





P/N: 99 250 & 99 251

P/N: 99 022

# **VARIABLE SPEED CONTROL**

5, 10 & 15 AMP CURRENT RATINGS

FAN CONTROLS SPEC & IOM







ISO 9001 2000 QMS

### **READ AND SAVE THESE INSTRUCTIONS**

# **Product Description**

ALDES Variable Speed Controls are offered as accessories to the line of in-line, wall- and roof-mount fans for airmoving applications that use Shaded Pole, Permanent Split Capacitor (PSC), and AC/DC motors. These economical speed controls are designed to replace obsolete tapped winding or reactive methods of speed control. The full-wave phase control circuitry minimizes power loss, thereby reducing energy requirements. The controls provide variable speed adjustment, allowing the end user to select the desired level of air volume. These models cover a wide range of current ratings (5-15 Amps AC).

Important features such as RFI Filter, Minimum Speed Trimpot, and built-in On/Off Line Switch are standard. These speed controls are available in distributor-type packaging with accessories such as knob, dial plate, mounting hardware, instructions, and individual carton. All models are designed to be mounted into a standard 2" x 4" electrical wall box.

## **FEATURES**

- Built-In On/Off AC Line Switch
- Minimum Speed Trimpot
- RFI Filter (Provides RFI and EMI Suppression)
- All Models Mount in a Standard 2" x 4"

**Electrical Wall Box** 

Agency Approvals:
UL Listing/Recognition
CSA Certified
ISO-9001: 2000 QMS Certified

### **ELECTRICAL RATINGS**

**Current Ratings: 5-15** 

Voltage Ratings: 120 VAC - 50/60 Hz

Typical Applications: Fans, Fireplace Blowers,

Humidifiers, Air Conditioners, Ceiling Fans, Attic Fans,

Ventilators, and Range Hoods

ELECTRICAL RATINGS AND AGENCY APPROVALS						
Part Number	AC Line Input Voltage (Volts AC - 50/60 Hz)	Maximum Current Rating (Amps RMS¹)	Ambient Temperature °F (°C)	Agency Approvals		
				c <b>FU</b> ®us	c UL us	© us
99 022	120	5	104 (40)		X	Χ
99 250	120	10	104 (40)		X	Χ
99 251	120	15	77 (25)	X		

<sup>&</sup>lt;sup>1</sup> Models rated 10 A and above include mounting kit.



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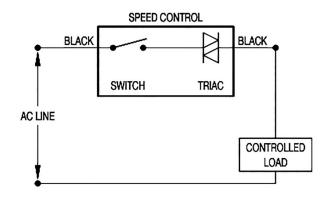




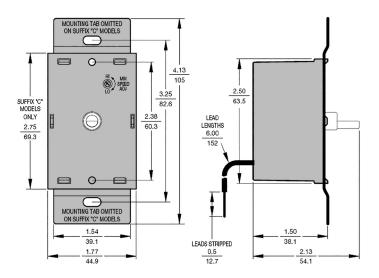




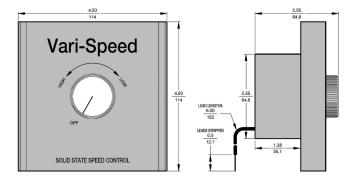
## Connection Diagrams



#### 2-Wire Controls with On/Off Switch



Mechanical Specifications (inches/mm) for P/N: 99 022



Mechanical Specifications (inches/mm) for P/N: 99 250 and 99 251

# **Application Notes**

- 1. Radio Frequency Interference (RFI): All solid-state speed controls generate annoying radio noise on the AM band. Speed controls contain, as standard, a high-gain RFI suppression filter which significantly reduces this interference.
- 2. Low-End Set Point (Minimum Speed): All 120 Volt input speed controls are factory set to 60 Volts AC output (±3 Volts), as standard. All controls are factory calibrated using an average responding AC voltmeter. Custom voltage settings are available.
- 3. Motor Suitability: Motors must be loaded to nearly full capacity with the appropriate fan blade in order to achieve proper speed control. Generally, motor suitability is established by determining motor speed as a function of applied voltage. A motor is deemed suitable if it changes speed linearly over a wide range of voltage. It is required that all motors contain a built-in thermal overload protector when used with solid-state speed controls.
- Temperature Test: The non-sinusoidal output voltage of a solid-state speed control may increase motor heating. Therefore, it is necessary that a temperature test be performed to ensure that the motor is operating within manufacturer's specifications.
- 5. Leads: All leads are approximately 6" (15 cm) long and stripped 1/2" (1.25 cm).

### SAFFTY WARNING!

Unit should be installed by a qualified electrician in accordance with the National Electrical Code and other local codes which may apply. This control must be grounded when installed. Failure to follow these instructions may result in electrical shock or a fire hazard. To reduce the risk of fire or electric shock, this control is to be used only with fans marked as suitable for use with solid state speed controls. This control is suitable for mounting in a metal or polymeric field enclosure. These controls must not be used at ratings exceeding those clearly marked on the device.

We are not responsible for any expense, inconvenience or subsequent damage caused by items of our manufacture or sale.







