



# DIN-RAIL INPUT/OUTPUT UNIT

## FUNCTION

The DIN-Rail Input/Output Unit provides a voltage-free, single pole, change-over relay output, a single, monitored switch input and an unmonitored, non-polarised opto-coupled input.

## FEATURES

The DIN-Rail Input/Output Unit supervises one or more normally-open switches connected to a single pair of cables. It is set to return an analogue value of 4 in the event of an open or short-circuit fault and 16 during normal operation. The status of the inputs is reported by means of two input bits.

The change-over contact is operated by a software command from the panel.

## ELECTRICAL CONSIDERATIONS

The DIN-Rail Input/Output Unit is loop powered and operates at 17–28V DC with protocol voltage pulses of 5–9V.

## PROTOCOL COMPATIBILITY

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



Part No. 55000–803

Dimensions and weight of DIN-Rail Input/Output Unit:  
110 x 107 x 20mm 95g

Two DIN-Rail enclosures are available:

- 4 way 29600–239
- 10 way 29600–240



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## MECHANICAL CONSTRUCTION

The DIN-Rail Input/Output Unit is supplied in a standard housing which is clipped onto a standard 35mm DIN rail (DIN 46277) or fixed directly to the enclosure using two 4mm screws.

Connections are made via plug-in terminal blocks which accept wires up to 2.5mm<sup>2</sup>.

Three LEDs, two red and one yellow, are visible through the top 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.

If the indicating LEDs are not required or the extra loop current to illuminate them is not available, they can be disabled by using the eighth segment of the DIL switch.

## LOW VOLTAGE DIRECTIVE 73/23/EEC

*No electrical supply greater than 50V AC rms or 75V DC should be connected to any terminal of this Input/Output Unit.*

## EMC DIRECTIVE 89/336/EEC

*The DIN-Rail Input/Output Unit complies with the essential requirements of the EMC directive 89/336/EEC, provided that it is used as described in this PIN sheet and that the contact is not operated more than five times a minute or twice in any two seconds.*

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

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

## Technical Data

Loop voltage	17-28V DC
Maximum current consumption at 24V	
switch-on surge, max 150 ms	3.5mA
quiescent,	1.2mA
EOL fitted	20kΩ
switch input s/c, max (LED on)	6mA
LEDs disabled	2.2mA
any other condition (max 2 LEDs on)	4.5mA
Switch input monitoring voltage (open-circuit condition)	9-11V DC
Maximum cable resistance	50Ω
Opto-coupled input	
voltage max	35V DC
impedance	10kΩ
Relay output contact rating at 30V AC or DC	max 1A (inductive or resistive)
Relay output wetting current at 10mV DC	min 10μA
Operating temperature	-20°C to +70°C
Humidity (no condensation)	0-95%
Shock	} to EFGS/F/95/007
Vibration	
Impact	
IP rating	20
Radiated emissions	to BS EN 50081-1 & 2
Radiated immunity	to BS EN 50082-1

*For further technical information please refer to PP2045-T, available on request.*

## Dimensional Drawing (mm)

