

Toxic and flammable gas alarm CTF-1



Designed for alarm generation when carbon monoxide (CO) and flammable gases concentration (CH_4 , C_3H_8 , C_4H_{10}) exceed the preset threshold values in air. Gas pipeline shutdown by means of quick-acting electromagnetic valve.

Application

Installation in boiler houses of varying capacity operated on liquefied and natural gases, and also in non-hazardous areas of other industrial, administrative and residential premises.



- Type of gas alarm – fixed, automatic.
- Mode of operation – continuous.
- Principle of operation:
 - > Carbon monoxide measuring channel – electrochemical;
 - > Flammable gases measuring channel – thermochemical.

Basic technical characteristics

Characteristics	Values	Remarks
Quantity of sensors: on flammable gas (remote) on carbon monoxide (CO) (built-in)	1/2 1	CTF1-1 / CTF1-2 permanent
Standard thresholds setting: on flammable gas, % LEL (on methane) on carbon monoxide (CO), mg/m ³ : 1-st threshold / 2-nd threshold	10±5 or 20±5 20±5 100±25	set by consumer
Generation of dry relay contacts when thresholds concentration achieved: 1- st threshold (on CO) 2- nd threshold (on CO) emergency (on flammable gases)	one group one group one group	30 V; 2,5 A 220 V; 5 A
Time of alarm generation, s on flammable gas on carbon monoxide (CO)	15 45	audible, common light, separate
Warm-up time, min	5 / 60	channel flammable gases / channel CO
Ambient temperature, °C	-10 / +50	
Protection degree	IP 30	
Length of communication cable between gas alarm and flammable gas sensor, m	up to 200	
Overall dimensions, mm, not more - for sensor unit - for control and alarm unit	110x50x70 195x60x120	weight, kg, not more 0,5 1
Supply voltage, V	from 150 to 253	frequency 50±1 Hz



Possible content of system

Toxic and flammable gas alarm CTF-1 (CTF-1-1 or CTF-1-2);
Valves КЭГ 9720 ИБЯЛ.685181.001 -01 (DN 20), -02 (DN 25),
-21 (DN 32) – 40V;
Valves КЭГ 9720 ИБЯЛ.685181.001 -03 (DN 40), -04 (DN 50),
-05 (DN 32), -09 (DN 25), -10 (DN 25) – 220V;
Valves of versions КЭГЭМ-У, КЭЭУГ, КЭМГ-М, КЭЭГ;
Dispatcher desk ДИСП ИБЯЛ.465213.003.



Recommended type of cable

ШВВП 3x0,25 ГОСТ 7399-97; ПВС 3x0,5 ГОСТ 7399-97;
ШВЛ 3x0,75 ГОСТ 7399-97; ППВ 3x1,0 ГОСТ 6323-79;
РПШ 3x1,25 ТУ 16-К18.001-89.



CTF-1-1 with built-in carbon monoxide sensor and one
remote flammable gases sensor;
CTF-1-2 with built-in carbon monoxide sensor and two
remote flammable gases sensors.



Standard equipment

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



Optional items can be ordered

- > Electromagnetic valves КЭГ-9720 ИБЯЛ.685181.001 ТУ-2003;
- > ТХД ИБЯЛ.413923.031-03 (TCS thermochemical sensor)
(instead the sensor that has reached the end of its service life);
- > ЭХД ИБЯЛ.305649.035-54 (ECS electrochemical sensor)
(instead the sensor that has reached the end of its service life).