



FAN CONTROLS

Variable Speed Control

5, 10 & 15 Amp Current Ratings

PRODUCT SPECIFICATIONS & TECHNICAL DATA



P/N: 99 250 & 99 251



P/N: 99 022

DESCRIPTION

ALDES Variable Speed Controls are offered as accessories to the line of in-line, wall- and roof-mount fans for air-moving 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.

Standard 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:

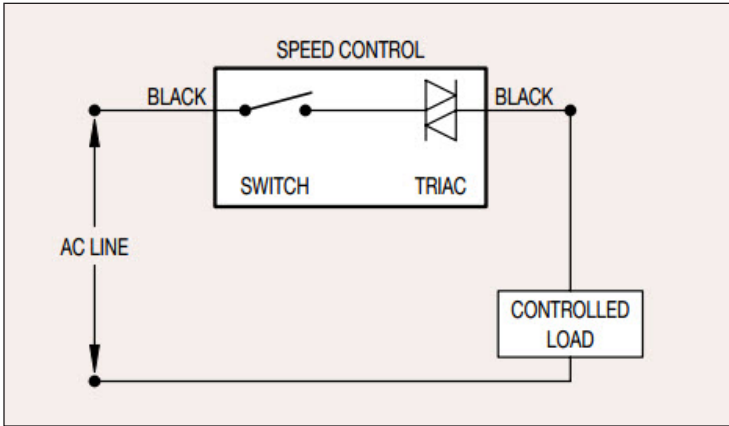
Fans, Fireplace Blowers, Humidifiers, Air Conditioners, Ceiling Fans, Attic Fans, Ventilators, and Range Hoods

ELECTRICAL RATINGS AND AGENCY APPROVALS

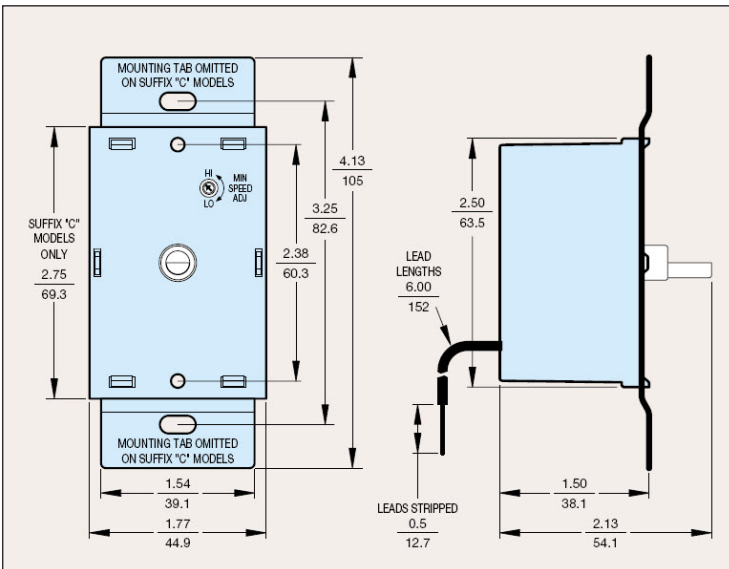
Part Number	AC Line Input Voltage (Volts AC - 50/60 Hz)	Maximum Current Rating (Amps RMS ¹)	Ambient Temperature °F (°C)	Agency Approvals		
				CSA US	UL US	SP US
99 022	120	5	104 (40)		X	X
99 250	120	10	104 (40)		X	X
99 251	120	15	77 (25)	X		

¹ Models rated 10 A and above include mounting kit.

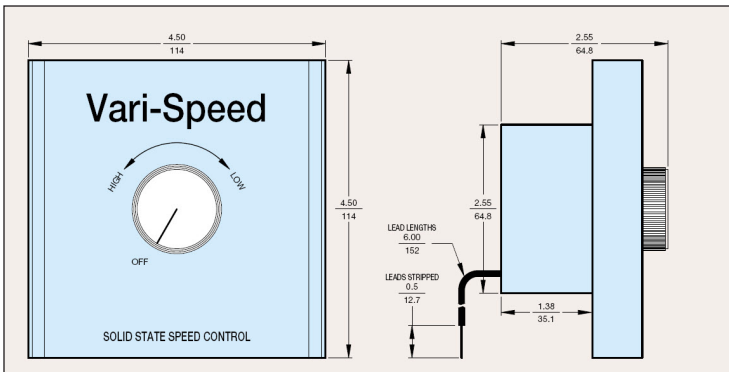
Connection Diagrams



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.**
- 4. 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).