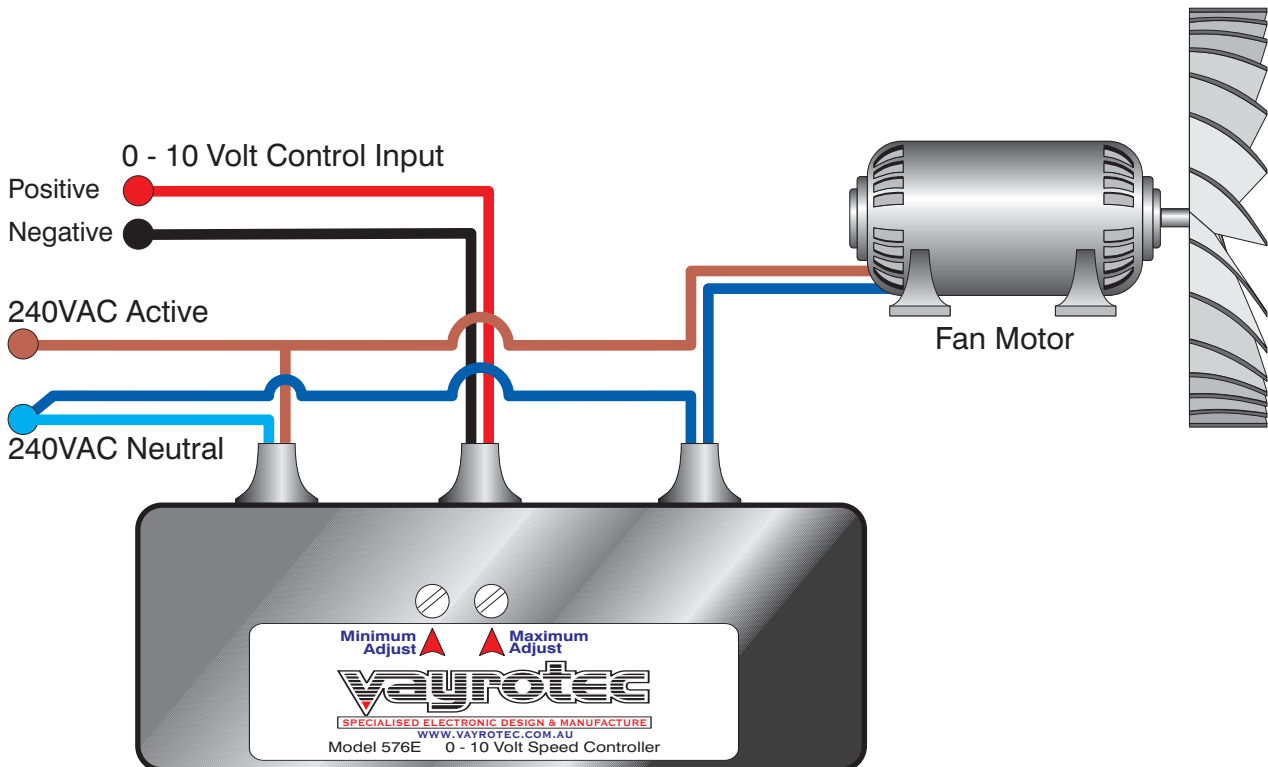
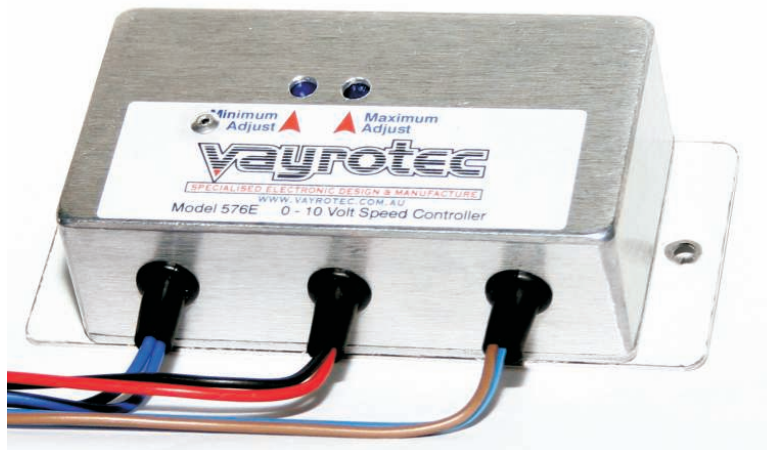


576 (586) Speed Controller

Installation Diagram



The 576 controller is an economical solution to the need for a remote 0 - 10 volt DC electrical control signal to control the speed of a fan. The fan will run at minimum speed with 0 volts DC control signal and will increase to the maximum setting at 10 volts DC control signal. The maximum speed can be set at the maximum motor speed or any lower value. The minimum speed can be set at any speed above motor stall speed which provides adequate cooling air to the motor.

576 (also 586)

0 - 10 volt Motor Speed Controller

Description

The 576 allows a 0 - 10 volt DC signal to vary the speed of a motor driven fan proportionally to the control voltage supplied.

The 576 varies the speed as the control voltage varies between 0 and 10 volts. AT 0 the motor operates at its preset minimum speed. As the control voltage increases the motor speed increases.

The 586 has a definite off facility. When the control is 0 volts the fan is off. As the control increases past 0.7 volts the fan starts and runs at its preset minimum speed. Operation over 0.7 volt is identical to the 576.

Both units have transformer isolation of the 0-10 volt controller circuitry from the mains. The speed control output (blue wires) is isolated from the DC control circuitry and mains by optocoupler.

Wires are 24/020 for the mains in and 0 - 10 volt, and 32/020 for the motor wires. All are V105. The 576 and 586 will drive permanent split capacitor (PSC) motor up to 600 watts.

The case is alloy with a mounting flange. Size 120 x 65 x 40 mm. There is a 20mm mounting flange with holes provided for screws. Screwdriver controls can set minimum speed and maximum speed, the 0 - 10v varies the speed between these limits. A tiny jewellers screwdriver is required for adjustment.

Setting up

With the 0-10 at 0 volts, set the minimum speed adjustment. With the 0-10 at 10 volts set the maximum speed adjustment. There is a small interaction between these two adjustments and they may need to be repeated. The 576 does not change between 0 and 1 volt, but runs at its preset minimum speed. The 586 model includes an off mode where the fan is stopped when the 0 - 10 volt is less than 1 volt and starts at 1 volt at the minimum speed set by the adjustment.

The minimum speed must be set so the fan can start from rest after a power fail without stalling.

Dimensions

Length OA 160mm x Width 70mm x Height 40mm

Four mounting holes on a grid 140 x 48mm

Flying leads of 150mm long.