

**762-ECM**  
**2 Speed Comfort Control**

## Description

The 762-ECM 2 Speed Comfort Control allows the Installer to custom set the Heating & Cooling flow rates (RPM) when used in conjunction with a PWM compatible ECM motor. The Controller connects to the Thermostat or Integrated Furnace Control board Heating & Cooling 24Vac signals and provides adjustable Heat & Cool flow rate output PWM signals to the ECM motor.

The 762-ECM Controller has two manually adjustable potentiometers to control the desired Heating & Cooling motor speeds. The speed range in both the Heating & Cooling modes can be adjusted from full OFF to full ON. This allows the Installer to custom set the Heating medium speed and Cooling high speed to the desired comfort levels for the installation. The Controller also has an LED indicator lamp that displays the intensity of the Heating & Cooling output to aid in the installation process.

The 762-ECM Controller is stand-off mounted and is supplied with two self tapping mounting screws, ECM motor matching connections and wire nuts for thermostat connections.

## Application

The 762-ECM Controller & ECM motor combination can replace existing PSC motors or 24Vac activated discrete speed ECM motors for improved comfort, performance and efficiency.

The Controller and the ECM motor are wired as shown in the Figure 1 wiring diagram. Please refer to motor manufacturer's Installation Instructions for motor installation and programming options.

The Thermostat or Integrated Furnace Control (IFC) board HEAT "W" 24Vac signal and COOL "Y" signals are connected to the 762-ECM Controller HEAT and COOL wires. The 24Vac transformer RETURN is connected to the control's "COM" flying lead. The motor COM and PWM Red TAP5 wire are connected to the Control's COM and TAP5 terminals.

Once the Controller and motor are wired, the Heating & Cooling motor speeds can be adjusted when there is a HEAT or COOL signal present from the Thermostat/IFC board.

## Specifications

Motor Types:	PWM compatible ECM (dc brushless) Motors
Motor Speed:	Field Adjustable
Input Voltage:	
HEAT speed:	24Vac or 24Vdc (+20%/-10%)
COOL speed:	24Vac or 24Vdc (+20%/-10%)
Output:	0% to 97% PWM @ 90Hz 13.5Vdc, 5mA (max.)
Humidity:	95%, Non Condensing
Ambient:	32° – 120° F
Dimensions:	(L x W x H) 3.3" x 2.3" x 1.3"

## Installation Tip

Mount the 762-ECM Controller in a convenient location using the supplied self tapping screws.

The PWM signal operates at a nominal voltage level of 13.5Vdc at 90Hz. It is capable of sourcing up to 5mA drive current, typically one ECM motor.

The Control's PWM output signal to the PWM compatible ECM motor can be viewed on an RMS DC Voltmeter as a 0-13.5Vdc signal.

A voltmeter reading of zero Vdc indicates zero motor RPM (LED off) and a voltmeter reading of 13.5Vdc indicates full ON motor RPM (LED full ON). Voltmeter readings in between 0 Vdc and 13.5Vdc indicate proportionally different motor RPMs (modulating LED).

# 762-ECM 2 SPEED COMFORT CONTROL

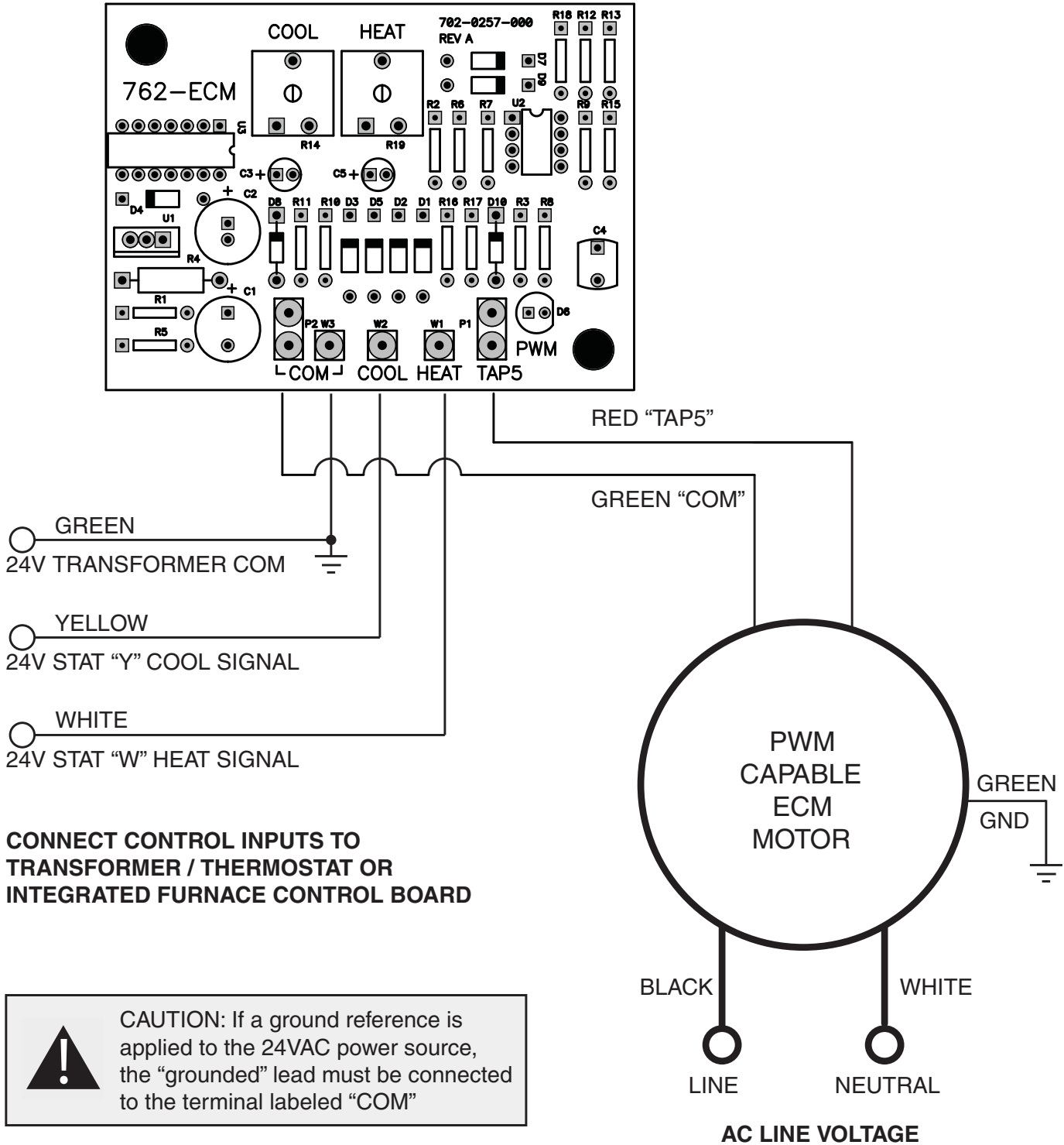


Figure 1 - 762-ECM Wiring Diagram