

Toxic and flammable gas alarm CTF-1



Designed for alarm actuation when the set threshold values of carbon oxide are exceeded and pre-explosive concentrations of flammable gases (methane or propane/butane mixture) in air.

Application: mounting in boiler houses with various capacities, liquefied gas-powered and natural gas-powered, and also in non-hazardous areas of other working, administrative and housing premises.

Type of gas alarms - fixed, automatic, multichannel device of continuous operation.

Mode of operation - continuous.

Principle of operation:

- carbon oxide channel- electrochemical;
 - flammable gases channel - thermochemical.
- Sampling - diffusion.

Basic technical characteristics

Characteristics	Values	Remarks
Number of sensors: of flammable gas (remote) of carbon oxide (CO) (built-in)	1 / 2 1	CTГ1-1 / CTГ1-2 constant
Standard threshold setting: of flammable gas, % LEL (methane) of carbon oxide (CO), mg/m ³ : 1st threshold 2nd threshold	10±5 or 20±5 20±5 100±25	set by customer
“Dry” relay contacts actuation when the set threshold values are exceeded: 1st threshold 2nd threshold	one group one group	220 V; 2,5 A 220 V; 1 A
Alarm actuation time, s, not more Of flammable gas Of carbon oxide (CO)	15 45	audible common, light separate
Warm-up time, min, not more	5 / 60	channel CH ₄ / channel CO
Ambient temperature, °C	-10 - +50	
Degree of gas alarm enclosure protection	IP30	
Communication cable length between gas alarm and sensor of flammable gas, m	up to 200	core section 0,75 mm
Overall dimensions, mm, not more for sensor unit for control and alarm unit	110x50x70 195x60x120	weight, kg, not more 0,5 1
Power supply, V	from 150 to 253	frequency 50±1 Hz
Power consumption, VA, not more	10	
Device service life, years, not less for CO sensor for CH ₄ sensor	10 5 5	in ambient air

Advantages:

- modern design of gas alarm enclosure;
- device versions reduction with functionality retention, there are manufactured two versions of CTF-1-1 (one flammable gases sensor), CTF-1-2 (two flammable gases sensors);
- extended temperatures range from -10 to +50 °C;
- availability of external input «emergency», it allows to connect the devices in loop or connect the devices to fire or burglar alarm;
- possibility for customer to set alarm thresholds himself – 10 or 20%LEL; modes of operation after the device switching on - automatic entry the mode of operation «O» or alarm actuation «B»;
- availability of «test» button that allows to check serviceability of device and shut-off valves without using of gas mixtures;
- increased output capability of «dry» relay contacts up to 5A, 220V;
- connection of sensors remote unit by means of clamp connections;
- service life of sensing elements is 5 years.

Delivery set:

Gas alarm, SPTA set, technical documentation.

Supplied on special order:

a) electromagnetic valves КЭГ-9720 ИБЯЛ.685181.001 ТУ-2003:

- ИБЯЛ.685181.001-01, Ду20mm, Дпр G 1¼-В 40V;

- ИБЯЛ.685181.001-02, Ду25mm, Дпр G 1-В 40V;

- ИБЯЛ.685181.001-03, Ду40mm, Дпр G 1½-В 220V;

- ИБЯЛ.685181.001-04, Ду50mm, Дпр G 2-В 220V;

- ИБЯЛ.685181.001-05, Ду32mm, Дпр G 1¼-В 220V;

- ИБЯЛ.685181.001-09, Ду20mm, Дпр G ¾-В 220V;

- ИБЯЛ.685181.001-10, Ду25mm, Дпр G 1-В 220V;

- ИБЯЛ.685181.001-21, Ду32mm, Дпр G 1¼-В 40V;

b) ТХД (thermochemical sensor) ИБЯЛ.413923.031-03 instead of sensor that has reached the end of its service life;

c) ЭХД (electrochemical sensor) ИБЯЛ.305649.035-83 instead of sensor that has reached the end of its service life;

d) TGM-SSS cylinders;

e) fine adjustment valve ИБЯЛ.306577.002;

f) flow rate indicator ИБЯЛ.418622.003-01;

g) dispatcher desk ДИСП ИБЯЛ.465213.003.

Designed for reception of signals EMERGENCY from gas alarm, light and audible alarm actuation with simultaneous switching of «dry» relay contacts.