

Mini Switch Monitor



Product overview		
Product Type	Mini Switch Monitor	
Part No.	55000-760	
Digital communication	XP95, Discovery and CoreProtocol® compatible	

Approvals		
C€	(LPCB)	VdS
FG	GOST-R)	

Product information

The Mini Switch Monitor is a miniature interface. The monitor is designed to fit into equipment with limited space or to be mounted within an enclosure such as a manual call point. The monitor can also be fitted onto a standard 35mm DINrail using a twist-click motion.

The Mini Switch Monitor is designed to monitor the state of one or more single-pole, volt-free contacts. It also reports the contact status to Apollo compatible fire control panels.

The Mini Switch Monitor features a 201 short-circuit isolator as standard and can be used as an interrupt or non-interrupt device. The interrupt feature (selected via the DIL Switch) means the monitor can be used where a priority response is required, in particular for monitoring an individual or a zone of conventional manual call points.

Note: When the eighth section of the DIL switch is changed, the Mini Switch Monitor will change the type code it sends to the panel. The panel will have to be programmed to accept this change.

The unit provides "normal", "fault", "pre-alarm" and "alarm" states to the control equipment. The states are derived from the switched resistive values shown in Table 2. The device accepts a maximum line resistance of 50Ω and requires a $20k\Omega$ End-of-Line resistor.

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 17-28 V DC

(Vmin–Vmax)

Digital communications protocol XP95, Discovery and CoreProtocol

compatible 5-9 V Peak to Peak

Current consumption (max) at 24V DC

Power up surge 0.8mA

Quiescent 0.2mA

(20kΩ End-of-Line fitted)

LED on3.4mA + quiescentRemote LED on2.8mA + quiescentYellow fault LED on2.8mA + quiescent

Maximum cable resistance 50Ω

Operating temperature -20°C to $+60^{\circ}\text{C}$ Humidity (no condensation or 0% to 95%RH

icing)

Vibration, impact and shock EN 54-17, EN 54-18

Approvals and standards CPR, LPCB, VdS, FG, CCMG,

VNIIPO

Dimensions 20mm height x 39mm width x

39mm depth

Weight 30g

Material White flame retardant

polycarbonate

Table 1: Digital communications protocol compatibility Protocol XP95/Discovery XP95 CoreProtocol (fire control panel dependant) XP95

Mechanical Construction

The unit has three status LEDs, one red, one green and one yellow.

The red LED is switched by the control panel and illuminates in the event of an alarm condition being detected.

The green LED means that the device is polled.

The yellow LED can either mean a short-circuit on loopwiring (constant) or a fault on the monitored circuit (pulsing).

The unit has provision for a remote LED which is switched by the control panel. The length of cable used for the remote LED must not exceed 3m (see Table 2 and Figure 1).

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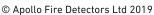






Table 2: Key to resistors		
R1 – Alarm	1ΚΩ	
R2 – Pre-Alarm	10ΚΩ	
R3 – End-of-Line	20ΚΩ	
D1 – Optional Remote LED	Max 3m cable length	

Table 3: Analogue Values Related to Circuit Status and Zone Load (Input Resistance)

and Zone Load (Input Resistance)				
Status	Analogue Value	Mini Switch Monitor (55000-760)		
Short Circuit Fault	4	< 0.1kΩ		
Indeterminate	4 or 64	$0.1 k\Omega - 0.2 k\Omega$		
Alarm	64	0.2kΩ – 2kΩ (1kΩ)*		
Indeterminate	45–51 or 64	2kΩ – 3kΩ		
Pre-alarm	45–51	3kΩ – 11kΩ (10kΩ)*		
Indeterminate	16 or 45–51	11kΩ – 15kΩ		
Normal	16	15kΩ – 25kΩ (20kΩ)*		
Indeterminate	4 or 16	25kΩ – 30kΩ		
Open Circuit Fault	4	> 30kΩ		

^{*} Note: The values shown in brackets are recommended values, recomended value resistors supplied with the unit

EMC Directive 2014/30/EU

The Mini Switch Monitor 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 the Apollo website: www.apollo-fire.co.uk

Conformity of the Mini Switch Monitor with the EMC Directive, does not confer compliance with the directive on any apparatus or systems connected to them.

Construction Products Regulation (EU) 305/2011

The Mini Switch Monitor complies with the essential requirements of the Construction Products Regulation (EU) 305/2011.

A copy of the Declaration of Performance is available from the Apollo website: www.apollo-fire.co.uk

