## STANDARD TWIN PACKAGED BLOWERS





KP877A

### STANDARD FEATURES

Baked Powder Finish
Capacities: 130 to 800 CFM
Heavy-gauge steel enclosures
EIA-notched flanges
Attractive 19" [482.6mm] stainless
steel grilles

UL/CSA precision ball-bearing motors
Dual inlet quadruplex blower design
Inlet air cools motor for longer life
Permanent filters
Exhaust guards included
Three foot [0.9m] (minimum)
SJT 3-wire power cord

### ACCESSORIES AND OPTIONS\*

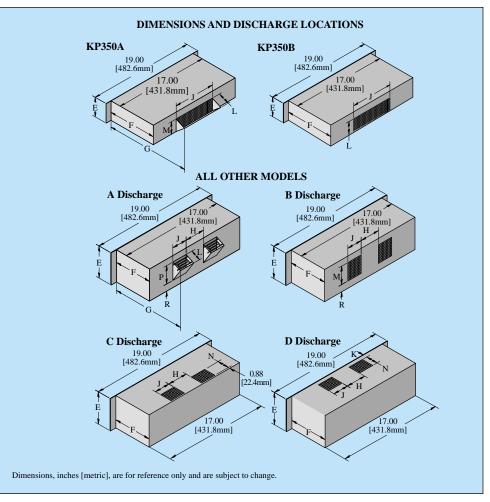
- Adapters
- Airflow Switch
- EMI/RFI Shielding
- Filter Recoating Adhesive
- Filters for replacement
- Grille Assemblies for replacement
- Other voltages and frequencies
- Special external paint finishes
- Special line cord or connectors

### TECHNICAL DATA\*\*

Model	CFM@ 0" S.P.	Cutoff S.P.	RPM Nominal
KP350	160	0.52	1500
KP528	130	0.87	3150
KP529	300	0.87	3000
KP701	330	0.42	1600
KP729	470	1.40	3250
KP877	525	0.82	1500
KP1051	800	1.00	1500

	Amps			Approximate Weight		
Model	Run	L.R.	Watts	Lbs.	[kg]	
KP350	1.2	1.6	90	18	8.2	
KP528	0.8	1.3	65	13	5.9	
KP529	1.4	1.9	95	13	5.9	
KP701	1.1	1.6	85	18	8.2	
KP729	1.7	3.1	185	18	8.2	
KP877	1.3	1.9	140	28	12.7	
KP1051	2.5	5.1	260	35	15.9	

<sup>\*\*115</sup>V, 60 Hz. operation



### **DIMENSIONS** (inches [metric])

		,	- 4/				
Model	Discharge Available	Max. Panel Height E	F	G	Н	J	K
KP350	AB	3.50 [88.9]	8.75 [222.3]	10.50 [266.7]	_	7.50 [190.5]	_
KP528	ABCD	5.25 [133.4]	6.25 [158.8]	7.69 [195.3]	3.25 [82.6]	2.50 [63.5]	0.63 [16.0]
KP529	ABCD	5.25 [133.4]	6.25 [158.8]	7.69 [195.3]	4.56 [115.8]	4.56 [115.8]	0.63 [16.0]
KP701	ABCD	7.00 [177.8]	8.25 [209.6]	10.06 [255.5]	3.25 [82.6]	4.75 [120.7]	0.63 [16.0]
KP729	ABCD	7.00 [177.8]	8.25 [209.6]	10.25 [260.4]	4.56 [115.8]	4.88 [124.0]	1.00 [25.4]
KP877	ABCD	8.75 [222.3]	10.00 [254.0]	11.56 [293.6]	2.13 [54.1]	5.69 [144.5]	0.69 [17.5]
KP1051	ABCD	10.50 [266.7]	11.50 [292.1]	13.13 [333.5]	4.00 [101.6]	4.50 [114.3]	1.00 [25.4]

Model	Discharge Available	L	M	N	P	R	
KP350	AΒ	2.25 [57.2]	2.25 [57.2]	-	-	-	
KP528	ABCD	1.88 [47.8]	3.00 [76.2]	1.94 [49.3]	3.00 [76.2]	1.19 [30.2]	
KP529	ABCD	1.88 [47.8]	3.00 [76.2]	1.94 [49.3]	3.00 [76.2]	1.19 [30.2]	
KP701	ABCD	4.00 [101.6]	5.44 [138.2]	3.25 [82.6]	5.44 [138.2]	0.88 [22.4]	
KP729	ABCD	2.50 [63.5]	4.00 [101.6]	2.50 [63.5]	4.00 [101.6]	1.44 [36.6]	
KP877	ABCD	4.38 [111.3]	6.06 [153.9]	3.63 [92.2]	6.06 [153.9]	1.19 [30.2]	
KP1051	ABCD	5.63 [143.0]	7.44 [189.0]	4.19 [106.4]	7.44 [189.0]	1.81 [46.0]	

### **HOW TO ORDER**

Specify model number, adding discharge suffix A, B, C or D. Example: KP701A. For 230 VAC operation, add a 2 after the K. Example: K2P701A.

For assistance in model selection, refer to the <u>Blower and Fan Selection Guides</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

<sup>\*</sup>See accompanying literature for more information.

# STANDARD TWIN PACKAGED BLOWERS PERFORMANCE CHARTS

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

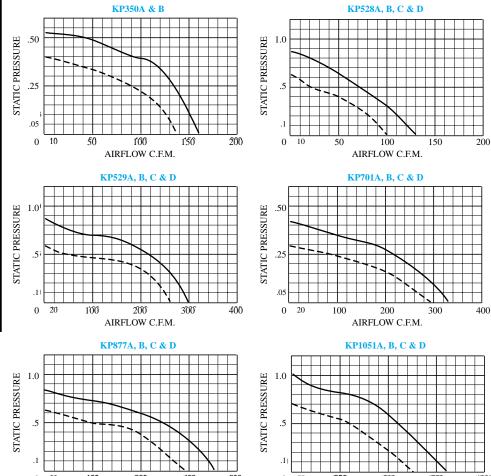
### **CONVERSION FACTORS**

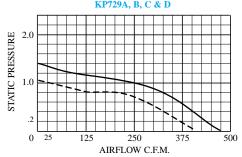
Multiply airflow in cubic feet per minute (CFM) by:

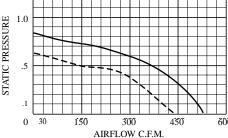
- 1.7 to obtain airflow in cubic meters per hour (m<sup>3</sup>/hr.)
- 0.47 to obtain airflow in liters per second (L/S)

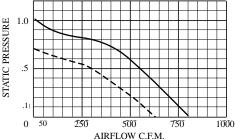
Multiply static pressure in inches of water ("H<sub>2</sub>O) by:

- 25.4 to obtain static pressure in millimeters of water (mm H<sub>2</sub>O)
- 249 to obtain static pressure in Pascals (Pa)









# **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.

**PERMANENT FILTERS:** Designed to last the life of the unit, 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.

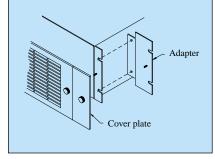
**EXHAUST GUARDS:** Included on all packaged blowers.

### 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	Brushed	Height
Finish	Finish	Inches [metric]
KA24-3M	KA24-3	3.50 [88.9]
KA24-5M	KA24-5	5.25 [133.4]
KA24-7M	KA24-7	7.00 [177.8]
KA24-8M	KA24-8	8.75 [222.3]
KA24-10M	KA24-10	10.50 [266.7]



AIRFLOW SWITCH: See accompanying literature for more information.

**EMI/RFI SHIELDING:** See EMI/RFI-Shielded Twin Packaged Blowers.

**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.

KP350 - Part No. 3501F (16.63" x 8.13" x 0.50" [422.3mm x 206.5mm x 12.7mm])

KP528, KP529 - Part No. 5251F (16.63" x 5.13" x 0.50" [422.3mm x 130.3mm x 12.7mm])

KP701, KP729 - Part No. 7001F (16.63" x 6.63" x 0.50" [422.3mm x 168.4mm x 12.7mm])

KP877 - Part No. 8751F (16.63" x 8.38" x 0.50" [422.3mm x 212.9mm x 12.7mm])

KP1051 - Part No. 10501F (16.63" x 10.13" x 0.50" [422.3mm x 257.3mm x 12.7mm])

Kooltronic, Inc., 30 Pennington-Hopewell Road, P.O. Box 240, Pennington, NJ 08534-0240
Tel: (609) 466-3400 Fax: (609) 466-1114 Internet: www.kooltronic.com E-Mail: techserv@kooltronic.com

# ACCESSORIES AND OPTIONS\* (continued)

**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	Filter Grilles	Height
Assemblies	Assemblies	Inches [metric]
KPG350-19	KFG350-19	3.50 [88.9]
KPG525-19	KFG525-19	5.25 [133.4]
KPG700-19	KFG700-19	7.00 [177.8]
KPG875-19	KFG875-19	8.75 [222.3]
KPG1050-19	KFG1050-19	10.50 [266.7]
Overall depth, in	cluding fasteners	:
0.50" [12.7mm]	0.75" [19.1mm]	

OTHER VOLTAGES AND FREQUENCIES

SPECIAL EXTERNAL PAINT FINISHES

SPECIAL LINE CORD OR CONNECTORS

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.

<sup>\*</sup>Contact KOOLTRONIC for information.



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 36" [914.4mm], 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 consult KOOLTRONIC Engineering for assistance.

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

1.50

[38.1mm]

-.375 x .187 [9.5mm x 4.7mm] SLOT

DIRECTION OF AIRFLOW

\_\_ 1.25 \_\_ [31.8mm]

0.44

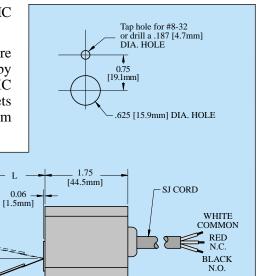
[11.2mm]

[19.1mm]

0.63 [16.0mm]

0.38

[9.7mm]



Dimensions, inches [metric], are for

reference only and are subject to change.

TECH	CCHNICAL DATA Orientation of Airflow Switch						ch			
				Vertical A	Airstream			Horizontal	Airstream	
										ertical
	Dim.		Airstre	am Up	Airstrea	m Down	Arm Ho	orizontal	Vane	Down
	"L"	Vane	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing	Increasing	Decreasing
	Max.	Length	Air							
	Inches	Inches	Actuate	Deactuate	Actuate	Deactuate	Actuate	Deactuate	Actuate	Deactuate
Model	[metric]	[metric]	ft/min							
KV-1	3.38 [85.9]	2.88 [73.2]	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

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