

# Solid State Relays

## Panel or DIN-Rail Mount from

# GEFRAN

**Series GQ**  
Panel Mount  
1-phase to 90A



**Series GTS**  
DIN-Rail Mount  
1-phase to 120A

**Series GTZ**  
DIN-Rail Mount  
3-phase to 55A

Sprecher + Schuh proudly offers the Gefran line of solid state relays. All Gefran solid state relays feature opto-isolated inputs where an internal LED signals a photosensitive element when output switching is to occur. This provides up to 4,000V isolation between the input voltage and the output voltage and also limits current leakage. This feature is important in certain medical, residential and industrial applications. The Gefran solid state relays also include built-in metal oxide varistor (MOV) protection to protect against internal damage to the solid state relay.



## Output Circuit Features

The Gefran solid state relays feature zero voltage turn-on, which means they are designed to turn on at the next zero crossover after application of the control voltage. This limits electromagnetic interference, reducing the chance of damage to downstream equipment. The built-in MOV reduces the likelihood of damage to the relay from rapid changes in voltage (dv/dt) and transient voltages.

## Safety and Convenience

All Gefran solid state relays come standard with an LED to indicate when the relay is in an operational state. This increases safety and speeds troubleshooting.

In addition, all GQ hockey puck type relays come standard with a load side cover that provides touch protection. The GTS DIN-Rail mounted relays also offer touch protection through the use of a removable protective cover plate.



RoHS

**Output Connections**

- AC Loads up to 90Amps @230V or 600V
- Amps rated at 40°C

**Copper/semiconductor coupling technology**

**Gefran DIN-rail mountable heatsinks available**

**Input Connections**

- DC Input 3...32V
- AC Input 20...260V

**Finger Safe Protection Covers**

**Zero crossing switching technology**

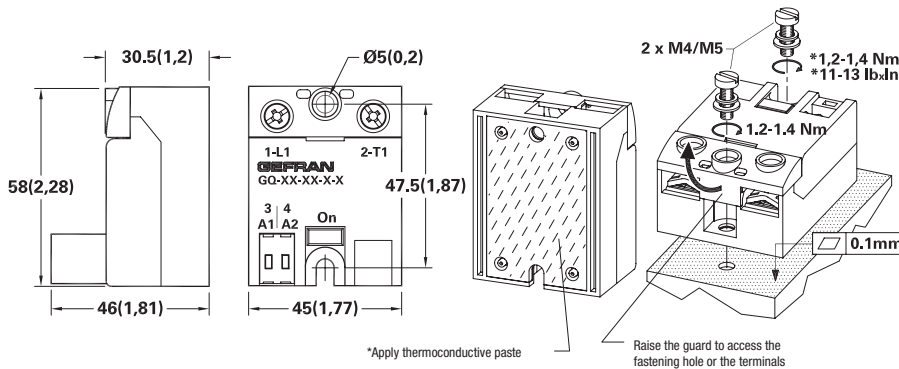
**Internal MOV protection**

**Red "ON" LED Indicator**

UL US CE RoHS

## Series GQ - 1 Pole Panel Mount Relay

| Amp Rating (AC51) | AC Output | DC Control | Catalog Number | Price | AC Control   | Catalog Number | Price |
|-------------------|-----------|------------|----------------|-------|--------------|----------------|-------|
| 15                | 230 VAC   | 3-32 VDC   | GQ-15-24-D-1-4 | 45    | 20...260 VAC | GQ-15-24-A-1-4 | 53    |
| 25                |           |            | GQ-25-24-D-1-4 | 50    |              | GQ-25-24-A-1-4 | 55    |
| 50                |           |            | GQ-50-24-D-1-4 | 79    |              | GQ-50-24-A-1-4 | 88    |
| 90                |           |            | GQ-90-24-D-1-4 | 104   |              | GQ-90-24-A-1-4 | 112   |
| 50                | 600 VAC   | 3-32 VDC   | GQ-50-60-D-1-4 | 93    | 20...260 VAC | GQ-50-60-A-1-4 | 104   |
| 90                |           |            | GQ-90-60-D-1-4 | 134   |              | GQ-90-60-A-1-4 | 145   |



## Heatsinks

for the GQ series of panel mount relays. Other accessories are also available.

| Thermal Resistance (Rth)          | Size (L x W x D)  | For use with... | Catalog Number | Price |
|-----------------------------------|-------------------|-----------------|----------------|-------|
| > 2.8 K/W                         | 100 x 24 x 65mm   | GQ 15A & 25A    | DIS-25GD       | 90    |
| > 8.3 K/W                         | 100 x 60 x 100mm  | GQ 25A & 50A    | DIS-50G        | 97    |
| > 0.66 K/W                        | 100 x 80 x 100mm  | GQ 50A          | DIS-60G        | 114   |
| > 0.56 K/W                        | 100 x 126 x 100mm | GQ 90A          | DIS-90G        | 145   |
| Kit attachment for Panel Mounting |                   | GTS & DIS       | PAN-1          | 19    |
| Heatsink mounting silicone paste  |                   | GQ              | SIL-1          | 82    |
| Graphite film                     |                   | GQ              | SIL-GQ         | 79    |



# Series GTS DIN-Rail Mount up to 120A

**Removable Finger Safe Protection Covers**

**Multi-color LED Indicator**  
 - Red: ON SCR condition  
 - Yellow: SCR Over Temperature

**Zero crossing switching technology**

**Internal MOV protection**

**Input Connections**  
 - DC Input 6...32V  
 - AC Input 20...260V AC/DC

**Compact DIN-rail mountable heatsink**  
 - panel mountable with PAN-1 accessory

**Copper/semiconductor coupling technology**

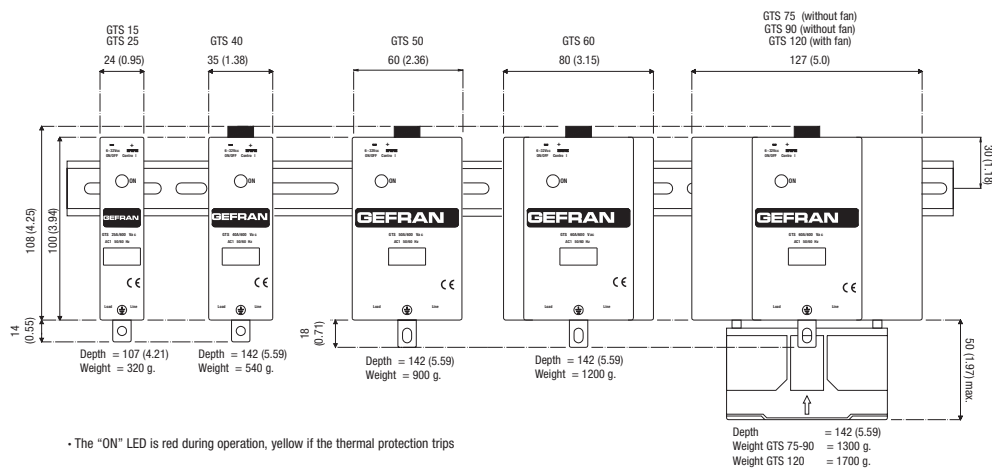
**Output Connections**  
 - AC Loads up to 120A @ 480V  
 - Amps rated at 40°C

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## Series GTS - 1 Pole DIN-Rail Mount Relay

| Amp Rating (AC51) | AC Output | DC Control | Catalog Number       | Price | AC Control       | Catalog Number       | Price |
|-------------------|-----------|------------|----------------------|-------|------------------|----------------------|-------|
| 15                | 600 VAC   | 6-32 VDC   | GTS-15/60-D-0        | 99    | 20...260 V AC/DC | GTS-15/60-A-0        | 108   |
| 25                |           |            | GTS-25/60-D-0        | 111   |                  | GTS-25/60-A-0        | 117   |
| 40                |           |            | GTS-40/60-D-0        | 134   |                  | GTS-40/60-A-0        | 147   |
| 50                |           |            | GTS-50/60-D-0        | 242   |                  | GTS-50/60-A-0        | 250   |
| 60                |           |            | GTS-60/60-D-0        | 301   |                  | GTS-60/60-A-0        | 316   |
| 75                |           |            | GTS-75/60-D-0        | 358   |                  | GTS-75/60-A-0        | 366   |
| 90                |           |            | GTS-90/60-D-0        | 633   |                  | GTS-90/60-A-0        | 646   |
| 120               |           |            | GTS-120/60-D-0-VEN-* | 750   |                  | GTS-120/60-A-0-VEN-* | 770   |

Replace \* with 90 for 230V fan or 91 for 115V fan



# GEFRAN



Sprecher + Schuh is a proud supplier of Gefran Solid State Relays in North America. With forty years of experience, Gefran is the world leader in the design and production of solutions for measuring, controlling, and driving industrial production processes. Gefran's know-how and experience guarantee continuity and tangible solutions. Gefran's line of solid state relays are the ideal solution for applications where high speed switching and long life are essential. In specific applications, solid state relays offer many advantages over electromechanical devices including no moving parts or contact arcing. In addition, solid state relays are directly compatible with logic components such as microprocessors and PLCs.

## Series GTZ DIN-Rail Mount up to 55A

### 3-Phase Line/Load Connections

- AC Loads up to 55A (40°C) @ 480VAC or 600VAC
- Amps rated at 40°C

### Compact DIN-rail mountable heatsink

- panel mountable with PAN-1 accessory

### Optoinsulation 4000V

### Integrated overvoltage suppressor

### IP20 Touch safe protection



### Zero crossing switching technology

### Input Connections

- DC Input 5...32V
- AC Input 20...260V AC/DC

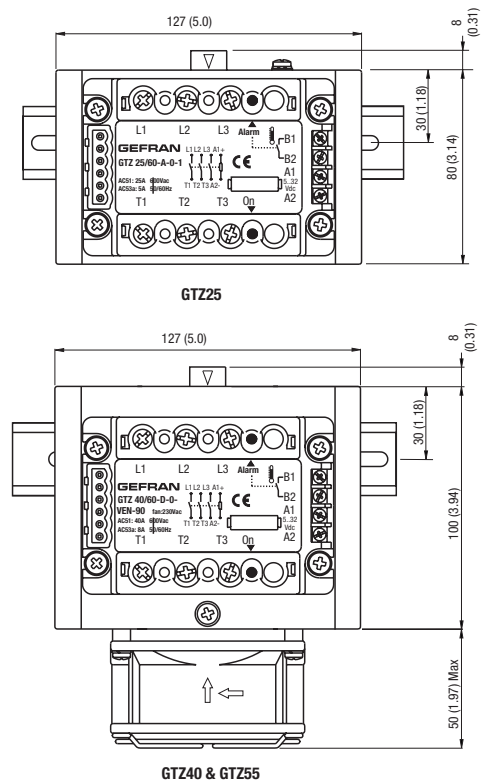
### Multi-color LED Indicator

- Red: ON SCR condition
- Yellow: SCR Over Temperature



### Series GTZ - 3 Pole DIN-Rail Mount Relay

| Amp Rating (AC51) | AC Output | DC Control          | Integrated Fan | Catalog Number      | Price |
|-------------------|-----------|---------------------|----------------|---------------------|-------|
| 25                | 600 VAC   | 5...32V DC          | None           | GTZ25/60-D-0        | 285   |
| 40                |           |                     | 230 VAC        | GTZ40/60-D-0-VEN-90 | 330   |
|                   |           |                     | 115 VAC        | GTZ40/60-D-0-VEN-91 |       |
| 55                |           |                     | 230 VAC        | GTZ55/60-D-0-VEN-90 | 390   |
|                   | 115 VAC   | GTZ55/60-D-0-VEN-91 |                |                     |       |
| 25                | 600 VAC   | 20...260V AC/DC     | None           | GTZ25/60-A-0        | 342   |
| 40                |           |                     | 230 VAC        | GTZ40/60-A-0-VEN-90 | 392   |
|                   |           |                     | 115 VAC        | GTZ40/60-A-0-VEN-91 |       |
| 55                |           |                     | 230 VAC        | GTZ55/60-A-0-VEN-90 | 459   |
|                   | 115 VAC   | GTZ55/60-A-0-VEN-91 |                |                     |       |



Contact your Sprecher + Schuh representative for complete product information.

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