Units

Next-Gen MiniCons are ideally suited for use in a variety of commercial applications such as cafeterias, convenience stores, restaurants and fast food outlets while providing the versatility to excel in a full array of other applications. The 1/2-6 HP product line provides a winning combination of high quality, increased flexibility and greatly improved efficiency for even lower long-term operating costs.

The small profile product line is designed to utilize R404A or other low GWP refrigerants R407A, R407C, R448A and R449A. Units are available with hermetic or scroll compressors. The standard rated for operation in ambient air temperatures up to 110° F.



STANDARD FEATURES

- Hermetic or Scroll Compressors
- All-weather - Galvanized steel painted housing
- Generously sized high efficiency condenser, enhanced copper tubes/aluminum fins
- Integral Liquid Subcooling Circuit provides subcooled liquid to the expansion device
- Base mounted shut-off valves placed external to cabinet for easy access
- Liquid line kit with filter/drier and sight glass with moisture indicator
- Suction line piping
- Larger electrical panel with hinged/removable door
- Color coded point-to-point wiring
- Crankcase heater
- Refrigerant receiver with isolation valve and pressure relief plug
- "A" Vintage Units feature PSC Motors, "B" Vintage Units feature High Efficiency Motors
- Encapsulated high pressure (auto reset) and low pressure (auto reset) controls (adjustable low pressure control is standard on low temperature models)
- Electronic defrost timer with defrost contactor/ relay on low temperature standard models (2 evaps. maximum)
- Electronic air defrost timer (Medium temperature standard models only)
- **Flooded models include flooded head pressure control**
- **Non-flooded models include mild ambient fan cycle control**

Next-Gen MiniCon Nomenclature:

CONFIGURABLE BASE MODEL								PRE-CONFIGURATION CODES ³	
R	F	H	150	E	4S	D	A	NT	
Brand	Style	Compressor Style	Horsepower	Temperature Range	Refrigerant Type	Voltage Code	Vintage ²	Pre-Assembly Code	
R - Russell	F - Flooded B - Non-Flooded	H - Hermetic O - Scroll		E - Extended Medium L - Low M - Medium	44 - R404A Only 4S - Multiple Refrigerants	D - 208-230/1/60 E - 208-230/3/60 G - 460/3/60 M - 200-220/1/50 ¹ N - 200-220/3/50 ¹ Q - 380/3/50 ¹	A or B	NT - No Defrost Timer /Kit ⁴ ALNT - Adjustable Low Pressure Control and No Defrost Timer ⁵	

Note(s):

1. 50 Hz available. Contact Factory for additional information.
2. **A** Vintage has standard PSC motor(s). **B** Vintage has standard High Efficiency motors For specific model number vintages, please refer to following price tables or contact factory.
3. Pre-Configuration Codes are used to show common Factory Mounted options. Pre-Configuration Codes are not available for every model. For specific model availability, see the respective Pre-Configuration pricing tables or contact your local sales representative.
4. "NT" pre-configuration code is available on Flooded Models with 208-230/1/60 or 208-230/3/60 voltage.
5. "ALNT" pre-configuration code is available on Flooded Medium/Extended Medium Temperature models with 208-230/1/60 or 208-230/3/60 voltage. Please note, Adjustable Low Pressure Controls are standard on Low Temperature W-Series Models.

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Next-Gen MiniCon - 1/2-6 HP Condensing Units

Flooded - Hermetic Compressor - Configurable Base Models - 208-230/1/60

Includes Flooded Head Pressure Control Valve, Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator and Defrost Provisions

	Cabinet Size	Nom. H.P.	Compressor Model Number	208-230/1/60			EC Motor List Price Adder (\$US)	4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
				Model Number	Standard Defrost Provision(s)	List Price (\$US)			
EXTENDED MEDIUM TEMPERATURE	FM1	0.50	RST45C1E	KFH055E4SDB	Air Defrost Timer	11,276	–	195	152
		0.75	RST55C1E	KFH080E4SDB	Air Defrost Timer	11,371	–	195	156
		1.00	RST70C1E	KFH100E4SDB	Air Defrost Timer	12,651	–	221	167
	FM2	1.25	RST97C1E	KFH125E4SDB	Air Defrost Timer	13,250	–	221	195

1. Factory Mounted Options are found on Pages 69 -70 & Shipped-Loose Accessories and Defrost Kits are found on Pages 70 -71.
2. An 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. “-” = Not Available

Non-Flooded - Hermetic Compressor - Configurable Base Models - 208-230/1/60

Includes Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator and Defrost Provisions

	Cabinet Size	Nom. H.P.	Compressor Model Number	208-230/1/60			EC Motor List Price Adder (\$US)	4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
				Model Number	Standard Defrost Provision(s)	List Price (\$US)			
EXTENDED MEDIUM TEMPERATURE	FM1	0.50	RST45C1E	KBH055E4SDB	Air Defrost Timer	10,564	–	195	152
		0.75	RST55C1E	KBH080E4SDB	Air Defrost Timer	10,703	–	195	156
		1.00	RST70C1E	KBH100E4SDB	Air Defrost Timer	11,863	–	221	167
	FM2	1.25	RST97C1E	KBH125E4SDB	Air Defrost Timer	12,442	–	221	195

1. Factory Mounted Options are found on Pages 69 -70 & Shipped-Loose Accessories and Defrost Kits are found on Pages 70 -71.
2. An 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. “-” = Not Available

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

AIR-COOLED CONDENSING UNITS

KRAMER

Next-Gen MiniCon - 1/2-6 HP Condensing Units

Flooded - Hermetic Compressor - 208-230/1/60

No Defrost Provisions Pre-Configured Models

Includes Flooded Head Pressure Control Valve, Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator and No Defrost Provisions

	Cabinet Size	Nom. H.P.	Compressor Model Number	208-230/1/60		4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
				Model Number	List Price (\$US)		
EXTENDED MEDIUM TEMPERATURE	FM1	0.50	RST45C1E	KFH055E4SDBNT	10,490	195	152
		0.75	RST55C1E	KFH080E4SDBNT	10,585	195	156
		1.00	RST70C1E	KFH100E4SDBNT	11,865	221	167
	FM2	1.25	RST97C1E	KFH125E4SDBNT	12,464	221	195

Flooded - Hermetic Compressor - 208-230/1/60

No Defrost Timer with Adjustable Low Pressure Control Pre-Configured Models

Includes Flooded Head Pressure Control Valve, Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator Adjustable Low Pressure Control and No Defrost Timer

	Cabinet Size	Nom. H.P.	Compressor Model Number	208-230/1/60		4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
				Model Number	List Price (\$US)		
EXTENDED MEDIUM TEMPERATURE	FM1	0.50	RST45C1E	KFH055E4SDBALNT	10,737	195	152
		0.75	RST55C1E	KFH080E4SDBALNT	10,832	195	156
		1.00	RST70C1E	KFH100E4SDBALNT	12,112	221	167
	FM2	1.25	RST97C1E	KFH125E4SDBALNT	12,711	221	195

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Next-Gen MiniCon - 1/2-6 HP Condensing Units

Flooded - Hermetic Compressor - Configurable Base Models - 208-230/3/60

Includes Flooded Head Pressure Control Valve, Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator and Defrost Provisions

	Cabinet Size	Nom. H.P.	Compressor Model Number	208-230/3/60			EC Motor List Price Adder (\$US)	4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
				Model Number	Standard Defrost Provision(s)	List Price (\$US)			
EXT. MEDIUM TEMP.	FM1	1.00	RST70C1E	KFH100E4SEB	Air Defrost Timer	12,509	–	195	167
	FM2	1.25	RST97C1E	KFH125E4SEB	Air Defrost Timer	13,101	–	195	195

1. Factory Mounted Options are found on Pages 69 -70 & Shipped-Loose Accessories and Defrost Kits are found on Pages 70 -71.
2. An 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.

“–” = Not Available

Non-Flooded - Hermetic Compressor - Configurable Base Models - 208-230/3/60

Includes Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator and Defrost Provisions

	Cabinet Size	Nom. H.P.	Compressor Model Number	208-230/3/60			EC Motor List Price Adder (\$US)	4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
				Model Number	Standard Defrost Provision(s)	List Price (\$US)			
EXT. MEDIUM TEMP.	FM1	1.00	RST70C1E	KBH100E4SEB	Air Defrost Timer	11,717	–	191	167
	FM2	1.25	RST97C1E	KBH125E4SEB	Air Defrost Timer	12,324	–	191	195

1. Factory Mounted Options are found on Pages 69 -70 & Shipped-Loose Accessories and Defrost Kits are found on Pages 70 -71.
2. An 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.

“–” = Not Available

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

AIR-COOLED CONDENSING UNITS

KRAMER

Next-Gen MiniCon - 1/2-6 HP Condensing Units

Flooded - Hermetic Compressor - 208-230/3/60

No Defrost Provisions Pre-Configured Models

Includes Flooded Head Pressure Control Valve, Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator and No Defrost Provisions

	Cabinet Size	Nom. H.P.	Compressor Model Number	208-230/3/60		4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
				Model Number	List Price (\$US)		
EXT. MEDIUM TEMP	FM1	1.00	RST70C1E	KFH100E4SEBNT	11,723	195	167
	FM2	1.25	RST97C1E	KFH125E4SEBNT	12,315	195	195

Flooded - Hermetic Compressor - 208-230/3/60

No Defrost Timer with Adjustable Low Pressure Control Pre-Configured Models

Includes Flooded Head Pressure Control Valve, Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator Adjustable Low Pressure Control and No Defrost Timer

	Cabinet Size	Nom. H.P.	Compressor Model Number	208-230/3/60		4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
				Model Number	List Price (\$US)		
EXT. MEDIUM TEMP	FM1	1.00	RST70C1E	KFH100E4SEBALNT	11,970	195	167
	FM2	1.25	RST97C1E	KFH125E4SEBALNT	12,562	195	195

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

PLACE HOLDER PAGE

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

AIR-COOLED CONDENSING UNITS

KRAMER

Next-Gen MiniCon - 1/2-6 HP Condensing Units

Flooded - Scroll Compressor - Configurable Base Models - 208-230/1/60

Includes Flooded Head Pressure Control Valve, Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator and Defrost Provisions

	Cabinet Size	Nom. H.P.	Compressor Model Number	208-230/1/60			EC Motor List Price Adder (\$US)	4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
				Model Number	Standard Defrost Provision(s)	List Price (\$US)			
MED. TEMP.	FM1	0.5	ZB06KAE	KFO060M4SDA	Air Defrost Timer	11,740	397	361	195
		0.75	ZB07KAE	KFO080M4SDA	Air Defrost Timer	12,397	397	361	195
		1.0	ZB08KAE	KFO100M4SDA	Air Defrost Timer	12,629	397	361	195
EXTENDED MEDIUM TEMPERATURE	FM2	1.0	ZS09KAE	KFO130E4SDA	Air Defrost Timer	13,371	397	361	195
		1.25	ZS11KAE	KFO150E4SDA	Air Defrost Timer	13,461	794	361	205
		1.5	ZS13KAE	KFO180E4SDA	Air Defrost Timer	14,891	794	361	210
	FM3	2.0	ZS15KAE	KFO200E4SDA	Air Defrost Timer	14,906	794	361	215
		2.5	ZS19KAE	KFO250E4SDA	Air Defrost Timer	15,189	794	361	230
		2.8	ZS20KAE	KFO280E4SDA	Air Defrost Timer	16,087	794	471	305
	FM4	3.0	ZS21KAE	KFO300E4SDA	Air Defrost Timer	16,256	794	471	305
		3.5	ZS26KAE	KFO350E4SDA	Air Defrost Timer	17,856	794	471	325
		4.0	ZS29KAE	KFO400E4SDA	Air Defrost Timer	18,101	794	493	352
		4.5	ZS33KAE	KFO450E4SDA	Air Defrost Timer	19,533	794	493	375
		5.0	ZS38K4E	KFO500E4SDA	Air Defrost Timer	20,437	794	506	383
LOW TEMPERATURE	FM1	1.0	ZF03KAE	KFO100L4SDA	ED-5	13,532	397	361	195
		1.3	ZF04KAE	KFO130L4SDA	ED-5	14,120	397	361	195
		1.5	ZF05KAE	KFO160L4SDA	ED-5	14,754	397	361	195
	FM2	2.3	ZF07K4E	KFO230L4SDA	ED-7	15,654	794	361	230
		2.5	ZF08K4E	KFO250L4SDA	ED-7	16,905	794	361	240
	FM3	3.0	ZF09K4E	KFO300L4SDA	ED-7	17,510	794	471	245
		3.5	ZF11K4E	KFO350L4SDA	ED-10	19,345	794	471	255
	FM4	4.0	ZF13K4E	KFO400L4SDB	ED-10	21,797	–	493	352
		5.0	ZF15K4E	KFO500L4SDB	ED-10	22,524	–	506	367

1. Factory Mounted Options are found on Pages 69 -70 & Shipped-Loose Accessories and Defrost Kits are found on Pages 70 -71.

2. An 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.

“–” = Not Available

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Next-Gen MiniCon - 1/2-6 HP Condensing Units

Non-Flooded - Scroll Compressor - Configurable Base Models - 208-230/1/60

Includes Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator and Defrost Provisions

	Cabinet Size	Nom. H.P.	Compressor Model Number	208-230/1/60			EC Motor List Price Adder (\$US)	4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
				Model Number	Standard Defrost Provision(s)	List Price (\$US)			
MED. TEMP.	FM1	0.5	ZB06KAE	KBO060M4SDB	Air Defrost Timer	11,156	–	361	195
		0.75	ZB07KAE	KBO080M4SDB	Air Defrost Timer	11,813	–	361	195
		1.0	ZB08KAE	KBO100M4SDB	Air Defrost Timer	12,039	–	361	195
EXTENDED MEDIUM TEMPERATURE	FM2	1.0	ZS09KAE	KBO130E4SDB	Air Defrost Timer	12,712	–	361	195
		1.25	ZS11KAE	KBO150E4SDA	Air Defrost Timer	12,811	794	361	205
		1.5	ZS13KAE	KBO180E4SDA	Air Defrost Timer	13,944	794	361	210
	FM3	2.0	ZS15KAE	KBO200E4SDA	Air Defrost Timer	14,193	794	361	215
		2.5	ZS19KAE	KBO250E4SDA	Air Defrost Timer	14,467	794	361	230
	FM4	2.8	ZS20KAE	KBO280E4SDB	Air Defrost Timer	15,360	–	471	305
		3.0	ZS21KAE	KO300E4SDB	Air Defrost Timer	15,651	–	471	305
		3.5	ZS26KAE	KBO350E4SDB	Air Defrost Timer	17,144	–	471	325
		4.0	ZS29KAE	KBO400E4SDB	Air Defrost Timer	17,409	–	493	352
		4.5	ZS33KAE	KBO450E4SDB	Air Defrost Timer	18,874	–	493	375
		5.0	ZS38K4E	KBO500E4SDB	Air Defrost Timer	19,828	–	506	383
LOW TEMPERATURE	FM1	1.0	ZF03KAE	KBO100L4SDB	ED-5	12,799	–	361	195
		1.3	ZF04KAE	KBO130L4SDB	ED-5	13,437	–	361	195
		1.5	ZF05KAE	KBO160L4SDB	ED-5	14,104	–	361	195
	FM2	2.3	ZF07K4E	KBO230L4SDA	ED-7	15,041	794	361	230
		2.5	ZF08K4E	KBO250L4SDA	ED-7	16,318	794	361	240
	FM3	3.0	ZF09K4E	KBO300L4SDA	ED-7	17,313	794	471	245
		3.5	ZF11K4E	KBO350L4SDA	ED-10	18,701	794	471	255
	FM4	4.0	ZF13K4E	KBO400L4SDB	ED-10	21,211	–	493	352
		5.0	ZF15K4E	KBO500L4SDB	ED-10	21,838	–	506	367

1. Factory Mounted Options are found on Pages 69 -70 & Shipped-Loose Accessories and Defrost Kits are found on Pages 70 -71.

2. An 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.

“–” = Not Available

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

AIR-COOLED CONDENSING UNITS

KRAMER

Next-Gen MiniCon - 1/2-6 HP Condensing Units

Flooded - Scroll Compressor - 208-230/1/60

No Defrost Provisions Pre-Configured Models

Includes Flooded Head Pressure Control Valve, Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator and No Defrost Provisions

	Cabinet Size	Nom. H.P.	Compressor Model Number	208-230/1/60		4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
				Model Number	List Price (\$US)		
MED. TEMP.	FM1	0.5	ZB06KAE	KFO060M4SDANT	10,954	361	195
		0.75	ZB07KAE	KFO080M4SDANT	11,611	361	195
		1.0	ZB08KAE	KFO100M4SDANT	11,843	361	195
		1.0	ZS09KAE	KFO130E4SDANT	12,585	361	195
EXTENDED MEDIUM TEMPERATURE	FM2	1.25	ZS11KAE	KFO150E4SDANT	12,675	361	205
		1.5	ZS13KAE	KFO180E4SDANT	14,105	361	210
	FM3	2.0	ZS15KAE	KFO200E4SDANT	14,120	361	215
		2.5	ZS19KAE	KFO250E4SDANT	14,403	361	230
	FM4	2.8	ZS20KAE	KFO280E4SDANT	15,251	471	305
		3.0	ZS21KAE	KFO300E4SDANT	15,470	471	305
		3.5	ZS26KAE	KFO350E4SDANT	17,070	471	325
		4.0	ZS29KAE	KFO400E4SDANT	17,315	493	352
		4.5	ZS33KAE	KFO450E4SDANT	18,747	493	375
		5.0	ZS38K4E	KFO500E4SDANT	19,651	506	383
LOW TEMPERATURE	FM1	1.0	ZF03KAE	KFO100L4SDANT	12,584	361	195
		1.3	ZF04KAE	KFO130L4SDANT	13,172	361	195
		1.5	ZF05KAE	KFO160L4SDANT	13,806	361	195
	FM2	2.3	ZF07K4E	KFO230L4SDANT	14,706	361	230
	FM3	2.5	ZF08K4E	KFO250L4SDANT	15,957	361	240
		3.0	ZF09K4E	KFO300L4SDANT	16,562	471	245
		3.5	ZF11K4E	KFO350L4SDANT	18,397	471	255
	FM4	4.0	ZF13K4E	KFO400L4SDBNT	20,849	493	352
		5.0	ZF15K4E	KFO500L4SDBNT	21,576	506	367

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Next-Gen MiniCon - 1/2-6 HP Condensing Units

Flooded - Scroll Compressor - 208-230/1/60

No Defrost Timer with Adjustable Low Pressure Control Pre-Configured Models

Includes Flooded Head Pressure Control Valve, Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator Adjustable Low Pressure Control and No Defrost Timer

	Cabinet Size	Nom. H.P.	Compressor Model Number	208-230/1/60		4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
				Model Number	List Price (\$US)		
MED. TEMP.	FM1	0.5	ZB06KAE	KFO060M4SDAALNT	11,201	361	195
		0.75	ZB07KAE	KFO080M4SDAALNT	11,858	361	195
		1.0	ZB08KAE	KFO100M4SDAALNT	12,090	361	195
EXTENDED MEDIUM TEMPERATURE	FM2	1.0	ZS09KAE	KFO130E4SDAALNT	12,832	361	195
		1.25	ZS11KAE	KFO150E4SDAALNT	12,922	361	205
		1.5	ZS13KAE	KFO180E4SDAALNT	14,352	361	210
	FM3	2.0	ZS15KAE	KFO200E4SDAALNT	14,367	361	215
		2.5	ZS19KAE	KFO250E4SDAALNT	14,650	361	230
	FM4	2.8	ZS20KAE	KFO280E4SDAALNT	15,498	471	305
		3.0	ZS21KAE	KFO300E4SDAALNT	15,717	471	305
		3.5	ZS26KAE	KFO350E4SDAALNT	17,317	471	325
		4.0	ZS29KAE	KFO400E4SDAALNT	17,562	493	352
		4.5	ZS33KAE	KFO450E4SDAALNT	18,994	493	375
		5.0	ZS38K4E	KFO500E4SDAALNT	19,898	506	383

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

AIR-COOLED CONDENSING UNITS

KRAMER

Next-Gen MiniCon - 1/2-6 HP Condensing Units

Flooded - Scroll Compressor - Configurable Base Models - 208-230/3/60

Includes Flooded Head Pressure Control Valve, Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator and Defrost Provisions

	Cabinet Size	Nom. H.P.	Compressor Model Number	208-230/3/60			EC Motor List Price Adder (\$US)	4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
				Model Number	Standard Defrost Provision(s)	List Price (\$US)			
MED. TEMP.	FM1	0.5	ZB06KAE	KFO060M4SEA	Air Defrost Timer	11,880	397	361	195
		0.75	ZB07KAE	KFO080M4SEA	Air Defrost Timer	12,724	397	361	195
		1.0	ZB08KAE	KFO100M4SEA	Air Defrost Timer	12,874	397	361	195
EXTENDED MEDIUM TEMPERATURE.	FM2	1.0	ZS09KAE	KFO130E4SEA	Air Defrost Timer	13,332	397	361	195
		1.25	ZS11KAE	KFO150E4SEA	Air Defrost Timer	13,552	794	361	205
	FM3	1.5	ZS13KAE	KFO180E4SEA	Air Defrost Timer	14,645	794	361	210
		2.0	ZS15KAE	KFO200E4SEA	Air Defrost Timer	15,009	794	361	215
	FM4	2.5	ZS19KAE	KFO250E4SEA	Air Defrost Timer	15,386	794	361	230
		2.8	ZS20KAE	KFO280E4SEA	Air Defrost Timer	16,281	794	471	305
		3.0	ZS21KAE	KFO300E4SEA	Air Defrost Timer	16,538	794	471	305
		3.5	ZS26KAE	KFO350E4SEA	Air Defrost Timer	18,137	794	471	325
		4.0	ZS29KAE	KFO400E4SEA	Air Defrost Timer	18,641	794	493	352
		4.5	ZS33KAE	KFO450E4SEA	Air Defrost Timer	19,146	794	493	375
		5.0	ZS38K4E	KFO500E4SEA	Air Defrost Timer	20,663	794	506	383
		6.0	ZS45K4E	KFO600E4SEA	Air Defrost Timer	22,928	794	506	405
LOW TEMPERATURE	FM1	1.0	ZF03KAE	KFO100L4SEA	ED-5	13,712	397	361	195
		1.3	ZF04KAE	KFO130L4SEA	ED-5	14,311	397	361	195
		1.5	ZF05KAE	KFO160L4SEA	ED-5	14,953	397	361	195
	FM2	2.3	ZF07K4E	KFO230L4SEA	ED-5	15,867	794	361	230
	FM3	2.5	ZF08K4E	KFO250L4SEA	ED-6	17,207	794	361	240
		3.0	ZF09K4E	KFO300L4SEA	ED-6	17,835	794	471	245
		3.5	ZF11K4E	KFO350L4SEA	ED-7	19,564	794	471	255
	FM4	4.0	ZF13K4E	KFO400L4SEB	ED-7	22,016	—	493	352
		5.0	ZF15K4E	KFO500L4SEB	ED-11	22,646	—	506	367
		6.0	ZF18K4E	KFO600L4SEB	ED-11	23,961	—	506	383

1. Factory Mounted Options are found on Pages 69 -70 & Shipped-Loose Accessories and Defrost Kits are found on Pages 70 -71.

2. An 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.

“—” = Not Available

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Next-Gen MiniCon - 1/2-6 HP Condensing Units

Non-Flooded - Scroll Compressor - Configurable Base Models - 208-230/3/60

Includes Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator and Defrost Provisions

	Cabinet Size	Nom. H.P.	Compressor Model Number	208-230/3/60			EC Motor List Price Adder (\$US)	4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
				Model Number	Standard Defrost Provision(s)	List Price (\$US)			
MED. TEMP.	FM1	0.5	ZB06KAE	KBO060M4SEB	Air Defrost Timer	11,289	–	361	195
		0.75	ZB07KAE	KBO080M4SEB	Air Defrost Timer	12,138	–	361	195
		1.0	ZB08KAE	KBO100M4SEB	Air Defrost Timer	12,289	–	361	195
		1.0	ZS09KAE	KBO130E4SEB	Air Defrost Timer	12,729	–	361	195
EXTENDED MEDIUM TEMPERATURE.	FM2	1.25	ZS11KAE	KBO150E4SEA	Air Defrost Timer	12,943	794	361	205
		1.5	ZS13KAE	KBO180E4SEA	Air Defrost Timer	13,899	794	361	210
	FM3	2.0	ZS15KAE	KBO200E4SEA	Air Defrost Timer	14,291	794	361	215
		2.5	ZS19KAE	KBO250E4SEA	Air Defrost Timer	14,682	794	361	230
	FM4	2.8	ZS20KAE	KBO280E4SEB	Air Defrost Timer	15,605	–	471	305
		3.0	ZS21KAE	KBO300E4SEB	Air Defrost Timer	15,915	–	471	305
		3.5	ZS26KAE	KBO350E4SEB	Air Defrost Timer	17,431	–	471	325
		4.0	ZS29KAE	KBO400E4SEB	Air Defrost Timer	17,947	–	493	352
		4.5	ZS33KAE	KBO450E4SEB	Air Defrost Timer	18,464	–	493	375
		5.0	ZS38K4E	KBO500E4SEB	Air Defrost Timer	20,059	–	506	383
		6.0	ZS45K4E	KBO600E4SEB	Air Defrost Timer	22,137	–	506	405
LOW TEMPERATURE	FM1	1.0	ZF03KAE	KBO100L4SEB	ED-5	12,804	–	361	195
		1.3	ZF04KAE	KBO130L4SEB	ED-5	13,505	–	361	195
		1.5	ZF05KAE	KBO160L4SEB	ED-5	14,221	–	361	195
	FM2	2.3	ZF07K4E	KBO230L4SEA	ED-5	15,247	794	361	230
	FM3	2.5	ZF08K4E	KBO250L4SEA	ED-6	16,623	794	361	240
		3.0	ZF09K4E	KBO300L4SEA	ED-6	17,249	794	471	245
		3.5	ZF11K4E	KBO350L4SEA	ED-7	18,978	794	471	255
	FM4	4.0	ZF13K4E	KBO400L4SEB	ED-7	21,431	–	493	352
		5.0	ZF15K4E	KBO500L4SEB	ED-11	22,060	–	506	367
		6.0	ZF18K4E	KBO600L4SEB	ED-11	23,377	–	506	383

1. Factory Mounted Options are found on Pages 69 -70 & Shipped-Loose Accessories and Defrost Kits are found on Pages 70 -71.
2. An 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.

“–” = Not Available

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

AIR-COOLED CONDENSING UNITS

KRAMER

Next-Gen MiniCon - 1/2-6 HP Condensing Units

Flooded - Scroll Compressor - 208-230/3/60

No Defrost Provisions Pre-Configured Models

Includes Flooded Head Pressure Control Valve, Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator and No Defrost Provisions

	Cabinet Size	Nom. H.P.	Compressor Model Number	208-230/3/60		4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
				Model Number	List Price (\$US)		
MED. TEMP.	FM1	0.5	ZB06KAE	KFO060M4SEANT	11,094	361	195
		0.75	ZB07KAE	KFO080M4SEANT	11,938	361	195
		1.0	ZB08KAE	KFO100M4SEANT	12,088	361	195
		1.0	ZS09KAE	KFO130E4SEANT	12,546	361	195
EXTENDED MEDIUM TEMPERATURE:	FM2	1.25	ZS11KAE	KFO150E4SEANT	12,766	361	205
		1.5	ZS13KAE	KFO180E4SEANT	13,859	361	210
	FM3	2.0	ZS15KAE	KFO200E4SEANT	14,223	361	215
		2.5	ZS19KAE	KFO250E4SEANT	14,600	361	230
	FM4	2.8	ZS20KAE	KFO280E4SEANT	15,495	471	305
		3.0	ZS21KAE	KFO300E4SEANT	15,752	471	305
		3.5	ZS26KAE	KFO350E4SEANT	17,351	471	325
		4.0	ZS29KAE	KFO400E4SEANT	17,855	493	352
		4.5	ZS33KAE	KFO450E4SEANT	18,360	493	375
		5.0	ZS38K4E	KFO500E4SEANT	19,877	506	383
		6.0	ZS45K4E	KFO600E4SEANT	22,142	506	405
LOW TEMPERATURE	FM1	1.0	ZF03KAE	KFO100L4SEANT	12,764	361	195
		1.3	ZF04KAE	KFO130L4SEANT	13,363	361	195
		1.5	ZF05KAE	KFO160L4SEANT	14,005	361	195
	FM2	2.3	ZF07K4E	KFO230L4SEANT	14,919	361	230
		2.5	ZF08K4E	KFO250L4SEANT	16,259	361	240
		3.0	ZF09K4E	KFO300L4SEANT	16,887	471	245
	FM3	3.5	ZF11K4E	KFO350L4SEANT	18,616	471	255
		4.0	ZF13K4E	KFO400L4SEBNT	21,068	493	352
		5.0	ZF15K4E	KFO500L4SEBNT	21,698	506	367
	FM4	6.0	ZF18K4E	KFO600L4SEBNT	23,013	506	383

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Next-Gen MiniCon - 1/2-6 HP Condensing Units

Flooded - Scroll Compressor - 208-230/3/60

No Defrost Timer with Adjustable Low Pressure Control Pre-Configured Models

Includes Flooded Head Pressure Control Valve, Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator Adjustable Low Pressure Control and No Defrost Timer

		Cabinet Size	Nom. H.P.	Compressor Model Number	208-230/3/60		4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
MED. TEMP.		FM1	0.5	ZB06KAE	KFO060M4SEAAALNT	11,341	361	195
			0.75	ZB07KAE	KFO080M4SEAAALNT	12,185	361	195
			1.0	ZB08KAE	KFO100M4SEAAALNT	12,335	361	195
			1.0	ZS09KAE	KFO130E4SEAAALNT	12,793	361	195
EXTENDED MEDIUM TEMPERATURE.		FM2	1.25	ZS11KAE	KFO150E4SEAAALNT	13,013	361	205
			1.5	ZS13KAE	KFO180E4SEAAALNT	14,106	361	210
			FM3	2.0	ZS15KAE	KFO200E4SEAAALNT	14,470	361
		2.5		ZS19KAE	KFO250E4SEAAALNT	14,847	361	230
		FM4	2.8	ZS20KAE	KFO280E4SEAAALNT	15,742	471	305
			3.0	ZS21KAE	KFO300E4SEAAALNT	15,999	471	305
			3.5	ZS26KAE	KFO350E4SEAAALNT	17,598	471	325
			4.0	ZS29KAE	KFO400E4SEAAALNT	18,102	493	352
			4.5	ZS33KAE	KFO450E4SEAAALNT	18,607	493	375
			5.0	ZS38K4E	KFO500E4SEAAALNT	20,124	506	383
6.0	ZS45K4E	KFO600E4SEAAALNT	22,389	506	405			

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

AIR-COOLED CONDENSING UNITS

KRAMER

Next-Gen MiniCon - 1/2-6 HP Condensing Units

Flooded - Scroll Compressor - Configurable Base Models - 460/3/60

Includes Flooded Head Pressure Control Valve, Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator and Defrost Provisions

	Cabinet Size	Nom. H.P.	Compressor Model Number	460/3/60			EC Motor List Price Adder (\$US)	4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
				Model Number	Standard Defrost Provision(s)	List Price (\$US)			
EXTENDED MEDIUM TEMPERATURE:	FM2	1.25	ZS11KAE	KFO150E4SGA	Air Defrost Timer	15,032	794	361	205
		1.5	ZS13KAE	KFO180E4SGA	Air Defrost Timer	15,754	794	361	210
	FM3	2.0	ZS15KAE	KFO200E4SGA	Air Defrost Timer	15,932	–	361	215
		2.5	ZS19KAE	KFO250E4SGA	Air Defrost Timer	16,157	–	361	230
	FM4	2.8	ZS20KAE	KFO280E4SGA	Air Defrost Timer	17,028	794	471	305
		3.0	ZS21KAE	KFO300E4SGA	Air Defrost Timer	17,231	794	471	305
		3.5	ZS26KAE	KFO350E4SGA	Air Defrost Timer	18,781	794	471	325
		4.0	ZS29KAE	KFO400E4SGA	Air Defrost Timer	19,520	794	493	352
		4.5	ZS33KAE	KFO450E4SGA	Air Defrost Timer	21,073	794	493	375
		5.0	ZS38K4E	KFO500E4SGA	Air Defrost Timer	21,303	794	506	383
		6.0	ZS45K4E	KFO600E4SGA	Air Defrost Timer	23,575	794	506	405
	FM2	2.3	ZF07K4E	KFO230L4SGA	ED-17	17,211	794	361	230
LOW TEMPERATURE	FM3	2.5	ZF08K4E	KFO250L4SGA	ED-17	18,553	–	361	240
		3.0	ZF09K4E	KFO300L4SGA	ED-17	18,870	–	471	245
		3.5	ZF11K4E	KFO350L4SGA	ED-17	20,207	–	471	255
	FM4	4.0	ZF13K4E	KFO400L4SGB	ED-17	22,326	–	493	352
		5.0	ZF15K4E	KFO500L4SGB	ED-17	23,019	–	506	367
		6.0	ZF18K4E	KFO600L4SGB	ED-17	24,346	–	506	383

1. Factory Mounted Options are found on Pages 69 -70 & Shipped-Loose Accessories and Defrost Kits are found on Pages 70 -71.
2. An 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.

“–” = Not Available

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Next-Gen MiniCon - 1/2-6 HP Condensing Units

Non-Flooded - Scroll Compressor - Configurable Base Models - 460/3/60

Includes Liquid Line Kit with Filter/Drier, Sight Glass with Moisture Indicator and Defrost Provisions

	Cabinet Size	Nom. H.P.	Compressor Model Number	460/3/60			EC Motor List Price Adder (\$US)	4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
				Model Number	Standard Defrost Provision(s)	List Price (\$US)			
EXTENDED MEDIUM TEMPERATURE	FM2	1.25	ZS11KAE	KBO150E4SGA	Air Defrost Timer	14,422	794	361	205
		1.5	ZS13KAE	KBO180E4SGA	Air Defrost Timer	15,079	794	361	210
	FM3	2.0	ZS15KAE	KBO200E4SGA	Air Defrost Timer	15,256	–	361	215
		2.5	ZS19KAE	KBO250E4SGA	Air Defrost Timer	15,482	–	361	230
	FM4	2.8	ZS20KAE	KBO280E4SGB	Air Defrost Timer	16,384	–	471	305
		3.0	ZS21KAE	KBO300E4SGB	Air Defrost Timer	16,645	–	471	305
		3.5	ZS26KAE	KBO350E4SGB	Air Defrost Timer	18,099	–	471	325
		4.0	ZS29KAE	KBO400E4SGB	Air Defrost Timer	18,890	–	493	352
		4.5	ZS33KAE	KBO450E4SGB	Air Defrost Timer	20,242	–	493	375
		5.0	ZS38K4E	KBO500E4SGB	Air Defrost Timer	20,656	–	506	383
		6.0	ZS45K4E	KBO600E4SGB	Air Defrost Timer	22,892	–	506	405
LOW TEMPERATURE	FM2	2.3	ZF07K4E	KBO230L4SGA	ED-17	16,249	794	361	230
	FM3	2.5	ZF08K4E	KBO250L4SGA	ED-17	17,626	–	361	240
		3.0	ZF09K4E	KBO300L4SGA	ED-17	18,202	–	471	245
		3.5	ZF11K4E	KBO350L4SGA	ED-17	19,622	–	471	255
	FM4	4.0	ZF13K4E	KBO400L4SGB	ED-17	21,742	–	493	352
		5.0	ZF15K4E	KBO500L4SGB	ED-17	22,433	–	506	367
		6.0	ZF18K4E	KBO600L4SGB	ED-17	23,761	–	506	383

1. Factory Mounted Options are found on Pages 69 -70 & Shipped-Loose Accessories and Defrost Kits are found on Pages 70 -71.
2. An 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.

“–” = Not Available

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

AIR-COOLED CONDENSING UNITS

KRAMER

Next-Gen MiniCon - 1/2-6 HP Condensing Units

Factory Installed Options - General

Option Description	Cabinet Size	List Price Adder (\$US)	
		Medium Temperature	Low Temperature
CRANKCASE HEATER	ALL	STANDARD	
FIXED HIGH/FIXED LOW PRESSURE CONTROL	ALL	STANDARD	–
FIXED HIGH/ADJUSTABLE LOW PRESSURE CONTROL	ALL	247	STANDARD
ADJUSTABLE HIGH/ADJUSTABLE LOW PRESSURE CONTROL	ALL	552	552
LIQUID LINE WITH COMPONENTS: SEALED FILTER & SIGHT GLASS	ALL	STANDARD	
LIQUID LINE WITHOUT COMPONENTS: PIPE ONLY	FM1	(456)	
	FM2 - FM4	(541)	
LIQUID LINE WITH PREMIUM COMPONENTS: REPLACEABLE CORE FILTER/DRIER & SIGHT GLASS ¹	FM4	813	
SUCTION LINE COMPONENTS: SEALED FILTER	FM1	528	
	FM2 - FM4	629	
SUCTION LINE COMPONENTS: REPLACEABLE CORE FILTER ¹	FM4	1,851	
SUCTION LINE ACCUMULATOR (CANNOT BE ORDERED WITHOUT SUCTION LINE COMPONENTS)	FM1	814	
	FM2 - FM4	1,257	
OIL SEPERATOR	FM4	1,999	
OVER-SIZED RECEIVER	FM1	675	
	FM2	805	
	FM3	1,923	
	FM4	1,973	
PUMPDOWN TOGGLE SWITCH	ALL	520	
HEATED AND INSULATED RECEIVER	ALL	1,102	
PHASE LOSS MONITOR ^A	ALL	1,808	
COPPER FINS OR ELECTRO FIN COATED COIL	ALL	CONTACT FACTORY	
THRU THE DOOR - NON - FUSED - DISCONNECT SWITCH	FM1 - FM2	775	
	FM3 - FM4	1,030	
EXTERNAL FUSED DISCONNECT (Mounted)	FM1 - FM2	871	
	FM3 - FM4	1,606	
VARIABLE SPEED EC MOTORS & CONTROLLER	FM1	1,573	
	FM2	2,140	
	FM3	2,388	
	FM4	1,737	

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

Next-Gen MiniCon - 1/2-6 HP Condensing Units

Factory Installed Options - Common Defrost Components

Option Description	Cabinet Size	List Price Adder (\$US)	
		Medium Temperature	Low Temperature
STANDARD (ELECTRONIC) AIR DEFROST TIMER*	ALL	STANDARD	–
REMOVE STANDARD AIR DEFROST TIMER	ALL	(786)	–
STANDARD DEFROST KIT (ED5 - ED11)	ALL	–	STANDARD
SUBSTITUTE STANDARD AIR DEFROST TIMER FOR STANDARD DEFROST KIT (ED5-ED11)	ALL	162	–
REMOVE STANDARD DEFROST KIT	ALL	–	(948)
Negative numbers represent the price to be deducted from base price if a standard feature is removed.			

1. If ordering a Replaceable Core Suction Filter, a Replaceable Core Liquid Line Filter must also be ordered. If ordering a Replaceable Core Liquid Line Filter, a Replaceable Core Suction Filter must also be ordered.

^ Only available on units that are 3 Phase.

* Standard Electronic Air Defrost Timer can be substituted with Mechanical Air Defrost Timer at no charge.

Defrost Kit Descriptions & Additional Defrost Kit Options Available on Pages 70 - 71.

Shipped-Loose Accessories

Option Description	Cabinet Size	List Price (\$US)
CRANKCASE PRESSURE REGULATING VALVE	ALL	CONTACT FACTORY
EXTERNAL FUSED DISCONNECT	FM4	1,472
TWO TIERED STACKING RACK	ALL	CONTACT FACTORY
SNOW / HAIL GUARDS	FM1	603
	FM2	665
	FM3	721
	FM4	883

Electric Defrost Kits - Defrost Kit Nomenclature

ED	1	2
Kit Designator	Unit Coolers per System	Defrost Kit Identifier
	1, 2 or 3	

A	2
Defrost Heater Phase	Defrost Heater Voltage
A - 1 Phase Fan Motor(s), 1 Phase Heater(s)	2 - 208-230
B - 1 Phase Fan Motor(s), 3 Phase Heaters(s)	4 - 460
C - 3 Phase Fan Motor(s), 3 Phase Heater(s)	

Electric Defrost Kits - Descriptions

The MiniCon 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.

Electric Defrost Kits - Definitions

- Timer** - Initiates the defrost cycle. Also used as override 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.
- Relays** - Provides interconnection of multiple unit coolers on a single system so that each unit cooler is allowed to individually terminate defrost on temperature.

AIR-COOLED CONDENSING UNITS

KRAMER

Next-Gen MiniCon - 1/2-6 HP Condensing Units

Electric Defrost Kits - Kit Numbers

Kit Number	Timer	Auxiliary Relays	Block-out Relays	† 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-20	1	–	1-30A	–	–	2
ED-210	1	–	1-30A	–	–	–
ED-17	1	1	–	1-15A	1-25A	–
ED-11	1	1	–	1-30A	–	–
ED-12	1	1	–	1-30A	1-25A	–
ED-14	1	1	–	1-50A	1-25A	–
ED-211	1	1	–	1-30A	–	–
ED-213	1	1	–	1-50A	–	–
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

* 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 Kits - Pricing

Quantity of Unit Coolers	Description	Defrost Kit Number				List Price Adder (Only Available Mounted)
		1 PH. FANS 1 PH. HTRS	1 PH. FANS 3 PH. HTRS	230V	460V	
				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	–	–	–	948
	20 Amps Heater (w/ relay)	ED6-A2	–	–	–	948
	25 Amps Heater (w/ relay)	ED7-A2	–	–	–	948
	Up to 30 Amps Heater (w/ relay)	ED10-A2	–	–	–	948
	30 Amps - Heater (w/ contactors)	–	ED11-B2	–	–	948
TWO UNIT COOLERS PER SYSTEM	Up to 30 Amps Heater (w/ relay)	ED210-A2	-	–	–	1,033
	30 Amps Heater	ED211-A2	ED211-B2	–	–	1,033
	50 Amps Heater	ED213-A2	ED213-B2	–	–	2,073
	Up to 15 Amps Heaters each (w/ relays)	ED20-A2	-	–	–	2,959
	15 Amps Heaters each	ED21-A2	ED21-B2	–	–	2,959
	25 Amps Heaters each (w/ relays)	ED23-A2	-	–	–	3,041
	25 Amps Heaters each (w/ contactors)	–	ED23-B2	–	–	3,041
DEFROST KITS WHEN THE EVAPORATOR FAN MOTORS ARE WIRED FOR 230/3, 460/3, OR 460/1.						
ONE UNIT COOLER PER SYSTEM	Up to 25 Amps Heater	ED17-A4	–	–	–	948
	30 Amps Heater	ED12-A4	ED12-BX	ED12-C2	ED12-C4	2,160
	50 Amps Heater	–	ED14-BX	ED14-C2	ED14-C4	2,528
TWO UNIT COOLERS PER SYSTEM	Up to 15 Amps Heaters per Unit Cooler	–	ED22-BX	ED22-C2	ED22-C4	3,634
	25 Amps Heaters per Unit Cooler	–	ED24-BX	ED24-C2	ED24-C4	3,634
NOTE: Defrost Kits are only available Factory Mounted and cannot be Shipped Loose.						

Next-Gen II - 3-22 HP Condensing Units

Next-Gen II units feature a robust design that improves serviceability, increases unit efficiency, and are designed for use with low GWP refrigerants. Units are offered with Copeland Discus™, Copeland Scroll™ and Bitzer semi-hermetic compressors with a host of standard features and available options to meet a wide variety of refrigeration needs. Next-Gen II condensing units are built for durability and flexibility.



Model shown features configured options



STANDARD FEATURES

- 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 on 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
- Liquid injection for low temp. Scroll compressors
- **Flooded models include flooded head pressure control (70°F)**
- **Non-flooded models include fan cycle control**

Next-Gen II Nomenclature:

CONFIGURABLE BASE MODEL								
K	F	D	S	04	M	4S	E	A
Brand	Style	Compressor Style	Compressor Configuration	Horsepower	Temperature Range	Refrigerant Type	Voltage Code	Vintage ²
K - Kramer	F - Flooded B - Non-Flooded	D - Discus O - Scroll B - Bitzer	S - Single		E - Extended Medium L - Low M - Medium	4S - Multiple Refrigerants	E - 208-230/3/60 G - 460/3/60 N - 200-220/3/50 ¹ Q - 380/3/50 ¹	A or B

Note(s):

1. 50 Hz available. Contact Factory for additional information.

2. **A** Vintage has standard PSC motor(s). **B** Vintage has standard High Efficiency motors For specific model number vintages, please refer to following price tables or contact factory.

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

AIR-COOLED CONDENSING UNITS

KRAMER

Next-Gen II - 3-22 HP Condensing Units

Flooded - Discus Compressor - Medium Temperature - Configurable Base Models

	Compressor Model Number	Nominal H.P.	Voltage	Model Number	List Price (\$US)	4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
Medium Temperature	2DC3R53K	04	208/230/3/60	KFDS04M4SEA	35,856	848	825
			460/3/60	KFDS04M4SGA	38,088		
	2DD3R63K	05	208/230/3/60	KFDS05M4SEA	36,504	848	850
			460/3/60	KFDS05M4SGA	38,645		
	2DL3R78K	06	208/230/3/60	KFDS06M4SEA	45,338	1,024	1,075
			460/3/60	KFDS06M4SGA	48,491		
	2DA3R89K	07	208/230/3/60	KFDS07M4SEA	46,301	1,024	1,100
			460/3/60	KFDS07M4SGA	49,130		
	3DA3R10M	08	208/230/3/60	KFDS08M4SEA	51,922	1,024	1,130
			460/3/60	KFDS08M4SGA	55,035		
	3DB3R12M	10	208/230/3/60	KFDS10M4SEA	55,681	1,528	1,330
			460/3/60	KFDS10M4SGA	58,560		
	3DF3R15M	12	208/230/3/60	KFDS12M4SEA	60,315	1,612	1,330
			460/3/60	KFDS12M4SGA	62,677		
	3DS3R17M	15	208/230/3/60	KFDS15M4SEA	61,650	2,081	1,350
			460/3/60	KFDS15M4SGA	63,732		

Factory Mounted Options & Shipped-Loose Accessories are found on Pages 84 - 85.

"-" = Not Available

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Next-Gen II - 3-22 HP Condensing Units

Non-Flooded - Discus Compressor - Medium Temperature - Configurable Base Models

	Compressor Model Number	Nominal H.P.	Voltage	Model Number	List Price (\$US)	4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
Medium Temperature	2DC3R53K	04	208/230/3/60	KBDS04M4SEB	33,548	848	825
			460/3/60	KBDS04M4SGB	35,737		
	2DD3R63K	05	208/230/3/60	KBDS05M4SEB	34,180	848	850
			460/3/60	KBDS05M4SGB	36,284		
	2DL3R78K	06	208/230/3/60	KBDS06M4SEA	42,848	1,024	1,075
			460/3/60	KBDS06M4SGA	45,943		
	2DA3R89K	07	208/230/3/60	KBDS07M4SEA	43,790	1,024	1,100
			460/3/60	KBDS07M4SGA	46,570		
	3DA3R10M	08	208/230/3/60	KBDS08M4SEA	49,311	1,024	1,130
			460/3/60	KBDS08M4SGA	52,360		
	3DB3R12M	10	208/230/3/60	KBDS10M4SEA	52,995	1,528	1,330
			460/3/60	KBDS10M4SGA	55,821		
	3DF3R15M	12	208/230/3/60	KBDS12M4SEA	57,541	1,612	1,330
			460/3/60	KBDS12M4SGA	59,859		
	3DS3R17M	15	208/230/3/60	KBDS15M4SEA	60,020	2,081	1,350
			460/3/60	KBDS15M4SGA	62,101		

Factory Mounted Options & Shipped-Loose Accessories are found on Pages 84 - 85.

"-" = Not Available

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

AIR-COOLED CONDENSING UNITS

KRAMER

Next-Gen II - 3-22 HP Condensing Units

Flooded - Discus Compressor - Low Temperature - Configurable Base Models

	Compressor Model Number	Nominal H.P.	Voltage	Model Number	List Price (\$US)	4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
Low Temperature	2DF3F16K	03	208/230/3/60	KFDS03L4SEA	34,908	848	710
			460/3/60	KFDS03L4SGA	37,326		
	2DL3F20K	04	208/230/3/60	KFDS04L4SEA	38,271	848	760
			460/3/60	KFDS04L4SGA	40,724		
	2DA3F23K	05	208/230/3/60	KFDS05L4SEA	39,195	848	805
			460/3/60	KFDS05L4SGA	41,981		
	3DA3F28K	06	208/230/3/60	KFDS06L4SEA	42,737	1,024	870
			460/3/60	KFDS06L4SGA	45,545		
	3DB3F33K	08	208/230/3/60	KFDS08L4SEA	47,847	1,024	1,130
			460/3/60	KFDS08L4SGA	50,108		
	3DF3F40K	09	208/230/3/60	KFDS09L4SEA	53,539	1,528	1,275
			460/3/60	KFDS09L4SGA	56,706		
	3DS3F46K	10	208/230/3/60	KFDS10L4SEA	58,122	1,528	1,275
			460/3/60	KFDS10L4SGA	59,126		
	4DBNF54K	12	208/230/3/60	KFDS12L4SEA	59,275	1,612	1,290
			460/3/60	KFDS12L4SGA	60,629		
	4DHNF63K	15	208/230/3/60	KFDS15L4SEA	62,299	2,081	1,310
			460/3/60	KFDS15L4SGA	63,291		
	4DJNF76K	22	208/230/3/60	KFDS22L4SEA	70,607	2,571	1,420
			460/3/60	KFDS22L4SGA	71,790		

Factory Mounted Options & Shipped-Loose Accessories are found on Pages 84 - 85.
Demand Cooling™ is optional for Low Temp. Discus compressors. It's required for non-R404A refrigerants.

"-" = Not Available

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Next-Gen II - 3-22 HP Condensing Units

Non-Flooded - Discus Compressor - Low Temperature - Configurable Base Models

	Compressor Model Number	Nominal H.P.	Voltage	Model Number	List Price (\$US)	4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
Low Temperature	2DF3F16K	03	208/230/3/60	KBDS03L4SEB	33,276	848	710
			460/3/60	KBDS03L4SGB	35,697		
	2DL3F20K	04	208/230/3/60	KBDS04L4SEB	36,639	848	760
			460/3/60	KBDS04L4SGB	39,094		
	2DA3F23K	05	208/230/3/60	KBDS05L4SEB	37,564	848	805
			460/3/60	KBDS05L4SGB	40,350		
	3DA3F28K	06	208/230/3/60	KBDS06L4SEA	41,110	1,024	870
			460/3/60	KBDS06L4SGA	43,918		
	3DB3F33K	08	208/230/3/60	KBDS08L4SEA	46,214	1,024	1,130
			460/3/60	KBDS08L4SGA	48,481		
	3DF3F40K	09	208/230/3/60	KBDS09L4SEA	51,911	1,528	1,275
			460/3/60	KBDS09L4SGA	55,074		
	3DS3F46K	10	208/230/3/60	KBDS10L4SEA	56,493	1,528	1,275
			460/3/60	KBDS10L4SGA	57,497		
	4DBNF54K	12	208/230/3/60	KBDS12L4SEA	57,647	1,612	1,290
			460/3/60	KBDS12L4SGA	58,999		
	4DHNF63K	15	208/230/3/60	KBDS15L4SEA	60,674	2,081	1,310
			460/3/60	KBDS15L4SGA	61,662		
	4DJNF76K	22	208/230/3/60	KBDS22L4SEA	68,978	2,571	1,420
			460/3/60	KBDS22L4SGA	70,158		

Factory Mounted Options & Shipped-Loose Accessories are found on Pages 84 - 85.
Demand Cooling™ is optional for Low Temp. Discus compressors. It's required for non-R404A refrigerants.

"-" = Not Available

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

AIR-COOLED CONDENSING UNITS

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Next-Gen II - 3-22 HP Condensing Units

Flooded - Scroll Compressor - Medium Temperature - Configurable Base Models

	Compressor Model Number	Nominal H.P.	Voltage	Model Number	List Price (\$US)	4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
Medium Temperature	ZS29KAE	04	208/230/3/60	KFOS04E4SEA	32,332	493	700
			460/3/60	KFOS04E4SGA	34,886		
	ZS33KAE	05	208/230/3/60	KFOS05E4SEA	32,907	506	710
			460/3/60	KFOS05E4SGA	35,413		
	ZS38K4E	06	208/230/3/60	KFOS06E4SEA	37,497	506	710
			460/3/60	KFOS06E4SGA	40,505		
	ZS45K4E	07	208/230/3/60	KFOS07E4SEA	38,226	834	870
			460/3/60	KFOS07E4SGA	41,076		
	ZB58K5E	08	208/230/3/60	KFOS08E4SEA	39,738	834	915
			460/3/60	KFOS08E4SGA	42,672		
	ZB66K5E	09	208/230/3/60	KFOS09E4SEA	41,937	904	980
			460/3/60	KFOS09E4SGA	44,564		
	ZB76K5E	10	208/230/3/60	KFOS10E4SEA	49,030	904	1,085
			460/3/60	KFOS10E4SGA	50,894		
	ZB95K5E	13	208/230/3/60	KFOS13E4SEA	54,301	1,041	1,105
			460/3/60	KFOS13E4SGA	54,426		
	ZB114K5E	15	208/230/3/60	KFOS15E4SEA	60,630	1,065	1,200
			460/3/60	KFOS15E4SGA	63,399		

Factory Mounted Options & Shipped-Loose Accessories are found on Pages 84 - 85.

"-" = Not Available

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Next-Gen II - 3-22 HP Condensing Units
Non-Flooded - Scroll Compressor - Medium Temperature - Configurable Base Models

	Compressor Model Number	Nominal H.P.	Voltage	Model Number	List Price (\$US)	4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
Medium Temperature	ZS29KAE	04	208/230/3/60	KBOS04E4SEB	30,701	493	700
			460/3/60	KBOS04E4SGB	33,255		
	ZS33KAE	05	208/230/3/60	KBOS05E4SEB	31,276	506	710
			460/3/60	KBOS05E4SGB	33,784		
	ZS38K4E	06	208/230/3/60	KBOS06E4SEB	35,866	506	710
			460/3/60	KBOS06E4SGB	38,873		
	ZS45K4E	07	208/230/3/60	KBOS07E4SEA	36,597	834	870
			460/3/60	KBOS07E4SGA	39,446		
	ZB58K5E	08	208/230/3/60	KBOS08E4SEA	37,356	834	915
			460/3/60	KBOS08E4SGA	40,234		
	ZB66K5E	09	208/230/3/60	KBOS09E4SEA	39,516	904	980
			460/3/60	KBOS09E4SGA	42,089		
	ZB76K5E	10	208/230/3/60	KBOS10E4SEA	46,471	904	1,085
			460/3/60	KBOS10E4SGA	48,299		
	ZB95K5E	13	208/230/3/60	KBOS13E4SEA	51,642	1,041	1,105
			460/3/60	KBOS13E4SGA	51,765		
	ZB114K5E	15	208/230/3/60	KBOS15E4SEA	57,851	1,065	1,200
			460/3/60	KBOS15E4SGA	60,566		

Factory Mounted Options & Shipped-Loose Accessories are found on Pages 84 - 85.

"-" = Not Available

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

AIR-COOLED CONDENSING UNITS

KRAMER

Next-Gen II - 3-22 HP Condensing Units

Flooded - Scroll Compressor - Low Temperature - Configurable Base Models

	Compressor Model Number	Nominal H.P.	Voltage	Model Number	List Price (\$US)	4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
Low Temperature	ZF25K4E	08	208/230/3/60	KFOS08L4SEA	36,840	834	850
			460/3/60	KFOS08L4SGA	39,018		
	ZF34K5E	10	208/230/3/60	KFOS10L4SEA	45,728	904	1,025
			460/3/60	KFOS10L4SGA	48,415		
	ZF41K5E	13	208/230/3/60	KFOS13L4SEA	51,682	1,041	1,050
			460/3/60	KFOS13L4SGA	52,567		
	ZF49K5E	15	208/230/3/60	KFOS15L4SEA	53,401	1,065	1,105
			460/3/60	KFOS15L4SGA	54,604		

Factory Mounted Options & Shipped-Loose Accessories are found on Pages 84 - 85.
Liquid Injection is standard on Low Temp. Scroll compressors.

“-” = Not Available

Non-Flooded - Scroll Compressor - Low Temperature - Configurable Base Models

	Compressor Model Number	Nominal H.P.	Voltage	Model Number	List Price (\$US)	4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
Low Temperature	ZF25K4E	08	208/230/3/60	KBOS08L4SEB	35,208	834	850
			460/3/60	KBOS08L4SGB	37,387		
	ZF34K5E	10	208/230/3/60	KBOS10L4SEA	44,095	904	1,025
			460/3/60	KBOS10L4SGA	46,787		
	ZF41K5E	13	208/230/3/60	KBOS13L4SEA	50,052	1,041	1,050
			460/3/60	KBOS13L4SGA	50,938		
	ZF49K5E	15	208/230/3/60	KBOS15L4SEA	51,770	1,065	1,105
			460/3/60	KBOS15L4SGA	52,976		

Factory Mounted Options & Shipped-Loose Accessories are found on Pages 84 - 85.
Liquid Injection is standard on Low Temp. Scroll compressors.

“-” = Not Available

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Next-Gen II - 3-22 HP Condensing Units

Flooded - Bitzer Compressor - Medium Temperature - Configurable Base Models

	Compressor Model Number	Nominal H.P.	Voltage	Model Number	List Price (\$US)	4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
Medium Temperature	2DES-3	03	208/230/3/60	KFBS03E4SEA	38,600	848	800
			460/3/60	KFBS03E4SGA	41,133		
	2CES-4	04	208/230/3/60	KFBS04E4SEA	39,211	848	825
			460/3/60	KFBS04E4SGA	41,649		
	4FES-5	05	208/230/3/60	KFBS05E4SEA	39,842	848	850
			460/3/60	KFBS05E4SGA	42,193		
	4EES-6	06	208/230/3/60	KFBS06E4SEA	43,671	1,024	1,075
			460/3/60	KFBS06E4SGA	45,320		
	4DES-7	07	208/230/3/60	KFBS07E4SEA	47,445	1,024	1,100
			460/3/60	KFBS07E4SGA	48,392		
	4CES-9	08	208/230/3/60	KFBS08E4SEA	54,502	1,024	1,130
			460/3/60	KFBS08E4SGA	57,228		
	4TES-12	10	208/230/3/60	KFBS10E4SEA	55,161	1,528	1,330
			460/3/60	KFBS10E4SGA	58,420		
	4PES-15	12	208/230/3/60	KFBS12E4SEA	57,504	1,612	1,330
			460/3/60	KFBS12E4SGA	60,503		
	4NES-20	15	208/230/3/60	KFBS15E4SEA	58,814	2,081	1,350
			460/3/60	KFBS15E4SGA	61,691		

Factory Mounted Options & Shipped-Loose Accessories are found on Pages 84 - 85.

"-" = Not Available

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

AIR-COOLED CONDENSING UNITS

KRAMER

Next-Gen II - 3-22 HP Condensing Units

Non-Flooded - Bitzer Compressor - Medium Temperature - Configurable Base Models

	Compressor Model Number	Nominal H.P.	Voltage	Model Number	List Price (\$US)	4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
Medium Temperature	2DES-3	03	208/230/3/60	KBBS03E4SEB	36,972	848	800
			460/3/60	KBBS03E4SGB	39,503		
	2CES-4	04	208/230/3/60	KBBS04E4SEB	37,579	848	825
			460/3/60	KBBS04E4SGB	40,019		
	4FES-5	05	208/230/3/60	KBBS05E4SEB	38,216	848	850
			460/3/60	KBBS05E4SGB	40,564		
	4EES-6	06	208/230/3/60	KBBS06E4SEA	42,042	1,024	1,075
			460/3/60	KBBS06E4SGA	43,690		
	4DES-7	07	208/230/3/60	KBBS07E4SEA	45,816	1,024	1,100
			460/3/60	KBBS07E4SGA	46,764		
	4CES-9	08	208/230/3/60	KBBS08E4SEA	51,839	1,024	1,130
			460/3/60	KBBS08E4SGA	54,513		
	4TES-12	10	208/230/3/60	KBBS10E4SEA	52,483	1,528	1,330
			460/3/60	KBBS10E4SGA	55,681		
	4PES-15	12	208/230/3/60	KBBS12E4SEA	54,785	1,612	1,330
			460/3/60	KBBS12E4SGA	57,726		
	4NES-20	15	208/230/3/60	KBBS15E4SEA	56,068	2,081	1,350
			460/3/60	KBBS15E4SGA	58,892		

Factory Mounted Options & Shipped-Loose Accessories are found on Pages 84 - 85.

"-" = Not Available

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Next-Gen II - 3-22 HP Condensing Units

Flooded - Bitzer Compressor - Low Temperature - Configurable Base Models

	Compressor Model Number	Nominal H.P.	Voltage	Model Number	List Price (\$US)	4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
Low Temperature	4FES-3	03	208/230/3/60	KFBS03L4SEA	34,234	848	710
			460/3/60	KFBS03L4SGA	35,576		
	4EES-4	04	208/230/3/60	KFBS04L4SEA	37,624	848	760
			460/3/60	KFBS04L4SGA	38,965		
	4DES-5	05	208/230/3/60	KFBS05L4SEA	39,534	848	805
			460/3/60	KFBS05L4SGA	41,015		
	4CES-6	06	208/230/3/60	KFBS06L4SEA	47,362	1,024	870
			460/3/60	KFBS06L4SGA	49,283		
	4TES-9	08	208/230/3/60	KFBS08L4SEA	50,662	1,024	1,130
			460/3/60	KFBS08L4SGA	52,503		
	4PES-12	09	208/230/3/60	KFBS09L4SEA	54,239	1,528	1,275
			460/3/60	KFBS09L4SGA	55,982		
	4NES-14	10	208/230/3/60	KFBS10L4SEA	57,871	1,528	1,275
			460/3/60	KFBS10L4SGA	59,615		
	4JE-15	12	208/230/3/60	KFBS12L4SEA	62,377	1,612	1,290
			460/3/60	KFBS12L4SGA	64,120		
	4HE-18	15	208/230/3/60	KFBS15L4SEA	66,987	2,081	1,310
			460/3/60	KFBS15L4SGA	68,723		
	4GE-23	22	208/230/3/60	KFBS22L4SEA	68,723	2,571	1,420
			460/3/60	KFBS22L4SGA	71,262		

Factory Mounted Options & Shipped-Loose Accessories are found on Pages 84 - 85.

Liquid Injection is optional on Low Temp. Bitzer compressors. It's required for non-R404A refrigerants.

"-" = Not Available

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

AIR-COOLED CONDENSING UNITS

KRAMER

Next-Gen II - 3-22 HP Condensing Units

Non-Flooded - Bitzer Compressor - Low Temperature - Configurable Base Models

	Compressor Model Number	Nominal H.P.	Voltage	Model Number	List Price (\$US)	4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
Low Temperature	4FES-3	03	208/230/3/60	KBBS03L4SEB	32,605	848	710
			460/3/60	KBBS03L4SGB	33,946		
	4EES-4	04	208/230/3/60	KBBS04L4SEB	35,992	848	760
			460/3/60	KBBS04L4SGB	37,333		
	4DES-5	05	208/230/3/60	KBBS05L4SEB	37,903	848	805
			460/3/60	KBBS05L4SGB	39,383		
	4CES-6	06	208/230/3/60	KBBS06L4SEB	45,733	1,024	870
			460/3/60	KBBS06L4SGB	47,654		
	4TES-9	08	208/230/3/60	KBBS08L4SEA	49,029	1,024	1,130
			460/3/60	KBBS08L4SGA	50,875		
	4PES-12	09	208/230/3/60	KBBS09L4SEA	52,608	1,528	1,275
			460/3/60	KBBS09L4SGA	54,350		
	4NES-14	10	208/230/3/60	KBBS10L4SEA	56,240	1,528	1,275
			460/3/60	KBBS10L4SGA	57,981		
	4JE-15	12	208/230/3/60	KBBS12L4SEA	60,747	1,612	1,290
			460/3/60	KBBS12L4SGA	62,488		
	4HE-18	15	208/230/3/60	KBBS15L4SEA	65,357	2,081	1,310
			460/3/60	KBBS15L4SGA	67,092		
	4GE-23	22	208/230/3/60	KBBS22L4SEA	63,609	2,571	1,420
			460/3/60	KBBS22L4SGA	69,630		

Factory Mounted Options & Shipped-Loose Accessories are found on Pages 84 - 85.
Liquid Injection is optional on Low Temp. Bitzer compressors. It's required for non-R404A refrigerants.

"-" = Not Available

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Next-Gen II - 3-22 HP Condensing Units

Factory Installed Options - Electrical Options

Option Description (All Options are Factory Mounted unless otherwise noted)	Option Number	H.P Range/ Cabinet	List Price Adder (\$US)
THROUGH THE DOOR NON-FUSED DISCONNECT SWITCH (Only available Mounted)	TDNM-3	3-10	2,575
	TDNM-4	12-22	2,880
EXTERNAL FUSED DISCONNECT (Available Loose or Mounted)	EFDM-2 (230V)	3 - 6	1,667
	EFDM-3 (230V)	7 - 10	1,982
	EFDM-4 (230V)	12 - 22	4,229
	EFDM-2 (460V)	3 - 6	1,958
	EFDM-3 (460V)	7 - 10	3,522
	EFDM-4 (460V)	12 - 22	5,814
MAIN CIRCUIT BREAKER	BKR-2	3 - 6	2,381
	BKR-3	7 - 10	2,998
	BKR-4	12 - 22	3,771
† PHASE LOSS MONITOR	PLM	ALL	1,874
ANTI SHORT CYCLE TIMER	ASC	ALL	1,108
AIR DEFROST TIMER	TMR	ALL	922
CURRENT SENSING RELAY (Run proof)	CSR	ALL	1,228
COMPRESSOR UNLOADERS (Suction pressure control. Medium Temp reciprocating compressors only. 1 Step for 3D and larger compressors.	UNL-1	When Available	3,446

† 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. For all other models, option is only available on units that are 3 Phase.

Factory Installed Options - Defrost Kits

1 Unit Cooler per CU	Max Defrost Load	List Price (\$US)
DMA15	15	1,975
DMA20	20	
DMA24	24	
DMA30	30	
DMA35	35	2,206
DMA40	40	
DMA48	48	
DMB60	60	4,303
DMB96	96	

2 Unit Coolers per CU	Max Defrost Load	List Price (\$US)
DMB35	35	2,992
DMB40	40	
DMB48	48	
DMB60	60	4,303
DMB96	96	

3 Unit Coolers per CU	Max Defrost Load	List Price (\$US)
DMC35	35	4,501
DMC40	40	
DMC48	48	
DMC60	60	5,564
DMC96	96	

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.

Next-Gen II Options continued on next page.

AIR-COOLED CONDENSING UNITS

KRAMER

Next-Gen II - 3-22 HP Condensing Units

Factory Installed Options - Mechanical Options

Option Description (All Options are Factory Mounted unless otherwise noted)	Option Number	H.P Range/ Cabinet	List Price Adder (\$US)
SUCTION LINE FILTER (Sealed)	SK-5	3 - 8	771
	SK-6	9 - 10	1,310
	SK-7	12 - 22	2,040
REPLACEABLE CORE SUCTION FILTER ¹	RSK-5	3 - 8	1,482
	RSK-6	9 - 10	2,023
	RSK-7	12 - 22	2,739
REPLACEABLE CORE LIQUID FILTER ¹	RLK-5	3 - 8	1,305
	RLK-6	9 - 10	1,483
	RLK-7	12 - 22	1,679
SUCTION LINE ACCUMULATOR ²	ASK-4	3 - 8	1,305
	ASK-5	9 - 10	1,918
	ASK-6	12 - 22	4,006
OIL SEPARATOR	OS-1	3 - 6	2,222
	OS-2	7 - 10	2,366
	OS-3	12 - 22	2,779
OVERSIZED RECEIVERS	OSR-1	1 FAN	1,961
	OSR-2	2 FAN	1,097
	OSR-3	2 FAN TALL	1,109
PRESSURE RELIEF VALVE (For models built on FD1 cabinet base. Requires Oversized Receiver OSR-1 option)	RV	FD1 Cabinet	497
HEATED AND INSULATED RECEIVER (Temperature controlled with low pressure bypass timer)	HIR	ALL	1,290
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	2,556
		6 - 9	2,833
		10 - 15	5,280
		22	8,262
LIQUID INJECTION / DEMAND COOLING™ (Low Temp. Bitzer and Discus compressors)	LNJ	ALL	4,182
HAIL / SNOW GUARDS (Shipped loose to prevent shipping damage. Requires field installation)	SG-E	1 FAN	1,580
	SG-F	2 FAN	2,160
	SG-G	2 FAN TALL	2,422
2 UNIT STACKING RACK (Shipped empty. Condensing units must be field installed.)	SR-2	1 or 2 FAN	Call Factory
3 UNIT STACKING RACK (Shipped empty. Condensing units must be field installed.)	SR-3	1 or 2 FAN	Call Factory

1. If ordering a Replaceable Core Suction Filter, a Replaceable Core Liquid Line Filter must also be ordered. If ordering a Replaceable Core Liquid Line Filter, a Replaceable Core Suction Filter must also be ordered.
2. If ordering a Suction Line Accumulator, either a Sealed Suction Line Filter or Replaceable Core Suction Line Filter must be ordered.

QV-Series - 15-100 HP Condensing Units

The design of the innovative QV-Series Condensing Units™ sets the new standard for efficiency, reliability and serviceability to meet the needs of the food processing, industrial cooling and warehousing industries.

Models incorporate features from our award-winning Quantum Air™ Condensers such as the floating coil design with generously sized condensers for energy savings, swept wing fan blades for optimal air flow, and LED lighted control panel and hinged venturi panels for easy access. A floored compressor cabinet with removable compressor tray, service convenience outlet, hinged and removable access panels, integral liquid subcooling circuit, and paint protected galvanized steel housing are all standard features of these units.



STANDARD FEATURES

- Available in single, dual or parallel compressor configurations from 15 to 100 HP
- Prepainted 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
- 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
- LED control and compressor panel lighting
- 110V service convenience outlet
- Service gauge hooks
- 3 Phase condenser fan motors
- Color-coded high and low pressure hoses
- 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**

QV-Series Nomenclature:

CONFIGURABLE BASE MODEL								
K	F	D	V	30	M	4S	G	A
Brand	Style	Compressor Style	Compressor Configuration	Horsepower	Temperature Range	Refrigerant Type	Voltage Code	Vintage
K - Kramer	F - Flooded B - Non-Flooded	D - Discus B - Bitzer EcoLine	V - Single D - Dual P - Parallel Piped		L - Low M - Medium	4S - Multiple Refrigerants	E - 208-230/3/60 G - 460/3/60	

Note(s):

1. 50 Hz available. Contact Factory for additional information.

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

AIR-COOLED CONDENSING UNITS

KRAMER

QV-Series - 15-100 HP Condensing Units

Discus Compressor - Single Compressor - Configurable Base Models

	Nom. H.P.	Model Number	Comp. Model Number (1 per Unit)	Flooded		Non-Flooded		4 Year Compressor Protection Plan (NET PRICE ADDER \$US)
				208-230/3	460/3	208-230/3	460/3	
Medium Temp.	15	K*DV015M4S*A	3DS3R17ME	69,628	70,768	69,209	70,386	2,081
	20	K*DV020M4S*A	4DBNR20ME	77,065	78,151	75,426	76,969	2,571
	25	K*DV025M4S*A	4DHNR22ME	92,024	93,034	90,155	91,712	2,873
	30	K*DV030M4S*A	4DJNR28ME	107,560	108,734	101,736	102,997	3,082
	35	K*DV035M4S*A	6DHNR35ME	121,820	122,515	117,324	117,644	3,249
	40	K*DV040M4S*A	6DJNR40ME ¹	134,059	135,922	128,884	130,773	3,715
Low Temp.	50	K*DV050M4S*A	6DUNR49ME	—	162,265	—	154,102	3,837
	22	K*DV022L4S*A	4DJNF76KE	86,568	88,389	86,553	87,648	2,571
	27	K*DV027L4S*A	6DHNF93KE	100,206	101,006	98,264	100,037	2,873
	30	K*DV030L4S*A	6DJNF11ME	110,710	111,729	108,427	110,244	3,082
	40	K*DV040L4S*A	6DUNF13ME	—	139,119	—	136,847	3,715

Factory Mounted Options & Shipped-Loose Accessories are found on Pages 90 - 91 and 96 - 97.

* Represents Flooded (F) or Non-Flooded (B) & Voltage 208-230/3/60 (E) or 460/3/60 (G)

Demand Cooling is optional on Low Temp. Discus compressors. It's required for non-R404A refrigerants.

“—” = Not Available

Bitzer Compressor - Single Compressor - Configurable Base Models

	Nom. H.P.	Model Number	Comp. Model Number (1 per Unit)	Flooded		Non-Flooded		4 Year Compressor Protection Plan (NET PRICE ADDER \$US)
				208-230/3	460/3	208-230/3	460/3	
Medium Temp.	15	K*BV015M4S*A	4NE-20	69,628	70,768	69,209	70,386	2,081
	20	K*BV020M4S*A	4JE-22	77,065	78,151	75,426	76,969	2,571
	25	K*BV025M4S*A	4HE-25	92,024	93,034	90,155	91,712	2,873
	30	K*BV030M4S*A	4GE-30	107,560	108,734	101,736	102,997	3,082
	35	K*BV035M4S*A	6HE-35	121,820	122,515	117,324	117,644	3,249
	40	K*BV040M4S*A	6GE-40	134,059	135,922	128,884	130,773	3,715
	50	K*BV050M4S*A	6FE-50	161,057	162,265	152,956	154,102	3,837
Low Temp.	22	K*BV022L4S*A	4GE-23	86,568	88,389	86,553	87,648	2,571
	27	K*BV027L4S*A	6HE-28	100,206	101,006	98,264	100,037	2,873
	30	K*BV030L4S*A	6GE-34	110,710	111,729	108,427	110,244	3,082
	40	K*BV040L4S*A	6FE-44	138,085	139,119	136,096	136,847	3,715

Factory Mounted Options & Shipped-Loose Accessories are found on Pages 90 - 91 and 96 - 97.

* Represents Flooded (F) or Non-Flooded (B) & Voltage 208-230/3/60 (E) or 460/3/60 (G)

Liquid Injection is optional on Low Temp. Bitzer compressors. It's required for non-R404A refrigerants.

“—” = Not Available

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

QV-Series - 15-100 HP Condensing Units

Discus Compressor - Dual Compressor - Configurable Base Models

	Nom. H.P.	Model Number	Comp. Model Number (2 per Unit)	Flooded		Non-Flooded		4 Year Compressor Protection Plan (NET PRICE ADDER \$US)
				208-230/3	460/3	208-230/3	460/3	
Medium Temp.	30	K*DD030M4S*A	3DS3R17ME	139,261	141,538	138,414	140,771	4,162
	40	K*DD040M4S*A	4DBNR20ME	154,132	156,303	150,855	153,938	5,142
	50	K*DD050M4S*A	4DHNR22ME	184,050	186,068	180,311	183,429	5,746
	60	K*DD060M4S*A	4DJNR28ME	215,125	217,469	203,469	205,994	6,164
	70	K*DD070M4S*A	6DHNR35ME	243,639	245,035	234,648	235,291	6,498
	80	K*DD080M4S*A	6DJNR40ME¹	268,122	271,843	257,767	261,544	7,430
	100	K*DD100M4S*A	6DUNR49ME	—	324,532	—	308,205	7,674
Low Temp.	44	K*DD044L4S*A	4DJNF76KE	173,134	176,777	173,108	175,296	5,142
	54	K*DD054L4S*A	6DHNF93KE	200,409	202,009	196,530	200,074	5,746
	60	K*DD060L4S*A	6DJNF11ME	221,418	223,457	216,856	220,479	6,164
	80	K*DD080L4S*A	6DUNF13ME	—	278,241	—	273,694	7,430

Factory Mounted Options & Shipped-Loose Accessories are found on Pages 90 - 91 and 96 - 97.

* Represents Flooded (F) or Non-Flooded (B) & Voltage 208-230/3/60 (E) or 460/3/60 (G)

Demand Cooling is optional on Low Temp. Discus compressors. It's required for non-R404A refrigerants.

“—” = Not Available

Bitzer Compressor - Dual Compressor - Configurable Base Models

	Nom. H.P.	Model Number	Comp. Model Number (2 per Unit)	Flooded		Non-Flooded		4 Year Compressor Protection Plan (NET PRICE ADDER \$US)
				208-230/3	460/3	208-230/3	460/3	
Medium Temp.	30	K*BD030M4S*A	4NE-20	139,261	141,538	134,383	136,671	4,162
	40	K*BD040M4S*A	4JE-22	154,132	156,303	146,461	149,454	5,142
	50	K*BD050M4S*A	4HE-25	184,050	186,068	175,059	178,086	5,746
	60	K*BD060M4S*A	4GE-30	215,125	217,469	197,543	199,994	6,164
	70	K*BD070M4S*A	6HE-35	243,639	245,035	227,814	228,438	6,498
	80	K*BD080M4S*A	6GE-40	268,122	271,843	250,259	253,926	7,430
	100	K*BD100M4S*A	6FE-50	322,116	324,532	297,000	299,228	7,674
Low Temp.	44	K*BD044L4S*A	4GE-23	173,134	176,777	168,066	170,190	5,142
	54	K*BD054L4S*A	6HE-28	200,409	202,009	190,806	194,247	5,746
	60	K*BD060L4S*A	6GE-34	221,418	223,457	210,540	214,057	6,164
	80	K*BD080L4S*A	6FE-44	276,170	278,241	263,744	265,722	7,430

Factory Mounted Options & Shipped-Loose Accessories are found on Pages 90 - 91 and 96 - 97.

* Represents Flooded (F) or Non-Flooded (B) & Voltage 208-230/3/60 (E) or 460/3/60 (G)

Liquid Injection is optional on Low Temp. Bitzer compressors. It's required for non-R404A refrigerants.

“—” = Not Available

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

AIR-COOLED CONDENSING UNITS

KRAMER

QV-Series - 15-100 HP Condensing Units

Discus Compressor - Parallel Piped Compressor - Configurable Base Models

	Nom. H.P.	Model Number	Comp. Model Number (2 per Unit)	Flooded		Non-Flooded		4 Year Compressor Protection Plan (NET PRICE ADDER \$US)
				208-230/3	460/3	208-230/3	460/3	
Medium Temp.	50	K*DP050M4S*A	4DHNR22ME	206,815	208,583	202,525	205,582	5,746
	60	K*DP060M4S*A	4DJNR28ME	235,963	238,107	222,447	224,843	6,164
	70	K*DP070M4S*A	6DHNR35ME	265,304	266,496	255,140	255,461	6,498
	80	K*DP080M4S*A	6DJNR40ME ¹	287,757	292,243	276,199	280,736	7,430
	100	K*DP100M4S*A	6DUNR49ME	—	360,230	—	341,148	7,674
Low Temp.	44	K*DP044L4S*A	4DJNF76KE	196,393	200,001	196,364	198,311	5,142
	54	K*DP054L4S*A	6DHNF93KE	222,172	223,491	217,787	221,332	5,746
	60	K*DP060L4S*A	6DJNF11ME	241,800	243,613	236,710	240,322	6,164
	80	K*DP080L4S*A	6DUNF13ME	—	308,844	—	303,716	7,430

Factory Mounted Options & Shipped-Loose Accessories are found on Pages 90 - 91 and 96 - 97.

* Represents Flooded (F) or Non-Flooded (B) & Voltage 208-230/3/60 (E) or 460/3/60 (G)

Demand Cooling is optional on Low Temp. Discus compressors. It's required for non-R404A refrigerants.

“—” = Not Available

Bitzer Compressor - Parallel Piped Compressor - Configurable Base Models

	Nom. H.P.	Model Number	Comp. Model Number (2 per Unit)	Flooded		Non-Flooded		4 Year Compressor Protection Plan (NET PRICE ADDER \$US)
				208-230/3	460/3	208-230/3	460/3	
Medium Temp.	50	K*BP050M4S*A	4HE-25	206,815	208,583	202,525	205,582	5,746
	60	K*BP060M4S*A	4GE-30	235,963	238,107	222,447	224,843	6,164
	70	K*BP070M4S*A	6HE-35	265,304	266,496	255,140	255,461	6,498
	80	K*BP080M4S*A	6GE-40	287,757	292,243	276,199	280,736	7,430
	100	K*BP100M4S*A	6FE-50	357,548	360,230	338,606	341,148	7,674
Low Temp.	44	K*BP044L4S*A	4GE-23	196,393	200,001	196,364	198,311	5,142
	54	K*BP054L4S*A	6HE-28	222,172	223,491	217,787	221,332	5,746
	60	K*BP060L4S*A	6GE-34	241,800	243,613	236,710	240,322	6,164
	80	K*BP080L4S*A	6FE-44	357,548	308,844	301,453	303,716	7,430

Factory Mounted Options & Shipped-Loose Accessories are found on Pages 90 - 91 and 96 - 97.

* Represents Flooded (F) or Non-Flooded (B) & Voltage 208-230/3/60 (E) or 460/3/60 (G)

Liquid Injection is optional on Low Temp. Bitzer compressors. It's required for non-R404A refrigerants.

“—” = Not Available

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

QV-Series - 15-100 HP Condensing Units

Factory Installed Options - Single Compressor - Compressor & Electrical Options

	Option Description (All Options are Factory Mounted unless otherwise noted)	Option Available On:	List Price Adder (\$US)
Compressor Options	Compressor Unloading with Pressure Control for 1 Cycle Bank	BV015M, 020M-30M, 050M; 022L - 040L	2,746
	Compressor Unloading with Pressure Control for 2 Cycle Bank	035M & 045M	4,599
	Compressor Unloading: ModuloLoad	DV015M	6,775
	Head Cooling Fan	All Models	2,858
	Liquid Injection / Demand Cooling	022L - 040L	6,276
Electrical and Control Panel Options	Air Defrost Time Clock	All Medium Temperature Models	922
	Anti-Short Cycle Timer	All Models	796
	Condenser Fan Breaker	015M -030M; 022L - 040L	1,201
		035M -050M	1,826
	Control Circuit Breaker	All Models	391
	EC Fan Motors with Electronic Variable Speed Control	015M -030M; 022L - 040L	Call Factory
		035M -050M	Call Factory
	Thru-the-door Fused Disconnect	Models with MOPD < 61A	2,431
		Models with 61A < MOPD < 101A	3,600
		Models with 101A < MOPD < 201A	6,167
	Thru-the-door Main Breaker	Models with MOPD ≤ 100A	3,108
		Models with 101A < MOPD < 201A	5,041
	Thru-the-door Non-Fused Disconnect	Models with MCA < 59A	2,188
		Models with 59A < MCA > 99A	3,177
		Models with 99A < MCA < 199A	5,253
	Phase-Loss Monitor - 250A	230V & 460V	1,537
	Phase-Loss Monitor - ICM450	230V	2,241
		460V	1,593

QV-Series Single Compressor Options continued on next page.

AIR-COOLED CONDENSING UNITS

KRAMER

QV-Series - 15-100 HP Condensing Units

Factory Installed Options - Single Compressor - Refrigeration Options

Option Description (All Options are Factory Mounted unless otherwise noted)		Option Available On:	List Price Adder (\$US)
Refrigeration Options	Crankcase Pressure Regulator Valves	015M	5,396
		020M - 040M; 022L - 030L	6,796
		050M & 040L	13,488
	Fan Cycling - Temperature or Pressure	All Flooded Models; Standard on Non-Flooded Models	2,424
	Heat Reclaim Valve	All Models	5,609
	Heated & Insulated Receiver	All Models	4,267
	Hot Gas Bypass Tee & Ball Valve	All Models	1,315
	Hot Gas Bypass Tee, Ball Valve & Regulator	All Models	7,625
	Liquid-line Filter Isolation Valve (Single Valve)	All Models	759
	Liquid Line Solenoid Valve (Shipped loose)	015M - 025M; 022L - 040L	943
		030M - 035M	1,206
		040M - 050M	1,822
	Oil Separator with Check Valve	015 - 030	2,614
		035 - 050	4,414
	Oil Separator with Check Valve & Oil Return Service Kit	015 - 030	5,788
		035 - 050	8,196
	Oversized Receiver	All Models	1,816
	Receiver Level Gauge	All Models	2,253
	Suction Accumulator - Standard	015	4,067
		020-050	4,704
	Suction Accumulator - Heat Exchanger	015	5,041
		020-050	7,804
	Suction-line Filter - Replaceable Core	015M	2,667
		020M - 040M; 022L - 030L	2,785
		050M & 040L	3,482
	Suction-line Filter Isolation Valves	015M	1,244
		020M - 040M; 022L - 030L	2,004
		050M & 040L	3,486
	Suction-line Insulation	All Models	2,206

QV-Series - 15-100 HP Condensing Units

Factory Installed Options - Dual Compressor - Compressor & Electrical Options

	Option Description (All Options are Factory Mounted unless otherwise noted)	Option Available On:	List Price Adder (\$US)
Compressor Options	Compressor Unloading with Pressure Control for 1 Cycle Bank	BD030M, D040M - D060M, D100M; D044L - D080L	5,492
	Compressor Unloading with Pressure Control for 2 Cycle Bank	D070M & D080M	9,198
	Compressor Unloading: Moduload	DD030M	13,550
	Head Cooling Fan	All Models	5,716
	Liquid Injection / Demand Cooling	D044L - D080L	12,552
Electrical and Control Panel Options	Air Defrost Time Clock	All Medium Temperature Models	1,844
	Anti-Short Cycle Timer	All Models	1,592
	Condenser Fan Breaker	D030M -D060M; D044L - D080L	2,402
		D070M -D100M	3,652
	Control Circuit Breaker	All Models	391
	EC Fan Motors with Electronic Variable Speed Control	D030M -D060M; D044L - D080L	Call Factory
		D070M -D100M	Call Factory
	Thru-the-door Fused Disconnect	Models with MOPD < 61A	2,431
		Models with 61A < MOPD < 101A	3,600
		Models with 101A < MOPD < 201A	6,167
	Thru-the-door Main Breaker	Models with MOPD ≤ 100A	3,108
		Models with 101A < MOPD < 201A	5,041
	Thru-the-door Non-Fused Disconnect	Models with MCA < 59A	2,188
		Models with 59A < MCA > 99A	3,177
		Models with 99A < MCA < 199A	5,253
	Phase-Loss Monitor - 250A	230V & 460V	3,074
	Phase-Loss Monitor - ICM450	460V	3,186

QV-Series Dual Compressor Options continued on next page.

AIR-COOLED CONDENSING UNITS

KRAMER

QV-Series - 15-100 HP Condensing Units

Factory Installed Options - Dual Compressor - Refrigeration Options

Option Description (All Options are Factory Mounted unless otherwise noted)		Option Available On:	List Price Adder (\$US)
Refrigeration Options	Crankcase Pressure Regulator Valves	D030M	10,792
		D040M - D080M; D044L - D060L	13,592
		D100M & D080L	26,976
	Fan Cycling - Temperature or Pressure	All Flooded Models; Standard on Non-Flooded Models	4,848
	Heat Reclaim Valve	All Models	11,218
	Heated & Insulated Receiver	All Models	8,534
	Hot Gas Bypass Tee & Ball Valve	All Models	2,630
	Hot Gas Bypass Tee, Ball Valve & Regulator	All Models	15,250
	Liquid-line Filter Isolation Valve (Single Valve per Circuit)	All Models	1,518
	Liquid Line Solenoid Valve (Shipped loose)	030M - 050M; 044L - 080L	1,886
		060M - 070M	2,412
		080M - 100M	3,644
	Oil Separator with Check Valve	D030 - D060	5,228
		D070 - D100	8,828
	Oil Separator with Check Valve & Oil Return Service Kit	D030 - D060	11,576
		D070 - D100	16,392
	Oversized Receiver	All Models	3,632
	Receiver Level Gauge	All Models	4,506
	Suction Accumulator - Standard	D030	8,134
		D040-D100	9,408
	Suction Accumulator - Heat Exchanger	D030	10,082
		D040-D100	15,608
	Suction-line Filter - Replaceable Core	D030M	5,334
		D040M - D080M; D044L - D060L	5,570
		D100M & D080L	6,964
	Suction-line Filter Isolation Valves	D030M	2,488
		D040M - D080M; D044L - D060L	4,008
		D100M & D080L	6,972
	Suction-line Insulation	All Models	4,412

QV-Series - 15-100 HP Condensing Units

Factory Installed Options - Parallel-Piped Compressor - Compressor & Electrical Options

	Option Description (All Options are Factory Mounted unless otherwise noted)	Option Available On:	List Price Adder (\$US)
Compressor Options	Compressor Unloading with Pressure Control for 1 Cycle Bank	P050M - P060M, P100M; P044L - P080L	5,492
	Compressor Unloading with Pressure Control for 2 Cycle Bank	P070M & P080M	9,198
	Head Cooling Fan	All Models	5,716
	Liquid Injection / Demand Cooling	P044L - P080L	12,552
Electrical and Control Panel Options	Air Defrost Time Clock	All Medium Temperature Models	922
	Anti-Short Cycle Timer	All Models	796
	Condenser Fan Breaker	P050M -P060M; P044L - P080L	1,201
		P070M -P100M	1,826
	Control Circuit Breaker	All Models	391
	EC Fan Motors with Electronic Variable Speed Control	P050M -P060M; P044L - P080L	Call Factory
		P070M -P100M	Call Factory
	Thru-the-door Fused Disconnect	Models with MOPD < 61A	2,431
		Models with 61A < MOPD < 101A	3,600
		Models with 101A < MOPD < 201A	6,167
	Thru-the-door Main Breaker	Models with MOPD ≤ 100A	3,108
		Models with 101A < MOPD < 201A	5,041
	Thru-the-door Non-Fused Disconnect	Models with MCA < 59A	2,188
		Models with 59A < MCA > 99A	3,177
		Models with 99A < MCA < 199A	5,253
	Phase-Loss Monitor - 250A	230V & 460V	1,537
	Phase-Loss Monitor - ICM450	460V	1,593

QV-Series Parallel-Piped Compressor Options continued on next page.

AIR-COOLED CONDENSING UNITS



QV-Series - 15-100 HP Condensing Units

Factory Installed Options - Parallel-Piped Compressor - Refrigeration Options

Option Description (All Options are Factory Mounted unless otherwise noted)		Option Available On:	List Price Adder (\$US)
Refrigeration Options	Crankcase Pressure Regulator Valves	P050M-P60M	13,593
		P070M-P100M; P044L - P080L	15,868
	Fan Cycling - Temperature or Pressure	All Flooded Models; Standard on Non-Flooded Models	4,848
	Heat Reclaim Valve	All Models	5,609
	Heated & Insulated Receiver	All Models	4,267
	Hot Gas Bypass Tee & Ball Valve	All Models	1,315
	Hot Gas Bypass Tee, Ball Valve & Regulator	All Models	7,625
	Liquid-line Filter Isolation Valve (Single Valve)	All Models	759
	Liquid Line Solenoid Valve (Shipped loose)	050M - 060M	1,787
		070M – 100M	3,082
		044L – 080L	1,181
	Oversized Receiver	All Models	1,816
	Receiver Level Gauge	All Models	2,253
	Suction Accumulator - Standard	P050M-P60M	5,645
		P070M-P100M; P044L - P080L	6,143
	Suction Accumulator - Heat Exchanger	P050M-P60M	7,804
		P070M-P100M; P044L - P080L	8,623
	Suction-line Filter - Replaceable Core	P050M-P60M	2,492
		P070M-P100M; P044L - P080L	2,759
	Suction-line Filter Isolation Valves	P050M-P60M	3,486
		P070M-P100M; P044L - P080L	5,504
	Suction-line Insulation	All Models	4,412

QV-Series - 15-100 HP Condensing Units

Defrost Kit Nomenclature

DL	A	24	-
Kit Designator	Heater Contactor QTY	Max Total Heater Amp Value	Special Kit Codes
	A - 1, B - 2, C - 3, D - 4		-1: 1 Evaporator with Multiple Heater Feeds -2: 2 Evaporators with Multiple Heater Feeds PP: Pressure Prop Kits for Large Evaporators

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.

Factory Installed Options - Defrost Kits - Single & Parallel-Piped Compressor Models

1 Heater Contactor		2 Heater Contactors		3 Heater Contactors		4 Heater Contactors	
Kit Model	List Price (\$US)	Kit Model	List Price (\$US)	Kit Model	List Price (\$US)	Kit Model	List Price (\$US)
DLA24 ¹	2,540						
DLA30 ¹	2,640						
DLA35 ¹	2,972	DLB35 ¹	3,792	DLC35	5,181		
DLA40 ¹	2,972	DLB40 ¹	3,792	DLC40	5,181		
DLA48 ¹	2,972	DLB48 ¹	3,792	DLC48	5,181		
		DLB60 ^{1 2 4}	3,943	DLC60 ¹	5,181	DLD60	6,127
		DLB96 ^{1 2 4}	4,776	DLC96 ¹	5,494	DLD96	6,176
				DLC144 ¹	7,487	DLD144 ^{3 5}	7,537
						DLD192 ^{3 5}	7,921

Defrost Kit selected for Single and Parallel compressor models is for entire unit. Up to 4 contactors.
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 2 Evaporators with Multiple Heater Feeds (Special Kit Code: -2)

⁴Defrost Kit Available for Evaporator with Multiple Heater Feeds & Pressure Prop Kit (Special Kit Code: -1PP)

⁵Defrost Kit Available for 2 Evaporators with Multiple Heater Feeds & Pressure Prop Kit (Special Kit Code: -2PP)

Factory Installed Options - Defrost Kits - Dual Compressor Models

1 Heater Contactor per Compressor		2 Heater Contactors per Compressor	
Kit Model	List Price (\$US)	Kit Model	List Price (\$US)
DLA24 ¹	5,080		
DLA30 ¹	5,280		
DLA35 ¹	5,944	DLB35 ¹	7,584
DLA40 ¹	5,944	DLB40 ¹	7,584
DLA48 ¹	5,944	DLB48 ¹	7,584
		DLB60 ^{1 2 3}	7,886
		DLB96 ^{1 2 3}	9,552

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)

Factory Installed Options - Timer/Fan Contactor - Single & Parallel-Piped Compressor Models

1 Fan Contactor & Defrost Timer		
Kit Model	Max Motor Amps	List Price (\$US)
TMR-EF-15A	15	1,402
TMR-EF-30A	30	1,486

QV-Series Defrost Kit Options continued on next page.

AIR-COOLED CONDENSING UNITS



QV-Series - 15-100 HP Condensing Units

Fuseblock and Circuit Breaker Options

Max Heater Amps	1 Heater Contactor		2 Heater Contactors		3 Heater Contactors		4 Heater Contactors	
	Fuseblock List Price (\$US)	Circuit Breaker List Price (\$US)	Fuseblock List Price (\$US)	Circuit Breaker List Price (\$US)	Fuseblock List Price (\$US)	Circuit Breaker List Price (\$US)	Fuseblock List Price (\$US)	Circuit Breaker List Price (\$US)
24	179	1,340	-	-	-	-	-	-
30	238	2,086	-	-	-	-	-	-
35	238	2,086	238	2,474	354	2,657	-	-
40	238	2,086	238	2,474	354	2,657	-	-
48	238	2,086	238	2,474	354	2,657	-	-
60	-	-	333	4,161	509	4,393	548	4,600
96	-	-	426	4,189	582	5,598	703	5,770
144	-	-	-	-	736	5,788	962	6,949
192	-	-	-	-	-	-	968	7,022

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

Low Charge - 20-30 HP Condensing Units

The Low Charge dual scroll compressor condensing units feature energy-efficient variable speed EC condenser fan motors and are circuited for R448A and R449A/B low GWP refrigerants. Models incorporate features from our award-winning QV-Series Condensing Units™ and Quantum Air™ Condensers such as the innovative floating coil design with generously sized condensers for energy savings, swept wing fan blades for optimal air flow, and LED lighted control panel and hinged venturi panels for easy access. A floored compressor cabinet with removable compressor tray, service convenience outlet, hinged and removable access panels, integral liquid subcooling circuit, and paint protected galvanized steel housing are all standard features of these units.



STANDARD FEATURES

- Scroll compressors
- 900 RPM Variable Speed EC Condenser Fan Motors
- Available as dual compressor configurations from 20 to 30 HP
- All models are non-flooded and include electronic fan cycling control
- Prepainted 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
- Mechanically formed pre-bent tubing reduces potential leaks
- Enhanced tube design
- Separate power and control electrical panels
- Swept wing fan/Venturi improves airflow and sound
- Crankcase heater
- Pump down switch
- Hinged and removable access panels
- Flip top hinged Venturi panels for easy servicing
- Floored compressor cabinet with removable compressor tray
- LED control and compressor panel lighting
- 110V service convenience outlet
- Service gauge hooks
- Color-coded high and low pressure hoses
- Thru-the-door non-fused disconnect switch
- Suction line isolation valve
- Liquid line isolation valve with sight glass
- Liquid line injection on low temp. models
- Sealed liquid line filter
- Single point alarm with liquid line solenoid lockout
- Control circuit and condenser fan fusing
- Condenser fan contactors
- UL and cUL listed for outdoor use

Low Charge Nomenclature:

CONFIGURABLE BASE MODEL								
K	B	O	D	20	M	4S	E	A
Brand	Style	Compressor Style	Compressor Configuration	Horsepower	Temperature Range	Refrigerant Type	Voltage Code	Vintage
K - Kramer	B - Non-Flooded	O - Scroll	D - Dual Piped		L - Low M - Medium	4S - R-448A & R-449A/B	E - 208-230/3/60 G - 460/3/60	

Note(s):

1. 50 Hz available. Contact Factory for additional information.

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

AIR-COOLED CONDENSING UNITS

KRAMER

Low Charge - 20-30 HP Condensing Units

Scroll Compressor - Dual Compressor - Configurable Base Models

	Nom. H.P.	Model Number	Comp. Model Number (2 per Unit)	Non-Flooded		4 Year Compressor Protection Plan (NET PRICE ADDER \$US)
				208-230/3	460/3	
Medium Temp.	20	KBOD020M4S*A	ZB76K5E	145,410	147,985	1,808
	26	KBOD026M4S*A	ZB95K5E	150,084	152,737	2,082
	30	KBOD030M4S*A	ZB114K5E	167,878	170,800	2,130
Low Temp.	20	KBOD020L4S*A	ZF34K5E	160,345	165,624	1,808
	26	KBOD026L4S*A	ZF41K5E	172,770	178,422	2,082
	30	KBOD030L4S*A	ZF49K5E	186,881	189,250	2,130

Factory Mounted Options & Shipped-Loose Accessories are found on Pages 99 - 100.

* Represents Voltage 208-230/3/60 (E) or 460/3/60 (G)

"-" = Not Available

Factory Installed Options - Dual Compressor - Compressor & Electrical Options

Option Description (All Options are Factory Mounted unless otherwise noted)	List Price Adder (\$US)
Liquid Line Filter (Replaceable Core)	6,885
Suction Line Filter (Sealed)	4,081
Suction Line Filter (Replaceable Core)	5,478
Suction Accumulator	8,011
Oil Separator	5,558
Receiver	18,833
Heated & Insulated Receiver (Must Add Receiver Option)	4,001
Electronic Oil Float	7,284
Condenser Coatings	Contact Factory

Low Charge - 20-30 HP Condensing Units

Defrost Kit Nomenclature

DL	A	24	-
Kit Designator	Heater Contactor QTY	Max Total Heater Amp Value	Special Kit Codes
	A - 1, B - 2, C - 3, D - 4		-1: 1 Evaporator with Multiple Heater Feeds -2: 2 Evaporators with Multiple Heater Feeds PP: Pressure Prop Kits for Large Evaporators

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.

Factory Installed Options - Defrost Kits - Dual Compressor Models

DEFROST KITS	AVAILABLE CONTROLS	DUAL PRICE (\$US)	SINGLE PRICE (\$US)
TMR ONLY	DUAL/SINGLE	1,844	922
DLA24	DUAL ONLY	5,080	
DLA24PP	DUAL ONLY	5,080	
DLA30	DUAL ONLY	5,280	
DLA30PP	DUAL ONLY	5,280	
DLA35	DUAL ONLY	5,944	
DLA35PP	DUAL ONLY	5,944	
DLA40	DUAL ONLY	5,944	
DLA40PP	DUAL ONLY	5,944	
DLA48	DUAL ONLY	5,944	
DLA48PP	DUAL ONLY	5,944	
DLB60-1	DUAL ONLY	7,886	
DLB60-1PP	DUAL ONLY	7,886	
DLB96-1	DUAL ONLY	9,552	
DLB96-1PP	DUAL ONLY	9,552	
DLB35	DUAL/SINGLE	7,584	3,792
DLB35PP	DUAL/SINGLE	7,584	3,792
DLB40	DUAL/SINGLE	7,584	3,792
DLB40PP	DUAL/SINGLE	7,584	3,792
DLB48	DUAL/SINGLE	7,584	3,792
DLB48PP	DUAL/SINGLE	7,584	3,792
DLB60	DUAL/SINGLE	7,886	3,943
DLB60PP	DUAL/SINGLE	7,886	3,943
DLB96	DUAL/SINGLE	9,552	4,776
DLB96PP	DUAL/SINGLE	9,552	4,776
DLD144-2	SINGLE ONLY		7,537
DLD144-2PP	SINGLE ONLY		7,537
DLD192-2	SINGLE ONLY		7,921
DLD192-2PP	SINGLE ONLY		7,921

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

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

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

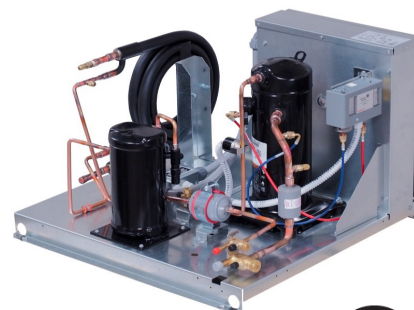
*Defrost Kit Available for Evaporator with Multiple Heater Feeds & Pressure Prop Kit (Special Kit Code: -1PP)

AIR-COOLED CONDENSING UNITS

KRAMER

Next-Gen WC-Series - 1/2 - 6 HP Water-Cooled Condensing Units

Next-Gen WC-Series™ Water Cooled Condensing Units capitalize on the Next-Gen Kompact's award-winning design success. This exciting product offering features greater serviceability, increased unit efficiency, and is compatible for use with low GWP refrigerants. The improvements start with mechanically formed pre-bent tubing for reduced leak potential, high efficiency water cooled coaxial condenser and heat exchange, base mounted shut-off valves, a large electrical control panel with removable door and abundant room for standard components and system accessories along with color-coded and numbered point-to-point wiring that assist in easy service and unit maintenance.



STANDARD FEATURES

- Hermetic or quiet and efficient Scroll compressor
- High efficiency water cooled coaxial condenser
- Base mounted shut-off valves
- Liquid line kit with filter/drier and sight glass with moisture indicator
- Suction and discharge service valves (as required)
- Compressor contactor or start kit (as required)
- Suction line piping (filter optional)
- Color-coded point-to-point wiring
- Large electrical panel with hinged/removable door
- Refrigerant receiver with isolation valve and pressure relief plug
- Adjustable high pressure (auto reset) and low pressure (auto reset) controls
- Electronic defrost timer with defrost contactor/relay on low temperature models (2 evaps. maximum)
- Electronic air defrost timer (Medium temperature models only)
- UL and cUL listed for indoor use

Next-Gen WC-Series Nomenclature:

CONFIGURABLE BASE MODEL							
K	W	O	500	E	4S	E	A
Brand	Style	Compressor Style	Horsepower	Temperature Range	Refrigerant Type	Voltage Code	Vintage
K - Kramer	W - Water-Cooled	H - Hermetic O - Scrolls		E - Extended Medium L - Low M - Medium	4S - Multiple Refrigerants 44 - R-404A	D - 208-230/1/60 E - 208-230/3/60 G - 460/3/60	

For specific model DOE AWEF values in a given application, please refer to this product line's corresponding Sales/Marketing Brochure found on our website.

Next-Gen WC-Series - 1/2 - 6 HP Water-Cooled Condensing Units

Water-Cooled - Hermetic Compressor - Configurable Base Models

Includes Liquid Line Kit with Filter/Drier and Sight Glass with Moisture Indicator, and Defrost Timer or Kit

	Frame Size	Nom. H.P.	Compressor Model Number	Model Number	List Price (\$US)			4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
					208-230/1/60	208-230/3/60	460/3/60		
EXTENDED MEDIUM TEMPERATURE	FW1	1/2	RST45C1E	RWH055E4S*A	7,613	–	–	195	152
	FW1	1/2	RST55C1E	RWH080E4S*A	7,771	–	–	195	156
	FW1	3/4	RST64C1E	RWH090E4S*A	8,006	–	–	195	160
	FW1	3/4	RST70C1E	RWH100E4S*A	8,646	8,939	–	195	167
	FW2	1	RST97C1E	RWH125E4S*A	9,266	9,193	–	221	195

1. Factory Mounted Options & Shipped-Loose Accessories are found on Page 104.
2. “*” represents Voltage. “D” for 208-230/1/60, “E” for 280-230/3/60 and “G” for 460/3/60

“–” = Not Available

WATER-COOLED CONDENSING UNITS

KRAMER

Next-Gen WC-Series - 1/2 - 6 HP Water-Cooled Condensing Units

Water-Cooled - Scroll Compressor - Configurable Base Models

Includes Liquid Line Kit with Filter/Drier and Sight Glass with Moisture Indicator, and Defrost Timer or Kit

	Frame Size	Nom. H.P.	Compressor Model Number	Model Number	List Price (\$US)			4 Year Compressor Protection Plan (NET PRICE ADDER \$US)	Approx. Ship Weight (lbs)
					208-230/1/60	208-230/3/60	460/3/60		
MEDIUM TEMP.	FW1	1/2	ZB06KAE	KWO060M4S*A	13,599	13,620	—	361	195
	FW1	1/2	ZB07KAE	KWO080M4S*A	13,734	13,780	—	361	195
	FW1	1	ZB08KAE	KWO100M4S*A	13,868	13,959	—	361	195
EXTENDED MEDIUM TEMPERATURE	FW1	1-1/3	ZS09KAE	KWO130E4S*A	14,020	14,161	14,681	361	195
	FW2	1-1/2	ZS11KAE	KWO150E4S*A	14,999	15,143	15,660	361	205
	FW2	1-3/4	ZS13KAE	KWO180E4S*A	15,357	15,497	16,015	361	210
	FW3	2	ZS15KAE	KWO200E4S*A	15,623	15,763	16,282	361	215
	FW3	2-1/2	ZS19KAE	KWO250E4S*A	15,803	15,977	16,590	361	230
	FW4	3	ZS21KAE	KWO300E4S*A	16,042	16,247	16,958	471	305
	FW4	3-1/2	ZS26KAE	KWO350E4S*A	17,043	17,263	17,769	471	325
	FW4	4	ZS29KAE	KWO400E4S*A	17,587	17,831	18,321	493	352
	FW4	4-1/2	ZS33KAE	KWO450E4S*A	17,364	17,610	18,250	493	375
	FW4	6	ZS38K4E	KWO500E4S*A	18,233	18,484	19,272	506	383
	FW4	6-1/2	ZS45K4E	KWO600E4S*A	—	21,333	21,676	506	405
LOW TEMPERATURE	FW2	1	ZF03KAE	KWO100L4S*A	14,249	15,035	—	361	230
	FW2	1-1/3	ZF04KAE	KWO130L4S*A	14,599	15,297	—	361	230
	FW2	1-1/2	ZF05KAE	KWO160L4S*A	15,052	15,656	—	361	230
	FW2	2	ZF07KAE	KWO230L4S*A	15,902	16,113	16,618	361	230
	FW3	2-1/2	ZF08K4E	KWO250L4S*A	16,451	16,683	16,861	361	240
	FW3	3	ZF09K4E	KWO300L4S*A	16,850	17,099	19,147	471	245
	FW3	3-1/2	ZF11K4E	KWO350L4S*A	17,613	17,864	18,284	471	255
	FW4	4	ZF13K4E	KWO400L4S*A	18,372	18,609	19,031	493	352
	FW4	5	ZF15K4E	KWO500L4S*A	18,609	18,840	19,277	506	367
	FW4	6	ZF18K4E	KWO600L4S*A	—	21,240	22,393	506	383

1. Factory Mounted Options & Shipped-Loose Accessories are found on Page 105.

2. "*" represents Voltage. "D" for 208-230/1/60, "E" for 280-230/3/60 and "G" for 460/3/60

"—" = Not Available

Next-Gen WC-Series - 1/2 - 6 HP Water-Cooled Condensing Units**Options**

Option Description (All Options are Factory Mounted unless otherwise noted)	H.P Range/ Cabinet	List Price Adder (\$US)
Water Regulating Valve (Shipped-Loose)	0.5 - 2.0	973
	2.5 - 3.5	1,056
	4.0 - 4.5	1,186
	5.0 - 6.5	1,746
Liquid Line with Premium Components: Replaceable Core Filter/Drier & Sight Glass	FW4	813
Suction Line Components: Sealed Filter	FW1	528
	FW2-FW4	629
Suction Line Components: Replaceable Core Filter	FW4	1,851
Suction Accumulator (Cannot be ordered without Suction Line components)	FW1	814
	FW2-FW4	1,257
Pumpdown Toggle Switch	ALL	520
Phase Loss Monitor*	ALL	1,808
Cupronickle Heat Exchanger	ALL	Contact Factory
Two-Tiered Stacking Rack (Shipped-Loose)	ALL	Contact Factory

1, If ordering a Replaceable Core Suction Filter, a Replaceable Core Liquid Line Filter must also be ordered. If ordering a Replaceable Core Liquid Line Filter, a Replaceable Core Suction Filter must also be ordered.

* Only available on units that are 3 Phase.

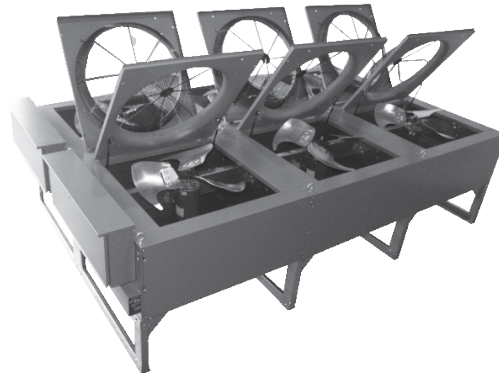
For Defrost Kit Options, please see pages 70 - 71.

AIR-COOLED CONDENSERS

KRAMER

Quantum Air™ Large Air-Cooled Condensers

Our remote Air Cooled Condensers feature an innovative design that provides a wide array of solutions focusing on performance, energy efficiency, reduced sound output, and other attributes to meet the needs of grocery, supermarket, industrial cooling and commercial warehousing industries. For easy installation and serviceability, the units feature lifting eyes, hinged leg design, LED control panel lighting, and hinged fan panels. The condensers are available with 1 to 14 fans in single and double fan width models with vertical or horizontal air flow.



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

*Models with 1 to 4 fans in length have 3/8" copper tubing, which results in using less refrigerant. Models with 5 to 7 fans in length use 1/2" copper tubing

Quantum Air™ Large Air-Cooled Condensers Nomenclature:

CONFIGURABLE BASE MODEL							
K	D	D	087	G	D	3	A
Brand	Series	Width	Capacity*	Voltage	Motor	Number of Fans	Vintage
K - Kramer	D - Condenser	S - Single Wide D - Double Wide	MBTUH	E - 208-230/3/60 G - 460/3/60 N - 200-220/3/50 Q - 380/3/50 X - Non-Catalogued	B - 1140 RPM, 1.5 HP D - 850 RPM, 1.5 HP L - 850 RPM, 1 HP E - 550 RPM, 1/3 HP G - 900 RPM Rail Mount Variable Speed EC K - 1200 RPM Rail Mount Variable Speed EC	1 - 7	

*Capacity at 10 FPI per 1°F TD

Quantum Air™ Large Air-Cooled Condensers
Models with 1140 RPM, 1.5 HP Motors

	Model Number	List Price (\$US)				Fan Configuration	Approx. Net Weight (lbs)
		8 FPI	10 FPI	12 FPI	14 FPI		
Single Fan Width	KDS004^B1A	11,240	11,911	12,582	13,251	1 x 1	350
	KDS006^B1A	14,308	14,979	15,650	16,319	1 x 1	375
	KDS007^B1A	15,981	16,652	17,323	17,992	1 x 1	400
	KDS012^B2A	23,509	24,851	26,193	27,531	1 x 2	725
	KDS015^B2A	32,359	33,701	35,043	36,381	1 x 2	750
	KDS018^B2A	38,343	39,685	41,027	42,365	1 x 2	775
	KDS022^B3A	47,318	49,331	51,344	53,351	1 x 3	1,125
	KDS027^B3A	55,093	57,106	59,119	61,126	1 x 3	1,150
	KDS030^B4A	66,109	68,793	71,477	74,153	1 x 4	1,500
	KDS036^B4A	74,782	77,466	80,150	82,826	1 x 4	1,525
	KDS039^B5A	82,481	85,836	89,191	92,536	1 x 5	1,875
	KDS047^B5A	95,963	99,318	102,673	106,018	1 x 5	1,900
	KDS056^B6A	114,840	118,866	122,892	126,906	1 x 6	2,275
	KDS065^B7A	134,940	139,637	144,334	149,017	1 x 7	2,650
Double Fan Width	KDD022^B2A	48,548	51,232	53,916	56,592	2 x 2	1,500
	KDD030^B2A	64,603	67,287	69,971	72,647	2 x 2	1,525
	KDD036^B2A	75,229	77,913	80,597	83,273	2 x 2	1,550
	KDD045^B3A	96,632	100,658	104,684	108,698	2 x 3	2,275
	KDD054^B3A	113,056	117,082	121,108	125,122	2 x 3	2,300
	KDD059^B4A	129,380	134,748	140,116	145,468	2 x 4	3,025
	KDD072^B4A	149,335	154,703	160,071	165,423	2 x 4	3,050
	KDD078^B5A	164,962	171,672	178,382	185,072	2 x 5	3,775
	KDD094^B5A	192,216	198,926	205,636	212,326	2 x 5	3,800
	KDD113^B6A	229,652	237,704	245,756	253,784	2 x 6	4,550
	KDD131^B7A	270,539	279,933	289,327	298,693	2 x 7	5,300

Factory Installed Options and Shipped-Loose Accessories are located on pages 113 - 114.

^ Represents Voltage. "E" - 208-230/3/60, "G" - 460/3/60, "N" - 200-220/3/50 or "Q" - 380/3/50

AIR-COOLED CONDENSERS



Quantum Air™ Large Air-Cooled Condensers

Models with 850 RPM, 1.5 HP Motors

	Model Number	List Price (\$US)				Fan Configuration	Approx. Net Weight (lbs)
		8 FPI	10 FPI	12 FPI	14 FPI		
Single Fan Width	KDS004^D1A	11,125	11,796	12,467	13,136	1 x 1	350
	KDS005^D1A	14,219	14,890	15,561	16,230	1 x 1	375
	KDS007^D1A	15,845	16,516	17,187	17,856	1 x 1	400
	KDS010^D2A	24,040	25,382	26,724	28,062	1 x 2	725
	KDS014^D2A	32,260	33,602	34,944	36,282	1 x 2	750
	KDS015^D2A	35,773	37,115	38,457	39,795	1 x 2	775
	KDS021^D3A	47,605	49,618	51,631	53,638	1 x 3	1,125
	KDS024^D3A	53,896	55,909	57,922	59,929	1 x 3	1,150
	KDS028^D4A	64,652	67,336	70,020	72,696	1 x 4	1,500
	KDS032^D4A	72,499	75,183	77,867	80,543	1 x 4	1,525
	KDS035^D5A	79,052	82,407	85,762	89,107	1 x 5	1,875
	KDS043^D5A	94,897	98,252	101,607	104,952	1 x 5	1,900
	KDS052^D6A	113,869	117,895	121,921	125,935	1 x 6	2,275
	KDS060^D7A	133,509	138,206	142,903	147,586	1 x 7	2,650
Double Fan Width	KDD019^D2A	46,772	49,456	52,140	54,816	2 x 2	1,500
	KDD028^D2A	64,413	67,097	69,781	72,457	2 x 2	1,525
	KDD031^D2A	70,345	73,029	75,713	78,389	2 x 2	1,550
	KDD041^D3A	95,806	99,832	103,858	107,872	2 x 3	2,275
	KDD048^D3A	108,778	112,804	116,830	120,844	2 x 3	2,300
	KDD055^D4A	129,446	134,814	140,182	145,534	2 x 4	3,025
	KDD065^D4A	145,303	150,671	156,039	161,391	2 x 4	3,050
	KDD069^D5A	158,039	164,749	171,459	178,149	2 x 5	3,775
	KDD086^D5A	190,128	196,838	203,548	210,238	2 x 5	3,800
	KDD103^D6A	227,852	235,904	243,956	251,984	2 x 6	4,550
	KDD121^D7A	267,053	276,447	285,841	295,207	2 x 7	5,300

Factory Installed Options and Shipped-Loose Accessories are located on pages 113 - 114.

^ Represents Voltage. "E" - 208-230/3/60, "G" - 460/3/60, "N" - 200-220/3/50 or "Q" - 380/3/50

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

Quantum Air™ Large Air-Cooled Condensers

Models with 850 RPM, 1.0 HP Motors

	Model Number	List Price (\$US)				Fan Configuration	Approx. Net Weight (lbs)
		8 FPI	10 FPI	12 FPI	14 FPI		
Single Fan Width	KDS004^L1A	10,397	11,068	11,739	12,408	1 x 1	350
	KDS006^L1A	13,460	14,131	14,802	15,471	1 x 1	375
	KDS008^L1A	16,089	16,760	17,431	18,100	1 x 1	400
	KDS010^L2A	22,579	23,921	25,263	26,601	1 x 2	725
	KDS012^L2A	28,486	29,828	31,170	32,508	1 x 2	750
	KDS015^L2A	34,439	35,781	37,123	38,461	1 x 2	775
	KDS019^L3A	44,999	47,012	49,025	51,032	1 x 3	1,125
	KDS023^L3A	51,501	53,514	55,527	57,534	1 x 3	1,150
	KDS026^L4A	62,303	64,987	67,671	70,347	1 x 4	1,500
	KDS030^L4A	70,662	73,346	76,030	78,706	1 x 4	1,525
	KDS032^L5A	75,881	79,236	82,591	85,936	1 x 5	1,875
	KDS040^L5A	93,461	96,816	100,171	103,516	1 x 5	1,900
	KDS048^L6A	112,767	116,793	120,819	124,833	1 x 6	2,275
	KDS056^L7A	131,959	136,656	141,353	146,036	1 x 7	2,650
Double Fan Width	KDD017^L2A	43,503	46,187	48,871	51,547	2 x 2	1,500
	KDD026^L2A	62,278	64,962	67,646	70,322	2 x 2	1,525
	KDD030^L2A	70,691	73,375	76,059	78,735	2 x 2	1,550
	KDD038^L3A	94,170	98,196	102,222	106,236	2 x 3	2,275
	KDD046^L3A	109,881	113,907	117,933	121,947	2 x 3	2,300
	KDD051^L4A	126,454	131,822	137,190	142,542	2 x 4	3,025
	KDD060^L4A	144,024	149,392	154,760	160,112	2 x 4	3,050
	KDD063^L5A	153,497	160,207	166,917	173,607	2 x 5	3,775
	KDD080^L5A	189,427	196,137	202,847	209,537	2 x 5	3,800
	KDD097^L6A	227,505	235,557	243,609	251,637	2 x 6	4,550
	KDD113^L7A	266,646	276,040	285,434	294,800	2 x 7	5,300

Factory Installed Options and Shipped-Loose Accessories are located on pages 113 - 114.

^ Represents Voltage. "E" - 208-230/3/60, "G" - 460/3/60, "N" - 200-220/3/50 or "Q" - 380/3/50

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

AIR-COOLED CONDENSERS



Quantum Air™ Large Air-Cooled Condensers

Models with 550 RPM, 1/3 HP Motors

	Model Number	List Price (\$US)				Fan Configuration	Approx. Net Weight (lbs)
		8 FPI	10 FPI	12 FPI	14 FPI		
Single Fan Width	KDS004^E1	12,004	12,675	13,346	14,015	1 x 1	350
	KDS005^E1	14,134	14,805	15,476	16,145	1 x 1	375
	KDS006^E1	15,923	16,594	17,265	17,934	1 x 1	400
	KDS008^E2	23,662	25,004	26,346	27,684	1 x 2	725
	KDS011^E2	31,191	32,533	33,875	35,213	1 x 2	750
	KDS012^E2	34,493	35,835	37,177	38,515	1 x 2	775
	KDS016^E3	47,735	49,748	51,761	53,768	1 x 3	1,125
	KDS018^E3	52,314	54,327	56,340	58,347	1 x 3	1,150
	KDS021^E4	65,431	68,115	70,799	73,475	1 x 4	1,500
	KDS025^E4	73,363	76,047	78,731	81,407	1 x 4	1,525
	KDS028^E5	83,129	86,484	89,839	93,184	1 x 5	1,875
	KDS032^E5	92,134	95,489	98,844	102,189	1 x 5	1,900
	KDS040^E6	117,229	121,255	125,281	129,295	1 x 6	2,275
	KDS046^E7	137,054	141,751	146,448	151,131	1 x 7	2,650
Double Fan Width	KDD016^E2	50,729	53,413	56,097	58,773	2 x 2	1,500
	KDD021^E2	65,431	68,115	70,799	73,475	2 x 2	1,525
	KDD025^E2	72,712	75,396	78,080	80,756	2 x 2	1,550
	KDD032^E3	100,405	104,431	108,457	112,471	2 x 3	2,275
	KDD037^E3	109,964	113,990	118,016	122,030	2 x 3	2,300
	KDD043^E4	134,334	139,702	145,070	150,422	2 x 4	3,025
	KDD050^E4	149,657	155,025	160,393	165,745	2 x 4	3,050
	KDD055^E5	171,373	178,083	184,793	191,483	2 x 5	3,775
	KDD063^E5	188,142	194,852	201,562	208,252	2 x 5	3,800
	KDD080^E6	238,569	246,621	254,673	262,701	2 x 6	4,550
	KDD093^E7	277,411	286,805	296,199	305,565	2 x 7	5,300

Factory Installed Options and Shipped-Loose Accessories are located on pages 113 - 114.

^ Represents Voltage. "E" - 208-230/3/60, "G" - 460/3/60, "N" - 200-220/3/50 or "Q" - 380/3/50

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

Quantum Air™ Large Air-Cooled Condensers

Models with 1200 RPM, Variable Speed EC Motors

	Model Number	List Price (\$US)				Fan Configuration	Approx. Net Weight (lbs)
		8 FPI	10 FPI	12 FPI	14 FPI		
Single Fan Width	KDS005^K1A	20,391	21,062	21,733	22,402	1 x 1	350
	KDS006^K1A	23,462	24,133	24,804	25,473	1 x 1	375
	KDS008^K1A	25,135	25,806	26,477	27,146	1 x 1	400
	KDS013^K2A	41,814	43,156	44,498	45,836	1 x 2	725
	KDS016^K2A	50,662	52,004	53,346	54,684	1 x 2	750
	KDS019^K2A	56,649	57,991	59,333	60,671	1 x 2	775
	KDS024^K3A	74,777	76,790	78,803	80,810	1 x 3	1,125
	KDS028^K3A	82,549	84,562	86,575	88,582	1 x 3	1,150
	KDS032^K4A	102,720	105,404	108,088	110,764	1 x 4	1,500
	KDS038^K4A	111,393	114,077	116,761	119,437	1 x 4	1,525
	KDS041^K5A	128,243	131,598	134,953	138,298	1 x 5	1,875
	KDS049^K5A	141,726	145,081	148,436	151,781	1 x 5	1,900
	KDS059^K6A	169,758	173,784	177,810	181,824	1 x 6	2,275
	KDS069^K7A	199,008	203,705	208,402	213,085	1 x 7	2,650
Double Fan Width	KDD023^K2A	85,163	87,847	90,531	93,207	2 x 2	1,500
	KDD032^K2A	101,213	103,897	106,581	109,257	2 x 2	1,525
	KDD038^K2A	111,842	114,526	117,210	119,886	2 x 2	1,550
	KDD047^K3A	151,545	155,571	159,597	163,611	2 x 3	2,275
	KDD057^K3A	167,972	171,998	176,024	180,038	2 x 3	2,300
	KDD063^K4A	202,602	207,970	213,338	218,690	2 x 4	3,025
	KDD075^K4A	222,555	227,923	233,291	238,643	2 x 4	3,050
	KDD082^K5A	256,491	263,201	269,911	276,601	2 x 5	3,775
	KDD099^K5A	283,742	290,452	297,162	303,852	2 x 5	3,800
	KDD118^K6A	339,483	347,535	355,587	363,615	2 x 6	4,550
	KDD138^K7A	398,691	408,085	417,479	426,845	2 x 7	5,300

Factory Installed Options and Shipped-Loose Accessories are located on pages 113 - 114.

^ Represents Voltage. "E" - 208-230/3/60, "G" - 460/3/60, "N" - 200-220/3/50 or "Q" - 380/3/50

AIR-COOLED CONDENSERS



Quantum Air™ Large Air-Cooled Condensers

Models with 900 RPM, Variable Speed EC Motors

	Model Number	List Price (\$US)				Fan Configuration	Approx. Net Weight (lbs)
		8 FPI	10 FPI	12 FPI	14 FPI		
Single Fan Width	KDS004^G1A	20,391	21,062	21,733	22,402	1 x 1	350
	KDS005^G1A	23,462	24,133	24,804	25,473	1 x 1	375
	KDS007^G1A	25,135	25,806	26,477	27,146	1 x 1	400
	KDS010^G2A	41,814	43,156	44,498	45,836	1 x 2	725
	KDS014^G2A	50,662	52,004	53,346	54,684	1 x 2	750
	†KDS015^G2A	56,649	57,991	59,333	60,671	1 x 2	775
	KDS021^G3A	74,777	76,790	78,803	80,810	1 x 3	1,125
	†KDS025^G3A	82,549	84,562	86,575	88,582	1 x 3	1,150
	KDS028^G4A	102,720	105,404	108,088	110,764	1 x 4	1,500
	†KDS033^G4A	111,393	114,077	116,761	119,437	1 x 4	1,525
	KDS035^G5A	128,243	131,598	134,953	138,298	1 x 5	1,875
	†KDS044^G5A	141,726	145,081	148,436	151,781	1 x 5	1,900
	†KDS052^G6A	169,758	173,784	177,810	181,824	1 x 6	2,275
	†KDS061^G7A	199,008	203,705	208,402	213,085	1 x 7	2,650
Double Fan Width	KDD020^G2A	85,163	87,847	90,531	93,207	2 x 2	1,500
	KDD028^G2A	101,213	103,897	106,581	109,257	2 x 2	1,525
	†KDD032^G2A	111,842	114,526	117,210	119,886	2 x 2	1,550
	KDD042^G3A	151,545	155,571	159,597	163,611	2 x 3	2,275
	†KDD049^G3A	167,972	171,998	176,024	180,038	2 x 3	2,300
	KDD056^G4A	202,602	207,970	213,338	218,690	2 x 4	3,025
	†KDD065^G4A	222,555	227,923	233,291	238,643	2 x 4	3,050
	KDD070^G5A	256,491	263,201	269,911	276,601	2 x 5	3,775
	†KDD087^G5A	283,742	290,452	297,162	303,852	2 x 5	3,800
	†KDD105^G6A	339,483	347,535	355,587	363,615	2 x 6	4,550
	†KDD122^G7A	398,691	408,085	417,479	426,845	2 x 7	5,300

Factory Installed Options and Shipped-Loose Accessories are located on pages 113 - 114.

^ Represents Voltage. "E" - 208-230/3/60, "G" - 460/3/60, "N" - 200-220/3/50 or "Q" - 380/3/50

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

Quantum Air™ Large Air-Cooled Condensers

Quantum Air™ Large Air-Cooled Condensers Options

	Fan Configuration												
	1 X 1	1 X 2	1 X 3	1 X 4	1 X 5	1 X 6	1 X 7	2 X 2	2 X 3	2 X 4	2 X 5	2 X 6	2 X 7
Disconnect Options													
Through the door non-fused disconnect	Standard												
Through the door fused disconnect	735	735	1,243	1,413	1,550	1,696	1,836	1,413	1,696	2,188	2,686	3,184	3,678
Main Power Circuit Breaker	1,507	1,507	1,866	1,866	1,866	1,866	1,866	1,866	1,866	1,998	1,998	1,998	1,998
Bladed Safety Switch, Non-fused	1,342	1,342	2,586	2,586	2,586	2,586	2,586	2,586	2,586	3,265	3,265	3,265	3,265
110 VAC - 20 Amp Convenience Outlet powered by separate building feed or transformer	541	541	541	541	541	541	541	541	541	541	541	541	541
Fan Cycling Options - Requires Contactor Option													
Ambient fan cycling†	–	1,498	2,041	2,721	3,397	4,077	4,758	1,498	2,041	2,721	3,397	4,077	4,758
Mechanical Pressure fan cycling (per circuit) W/O Header†	–	2,253	2,467	3,285	4,109	4,931	5,747	2,253	2,467	3,285	4,109	4,931	5,747
Mechanical Pressure fan cycling (per circuit) W/ Header†	–	2,871	3,696	4,521	5,349	6,174	7,015	2,871	3,696	4,521	5,349	6,174	7,015
Electronic Pressure fan cycling (per circuit) W/O Header†	–	2,337	2,929	4,864	6,802	8,737	10,263	2,337	2,929	4,864	6,802	8,737	10,263
Electronic Pressure fan cycling (per circuit) W/ Header†	–	3,319	5,253	7,187	9,130	10,636	12,497	3,319	5,253	7,187	9,130	10,636	12,497
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†	Contact Factory												
Variable speed header end fan (1 or 2 Circuit) Electronic control - pressure†	Contact Factory												
Variable Frequency Drive (VFD)													
VFD Package - Shipped Loose†	Contact Factory												
VFD Package - Factory Mounted†	Contact Factory												
Control Boards - Items with this mark also ‡ require the contactor option													
CPC relay board + xfmr (1x1 thru 2x4 config) ‡	4,835	4,835	4,835	4,835	4,835	4,835	4,835	4,835	4,835	4,835	-	-	-
CPC relay boards (2)+ xfmr (2x5 thru 2x7 config) ‡	-	-	-	-	-	-	-	-	-	-	9,066	9,066	9,066
CPC relay board condenser split 50/50 (1 board + relay)	5,031	5,031	5,031	5,031	5,031	5,031	5,031	5,031	5,031	5,031	5,031	5,031	5,031
CPC analog speed control board and transformer	5,061	5,061	5,061	5,061	5,061	5,061	5,061	5,061	5,061	5,061	5,061	5,061	5,061
DANFOSS relay board + xfmr (1x1 thru 2x4 config) ‡	4,852	4,852	4,852	4,852	4,852	4,852	4,852	4,852	4,852	4,852	-	-	-
DANFOSS relay boards (2) + xfmr (2x5 thru 2x7 config) ‡	-	-	-	-	-	-	-	-	-	-	9,948	9,948	9,948
DANFOSS relay board condenser split 50/50 (relay) ‡	7,127	7,127	7,127	7,127	7,127	7,127	7,127	7,127	7,127	7,127	7,127	7,127	7,127
DANFOSS analog speed control board and transformer	5,603	5,603	5,603	5,603	5,603	5,603	5,603	5,603	5,603	5,603	5,603	5,603	5,603
VSEC Stand alone motor control (C450)	Contact Factory												
Control Options													
Control Circuit Breaker (2P - 15A)	486	486	486	486	486	486	486	486	486	486	486	486	486
Control circuit transformert	916	916	916	916	916	916	916	916	916	916	916	916	916

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

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

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

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

“–” = Not Available

Quantum Air™ Large Air-Cooled Condensers Options continued on next page.

AIR-COOLED CONDENSERS

KRAMER

Quantum Air™ Large Air-Cooled Condensers

Quantum Air™ Large Air-Cooled Condensers Options

	Fan Configuration												
	1 X 1	1 X 2	1 X 3	1 X 4	1 X 5	1 X 6	1 X 7	2 X 2	2 X 3	2 X 4	2 X 5	2 X 6	2 X 7
Fan Control Options (Contactors)													
Individual Motor Contactors†	385	770	1,155	1,540	1,925	2,310	2,695	1,540	2,310	3,080	3,850	4,620	5,390
Paired Motor Contactors†	-	-	-	-	-	-	-	770	1,155	1,540	1,925	2,310	2,695
NEMA rated Contactors - Individual†	1,579	3,158	4,737	6,316	7,895	9,474	11,053	6,316	9,474	12,632	15,790	18,948	22,106
NEMA rated Contactors - PAIRED†	-	-	-	-	-	-	-	3,158	4,737	6,316	7,895	9,474	11,053
Individual motor fuses†	388	776	1,164	1,552	1,940	2,328	2,716	1,552	2,328	3,104	3,880	4,656	5,432
Paired motor fuses†	-	-	-	-	-	-	-	776	1,164	1,552	1,940	2,328	2,716
Individual circuit breakers††	1,076	2,152	3,228	4,304	5,380	6,456	7,532	4,304	6,456	8,608	10,760	12,912	15,064
Paired circuit breakers††	-	-	-	-	-	-	-	2,152	3,228	4,304	5,380	6,456	7,532
Individual motor terminal boards†	273	546	819	1,092	1,365	1,638	1,911	1,092	1,638	2,184	2,730	3,276	3,822
Paired motor terminal blocks†	-	-	-	-	-	-	-	546	819	1,092	1,365	1,638	1,911
Fan toggle switches - per fan (to control contactors)†	162	324	486	648	810	972	1,134	648	972	1,296	1,620	1,944	2,268
Fan toggle switches - PAIRED (to control contactors)†	-	-	-	-	-	-	-	324	486	648	810	972	1,134
Fan toggle switches - per fan (to control Motors)†	735	1,470	2,205	2,940	3,675	4,410	5,145	2,940	4,410	5,880	7,350	8,820	10,290
Fan toggle switches - PAIRED (to control Motors)†	-	-	-	-	-	-	-	1,470	2,205	2,940	3,675	4,410	5,145
Build Options**													
Horizontal Air Discharge	1,087	1,588	2,341	2,873	3,378	3,887	4,361	3,181	4,632	5,743	6,756	7,769	8,725
Stainless Steel Housing	Contact Application Engineering												
Leg length - 21" or 30" - Standard Vertical air discharge	228	453	678	678	678	836	1,062	453	678	678	678	836	1,062
Leg length - 46" (Vertical air discharge only)	271	537	802	802	802	988	1,249	537	802	802	802	988	1,249
Box Style Leg at every location- 25" (Vertical air discharge only)	788	1,181	1,577	1,969	2,363	2,755	3,151	1,181	1,577	1,969	2,363	2,755	3,151
Sealtite wiring to motor rail	338	419	636	857	1,056	1,275	1,486	857	1,275	1,696	2,125	2,547	2,957
Sealtite wiring to electrical box	1,123	2,242	3,365	4,487	5,606	6,728	7,852	4,487	6,728	8,971	11,216	13,458	15,701
Condenser Base with 18" legs (Vertical air discharge only)	2,749	3,968	5,189	7,431	8,991	10,307	11,972	3,968	5,189	7,431	8,991	10,719	12,452
Condenser Base with 30 or 46" legs (Vertical air discharge only)	2,944	4,358	5,770	7,359	9,960	11,429	13,281	4,358	5,770	8,210	9,960	11,885	13,811
Condenser / Receiver Assembly (Vertical air discharge only)	Contact Application Engineering												
Header End control panel mounting (Specify location change)	No Additional Charge for this Feature												

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

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

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

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

"-" = Not Available

Small Air-Cooled Condensers

Our small Remote Air Cooled Condensers' innovative design provides a wide array of solutions focusing on performance, energy efficiency, reduced sound output and other requirements to meet the needs of the grocery, supermarket, industrial cooling and commercial warehousing industries.



STANDARD FEATURES

- Direct drive motor arrangement
- Vertical air flow
- 1075 or 850 RPM motors
- Motors with inherent thermal overload protection
- Copper tube, aluminum fin coils
- Leak tested at 450 PSIG
- Vinyl coated heavy gauge steel fan guards
- Heavy gauge galvanized steel construction for superior corrosion resistance
- Internal divider isolates fan cells (2 fan models)
- Fan cycling head pressure control (2 fan models)
- Variable speed fan control (header end fan only)
- Flooded head pressure control
- Sub-cooling circuit
- Horizontal air flow
- Multi-circuited coils
- Wide selection of fin coatings and materials

Small Air-Cooled Condensers Nomenclature:

CONFIGURABLE BASE MODEL												
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* 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 G – 460V/3/60 D – 208-230V/1/60 X – Other E – 208-230V/3/60 Codes D, E, F, and G can be used F – 460V/1/60 with 50 or 60 Hz power						XIII. Revision Code – Single Alphanumeric Character A – Initial Release						
VI. Motor/Fan Type A – 1075 RPM, 0.33 HP, Metal Blade C – 850 RPM, 0.25 HP, Metal Blade H – 1075 RPM, 0.5 HP Totally Enclosed, Metal Blade X – Other						* Contact Application Engineering to obtain price quotes for special fin materials or coatings.						
VII. Length in Fans – 1 or 2												
VIII. Coil Density A – 8 fpi B – 10 fpi D – 14 fpi C – 12 fpi X – Other												

AIR-COOLED CONDENSERS

KRAMER

Small Air-Cooled Condensers

1075 RPM .33 HP MOTORS			
Model Number	10 FPI List Price	Fan Configuration	Approx Net Weight (LBS.)
KDS001DA1B12A1A	\$4,089	1 x 1	80
KDS002DA1B12A1A	5,365	1 x 1	86
KDS003DA1B12A1A	5,992	1 x 1	107
KDS005DA1B12A1A	10,952	1 x 1	116
KDS007DA2B12A1A	13,715	1 x 2	164
KDS009DA2B12A1A	16,787	1 x 2	179
KDS011DA2B12A1A	18,848	1 x 2	195

850 RPM .25 HP MOTORS			
Model Number	10 FPI List Price	Fan Config.	Approx Net Weight (LBS.)
KDS001DC1B12A1A	\$4,483	1 x 1	80
KDS002DC1B12A1A	6,432	1 x 1	86
KDS003DC1B12A1A	7,354	1 x 1	107
KDS004DC1B12A1A	11,608	1 x 1	116
KDS006DC2B12A1A	14,318	1 x 2	164
KDS008DC2B12A1A	18,000	1 x 2	179
KDS009DC2B12A1A	19,565	1 x 2	195

1075 RPM .33 HP MOTORS - Totally Enclosed			
Model Number	10 FPI List Price	Fan Config.	Approx. Net Weight (LBS.)
KDS001DH1B12A1A	\$5,949	1 x 1	80
KDS002DH1B12A1A	7,226	1 x 1	86
KDS003DH1B12A1A	7,856	1 x 1	107
KDS005DH1B12A1A	12,812	1 x 1	116
KDS007DH2B12A1A	17,437	1 x 2	164
KDS009DH2B12A1A	20,509	1 x 2	179
KDS011DH2B12A1A	22,568	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	\$218	Available with motor options A, C
F-460/1/60	N/C	Available with motor options A & C
G-460/3/60	\$218	Available with motor options A, C

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
A- 1075, 0.33HP	—	Available in Voltage codes A, D, E, F, G
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	(\$548)	—	\$671	\$1,342
1 X 2	(\$1,094)	—	\$1,342	\$2,677

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	\$242	\$242
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, coating, 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.

Principal Terms and Conditions of Sale

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, carrier, and shipping point. If special routing (dedicated/contract haul, flatbed delivery, appointment to meet a crane, etc.) is required/requested for a purchase order of \$10,000.00 or greater, Buyer will be assessed a special delivery charge per truck. Charges of \$80 per hour resulting from excessive unloading time, beyond the allotted "free time" (two hours per stop on partial loads and/or full truck loads), as defined by the carrier, is subject to being passed on to the customer. The responsibility of the Seller shall cease upon delivery of product in good condition to a common carrier (TL, LTL, FLATBED, ETC. Since all goods are shipped at Buyer's risk, they should be examined carefully 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 or 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. Sometimes damage or loss is not readily apparent, so it is suggested that Buyer thoroughly inspect each shipment as soon as it is received for concealed loss or damage. Refer to HTPG's 2019 Freight Policy for further information.
5. **Taxes:** Any sales, use, excise, or similar tax payable by Seller which is or may be imposed by any taxing authority upon manufacture, sale or delivery of goods covered by any order or any increase in rate of any such tax now in force, shall be added to the sales price; if not collected at the time of payment of sales price, Buyer will hold Seller harmless.
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.
7. **THIS GUARANTEE SUPERSEDES AND IS IN LIEU OF ANY AND ALL OTHER WARRANTIES BY LAW OR CUSTOM, EITHER EXPRESSED OR IMPLIED INCLUDING, BUT NOT LIMITED BY THIS ENUMERATION, ANY GUARANTEE AS TO QUALITY OR FITNESS FOR ANY PARTICULAR PURPOSE, EXCEPT AS SET FORTH ABOVE. NO PERSON, AGENT, OR DEALER IS AUTHORIZED TO GIVE ANY WARRANTIES ON BEHALF OF SELLER NOR TO ASSUME FOR SELLER ANY OTHER LIABILITY IN CONNECTION WITH ANY OF THE SELLER'S PRODUCTS.**
8. **Delivery:** Seller shall not be liable for any delays in or failure of delivery due to acts of God or public authority, labor disputes, accidents, fires, floods, extreme weather conditions, failure of and delays by carriers, shortages of material, delays of a supplier, and any other cause beyond Seller's control. In no event shall Seller be liable for consequential or special damages arising out of a delay in or failure of delivery. Failure to meet estimated ship dates will not be considered sufficient cause of cancellation of orders.
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 acknowledgement.

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.