AX-RM2T-SSR
Two Stage Triac Module with Timer

AXIO

Product Overview

The AX-RM2T-SSR converts a 0-10V dc input signal into a Triac output pair. The module can be configured, for a raise/lower , high/low or binary output with or without stage delays or as a timer module. Applications include the control of windows , valve or damper actuators, in conjunction with a BMS Controller. The unit has an adjustable timer function . The AX-RM2T-SSR is powered from 24Vac/dc and is designed to fit onto TS35 Section DIN Rail. The unit is particularly useful for use with loads known to have a high inrush, as the unit always switches at the zero-crossing. Also very useful in environments where the noise caused by relays switching is a problem.

Features

- 0-10V dc Input
- 2 x Triac Outputs with zero-crossing switching
- On/Off/Auto Override
- Raise/Lower , High/Low, Binary and Timer Functions

- Adjustable Timer Range
- LED Indication
- Totally Silent operation
- DIN Rail Mounting (TS35)

Product Specifications

Input Signal:	0-10V dc (1mA max)
Output Contacts:	2 x Triac - zero cross switching - AC switching only
Output Rating:	Maximum 240V @1kW (500W per output in High/Low or Binary Mode
Power Supply:	24Vac /dc
Power Consumption:	80 mA max@24Vac
Mode of Operation:	Raise/Lower
	High/Low
	Binary
	Single stage Timer
	Two stage Timer
Manual Override:	ON/OFF/AUTO (Link Selectable)
Timer:	AX-RM2T-SSR 0 to 30 seconds per stage
	AX-RM2T-SSR/2 0 to 240 seconds per stage
Terminals:	Rising Clamp for 0.5-2.5mm^2 Cable
LED Indicators:	ON when triac energised
Ambient Temp. Range:	0 to 50'C
Dimensions:	83mm (l) x 46mm (w) x 50mm (h) (approx.)
Weight:	60 gms
Country of Origin:	United Kingdom

Order Codes

AX-RM2T-SSR	-	Dual Triac Output Module with Timer 0 to 30 secs
AX-RM2T-SSR/2	-	Dual Triac Output Module with Timer 0 to 240 secs

Modes of Operation

The AX-RM2T-SSR offers a total of five operating modes
Three Triac Modes
Two Timer Modes

Configuration - Control Modes

The AX-RM2T-SSR offers a choice of three triac operating modes, High/Low , Raise/Lower or Binary (see Table 1), which are selected using the Function Link . The stage delay is the minimum time between any stage switching on or off and can be set between 0 and 30 seconds

 (0 and 240 seconds for the AX-RM2T-SSR/2) using the timer adjustment potentiometer .

The units are factory preset to no delay (timer potentiometer fully anti-clockwise)
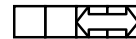
Relay mode configuration table

Table 1

1/ High / Low mode - triacs switch in sequence

Input Voltage	Triac 1 LOW	Triac 2 HIGH
0V	OFF	OFF
5V	ON	OFF
10V	ON	ON

Function Link

BIN R/L H/L

2/ Raise / Lower Mode - triacs switch as below

Input Voltage	Triac 1 LOWER	Triac 2 RAISE
0V	OFF	OFF
4V	ON	OFF
7V	OFF	OFF
10V	OFF	ON

Function Link

BIN R/L H/L

3/ Binary Mode - triacs switch as below

Input Voltage	Triac 1	Triac 2
0V	OFF	OFF
4V	ON	OFF
7V	OFF	ON
10V	ON	ON

Function Link

BIN R/L H/L

Configuration - Timer Mode

The AX-RM2T-SSR also offers a choice of two timer operating modes, either as a single or two stage timer . To set the unit up as a timer module put two jumpers on the function link . The unit now operates without a 0-10V input and the delay time is set by using the timer potentiometer . The units come factory preset set to no delay when the potentiometer is fully anti clockwise . (see timer selection below)

Example; If the pot is set to 10 seconds, triac 1 will switch on 10 seconds after applying power to the module. Triac 2 will switch on another 10 seconds later

Function Link

BIN R/L H/L

Unit 21, Highview, High Street, Bordon, Hampshire. GU35 0AX.
Tel: +44 (0)1420 487788   Fax: +44 (0)1420 487799
Email: sales@axio.co.uk
www.axio.co.uk

Timer Selection

There are two timer options . The standard unit provides 0 to 30 seconds delay per stage using the timer adjustment potentiometer. If you require 0 to 240 seconds please order the AX-RM2T-SSR/2.
The units will be factory preset to no delay when the potentiometer is fully anti-clockwise.

N.B. Other timings may be available

Commissioning

Two Links are provided as a commisioning aid ON-OFF-AUTO (H = ON, O = OFF, A = AUTO)one for each triac .
In the ON position, the appropriate triac will be energised regardless of the 0-10Vdc Input Voltage. Likewise in the OFF position the triac will remain off. When the jumper is in the AUTO position, the triac will be energised in accordance with the mode of operation.

Connection

The diagram below shows the terminal designations and board layout for the AX-RM2T-SSR range