

Nidec

Drives

TRIAC Controls

KB Electronics



KBGE Series

Chassis Mount

The KBGE Series TRIAC control offers versatile solutions for various power applications.

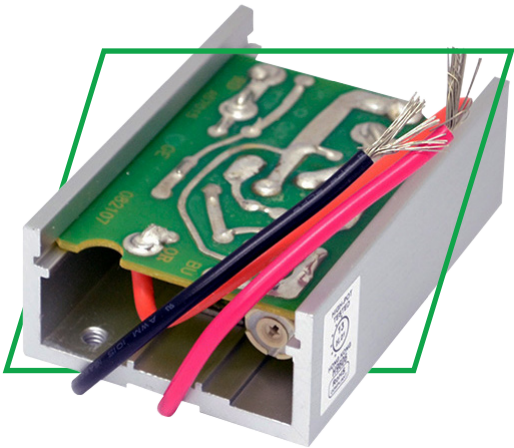
Key Features:

- Extended Range Circuitry:** Enables a broader operational range. (0 Vac-120 Vac, 0 Vac-240 Vac)
- RFI Filtering:** Reduces radio frequency interference, ensuring stable performance
- Minimum Output Voltage Trimpot:** Allows for precise adjustments to the minimum output voltage

Designed to provide a phase-controlled symmetrical AC output, the KBGE Series excels in variable voltage control and static switching. It effectively manages loads such as motors, lamps, and heaters, making it suitable for a wide range of applications, including Air curtains, Ventilators, Heat tunnels, Stirring devices, Theatre lighting and Laminar flow hoods.

The control unit is housed in a durable aluminum channel, which also functions as an isolated heat sink, enhancing thermal management. For increased amperage capacity, the KBGE controller can be mounted on a thermally conductive surface.

The KBGE Series is available in two voltage ratings: 115 Vac and 230 Vac. The 230 Vac models are compatible with 115 Vac circuits, providing added flexibility for installation.

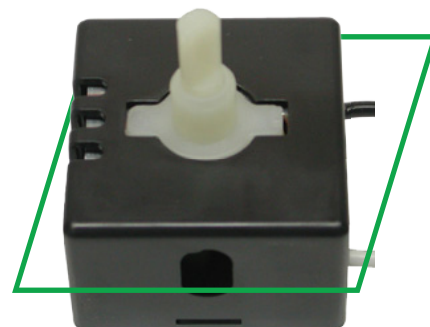


Max. Load Current	AC Line Voltage (50/60 Hz)	Model Number	Item Number	Dimensions H x W x D (in)
7	115	KBGE-115C	H9606	3.0 x 2.0 x 1.0
9	115	KBGE-125C	H9608	
7	230	KBGE-215C	H9607	
9	230	KBGE-225C	H9617	

KBMS Series

Compact ABS Enclosure Panel Mount

The KBMS Series controllers is the most compact solution within the panel mount product series. Designed to operate on 115 Vac or 230 Vac at 50/60 Hz, these controls feature an amperage rating of 3.0 Amps, making them suitable for various applications.



Key Features:

- **Compact Design:** The smallest control in the panel mount series, ideal for space-constrained installations.
- **Integrated On/Off AC Line Switch:** Available with an internal On/Off AC Line switch for convenient control
- **Auxiliary Control Options:** Models may include an optional third lead, enabling the control of auxiliary circuits such as relays, dampers, louvers, and indicator lamps.

The KBMS series is designed to deliver reliable performance while maintaining a compact footprint for enhanced flexibility in fan control applications.

Options:

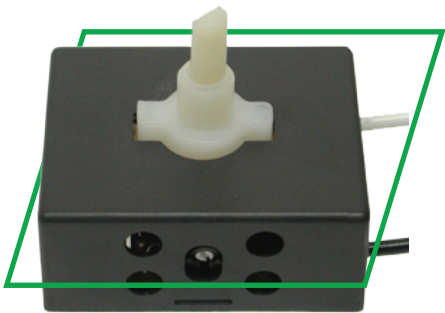
- Knob Spun Aluminum (Item Number 9801)
- Dial Plate (Item Number 9724)

Max. Load Current	AC Line Voltage (50/60 Hz)	Model Number	Item Number	Description	Dimensions H x W x D (in)
3	115	KBMS-13BV	H9042	Minimum Voltage Trimpot Adjustment, Off-High-Low Rotation	1.7 x 1.7 x 1.1
3	230	KBMS-23BV	H9082	Minimum Voltage Trimpot, Off-Low-High Rotation, No On/Off Switch	

KBMC Series

ABS Enclosure Panel Mount

The KBMC controls include models that operate on 115 Vac or 230 Vac at 50/60 Hz, providing an effective solution for replacing alternative speed control methods, such as tapped windings, chokes, and rheostats



Key Features:

- Integrated On/Off AC Line Switch:** Available with an internal On/Off AC Line switch for convenient control.
- Auxiliary Control Options:** Models may include an optional third lead, enabling the control of auxiliary circuits such as relays, dampers, louvers, and indicator lamps.

The KBMC series is designed to enhance operational efficiency while providing reliable and adjustable speed control for fan applications.

Options:

- Knob Spun Aluminum (Item Number 9801)
- Dial Plate (Item Number 9724)

Max. Load Current	AC Line Voltage (50/60 Hz)	Model Number	Item Number	Description	Dimensions H x W x D (in)
2.5	115	KBMC-13BV	H9034	Minimum Voltage Trimpot Adjustment Off-High-Low Rotation	1.7 x 2.2 x 1.1
2.5	115	KBMC-13BVNS	H9035A	Minimum Voltage Trimpot Adjustment, Off-Low-High Rotation, No On/Off Switch	
4	115	KBMC-14HV	H9753	Aluminum Enclosure, Minimum Voltage Trimpot Adjustment, Off-High-Low Rotation, 115 Vac Auxiliary Line	
2.5	230	KBMC-23BV	H9037	Minimum Voltage Trimpot Adjustment, Off-High-Low Rotation	

KBSC Series

Aluminum Enclosure Panel Mount

The KBSC Series TRIAC Controls are designed to operate on 115 Vac or 230 Vac, 50/60 Hz, and are housed in a durable aluminum enclosure.



Key Features:

- **Optional RFI Filter:** Enhances performance by reducing radio frequency interference.
- **Output Rotation:** Supports low to high output rotation for flexible speed control.

These controls provide an effective solution for managing fan speed while ensuring durability and ease of installation.

Options:

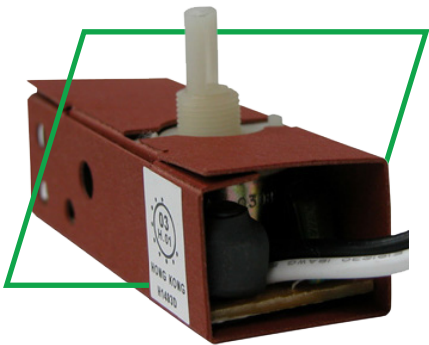
- Knob - Black ABS with silver hot stamp pointer (Item Number 9801)
- Dial Plate - Self Adhesive (Item Number 9724)

Max. Load Current	AC Line Voltage (50/60 Hz)	Model Number	Item Number	Description	Dimensions H x W x D (in)
4	115	KBSC-14FK	H9045	RFI Filter, Off-Low-High Rotation	1.7 x 2.2 x 1.1
4	115	KBSC-14NSRF	H9097	No On/Off Switch, RFI Filter, Off-Low-High Rotation	
4	230	KBSC-24NSRF	H9098	No On/Off Switch, RFI Filter, Off-Low-High Rotation	
4	230	KBSC-24FK	H9025A	RFI Filter, Off-Low-High Rotation	

KBNH Series

Fiber Enclosure Panel Mount

The KBNH Controller is designed with unique dimensions that provide space-saving advantages, making it an ideal choice for embedded systems. These Solid State AC Variable Voltage Fan Controls operate on 115 Vac at 50/60 Hz, offering alternative solution such as tapped windings, chokes, and rheostats for speed variation.



Key Features:

- **Compact Design:** Optimized dimensions for use in embedded systems, maximizing available space.
- **Integrated On/Off AC Line Switch:** Available with an internal On/Off AC line switch for convenient operation.

The KBNH Controller provides an efficient and flexible solution for managing fan speed in various applications while conserving space in embedded designs.

Max. Load Current	AC Line Voltage (50/60 Hz)	Model Number	Item Number	Description	Dimensions H x W x D (in)
2.5	115	KBNH-13BV	H9903	Fiber Enclosure, Minimum Voltage Trimpot Adjustment, Off-High-Low Rotation	3.0 x 1.1 x 1.0

Panel Mount Series

Part Number

Descriptions



Suffix Identification	Description	Notes	Example
B	Includes Enclosure, Flame Retardant ABS	KBMS & KBMC models are supplied with ABS enclosures.	KBMC-13BV
V	Includes Minimum Speed Trimpot	A fixed resistor is used on all models that do not contain the minimum speed trimpot.	KBMC-13BV
NS	Deletes On/Off Line Switch	When On/Off switch is not supplied the standard control output has a low to high rotation.	KBMC-13BVNS
I	Deletes RFI Filter	Caution must be exercised when eliminating the RF Filter	KBMC-13BVI
F	Includes Built-in Fuse	A built-in fuse is available on the KBMC models only. Fuse rating must be specified.	KBMC-13BVF
L	Includes Auxiliary 3rd Lead	Total current of motor load and auxiliary load must not exceed 4.0 Amps	KBMC-13BVL
R	Reverses Control Output Vs. Potentiometer Rotation	Standard TRIAC Controls have a high to low output rotation. This reverses the rotation from low to high.	KBMC-13BVR

DIAL-A-Temp

AC Line Connector Plug in

The DIAL-A-TEMP TRIAC Controller is a Plug-In style fan speed control specifically designed for controlling built-in Fans in Stoves and Fireplaces. It operates from 115 Vac 50/60 Hz with a maximum rating of 300 Watts @ 25C. The Dial-A-Temp contains an AC line Switch.



Key Features:

- Easy Installation:** No internal wiring, no tools required. Plug power source or extension chord into receptacle located on the bottom of the control.
- Enclosure:** Rugged Fire Retardant Thermoplastic Enclosure
- Integrated On/Off AC Line Switch:** Available with an internal On/Off AC line switch for convenient operation.
- Output Rotation:** Supports low to high output rotation for flexible speed control.

Max. Load Current	AC Line Voltage (50/60 Hz)	Model Reference	Item Number	Dimensions H x W x D (in)
2.5	115	Dial-A-Temp	H9980	2.0 x 3.0 x 1.7





KBWC Series

Wall Mount

The KBWC Series TRIAC Controls is Fan Speed Controls are specifically packaged for distributors and designed for installation in a standard 2" x 4" electrical wall box. These controls include models that operate using 115 Vac, 230 Vac or 277 Vac, 50/60 Hz, with a maximum rating ranging from 2.5 to 15 Amps, suitable for ambient temperatures between 25°C to 40°C.



Key Features:

- **Variable Speed Control:** Provides smooth, adjustable speed control for Shaded Pole, Permanent Split Capacitor, and Universal (AC/DC) motors.
- **Integrated On/Off AC Line Switch:** Features an easy-to-use On/Off AC line switch for convenient operation.
- **RFI Noise Suppression:** Equipped with a high-gain RFI noise suppression filter to minimize interference.
- **Adjustable Minimum Speed Trimpot:** Allows users to set the minimum speed according to their specific requirements.
- **Durable Enclosure:** Housed in a flame-retardant ABS enclosure for enhanced safety and durability.

These controls offer a reliable solution for precise motor speed management in various applications, making them an ideal choice for both residential and commercial use

Options:

- Knob- Blk plastic w/silver trim (Item Number 9801)- KBWC Pkg. B & C
- Knob- Blk plastic w/silver trim (Item Number 9727)- KBWC Pkg. D & E
- Dial Plate- Wall cover plate Silver (Item Number 9725)- KBWC PKG B & C
- Dial Plate- Integral part of heatsink, silver Off-High-Low (Item Number 9721)- KBWC PKG D
- Dial Plate- Integral part of heatsink, silver Off-High-Low (Item Number 9847)- KBWC PKG E

Max. Load Current	AC Line Voltage (50/60 Hz)	Model Number	Item Number	Installation Kit	Aux. Lead	Ref. Code
2.5	115	KBWC-13K	H9030A	✓		B
5	115	KBWC-15K	H9000C	✓		C
5	115	KBWC-15K	H9096A	✓		C
5	115	KBWC-15L	H9060A		✓	C
5	115	KBWC-16C	H9084			C
5	115	KBWC-16L	H9064A		✓	C
5	115	KBWC-16LK	H9063A	✓	✓	C
6	115	KBWC-16K	H9001C	✓		C
8	115	KBWC-18K	H9011	✓		D
10	115	KBWC-110	H9074			E
10	115	KBWC-110K	H9002F	✓		E
10	115	KBWC-112K-E	H9086B	✓		E
15	115	KBWC-115K	H9016B	✓		E

KBWC Series

ABS Enclosure, Wall Plate & Knob Wall Mount



Max. Load Current	AC Line Voltage (50/60 Hz)	Model Number	Item Number	Installation Kit	Aux. Lead	Ref. Code
5	230	KBWC-25 (4L)	H9994			C
5	230	KBWC-25K(4L)	H9956	✓		C
6	230	KBWC-26K	H9068	✓		C
8	230	KBWC-28K	H9033	✓		D
10	230	KBWC-210K	H9006	✓		E
15	230	KBWC-215K	H9007A	✓		E

Max. Load Current	AC Line Voltage (50/60 Hz)	Model Number	Item Number	Installation Kit	Aux. Lead	Ref. Code
5	277	KBWC-35K	H9785B	✓		C
6	277	KBWC-36K	H9784A	✓		C
8	277	KBWC-38K	H9783B	✓		D
10	277	KBWC-310K	H9782A	✓		E
15	277	KBWC-315K	H9781A	✓		E

KBWC

Part Designators



Suffix Identification	Description	Dimensions H x W x D (in)
C	Omits Installation Tabs	KBWC-16 and KBWC-26 Only
K	Adds Kit for Wall Box Installation	Installation kit includes dial plate, knob, installation screws, wire connectors and instructions.
NS	Deletes On/Off AC Line Switch	When On/Off AC Line switch is not supplied the standard control output has a low to high rotation
L	Adds Auxiliary 3rd Lead	Total current of motor load and auxiliary load must not exceed 4.0 Amps
4L	Adds a DPDT On/Off AC Line Switch (4-wire control)	KBWC-25 Series Only
R	Reverses Control Output Vs. Potentiometer Rotation	Standard TRIAC Controls have a high to low output rotation. This reverses the rotation from low to high.

Dimensions (H x W x D)

Ref. Code	Inches	Millimeters
B	4.00 x 1.75 x 1.93	102 x 44.5 x 49
C	4.13 x 1.77 x 2.18	105 x 44.9 x 54.1
D	4.50 x 2.75 x 2.55	114 x 69.9 x 64.8
E	4.50 x 4.50 x 2.55	114 x 114 x 64.8



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required for automobiles



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