

Intelligent DIN-Rail Input/Output Unit **Installation Guide**

Part No	Product Name
SA4700-302APO	Intelligent DIN-Rail Input/Output Unit

Technical Information

All data is supplied subject to change without notice. Specifications are typical at 24V, 25°C and 50% RH unless otherwise stated.

> Supply Voltage 17-35V dc Quiescent Current 500µA Power-up Surge Current 900µA

Relay Output Contact Rating 1A at 30V dc or ac

LED Current 1.6mA per LED

Maximum Loop Current 1A

(I_cmax; L1 in/out)

Operating Temperature -40°C to 70°C

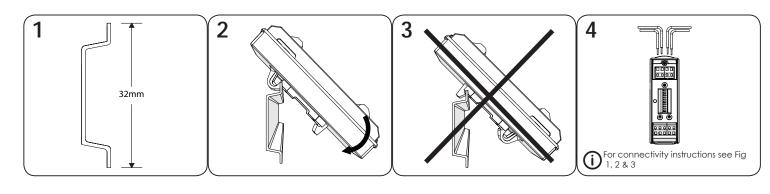
Humidity 0% to 95% RH

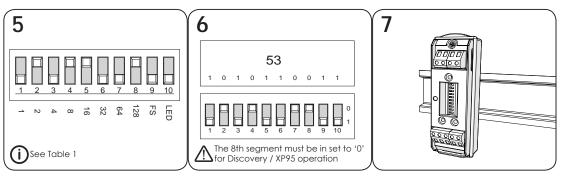
(no condensation or icing)

Approvals EN 54-17 & EN 54-18

For additional technical information please refer to the following documents which are available on request.

PP2559 - Intelligent DIN-Rail Input/Output Unit





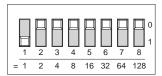
Addressing

Table 1

		XP95 / Discovery Systems	CoreProtocol Systems
Segment	1 2 3 4 5 6 7	Sets the address	Sets the address
'	8	Set to '0' (Fault value is returned if set to '1')	
	FS	Enables failsafe mode (compliant with BS7273-4 for door holders)	Enables failsafe mode (compliant with BS7273-4 for door holders)
	LED	Enables/Disables LED (except Isolator LED)	Enables/Disables LED (except Isolator LED)

Note: On mixed systems addresses 127 and 128 are reserved. Refer to system's panel manufacturer for further information.

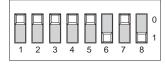
Address Setting Examples















Connectivity Examples

Fig. 1 Standard resistive monitoring mode

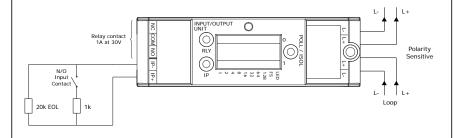


Fig. 2 Normally open monitoring mode (compatible with CoreProtocol only)

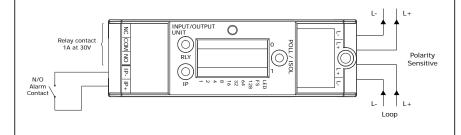
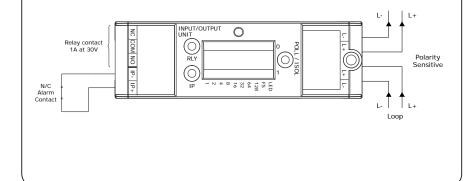


Fig. 3 Normally closed monitoring mode (Compatible with CoreProtocol only)



LED Status Indicator

RLY	Continuous Red	Relay Active
	Continuous Yellow	Fault
POLL/	Flashing Green	Device Polled
ISO	Continuous Yellow	Isolator Active
IP	Continuous Red	Input Active
I IP	Continuous Yellow	Input Fault

Note:

Not all LEDs can be on simultaneously.

Commissioning

The installation must conform to BS5839-1 (or applicable local codes).

Caution

Unit damage. No electrical supply greater than 50V ac rms or 75V dc should be connected to any terminal of this Input/Output Unit.

Note: For compliance with Electrical Safety Standards the sources switched by the output relays must be limited to a 71V transient over-voltage condition. Contact Apollo for moreinformation.

Troubleshooting

Before investigating individual units for faults, it is important to check that the system wiring is fault free. Earth faults on data loops or interface zone wiring may cause communication errors. Many fault conditions are the result of simple wiring errors. Check all connections to the unit.

Problem	Possible Cause
No response or missing	Incorrect address setting Incorrect loop wiring
Fault condition reported Relay fails to operate	Incorrect input wiring Incorrect wiring
	Control panel has incorrect cause and effect programming
Relay energised continuously	Incorrect loop wiring Incorrect address setting
Analogue value unstable	Dual address

Constant Alarm

Loop data fault, data corruption
Incorrect wiring
Incorrect end-of-line resistor fitted

Isolator LED on

Incompatible control panel software
Short-circuit on loop wiring

Short-circuit on loop wiring Wiring reverse polarity Too many devices between isolators

Mode Table*

Mode	Description	
1	DIL Switch XP Mode	
2	Alarm Delays	
3	Output and N/O input (can be equivalent for Output only)	
4	Output and N/C input	
5	Output with Feedback (1st input N/C, 2nd input N/O)	
6	Failsafe Output with Feedback (1st input N/C, 2nd input N/O)	
7	Failsafe Output without Feedback	
8	Momentary Input Activation Sets Output Relay	
9	Input Activation Sets Output	

*CoreProtocol enabled systems only

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Tel: +44 (0) 23 9249 2412 Fax: +44 (0) 23 9249 2754 Email: techsalesemails@apollo-fire.com Website: www.apollo-fire.co.uk