




Addressable Double-Input Module S2000-AR2 Rev.02

Installation Manual

This Installation Manual provides instructions of how to mount the S2000-AR2 Rev.02 Addressable Double-Input Module (hereinafter referred to as the module) and get it ready for operation.

To get information on module's description and rules of settings and operation please refer to its User's Manual, which can be found online at <http://bolid.ru> in the section PRODUCTS.

1 SAFETY PRECAUTIONS

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- *The module contains no circuits under hazardous voltages.*
 - *The design of the module meets the requirements of electric and fire safety including emergency operation in accordance with Russian standards GOST 12.2.007.0-75 and GOST 12.1.004-91.*
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- ***Do shut off power from the polling loop controller prior to mounting and installing the module.***
 - *Installation and maintenance shall be carried out by personnel qualified for the Electrical Safety of Level II or higher.*
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2 INSTALLATION

2.1 The module is to be installed on a wall, above a suspended ceiling, or on another structure of the protected premises at a place protected against atmospheric precipitations, mechanical damages, and unauthorized access.

2.2 The module should be mounted in line with Regulatory Document РД 78.145-93 "Fire and Intrusion Alarm Installations. Rules for Performance and Acceptance of Works".

3 MOUNTING

- 3.1 Make sure the wall the module to be connected to is durable, smooth, clean, and dry.
- 3.2 Apply the drilling template to the wall (Figure 1) and drill the holes.
- 3.3 Insert wall plugs into the holes.
- 3.4 Remove the module cover from its base using a flat-head screwdriver (see Figure 2).
- 3.5 Put the module to the wall so that to align the fastening holes with the wall plugs.
- 3.6 Screw the screws into the holes and fasten the module on the wall.

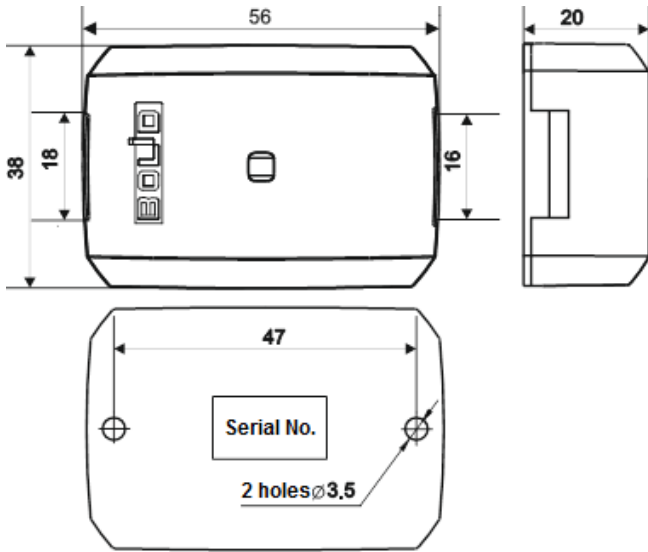


Figure 1. Overall and Mounting Dimensions of S2000-AR2 Rev.02

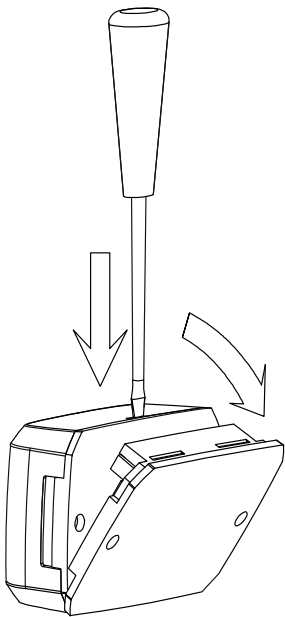


Figure 2. Opening S2000-AR2 Rev.02 Enclosure

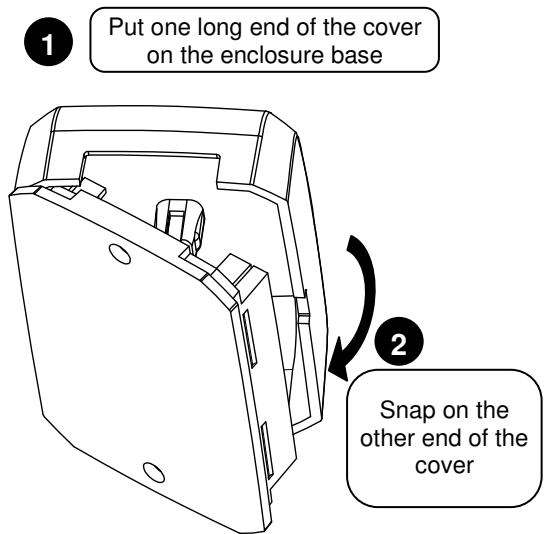


Figure 3. Closing S2000-AR2 Rev.02 Enclosure

4 WIRING

4.1 Polling Loop Wiring

4.1.1 Connect the polling loop wires to the contacts “+” and “-” of the module terminal block marked as “ДПЛС” on the PCB, observing polarity. Not observing polarity will result in non-operability of the polling loop.

4.1.2 For the polling loop it is advised to use twin twisted-pair wires.

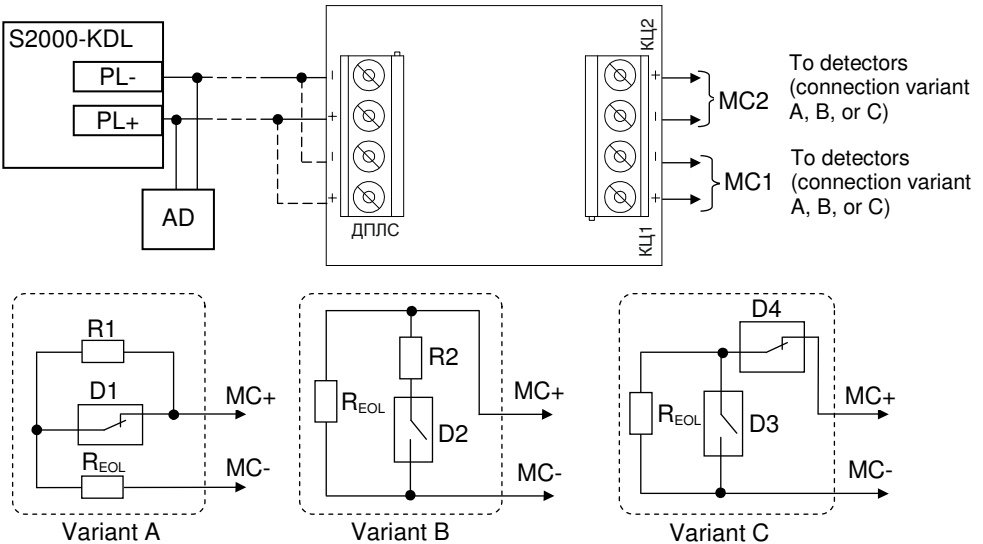
4.2 Detector Wiring

4.2.1 Connect alarm dry contact outputs of non-addressable detectors to terminals MC1 and MC2 (marked as “КЦ1” and “КЦ2” respectively) in line with the schematic in Figure 4.

4.2.2 The resistance of the monitored circuit wires shall not exceed 100 Ohm while the leakage resistance shall be at least 50 kOhm.

4.2.3 If a monitored circuit is not in use connect a 10 kOhm termination resistor to its contacts.

4.3 Close the module enclosure as shown in Figure 3.



AD: Addressable Device

MC: Monitored Circuit

D1: A normally closed fire detector

D2: A normally open fire detector

D3: A normally open intrusion detector

D4: A normally closed intrusion detector

R1: An additional resistor MF1/4 - 20K ±5%

R2: An additional resistor MF1/4 - 4K7 ±5%

R_{EOL}: A termination resistor MF1/4 – 10K ±5%

Figure 4. Schematic for External Wiring of S2000-AR2 Rev.02

5 TESTING

5.1 Testing the module shall be carried out by personnel qualified for the Electrical Safety of Level II or higher.

5.2 Do shut off power from the polling loop controller while connecting and disconnecting external circuits.

5.3 Performance Testing

5.3.1 Apply power to the polling loop controller.

5.3.2 By means of the network controller arm the detector with the number assigned with MC1 in the module.

5.3.3 Simulate an alarm response of the detector connected to MC1. The module LED shall start flashing doubly every four seconds. The network controller shall display Intrusion Alarm or Fire Alarm for the address assigned to the module's MC1.

5.3.4 Place the detector into the normal state. The module LED shall start flashing once every four seconds. By means of the network controller issue a command to reset alarm from the detector related to MC1. When one monitored circuit is being tested the other circuit shall be in norm.

5.3.5 Perform actions 5.3.2 - 5.3.4 for the monitored circuit MC2.

5.3.6 If no Intrusion / Fire Alarm message has come on the network controller then the module is considered as defective and should be replaced.

5.3.7 By means of the network controller request for ADC values representing monitored circuit states (see User's Manual).

6 GETTING STARTED

In order the S2000-AR2 Rev.02 to operate under a polling loop controller in an Orion ISS, it should be assigned to a polling loop address and the relevant settings should be carried out (see User's Manual).