



"The Right Control
 for Your Application"

DATA SHEET D-162

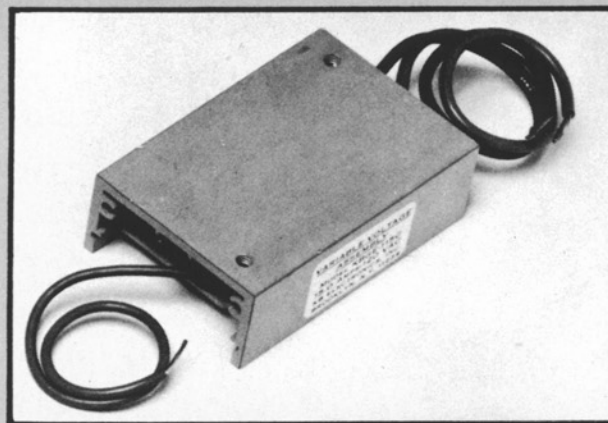
KBGE Series Solid State A.C. Variable Voltage Control Assemblies

Typical Uses:

- Motor Speed Control — PSC, shaded pole and AC/DC Brush Type Motors
- Heater Control
- Lamp Dimming
- Static Switching - Includes inductive and resistive loads

Standard Features:

- Adjustable Minimum Voltage Trim
- RFI Suppression
- Extended Range Circuitry
- Electrically Isolated Heat Sink
- Compact Rugged Construction



Description:

The KBGE Series Solid State Triac Voltage Control Assemblies provide the design engineer versatility when used in power control applications. Their compact size only 3" x 2" x 1" allows for convenient mounting in most locations. The KBGE Series contains many features such as extended range circuitry, RFI filtering and a minimum output voltage trimpot. They are designed to provide a phase controlled symmetrical AC output for variable voltage control or static switching.

A customer supplied remote potentiometer, switch, photocell or thermistor when used in conjunction

with the KBGE Series will control loads such as motors, lamps or heaters. Motors which can be controlled are shaded pole, PSC and universal (series) types. Applications include air curtains, ventilators, heat tunnels, stirrers, theater lighting, photo copy machines and laminar flow hoods.

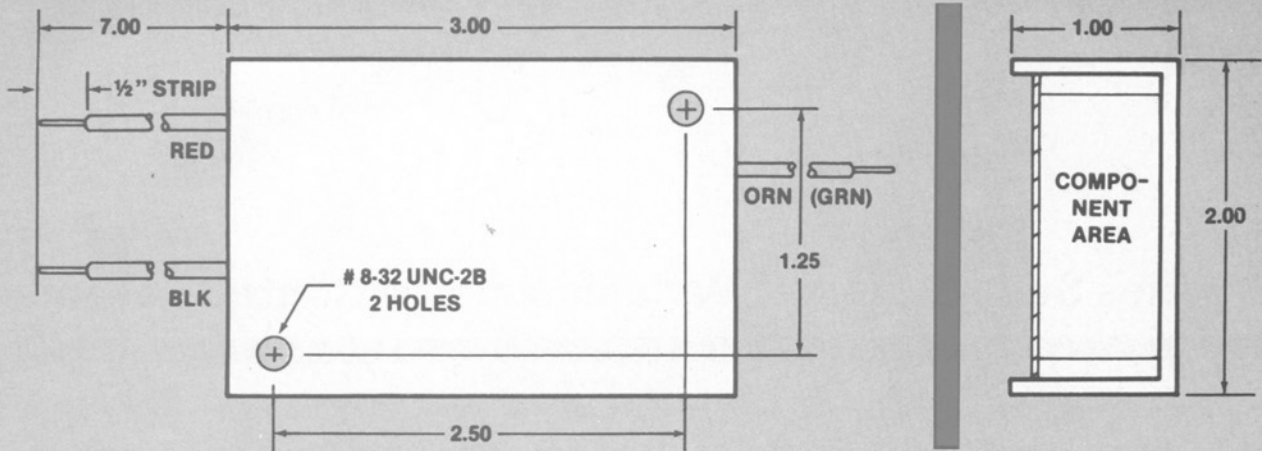
The Solid State control circuitry is housed in an aluminum channel which also serves as an isolated heat sink. The amperage-rating of the control can be enhanced by mounting the controller to a thermally conductive mounting surface.

The KBGE Series is available in 120 and 240 volt ratings. The 240V models may also be used on 120V circuits.

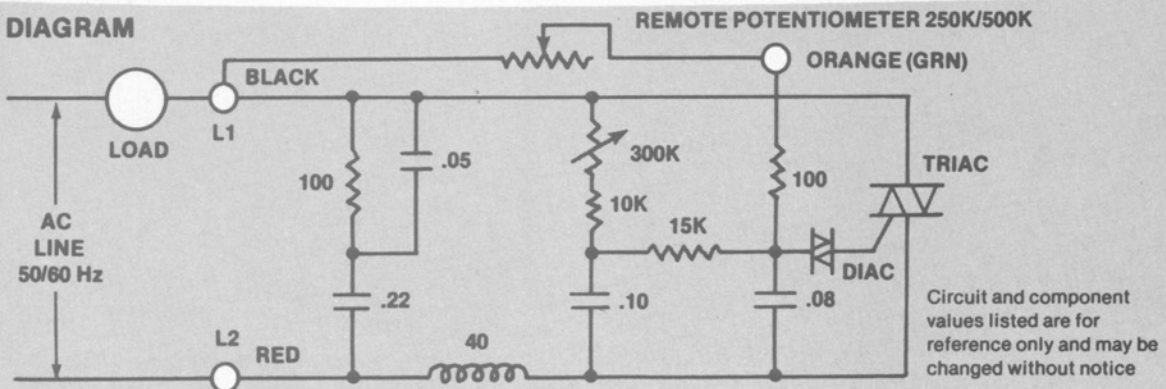
| MODEL NUMBER | LINE VOLTAGE (VAC 50/60 Hz) See Note 1 | TRIAC CURRENT RATING (RMS AMPS) See Note 2 | CONTROL CURRENT RATING-FREE AIR (RMS AMPS) See Note 3 | CONTROL CURRENT RATING-EXTERNAL HEATSINK (RMS AMPS) See Note 4 | POTENTIOMER RESISTANCE (OHMS) See Note 5 |
|--------------|---|---|--|---|---|
| KBGE-115 C | 120 | 15 | 7.0 | 12.5 | 250,000 |
| KBGE-125 C | 120 | 25 | 9.0 | 20.0 | 250,000 |
| KBGE-215 C | 240 | 15 | 7.0 | 12.5 | 500,000 |
| KBGE-225 C | 240 | 25 | 9.0 | 20.0 | 500,000 |

NOTES: (1) A 250K potentiometer should be used on 240 volt rated controls which are to be used on 120 volt circuits. (2) Triac current rating does not reflect control amperage - see control performance charts. (3) Control rating may be enhanced by attachment to auxiliary heat sink. (4) Control mounted to a 12" x 12" x 1/8" vertical aluminum panel is rated at 40° ambient temperature. For other ambients - see performance charts. (5) A standard industrial potentiometer may be used such as Allen Bradley type "J" (RV-4).

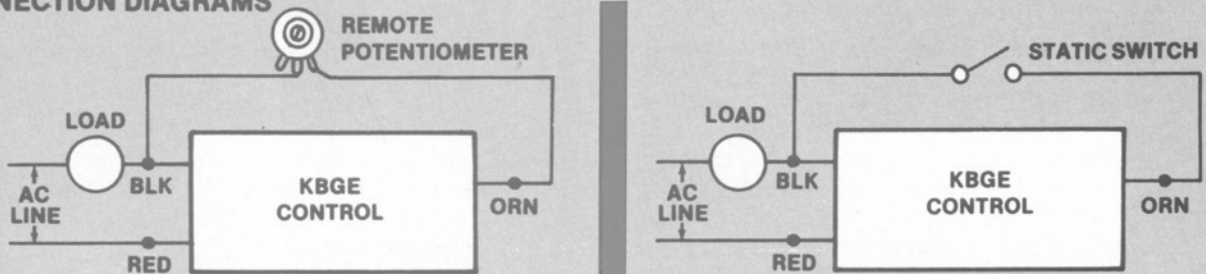
MECHANICAL SPECIFICATIONS-INCHES



CIRCUIT DIAGRAM



CONNECTION DIAGRAMS



PERFORMANCE CHARTS

MAX. ALLOW. AMBIENT TEMP. VS FULL LOAD CURRENT (Full conduction for resistive or inductive loads)

