

# EC MOTORS

## OPERATION INSTRUCTIONS AND PARTS MANUAL

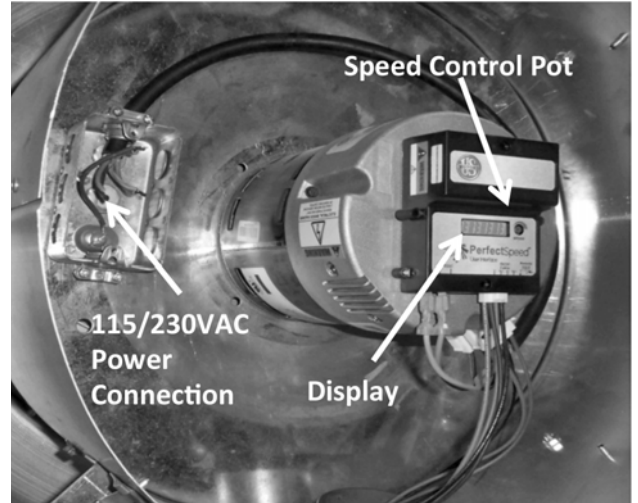
READ AND SAVE THESE INSTRUCTIONS



## EC (Electronically Controlled) MOTOR SPEED CONTROL

EC motors are equipped with a control module that allows for accurate manual adjustment of motor speed. Motor speed range is from 300 to 1800 rpm or maximum rpm for that model.

The control module features a 4 digit LED display that indicates % demand of full speed and motor speed in rpm. The display also indicates an error code message for minor diagnostics if required.



### MESSAGE DISPLAYED...

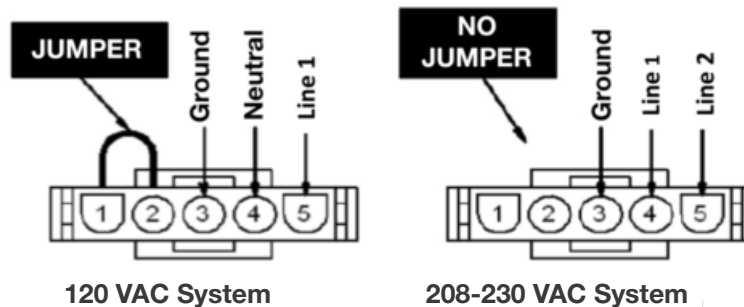
- Spd-** followed by the instantaneous speed in rpm
- dE-** followed by S + demand in %
- E1-** No communications
- E2-** Under Voltage

Motor speed can be changed by adjusting the speed control pot located on the control module. A small screwdriver can be used to make the speed adjustment.

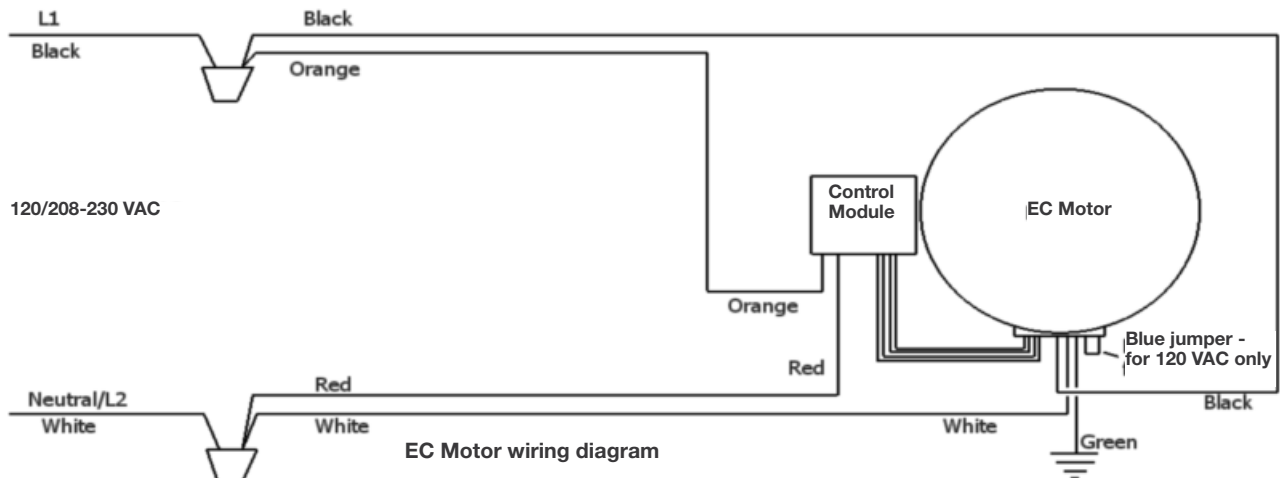
## AC Supply - 120/208-230VAC

Power is connected to the motor and control module through the junction box and wiring harness provided.

**Note:** For 115VAC operation the blue jumper provided(taped to wire harness) must be inserted into motor power connector. See diagram.



**Caution:** Operating the motor at 208-230VAC with the jumper will cause significant damage to the motor.



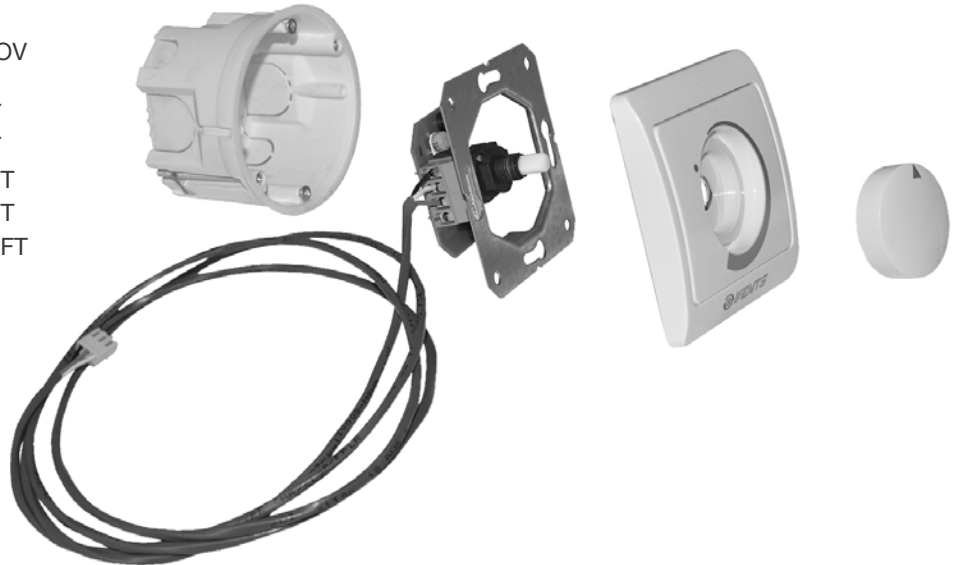
**Note:** EC motors have a soft start feature. When the power is turned on the control module gathers information from the motor then begins the start up process. After a few seconds the motor will start to turn and reach full set speed in 10-30 seconds.

## REMOTE POTENTIOMETER CONTROL

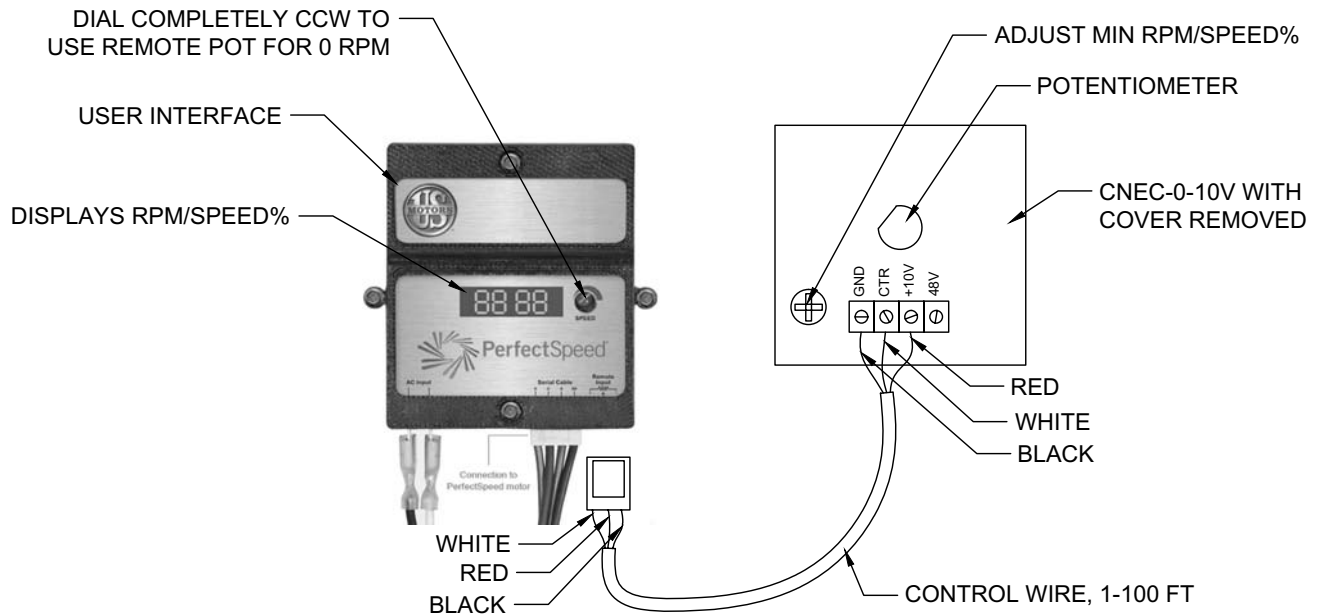
The PerfectSpeed motors accept a 0-10v control from a remote potentiometer. The “pot” can be located up to 100 feet away from the motor. This will give the motor full variable speed based on the min and max rpm set at factory.

Part numbers for the pot and wiring harnesses are as follows:

- |                       |            |
|-----------------------|------------|
| Potentiometer switch: | CNEC-O-IOV |
| 1 ft control cable:   | CNEC-1FT   |
| 4 ft control cable:   | CNEC-4FT   |
| 10 ft control cable:  | CNEC-10FT  |
| 50 ft control cable:  | CNEC-50FT  |
| 100 ft control cable: | CNEC-100FT |



### Wiring for remote potentiometer



**REMOTE POT DOES NOT DISCONNECT POWER FROM MOTOR  
ONLY SETS MOTOR TO 0 RPM**