

Loop gas alarm CTF-3



Designed for audible and light alarm generation when harmful substances, oxygen volume fraction, flammable gases (natural and liquefied) in the air of working areas exceed the preset threshold values.

Application

Monitoring of atmosphere of community premises equipped with heating systems, cooling installations, garages and autoparkings, heat and power engineering facilities, collectors and tunnels, food industry facilities (poultry factories and pig complexes) and other objects where appearance of toxic and flammable gases is possible.



Principle of operation – electrochemical and thermochemical.
Type of gas alarms – fixed.

Basic technical characteristics

Name	Measured component	Measuring range, mg/m ³	Thres-hold 1, mg/m ³	Thres-hold 2, mg/m ³	Section of measuring range	Alarm generation time, s	Warm up time, min
CTF-3-CO CTF-3-И-CO	CO	0-200	20	100	0-20 20-200	30	30
CTF-3-H ₂ S CTF-3-И-H ₂ S	H ₂ S	0-40	10	40	0-10 10-40	30	30
CTF-3-SO ₂ CTF-3-И-SO ₂	SO ₂	0-20	10	20	0-10 10-20	30	30
CTF-3-Cl ₂ CTF-3-И-Cl ₂	Cl ₂	0-25	1	5	0-1 1-25	30	30
CTF-3-NH ₃ -20 CTF-3-И-NH ₃ -20 CTF-3-NH ₃ -500 CTF-3-И-NH ₃ -500	NH ₃	0-600 200-2 000	20 -	60 500	0-600 200-2 000	60 60	30 30
CTF-3-O ₂ CTF-3-И-O ₂	O ₂	0-30% vol	18% vol	23% vol	0-30	30	30
CTF-3-NO ₂ CTF-3-И-NO ₂	NO ₂	0-10	2	10	0-2 2-10	30	30
CTF-3-HCl CTF-3-И-HCl	HCl	5-30	5	25	5-30	60	60
CTF-3-Ex CTF-3-И-Ex	Ex	0-50% LEL	10	20	0-50	15	5

Advantage

- > Loop connection of sensors (four-wire line for 2 threshold systems, three-wire line for 1 threshold systems);
- > Possibility of simultaneous monitoring of toxic and flammable gases in voluntary combination;
- > Possibility of connection on one loop to БПС-3 up to 16 sensors for PEC(pre-explosive concentration) or 30 sensors for MPC of working area or sensors combination (calculated on consumed power);
- > Length of communication line up to 1 000 m;
- > Possibility to transfer data on concentration of measured gases through RS485 indicating sensor address for CTF-3-И;
- > Light (for all) and audible (for CTF-3-И) alarm in place of sensors installation;
- > Possibility to calibrate sensors in place of their installation;
- > Sensor demounting without violation of loops integrity.



Note that according to requirements of normative documents gas alarms shall be installed at the following height: CTF-3, CTF-3-И for Ex- installed at a height of 0,5-0,7 m from the ceiling. CTF-3, CTF-3-И for H₂S, CO, O₂, NH₃, HCl, NO₂, SO₂ - installed at a height of 1,5-1,8 m from the floor.

Connection box with socket «iButton» allows to calibrate gas alarms by means of key «iButton» without demounting of gas alarms from the place of installation.

Loop gas alarm СТГ-3

Technical characteristics

Characteristics	Values
Supply voltage, V	from dc source with output voltage 10 up to 36V or from power supply and alarm unit БПС-3, БПС-3-И
Consumed power	СТГ-3-Ex, СТГ-3-И-Ex- 3W, the rest 2W
Way of data transfer on gas contamination	for СТГ-3-И: RS 485 for СТГ-3: optoelectronic relay (40 V, 0,2 A)
Ambient temperature range, °C	-40 / +50 -20 / +50 (for versions СТГ-3-02, СТГ-3-И-02)
Degree of protection against moisture and dust	IP 65 (assembled with connection box)
Length of communication line	up to 1000 m



Note that on special order СТГ-3-И can be manufactured without audible alarm, and also with use of clamping screw of unstainable metals. This function is applied at the object with increased corrosive medium (poultry factories, pig complexes etc.).



Standard equipment

- > Gas alarm СТГ-3;
- > SPTA set;
- > Documentation.



Recommended type of cable

- For СТГ-3-XX: КВВГЭ 4*1,5
(or similar one with outer diameter from 9 to 14 mm).
- For СТГ-3-И-XX: МКЭШВ 2*2*1,5
(or similar one with outer diameter from 9 to 14 mm).



Optional items can be ordered

- > Connection box КС (ИБЯЛ.426479.045)
or КСГ (ИБЯЛ.426479.045-01) for СТГ-3-XX;
- > Connection box КСИ (ИБЯЛ.426479.045-02)
or connection box with socket «iButton»
КСГИ (ИБЯЛ.426479.045-03) for gas alarms
СТГ-3-И-XX;

- > Disk CD-R ИБЯЛ.431212.002 with software
БПС-3-И and СТГ-3-И;
- > Adapter DS9097U-S09 and connector
DS1402RP8 in package ИБЯЛ.413955.017;
- > Key iButton DS1971-F5 in package ИБЯЛ.413955.016;
- > Set of replaceable parts ИБЯЛ.305659.012-02
(filter for dust protection);
- > Cable ИБЯЛ.685624.075 for sensors maintenance.