

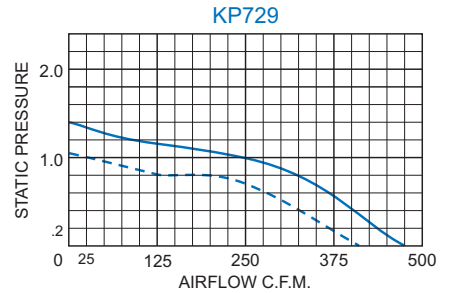
## STANDARD FEATURES

Capacity: 470 CFM  
 Heavy-gauge steel shell with EIA-notched flanges and baked powder finish  
 Attractive 19-inch [482.6mm] stainless steel grilles  
 UL/CSA ball-bearing motors  
 Filter  
 Dual inlet quadruplex blower design for maximum airflow  
 Inlet air cools motor for longer life  
 Exhaust guards included  
 Three foot [0.9m] (minimum) SJT 3-wire power cord

## ACCESSORIES AND OPTIONS

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

## PERFORMANCE GRAPH



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



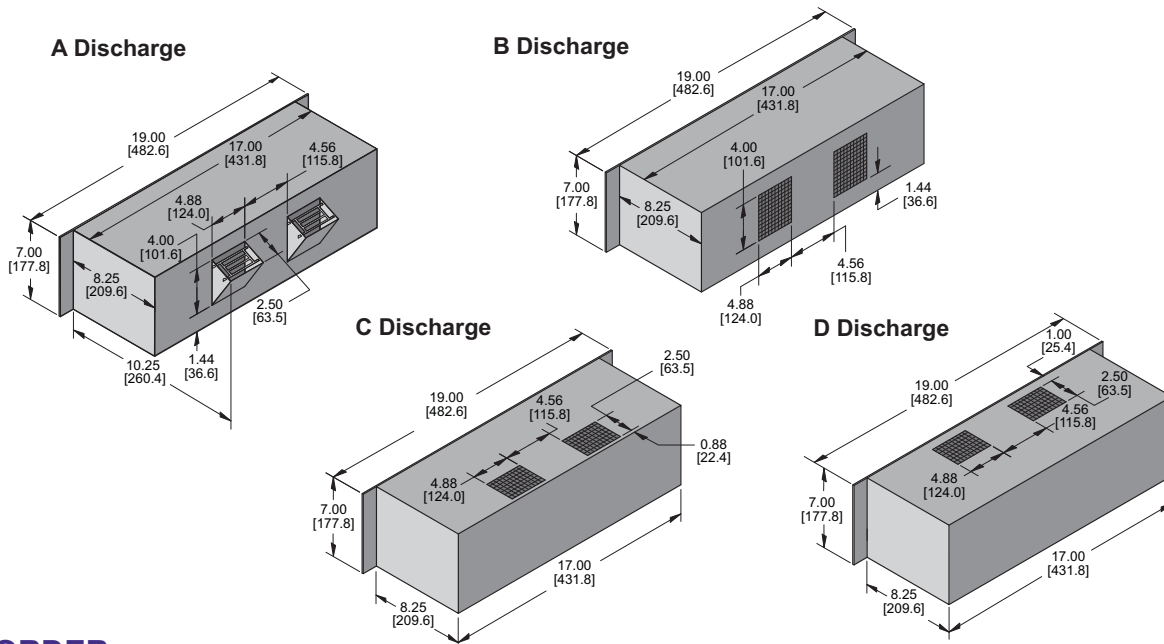
## TECHNICAL DATA \*

Model**	Normally In Stock	CFM @ 0" S.P.	Cutoff S.P.	RPM Nominal	Amps		Watts	Approximate Weight	
					Run.	L.R.		Lbs.	Kg.
KP729	Yes	470	1.40	3250	1.7	3.1	185	18	8.2

\*115V, 60 Hz. operation

\*\*A, B, C & D

## DIMENSIONS AND DISCHARGE LOCATIONS inches [metric]



## HOW TO ORDER

Specify model number, adding discharge suffix A, B, C or D. Example: KP729A. For 230 VAC operation, add a 2 after the K. Example: K2P729A.

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

kp729.qxd 9/22/06

## DESCRIPTION

**Standard Twin Packaged Blowers** are the most popular KOOLTRONIC Packaged Blower. These blowers achieve exceptional performance through use of the largest possible blower housings and wheels. Each contains a quadruplex centrifugal blower powered by a single precision ball-bearing motor.

These widely-used **Standard Twin Packaged Blowers** deliver air from more than 50% of their 17" [431.8mm] width, while conventional blowers deliver air from only about 30%.

Internal neoprene isolation mounts reduce transmission of vibration and AC hum to the enclosure. Long service life and trouble-free performance are assured through the use of precision ball-bearing motors in all models and by the dual inlet quadruplex design, which uses intake air to cool the motor.

## 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] type SJT 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.

**EXHAUST GUARDS:** Included on all packaged blowers.

## ACCESSORIES AND OPTIONS\*

**ADAPTERS:** (Set of two) These extend the width of any 19" [482.6mm] KOOLTRONIC Packaged Blower to permit mounting in a cabinet designed for 24" [609.6mm] units. The EIA-notched adapters are covered by a plate of mirror-finish stainless steel to match KOOLTRONIC Standard Grilles. These adapters are non-structural. Therefore, Packaged Blowers must be supported at the rear, due to their weight.

### Models

Mirror Finish	Brushed Finish	Height Inches [metric]
KA24-3M	KA24-3	3.50 [88.9]

**AIRFLOW SWITCH:** See accompanying literature for more information.

**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.

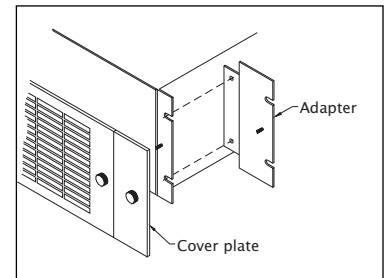
The controller will operate single or multiple fans or blowers of compatible voltage and frequency up to a combined load of 6 Amps. The controller may be operated by either a control voltage signal of 0 to 10 VDC, a control current signal of 0 to 20 mA or one to three temperature sensors. With multiple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

\*Contact KOOLTRONIC for information.



## ACCESSORIES AND OPTIONS\* (continued)

**EMI/RFI SHIELDING:** See EMI/RFI-Shielded Twin Packaged 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 reusable, 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. 3501F (16.63" x 8.13" x 0.50" [422.3mm x 206.5mm 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.

**Model**

Grilles Assemblies	Filter Grilles Assemblies	Height Inches [metric]
KPG350-19	KFG350-19	3.50 [88.9]
Overall depth, including fasteners:		
0.50" [12.7mm]	0.75" [19.1mm]	

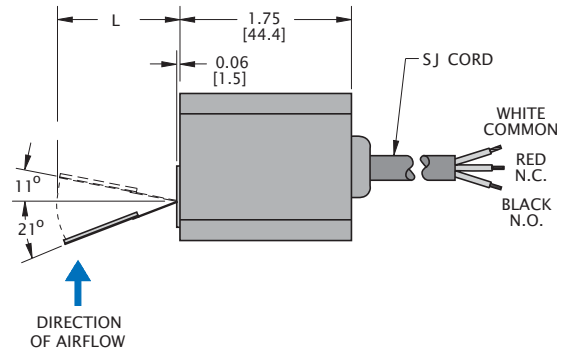
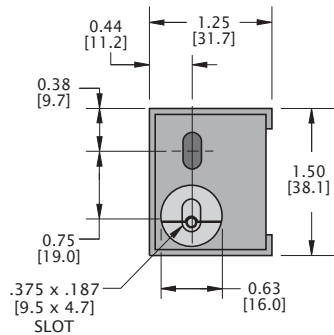
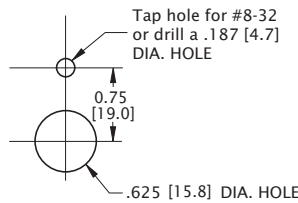
**AIRFLOW SWITCH:** Protects equipment against damage caused by loss of cooling airflow, by activating an alarm or turning off power. The switch can be mounted on any suitable surface which allows the stainless steel air vane to be placed in the critical airstream. This switch is a single-pole double-throw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

The UL rating for the rotary snap action switch is 5 amps at 250 volts AC. A three foot [0.9m], three-wire SJT power cord is provided, allowing connection to normally open or normally closed circuits.

The choice of air vanes is determined by location and orientation in the airstream, and the normal operating air velocity at the point of installation. Refer to the chart below or consult KOOLTRONIC Engineering for assistance.

**For other switch orientations or if air velocity cannot be measured by conventional means, KOOLTRONIC can supply additional individual or sets of air vanes to determine the optimum size.**

See next page for Airflow Switch Technical Data



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

\*Contact KOOLTRONIC for information.

**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.**

## ACCESSORIES AND OPTIONS\* (continued)

TECHNICAL DATA			Orientation of Airflow Switch							
			Vertical Airstream				Horizontal Airstream			
Model	Dim. "L" Max.	Vane Length	Airstream Up		Airstream Down		Arm Horizontal		Arm Vertical Vane Down	
			Increasing Air	Decreasing Air	Increasing Air	Decreasing Air	Increasing Air	Decreasing Air	Increasing Air	Decreasing Air
			Actuate ft/min	Deactuate ft/min	Actuate ft/min	Deactuate ft/min	Actuate ft/min	Deactuate ft/min	Actuate ft/min	Deactuate ft/min
KV-1	3.36 [85.3]	2.86 [72.6]	660	590	-	-	620	530	630	520
KV-2	2.75 [69.9]	2.25 [57.2]	840	750	-	-	790	670	800	660
KV-3	2.44 [62.0]	1.94 [49.3]	980	870	-	-	860	750	860	770
KV-4	2.19 [55.6]	1.69 [42.9]	1010	960	640	610	980	870	980	820
KV-5	1.94 [49.3]	1.44 [36.6]	1180	1130	880	720	1070	930	1050	960
KV-6	1.56 [39.6]	1.06 [26.9]	1520	1370	1210	1050	1370	1260	1410	1290
KV-7	1.44 [36.6]	0.94 [23.9]	1670	1520	1380	1290	1570	1430	1600	1430
KV-8	1.25 [31.8]	0.75 [19.1]	2020	1880	1940	1780	2010	1710	2080	1780
KV-9	1.13 [28.7]	0.63 [16.0]	2360	2180	2350	1930	2340	2060	2510	2150

Airflow switches KV-1 through KV-3 should not be mounted in a "down airstream" orientation because the weight of the vane is greater than the return spring force.  
Dimensions, inches [metric], are for reference only and subject to change.

\*Contact KOOLTRONIC for information.

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