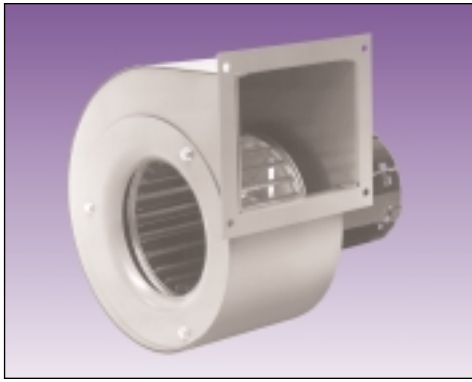


# SINGLE CENTRIFUGAL BLOWERS



KBB25

## STANDARD FEATURES

Baked Powder Finish  
 Capacities: 60 to 425 CFM  
 Full performance in any mounting position  
 Rugged construction  
 UL/CSA precision ball-bearing motors  
 12" [304.8mm] (minimum) power and ground leads

## ACCESSORIES AND OPTIONS\*

- Airflow Switch
- Other voltages and frequencies
- Special external paint finishes
- Special line cords or connectors

\*See accompanying literature for more information.

## TECHNICAL DATA\*\*

Model	CFM@ 0" S.P.	Cutoff S.P.	RPM Nominal
KBB25	60	0.85	3300
KBB30	95	0.85	3150
KBB35	140	1.30	3200
KBB36	235	1.50	3275
KBB43	320	2.00	3300
KBB49	425	2.70	3450
KBB50	300	0.88	1550

Model	Amps		Watts	Approximate Weight	
	Run	L.R.		Lbs.	[kg]
KBB25	0.5	0.8	35	5	2.3
KBB30	0.6	0.8	41	5	2.3
KBB35	1.3	2.1	90	6	2.7
KBB36	1.3	2.1	140	7	3.2
KBB43	1.6	3.1	180	9	4.1
KBB49	3.3	13.6	335	13	5.9
KBB50	0.9	1.3	95	8	3.6

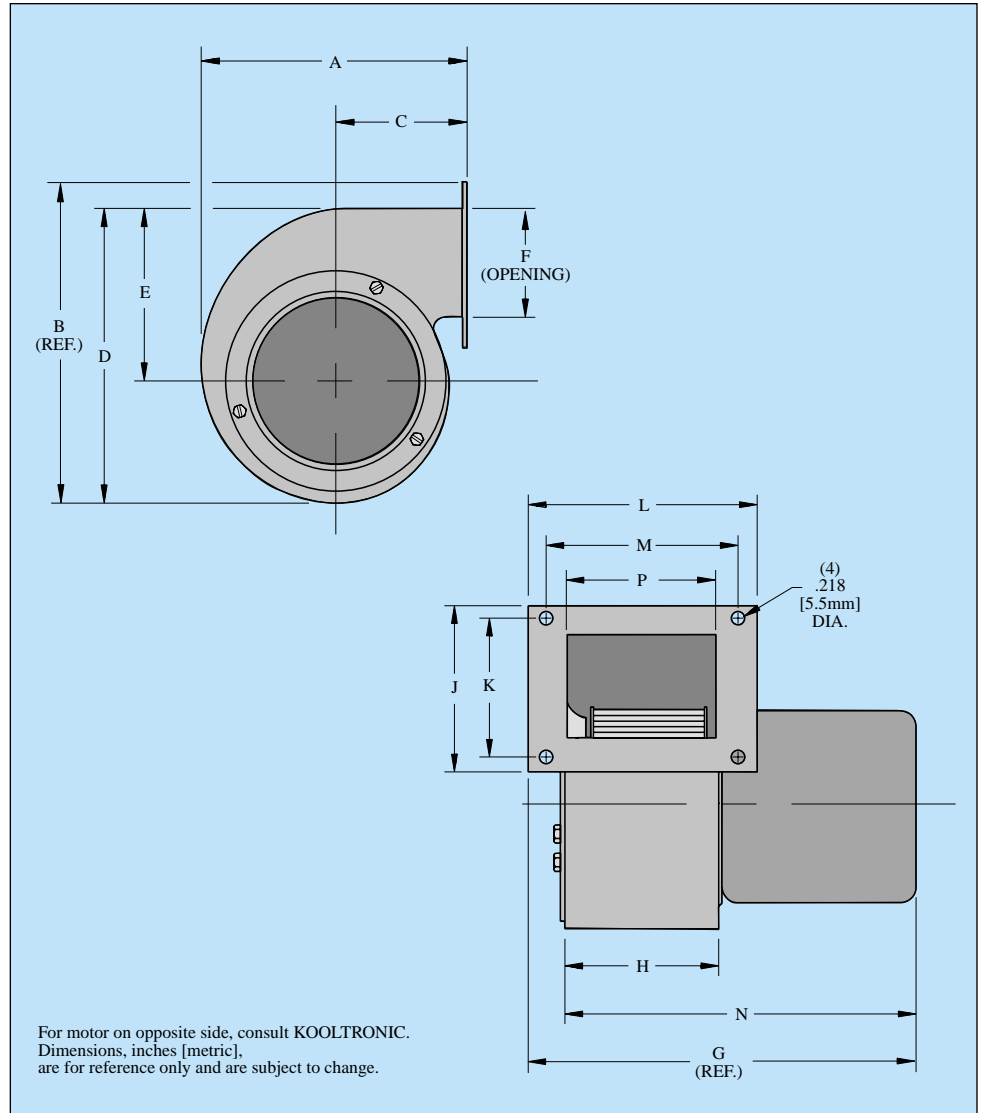
\*\*115V, 60 Hz. operation

## HOW TO ORDER

Specify model number. For 230 VAC operation, add a 2 after the K. Example: K2BB43.

For assistance in model selection, refer to the *Blower and Fan Selection Guides*, contact KOOLTRONIC, or use one of our design aid software programs, available FREE.

CALL 1-800-321-KOOL (5665)  
 or FAX 609-466-1114



## DIMENSIONS (inches [metric])

Model	A	B	C	D	E	F	G
KBB25	4.56 [115.8]	5.25 [133.4]	2.25 [57.2]	4.88 [124.0]	2.88 [73.2]	1.88 [47.8]	5.25 [133.4]
KBB30	5.31 [134.9]	6.00 [152.4]	2.56 [65.0]	5.44 [138.2]	3.13 [79.5]	1.88 [47.8]	5.88 [149.4]
KBB35	6.38 [162.1]	7.38 [187.5]	3.00 [76.2]	6.75 [171.5]	3.88 [98.6]	2.44 [62.0]	6.38 [162.1]
KBB36	6.44 [163.6]	7.19 [182.6]	3.19 [81.0]	6.81 [173.0]	3.81 [96.8]	2.44 [62.0]	8.56 [217.4]
KBB43	7.31 [185.7]	8.25 [209.6]	3.44 [87.4]	7.63 [193.8]	4.19 [106.4]	3.31 [84.1]	8.25 [209.6]
KBB49	7.31 [185.7]	8.19 [208.0]	3.44 [87.4]	7.63 [193.8]	4.38 [111.3]	3.25 [82.6]	10.50 [266.7]
KBB50	8.25 [209.6]	9.19 [233.4]	4.06 [103.1]	8.63 [219.2]	5.00 [127.0]	3.19 [81.0]	8.94 [227.1]

Model	H	J	K	L	M	N	P
KBB25	2.06 [52.3]	2.69 [68.3]	2.25 [57.2]	3.06 [77.7]	2.63 [66.8]	4.75 [120.7]	1.94 [49.3]
KBB30	2.56 [65.0]	3.13 [79.5]	2.44 [62.0]	3.75 [95.3]	3.13 [79.5]	5.25 [133.4]	2.44 [62.0]
KBB35	2.56 [65.0]	3.75 [95.3]	3.00 [76.2]	3.75 [95.3]	3.13 [79.5]	5.75 [146.1]	2.44 [62.0]
KBB36	3.44 [87.4]	3.25 [82.6]	2.00 [50.8]	4.63 [117.6]	4.06 [103.1]	8.00 [203.2]	3.38 [85.9]
KBB43	4.00 [101.6]	4.50 [114.3]	3.75 [95.3]	5.13 [130.3]	4.63 [117.6]	7.69 [195.3]	3.88 [98.6]
KBB49	4.19 [106.4]	4.50 [114.3]	3.75 [95.3]	5.63 [143.0]	5.00 [127.0]	9.75 [247.7]	4.06 [103.1]
KBB50	4.31 [109.5]	4.38 [111.3]	3.75 [95.3]	5.50 [139.7]	4.88 [124.0]	8.31 [211.1]	4.19 [106.4]

POPULAR MODELS ARE  
 STOCKED AND READY TO SHIP

# SINGLE CENTRIFUGAL 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.

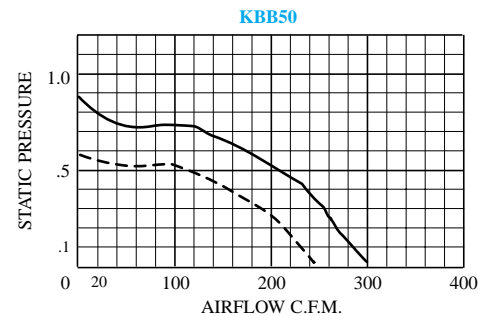
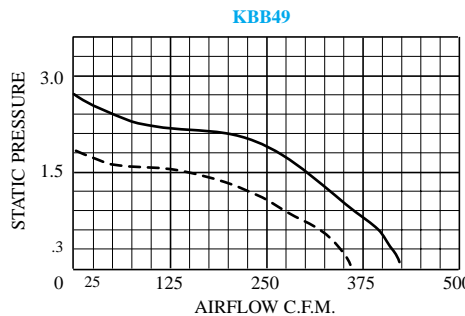
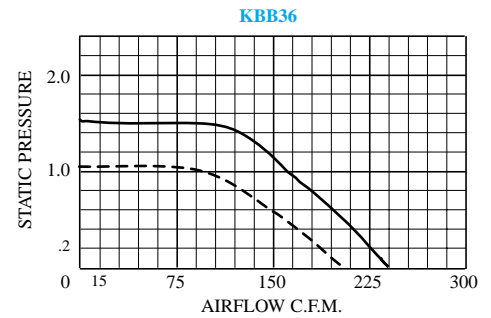
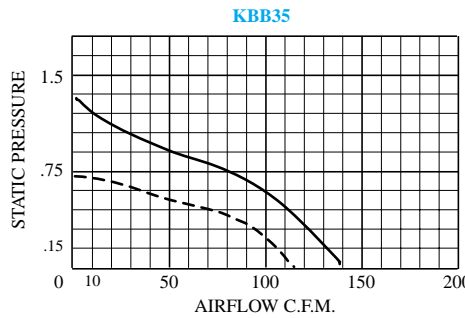
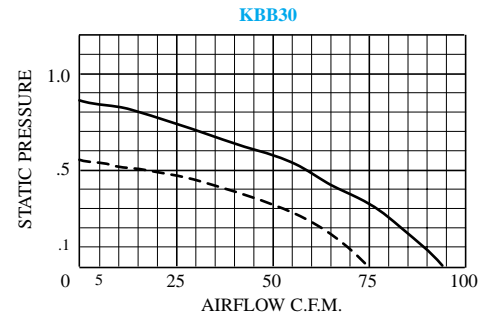
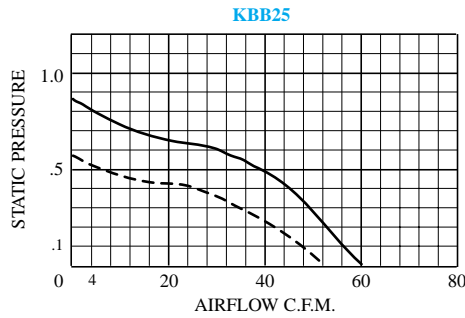
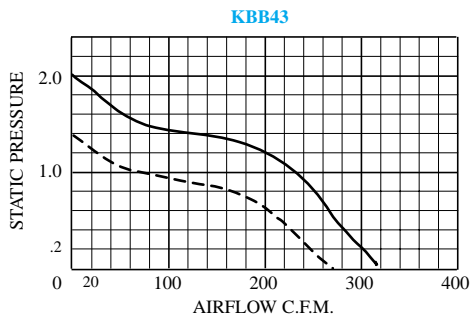
## CONVERSION FACTORS

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

KOOLTRONIC *Single Centrifugal Blowers* are designed for performance against low to moderate static pressures. They are available in seven sizes and capacities. Easily installed, they can be mounted in any orientation for maximum cooling efficiency.

These popular blowers are a low cost alternative for a multitude of applications. They are the workhorses of electronics cooling and are widely used in other non-electronic applications.

## STANDARD FEATURES

**RUGGED CONSTRUCTION:** Precision-engineered heavy-gauge steel construction insures blowers stand up under tough applications.

**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.

**LEADS:** 12" [304.8mm] (minimum) power and ground leads. Special lengths and/or plugs available.

# AIRFLOW SWITCH

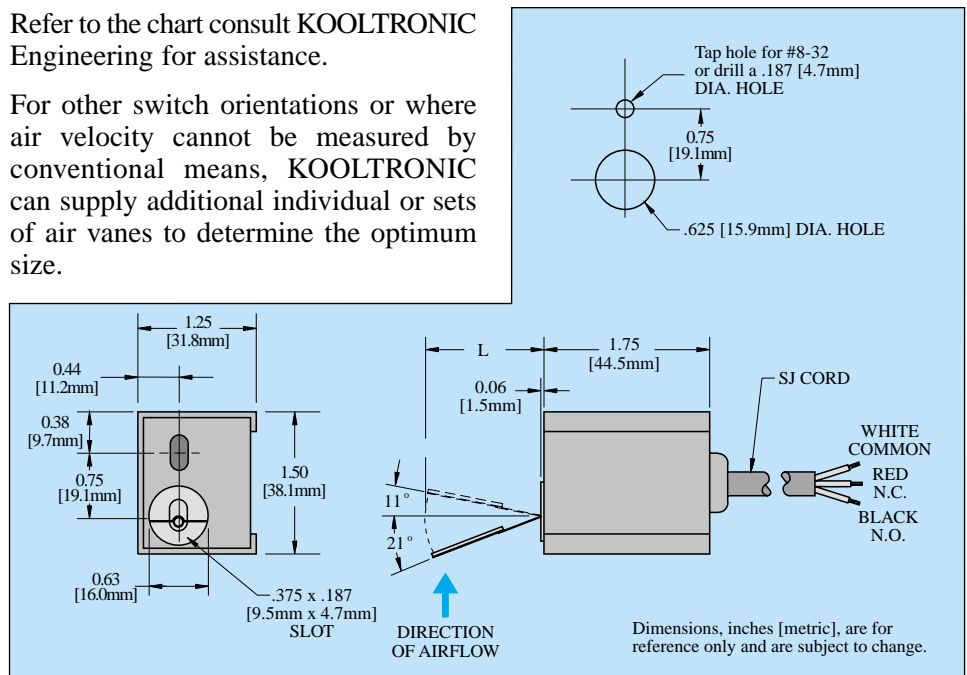
Protects equipment against damage caused by loss of cooling airflow, by activating an alarm or turning off power. The switch can be mounted on any suitable surface which allows the stainless steel air vane to be placed in the critical airstream. This switch is a single-pole double-throw type, with normally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

The UL rating for the rotary snap action switch is 5 amps at 250 volts AC. A 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.



## TECHNICAL DATA

### Orientation of Airflow Switch

Model	Dim. "L" Max. Inches [metric]	Vane Length Inches [metric]	Orientation of Airflow Switch							
			Vertical Airstream				Horizontal Airstream			
			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	3.38 [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