HEVAC Control Agencies

# PBECv SERIES EC FAN AUTO/MANUAL MODULES

FOR SWITCHBOARDS WITH **NO** Auto/Off/ Manual EC FAN CONTROL SWITCH.
Auto/Off/Manual SELECTION BY ONBOARD 3 POSITION SLIDE SWITCH.
ONBOARD RELAY ENERGISES ON MANUAL OR AUTO CONTROL WITH C/O CONTACTS. MODULE HAS ONBOARD 12vDC VOLTAGE SOURCE FOR MANUAL POTENTIOMETER SIGNAL .


PBEC-1v

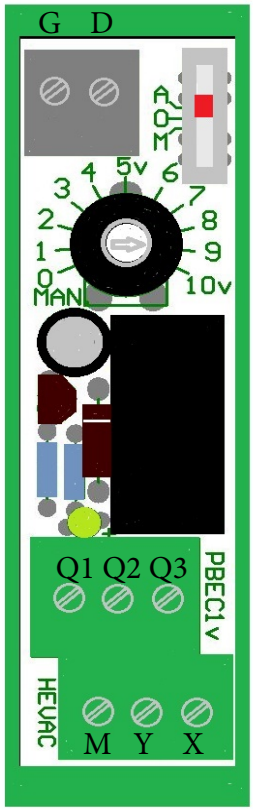
- **Made in Australia to Australian Standards.**
- **Multiple I/O versions : single, 3 way, 5way.**
- **Auto Run 24v Active & 0-10v Control Signal from BMS, or Manual by A/O/M Slide Switch on-board.**
- **Manual potentiometer can adjust output from 0-10vDC.**
- **Potential Free (24v 1Amp max.) SPDT Fan Enable Relay or Run Indication Output.**
- **2 wire signal to EC fan (+ 2 wires if relay enable O/P required)**
- **Onboard Relay Status L.E.D**
- **Din rail mount low profile.**

## APPLICATION

*The PBEC1v module is intended for use as a low cost alternative to traditional plug in relays & potentiometers for Auto/Off/Manual EC fan speed interlocks & control,with this version mainly intended for use with switchboards with **no** switchboard fascia Auto/Off/Manual EC fan control switches. The device is available in 3 versions - a Single output module PBEC-1v, a triple version PBEC-3v or a 5 way version PBEC-5v. The onboard relay is energised either by an external 24v active Auto control Run signal (typically BMS run interlock) or via the onboard Auto/Off/Manual slide switch. The output 0-10vDC signal to the EC fan is derived either from the onboard potentiometer in **Manual** mode **or** to pass through the 0-10vdc signal from an external control device (BMS) fan speed control signal in **Auto** mode. The potentiometer shaft/knob can be removed exposing only a hexagonal hole to decrease the ability of tampering post commissioning manual fan speed settings if desired.*

## TERMINAL LEGEND

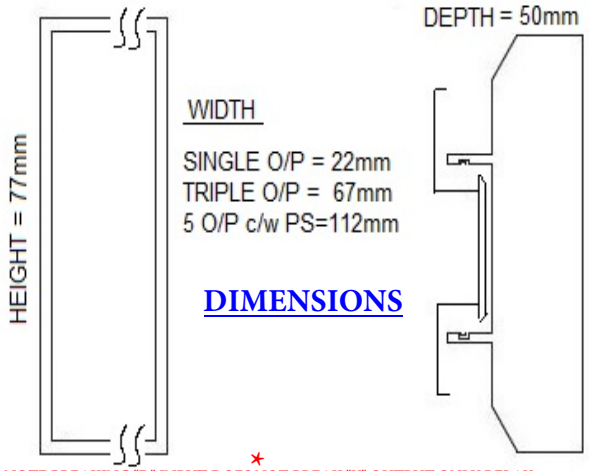
| | |
|---|---|
| G | 24v ACTIVE (for Manual mode supply) |
| D | 24v ACTIVE to energise Auto mode |
| Q1 | RELAY COMMON |
| Q2 | RELAY N/O |
| Q3 | RELAY N/C |
| M | 24v NEUTRAL & EC Fan DC ground interlock |
| Y | EC Fan 0-10Vdc output control interlock |
| X | External (AUTO) 0-10vdc signal input |



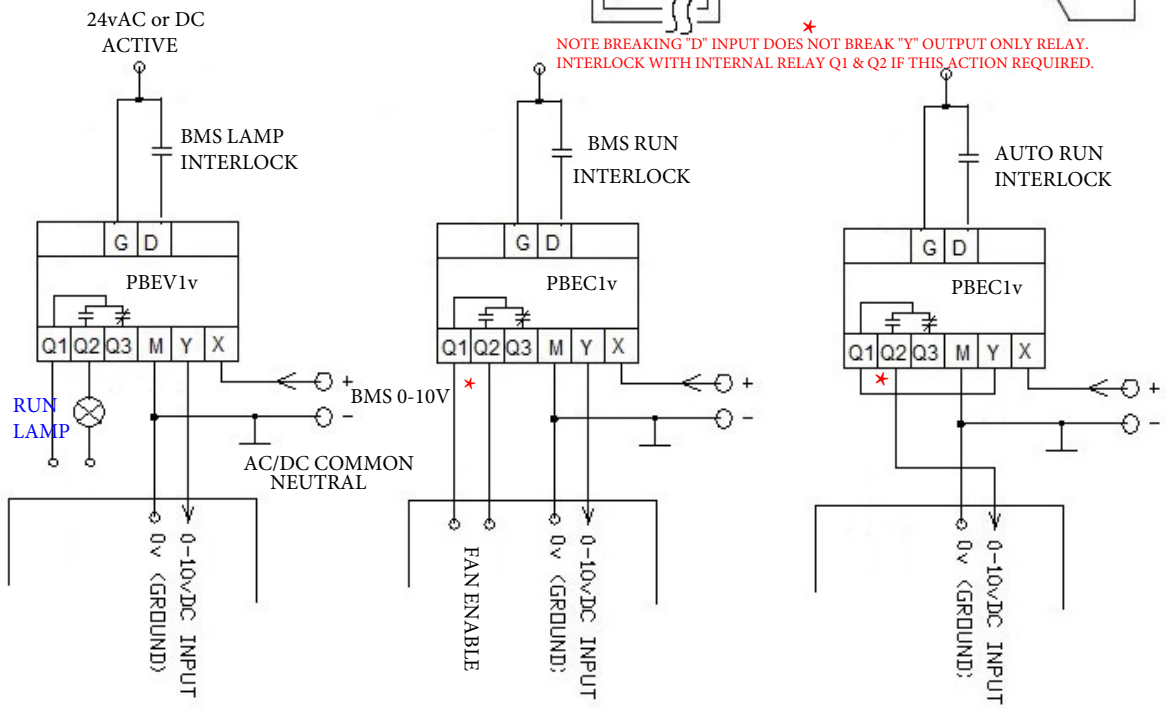

3 POSITION
A / O / M
SLIDE SW.

MANUAL
0-10v OUTPUT
POTENTIOMETER

ON-BOARD LED
TO INDICATE
RELAY STATUS




**DIMENSIONS**




* NOTE BREAKING "D" INPUT DOES NOT BREAK "Y" OUTPUT ONLY RELAY. INTERLOCK WITH INTERNAL RELAY Q1 & Q2 IF THIS ACTION REQUIRED.

**BASIC EC FAN SPEED CONTROL WITH VARIABLE EXTERNAL CONTROL INPUT & MANUAL SPEED SELECTION VIA 3 POSITION ONBOARD SWITCH.**

TYPICAL VSD CONNECTIONS

**EC FAN SPEED CONTROL WITH VARIABLE EXTERNAL INPUT & MANUAL SPEED VIA ONBOARD SWITCH. c/w Auto/Manual CONTROLLED RELAY. INTERLOCK.**

Hevac does NOT offer or suggest this product is suitable for use in fire mode control of fan operation.
For maximum compliance & safety we recommend for fire mode operation, breaking the 0-10v Y signal from this module and connecting a fire mode set of relay contacts directly across the EC fans "10v" supply & "Y" input terminals & enabling run contacts if the fan also has enable terminals.