# A. E. C.

# MOD3RM Three Relay Module

### **Description**

The MOD 3 RM Module is intended for use with Direct Digital Controllers to convert an Analogue Output signal to a Fan/Cool/Heat or Stepped Output.

The MOD 3 RM Module is constructed on a Epoxy Glass Laminate and housed in an industry standard 80mm DIN Rail Mounting. Generous 2.5mm² terminals are provided for the field interconnections.

The MOD 3 RM Module is CE rated and is RoHS compliant.



# **Applications**

Applications include the switching via Relay contacts of any Plant up to a 10Amp resistive load.

Switching of electric heater banks, fan/cool/heat sequences, boilers and fan coil units.

To provide Local Manual Control of the Plant in case of controller failure.

Local Manual Control of the Plant will also enable pre-commissioning and testing.

To provide a Local LED indication of Output Status.

To provide isolation of the controller from the Harsh Plant Environment, protecting the Controller.

The inputs require only 1mA @ 0 to 10V DC to switch which allows controllers with limited output capability to operate correctly.

#### **Features**

Expands controllers output capacity.

Provides 3 SPDT Relay Output channels C/NO/NC

Design for DIN rail mounting.

Auto/On/Off jumper for plant checkout and override.

Rising cage Terminals.

LED status indication.

Universal AC or DC Supply.

Flame retardant Polyamide DIN mounting.

A remote Auto/On/Off Switch is available.

MOD 3 RM Data Sheet. Issue 2, Jan 2010 E&OE.

Supplied By

Watchtower Trading
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# MOD3RM Continued

# **Specifications**

Input Signal: 0 to 10V DC @ 1mA Max.

0 to 20mA or 4 to 20mA available on request.

Output Contacts: 10 Amp @ 230V AC Resistive.

Power Supply: 24V DC @ 60mA or 24V AC @ 1.5 VA (+/-15%) S.P.D.T.

LED Indication: ON when relay energised.

Output States: Jumper selectable AUTO/ON/OFF.

Auto, controlled by input.

On, always on. Off, always off.

Electrical connections: Rising cage terminals for 0,5 to 2,5mm² cable.

Ambient Conditions: -10 to 50°C 0 to 80% RH non-condensing.

Dimensions: 80 x 68 x 52mm.

Weight 112g I.P. Rating: IP00.

Mounting Flame retardant green Polyamide 66 UL 94V0 moulding.

To suit 35mm top hat din rail.

# **Switching Tables**

Fan/Cool/Heat mode H selected

Input	Relay A	Relay B	Relay C	Function
0V DC	OFF	OFF	OFF	Off
4V DC	ON	ON	OFF	Fan + Cool
7V DC	ON	OFF	OFF	Dead band
10V DC	ON	OFF	ON	Fan + Heat

# Stepped mode T selected

Input	Relay A	Relay B	Relay C	Function
0V DC	OFF	OFF	OFF	Off
4V DC	ON	OFF	OFF	Stage 1 on
7V DC	ON	ON	OFF	Stage 1&2 on
10V DC	ON	ON	ON	Stage 1,2&3 on

The table shows the set voltages to be applied to the input to ensure reliable switching.

See also the MOD 3 RM Installation Sheet for wiring detail.

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Watchtower Trading reserves the right to update this product, revise and update this publication including information hereof without obligation to notify any person of such updates, revisions or changes.

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