



BULLETIN

P-872r1

SUPERSEDES
ALL PRICES PRIOR
TO January 2016

1-2016
1/2 - 6 HP
KOMPACT
January 2016

**LIST PRICES
1/2 - 6 HP
"KOMPACT"
CONDENSING UNITS**

ALL PRODUCTS, EXCEPT SURFACE COILS AND PARTS, ARE SHIPPED F.O.B. POINT OF SHIPMENT WITH FULL FREIGHT ALLOWED ON SINGLE ORDERS WITH A NET PRICE VALUE OF \$7000.00 OR MORE, WITHIN THE CONTINENTAL USA (EXCLUDING ALASKA AND HAWAII). ANY ADDITIONAL COSTS INCURRED FOR SPECIAL ROUTING AND HANDLING REQUESTS WILL BE INVOICED.

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BACK COVER	TERMS & CONDITIONS

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



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NEXT-GENERATION COMPACT K-SERIES AIR COOLED CONDENSING UNITS

1/2 THROUGH 6 H.P.

Standard Features (all models)

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

- Large electrical control panel with hinged/lift off door
- Color coded wiring with point-to-point wiring diagram
- Crankcase heater
- PSC condenser fan motor(s)
- Air Defrost Timer on all MediumTemp. models
- All Low temp. models include Electric Defrost provisions
- UL and CUL listed for indoor / outdoor use

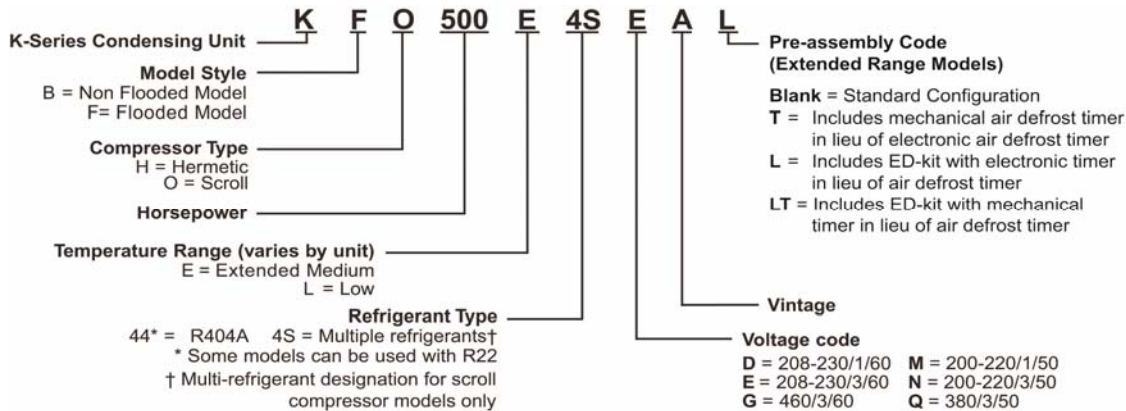


KFH/KFO models also include flooded head pressure control as a standard feature.

Optional Components

- Mild Ambient Fan Cycle control (2 fan KB models only)
- Electric Defrost on Extended range med. temp models
- Mounted replaceable core liquid or suction line filter (4 to 6 HP)
- Suction Accumulator
- Oil Separator (may not be available with accumulator)
- Suction line filter
- Liquid line piping only (no filter)
- Copper or polyester coated fins
- Electro-Fin coated condenser coil
- Single Speed EC condenser mtr
- Pumpdown toggle switch
- Thru-the-door disconnect switch (some models)
- External fused or non-fused disconnect
- Paragon Mechanical timer
- CPC timer
- Phase loss monitor
- Snow / Hail guards (shipped loose)

NOMENCLATURE



K-SERIES HERMETIC COMPRESSOR MODELS

§REF TYPE	NOM. H.P.	MODEL NUMBER	KF OUTDOOR FLOODED LIST PRICE			KB INDOOR / OUTDOOR BASE UNIT LIST PRICE			†ECM cond. motor add.	4 YEAR EXTENDED COMP. WARRANTY		Approx. Ship Wt. (LBS.)
			208-230V/3	208-230V/1	460V/3	208-230V/3	208-230V/1	460V/3		NET	WARRANTY	
EXTENDED RANGE MEDIUM TEMP 404A	0.50	K*H055E44	N/A	\$5,983	N/A	N/A	\$5,631	N/A	\$238	\$105	NET	152
	0.75	K*H080E44	N/A	6,182	N/A	N/A	5,830	N/A	238	105	NET	156
	0.75	K*H090E44	N/A	6,340	N/A	N/A	5,988	N/A	238	105	NET	160
	1.0	K*H100E44	\$6,436	6,515	N/A	\$6,084	6,163	N/A	238	105	NET	167
	1.25	K*H125E44	6,784	6,794	N/A	6,432	6,442	N/A	476	118	NET	195
	1.5	K*H150E44	7,067	7,021	\$7,167	6,715	6,669	\$6,815	476	118	NET	205
	2.0	K*H200E44	7,523	7,433	N/A	7,171	7,081	N/A	476	129	NET	228
	2.5	K*H250E44	7,721	7,859	8,588	7,369	7,507	8,236	476	129	NET	235
LOW TEMP 404A	3.0	K*H300E44	7,903	8,081	8,808	7,551	7,729	8,456	476	142	NET	253
	3.0	K*H325E44	8,342	8,494	9,266	7,990	8,142	8,914	476	142	NET	273
	1.5	K*H150L44	6,529	6,877	6,883	6,177	6,525	6,531	476	118	NET	195
	2.0	K*H200L44	7,272	7,490	7,525	6,920	7,138	7,173	476	129	NET	243
	3.0	K*H300L44	9,599	9,407	10,012	9,247	9,055	9,660	476	142	NET	255

§ For R507 models, use equivalent R404A model prices. Models 055E44, 080E44, and 090E44 are not suitable for use with R507. Use Scroll compressor models for refrigerants other than R404A/507.

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

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

SCROLL COMPRESSOR AIR COOLED CONDENSING UNITS

1 THRU 13 H.P.

Next-Gen K-Series KOMPACT Scroll:

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

Models range from 1 to 6 horsepower. Refer to page 2 for model options and publication number KM-KFH1115 for detailed specifications.



K-Series 1/2 - 3 HP



K-Series 4 - 6 HP

NEXT-GEN K-SERIES KOMPACT • SCROLL CONDENSING UNITS

*REF TYPE	NOM H.P.	MODEL NUMBER	KF FLOODED UNIT LIST PRICE			KB NON FLOODED UNIT LIST PRICE			4 YEAR EXTENDED COMP. WARRANTY		Approx. Ship Wt. (LBS.)	EC ¹ Motor Adder
			230/3	230/1	460/3	230/3	230/1	460/3				
Extended Medium Temp R404A, R407A, R407C, R448/449	1.0	K*O130E4S	\$7,844	\$7,597	\$8,694	\$7,492	\$7,245	\$8,342	194	NET	195	\$238
	1.25	K*O150E4S	7,951	7,668	8,820	7,599	7,316	8,468	194	NET	205	238
	1.5	K*O180E4S	8,045	7,723	8,913	7,693	7,371	8,561	194	NET	210	238
	2.0	K*O200E4S	8,352	8,283	9,012	7,998	7,931	8,660	194	NET	215	238
	2.5	K*O250E4S	8,594	8,432	9,152	8,242	8,080	8,800	194	NET	230	238
	3.0	K*O300E4S	9,604	9,565	10,519	9,252	9,213	10,167	253	NET	305	425
	3.5	K*O350E4S	10,175	9,993	10,642	9,823	9,641	10,290	253	NET	325	425
	4.0	K*O400E4S	10,256	10,192	11,331	9,904	9,840	10,979	264	NET	352	425
	4.5	K*O450E4S	10,848	11,187	11,463	10,496	10,835	11,111	271	NET	375	425
Low Temp R404A, R407A, R407C, R448/449	5.0	K*O500E4S	12,192	12,395	12,982	11,840	12,043	12,630	271	NET	383	425
	6.0	K*O600E4S	13,613	N/A	13,430	13,261	N/A	13,078	271	NET	405	425
	2.0	K*O200L4S	10,684	10,445	10,767	10,332	10,093	10,415	194	NET	230	238
	2.5	K*O250L4S	10,996	10,809	11,154	10,644	10,457	10,802	194	NET	240	238
	3.0	K*O300L4S	11,103	11,026	11,345	10,751	10,674	10,993	253	NET	245	238
	3.0	K*O350L4S	11,762	11,630	12,149	11,410	11,278	11,797	253	NET	255	238
	4.0	K*O400L4S	13,236	13,104	13,923	12,884	12,752	13,571	264	NET	352	425
5.0	K*O500L4S	13,615	13,542	14,379	13,263	13,190	14,027	264	NET	367	425	
6.0	K*O600L4S	15,162	N/A	15,621	14,810	N/A	15,269	271	NET	383	425	

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

See page 2 for voltage codes and an example of nomenclature layout.

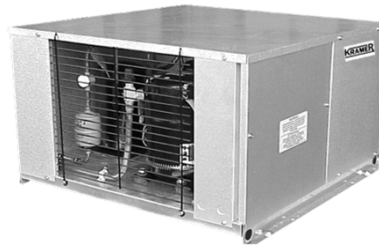
NOTE: An optional Electric Defrost kit must be ordered in lieu of the standard Air Defrost Timer when Extended Range Medium Temperature Models are used for low temperature applications.

LEGACY KOMPACT AIR COOLED CONDENSING UNITS

1/2 THROUGH 6 H.P.

Standard Features (KE Indoor / Outdoor models)

- Selection of Hermetic, Semi-hermetic, Discus or Scroll compressors
- Heavy gauge Weather-proof Housing on a raised base
- Compressor Contactor (three phase) or Start Kit (single phase)
- Main Power Block and Control Circuit Fuses
- 460V to 230V Control Circuit Transformer for 460 volt units
- High-low Pressure Control and Oil Pressure Control (when required)
- Liquid Receiver with Shut-off Valve and Pressure Relief Plug
- Liquid and suction line piping (filters are optional)
- PSC condenser fan motor(s)
- UL and cUL listed.



KOMPACT Series

Features on KL packaged models:

- Identical features as the KE models, plus:
 - Low ambient Head Pressure Valve.
 - Air Defrost Timer on 2-1/2 to 6 H.P. Medium & High Temp models
 - Electric Defrost Timer with Defrost Contactor/Relay on Low Temp models (ED10-230/1 on 1/2 thru 3 HP and ED11-230/3 on 4 thru 6 HP)
- Liquid Line Filter/Drier, Sight Glass & Pre-bent Piping
- Crankcase Heater

KOMPACT SERIES SEMI-HERMETIC COMPRESSOR MODELS

§REF TYPE	NOM H.P.	MODEL NUMBER	KLS OUTDOOR PACKAGE LIST PRICE			KES INDOOR/ OUTDOOR BASE UNIT LIST PRICE			†ECM cond. motor add.	4 YEAR EXTENDED COMPR. WARRANTY		SHIP WEIGHT (lbs)
			230/3	208-230/1	460/3	230/3	208-230/1	460/3				
			MEDIUM TEMP 404A	0.75	K*S075M44	\$7,706	\$7,706	N/A				
1.0	K*S100M44	7,935		7,935	N/A	6,542	6,542	N/A	238	175	NET	220
1.5	K*S150M44	9,603		N/A	N/A	7,844	N/A	N/A	476	181	NET	245
2.0	K*S200M44	11,276		11,276	N/A	9,759	9,759	N/A	476	269	NET	270
2.5	K*S250M44	11,723		N/A	\$12,821	11,268	N/A	\$12,293	476	269	NET	385
3.0	K*S300M44	13,125		13,466	13,741	12,057	12,396	12,843	476	306	NET	415
LOW TEMP 404A	0.50	K*S050L44	8,253	8,253	N/A	6,009	5,802	N/A	238	175	NET	189
	0.75	K*S075L44	8,861	8,861	N/A	6,330	6,155	N/A	238	175	NET	205
	1.0	K*S100L44	9,267	9,267	9,593	6,978	6,965	7,248	238	175	NET	220
	1.5	K*S150L44	9,670	9,519	10,576	8,148	8,016	9,519	476	181	NET	248
	2.0	K*S200L44	11,932	11,997	12,637	9,917	10,064	11,868	476	269	NET	290
	3.0	K*S300L44	13,261	13,261	13,645	11,925	12,195	12,867	476	306	NET	383

KOMPACT SERIES DISCUS COMPRESSOR MODELS

§REF TYPE	NOM H.P.	MODEL NUMBER	KLD OUTDOOR PACKAGE LIST PRICE			KED INDOOR/ OUTDOOR BASE UNIT LIST PRICE			†ECM cond. motor add.	4 YEAR EXTENDED COMPR. WARRANTY		SHIP WEIGHT (lbs)
			230/3	230/1	460/3	230/3	230/1	460/3				
			MT 404A	5.0	K*D500M44	\$20,181	N/A	\$21,053				
6.0	K*D600M44	25,056		N/A	26,089	21,034	N/A	22,369	425	105	NET	630
LOW TEMP 404A	3.0	K*D300L44	18,027	N/A	18,431	15,190	N/A	15,594	425	306	NET	575
	4.0	K*D400L44	19,651	N/A	20,258	16,790	N/A	17,421	425	454	NET	600
	5.0	K*D500L44	20,479	N/A	21,285	17,618	N/A	18,372	425	454	NET	620

NOTE:

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

§ For R507 models, use equivalent R-404A model prices.

KOMPACT NEXT-GEN K-SERIES / LEGACY K-SERIES 1/2 THROUGH 6 H.P. - OPTIONS

FACTORY INSTALLED OPTIONS

OPTIONS / ACCESSORIES	OPTION NUMBER	H.P. RANGE	KF MODELS	KB MODELS	KL PACKAGE	KE MODELS
CRANKCASE HEATER	CCH-1	1/2 - 6 H.P.	STD.	STD.	STD.	\$198
DEDUCT CRANKCASE HEATER		1/2 - 6 H.P.	-\$198	-\$198	-\$198	N/A
LIQUID LINE COMPONENTS - Filter drier, sight-glass and piping	LK-MC1	1/2 - 3 H.P.	STD.	STD.	STD.	498
	LK-MC2	4 - 6 H.P.	STD.	STD.	STD.	577
LIQUID LINE ONLY (DEDUCT LIQUID LINE FILTER AND SIGHT GLASS)	LL-MC1	1/2 - 3 H.P.	-317	-317	N/A	STD.
	LL-MC2	4 - 6 H.P.	-377	-377	N/A	STD.
Replaceable Core Liquid Filter/Dryer (4 - 6 H.P. only) Must add LK for RE unit	RPL-4	4 - 6 H.P.	467	467	467	467
SUCTION LINE COMPONENTS - Filter and Piping	SK-MC1	1/2 - 3 H.P.	317	317	317	317
	SK-MC2	4 - 6 H.P.	377	377	377	377
REPLACEABLE CORE SUCTION FILTER (4 - 6 H.P. only)	RPS-4	4 - 6 H.P.	451	451	451	451
SUCTION LINE ACCUMULATOR - Must add SK option	ASK-3	1/2 - 2 HP	488†	488†	488†	488†
	ASK-4	2½ - 6 H.P.	754†	754†	754†	754†
OIL SEPARATOR 4-6 HP (Due to space limits, may not be available with ASK opt)	OS-4	4 - 6 H.P.	1,285	1,285	1,285	1,285
OVER-SIZED RECEIVER – Refers to Next Gen CU frame sizes FM1 through FM4. See product catalogue for details. Contact factory for Legacy model oversized receiver prices.	OSR-1	FM1	405	405	Contact Application Engineering for pricing this option	
	OSR-2	FM2	483	483		
	OSR-3	FM3	1,156	1,156		
	OSR-4	FM4	1,187	1,187		
SPRING MOUNT AND DISCHARGE VIBRASORBER - Semi-Hermetics only. - Standard on 4 - 6 H.P. models,	SPR-VB	1/2 - 3 H.P.	N/A	N/A	243	243
		4 - 6 H.P.	N/A	N/A	STD.	STD.
LOW AMBIENT FLOODED HEAD PRESSURE CONTROL	FLD-SF	1/2 - 2 H.P.	STD.	N/A	STD.	352
		2½ - 6 H.P.	STD.	N/A	STD.	352
MILD AMBIENT FAN CYCLE	FC-1	2 fan units only	N/A	STD	N/A	345
ADJUSTABLE LOW PRESSURE CONTROL (For medium temperature units)	ADJ-LP	1/2 - 6 H.P.	147	147	147	147
ADJUSTABLE HI/LOW PRESSURE CONTROL	204464041	1/2 - 6 H.P.	330	330	330	330
AIR DEFROST TIMER ¹ (Electronic timer is standard. No additional charge to substitute mechanical timer. Specify at time of order.)	TMR ¹	1/2 - 6 H.P.	STD.	STD.	532	532
DEDUCT AIR DEFROST TIMER ¹	DEDUCT TMR ¹	2 1/2 - 6 H.P.	-532	-532	-532	N/A
SUBSTITUTE ED KIT (ED5 THRU ED10) FOR AIR DEFROST TIMER ²	REPLACE TMR ²	1 - 6 H.P. ²	110	110	N/A	N/A
ELEC. DEFR. TIMER WITH BLOCK-OUT RELAY 230/1 ^{††}	ED-5 THRU ED-10	1/2 - 6 H.P.	STD.*	STD.*	STD.*	642
* 2 EVAP ELEC. DEFR. TIMER WITHOUT BLOCK-OUT RELAY 230/1 ^{††}	ED-210-A2	1/2 - 6 H.P.	SPECIFY	SPECIFY	SPECIFY	642
ELECTRIC DEFR. TIMER WITH BLOCK-OUT AND CONTACTOR 230/3 ^{††}	ED-11-B2	1/2 - 6 H.P.	STD.*	STD.*	STD.*	642
DEDUCT STANDARD EVAP ELECTRIC DEFROST COMPONENTS		1/2 - 6 H.P.	-642	-642	-642	N/A
** 2 EVAP ELEC. DEFR. TMR WITH ONE 30 AMP DEFR. CONTACTOR 230/3 ^{††}	ED-211-B2	1/2 - 6 H.P.	SPECIFY	SPECIFY	SPECIFY	642
2 EVAP ELEC. DEFR. TMR WITH ONE 50 AMP DEFR. CONTACTOR 230/3 ^{††}	ED-213-B2	1/2 - 6 H.P.	714	714	714	1,246
2 EVAP. ELEC. DEFR. WITH SEQUENCING & B.O. RELAYS 230/1 ^{††}	ED-20-A2	4 - 6 H.P.	1,137	1,137	1,137	1,779
2 EVAP. ELEC. DEFR. WITH SEQ. & B.O. W/ CONTACTORS 230/3 ^{††}	ED-21-B2	4 - 6 H.P.	1,137	1,137	1,137	1,779
HEATED AND INSULATED RECEIVER	HIR	1/2 - 6 H.P.	662	662	662	662
PHASE LOSS MONITOR	PLM	1/2 - 6 H.P.	1,040	1,040	1,040	1,040
CRANKCASE PRESSURE REGULATING VALVE - (LOOSE ONLY)	CPR-1	1/2 - 6 H.P.	723	723	723	723
POLYESTER COATED CONDENSER FINS	PCF	1/2 - 3 H.P.	920	920	920	920
		4 - 6 H.P.	1,197	1,197	1,197	1,197
COPPER FINS OR ELECTRO FIN COATED COIL	CONTACT APPLICATIONS ENGINEERING FOR PRICING					
THRU THE DOOR NON - FUSED DISCONNECT SWITCH	TDNM-1	1/2 - 3 H.P.	466	466	466	466
	TDNM-2	4 - 6 H.P.	618	618	618	618
THRU THE DOOR FUSED DISCONNECT SWITCH	TDFM-1	1/2 - 3 H.P.	N/A	N/A	N/A	N/A
	TDFM-2	4 - 6 H.P.	1,267	1,267	1,267	1,267
EXTERNAL FUSED DISCONNECT (Mounted)	EFDM-1	1/2 - 3 H.P.	524	524	524	524
	EFDM-2	4 - 6 H.P.	964	964	964	964

FIELD INSTALLED OPTIONS

OPTIONS AND ACCESSORIES		H.P. RANGE	KF MODELS	KB MODELS	KL MODELS	KE MODELS
EXTERNAL FUSED DISCONNECT (LOOSE)	EFDL-2	4 - 6 H.P.	\$867	\$867	\$867	\$867
TWO TIERED STACKING RACK	11639400	1/2 - 3 H.P.	N/A	N/A	3,152	3,152
	11639600	4 - 6 H.P.	N/A	N/A	5,057	5,057
SNOW / HAIL GUARDS (LOOSE ONLY)	SG-A	Config. A, FM1	355	355	355	355
	SG-B	Config. B, FM2	391	391	391	391
	SG-C	Config. C, FM3	424	424	424	424
	SG-D	Config. D, FM4	520	520	520	520

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

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

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

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

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

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

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

ELECTRIC DEFROST KIT COMPONENTS

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

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

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

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

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

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

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

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

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

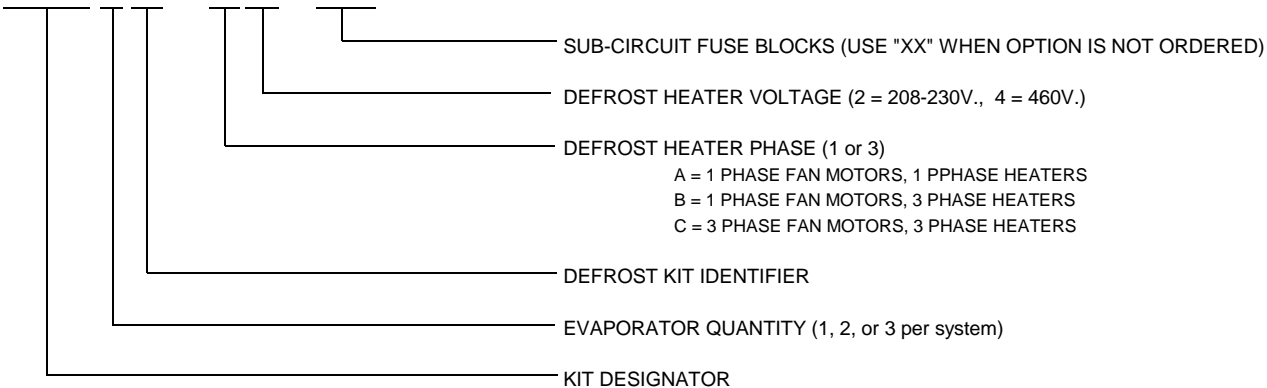
* Except for ED-210, ED-211, ED-213

† Heater contactor amperage is based on its resistive rating.

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

ELECTRIC DEFROST KIT NOMENCLATURE

E D 1 2 - A 2 - FB



ELECTRIC DEFROST PROVISIONS

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

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

ONE UNIT COOLERS PER SYSTEM	Up to 15 Amps Heater (w/ relay)	ED5-A2-XX	N/A	N/A	N/A	\$642	N/A
	20 Amps Heater (w/ relay)	ED6-A2-XX	N/A	N/A	N/A	642	N/A
	25 Amps Heater (w/ relay)	ED7-A2-XX	N/A	N/A	N/A	642	N/A
	Up to 30 Amps Heater (w/ relay)	ED10-A2-XX	N/A	N/A	N/A	642	N/A
	30 Amps - Heater (w/ contactors)	N/A	ED11-B2-XX	N/A	N/A	642	\$160
TWO UNIT COOLERS PER SYSTEM	50 Amps - Heater	ED13-A2-XX	ED13-B2-XX	N/A	N/A	1,246	160
	75 Amps Heater	ED15-A2-XX	ED15-B2-XX	N/A	N/A	1,910	195
	Up to 30 Amps Heater (w/ relay)	ED210-A2-XX	N/A	N/A	N/A	642	N/A
	30 Amps Heater	ED211-A2-XX	ED211-B2-XX	N/A	N/A	642	160
	50 Amps Heater	ED213-A2-XX	ED213-B2-XX	N/A	N/A	1,246	195
THREE UNIT COOLERS PER SYSTEM	Up to 15 Amps Heaters each (w/ relays)	ED20-A2-XX	N/A	N/A	N/A	1,779	N/A
	15 Amps Heaters each	ED21-A2-XX	ED21-B2-XX	N/A	N/A	1,779	288
	25 Amps Heaters each (w/ relays)	ED23-A2-XX	N/A	N/A	N/A	1,827	288
	25 Amps Heaters each (w/ contactors)	N/A	ED23-B2-XX	N/A	N/A	1,827	288
	50 Amps Heaters each	ED25-A2-XX	ED25-B2-XX	N/A	N/A	2,050	288
	75 Amps Heaters each	ED27-A2-XX	ED27-B2-XX	N/A	N/A	2,791	375
	Up to 10 Amps Heaters each (w/ relays)	ED30-A2-XX	N/A	N/A	N/A	2,422	N/A
16 Amps Heaters each (w/ relays)	ED31-A2-XX	N/A	N/A	N/A	2,422	355	
16 Amps Heaters each (w/ relays)	ED33-A2-XX	N/A	N/A	N/A	2,422	355	
16 Amps Heaters each (w/ contactors)	N/A	ED33-B2-XX	N/A	N/A	2,422	355	
30 Amps Heaters each (w/ relays)	ED35-A2-XX	N/A	N/A	N/A	2,718	355	
30 Amps Heaters each (w/ contactors)	N/A	ED35-B2-XX	N/A	N/A	2,718	355	
50 Amps Heaters each	ED37-A2-XX	ED37-B2-XX	N/A	N/A	3,089	422	

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

ONE UNIT COOLER	Up to 30 Amps Heater	ED12-A4-XX	ED12-BX-XX	ED12-C2-XX	ED12-C4-XX	\$1,299	\$266
	50 Amps Heater	N/A	ED14-BX-XX	ED14-C2-XX	ED14-C4-XX	1,519	266
	75 Amps Heater	N/A	N/A	ED16-C2-XX	ED16-C4-XX	2,089	310
	15 Amps Heater	ED17-A2-XX	ED17-B2-XX	N/A	N/A	1,299	195
TWO UNIT COOLERS	Up to 15 Amps Heaters per Unit Cooler	N/A	ED22-BX-XX	ED22-C2-XX	ED22-C4-XX	2,184	355
	25 Amps Heaters per Unit Cooler	N/A	ED24-BX-XX	ED24-C2-XX	ED24-C4-XX	2,184	355
	50 Amps Heaters per Unit Cooler	N/A	ED26-BX-XX	ED26-C2-XX	ED26-C4-XX	2,302	406
	75 Amps Heaters per Unit Cooler	N/A	N/A	ED28-C2-XX	N/A	2,973	494
THREE UNIT COOLERS	Up to 10 Amps Heaters per Unit Cooler	N/A	ED32-BX-XX	ED32-C2-XX	ED32-C4-XX	2,788	472
	16 Amps Heaters per Unit Cooler	N/A	ED34-BX-XX	ED34-C2-XX	ED34-C4-XX	2,788	472
	30 Amps Heaters per Unit Cooler	N/A	ED36-BX-XX	ED36-C2-XX	ED36-C4-XX	3,448	472
	50 Amps Heaters per Unit Cooler	N/A	ED38-BX-XX	ED38-C2-XX	ED38-C4-XX	3,829	565

† Replace "XX" with "FB" when ordering the sub-circuit fuse block option. For description of "ED" kit nomenclature see page 6.

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

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

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

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. Minimum order charge is \$50.00.
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. Routing and selection of carrier will be made by Seller. For special routing requests Buyer will bear all additional costs for such routing. Equipment is shipped at Buyer's risk. Buyer should examine equipment before signing transportation receipt. If equipment is received damaged or if quantity received does not match freight bill, the Buyer should require agent to so indicate on freight bill and immediately file a damage/missing claim. Our liability ceases upon delivery of equipment in good order to the freight carrier. Full freight is allowed on shipments with a net price value of \$7000.00 or more, except surface coils and parts within the continental U.S.A. excluding Alaska and Hawaii.
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. 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 Material Return 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.