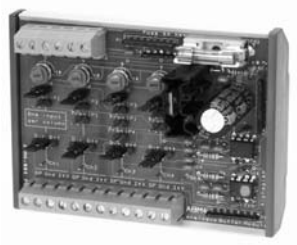
Analogue Override Module



Features

- 4 x 0-10Vdc Channels
- Fused 24V o/p terminals for actuator power
- Direct or buffered output signals

Specification

Input signal	0-10Vdc
Output signal	0-10Vdc direct or buffered
Max. output current	20mA per channel in buffered mode
Power supply	21Vdc to 40Vdc 21Vac to 27Vac
Max. supply current	
AC supply	260mA
DC supply	115mA
Fused output	24Vac @ 8A
Manual override	Hand/Off/Auto jumper selectable with screwdriver adjustment of out put voltage in 'Hand' position
Fuse	8A max.
Electrical Connections	Terminals for 0.5-2.5mm² Rising cage
Ambient	-10 to 50°C
Dimensions	105 x 75 x 50mm
Country of origin	UK

Product Codes

IO-ABM4
4 Channel analogue buffer module

Technical Overview

The **IO-ABM4** is used for independent manual override or buffering of analogue output channels from a BEMS controller, as a fail-safe in case of controller failure. This enables actuators and other plant to be manually overridden from the panel where local access may be difficult. The module is also useful for commissioning or temporary control of plant prior to controller installation.

Installation

1. The IO-ABM4 should only be installed by a competent, suitably trained technician.

2. Ensure that all power is disconnected before carrying out any work on the IO-ABM4.

3. Maximum cable size is 2.5mm². Care must be taken not to over tighten terminals.

4. When mounting the IO-ABM4 care should be taken not to stress the PCB when fitting to the DIN rail. If necessary, remove the board from the DIN rail before fitting, be sure to use a flat bladed screwdriver to release the DIN clips.

5. The IO-ABM4 is designed to operate from a 24Vac/dc supply. One side of the supply is common to the signal ground from the BEMS controller.

Jumper Settings

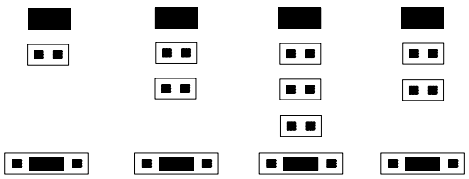
Buffered 

Direct 

Off 

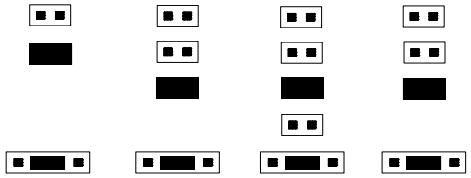
Link Setting Examples

Each output set to be buffered and adjustable by on-board pot

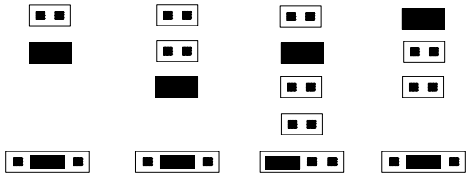


Link Example Settings (continued)

All 4 outputs are buffered and follow input 1



Outputs 1 & 2 are buffered and follow input 1, output 3 follows input 3 and is not buffered, output 4 is adjustable by the pot and is buffered.



Output Linking

The jumper settings allow each output to be configured in a number of different ways as follows:-

Output 1
Can be set to either HAND or IP1. Set to HAND, the output is adjusted using the corresponding potentiometer. Set to IP1, the output derives its value from input 1.

Output 2
Can be set to HAND, IP1 or IP2. Set to HAND, the output is adjusted using the corresponding potentiometer. Set to IP1, the output derives its value from input 1. Set to IP2, the output derives its value from input 2.

Output 3
Can be set to HAND, IP1, IP3 or IP4. Set to HAND, the output is adjusted using the corresponding potentiometer. Set to IP1, the output derives its value from input 1. Set to IP3, the output derives its value from input 3. Set to IP4, the output derives its value from input 4.

Output 4
Can be set to HAND, IP1 or IP4. Set to HAND, the output is adjusted using the corresponding potentiometer. Set to IP1, the output derives its value from input 1. Set to IP4, the output derives its value from input 4.

Output Linking (continued)

Output buffer:

When an output link is set to the Buff position the output signal is buffered to 20mA, in both Hand and Auto modes.

When an output link is set to the Dir position the output signal is powered only from the input in Auto mode, or from the potentiometer in Hand mode.

When an output link is set in the Off position, the output signal is open circuit.

Hand:

When the input link for a channel is set to Hand, the output voltage may be set by adjusting the associated potentiometer to give a fixed output.

Connections