

Intelligent Mains Switching Input/Output Unit



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)	17–35V dc
Protocol	5–13V peak to peak
Power-up surge current	1.1mA
Quiescent current	700µA
Max current LEDs On	5.2mA
Max current LEDs disabled	700µA
Relay output contact rating	5A at 30V dc or 250V 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 and LPCB
Dimensions	60mm height x 150mm width x 90mm depth
Weight	301g

Product overview

Product Type	Mains Switching Input/Output Unit
Part No.	SA4700-103APO
Digital Communication Protocol	XP95®/Discovery® & CoreProtocol® compatible

Product information

The Intelligent Mains Switching Input/Output Unit provides a single line tolerant circuit (CoreProtocol only) containing one or more normally open contacts connected to a single pair of cables. It also provides a voltage free change over relay output capable of switching mains.

Refer to Table 1 for digital communications protocol compatibility and Table 2 for the Intelligent Mains Switching 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 *
- Two input channels
- 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.

Table 1 Digital communications protocol compatibility

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

[†] Fire control panel dependant

Intelligent Mains Switching Input/Output Unit

Table 2 Intelligent Mains Switching 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

Mechanical Construction

The Intelligent Mains Switching Input/Output Unit (see Figure 1) is available in the new faceplate style enclosure. This can be mounted with the supplied back-box for surface mounting or flush mounted using a UK double gang, flush mounting back-box of minimum depth 30mm.

EMC Directive 2014/30/EU

The Intelligent Mains Switching 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.

Construction Products Regulation 305/2011

The Intelligent Mains Switching Input/Output Unit complies with the essential requirements of the Construction Products Regulation 305/2011.

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 39215-161 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 Mains Switching Input/Output Unit dimensional drawing

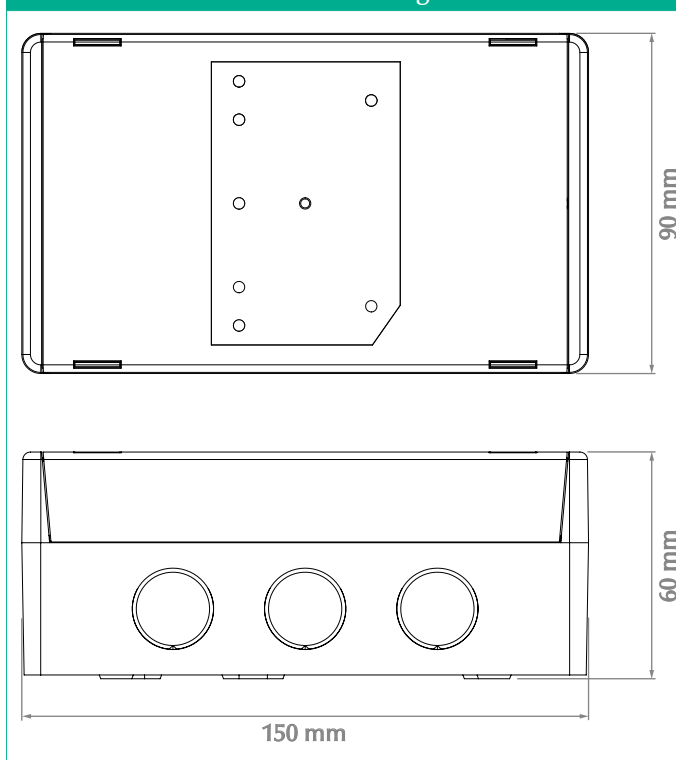


Table 3 Status Indications

Legend	LED Status	Description
RLY	Continuous Red	Relay Active
RLY	Continuous Yellow	Relay Fault
Poll/ISOL	Flashing Green	Polling LED
Poll/ISOL	Continuous Yellow	Isolator LED
I/P 1, IP 2	Continuous Yellow	Input Fault
I/P 1, IP 2	Continuous Red	Input Active

Intelligent Mains Switching Input/Output Unit

Figure 2 Intelligent Mains Switching Input/Output Unit standard resistive monitoring mode connectivity diagram

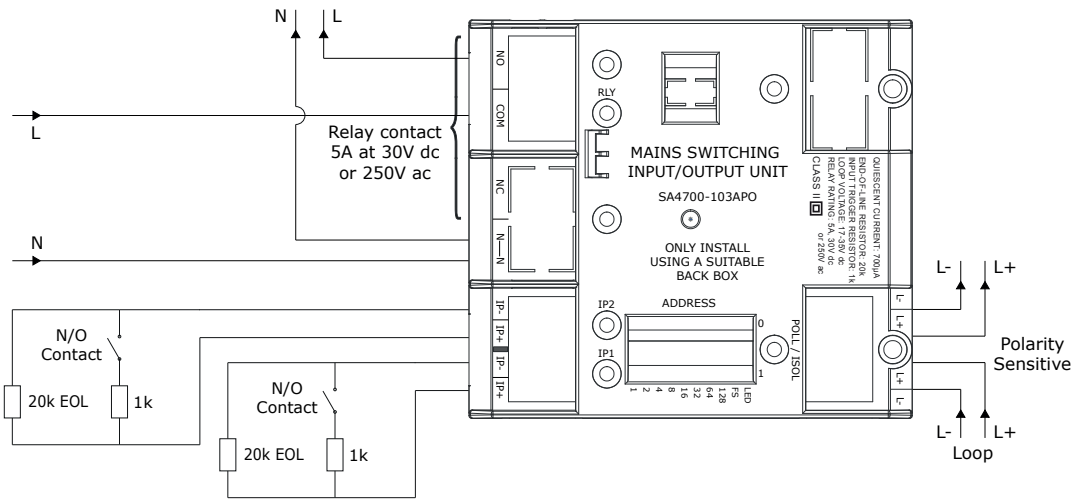


Figure 3 Intelligent Mains Switching Input/Output Unit normally open and normally closed contact monitoring mode connectivity diagram (compatible with CoreProtocol only)

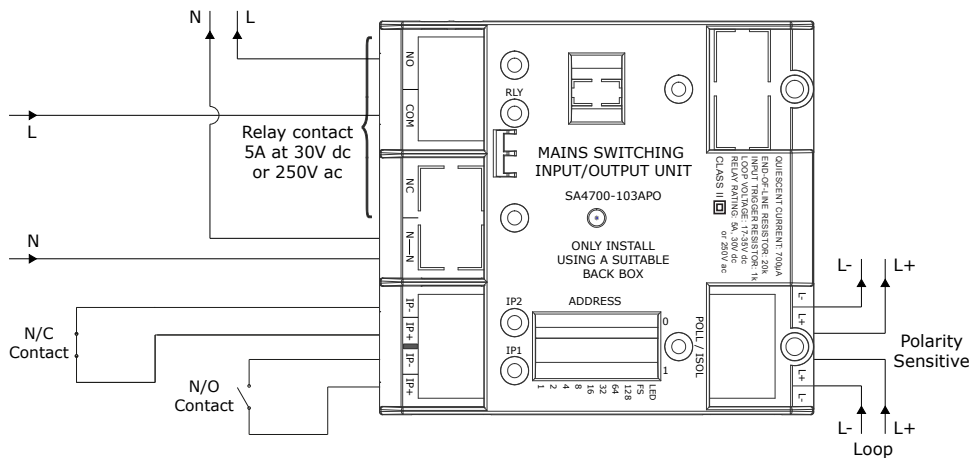


Figure 4 Intelligent Mains Switching Input/Output Unit single fault tolerant zone monitoring mode connectivity diagram (compatible with CoreProtocol only)

