

# RP28 ADVANTAGE AIR-COOLED PANEL-MOUNTED AIR CONDITIONERS

Legacy products are no longer in normal production. Consult factory for availability. Recommended replacement: See *Guardian/GuardianX* or *SlimKool* Series.

## TECHNICAL DATA



**cULus** **NEMA**  
TYPE 12 & 3R  
MAINTAINED

Model	NEMA Rating	UL/CUL Listed or Recognized	BTU/H Capacity	95/95 Rating BTU/H	Ambient Temp		Volts	Hz	Running Amps	Approx. Weight	
					°F	°C				lbs	kg
KA4C3RP28R	12/3R	Recognized	3000	2220	125/0	52/-17	115/100	60/50	9.8/9.7	86	40
K2A4C3RP28R	12/3R	Recognized	3000	2220	125/0	52/-17	230/200	60/50	5.5/5.6	86	40

Rating shown is for operation at maximum ambient temperature.  
230V models with Short Cycle Protector are not RoHS compliant.

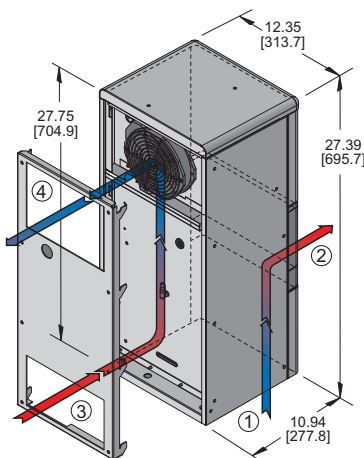
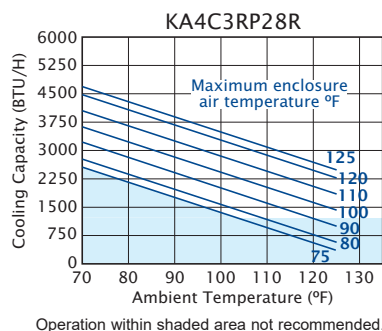
## STANDARD FEATURES

Baked Powder Finish  
Built-in Condensate Evaporator  
CFC-Free Refrigerant  
Closed-Loop Cooling  
Crankcase Compressor Heater  
Digital Temperature Display  
Filter  
Head Pressure Control Switch  
Low Temperature Control Thermostat  
NEMA 12 & 3R Ratings Maintained (UL50)  
UL/CUL Recognized▼

## ACCESSORIES AND OPTIONS

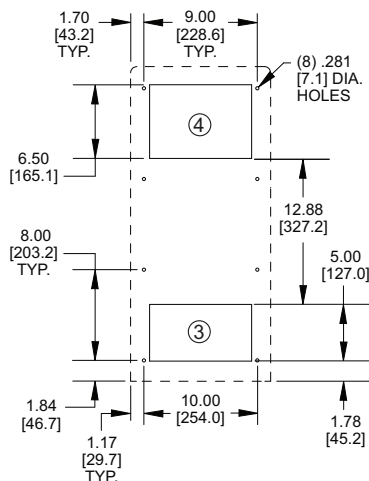
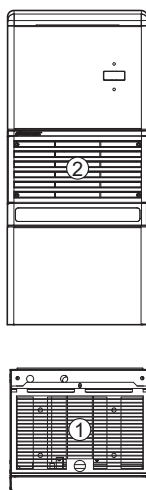
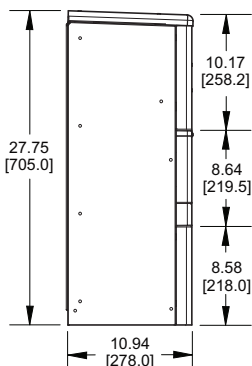
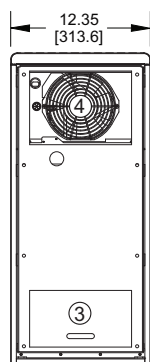
Compressor Short Cycle Protector  
Enclosure Heater  
Filter Recoating Adhesive  
Internal Corrosion Protection  
Painted Metal Grille  
Remote Thermostat Relay  
Replacement Filters  
Special controls or indicators  
Special motors, line cords, or connectors  
Special paint finishes  
Stainless or Aluminum Shell  
Temperature Alarm

## PERFORMANCE



Find additional information on this model at [kooltronic.com](http://kooltronic.com), or use the Technical Documents QR code below.

Technical Documents



- ① CONDENSER AIR INLET (Ambient Air In)
- ② CONDENSER OUTLET (Warm Ambient Air Out)
- ③ WARM AIR RETURN FROM ENCLOSURE
- ④ COOL AIR OUTLET TO ENCLOSURE

MOUNTING PLAN

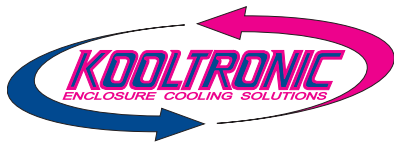
UNIT MUST BE 4" [100mm] MINIMUM ABOVE FLOOR FOR FILTER ACCESS

Many popular units are available as 3D solid models for customer system integration. Please contact Kooltronic for details.

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

▼ UL/CUL Listed models are available at added cost.

rp28.qxd (10/23) (CDR: 20532)



## RP28 ADVANTAGE AIR-COOLED PANEL-MOUNTED AIR CONDITIONERS

### DESCRIPTION

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At last - air conditioners designed specifically for cooling electronic enclosures that can be used for both indoor and outdoor applications right out of the box!

No more bulky unattractive weather hoods... No more worries over what options to specify for outdoor applications.

Expertly designed and crafted, the **ADVANTAGE Series** boasts a stylish appearance with rounded edges, no visible hardware and a baked powder finish to blend easily with contemporary enclosure designs.

Servicability has been made easier by incorporating a "knock-down" sheetmetal design which provides quick access to internal components.

Standard features include heavy duty galvanized steel construction with baked-on powder paint, environmentally friendly refrigerants, built-in condensate evaporator and thermostatic low temperature control. These air conditioners are available in capacities from 2,000 to 6,000 BTU/H in four heights.

**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

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

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

**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.

**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.

**CRANKCASE COMPRESSOR HEATER:** 120V or 240V heater attached to the compressor crankcase to maintain appropriate temperatures during cold operating conditions.

**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.

**GASKETING:** All units are fully gasketed for tight, leakproof installation, in compliance with the NEMA 3R Enclosure Rating.

**HEAD PRESSURE CONTROL SWITCH:** A control device to minimize compressor cycling and prevent evaporator coil icing.

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

**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.

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

**POWER:** Available in 115/100 VAC, 60/50 Hz and 230/200 VAC, 60/50 Hz.

**POWER CORD:** All models have six foot [1.8m] 3-wire power cords.

**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.

**REFRIGERANT:** CFC-free R134a Refrigerant is used in all **Advantage RP28** Series Air Conditioners.

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

**UL/CUL RECOGNIZED:** All **Advantage RP28** models are **UL/CUL Listed**. All **Recognized** models are available as **Listed** at added cost.

### ACCESSORIES AND OPTIONS\*\*

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#### FACTORY-INSTALLED OPTIONS:

**COMPRESSOR 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.

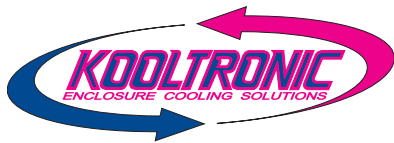
Append letter "Y" to Part No.

**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.

Double Heater, append letter "G" to Part No.

**\*\*Contact KOOLTRONIC for information.**



## RP28 ADVANTAGE AIR-COOLED PANEL-MOUNTED AIR CONDITIONERS

### **ACCESSORIES AND OPTIONS\*\*** *(continued)*

**INTERNAL CORROSION PROTECTION:** For corrosive or other hostile environments, special coating material is applied to copper lines, coils and other parts subject to damage.

Append letter "H" to Part No.

#### **PAINTED METAL GRILLE\*\***

Append letter "Z" to Part No

**POWER LOSS DELAYED COMPRESSOR START:** 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.

#### **SPECIAL PAINT FINISHES\*\***

**TEMPERATURE ALARM:** 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.

### **CUSTOMER-INSTALLED OPTIONS:**

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

**REPLACEMENT FILTERS:** 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 reuseable, 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. 7006F (12.00 x 7.00 x 0.50 [305mm x 178mm x 13mm])

**\*\*Contact KOOLTRONIC for information.**

### **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**

