

KPR1051 Rev. A EMI/RFI SHIELDED TWIN PACKAGED BLOWER



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

Technical Documents



STANDARD FEATURES

- 800 CFM Capacity
- Attractive 19-inch [482.6mm] stainless steel grilles
- Dual inlet quadruplex blower design for maximum airflow
- EMI/RFI Shielding
- Exhaust guards included
- Filter
- Heavy-gauge steel shell with EIA-notched flanges and baked powder finish
- Inlet air cools motor for longer life
- Shielding available for all KOOLTRONIC Packaged Blowers
- Three foot [0.9m] (minimum) 3-wire power cord
- UL/CSA ball-bearing motors



CERTIFIED TO ISO 9001:2015
10014240 QM15

ACCESSORIES AND OPTIONS

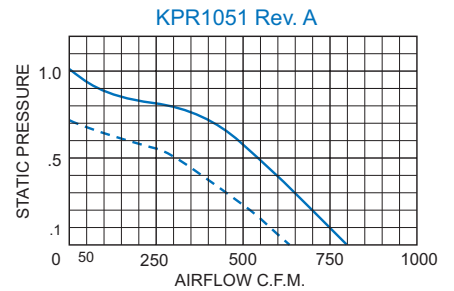
- Airflow Switch
- Automatic Speed Control
- Filter Recoating Adhesive
- Grille Assemblies for replacement
- Other voltages and frequencies
- Replacement Filters
- Special external paint finishes
- Special line cord or connectors

TECHNICAL DATA*

Model	Volts	CFM @ 0" S.P.	Cutoff S.P.	RPM Nominal	Amps			Approximate Weight	
					Run.	L.R.	Watts	Lbs.	Kg.
KPR1051A Rev A	115	800	1	1500	2.5	5.1	260	40	18.2
KPR1051B Rev A	115	800	1	1500	2.5	5.1	260	40	18.2
KPR1051C Rev A	115	800	1	1500	2.5	5.1	260	40	18.2
KPR1051D Rev A	115	800	1	1500	2.5	5.1	260	40	18.2

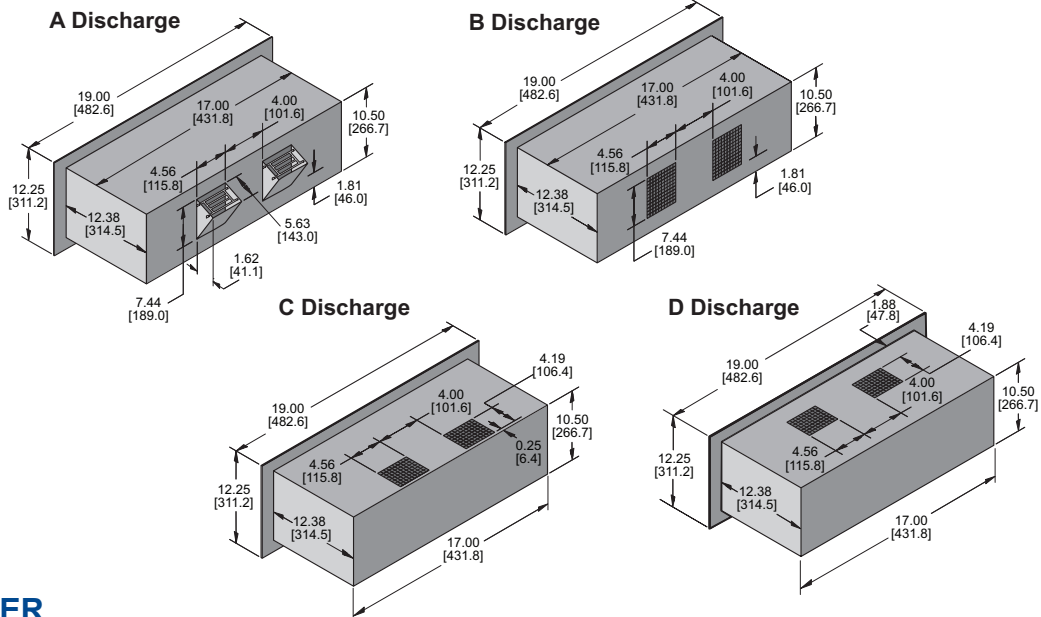
* 115V, 60 Hz operation.

PERFORMANCE GRAPHS



Airflow vs. static pressure curves are shown for 60 Hz (solid line) and 50 Hz (broken line) inputs. Static pressure is in inches of water.

DIMENSIONS AND DISCHARGE LOCATIONS inches [metric]

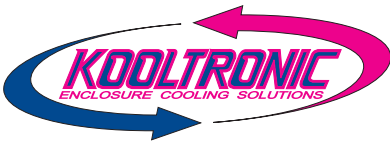


HOW TO ORDER

Specify model number, adding discharge suffix A, B, C or D. Example: KPR1051A. For 230 VAC operation, add a 2 after the K. Example: K2PR1051A.

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

kpr1051.qxd (05/23) (CDR: 20490)



KPR1051 EMI/RFI SHIELDED TWIN PACKAGED BLOWER

DESCRIPTION

The KOOLTRONIC EMI/RFI shield conforms to the latest technology in attenuation of electromagnetic interference. The **KPR Series** combines this shield with **Standard Twin Packaged Blowers**. In addition, the shielded front end can be incorporated into the entire broad line of KOOLTRONIC Packaged Blowers, as an option, with a few dimensional changes. This same front end can also be used as an enclosure accessory. See EMI-Shielded Filter-Grille Assemblies.

KOOLTRONIC achieves a high degree of EMI attenuation by the use of proven techniques and scrupulous production and quality controls. The honeycomb element and copper and tin-plated iron wire gasketing are sandwiched between a plated unitized steel frame and the plated flange welded to the cabinet. These are rigidly clamped in place with precision-torqued Allen head capscrews. This permits high clamping pressures for maximum EMI attenuation without distortion. The use of metallic chromate finish on the steel frame and corrosion-protected aluminum honeycomb provides uniform high attenuation and minimum internodal resistance. No conductive plastics are used. A full mounting flange provides a continuous conductive surface for interface with the user's cabinet.

KOOLTRONIC also offers a full line of **EMI-Shielded Filter-Grille Assemblies**, independent of the blower package. These assemblies can be used at remote inlet or discharge locations, for EMI-protected air paths.

EMI/RFI-shielded fronts, in packaged blowers or used separately, do not reduce air delivery.

STANDARD FEATURES

RUGGED CONSTRUCTION: Precision-engineered heavy-gauge steel construction insures blower will stand up under tough industrial applications. EIA-notched flanges extend 17" [431.8mm] blower cabinet to 19" [482.6mm] panel width.

BAKED POWDER FINISH: Durable, baked-on gray powder finish is standard. Other finishes are available.

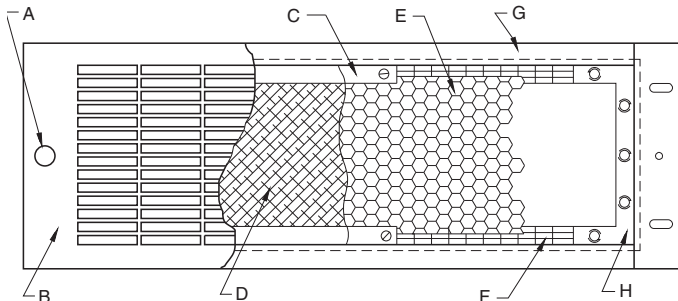
PRECISION BALL-BEARING MOTORS: All motors, whether permanent split capacitor or shaded pole, are UL/CSA Recognized, and include automatic-reset thermal overload protection. Designed for low temperature rise, KOOLTRONIC motors are also cooled by the blowers' intake air, for maximum motor life. All motors meet Federal Specification CC-M-1807A, and include double-sealed or double-shielded precision ball bearings which meet Federal Specification FF-B-171A. Special permanent lubricants perform over a broad temperature range: -20°F (-28.9°C) to 250°F (121.1°C). Consult KOOLTRONIC for motors designed to meet military or extreme environmental specifications.

POWER: 115 VAC or 230 VAC, 50/60 Hz is standard. For multi-phase power, other voltages and frequencies or brushless DC applications, consult KOOLTRONIC.

GRILLE: All units include attractive 19" [482.6mm] wide stainless steel grilles with knurled captive fasteners for easy removal. Grille area is 65% open and complies with OSHA and UL safety standards.

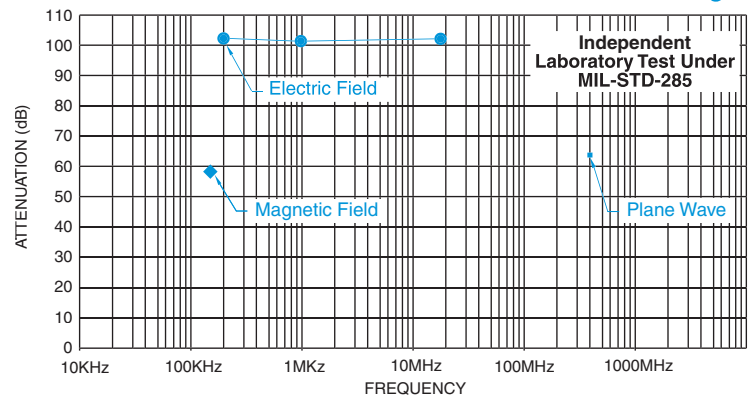
FILTERS: The filters included with all packaged blowers consist of a multi-layer grid of sturdy, corrugated aluminum in a one-piece aluminum frame. Adhesive coated to trap particulate matter, they are easy to remove, wash and treat with KOOLTRONIC A-16, an adhesive-rejuvenating spray. Filters must be kept free of accumulations, to prevent reduction or loss of performance and/or damage to equipment.

POWER CORD: All 115 VAC, 50/60 Hz units are supplied with a minimum of 36" [914.4mm] three-wire cord with molded plug included, internally grounded and securely locked to the case by a strain relief bushing. 230 VAC, 50/60 Hz blowers are supplied without a plug. Special lengths and/or plugs are available.

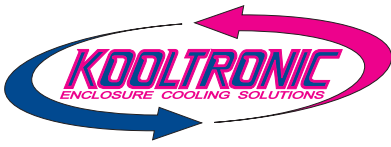


EMI-SHIELDED FILTER-GRILLE ASSEMBLIES: (A) Captive Thumbnut, (B) Grille, (C) Plated Steel Retainer Frame, (D) Aluminum Filter, (E) Honeycomb, (F) EMI Gasket (Plated knitted wire mesh), (G) EMI Frame (Plated steel rear surface), (H) Plated steel surface.

Attenuation Levels of Standard KOOLTRONIC EMI Shielding



For assistance in model selection, contact KOOLTRONIC or use one of our design aid software programs, available FREE.



KPR1051 EM/RFI SHIELDED TWIN PACKAGED BLOWER

ACCESSORIES AND OPTIONS*

ADAPTERS: Unavailable for this model.

AIRFLOW SWITCH: Protects equipment against damage caused by loss of cooling airflow by activating an alarm or turning off power. The switch can be mounted on any suitable surface which allows the stainless steel air vane to be placed in the critical airstream. This switch is a single-pole double-throw type, with normally open and normally closed contacts. To order integrated airflow switch add -XX10 to model number. To order as external accessory, see Kooltronic website.

AUTOMATIC SPEED CONTROL: The Kooltronic Fan and Blower Automatic Speed Control (Part Number KSC100) is a solid state "smart" controller packaged in a NEMA 1 type enclosure for remote mounting. The allowable input power supply range is 95 to 250 Volts, 47 to 63 Hz. It is furnished standard with an IEC 320 connector, a power supply fuse and a temperature sensor. Additional temperature sensors are optional. Power cord is not provided.

The controller will operate single or multiple fans or blowers of compatible voltage and frequency up to a combined load of 6 Amps. The controller may be operated by either a control voltage signal of 0 to 10 VDC, a control current signal of 0 to 20 mA or one to three temperature sensors. With multiple temperature sensors the controller will respond to the highest sensed temperature.

The control circuit board is furnished with a terminal strip for field connecting the sensor and fan wires. A pressure type strain relief connector is furnished in the enclosure. If required by installation or by code, this connector can be replaced with a 1/2-inch [12.7mm] trade size conduit connector.

A wide variety of control logic options can be field programmed into the controller by means of a board mounted DIP switch. These include fan idle or starting speed at 30%, 40%, 50% or 60% of supply voltage, fan on or off below the idle setting, control temperature setting at 86°F (30°C), 95°F (35°C), 104°F (40°C), 113°F (45°C), and temperature differential settings of 7°F (4°C) and 18°F (10°C). The selectable fan on/off feature is operative when the temperature(s) drop below the control temperature setting.

Consult factory for use with compatible Kooltronic fans or blowers.

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.

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 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. 10501F (16.63" x 10.13" x 0.50" [422.4mm x 257.3mm x 12.7mm])

GRILLE ASSEMBLIES: These assemblies are ideal for venting applications on the enclosure. These attractive grilles are made of mirror-finish stainless steel. All are 19" [482.6mm] wide. They are 65% open, comply with OSHA and UL safety standards, and include knurled captive fasteners for easy attachment and removal.

EMI/RFI-SHIELDED FILTER GRILLE ASSEMBLIES: For enclosures with filtered air intakes requiring EMI shielding, these assemblies are identical in design to the front ends of the KOOLTRONIC EMI/RFI Shielded Packaged Blowers. Each consists of a Grille Assembly, filter and EMI frame with integral EIA-notched flanges. For venting applications requiring no filtration, removal of the filter will not materially effect EMI attenuation.

GRILLE ASSEMBLIES

Model	Grilles Assemblies	Filter Grilles Assemblies	Height Inches [metric]
	10501X	KFG1050-19	10.50 [266.7]
Overall depth, including fasteners: 0.50" [12.7mm] 0.75" [19.1mm]			

EMI/RFI SHIELDED

FILTER GRILLE ASSEMBLIES

Model	Height
KFRG1050-19	12.25 [311.2]
Overall depth, including fasteners: Standard Grille - 1.88 [47.8]	
Dimensions, inches [mm], are for reference only and subject to change.	

OTHER VOLTAGES AND FREQUENCIES

SPECIAL EXTERNAL PAINT FINISHES

SPECIAL LINE CORD OR CONNECTORS

*Contact KOOLTRONIC for information.

KOOLTRONIC also designs and manufactures a variety of Packaged Blowers to meet *unique* specifications. We invite your inquiries about our modification and custom-design capabilities.