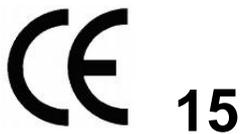


## CONVENTIONAL MANUAL CALL POINT Model: **SPR-3LM**



### USER'S MANUAL



DOP No: 1438-CPR-0433  
EN 54-11:2001+A1:2005  
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The following abbreviations apply in the manual:

MCP - SPR-3LM manual call point

AL - fire alarm line

FACP - fire alarm control panel

## 1 FUNCTIONS

1.1 The SPR-3LM manual call points have been designed to transmit the alarm signal manually to fire alarm control panels and fire intruder control panels.

1.2 The MCP is for indoor use only.

1.3 The alarm status ("FIRE" mode) is transmitted by 2-wire fire alarm line to FACP that responds to the increase of current in AL.

1.4 The fire mode is indicated with the yellow mechanical warning indicator with the inscription "FIRE" as well as with the red LED (steady light – DC alarm line, flashing light – AC line).

1.5 The standby mode is indicated with short-term flashes of the red LED.

1.6 The MCP has been designed to comply with EN 54-11:2001+A1:2005. The MCP are type A devices according to the standard.

## 2 TECHNICAL SPECIFICATIONS

2.1	Supply voltage	9 - 30 V
2.2	Internal resistance in the fire mode at 20 mA	≤ 500 Ohm
2.3	Standby current consumption at 30 V max	≤ 50 μA
2.4	Fire current consumption set by external resistor in the value range	5-20 mA
2.5	Push-button force	≥ 25,0 N
2.6	Operating temperature	from -10 to +55°C
2.7	Relative humidity/ at 35°C	25-95 %/ 95%
2.8	Atmosphere pressure	86-106 Pa
2.9	Dimensions	102 x 102 x 38 mm
2.10	Weight	120 g
2.11	Average lifespan	≥ 10 years

## 3 ITEMS SUPPLIED WITH THIS MANUAL CALL POINT

<i>Name</i>	<i>Quantity</i>	<i>Note</i>
SPR-3LM manual call point	1 pc.	
Manual	1/12	1 pc. per carton
Key	1 pc.	per unit
Reset key	1 pc.	per unit
3.5x35 screws	2 pcs.	per unit
6x35 dowels	2 pcs.	per unit
Carton	1/12	1pc. per 12 pcs.

## 4 DESIGN AND OPERATION PRINCIPLES

4.1 For dimensions of the MCP please refer to Figure 1 and for the appearance – to Figure 2.

4.2 The MCP consists of the front cover **1** and the surface mounting backbox **6** with the installed PCB **10** (see Figure 2). The housing has the protective cover **2** designed to prevent from accidental pressing the resettable element (button) **5**.

4.3 The fire mode shall be activated by pressing the button **5** after opening the protective cover **2**. The button shall be mechanically held down. The "FIRE" warning indicator shall pop up and the red LED **14** shall be lit.

4.4 The call point can be reset using the reset key **15** (see Figure 2).

Follow these steps to reset the MCP:

- 1) insert the reset key as far as it will go into the corresponding hole on the bottom of the housing **1** and turn it 90 degree clockwise;
- 2) pull the reset key down as far as will go and turn it 90 degree anti-clockwise;
- 3) remove the reset key.

4.5 Wiring diagram for detectors to DC FACP appears in Figure 3.

4.6 Wiring diagram for detectors to AC FACP appears in Figure 4.

## **5 SAFETY ISSUES**

5.1 The MCP is not a hazard source either for people or for protected property (including emergency situations).

5.2 The design of the MCP complies with general requirements of electrical and fire safety of the national normative documents.

5.3 The MCP has been designed in compliance with requirements of national regulations therefore is safe for service personnel at installation, repair and maintenance.

## **6 LOCATION AND INSTALLATION**

6.1 Before planning location and use of MCP consider requirements of your national construction regulations.

6.2 The MCP should be located vertically with consideration of dimensions (see Figure 1). Place them as high as 1,5 m  $\pm$  10% from the floor level.

6.3 Connect call points to AL using terminal block **11** (see Figure 2).

6.4 You should connect manual call points using screen wire.

6.5 It is not recommended to install call points in places where they can be affected by aggressive gases, vapour and aerosols.

6.6 Provide protection against construction debris, paint and dusts during reconstruction of lodgings.

ATTENTION! The PCB should be installed to the backbox (if it has been removed before) according to Figure 2.

## **7 PREPARATION FOR OPERATING AND SEQUENCE OF OPERATIONS**

7.1 Open the package after receiving MCPs, check contents.

7.2 In order to open the call point insert the key **16** (see Figure 2) into right-angled slots **3** as far as it will go into the housing **1** and lift it using the key as a lever (hold the backbox **6** still). The 90° turn of the housing relatively to the backbox allows to separate the former from the latter.

7.3 Prepare the site for installation of MCP. Pull incoming and outgoing line wires through the entry hole **9** on the backbox (see Figure 2). Secure the backbox at the site of installation using two  $\varnothing 3.5 \times 35$  mm screws.

7.4 Connect AL wires according to Figure 3 or Figure 4. Tighten screws. Check reliability of the junction.

7.5 Secure the housing to the backbox and close it.

7.6 Connect the AL with MCPs to a FACP and test the line circuit.

7.7 Connect the screen braid of the line to the earthing terminal located on the enclosure of FACP (see the FACP manual).

7.8 Testing of MCP should be made in accordance with pp. 4.3, 4.4.

7.9 After the final installation and connection of the unit fasten the cover with the stopping.

## **8 MAINTENANCE**

8.1 Servicing your fire alarm system regularly, at least once every 6 months check the operation of MCP following the steps:

8.1.1 Check the MCP for correct operation in standby and fire modes (p. 4.3);

8.1.2 Reset the MCP to standby mode using the reset key (see p. 4.4).

## 9 HANDLING AND STORAGE

9.1 MCP can be shipped by all land and air transport modes in cartons. Climatic and mechanical impacts during shipment must conform to national regulations.

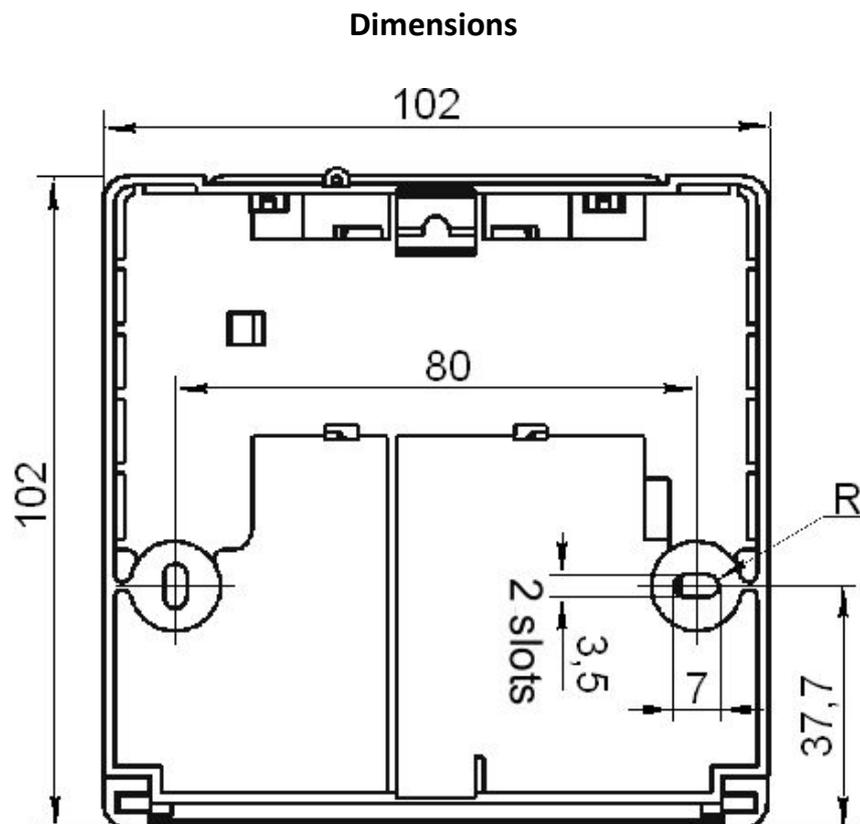
9.2 Allocation and securing of cartons with MCP in vehicles must ensure their stable position, exclude shifting of cartons and hitting one another and walls of the vehicle.

9.3 Storage of packed MCP must conform to national regulations.

## 10 GUARANTEE

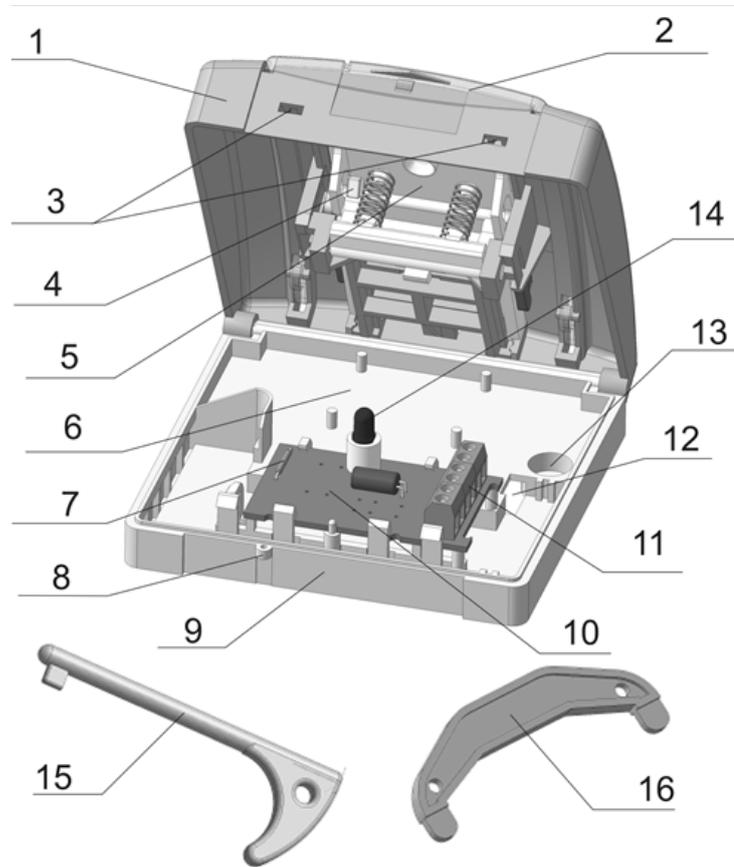
The manual call point is warranted by the manufacturer within 18 months upon the date of the commissioning but not longer than 30 months from the date of approval by the manufacturer's quality control department.

**Figure 1**



**Figure 2**

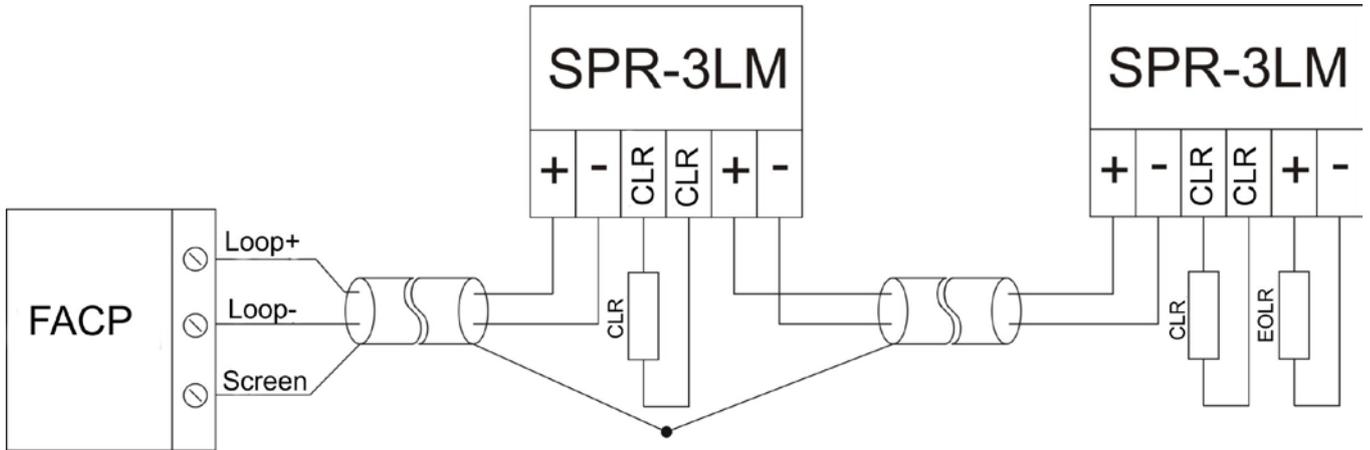
**General appearance and design**



- 1 – housing;
- 2 – cover;
- 3 – holes for key (the hole for reset key is located on the opposite side of the housing);
- 4 – magnet;
- 5 – resettable element (button);
- 6 – backbox;
- 7 – reed switch;
- 8 – opening for the stopping;
- 9 – spot (break the thin wall) for pulling over wires of line (to pull wires of line break from the opposite side of the backbox);
- 10 – PCB;
- 11 – terminal blocks for fixing wires and elements;
- 12 – opening for pulling wires of line to terminal blocks;
- 13 – mounting hole;
- 14 – standby and alarm indicator;
- 15- reset key;
- 16 - key.

**Figure 3**

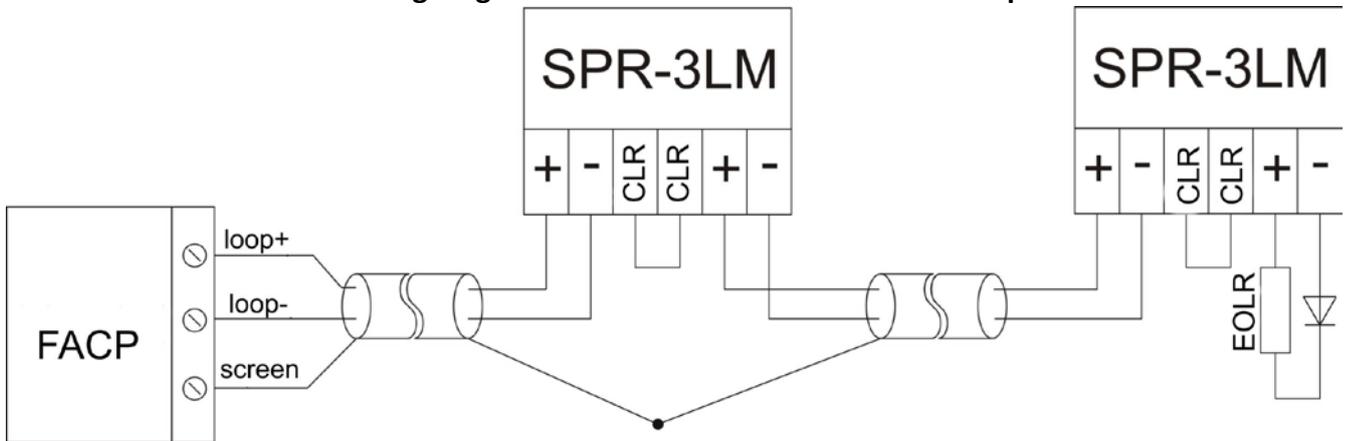
**Wiring diagram for N.O. detectors to D.C. control panel  
(with current increase in Fire mode)**



Resistors are specified by the control panel's manual and can be:  
 for 24 V line: EOL resistor= (3,6-5,1) kOhm, CLR=(2,0-2,7) kOhm  
 for 12 V line: EOL resistor = (1,8-2,7) kOhm, CLR=(0,62-0,91) kOhm

**Figure 4**

**Wiring diagram for N.O. detectors to A.C. control panel**



Resistors are specified by the control panel's manual.

**QUALITY AND PACKING CERTIFICATE**

SPR-3LM, serial numbers:

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\_\_\_\_\_pieces  
 Compliant with EN 54-11:2001+A1:2005

\_\_\_\_\_pieces  
 Packed in compliance with the factory rules

Manufacturing date \_\_\_\_\_.\_\_\_\_\_.201\_\_

Packing date \_\_\_\_\_.\_\_\_\_\_.201\_\_

Quality control mark \_\_\_\_\_