

TECHNICAL FEATURES

Target Gas	: Natural Gas (metan), LPG (liquefied petroleum gas)
Device Type	: A type (visual alarm, audible alarm ve relay output)
Target Place	: Domestic premises
Working voltage	: 230VAC \pm %10, 50-60Hz
Consumption	: 4W
Relay Output	: 7A 230VAC NO
Sensor Type	: Semiconductor
Preheat time	: 1.5min
Response time	: <10s
Audible Alarm	: Piezoelectric buzzer
Alarm Sound	: 85dB
Body material	: ABS
Visual Alarm	: Green-Power On, Red-Alarm, Yellow-Fault
Working Temperature	: -10°C ; +50°C
Relative Humidity	: 0-95%
Weight	: 280gr
Dimensions	: L x W x H 60mm x 100mm x 45mm
Sensor Life	: 5 years
Reference Standards	: TS EN 50194, TS EN 61779, TS EN 50244, TS EN 60335-1
Product complies with	TS EN 50194 and TSE certificate available.



WORKING PRINCIPLE

Gas alarm device detects combustible gases like natural gas or LPG . It detects any or a mixture of metan (CH₄), propane (C₃H₈) and butane (C₄H₁₀) gases. When 230VAC 50Hz power is applied to detector, green led turns on. After preheat time of 1.5minute it will be ready for gas leakage detection. No test gas should be applied to the device during preheat time. When concentration of gas leakage is above alarm level, detector goes into alarm mode and gives audible alarm within 10 seconds and red led turns on. In this mode, if detector relay output is connected to a solenoid valve, it shuts off the gas flow. As long as gas concentration is above alarming level, device stays in alarm mode. When gas concentration drops below alarm level, detector goes into watching mode and it is ready for further detection. When electricity is cut off, the device does not work. During possible gas leakage, in order to automatically activate any available external devices such as fan, shut off valve, siren, 230VAC relay output should be connected to those devices at installation. Maximum allowed current drawn from relay output is 7A. As long as total output current is below maximum allowed current limit of 7A, any number of devices can be connected to the relay output.

BASIC INFORMATION

Gas Alarm device is designed to detect gas leakage of natural gas, LPG and coal gas at domestic premises. It is an always on electrical device with fixed installation. By use of its relay output, during gas leakage it is able to switch on devices like fan, shut off valve, siren. For combustible gases minimum concentration level which does not cause any combustion in the environment is called LEL (lower explosive limit), shown in percentage volume. For natural gas (metan) LEL is %5 and for lpg LEL is %2. Gas alarm device gives visible and audible alarms well before these LEL values.

- Alarm level for natural gas is 0.5% (five in thousand) or 5000ppm (five thousand parts per million)
- Alarm level for LPG is 0.3% (three in thousand) or 3000ppm (three thousand parts per million)

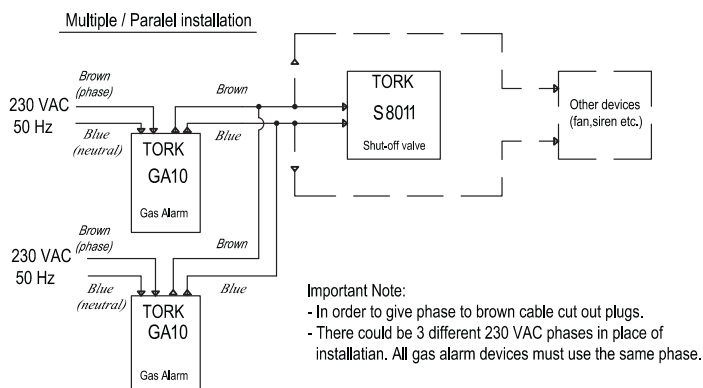
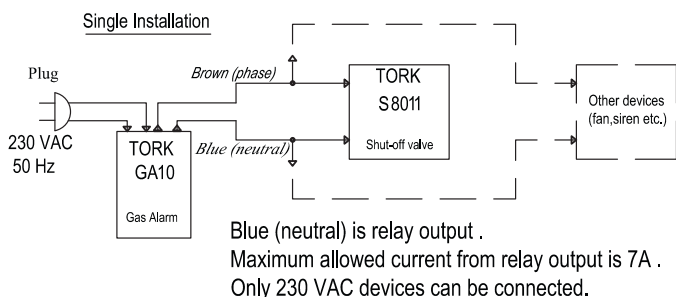
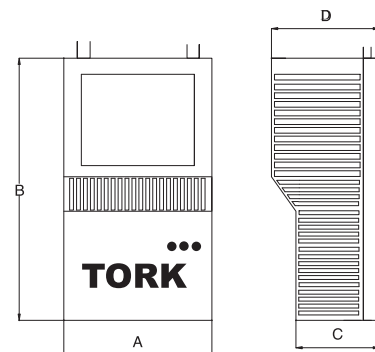
When deciding the place of gas alarm, priority should be given to places where leaked gas is likely to accumulate more. Never install the device at this places:

- Over oven
- Places with high smell
- Next to fan
- Any place outside
- Closed cupboard
- Next to open windows, places with high vapor, very hot places

Control and Test

- Plug in the device
- Green LED turns on when it is plugged in
- Wait 1.5 minute for preheat time. Do not apply any test gas during this time
- Apply lighter gas to test the device. (do not light the lighter)
- Audible alarm is heard and red led turns on
- If yellow led is always on, consult the service center

Control the gas alarm device at least once in a year. Clean it with soft fabric or brush, use cleaning materials without alcohol.



Valve Type / Order no	New Valve Type / Order no	Supply Voltage	Weight
T-GA	GA		(kg)
T-GA 101	GA10	220 V 50 Hz	0.28