

TRIMLINE TP59 SERIES AIR-COOLED PANEL-MOUNTED AIR CONDITIONERS



TP59

STANDARD FEATURES

- Baked Powder Finish
- Built-in Condensate Evaporator
- Low ODP Refrigerant
- EMI/RFI Suppressor
- Heavy-duty Steel Enclosure
- Low Temperature Control Thermostat
- M/TAB Mounting System
- NEMA 12 Rating Maintained (UL50)
- Reversible Condenser Outlet Blower
- Six Foot [1.8m] (minimum)
- SJT 3-wire Cord
- UL/CUL Recognized

† UL/CUL Recognized models are available as Listed at added cost

ACCESSORIES AND OPTIONS

- Compressor Heater
- Cooling Effect Detector
- Enclosure Heater
- Filter Recoating Adhesive
- Filters for replacement
- Internal corrosion protection
- Lifting Eyes
- Low Airflow Detector
- Low Ambient Kit & Compressor Heater
- Short Cycle Protector
- Special materials or finishes
- Special motors, line cords or connectors
- Stainless or Aluminum Cabinet
- Switchable 230V, 50/60 Hz
- Weather Protection Kit

APPROXIMATE WEIGHT

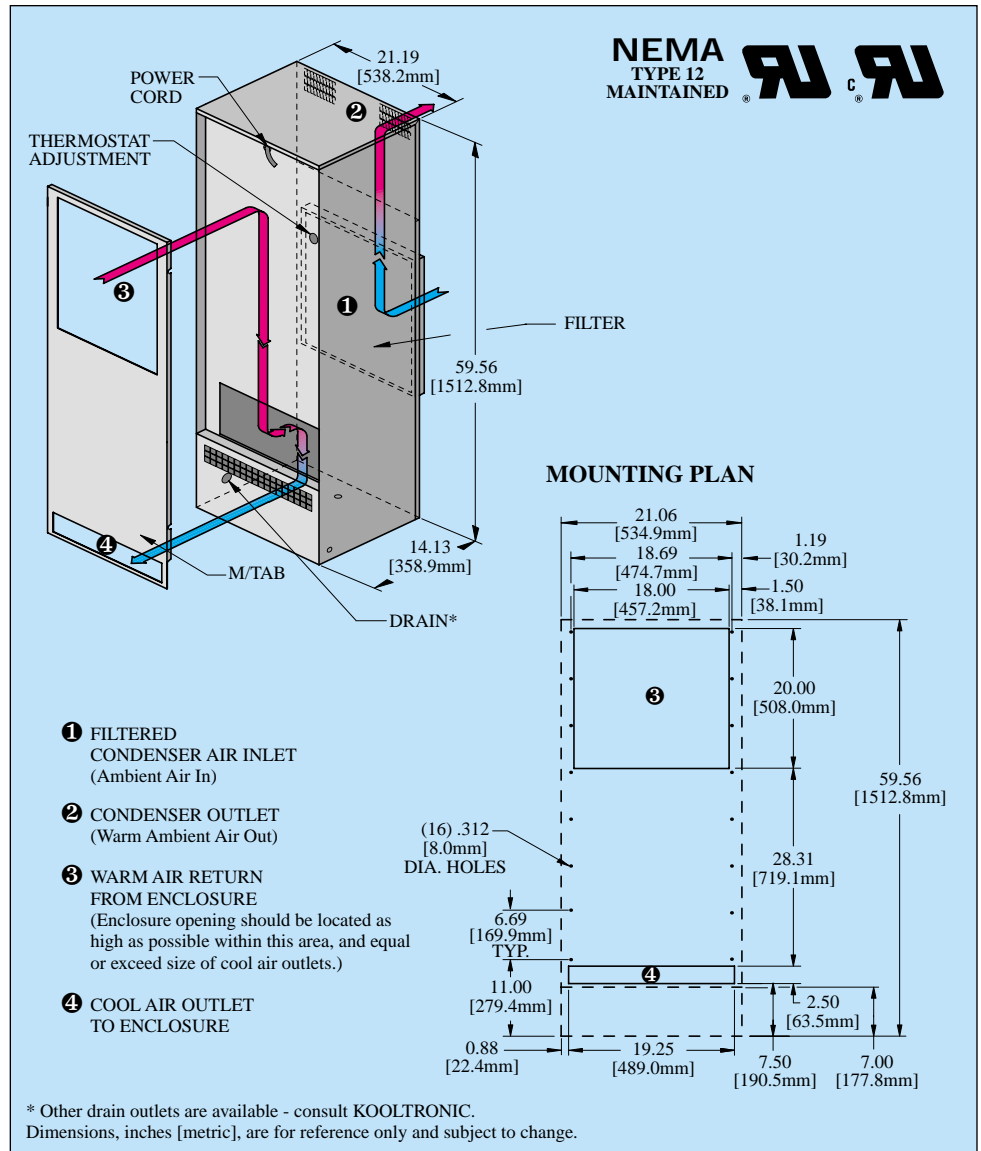
265 lbs. [120.5kg]

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 609-466-3400



TECHNICAL DATA*

Model	Refrigerant	UL/CUL Listed or Recognized	** BTU/H Rating	Ambient Temp.		◇ Volts	◇ Hz	** Running Amps
				Max./Min. °F	°C			
K2A3C18TP59R	R22	Recognized	18000	125/50	51.6/10.0	230/200	60/50	22.0/22.3
K2A3C18TP59R5	R22	Recognized	18000	125/50	51.6/10.0	230	50	19.8
K2A3C20TP59R	R22	Recognized	20000	125/50	51.6/10.0	230/200	60/50	22.0/22.3
K2A3C20TP59R5	R22	Recognized	20000	125/50	51.6/10.0	230	50	19.8
K2A3C22TP59R	R22	Recognized	22000	125/50	51.6/10.0	230/200	60/50	22.0/22.3
K2A3C22TP59R5	R22	Recognized	22000	125/50	51.6/10.0	230	50	19.8
K2A3C24TP59R	R22	Recognized	24000	125/50	51.6/10.0	230/200	60/50	22.0/22.3
K2A3C24TP59R5	R22	Recognized	24000	125/50	51.6/10.0	230	50	19.8

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

◇ 115V, 60 Hz and 230V, 60 Hz models also perform at full capacity when operated at 100V, 50 Hz or 200V, 50 Hz respectively. No transformer is required.

◆ This series is also available without Built-in Condensate Evaporator. Model Number suffix changes to TP52.

**POPULAR MODELS ARE
STOCKED AND READY TO SHIP**

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 TP59 Series consists of compact models in 18,000-24,000 BTU/H capacities. 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. No ambient air can 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 [-29°C] to 250°F [121°C]. Tube axial fans are rated to perform at 14°F [-10°C] to 158°F [70°C] and are designed to meet UL, CSA and VDE.

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 TP59 Series* Air Conditioners and are being converted to CFC-free R134a Refrigerant as compressors become available. Consult KOOLTRONIC for status at time of requirement.

PERMANENT 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. This model is available without Built-In Condensate Evaporator. Model number changes from TP59 to TP52.

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. 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 TP59 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)

COMPRESSOR HEATER: 120V or 240V heater attached to the compressor crankcase to maintain appropriate temperatures during cold operating conditions.

Append letter "E" to Part No.

**Contact KOOLTRONIC for information.

ACCESSORIES AND OPTIONS (continued)**

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].

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 & COMPRESSOR HEATER: Maintains sufficient operating pressures when ambient temperatures drop below 50°F [10°C]. Includes a compressor heater and a pressure device that senses the reduced discharge pressure and modulates the condenser blower. Effective to a minimum ambient temperature of 0°F [-17.8°C].

Append letter "N" to Part No.

SHORT CYCLE PROTECTOR: Protects the compressor from possible damage due to harmful short cycling after a power interruption, by initiating a 5 or 6-minute OFF period before resumption of normal operation. Generally, Air Conditioners require a 5-minute OFF period for compressor protection after power interruptions of any type, to prevent short cycling and resultant shortened compressor life. These power interruptions include power failures, opening of access doors, and cases where the thermostat activates the compressor in less than five minutes, due to high heat loads generated during OFF times. Particularly recommended for applications that experience frequent, brief power failures or require frequent opening of interlocked cabinet doors.

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)

SWITCHABLE 230V, 50/60 HZ: Consult Kooltronic for details.

CUSTOMER-INSTALLED OPTIONS:

FILTER RECOATING ADHESIVE: This compound is a superior product for recoating all permanent filters after washing. The adhesives penetrate dirt layers to keep the filter surface tacky for longer effective performance between washings.

Part No. A-16 - one pint container.

FILTERS FOR REPLACEMENT: 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 washable, reusable filters are designed to last the life of the cooling unit. Replacements are available for those which become damaged or otherwise non-serviceable.

Part No. 20001F (19.63" x 15.63" x 0.50" [498.6mm x 396.9mm x 12.7mm])

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.**