

0-10VDC BMS RELAYS WITH AN AUXILIARY SUPPLY

TYPES: YR-1RM, YR-1RM-A, YR-1RM-AS

PRODUCT
GROUP
F

FEATURES

- Din Rail Mounted
- Fully Enclosed
- BMS 0-10VDC Signal Compatible
- 0.5mA (Max) Consumption on 0-10VDC Input
- Output SPCO
- Large Terminals 4mm²
- CE Marked
- RoHS Compliant

DESCRIPTION

A range of three din rail mounted fully enclosed 0-10VDC BMS modules providing a volt free digital output from a 0-10VDC BMS signal. These modules are an alternative to standard BMS low coil consumption "SRMV" relays which have a coil consumption of <20mA. On occasions with some BMS systems there is insufficient power in the 0-10VDC signals even to drive a low coil consumption "SRMV" relay. The Foxtam Controls modules have a consumption of $\leq 0.5\text{mA}$ with regards to the 0-10VDC signal, the power to drive the output relay is taken from a separate auxiliary supply of 24V AC/DC, the 0-10VDC input signal and the 24V auxiliary supply shares a common 0V point (see wiring diagram below), it should also be noted that the module is polarity sensitive. A red LED indicates the output relay is energised.

YR-1RM This module has a fixed non adjustable setpoint of 5VDC at which point the SPCO output relay will energise indicated by a red LED. The de-energisation point is a fixed hysteresis of 5% (0.25V), therefore 4.75VDC. At all times the 24V AC/DC auxiliary supply must be present for the module to operate.

YR-1RM-A This module has an adjustable switching point of between 2-10VDC, adjustment is via a potentiometer on the front of the module. On reaching the selected setpoint the SPCO output relay will energise indicated by a red LED. The de-energisation point is a fixed hysteresis of 5% of the setpoint selected. At all times the 24V AC/DC auxiliary supply must be present for the module to operate.

YR-1RM-AS Exactly as the YR-1RM-A but with the addition of an **OFF/AUTO/ON** denoted selector switch on the module. Set to **AUTO** the module behaves as a YR-1RM-A. In the **ON** position the relay output will be forced on even if the 0-10VDC input signal has not reached the selected setpoint. Set to **OFF** the output relay can be forced to de-energise even if the 0-10VDC input signal is above the selected setpoint. At all times the 24V AC/DC auxiliary supply must be present for the module to operate.

SPECIFICATIONS

Input Supply

Auxiliary Supply:	24V AC/DC
Supply Tolerance:	+/-15%
Max Power Consumption:	26mA

BMS Input Signal

Signal input:	0-10VDC
Input impedance:	22K Ohms
Consumption:	0.5mA Max
Hysteresis:	5% fixed of the setpoint

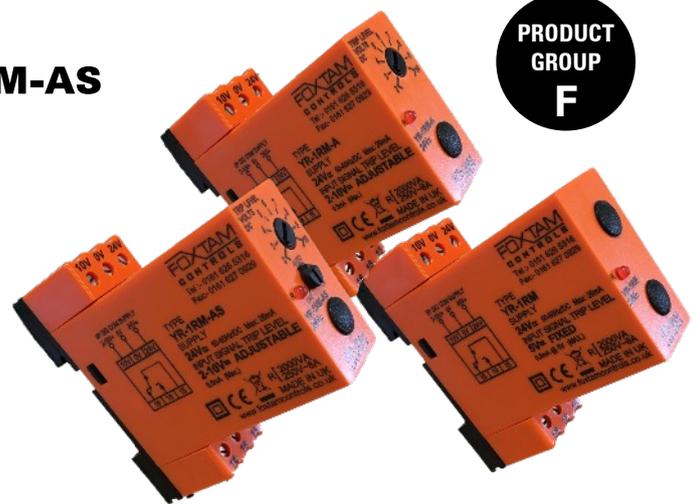
Relay Output

Output contact:	SPCO 8 Amps / 250V AC1
Operate time:	15mSec max
Release time:	8mSec max
Max switching voltage:	250VAC, 30VDC
Mechanical life:	30 Million ops

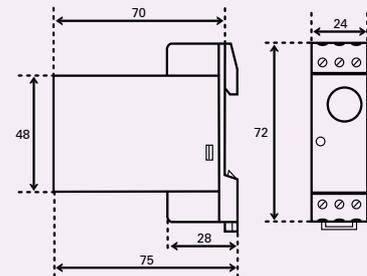
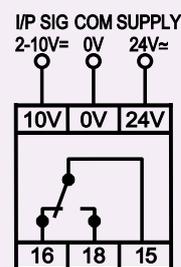
General

Operating Temperature:	-20°C to +65 °C
Storage Temperature:	-20°C to +65 °C
Humidity:	95% Rel H max
Isolation Voltage I/P-O/P:	1500VDC for 1 Min
CE Marked:	Yes
Standards Applied:	EN60950-1 EN6100-6-3 EN61010-1
Material Housing:	Polycarbonate Auto extinguishable to UL 94V-0
RoHS Compliant:	Yes

Tel: 0161 626 5316



CONNECTIONS & DIMENSIONS



ORDERING INFORMATION

Type	Trip Level	Manual Override
YR-1RM 24V AC/DC	FIXED	NO
YR-1RM-A 24V AC/DC	ADJUSTABLE	NO
YR-1RM-AS 24V AC/DC	ADJUSTABLE	YES