



TECHNICAL DATA

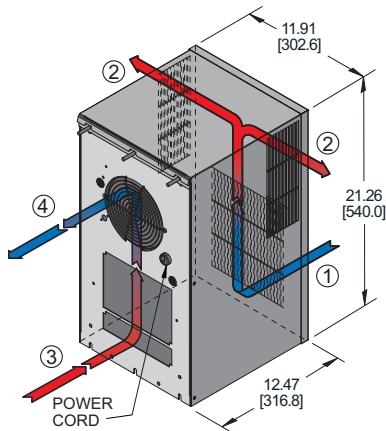
Model	Normally in Stock	BTU/H Capacity	95/95 Rating BTU/H	Ambient Temp. °F Max./Min.	Volts	Hz	** Running Amps	Approx. Weight (lbs.)
KNA4C3P21L	Yes	3000	2160	125/0	115	60	11.3	76
K2NA4C3P21L	Yes	3000	2160	131/0	230	60	4.7	76
K2NA4C3P21L5		3000	1940	131/0	230	50	4.6	76

STANDARD FEATURES

- CFC-Free Refrigerant
- Condensate Evaporator
- Condenser Impeller Speed Controller
- EMI/RFI Suppressor
- Filter
- Internal Corrosion Protection
- Low Temperature Control Thermostat
- NEMA 4/4X Ratings Maintained (UL50)
- Stainless Steel Shell
- UL/CUL Listed

ACCESSORIES AND OPTIONS

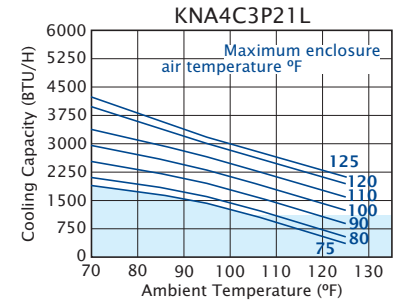
- Cooling Effect Detector
- Enclosure Heater
- Filter Recoating Adhesive
- Lead-Lag Controller
- Remote Thermostat Relay
- Replacement Filters
- Short Cycle Protector
- Special materials or finishes



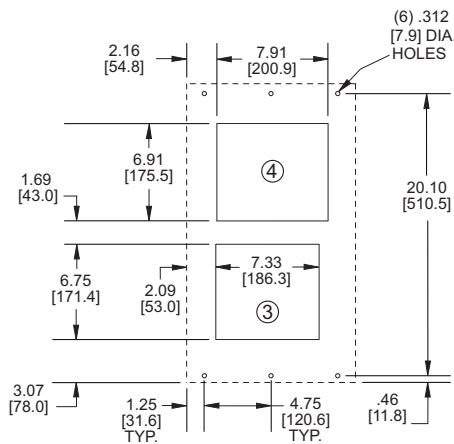
1. FILTERED CONDENSER AIR INLET (Ambient Air In)
2. CONDENSER OUTLET (Warm Ambient Air Out)
3. WARM AIR RETURN FROM ENCLOSURE
4. COOL AIR OUTLET TO ENCLOSURE

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

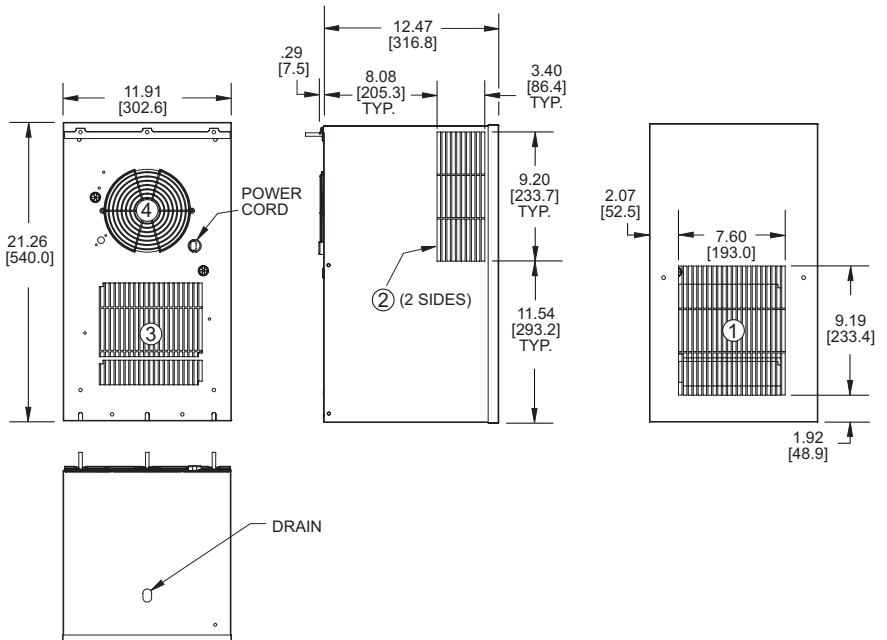
PERFORMANCE



Operation within shaded area not recommended.



MOUNTING PLAN



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

** Rating shown is for operation at maximum ambient temperature.

nema4x21.qxd 11/17/11

DESCRIPTION

Designed specifically for NEMA 4/4X Enclosure applications that require washdown or are subject to outdoor storm conditions, KOOLTRONIC *Integrity NEMA 4/4X Air Conditioners* protect the ratings of NEMA 4/4X Enclosures.

These exclusive **patented** UL/CUL Listed Panel-Mounted Air Conditioners provide superior closed-loop cooling and also protect against the hazards specified for both Indoor and Outdoor NEMA 4/4X Enclosures. Tested and rated by universally recognized Underwriters Laboratories, these uniquely-designed **304-2B Stainless Steel** Air Conditioners prevent unwanted environmental penetration of NEMA 4/4X Enclosures as they provide a clean, cool internal environment.

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

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].

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

POWER: Available in 115 VAC, 60 Hz or 50/60 switchable and 230 VAC, 50 Hz or 60 Hz.

REFRIGERANT: CFC-free R134a Refrigerant is used in all *Integrity NEMA 4/4X Series* Air Conditioners.

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 REMOVAL: Condensate drain fitting and hose are included.

LOW TEMPERATURE CONTROL: Thermostatic Low Temperature Control 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.

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 4/4X 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.

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

UL/CUL LISTED: All *NEMA 4/4X Integrity 21 Models* are **UL/CUL Listed**.

ACCESSORIES AND OPTIONS**

FACTORY-INSTALLED OPTIONS:

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.

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.

****Contact KOOLTRONIC for information.**

ACCESSORIES AND OPTIONS (continued)****FACTORY-INSTALLED OPTIONS (cont.):**

SHORT CYCLE PROTECTOR: Protects the compressor from possible damage due to harmful short cycling, (frequent starting) where temperature controls enable the compressor to restart frequently or after a power interruption. These conditions could be due to low or fluctuating heat loads within the electrical enclosure or a power failure. The Compressor Short Cycle Protector will prevent the compressor from starting when it has been shut off for less than several minutes or the power was interrupted. By limiting the number of compressor starts per hour, the life of the compressor is prolonged. It is recommended where installations are subject to solar gain and or changes in the enclosure internal load due to the degree of usage of the equipment being cooled. Also it is recommended where higher capacity units are specified in anticipation of the future addition of heat producing equipment being added to the enclosure.

Append letter "Y" to Part No.

SPECIAL MATERIALS OR FINISHES****SPECIAL MOTORS, LINE CORDS OR CONNECTORS******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.

LEAD-LAG CONTROLLER: This true dual-stage device allows users to control the operation of up to two air conditioners based on either temperature or run-time. For users with fluctuating heat loads, the Lead-Lag Controller will bring the second air conditioner on-line as the heat load increases, and shuts it down as the demand for additional cooling diminishes. It can also be used to distribute the run-time over multiple units, balancing the service life of the air conditioners.

Model Number: KLLC100

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.

(1) Part No. 9501F (9.50" x 10.50" x 0.38" [241mm x 267mm x 10mm])

****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**

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STOCKED AND READY TO SHIP**