

Intelligent DIN-Rail Input/Output Unit



Product overview

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

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 *
- Earth fault monitoring *

* 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 & approvals | EN 54-17, EN 54-18, CPR, LPCB, VdS and BOSEC |
| 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 NO input (can be equivalent for Output only) |
| 4 | Output and NC input |
| 5 | Output with Feedback (NC) |
| 6 | FailSafe Output with Feedback (NC) |
| 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 the Intelligent DIN-Rail Input/Output Unit with the EMC Directive, does not confer compliance with the directive on any apparatus or systems connected to them.

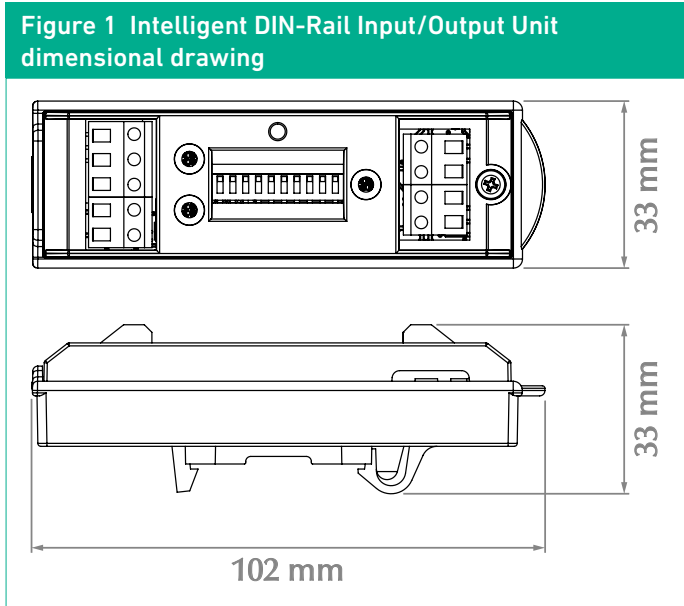
Construction Products Regulation 305/2011/EU

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 & 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.



| 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 |



Intelligent DIN-Rail Input/Output Unit

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

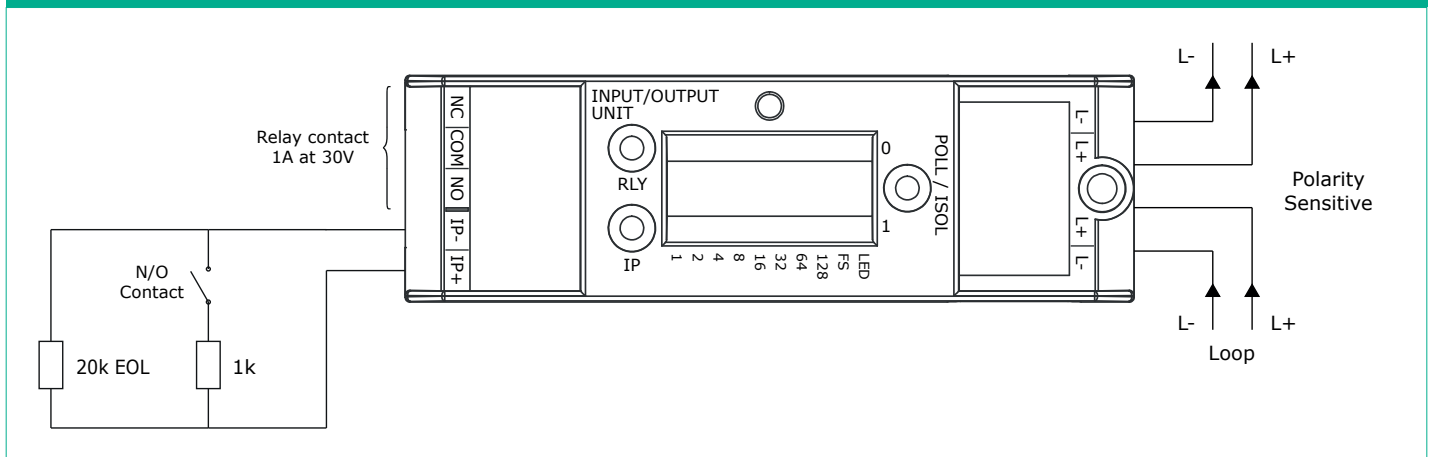


Figure 3: Intelligent DIN-Rail Input/Output Unit normally open monitoring mode connectivity diagram (compatible with CoreProtocol only)

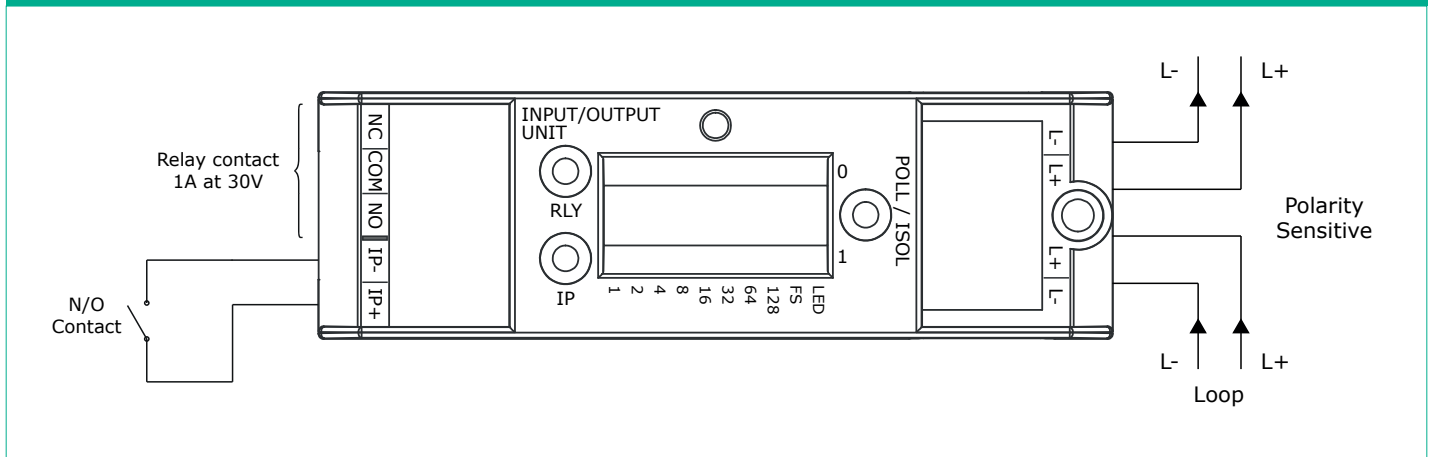


Figure 4: Intelligent DIN-Rail Input/Output Unit normally closed monitoring mode connectivity diagram (compatible with CoreProtocol only)

