# General Specifications

# SR-508-00

GS48C08Z00-00E-N

Safety Relay Module

## ■ GENERAL

The Safety Relay module is a DIN rail mountable single channel relay module and is suitable for the switching of safety related circuits in the requirement SIL4.

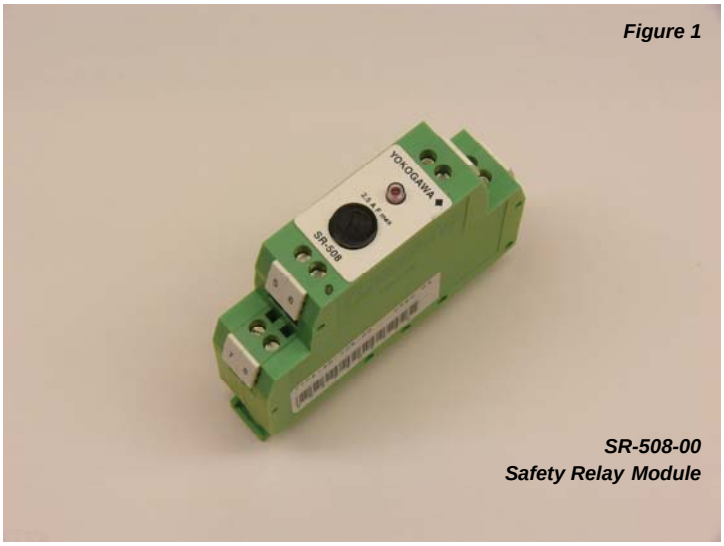


***Figure 1***

***SR-508-00***
***Safety Relay Module***

The module has a safe isolation between the input and output contacts. It can be used for safety shutdowns e.g. to cut off the fuel supply for incinerator plants.

The clearance and creepage distances are dimensioned for overvoltage class III up to 300V, according to DIN VDE 0106.

The test terminals (5 and 8) shall not be used during operational mode.

The module is equipped with diverse relays to avoid systematic errors.

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GS48C08Z00-00E-N

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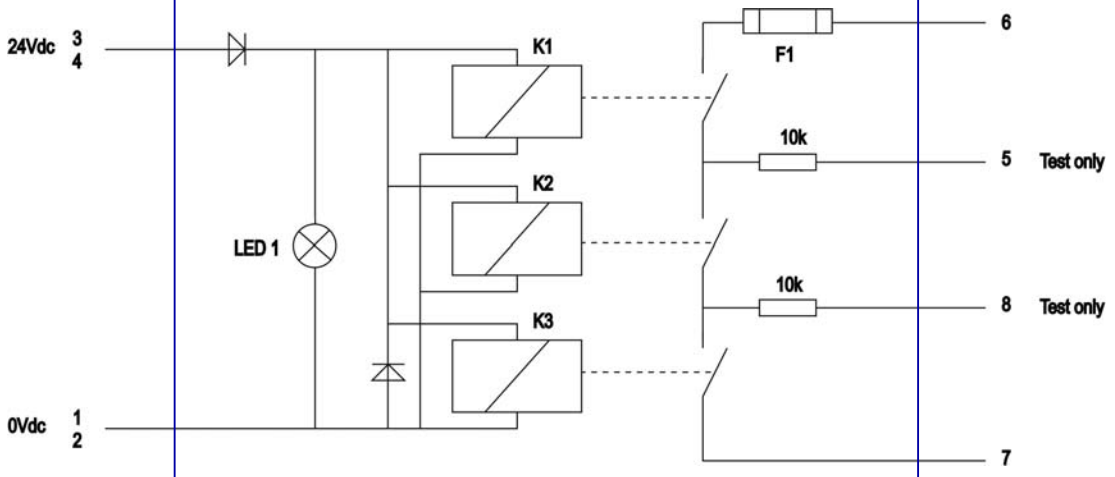
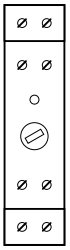
## ■ FUNCTIONAL DIAGRAM

**Inputs** **Module** **Outputs**




**Supply** **Notes** **Front**

| | | |
|---|---|---|
| 1 | **1** | **2** |
| 2 | **3** | **4** |
| 3 | | |
| 4 | Relay on | |
| 5 | Fuse | |
| 6 | | |
| 7 | **5** | **6** |
| 8 | **7** | **8** |



## ■ SPECIFICATIONS

| Description | | Data |
|---|---|---|
| General | No. of channels | 1 |
| | Size | DIN/EN rail mountable housing<br>80x20x70.5 mm (l x w x h) |
| | Connector | Screw terminals, ≤2.5 mm2 (AWG 14) |
| | Identification | SR-508 on top |
| Environmental | Temperature (working) | -20 to +70 °C |
| | Temperature (storage) | -25 to +85 °C |
| | Relative humidity | max. 95%, no condensation |
| | Protection degree | IP20 |
| Input | Voltage | 24 Vdc, -15…+20% |
| | Current | 35 – 40 mA |
| | Max. pull-in voltage | 17.5 V |
| | Min. drop-out voltage | 3.1 V |
| | Status indication | red LED |
| Output | Type | NO contact, gold plated over silver alloy |
| | Minimum load | 5 V and 10 mA |
| | Maximum load | 30 Vdc, 2 A<br>50 Vdc, 1.1 A<br>70 Vdc, 0.7 A<br>127 Vdc, 0.2 A<br>250 Vac, 2 A $\cos\varphi > 0.5$ |
| | Mechanical life time | $30 \times 10^6$ |
| | Electrical life time | $2.5 \times 10^5$ |
| | Fuse | 2.5 A fast, glass 5 x 20mm |
| Time delay | On delay | 3 – 10 ms |
| | Off delay | 5 – 7 ms |
| | Bounce | 1 ms |
| Isolation | Input to output | 4 kVrms 1 min.<br>6 kV surge 1.2/50 µs |
| Dissipation | | 1.5 W |

## ■ NOTES

The replacement of components must be made only by the manufacturer regarding the valid standards and TÜV restrictions.

For the system application of the module it is necessary to test the module on every power on of the system and cyclic every two years.