

TRADITIONAL SERIES WP59 WATER-COOLED PANEL-MOUNTED AIR CONDITIONERS

These units are discontinued, and this information is presented for reference purposes only. Recommended replacement: See Guardian/GuardianX or SlimKool Series or current TrimLine Series.





	BTU/H	Water Flow (GPM)			Running	Approx. Weight	
Model	Capacity	@ 85°F Max.	Volts	Hz	Amps	lbs	kg
KA4C4WP59	4000	1.5	115	60	12.4	155	71
K2A4C4WP59	4000	1.5	230	60	6.2	155	71
KA3C8WP59	8000	2.5	115	60	13.4	155	71
KA3C9WP59	9000	2.5	115	60	13.6	155	71
KA3C10WP59	10000	2.5	115	60	13.8	155	71
KA4C12WP59	12000	2.5	115	60	14.0	155	71

Rated for full capacity load at 85 °F water. Usage will vary at lower load or cooler water conditions. Rated shown is for operation at maximum water temperature.

WATER INLET & OUTLET 3/8-18 NPT MALE FITTING HIGH PRESSURE RESET BUTTON 17.00 [431.8] POWER CORD -THERMOSTAT ADJUSTMENT 59.50 [1511.3] DRAIN . 19.01 [483.0]

WARM AIR RETURN FROM ENCLOSURE

STANDARD FEATURES

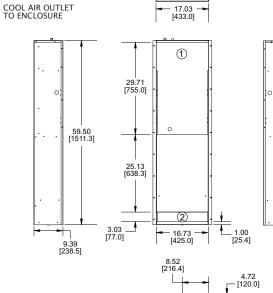
Baked Powder Finish **Ball-bearing Motors** CFC-Free R134a Refrigerant Closed-Loop Cooling **Excess Pressure Control** Heavy-Duty Steel Shell Low Temperature Control Thermostat Six-Foot [1.8m] (minimum) 3-Wire Power Cord Water Regulating Valve

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

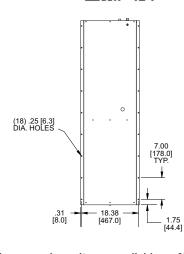
Technical **Documents**

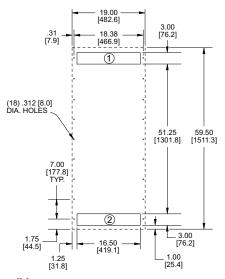
ACCESSORIES AND OPTIONS

Condensate Evaporator Kit Condenser Access Panel Deep Drain Pan Kit **Enclosure Heater** Internal Corrosion Protection Lifting Eyes Low Airflow Detector Mounting Hinge Short Cycle Protector Special materials or finishes Special motors, line cords or connectors Stainless or Aluminum Shell Temperature Alarm



17.03





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

MOUNTING PLAN

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

.46 [12.0] DIA DRAIN TUBE

wp59d.qxd (1/28/21) (CDR: (20293)



TRADITIONAL SERIES WP59 WATER-COOLED PANEL-MOUNTED AIR CONDITIONERS

DESCRIPTION

Cool circulating water has greater heat-removal capacity than warm ambient air.

KOOLTRONIC *Water-Cooled Air Conditioners* are recommended for applications with extreme ambient temperatures and/or severely contaminated environments, if a reliable supply of cool, clean water is available.

Since ambient air is sealed out of the Air Conditioner as well as the enclosure, no contaminants can enter and there are no filters to clean.

These units contain a regulating valve that automatically adjusts the condenser waterflow rate for water temperature and/or cooling load changes. When the Air Conditioner is shut off, the valve closes, cutting off the water supply to the unit.

Should the water supply become inadequate for any reason, the built-in Excess Pressure Control senses the increased compressor discharge pressure and turns off the unit. For added protection, the switch must be reset manually after the waterflow problem has been corrected.

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*.

See Rack-Mounted Water-Cooled Air Conditioners for alternatives to panel-mounted models.

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.

GASKETING: All units are fully gasketed for tight, leakproof installation, in compliance with the NEMA 4/4X 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 VAC, 60 Hz or 230 VAC, 60 Hz.

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

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.

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

REFRIGERANT: CFC-free R134a Refrigerant is used in all WP59 Series Air Conditioners.

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.

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

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.

**Contact KOOLTRONIC for information.



TRADITONAL SERIES WP59 WATER-COOLED PANEL-MOUNTED AIR CONDITIONERS

ACCESSORIES AND OPTIONS** (continued)

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.

SPECIAL MATERIALS OR FINISHES**

SPECIAL MOTORS. LINE CORDS OR CONNECTORS**

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

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. Consult KOOLTRONIC for Part No.

**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 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

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