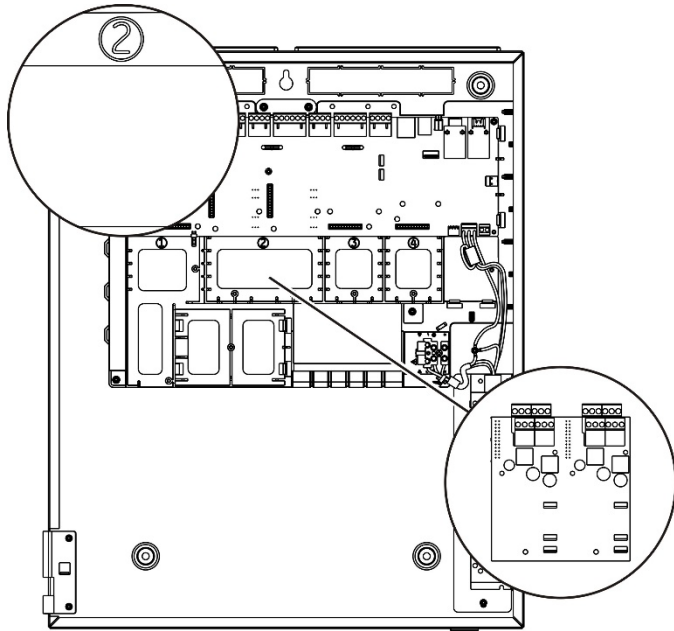


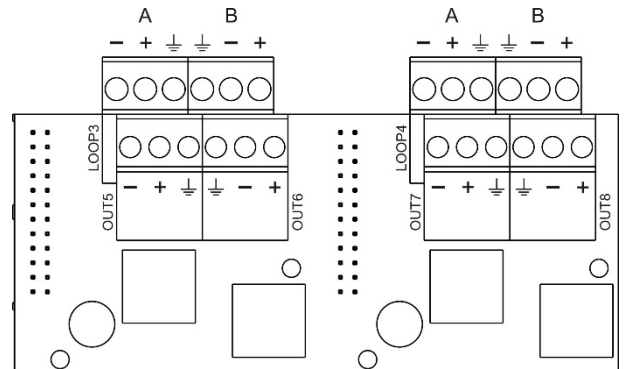


2X-A-LB-W Loop Board Installation Sheet

1



2



Description

The 2X-A-LB-W Loop Board provides two additional loops (LOOP3 and LOOP4) and four additional supervised outputs (OUT5, OUT6, OUT7, and OUT8) to compatible EMS 2X-A Series Fire Alarm Control Panels running the 900 Series protocol.

Installation

WARNING: To avoid personal injury or death from electrocution, disconnect the control panel from the mains power supply and batteries before installing this product.

Recommended cable

Use 0.13 to 3.31 mm² (26 to 12 AWG) shielded or unshielded twisted-pair cable. Use the earth studs in the control panel cabinet for termination.

See your control panel installation manual for more information on cable and wiring recommendations.

To install the expansion board:

1. Install the loop board into slot 2 of the control panel chassis, as shown in Figure 1.

Push firmly to ensure a good connection. Secure the board with the screws provided.

2. Connect loops and configurable outputs as shown in Figure 2.

Loop earth connection: Connect one side to the earth studs in the control panel cabinet (not to the loop earth terminal on the expansion board). The other side can be left floating.

Output connection: If an output is not used, install an end-of-line resistor across the unused terminals to avoid an open circuit fault on the output (see Table 2 on page 2).

3. Restore power and add the device to the control panel configuration (see the control panel installation manual for further details).
4. Configure loops, outputs, and all connected devices. Check loop installations using a loop load calculator.

See your control panel installation manual for detailed information on loop and configurable output wiring and configuration.

Maintenance

Basic maintenance consists of a yearly inspection. Do not modify internal wiring or circuitry.

Specifications

Table 1: Loop and mechanical specifications

Max. loop board current consumption (no devices connected)	120 mA at 24 VDC [1]
Max. loop output current	250 mA
Supply voltage range	17 to 28 VDC \pm 1% (+ protocol modulation)
Resistance	52 Ω max. (26 Ω per wire)
Capacitance	500 nF max.
LED indications	
Data transmission (TX)	2 red LEDs (one per loop)
Data receipt (RX)	2 green LEDs (one per loop)
Temperature	
Operation	-5 to +40°C
Storage	-20 to +60°C
Relative humidity	10 to 95% noncondensing
Dimensions (W x H)	106 x 110 mm
Weight	110 g

[1] Supplied by the control panel.

Table 2: Configurable output specifications

Supervision [1]	
Class A	4.7 k Ω 1%, 1/4 W
Class B	15 k Ω 1%, 1/4 W
Maximum output current [2]	750 mA per output at 25°C 675 mA per output at 40°C
Maximum electrical characteristics for sounder activation	1 A startup current ($t \leq 2$ ms), load 100 μ F
Output voltage range	
Open circuit	-21 to -28 VDC
Standby	-6.1 to -13.7 VDC
Activation	21 to 28 VDC
Short circuit	Less than -6.1 VDC

[1] Reverse polarity, end-of-line resistor.

[2] The maximum system consumption limit (I_{max}) depends on the control panel power supply – see your control panel installation manual for details.

Regulatory information

Conformity	
Manufacturer	Carrier Manufacturing Poland Spółka Z o.o., Ul. Kolejowa 24, 39-100 Ropczyce, Poland. Authorized EU manufacturing representative: Carrier Fire & Security B.V., Kelvinstraat 7, 6003 DH Weert, Netherlands.

Contact information and product documentation

For contact information or to download the latest product documentation, visit firesecurityproducts.com.

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