

# TRIMLINE SERIES WNP47 WATER-COOLED PANEL-MOUNTED AIR CONDITIONERS

Volts

115/100

230/200

230/200

Hz

60/50

60/50

60/50





 Rating for full capacity load at 85°F water.

 Rating shown is for operation at maximum ambient temperature.

 Usage will vary at lower load or cooler water temperature.

 STANDARD FEATURES

 CFC-Free Refrigerant

15 17

[385.3]

47.34 [1202.4]

12.26 [311.4]

0

WATER REGULATOR ADJUSTMENT

WATER INLET

<sup>3</sup>/8-18 NPT MALE FITTING

WATER OUTLET <sup>3/8-</sup>18 NPT MALE FITTING

RESET SWITCH \_ CONDENSATE DRAIN

BTU/H Water Flow (GPM)

@ 85°F Max.

2.0

2.0

2.5

Closed-Loop Cooling Excess Pressure Control Low Temperature Control Thermostat Water Regulating Valve

> POWER CORD

> > M/TAB

WATER

IN

THERMOSTAT

**TECHNICAL DATA** 

Model KA4C7WNP47

K2A4C7WNP47

K2A4C12WNP47

Capacity

7000

7000

12000

## ACCESSORIES AND OPTIONS

Approx.

Weight

kg.

lbs.

160 73

160 73

160 73

Running

Amps

12.0

7.0

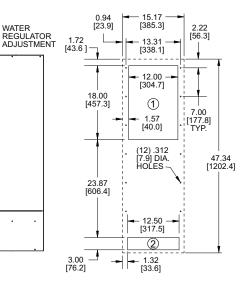
9.6

Adapter Aluminum Shell Compressor Short Cycle Protector Condensate Evaporator Kit Enclosure Heater Internal Corrosion Protection Lifting Eyes Low Airflow Detector Remote Thermostat Relay Special controls or indicators Special materials or finishes Special motors, line cords or connectors Stainless Steel Shell Temperature Alarm

#### (1) WARM AIR RETURN FROM ENCLOSURE

2 COOL AIR OUTLET TO ENCLOSURE

#### MOUNTING PLAN



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

Technical Documents

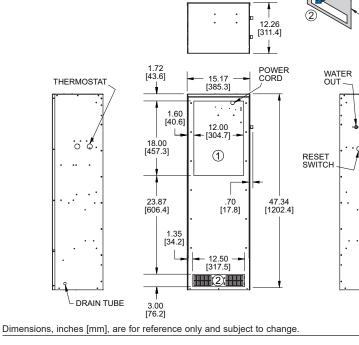
below.

Technical Documents



QR code

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



wnp47.qxd (10/23) (CDR: 20532)



## TRIMLINE SERIES WNP47 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 (7,000 BTU/H only) and 230 VAC, 50 Hz or 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.

REFRIGERANTS: CFC-free R134a Refrigerant is used in all WNP47 Air Conditioners.

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

## **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 shells and finishes 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 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.

MOUNTING ADAPTER PLATES: Are offered to replace another manufacturer's unit.

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.

## 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

