Relay Override Module

Features

- 0-10Vdc Input
- 12A Relay output
- <1mA current draw on input
- Off/Hand/Auto override links
- LED Status indication
- 24Vac/dc powered

Specification

Input signal	0-10Vdc @ <1mA
Output contact	12A @ 250Vac resistive
Power supply	24Vac/dc (±12%), 60mA max.
LED Status indication	ON When relay is energised
Manual override	Off/Hand/On jumper selectable
Electrical	Terminals for 0.5-2.5² cable
Connections	Rising cage
Ambient range	-10 to 50°C
Dimensions	105 x 80 x 45mm
Country of origin	UK

NB When using an AC supply, one half of the transformers winding must be grounded and common to the controller's 0V.

Product Codes

IO-ORM4
Four relay override module

Technical Overview

The IO-ORM4 is intended for applications which require independent manual override of digital output channels from a BMS controller, as a failsafe in the event of controller failure. It is also useful for commissioning and temporary control of plant, using the Off/Hand/Auto jumper. The IO-ORM4 has been designed for BMS controllers that have a limited current draw capability, as it only requires <1mA at 10Vdc to switch. Link selection allows up to 4 outputs to be switched from 1 input.

Installation

1. The IO-ORM4 should only be installed by a competent, suitably trained technician, experienced in installation with hazardous voltages. (>50Vac & <1000Vac or >75Vdc & 1500Vdc).

2. Ensure that all power is disconnected before carrying out any work on the IO-ORM4.

3. Maximum cable is 2.5mm², care must be taken not to over tighten terminals.

4. When mounting the IO-ORM4 care should be taken not to stress the PCB when fitting to the DIN rail. If it is necessary remove the module from the DIN rail, be sure to use a flat bladed screwdriver to release the DIN clips.

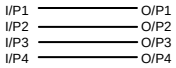
5. The IO-ORM4 is designed to operate from a 24Vac/dc supply (so that power can be drawn from a 24Vac transformer used for other purposes if a 24Vdc supply is not available). In either case one side of the supply is common to the signal ground from the BEMS controller.

6. The relay output is single Pole Change Over (SPCO) so they can be wired as Normally Open (NO) or Normally Closed (NC).

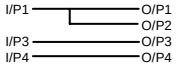
7. The 0-10Vdc signal input only requires <1mA to operate and therefore be compatible with all BMS controllers that have a 0-10Vdc output.

Operating Modes

4 channels

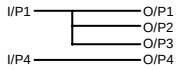


3 channels
(2 channels commoned to i/p 1)

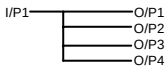


Operating Modes (continued)

2 channels
(3 channels commoned to i/p 1)



1 channel
(4 channels commoned to i/p 1)



Jumper Settings

Off/On/Auto jumper:

Off 

On 

Auto 

Input jumper:

Output channel is commoned to input 1 

Output channel is controlled by it's input 

Connections