

NP59 TRIMLINE AIR-COOLED PANEL-MOUNTED AIR CONDITIONERS



NEMA
TYPE 12
MAINTAINE

**NOTE: REPLACEMENT MODELS
USING R410A REFRIGERANT ARE
CURRENTLY UNDER DEVELOPMENT

K2A3C16NP59R

Maximum enclosure

air temperature

PERFORMANCE

24000

21000

(BTU

Capacity

Cooling

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.

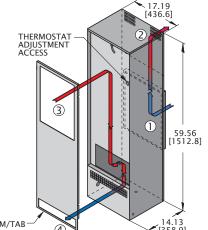
TECHNICAL DATA

				95/95	Ambient			**	Approx.
		Normally	BTU/H	Rating	Temp. ⁰F			Running	Weight
	Model	in Stock	Capacity	BTU/H	Max./Min.	Volts	Hz	Amps	(lbs.)
	K2A3C16NP59R	Yes	16000	12500	125/50	230/200	60/50	22.0/22.3	250
	K2A3C16NP59R5	j	16000	12500	125/50	230	50	19.8	250

STANDARD FEATURES

Built-in Condensate Evaporator*
EMI/RFI Suppressor
Filter
Low ODP Refrigerant
Low Temperature Control Thermostat
M/TAB Mounting System
NEMA12 Rating Maintained (UL50)
Reversible Condenser Outlet Blower
UL/CUL Recognized

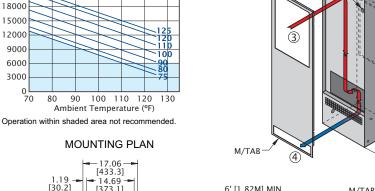
*These units are available without Built-in Condensate Evaporator. Model suffix changes from NP59 to NP52 and unit height decreases to 52.56" [1335.0mm].

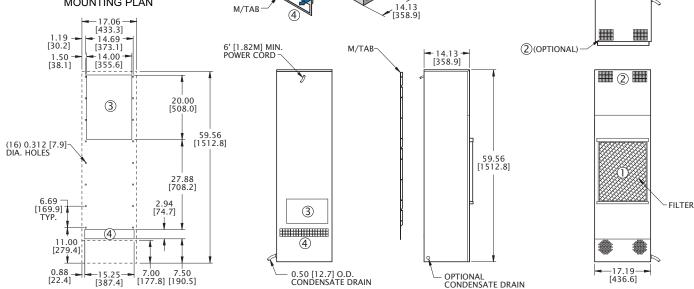


ACCESSORIES AND OPTIONS

Cooling Effect Detector
Enclosure Heater
Filter Recoating Adhesive
Internal Corrosion Protection
Lifting Eyes
Low Ambient Kit
Remote Thermostat Relay
Replacement Filters
Short Cycle Protector Special
controls or indicators Special
materials or finishes Special
motors, line cords, or
connectors
Stainless or Aluminum cabinet
Weather Protection Kit

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





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

np59d.qxd (12/21/21) (CDR:20369)

^{**} Rating shown is for operation at maximum ambient temperature.



NP59 TRIMLINE AIR-COOLED PANEL-MOUNTED AIR CONDITIONERS

DESCRIPTION

Innovations in technology have resulted in much denser components packaging and smaller available panel sizes on which to mount Air Conditioners. The KOOLTRONIC *TrimLine Series* is the response to these new packaging demands with the Narrow 10", 12", 15", 17" and 21" width panel-mount air conditioners. In addition to being narrower than traditional Air Conditioner units, the *TrimLine Series* include the Condensate Evaporator, Low Temperature Control Thermostat and EMI/RFI Suppressor as *standard* features and are available in all popular voltages and frequencies.

The *TrimLine NP59 Series* consists of compact models with a capacity of 16,000 BTU/H. This series is designed with a minimum width to take up less cabinet space on the exterior panel or door.

Integral to the TrimLine Series is the M/TAB (Mounting Template and Assembly Bracket) system which makes installing KOOLTRONIC Air Conditioners simple and fast and interchangeable with corresponding TrimLine Heat Exchangers.

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 *TrimLine* or other 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: Low Ozone Depleting Potential (ODP) R22 Refrigerant is used in all *TrimLine NP59 Series* Air Conditioners and are being converted to CFC-free R134a Refrigerant as compressors become available. Consult KOOLTRONIC for status at time of requirement.

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 Cotrol 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. Those rated at more than 16.0 Amps are supplied without plugs, for direct wiring to power source. For these, junction box connections, enabling UL Listed status where applicable, can be supplied at added cost.

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

GASKETING: All units are fully gasketed for tight, leakproof installation, in compliance with the NEMA 12 Enclosure Rating.

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 RECOGNIZED: All TrimLine NP59 Series are UL/CUL Recognized. All Recognized models are available as Listed at added cost.

*See Integrity NEMA 4/4X and Intrepid Outdoor Series for different specifications applicable.

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.

DEEP DRAIN PAN KIT: Where operating conditions permit excessive humidity into the enclosures, heavy condensate can invade the airstream into the electronics. The Deep Drain Pan Kit provides greater condensate water capacity and an internally mounted airflow system to facilitate the collection of condensate from the airstream for safe discharge. Replacing the standard drain pan without relocation of the cool air discharge into the cabinet, the kit does not impede airflow and can be field-retrofitted. The height of the Air Conditioner is increased only 5.50" [139.7mm].

**Contact KOOLTRONIC for information.



NP59 TRIMLINE AIR-COOLED PANEL-MOUNTED AIR CONDITIONERS

ACCESSORIES AND OPTIONS** (continued)

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.

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.

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.

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 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. 20001F (19.63" x 15.63" x 0.50" [499mm x 397mm 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 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