

Short Circuit Isolators

W Series

WM100-4B Short Circuit Isolator

(technical data brief)



WM100-4B is a stand-alone four-port short-circuit isolator designed to enable organizing of two separate spurs of addressable devices connected to the main loop and provide protection from short circuits for all ports.

The WM100-4B SCI is used to provide additional reliability for a fire alarm system by isolating a spur in which a short circuit has occurred.

The WM100-4B short-circuit isolator is non-addressable, the control panel does not indicate its state but detects and displays the disappearance of devices in an isolated loop section.

Features

- Detection of short circuit faults in the loop sections
- Minimization of the loop disruptions caused by short circuits
- Four short circuit LED indicators (yellow)
- Automatic loop section de-isolation upon short-circuit removal
- Loop powered
- Up to 32 devices may be installed in one spur

Technical Data

Operating voltage $V_{\min...V_{\max}}$	15... 28 V DC
Loop voltage (with protocol pulses)	≤ 38 V
Isolating voltage $V_{SC \text{ MAX}}$	$\leq 14,5$ V
Re-connect voltage $V_{SO \text{ MIN}}$	$\leq 10,5$ V
Max. continuous loop current $I_{Q\max}$	$\leq 0,15$ mA
Max. continuous current with the switch closed $I_{C\max}$	$\leq 0,8$ A
Max. leakage current with the switch open (with LED) $I_{L\max}$	≤ 30 mA
Max. short-circuit switching current $I_{S\max}$	$\leq 3,0$ A
Max. series resistance, switch closed $Z_{C\max}$	$\leq 0,13$ Ω
De-isolation impedance Z_{SC}	500 ... 600 Ω
Dimensions (L x W x H), mm	69,7 x 64,6 x 27,5
Weight	≤ 50 g
IP rating	IP30
Operating temperature	-10 °C to +65 °C
Humidity	up to 95 % (non-condensing)
Average service life	10 years



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