

S2000-BOS ADDRESSABLE LIGHT AND SOUND ALARM WITH BUILT-IN SHORT CIRCUIT ISOLATOR

HCO 9001

OPERATIONS MANUAL



1. DESCRIPTION AND OPERATION

1.1 Purpose

1.1.1 S2000-BOS Addressable Light and Sound Alarm with Built-in Short Circuit Isolator (hereinafter referred to as the BOS) is used in fire detection & alarm systems for giving light and sound fire and emergency alarms at various installations inside premises. It performs as a mounting base (base socket) for connecting a fire detector such as DIP-34A-03, DIP-34A-03-S, DIP-34A-04, DIP-34A-05, S2000-IP-03, S2000-IP-03-S, S2000-IPG, or similar. The BOS is operated with the detector installed into it.

1.1.2 The BOS is intended to operate under polling loop controllers S2000-KDL, S2000-KDL-2I, S2000-KDL-2I rev.01, S2000-KDL-S as a part of an Orion integrated security system. Communicating data and powering the addressable part of the BOS are performed over the polling loop (hereinafter referred to as the PL).

1.1.3 The BOS features a short circuit isolator built-in.

1.1.4 The BOS is intended for round-the-clock operation.

1.1.5 The BOS is classed as a restorable, regularly maintainable item.

1.1.6 The BOS is designed to be operated in residential, commercial, and industrial areas.

1.1.7 The design of the BOS doesn't provide its operation in aggressive and / or dusty environments as well as in explosion hazardous and flammable premises.

1.2 Specifications

Table 1.2.1

Parameter	Value
1.2.1. Input voltage of the BOS addressable part (from the polling loop), V	8 through 11
1.2.2. External power supply voltage, V	12 through 28
1.2.3. Current consumed from the polling loop, mA, max	0.6
1.2.4. Current consumed on short circuit isolator tripping, mA, max	3.3
1.2.5. Current consumed from the external power supply in alarm mode, mA	30 - 60
12 V power supply, mA, max	60
28 V power supply, mA, max	30
1.2.6. Current consumed from the external power supply in the quiescent mode, mA, max	1.1
1.2.7. Number of BOS units to be connected to a single polling loop, pcs.	Up to 127
1.2.8. Start-up time, s, max	15
1.2.9. Short circuit isolator, pc.	1
1.2.10. Maximum effective resistance of the polling loop wires, ohms, max	100
1.2.11. Minimum insulation resistance between the polling loop wires, kilo-ohms, min	50
1.2.12. Minimum insulation resistance between the wires of the external power supply, kilo-ohms, min	50
1.2.13. Maximum galvanic isolation voltage, V, max	500

Parameter	Value
1.2.14. Sound pressure level at the distance of 1 m in the frontal direction, dB, at least	85
1.2.15. Enclosure protection degree as per GOST 14254-2015	IP41
1.2.16. Resistance to mechanical exposure as per OST 25 1099-83	Arrangement Category III
1.2.17. Vibration exposure: - Frequency range, Hz - Max acceleration, g	1-35; 0.5
1.2.18. Environmental category as per OST 25 1099-83	O3
1.2.19. Operating temperatures, °C	Minus 20 through + 55
1.2.20. Relative humidity, %, at +40 °C	Up to 93
1.2.21. Weight, kg, max	0.3
1.2.22. Overall dimensions: - Diameter, mm, max - Height, mm, max	100 62
1.2.23. Non-stop operation	24/7
1.2.24. MTBF in the quiescent mode, hours, min	80,000
1.2.25. Survival probability after 1,000 hours	0.98758
1.2.26. Expected lifetime, years	10

1.2.27 As to immunity to man-made radio disturbance, the BOS meets the requirements for Test Severity Level III of the relevant standards listed in Appendix 'A' to GOST 34699-2020.

1.2.28 The BOS passes the industrial interference standards prescribed for Class 'B' equipment as per GOST R 30805.22.

1.3 Scope of Delivery

Deliverable parts of the BOS are as shown in Table 1.3.1

Table 1.3.1

Item	Quantity, pc.
S2000-BOS Addressable Light and Sound Alarm	1
Operations Manual	1

2 INTENDED USE

2.1 The design of the BOS 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.

2.2 Do SHUT OFF power from the unit before mounting, installing, and maintaining this one.

2.3 Operating restrictions, design, mounting, connecting, settings, testing and operation procedures for the BOS are defined in details in its User's Manual (the full version), which is available online at bolid.ru in the section Products on the page of S2000-BOS.

2.4 If a technical failure of the product has been found, the equipment shall be taken out of operation and sent for repair in accordance with Section 4.



3 MAINTENANCE

- 3.1 The BOS shall be maintained by personnel qualified for Accident Prevention of Class II or higher.
- 3.2 Maintenance works for the BOS are described in its User's Manual (the full version).

4 REPAIR

- 4.1 Repair of faulty equipment is to be conducted by the manufacturer or in authorized repair centers. The product shall be sent for repair in compliance with Company Standard QMS 8.5.3-2015, which can be found online at our website <https://bolid.ru/support/remont/>.



Warning!

The equipment shall be submitted for repair being assembled and clean and along with all the parts listed in the documentation.

Claims are accepted only if a reclamation report describing the failure is applied to the submitted equipment.

- 4.2 An equipment fault resulted from consumer's not observing rules of mounting and operation is not a reason for claims and warranty repair.
- 4.3 Claims shall be submitted to the following address:
NVP BOLID, #4 Pionerskaya Str., Korolyov, Moscow Region, 141070, Russia
Phone: +7 (495) 775-71-55, E-mail: info@bolid.ru.
- 4.4 In case of any issue related to use of the product, please contact the technical support:
+7 (495) 775-71-55 or e-mail: support@bolid.ru.

5 MARKING AND SEALING

- 5.1 Every BOS has a marking applied to the back of its enclosure.
- 5.2 The marking contains the name of the manufacturer, the name of the product, its decimal number, factory number, the year and quarter of production, and conformity marks.

6 PACKAGING

The BOS along with the accessory kit and operation documentation is packaged in a separate cardboard box.

7 STORAGE

- 7.1 Storage in a transport container is permitted at ambient temperatures minus 50 through plus 50°C and relative humidity up to 95% at plus 35 °C.
- 7.2 Storage in the consumer package is permitted only in heated premises at temperatures plus 5 through plus 40°C and relative humidity up to 80 % at plus 20 °C.

8 TRANSPORTING

- 8.1 The BOS can be transported in a transport container at ambient temperatures minus 50 through plus 50°C and relative humidity up to 95 % at plus 35°C.

9 DISPOSAL

- 9.1 The BOS is to be disposed of considering that there are no toxic components in it.
- 9.2 The content of precious materials: doesn't require accountability for storage, retirement, and disposal (Clause 1.2 of GOST 2.608-78).
- 9.3 The content of non-ferrous metals: does not require accountability for retirement and further disposal.

10 MANUFACTURER WARRANTY

10.1 The manufacturer guaranties the product meets with technical requirements stated in the manuals if the user follows the instructions for transportation, storage, installation, and usage.

10.2 The warranty period is 18 months since putting the product into operation but no more than 24 months from the manufacturer's date of production.

11 CERTIFICATION INFORMATION

For BOS certification details please refer to its User's Manual (the full version).

12 ACCEPTANCE AND PACKING CERTIFICATE

S2000-BOS Addressable Light and Sound Alarm with Built-in Short Circuit Isolator (factory numbers are lettered on the rear sides of the units) is manufactured, accepted in line with mandatory requirements of national standards and applicable technical documentation, approved as ready for use, and packed by the NVP Bolid Company.

Responsible for Acceptance and Packing

QCD _____
Full Name

Date, Month, Year

