

## TRADITIONAL SERIES P24 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**

Filter

3

		UL/CUL		95/95	Ambient Temp					Approx.	
	NEMA	Listed or	BTU/H		°F	°C			Running	We	ight
Model	Rating	Recognized	Capacity	BTU/H	Max./Min.	Max./Min.	Volts	Hz	Amps	lbs	kg
KA4C4P24L	12	Listed	4000	3600	120/50	49/10	115/100	60/50	14.2	90	41
K2A4C4P24L	12	Listed	4000	3600	125/50	52/10	230/200	60/50	6.2	90	41

Rating shown is for operation at maximum ambient temperature.

CFC-Free Refrigerant

Closed-Loop Cooling

UL/CUL Listed

STANDARD FEATURES

NEMA 12 Rating Maintained (UL50)

Thermostatic Low Temperature Control

17.00

[431.8]

1

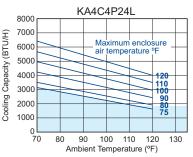
9.50 [241.3]

24.00 [609.6]

# CUTRONIC 44

MAINTAINED

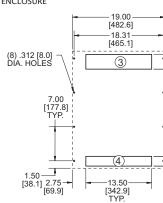
#### PERFORMANCE



Operation within shaded area not recommended.

() FILTERED CONDENSER AIR INLET (Ambient Air In)

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



0 6 3.00 17 1] 24.00 [609.6] 7.00 [609.6] 7.00 [177.8] [177.8] [17

-2.00

[50.8]

-0.44 [11.2]

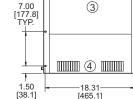
Many popular units are available as

for details.

3D solid models for customer system

integration. Please contact Kooltronic

CONDENSATE DRAIN



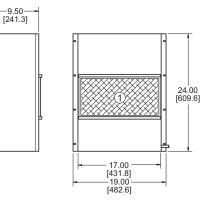
#### ACCESSORIES AND OPTIONS Compressor Short Cycle Protector Condensate Evaporator Kit

Condensate Evaporator Kit Filter Recoating Adhesive Internal Corrosion Protection Lifting Eyes Low Airflow Detector Low Ambient Kit Mounting Hinge Remote Thermostat Relay Replacement Filters Special controls or indicators Special motors, line cords or connectors Special paint finishes Stainless or Aluminum Shell Temperature Alarm Weather Protection Kit

> Find additional information on this model at kooltronic.com, or use the Technical Documents QR code below.

Technical Documents





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

MOUNTING PLAN

p24.qxd (10/29/21) (CDR: 20369)



#### DESCRIPTION

This series of KOOLTRONIC Air Conditioners offer the same range of sizes, voltages and frequencies, as the *TrimLine Series*, with cooling capacities of 4,000 BTU/H, in 19" width including side flanges.

These **traditional width** models have been redesigned to our latest standards and are available in a 24" height for maximum flexibility in obtaining optimal cooling efficiency. Good design dictates that the warm air return should be as far as possible from the cool air outlet. In addition, the Air Conditioner height should provide for the cooling air to be forced through all the heat-producing components in the enclosure. KOOLTRONIC designs satisfy both of these needs.

These high performance Air Conditioners can be installed in a variety of locations, either fixed or hinged, directly to any vertical cabinet panel or door. Gasketed mountings and the closed-loop design seal out moisture and contaminant-laden ambient air. Powerful **Kooltronic-designed** centrifugal blowers circulate clean, cool air throughout the enclosure.

Outdoor or corrosive environments require weather protection and/or special internal and external protective features. Also see Integrity NEMA 4/4X and Intrepid Outdoor Series.

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

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

**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.

**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 REMOVAL: Condensate drain fitting and hose are included.

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 12 Enclosure Rating.

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

**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 Traditional P24 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 LISTED: All Traditional P24 Series are UL/CUL Listed.

#### ACCESSORIES AND OPTIONS\*\*

#### FACTORY-INSTALLED OPTIONS:

ALUMINUM SHELL: 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)

COMPRESSOR SHORT CYCLE PROTECTOR: Protects the compressor from possible damage due to harmful short cycling.

Append letter "Y" 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 Shell 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.

**MOUNTING HINGE:** (Left-hand or Right-hand) Allows the Air Conditioner itself to be used as a cabinet door. (Caution: The cabinet must be able to support the full weight of the unit in open position.) Specify left-hand or right-hand, determined by facing the mounting side of the Air Conditioner.

Append letter "P" to Part No. for left-hand.

Append letter "S" to part No. for right hand.

**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.

SPECIAL MATERIALS OR FINISHES\*\*

#### SPECIAL MOTORS, LINE CORDS OR CONNECTORS\*\*

**STAINLESS STEEL SHELL:** 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:**

**CONDENSATE EVAPORATOR KIT:** Heated add-on unit for Air Conditioners without built-in condensate evaporator system. Eliminates need for draining of condensate under normal operating conditions. May not be adequate in extremely high humidity with open or leaky enclosure.

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. 8751F (16.63" x 8.38" x 0.50" [422mm x 213mm x 13mm])

WEATHER PROTECTION KIT: For outdoor installations subject to invasion by rain, snow or windblown dirt, special deflectors shield the condenser air inlet and outlet ports. Air conditioners installed outdoors may also require special exterior paint.

\*\*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 <u>Air Conditioner Sizing and</u> <u>Selection Guide</u>, 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

