ANALOG ADDRESSABLE
RATE-OF-RISE AND FIXED TEMPERATURE HEAT DETECTOR
IP 101-55-A1R "S2000-IP-03"

ИСО 9001

OPERATIONS MANUAL

EAC

1 DESCRIPTION AND OPERATION

1.1 Product Purpose

1.1.1 S2000-IP-03 Analog Addressable Rate-of-Rise and Fixed Temperature Heat Detector (hereinafter referred to as the detector) is to be used in fire detection and fire alarm systems to protect premises against fires by monitoring the rate of ambient temperature rise and to generate fire alarms automatically.

1.1.2 The detector is meant to operate under a polling loop controller S2000-KDL, S2000-KDL-2I, S2000-KDL-2I Rev.01, or S2000-KDL-S as a part of an Orion integrated security system. The detector is powered and communicates data over the multiplex addressable polling loop (hereinafter referred to as the PL).

1.1.3 The detector is intended for round-the-clock operation.

1.1.4 The detector is classed as a restorable, regularly maintainable product.

1.1.5 The detector's design doesn't imply operating it in aggressive and dusty environments or in ex-hazardous premises.

1.2 Specifications

Table 1.2.1

Parameter	Value
1.2.1 Input power voltage (via the polling loop)	8 V … 11 V
1.2.2 Consumed current	0.6 mA max
1.2.3 Number of detectors within a polling loop	127 max
1.2.4 Start-up Time	60 s max
1.2.5 Maximum active resistance of polling loop wires	100 ohms
1.2.6 Minimum insulation resistance between polling loop wires	50k ohms min
1.2.7 Detector Class	A1R
1.2.8 Fixed Temperature (factory setting)	+54 °C
1.2.9 Heat detection accuracy	± 1.5 °C
1.2.10 Enclosure protection degree as per GOST 14254-2015	IP41
1.2.11 Resistance to mechanical exposure as per OST 25 1099-83	Arrangement Category III
1.2.12 Vibration exposure: - Frequency range - Max acceleration	 1-35 Hz 0.5 g
1.2.13 Environmental category as per OST 25 1099-83	O3
1.2.14 Operating temperature	Minus 30°C to +55°C
1.2.15 Relative humidity	Up to 95 % at +40 °C
1.2.16 Weight	0.2 kg max
1.2.17 Overall dimensions: - Diameter - Height	 100 mm max 47 mm max
1.2.18 Non-stop operation	Round-the-clock
1.2.19 MTBF	80,000 hours min
1.2.20 Reliability (10 years)	0.98758
1.2.21 Expected service life	10 years

1.2.22 In terms of immunity to electromagnetic interference, the detector meets the requirements of Test Severity Level III as per the relevant standards listed in Appendix ‘Б’ to GOST R 53325-2012.
1.2.23 The detector passes the industrial interference standards prescribed for Class ‘Б’ equipment as per GOST R 30805.22.

1.3 **Scope of Delivery**

The detectors are delivered in group packages, being packed in ten pieces.
Table 1.3.1 presents the delivery scope for the detector 1.3.1.

Table 1.3.1

Item	Q-ty, pcs.
S2000-IP-03 Detector (body)	10
S2000-IP-03 Detector Base (with terminals)	10
Dust Cover	10
Address Label	10
Operations Manual	1
MK-2 Recessed Mounting Kit*	—
MK-3 Recessed Mounting Kit*	—
Protection Wire Cage*	—

* **– Supplied by separate order**

2 INTENDED USE

2.1 The design of the detector meets the requirements of fire and electrical safety including operation in emergency in accordance with GOST 12.2.007.0-75 and GOST 12.1.004-91.
2.2 Do shut off the mains power from the detector before mounting, installing, and maintaining this one.
2.3 Operating restrictions, design, mounting, connecting, settings, testing and operation procedures for the detector 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-IP-03 and in the mobile app ‘Mobile Product Catalogue’ https://bolid.ru/support/mobile-catalogue/.
2.4 If a technical failure of the detector 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 detector shall be maintained by persons qualified for Accident Prevention of Level II or higher.
3.2 The maintenance procedures to be performed are described in S2000-IP-03 User’s Manual (the full version, please see Section 2.3)

4 REPAIR

4.1 Repair of faulty equipment is to be performed by the manufacturer or in authorized repair centers. The equipment 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/.

Attention!
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 problem is applied to the submitted equipment.

4.2 A product's failure resulted from consumer's not observing rules of mounting and operation is not a reason for claims and warranty repair.

4.3 Claims should be submitted to the following address:

NVP BOLID, #4 Pionerskaya Str., Korolyov, Moscow Region, 141070, Russia

Phone/fax: +7 (495) 775-71-55 (PBX). 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 STORAGE

5.1 In a transport container the equipment can be stored at ambient temperatures -50°C through +50°C and relative humidity up to 95% at +35°C.

5.2 In the consumer package the equipment shall be stored only in heated premises at temperatures +5°C through +40°C and relative humidity up to 80% at +20°C.

6 TRANSPORTING

6.1 The detector can be transported in a transport package at ambient temperatures minus 50 through +50 °C and relative humidity up to 95 % at +35 °C.

7 DISPOSAL

7.1 The detector is to be disposed of considering that there are no toxic components in it.

7.2 The content of precious materials: does not require accountability for storage, retirement and disposal (Clause 1.2 of GOST 2.608-78).

7.3 The content of non-ferrous metals: does not require accountability for retirement and further disposal.

8 MANUFACTURER WARRANTY

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

8.2 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.

9 CERTIFICATES INFORMATION

For certificates information, please refer to S2000-IP-03 User's Manual (the full version, please see Section 2.3).

10 ACCEPTANCE AND PACKAGING CERTIFICATE

S2000-IP-03 analog addressable rate-of-rise and fixed temperature heat detectors (serial numbers are indicated on the detector bodies and written in the microprocessor memory) are manufactured, accepted in line with mandatory requirements of national standards and applicable technical documentation, approved as ready for use, and packaged by the Bolid Company.

Responsible for acceptance and packaging

QCD _____ _____

Full Name Date, Month, Year