FUNCTION
The XP95 Mains Switching Input/Output Unit provides a voltage-free, single pole change-over relay output and a monitored switch input.

FEATURES
The Mains Switching Input/Output Unit supervises one or more normally-open switches connected to a single pair of cables.

ELECTRICAL CONSIDERATIONS
The XP95 Mains Switching Input/Output Unit is loop powered and operates at 17–28V dc with protocol voltage pulses of 5–9V. The loop connections are polarity sensitive.

PROTOCOL COMPATIBILITY
The unit will operate only with control equipment using the Apollo XP95 or Discovery protocol.

MECHANICAL CONSTRUCTION
The Input/Output Unit is supplied with a backbox for surface mounting. It is designed for indoor use only.

Three LEDs, two red and one yellow, are visible through the front cover of the enclosure.

One red LED is illuminated to indicate that the relay is set. The second red LED is illuminated to indicate that the switch input is closed.

The yellow LED is illuminated whenever a fault condition (open or short circuit) has been detected.

All LED indicators can be disabled using segment 8 of the DIL switch.

The enclosure is moulded from polycarbonate.

Dimensions and weight of Mains Switching Input/Output Unit:
150 x 90 x 48mm  240g
Technical data

Series 90/XP95 loop voltage 17–28V DC
Maximum current consumption at 24V
LED enabled
  switch-on surge, max 150ms 3.5mA
  quiescent, 20kΩ EOL fitted 1.25mA
  switch input closed,
    'switch closed' LED on 2.5mA
    any other condition, max 2 LEDs on 2mA
LED disabled
  switch-on surge, max 150ms 3.5mA
  quiescent, 20kΩ EOL fitted 1.2mA
  switch input closed,
    1.5mA
    any other condition 2mA
Rated load (resistive) 5A at 250V AC
  2A at 48V DC
Max switching capacity 1.25kVA
Switch input monitoring voltage 9–11V DC
(open-circuit condition)
Maximum cable resistance 50Ω

Environmental Data

Operating temperature –20°C to +70°C
Humidity (no condensation) 0–95%
Cyclic humidity
Impact to EFSG/F/95/007
Surface temperature under max load BSEN61010–1:1993
Vibration
Rigidity
Dielectric strength
IP rating 54

Schematic Diagram and Wiring Connections

The resistor value may be anywhere within the range 200Ω to 11kΩ
Live mains conductors