

BRIZ Rev.03

INSTRUCTION MANUAL

GENERAL

BRIZ Rev.03 Short Circuit Isolator Base (hereinafter referred to as the BRIZ-03) is designed to be brought into a Two Wire Multiplex Addressable Polling Loop controlled by an S2000-KDL controller. BRIZ-03 isolators divide the Addressable Polling Loop into segments, disabling individual segments in case of a short circuit failure and automatically reconnecting them after the fault has been repaired.

BRIZ-03 is designed as a mounting base protected against improper installation of a detector and is compatible with Bolid manufactured detectors DIP-34A-03 and S2000-IP-03.

BRIZ-03 is round-the-clock operable and is related to irreparable and regularly maintained products.

SPECIFICATIONS

Input Voltage (provided by S2000-KDL)	6 ÷ 12 VDC
Normal Current Consumption	40 µA max
Active Current Consumption (Short Circuit Condition)	3 mA max
Triggering Voltage	2.9 ÷ 3.4 V
Triggering Time	200 ms max
Maximum Quantity Per One Loop	Up to 127 (see the estimation below)
Operating Temperature Range	from -30 to +55°C
Ingress Protection Rating	IP20
Relative Humidity	up to 93 % at +40°C, non-condensing
Overall Dimensions, D×H	100 mm x 16 mm max
Weight	100 gram max

The content of precious material: does not require accounting for storage, retirement, and disposal

STANDARD DELIVERY

BRIZ Rev.03 Short Circuit Isolator Base	10 pcs.
Instruction Manual	1 copy
Woodscrew	20 pcs.
Wall Plug	20 pcs.
Package	1 pc.

WIRING

Figure 1 shows a schematic for wiring the BRIZ-03. BRIZ-03 is constructed to be symmetrical. The terminals 3 and 6 are isolated from each other. Figures 2, 3, and 4 show BRIZ-03 wiring diagrams in cases of ring, tree, and mixed polling loop topologies respectively.

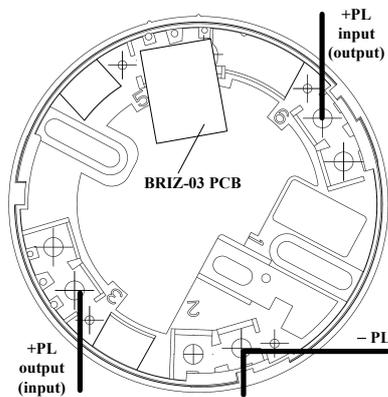


Figure 1

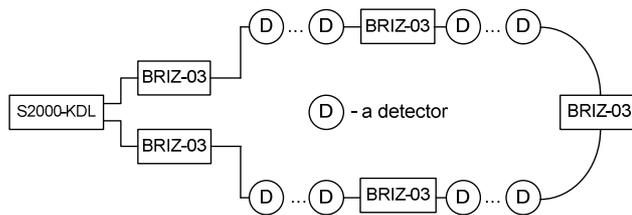


Figure 2

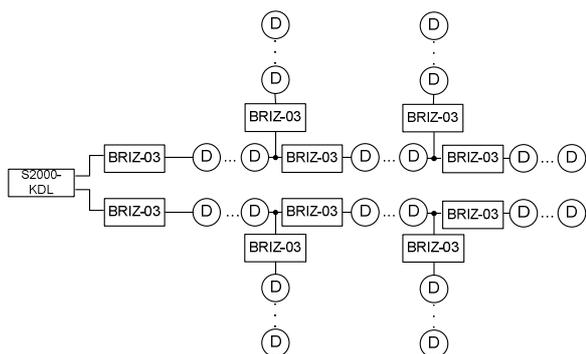


Figure 3

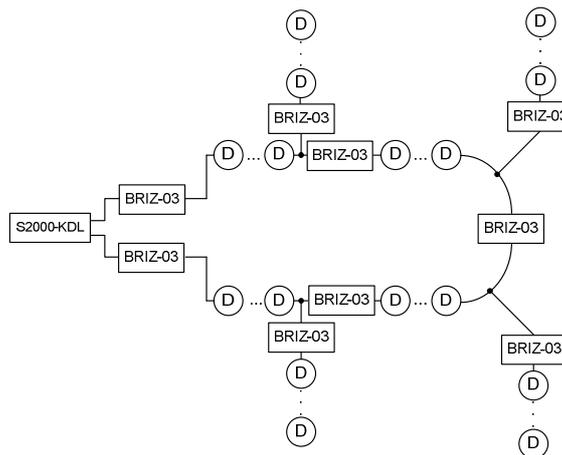


Figure 4

QUANTITY OF ISOLATORS PER ONE LOOP

The maximum number of BRIZ-03 isolators to be brought into a single addressable polling loop can be estimated by formula below:

$$N = (0.1 \text{ m}kF - C_{pi}) / 0.0005 \text{ m}kF,$$

where **N** stands for the maximum number of BRIZ-03 isolators, and

C_{pi} stands for the summary electrical capacity of the wires of the polling loop in microfarads.

The resistance of the multiplex addressable polling loop should be estimated taking into account the sum of the resistances of all the BRIZ-03 isolators connected to the polling loop. The resistance of a single BRIZ-03 isolator is taken to be equal to 25 mOhm.

MOUNTING

BRIZ-03 is mounted in accordance with requirements for mounting of fire detectors in use (Figure 5 shows the installation template).

ATTENTION: To install a detector into the BRIZ-03, insert the detector into the isolator base aligning the match mark on the detector with the short mark on the BRIZ-03 and twist the detector clockwise until the detector match mark aligns with the long match mark on the BRIZ-03.

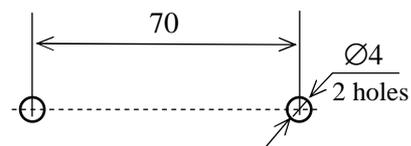


Figure 5.

TESTING

Please notify the proper authorities before testing.

At first, verify triggering of the BRIZ-03 isolator bases connected to the S2000-KDL outputs directly. To do this, for each BRIZ-03 couple its “-PL” contact with that “+PL” contact which is NOT directly connected to the S2000-KDL controller. If tree topology of the polling loop is in use, the network controller shall display messages about missing the detectors which are connected father than this

BRIZ-03. If, otherwise, ring topology is in use, the network controller shall display messages about missing the detectors which are between this BRIZ-03 and the next BRIZ-03. Then disconnect the contacts "+PL" and "-PL". Verify the network controller indicates presence of the detectors which were disconnected before.

Then, check all the other BRIZ-03 isolators in the loop by the following way. For every BRIZ-03, at first couple its "-PL" contact with the "+PL" contact No.3. Then disconnect them and couple the contact "-PL" with "+PL" contact No.6.

Ensure all the equipment to be used in the test is functioning.

MAINTENANCE

The BRIZ-03 shall be maintained at least annually by electricians qualified for Electrical Safety of Class III or higher.

The maintenance shall include the following:

- Checking the exterior conditions of the BRIZ-03, secure mounting, proper tightening of the terminals;
- Clearing the contact connections and BRIZ-03 enclosure from dust, debris, and corrosion traces.
- Testing functionality as mentioned above.

MANUFACTURER WARRANTY

The average lifetime of the BRIZ-03 is at least 10 years.

The manufacturer warrants its product to be free from defects in materials and workmanship under normal use and service for 18 months since putting it into operation, but no more than 24 months since the acceptance date.

In case of any issue related to setting and use of the product, please contact with the technical support: +7 (495) 775-71-55 or e-mail: support@bolid.ru.

While submitting the product for repair, please apply a report describing the potential failure.

Please submit your claims to the address:

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

Phone/fax: **+7 495 775-7155** (PBX), **777-40-20**, **516-93-72**

E-mail: info@bolid.ru, Technical Support: support@bolid.ru, <http://bolid.ru>

CONFORMITY CERTIFICATES

BRIZ-03 Short Circuit Isolator Base meets the requirements of Technical Regulations of Fire Safety Requirements (Federal Law No.123-FZ) and has Conformity Certificate No. C-RU.4C13.B.00779.

Conformity Certificate TC № RU Д-RU.ME61.B.00322 certifies that BRIZ-03 Short Circuit Isolator Base meets the requirements of Technical Regulations of Custom Union TR CU 020/2011.

BRIZ-03 Short Circuit Isolator Base is a part of Orion Addressable Fire Alarm System which is approved by Conformity Certificate № BY/112 02.01.033 00573.

Production of BRIZ-03 Short Circuit Isolator Base has Conformity Certificate GOST ISO 9001-2011 № POCC RU.ИК32.K00153.

ACCEPTANCE AND PACKAGING CERTIFICATE

Responsible for Acceptance and Packaging

QCD

Full Name

Date, Month, Year

BOLID®