Intelligent DIN-Rail Input/Output Unit

Product overview

Product Type	**Input/Output Unit**
Part No.	**SA4700-302APO**
Digital Communication	**XP95, Discovery and CoreProtocol® compatible**

Compliance

CE LPCB VdS BOSEC SBSC FG

Product information

The Intelligent DIN-Rail Input/Output Unit provides supervision of one or more normally open volt free contacts connected to a single pair of cables and a set of changeover relay output contacts.

Refer to Table 1 for digital communications protocol compatibility and Table 2 for the Intelligent DIN-Rail Input/Output Unit operating modes.

- Improved design for ease of wiring meaning faster installation
- Contains controllable isolator *
- Address range 1 - 254 *
- Nine pre-configured modes, including compatibility mode from XP95/Discovery to CoreProtocol systems *
- Failsafe Mode (meets BS 7273-4 requirements)
- Configurable input styles *

** Note: CoreProtocol enabled systems feature only, please check with your system partner for availability.*

Technical data

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

Supply voltage (Vmin–Vmax)	*17–35 V dc*
Protocol	*5–13 V peak to peak*
Power-up surge current	*900 µA*
Quiescent current	*500 µA*
Max current LEDs On	*3.5 mA*
Max current LEDs disabled	*500 µA*
Relay output contact rating	*1 A at 30 V dc or ac*
Isolator data	*Refer to the Short-Circuit Isolation datasheet PP2090*
Operating temperature	*– 40°C to + 70°C*
Humidity	*0% to 95% RH (no condensation or icing)*
Vibration, impact and shock	*EN 54-17, EN 54-18*
Standards and approvals	*EN 54-17, EN 54-18, CPR , LPCB, VdS, BOSEC, SBSC, FG*
Dimensions	*33 mm height x 102 mm width x 33 mm depth*
Weight	*49 g*

Table 1: Digital communications protocol compatibility

Protocol	Device Behaviour
XP95† /Discovery†	XP95
CoreProtocol†	Soteria

† Fire control panel dependant

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Table 2: Intelligent DIN-Rail Input/Output Unit operating modes*

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 (N⁄C)
6	FailSafe Output with Feedback (N⁄C)
7	FailSafe Output without Feedback
8	Momentary Input Activation Sets Output Relay
9	Input Activation Sets Output

** CoreProtocol enabled systems only*

Failsafe Mode

In Failsafe mode the Intelligent DIN-Rail Input/Output Unit will activate the on-board relay output without being commanded by the control panel on loss of loop or protocol loss. Failsafe mode is selected via a DIL switch and indicated with an analogue value of 17.

Mechanical Construction

The Intelligent DIN-Rail Input/Output Unit (see Figure 1) is designed to be mounted on a 35 mm width DIN-Rail inside an enclosure.

CAUTION
Unit Damage. This unit is not designed for outdoor use unless it is mounted in a suitable weatherproof enclosure.

EMC Directive 2014/30/EU

The Intelligent DIN-Rail Input/Output Unit complies with the essential requirements of the EMC Directive 2014/30/EU, provided that it is used as described in this datasheet.

A copy of the Declaration of Conformity is available from Apollo on request.

Conformity of theIntelligent DIN-Rail Input/Output Unit with the EMC Directive, does not confer compliance with the directive on any apparatus or systems connected to them.

Construction Products Regulation 305/2011/EU

The Intelligent DIN-Rail Input/Output Unit complies with the essential requirements of the Construction Products Regulation 305/2011/EU.

A copy of the Declaration of Performance is available from Apollo on request.

Connectivity

Refer to Figures 2, 3 and 4 for unit connection information. Refer to Installation Guide 39215-160 for the installation instructions on this product. Table 3 details the status indications of this unit, from normal operation through to fault conditions.

Figure 1 Intelligent DIN-Rail Input/Output Unit dimensional drawing

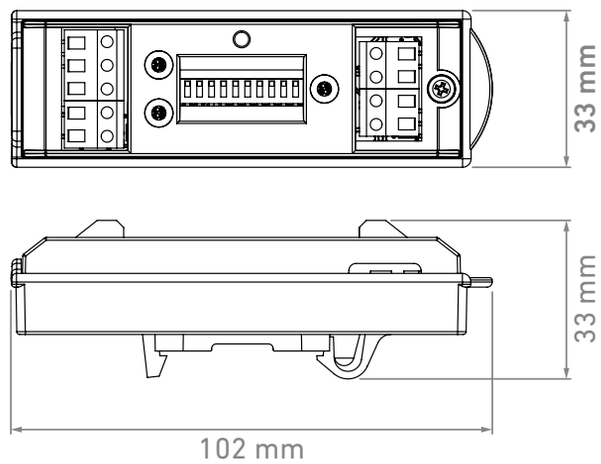

Table 3: Status Indications

Legend	LED Status	Description
RLY	Continuous Red	Relay Active
RLY	Continuous Yellow	Relay Fault
Poll/ISO	Flashing Green	Polling LED
Poll/ISO	Continuous Yellow	Isolator LED
I/P	Continuous Yellow	Input Fault
I/P	Continuous Red	Input Active

Figure 2: Intelligent DIN-Rail Input/Output Unit standard resistive monitoring mode connectivity diagram

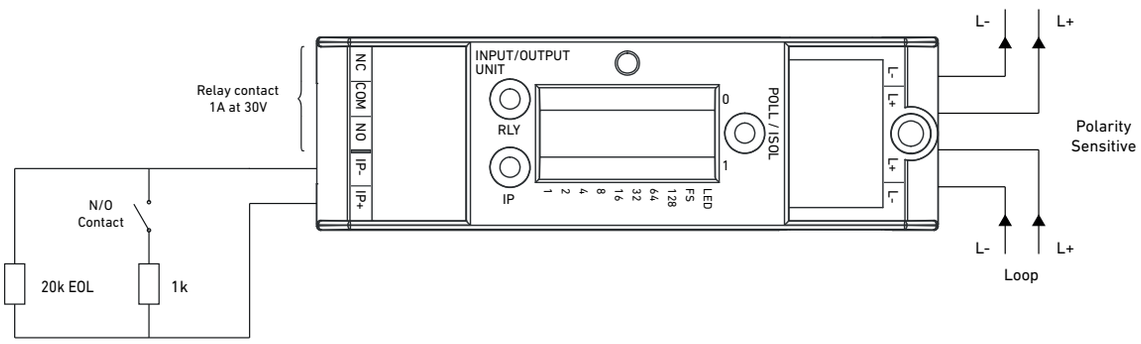

Figure 3: Intelligent DIN-Rail Input/Output Unit normally open monitoring mode connectivity diagram (compatible with CoreProtocol only)

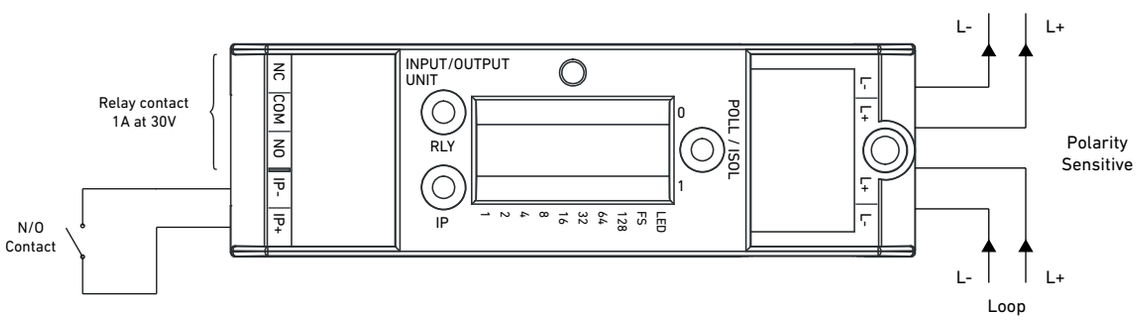

Figure 4: Intelligent DIN-Rail Input/Output Unit normally closed monitoring mode connectivity diagram (compatible with CoreProtocol only)