

**KE-SERIES** 



# LOW PROFILE UNIT COOLER ELECTRIC DEFROST MODELS

3,600 to 28,000 BTUH

## SMALL TO MEDIUM WALK-INS COOLER & FREEZER APPLICATIONS









#### **Features**

Kramer Low Profile Unit Coolers feature an air draw-through design, easy access for serviceability, and are available as air, electric or hot gas defrost models. Electric Defrost models (prefix "KE") are designed for use in coolers and freezers between 34°F and to -20°F. Complete electric defrost refrigeration systems are available. These Low Profile Unit Coolers can be used in combination with Kramer's Next-Gen Kompact K-Series Condensing Units to provide a complete refrigeration solution for small to medium walk-ins.

#### **SIZES**

There are a wide array of sizes available with capacities ranging from 3,600 to 28,000 BTUH at a 10°TD spanning from 780 to 4,980 cfm. One through six fan models are available.

#### **HOUSING**

The embossed Aluminum casing is lightweight yet durable. Each fan section is baffled to prevent short cycling of the air. The unit is designed to mount flush to the ceiling and meets all NSF requirements. The top pan is slotted for simple installation. Drain fittings are installed in the bottom of the drain pan for easy field connection and the drain fitting can be quickly replaced without replacing the entire drain pan.





End panels slide out for easy serviceability from the front or ends of the unit

#### COIL

Copper hairpins are staggered and mechanically expanded into corrugated Aluminum fins and tube sheets to achieve maximum heat transfer. Die formed fin collars provide even fin spacing and are available in 6 and 4 fins per inch. Sweat connections are standard on all models.

#### **FANS**

Heavy duty 12" Aluminum fans are balanced to provide vibration-free operation. Our low throw black plastic fan guards provide an optimal air pattern. The optional epoxy resin high throw fan guard moves air up to 25 feet.

#### **ELECTRICAL**

Available in 208/230V and 460V. All components are factory wired to convenient screw-type terminal strips. A large compartment is supplied internal to the unit for all electrical components and is easily accessible by opening the slide out end panel. All models are UL and cUL listed and are available in 60 or 50 Hz.

#### **ELECTRIC DEFROST**

Electric Defrost models contain internal coil heaters for rapid and efficient defrost. A lower heater is installed close to the drain pan for fast, reliable drainage. A defrost termination fan delay thermostat (DTFD) terminates the defrost cycle when the temperature is satisfied. The fan delay allows the warm coil to cool after a defrost cycle prior to the fans turning on. A heater safety thermostat is installed to prevent heaters from overheating above 75°F.

#### **Optional Features**

- Coated Aluminum fins (epoxy, ElectroFin¹, or Heresite¹) or Copper fins
- Coated housing (same options as above)
- Epoxy resin high throw guards for up to 25 ft. air throw
- Adjustable termination/ fan delay control\*
- Insulated drain pan\*
- \* These options require the units to be built as Revision B models.
- ElectroFin and Heresite coatings are not NSF approved. NSF approval label will be removed from unit if ordered with these coatings.

#### Motors

High efficiency single-speed and dual-speed Electronically Commutated (EC) motors are available in 208/230V. The dual-speed EC motors are compliant with California Title 24 regulations. Single-speed PSC motors are available in 208/230V and 460V. All motors include thermal overload protection.

#### **Energy Savings by Switching from PSC to Efficient EC Motor**

Chart is based on Energy Cost of \$0.10 per kWh.

Motor Change	Std Motor Power Watts/Mtr	Change to Motor Power Watts/Mtr	Reduced Power Watts/Mtr	Run Time Hrs/ Day	Motor Energy Savings kWh/Yr	Motor Energy Savings \$/Yr	Reduced Box Load MBTU/Yr	Cond. Unit Energy Savings \$/Yr	Yearly Saving \$ Per MTR	Pay back in Yrs
PSC to EC	85	47	38	22	305	31	1041	20	51	2.0

#### Performance and Electrical Data

		BTUH* Capacity @ 10°T.D. Suction Temperature				CFM	Motor Qty.	Motor Amps <sup>1</sup>			Heater Amps			
	Model Number							Single and Dual^ Speed EC Motors†	Single Speed PSC Motors		230V		460V	Heater Watts
		-30°F	-20°F	-10°F	+20°			230V	230V	460V	1 PH	3 PH	1 PH	
	KE16-36C	3,400	3,600	3,700	3,900	830	1	0.5	0.5	0.4	4.4	3.8	2.2	1,000
	KE16-41C	3,900	4,100	4,300	4,800	800	1	0.5	0.5	0.4	4.4	3.8	2.2	1,000
	KE16-46C	4,400	4,600	4,800	5,800	780	1	0.5	0.5	0.4	4.4	3.8	2.2	1,000
	KE26-60C	5,700	6,000	6,200	7,000	1,540	2	1.0	1.0	0.8	7.0	6.0	3.5	1,600
	KE26-75C	7,100	7,500	7,800	8,700	1,500	2	1.0	1.0	0.8	7.0	6.0	3.5	1,600
6 FPI	KE26-92C	8,700	9,200	9,600	11,500	1,560	2	1.0	1.0	0.8	8.7	7.5	4.4	2,000
	KE36-120C	11,400	12,000	12,500	14,500	2,400	3	1.5	1.5	1.2	13.0	11.3	6.4	3,000
	KE36-140C	13,300	14,000	14,600	17,000	2,340	3	1.5	1.5	1.2	13.0	11.3	6.4	3,000
	KE46-164C	15,000	16,400	17,100	19,200	3,200	4	2.0	2.0	1.6	17.4	15.1	8.7	4,000
	KE46-185C	17,600	18,500	19,200	23,000	3,120	4	2.0	2.0	1.6	17.4	15.1	8.7	4,000
	KE56-210C	20,000	21,000	21,800	24,500	4,000	5	2.5	2.5	2.0	21.7	18.8	10.9	5,000
	KE66-245C	23,300	24,500	25,500	29,500	4,800	6	3.0	3.0	2.4	25.0	21.7	12.5	5,750
	KE66-280C	26,600	28,000	29,100	34,500	4,680	6	3.0	3.0	2.4	25.0	21.7	12.5	5,750
	KE14-37C	3,500	3,700	3,800	4,200	830	1	0.5	0.5	0.4	4.4	3.8	2.2	1,000
4 FPI	KE24-72C	6,800	7,200	7,500	8,400	1,660	2	1.0	1.0	0.8	8.7	7.5	4.4	2,000
	KE24-85C	8,100	8,500	8,800	10,500	1,620	2	1.0	1.0	0.8	8.7	7.5	4.4	2,000
	KE34-105C	10,000	10,500	10,900	13,000	2,490	3	1.5	1.5	1.2	13.0	11.3	6.4	3,000
	KE44-140C	13,300	14,000	14,600	17,000	3,320	4	2.0	2.0	1.6	17.4	15.1	8.7	4,000
	KE54-180C	17,100	18,000	18,700	21,500	4,150	5	2.5	2.5	2.0	21.7	18.8	10.9	5,000
	KE64-215C	20,400	21,500	22,400	25,500	4,980	6	3.0	3.0	2.0	25.0	21.7	12.5	5,750

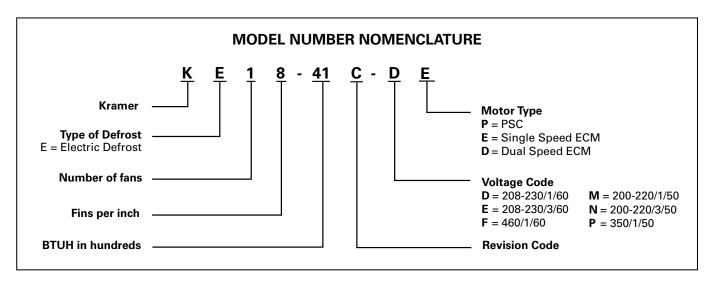
- \* Standard ratings are based on R404A refrigerant with 100°F Liquid temperature. Consult factory for other operating conditions.
- †These Electronically Commutated (EC) Motors are not available in 460V or 575V. Use EC motors for 50 Hz operation.
- ^ Dual-speed EC motors are compliant with California Title 24 regulations. 
  1. All fan motors are wired for single phase.



Mounts flush to the ceiling to maximize headroom and space

UL certified for use with multiple refrigerants

Single fan through six fan models are available



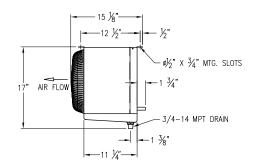
### Physical Data

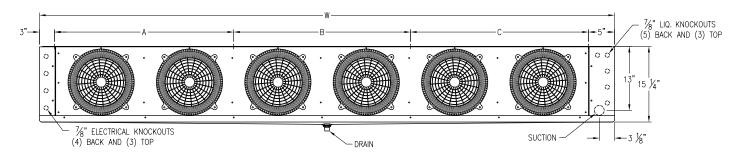
MODELS	TXV* TYPE	REFRIGERANT CONNECTIONS		NO. OF	DIMENSIONS (Inches)				APPROX. SHIP WT.
		LIQUID†	SUCTION	HANGERS	Α	В	С	W	(LBS)
KE16-36C	EXT	1/2 ODS	5/8 ODS	2	19	_	_	27	41
KE16-41C	EXT	1/2	5/8	2	19	_	_	27	44
KE16-46C	EXT	1/2	5/8	2	19	_	_	27	47
KE26-60C	EXT	1/2	7/8	2	33	_	_	41	54
KE26-75C	EXT	1/2	7/8	2	33	_	_	41	55
KE26-92C	EXT	1/2	7/8	2	37	_	_	45	62
KE36-120C	EXT	1/2	7/8	2	55	_	_	63	78
KE36-140C	EXT	1/2	1-1/8	2	55	_	_	63	85
KE46-164C	EXT	1/2	1-1/8	3	36-1/2	36-1/2	_	81	124
KE46-185C	EXT	1/2	1-1/8	3	36-1/2	36-1/2	_	81	147
KE56-210C	EXT	1/2	1-1/8	3	54-1/2	36-1/2	_	99	195
KE66-245C	EXT	1/2	1-1/8	4	37	36	36	117	238
KE66-280C	EXT	1/2	1-1/8	4	37	36	36	117	262
KE14-37C	EXT	1/2 ODS	5/8 ODS	2	19	_	_	27	42
KE24-72C	EXT	1/2	7/8	2	37	_	_	45	49
KE24-85C	EXT	1/2	7/8	2	37	_	_	45	55
KE34-105C	EXT	1/2	7/8	2	55	_	_	63	79
KE44-140C	EXT	1/2	1-1/8	3	36-1/2	36-1/2		81	144
KE54-180C	EXT	1/2	1-1/8	3	54-1/2	36-1/2		99	191
KE64-215C	EXT	1/2	1-1/8	4	37	36	36	117	257

<sup>\*</sup> External equalized

#### Installation Notes:

- (1) Install 12" away from back wall.
- (2) Drain connections are centered on drain pan.
- (3) For long air throw requirements, specify high throw fan guard.
- (4) 3/4" MPT drain connection.





<sup>†</sup> Sweat connection at the distributor. Mounted TXV outlet size may vary. All factory mounted Liquid Solenoids have 3/8" outlets.