# H7 SERIES HORIZONTAL AIR-COOLED RACK-MOUNTED AIR CONDITIONERS



2.00 [50.8mm] x 4.50 [114.3mm] each



KA4C4.2H7L

### STANDARD FEATURES

Baked Powder Finish **Ball-bearing Motors** Built-in Condensate Evaporator CFC-Free Refrigerant Closed-Loop Cooling EMI/RFI Suppressor Heavy-duty Steel Enclosure Low Temperature Control Thermostat Permanent Filters Reversible Condenser Outlet Blower Six Foot [1.8m] (minimum) SJT 3-wire Cord

# UL/CUL Listed/Recognized\*

♦ UL/CUL Recognized models are available as Listed at added cost.

### ACCESSORIES AND OPTIONS\*

- Cooling Effect Detector
- **Enclosure Heater**
- Filter Recoating Adhesive
- Filters for replacement
- Internal corrosion protection
- Lifting Eyes
- Low Airflow Detector
- Low Ambient Kit
- **Short Cycle Protector**
- Special materials or finishes
- Special motors, line cords or connectors
- Stainless or Aluminum Cabinet

#### *APPROXIMATE WEIGHT*

95 lbs. [43.2 kg]

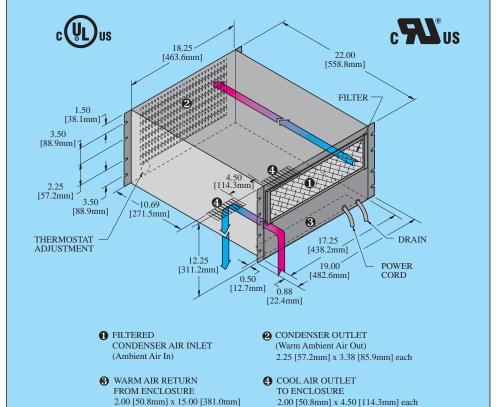
### **HOW TO ORDER**

Specify model number. NOTE: Accessories and Options may affect model number, contact KOOLTRONIC for information.

For assistance in model selection, refer to the Air Conditioner Sizing and Selection Guide, contact KOOLTRONIC, or use one of our design aid software programs. available FREE.

> CALL 1-800-321-KOOL (5665) or FAX 609-466-1114

POPULAR MODELS ARE STOCKED AND READY TO SHIP



#### TECHNICAL DATA

Dimensions, inches [metric], are for reference only and are subject to change.

		UL/CUL		Ambie	nt Temp.			**
		Listed or	BTU/H	Max./Min.		<b>&lt;</b>	<b>&lt;</b>	Running
Model	Refrigerant	Recognized	Rating	°F	°C	Volts	Hz	Amps
KA4C1.5H7L	R134a	Listed	1500	125/50	51.6/10.0	115/100	60/50	13.4
KA4C1.5H7L56	R134a	Listed	1500	125/50	51.6/10.0	115	50/60*	13.4
K2A4C1.5H7L	R134a	Listed	1500	125/50	51.6/10.0	230/200	60/50	6.0
K2A4C1.5H7L5	R134a	Listed	1500	125/50	51.6/10.0	230	50	6.0
KA4C1.8H7L	R134a	Listed	1800	125/50	51.6/10.0	115/100	60/50	13.4
KA4C1.8H7L56	R134a	Listed	1800	125/50	51.6/10.0	115	50/60*	13.4
K2A4C1.8H7L	R134a	Listed	1800	125/50	51.6/10.0	230/200	60/50	6.0
K2A4C1.8H7L5	R134a	Listed	1800	125/50	51.6/10.0	230	50	6.0
KA4C2.6H7L	R134a	Listed	2600	125/50	51.6/10.0	115/100	60/50	13.4
KA4C2.6H7L56	R134a	Listed	2600	125/50	51.6/10.0	115	50/60*	13.4
K2A4C2.6H7L	R134a	Listed	2600	125/50	51.6/10.0	230/200	60/50	6.0
K2A4C2.6H7L5	R134a	Listed	2600	125/50	51.6/10.0	230	50	6.0
KA4C3.1H7L	R134a	Listed	3100	125/50	51.6/10.0	115/100	60/50	13.4
KA4C3.1H7L56	R134a	Listed	3100	125/50	51.6/10.0	115	50/60*	13.4
K2A4C3.1H7L	R134a	Listed	3100	125/50	51.6/10.0	230/200	60/50	6.0
K2A4C3.1H7L5	R134a	Listed	3100	125/50	51.6/10.0	230	50	6.0
KA4C4.2H7L	R134a	Listed	4200	125/50	51.6/10.0	115/100	60/50	13.4
KA4C4.2H7L56	R134a	Listed	4200	125/50	51.6/10.0	115	50/60*	13.4
K2A4C4.2H7L	R134a	Listed	4200	125/50	51.6/10.0	230/200	60/50	6.0
K2A4C4.2H7L5	R134a	Listed	4200	125/50	51.6/10.0	230	50	6.0
KA4C5.0H7R	R134a	Recognized	5000	125/50	51.6/10.0	115/100	60/50	16.5
KA4C5.0H7R56	R134a	Recognized	5000	125/50	51.6/10.0	115/100	50/60*	16.5
K2A4C5.0H7L	R134a	Listed	5000	125/50	51.6/10.0	230/200	60/50	9.2
K2A4C5.0H7L5	R134a	Listed	5000	125/50	51.6/10.0	230	50	9.0
KA4C6.0H7R	R134a	Recognized	6000	125/50	51.6/10.0	115/100	60/50	16.5
KA4C6.0H7R56	R134a	Recognized	6000	125/50	51.6/10.0	115/100	50/60*	16.5
K2A4C6.0H7L	R134a	Listed	6000	125/50	51.6/10.0	230/200	60/50	9.2
K2A4C6.0H7L5	R134a	Listed	6000	125/50	51.6/10.0	230	50	9.0

- Switchable. Switch is internally-mounted for security.
- \*\* Rating shown is for operation at maximum ambient temperature.
- 115V, 60 Hz and 230V, 60 Hz models also operate at 100V, 50 Hz or 200V, 50 Hz respectively. No transformer is required.

<sup>\*</sup>See opposite side for more information.

### DESCRIPTION

KOOLTRONIC *Air-Cooled Rack-Mounted Air Conditioners* are particularly suited for applications where internal horizontal mounting is preferred over external panel, door or top mounting.

Air-cooled models are typically mounted internally at either the top or bottom of the cabinet.

KOOLTRONIC *Rack-Mounted Air Conditioners* all include EIA-notched flanges. Air-cooled models are provided with attractive 19-inch wide stainless steel grilles and knurled captive fasteners for easy removal. Grille area is 65% open. If preferred, side rails can be supplied.

Outdoor or corrosive environments require weather protection and/or special internal and external protective features.

For extreme ambient temperatures and/or severely contaminated environments, the use of **Water-Cooled Air Conditioners** is recommended.

KOOLTRONIC also designs and manufactures a variety of Air Conditioners to meet unique specifications. We invite your inquiries about our modification and custom-design capabilities.

### STANDARD FEATURES

**CLOSED-LOOP COOLING:** The enclosure interior airflow system is isolated from the ambient airflow system. Ambient air can not invade the cool, dehumidified sensitive component compartment.

**BALL-BEARING MOTORS:** All blower motors are UL/CSA Recognized and include automatic-reset thermal overload protection and double-sealed or double-shielded precision ball bearings. Special permanent lubricants perform over a broad temperature range: -20°F [-28.9°C] to 250°F [121.1°C].

BLOWERS: All centrifugal blowers are Kooltronic-designed and built, to provide optimum airflow and pressure for each Air Conditioner design.

**RUGGED CONSTRUCTION:** Precision-engineered heavy gauge steel construction of all cabinets and blowers insures Air Conditioners will stand up under tough applications.

**BAKED POWDER FINISH:** Durable, baked-on gray powder finish is standard. Other finishes are available.

POWER: Available in 115 VAC, 60 Hz or 50/60 switchable and 230 VAC, 50 Hz or 60 Hz.

REFRIGERANT: CFC-free R134a Refrigerant is used in all H7 Series Air Conditioners.

**FILTERS:** Multi-layer grid of sturdy, corrugated aluminum in an aluminum frame. May be reused after washing off accumulations and spraying with A-16 Recoating Adhesive.

**CONDENSATE EVAPORATOR:** Built-in Condensate Evaporator eliminates need for draining condensate under normal operating conditions. May not be adequate in extremely high humidity with open or leaky enclosure. Overflow condensate drain fitting and hose are included.

LOW TEMPERATURE CONTROL: Thermostatic Low Temperature Control prevents over-cooling and provides energy-efficient operation.

EMI/RFI SUPPRESSOR: EMI/RFI Suppressor minimizes transient line spikes during on/off cycling.

**POWER CORD:** All models have six foot [1.8m] SJT-type 3-wire power cords with appropriate plugs.

INSULATION: All cold components, lines and the evaporator compartment are insulated with high-performance insulation for maximum efficiency.

**QUALITY ASSURANCE:** Refrigeration system components are kept sealed until charged with refrigerant; all brazed joints are thoroughly leak-tested; each unit is functionally tested before shipment.

INSTALLATION: Detailed Installation and Operator's Manual, with drawings, mounting plan and spare parts list is included with each unit.

**UL/CUL LISTED OR RECOGNIZED:** All **H7** models are **UL/CUL Listed** or **Recognized**. **Listed** Air Conditioners have an "L" at or near the end of the model number and **Recognized** units have an "R" at or near the end of the model number. All **Recognized** models are available as **Listed** at added cost.

# ACCESSORIES AND OPTIONS\*\*

### **FACTORY-INSTALLED OPTIONS:**

**ALUMINUM CABINET:** Where light weight and/or compatibility with appearance of Aluminum Enclosures are required. Unpainted Type 5052 is standard. Other types and ultra-violet-resistant baked powder finish are available.

Append letter "A" to Part No. (5052 Unpainted)

**COOLING EFFECT DETECTOR:** A thermostat is mounted inside the cabinet and attached to a sensor in the warm air return. When the air temperature increases to the set point, a signal is sent to a terminal block. User-installed wiring from the terminal block to local and/or remote warning devices (*light, bell, siren, etc.*) can be for normally open or closed operation.

Append letter "B" to Part No.

**ENCLOSURE HEATER:** 120V or 240V fin strip heater, installed singly or ganged, used to maintain desired internal enclosure temperature, under cold operating conditions.

Single Heater, append letter "F" to Part No.

**INTERNAL CORROSION PROTECTION:** For corrosive or other hostile environments, special coating material is applied to copper lines, coils and other parts subject to damage. Also see **Stainless Steel Cabinet** or *Integrity NEMA 4/4X Air Conditioners*.

Append letter "H" to Part No.

\*\*Contact KOOLTRONIC for information.



# ACCESSORIES AND OPTIONS\*\* (continued)

LIFTING EYES: Heavy-gauge steel lifting eyes, attached to the side panels, assist in positioning units.

Append letter "K" to Part No.

**LOW AIRFLOW DETECTOR:** Similar to the Airflow Switch shown in the Blower Accessories Section, the switch is installed in a suitable location in the Air Conditioner to detect loss of airflow, and sends a signal to a terminal block, through which user-installed wiring and warning devices are activated. Append letter "M" to Part No.

**LOW AMBIENT KIT:** Maintains sufficient operating pressures when ambient temperatures drop below 50°F [10°C]. Includes a compressor heater and pressure actuated condenser blower cycling control.

Append letter "N" to Part No.

**SHORT CYCLE PROTECTOR:** Protects the compressor from possible damage due to harmful short cycling, by initiating an "off" period before resumption of normal operation. Generally air conditioners require several minutes off for compressor protection after power interruptions of any type. These power interruptions can include power failures, opening of interlocked access doors, and cases where a thermostat activates the compressor in less than a few minutes. This option is particularly recommended for applications where frequent, brief power failures occur, interlocked cabinet doors are utilized, or where the cabinet internal loads fluctuate across a wide range.

Append letter "Y" to Part No.

SIDE MOUNTING RAILS\*\*

SPECIAL MATERIALS OR FINISHES\*\*

SPECIAL MOTORS, LINE CORDS OR CONNECTORS\*\*

**STAINLESS STEEL CABINET:** For applications in corrosive or other hostile environments such as those requiring Internal Corrosion Resistant Coatings, especially where chemical/moisture combinations are present.

Append letter "V" to Part No. (304-2B Unpainted)

### **CUSTOMER-INSTALLED OPTIONS**

**FILTER RECOATING ADHESIVE:** This compound is a superior product for recoating all filters after washing. The adhesives penetrate dirt layers to keep the filter surface tacky for longer effective performance between washings. Part No. A-16.

**FILTERS FOR REPLACEMENT:** All KOOLTRONIC filters consist of a multi-layer grid of sturdy corrugated aluminum, securely held in a one-piece aluminum frame. Filters are required wherever air is drawn into an electronics enclosure or related cooling equipment to keep internal parts as clean as possible.

A non-drying adhesive coating traps a high percentage of particulate matter. These filters are reusable, they may be washed and recoated with the appropriate filter recoating adhesive. Replacements are available for those which become damaged or otherwise non-serviceable.

Part No. 4811F (15.00" x 4.88" x 0.38" [381mm x 124mm x 10mm])

\*\*Contact KOOLTRONIC for information.

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