



KitchenEssentials™

Variable Motor & Light Dimming Control

SMOOTH, RELIABLE POWER CONTROL
FOR LIGHT-DUTY MOTORS AND
LIGHTING APPLICATIONS

The Variable Motor & Light Dimming Control from Kitchen Brains® is a solid-state, phase-angle control board engineered for precision, durability, and ease of integration. Designed for light-duty fan motor and lighting applications—such as residential range hoods or commercial ventilation systems, this control enables smooth and continuous speed or brightness adjustment while protecting motors and extending equipment life. Whether integrated into OEM designs or used as a standalone module, this compact, cost-effective solution delivers reliable variable control for a wide range of commercial and residential appliances.

Phase-angle control for precise and smooth variable speed or dimming adjustment

Voltage-dependent speed control: reducing voltage slows motors, increasing voltage boosts speed

Gradual voltage ramp-up minimizes inrush current and mechanical stress

Integrated isolated potentiometer for adjustable output within a preconfigured range

Durable high-current switching triac ensures long-life operation and consistent output levels



Noise spike protection up to 4000V, safeguarding sensitive components

Solid-state switching design for reliability and longevity

Compact aluminum construction for easy integration in confined appliance spaces

Operates up to 158°F (70°C) and 90% relative humidity (non-condensing)

Optional rotary On/Off switch and trim pot configuration available

KitchenBrains®

Commercial Kitchen Intelligence

www.KitchenBrains.com | 800.243.9271

Features & Benefits

Precision Control for Performance

Delivers smooth and accurate motor speed or light level adjustments for optimal user experience and operational efficiency.

Extend Equipment Life

Soft-start voltage ramp-up reduces mechanical stress, heat, and wear on motors—prolonging the life of connected devices.

Simplify Design and Integration

Compact, solid-state architecture minimizes external components, streamlining installation and lowering manufacturing costs.

Enhance Safety and Reliability

Built-in noise spike protection and high-current triac switching deliver stable, interference-free performance.

Versatile Application Flexibility

Supports a broad range of OEM and standalone uses—from residential range hoods to commercial lighting and ventilation systems.

Appliance Applications

- Light-Duty Fan Motors
- Lighting Control
- Range Hoods
- Ventilation Systems
- Custom OEM Integration

Specifications

Mechanical

- Enclosure: Aluminum housing
- Max Ambient Temperature: 158°F (70°C)
- Max Humidity: 90% RH (non-condensing)
- Approx. Weight: 5 oz

Electrical

- Power Input: 208–240V, 60Hz
- Solid-State TRIAC Switching Design
- Noise Spike Protection: 4000V Minimum
- Optional Configurations: Rotary On/Off switch, trim potentiometer, isolated 120V output

