B.M.S INPUT - OUPUT MODULES
4 STAGE RELAY, SEQUENCE, BINARY 0-10VDC

E4RM

These products accept a 0-10vdc input and produce a 4 stage relay output which can be used for external plant switching. Suitable for staging (**which can be reversed**) or sequencing operation.
For multi-stage heating & cooling, two of these units or other relay modules can be used with the E13.. temperature controllers or similar.

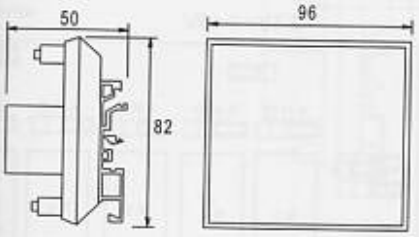

E4RM

ON-OFF-AUTO Manual Override links on each relay: -
ON = Energised
OFF = De-energised
AUTO = Controller operated
LED's indicate relay status
Volt free contacts Input current > 1mA
Din-Rail mounting Consumption 100mA
Max Ambient -10 /+50°C
Flammability = UL94-V0

Type	Supply ±15%	Input Signal	Switch Rating 230VAC SPDT	Time Delay	Compatibility	Enclosure
E4RM	24VAC/DC	0-10VDC	4 x 10(3)A	0-200s	Most BMS Controllers	IP00

UP TO 10 STAGED SWITCHING ACROSS 0-10VDC CAN BE ACHIEVED WHEN THIS PRODUCT IS USED WITH THE E6RM

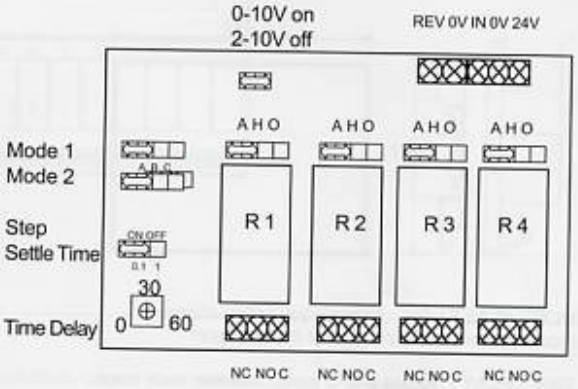
DIMENSIONS:



MODE RESET LINK : Remove link before changing modes and re-fit the link to reset the operation.

TIME DELAY : Allows a time period between each stage switching on or off.

WIRING:



INSTALLATION:

STAGED MODE JP1 = A JP 2 = A
Relays 1-4 switch on as the input signal increases

	RLY 1	RLY 2	RLY 3	RLY 4
0v	OFF	OFF	OFF	OFF
2.4v	**ON**	OFF	OFF	OFF
4.8v	**ON**	**ON**	OFF	OFF
7.2v	**ON**	**ON**	**ON**	OFF
9.6v	**ON**	**ON**	**ON**	**ON**

SEQUENCED MODE JP1 = A JP2 = B
Only one relay is on at any time

INPUT	RLY 1	RLY 2	RLY 3	RLY 4
0v	OFF	OFF	OFF	OFF
2.4v	**ON**	OFF	OFF	OFF
4.8v	OFF	**ON**	OFF	OFF
7.2v	OFF	OFF	**ON**	OFF
9.6v	OFF	OFF	OFF	**ON**

STAGED MODE JP1 = A JP 2 = A
Relays 4-1 switch on as the input signal increases when terminals R-R are closed via a volt free contact.

INPUT	RLY 1	RLY 2	RLY 3	RLY 4
0v	OFF	OFF	OFF	OFF
2.4v	OFF	OFF	OFF	**ON**
4.8v	OFF	OFF	**ON**	**ON**
7.2v	OFF	**ON**	**ON**	**ON**
9.6v	**ON**	**ON**	**ON**	**ON**

STAGED MODE + E6RM = 10 STG. JP1 = B JP2 = A
Connect 0-10VDC to both E6RM and E4RM.
No time delay or reverse action.

INPUT	RLY 1	RLY 2	RLY 3	RLY 4
6v	OFF	OFF	OFF	OFF
7v	**ON**	OFF	OFF	OFF
8v	**ON**	**ON**	OFF	OFF
9v	**ON**	**ON**	**ON**	OFF
10v	**ON**	**ON**	**ON**	**ON**

BINARY MODE JP1 = B JP2 = B

INPUT	0.6	1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0	6.6	7.2	7.8	8.4	9.4	9.6
RLY 1	OFF	**ON**	OFF	**ON**	OFF	**ON**	OFF	**ON**	OFF	**ON**	OFF	**ON**	OFF	**ON**	OFF	**ON**
RLY 2	OFF	OFF	**ON**	**ON**	OFF	OFF	**ON**	**ON**	OFF	OFF	**ON**	**ON**	OFF	OFF	**ON**	**ON**
RLY 3	OFF	OFF	OFF	OFF	**ON**	**ON**	**ON**	**ON**	OFF	OFF	OFF	OFF	**ON**	**ON**	**ON**	**ON**
RLY 4	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	**ON**	**ON**	**ON**	**ON**	**ON**	**ON**	**ON**	**ON**

All values are maximum switching points. Exact switching points may be slightly lower than those stated.
Terminals 0.5-2.5mm² rising clamps
Min sensor / control signal cable size 7/0.2mm
Max length 100m
Screened cable is recommended
The screen should be earthed at controller end only
Keep sensor/control signal wires away from power cables/units which may cause interference.