

ADDRESSABLE MAGNETIC CONTACT DETECTOR

ICO 9001

S2000-SMK Rev.01 (IP68)



INSTRUCTION MANUAL

1 GENERAL

S2000-SMK Rev.01 (IP68) Addressable Magnetic Contact Detector (hereinafter referred to as the detector) is designed to protect premises from unauthorized intrusion. The detector is used with a polling loop controller S2000-KDL or S2000-KDL-2I within an integrated Orion security system. The detector is powered and communicates data via the two-line multiplex addressable polling loop (hereinafter referred to as the PL) of the polling loop controller. The detector supports the polling loop protocol DPLS_v2.xx and provides measuring PL voltage at the point where it is connected. The version of S2000-SMK Rev.01 (IP68) firmware is v.1.00. The detector is intended for round-the-clock operation and relates to nonrepairable, periodically maintained units.

This modification of the detector varies from S2000-SMK by cable length, IP rating, extended operating temperature range, and being suitable to be installed on metal structures.

2 SPECIFICATIONS

No	Parameter	Value	
1	Power Voltage	8 to 11 V	
2	Consumed Current	0.5 mA max	
3	Ingress Protection Rating	IP68	
4	Operation Gap:		
	<ul style="list-style-type: none">ClosedOpen	Less than 10 mm More than 50 mm	
5	Pre-operation Time	15 s max	
6	Electric Shock Protection Class as per GOST 12.2.007.0-75	III	
7	Electric Fast Transient Immunity as per GOST R 51317.4.4	Test Severity Level 3	
8	Surge Immunity as per GOST R 51317.4.5	Test Severity Level 4	
9	Electrostatic Discharge Immunity as per GOST R 50009-2000 (YЭ1)	Test Severity Level 4	
10	Resistance to mechanical impacts as per OST 25 1099-83	Up to 0.5g with frequency 1-35 Hz	
11	Resistance to climatic conditions as per OST 25 1099-83	O1	
12	Weight	30 gram max	
13	Overall Dimensions		
	<ul style="list-style-type: none">Reed SwitchMagnetSpacerCable Length	56×10×8 mm max 56×10×8 mm max 56×10×6 mm max 1.5 m	
	14	Operating Temperature	Minus 45°C to +55°C
	15	Relative Humidity	Up to 100% at +25°C
16	Non-stop Operation	24/7	
17	MTBF	80000 hours min	
18	Non-failure Operation Probability	0.98758	
19	Average Lifetime	8 years min	

3 STANDARD DELIVERY

For Single-piece Delivery:

Unit	Quantity, pieces
S2000-SMK Rev.01 (IP68) Addressable Magnetic Contact Detector	1
Instruction Manual	1
Spacer for mounting on a metal surface	2
Tapping screw	4
Individual packing	1

For Group Delivery:

Unit	Quantity, pieces
S2000-SMK Rev.01 (IP68) Addressable Magnetic Contact Detector	10
Instruction Manual	1
Spacer for mounting on a metal surface	20
Tapping screw	40
Individual packing	10

4 DESIGN, MOUNTING, AND WIRING

Figure 1 shows a standard schematic for connecting the magnetic contact to the polling loop.

The reed switch is to be mounted inside the protected premises and is attached on the fixed frame. The magnet is to be fitted on the opening part of the fixture (such as a door, window sash, etc.). The reed switch and the magnet are to be installed along the opening edge of the monitored surfaces, so that the parallel gap between them is less than 10 mm and they are shifted less than 3 mm relative to each other. Mounting dimensions are shown in Figure 2. Mounting holes can be accessed after opening the contact cover.

While mounting on a metal structure, the magnet and the reed switch shall be installed on surface spacers 5 mm or higher. You can use 6 mm spacers provided.

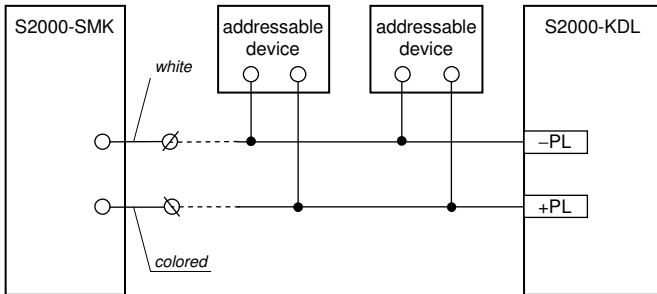


Figure 1. Connection Diagram

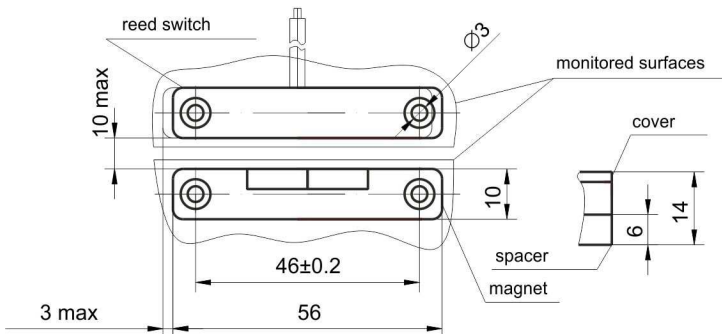


Figure 2. Mounting Dimensions

5 OPERATION

The detector can be operated with the Input Types **4: “Intrusion”, 7: Entrance** (Norm and Intrusion Alarm states), or **6: “Auxiliary”** (Auxiliary Zone Alarm and Auxiliary Zone Restored states). Types of system inputs and the ways to set them are described in the operation documentation for the polling loop controller, S2000M control panel, and Orion Pro Software Suite.

The detector provides storing its address for communicating data over the polling loop in its non-volatile memory. The address is in the range of 1 through 127. The detector comes with the factory address of 127. An address can be given by means of the control panel, PC software utility, or S2000-APA addressable device programmer (the rules to operate which are described in its user’s manual).

To give an address for the detector, send one of the following commands from the network controller:

- *Set Device Address*, or
- *Change Device Address*.

The command *Set Device Address* is used when the detector should be assigned with an address regardless of which address is given to the detector currently. This way is suitable when, for example, the same address is assigned with two or more devices. If so, issue a command to set the required address from the PC or the control panel. Then put the magnet to the reed switch twice. The panel / PC shall display the events of loss of communication with the device assigned with an old address and finding a device with the new address. If several devices were assigned with equal addresses set then there will be no messages about loss of communications for old address(es).

If however it is necessary to change the detector address which is known in advance then the *Change Device Address* command shall be used. Send this command specifying the old address and the new address from the panel / PC. The panel / PC shall display events about loss of communication with the device with the old address and establishing communications with the device with the new address.

6 TESTING OPERABILITY

Arm the detector with the reed switch and the magnet being closely to each other (not far than 10 mm) by means of the network controller. While moving the magnet 50 mm and more away from the reed switch ensure that an alarm is received by the network controller from the address assigned with the magnetic contact detector. Otherwise, the detector is defective and shall be replaced.

All the equipment used in testing must be known functioning!

7 MAINTENANCE AND REPAIR

7.1 Maintenance works shall be carried out at least annually by specialists having at least third electrical safety qualification level.

7.2 The detectors shall be maintained based on a fixed-schedule principle which implies annual service. Annual maintenance works include:

- Checking the external conditions of the detector;
- Testing operability as described in Section 6 of this manual;
- Ensuring the detector components are fastened properly, external wires are in good conditions, and terminal connections are tightened well.

IMPORTANT!

The manufacturer doesn’t accept any claims without an incident report.

7.3 A product’s failure which resulted from consumer’s not observing mounting or operation rules is not a reason for claims and warranty repair.

7.4 Claims shall be submitted to the following address:

ZAO NVP Bolid, 4 Pionerskaya Str., Korolev 141070, Moscow Region, Russia

Phone/fax: +7 (495) 775-71-55 (multi-channel). E-mail: info@bolid.ru

7.5 If you have any problems with operating the magnetic contacts please contact the technical support by phone +7 (495) 775-71-55 or by email support@bolid.ru.

8 TRANSPORTATION, STORAGE, DISPOSAL

8.1 The magnetic contacts in transportation packing can be stored in unheated storage buildings/rooms at ambient temperatures minus 50°C to +50°C and relative humidity up to 95% at +35 °C.

8.2 The magnetic contacts in consumer packing shall be stored in heated warehouses at temperatures + 5°C to + 40°C and relative humidity up to 80% at +20°C.

8.3 While disposing the magnetic contacts please take into account that there are no toxic components within it.

8.4 Precious material content: not subject to inventory accounting in case of storage, disposal and recycling (Article 1.2 of GOST 2.608-78).

9 MANUFACTURER WARRANTY

9.1 The manufacturer guarantees that the product meets technical requirements if the user follows the instructions for transportation, storage, installation, and usage.

9.2 Warranty period is 18 months since putting the product into operation but no more than 24 months from the manufacturer's date of issue.

10 CERTIFICATES

10.1 S2000-SMK Rev.01 (IP68) Addressable Magnetic Contact Detector meets the requirements of Technical Regulations of Custom Union TR CU 020/2011. Approved by Conformity Certificate No. RU C-RU.ME61.B.01598.

10.2 Production of S2000-SMK Rev.01 (IP68) Addressable Magnetic Contact Detector is certified by Conformity Certificate GOST ISO 9001-2011 № POCC RU.ИК32.К00153.

11 ACCEPTANCE, PACKAGING, MARKING INFORMATION

11.1 S2000-SMK Rev.01 (IP68) addressable magnetic contact detectors are manufactured and accepted in accordance with mandatory national standards and actual technical documentation, are approved as proper for operation and packaged by CJSC NVP Bolid.

11.2 The marking of transportation packages complies with Russian GOST 14192-77 and comprises handling symbols N3 (KEEP DRY) and N11 (THIS WAY UP) as well as explanatory text.

Responsible for acceptance and packaging

QCD _____
Full Name

Date, Month, Year

