

COMBINED CARBON MONOXIDE GAS AND FIXED TEMPERATURE & RATE-OF-RISE DETECTOR

HCO 9001

IP417/101-1-A1R COfree



OPERATIONS MANUAL

1 DESCRIPTION AND OPERATION

1.1 Purpose

1.1.1 IP417/101-1-A1R COfree Combined Carbon Monoxide Gas and Fixed Temperature & Rate-of-Rise Detector (hereinafter referred to as the COfree) is designed to detect fires accompanied with carbon monoxide gas and heat occurrence. The applicable scope for COfree is protecting buildings and premises against fires.

1.1.2 The COfree is intended for round-the-clock operation.

1.1.3 The COfree is designed to be operated in residential, commercial, and industrial areas.

1.1.4 The COfree is classed as a repairable and periodically maintained item.

1.1.5 The design of the COfree 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 Power voltage, V	9 ÷ 30
1.2.2 Current consumed in the - Quiescent mode, μ A - Alarm mode, mA, max	100 25
1.2.3 Start-up time, s	40
1.2.4 CO level alarm response threshold, ppm	40
1.2.5 Factory set alarm temperature, °C	+54
1.2.6 Accuracy of temperature measurements, °C	± 1.5
1.2.7 Enclosure protection degree as per GOST 14254-2015	IP41
1.2.8 Resistance to mechanical exposure as per OST 25 1099-83	Arrangement Category III
1.2.9 Vibration exposure: - Frequency range, Hz - Max acceleration, g	1-35 0.5
1.2.10 Operating temperatures, °C	Minus 10 through plus 50
1.2.11 Relative humidity, %, at +40°C	Up to 93
1.2.12 Weight, kg, max	0.2
1.2.13 Overall dimensions - Diameter, mm, max - Height, mm, max	100 47
1.2.14 Non-stop operation	24 / 7
1.2.15 MTBF in the quiescent mode, hours, min	80,000
1.2.16 Survival probability after 1,000 hours	0.98758
1.2.17 Expected lifetime, years	10

1.2.18 As to immunity to man-made radio disturbance, the COfree meets the requirements for Test Severity Level III of the relevant standards listed in Appendix “B” of GOST R 53325-2012.

1.2.19 The COfree passes the industrial interference standards prescribed for Class ‘B’ equipment as per GOST R 30805.22.

1.3 Scope of Delivery

The scope of delivery for COfree is shown in Table 1.3.1.

Table 1.3.1

Item	Quantity, pc.
COfree detector	1
Socket with terminals (base)	1
Dust cover	1
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 COfree design 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 COfree 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 COfree.



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 COfree shall be maintained by professionals qualified for Accident Prevention of Class II or higher.

3.2 Maintenance works for the COfree 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 COfree 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, the level of enclosure protection, and conformity marks.

5.3 Sealing the COfree is not applicable.

6 PACKAGING

The COfree along with accessory kit and operation documentation is packed in to a cardboard box.

7 STORAGE

7.1 Storage in a transport container is permitted at ambient temperatures minus 10 through plus 50°C and relative humidity up to 93% at plus 40°C.

7.2 Storage in the consumer package is permitted only in heated premises at temperatures 0 through plus 40°C and relative humidity up to 93% at plus 40°C.

8 TRANSPORTING

8.1 The COfree can be transported in a transport container at ambient temperatures minus 10 through plus 50°C and relative humidity up to 93 % at plus 40°C.

9 DISPOSAL

9.1 The COfree 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 certification details, please refer to COfree User's Manual (the full version).

12 ACCEPTANCE AND PACKING CERTIFICATE

IP417/101-1-A1R COfree Combined Carbon Monoxide Gas and Fixed Temperature & Rate-of-Rise Detector, Serial No. _____, 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

