

Variable Speed Fan Controller

General Description

Precisely modulate the speed of ventilation fans in response to changes in ambient temperature. Optimum air circulation is maintained in ventilated areas and buildings with minimum noise and efficient use of energy. A thermistor monitors the air temperature and, as the temperature rises or falls within a preset band above set point, the fan speed is correspondingly increased or reduced between maximum and minimum speed values. Typically the modulating band above set point, between the maximum and minimum speeds, is fixed at 6 degrees F but other bandwidths to 20 degrees F are available. Temperature set point is adjustable from 35 to 95 degrees F.

Especially designed for agricultural buildings, although of broad application in all ventilated areas, these fan controls are compact units designed to fit on a standard 4x4 junction box. Construction protects the electronic controls against dust and solid state design ensures long life and reliable operation. Fan speed motors must be permanent split capacitance or shaded pole with built-in thermal fuse. Load must decrease as RPM increases and bearings should be capable of operating at minimum RPM for phase angle speed control

Model 51E has the following special features

Auto fan off: Fan off set back is internally adjustable from 2 to 20 deg F below set point. In the set back position, the fan motor will disable when the room temperature fall below the set back temperature.

Auto heat on: A heater interlock output is provided externally adjustable from 2 to 20 deg F below set point. Out put is relay 2.5A @ 250VAC resistive.

Digital display: a digital indicator shows the room temperature.



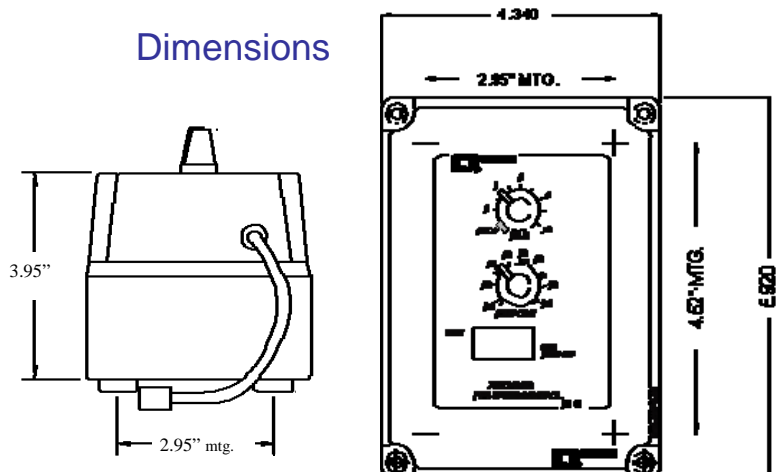
Features

- Modulates fan speed in response to temperature changes
- Convenient wall mounted or junction mounted control unit
- 8.5A full load rating
- 3 second kick start
- Fully insulated moisture proof enclosure
- Meets NEMA specification 547
- Universal line power 96/264VAC
- Fan auto off 2-20 deg F below st point
- Heater output 2-20 deg F below set point
- Digital temperature display

SPECIFICATIONS

Voltage 96/264VAC
 Output: 8.5A full load, 20.5A locked rotor
 Temperature range 35/95 deg F
 Setpoint Local set pot, 5 deg F divisions
 Control: Phase control proportional, 6 deg F bandwidth
 Stability: 2% FS
 Accuracy 5% FS
 Sensor NTC 20K at 77F included (#223-40058-08)
 Operating ambient: up to 120 deg F
 Idle adjustment 20/85% line voltage, front panel
 Maximum speed 98% line voltage
 Noise RF supression standard
 Overall size: unit: 4.3 x 5.9 x 4.9 in
 Overall size: sensor 9/16in diameter x 7/8in long probe, 12in leads
 Mounting to 4x4 junction box
 Options Lamp RPM) indicator

Dimensions



Model #	Power	Control	Set point	Range
51-E54-L420	96/264VAC	6 deg F bandwidth	Front idle adjust Local	35 to 95 deg F