

# 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**

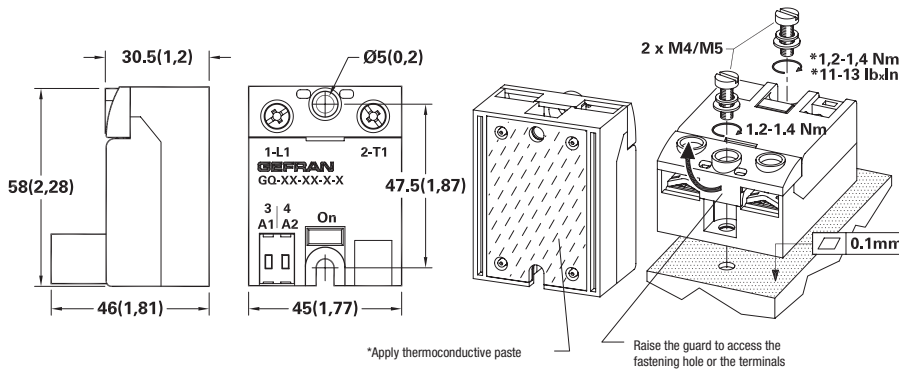
**Internal MOV protection**

**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**

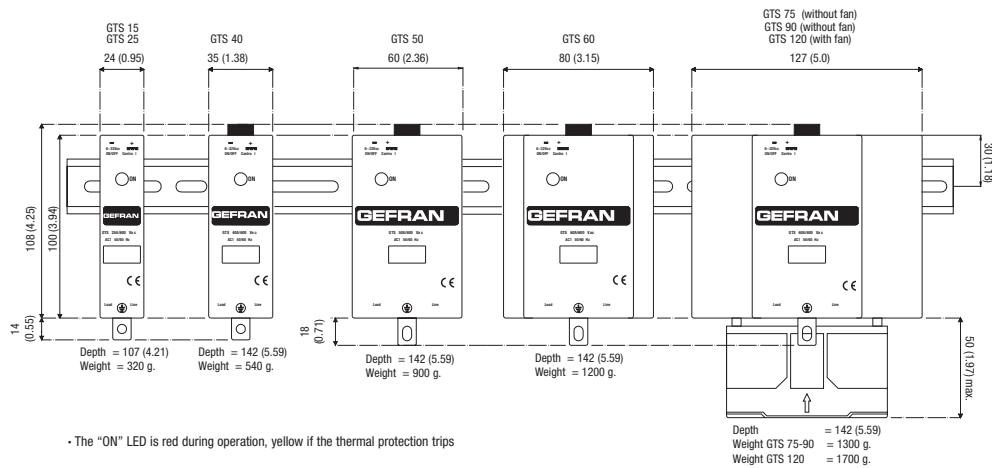
**Output Connections**  
 - AC Loads up to 120A @ 480V  
 - Amps rated at 40°C

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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



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

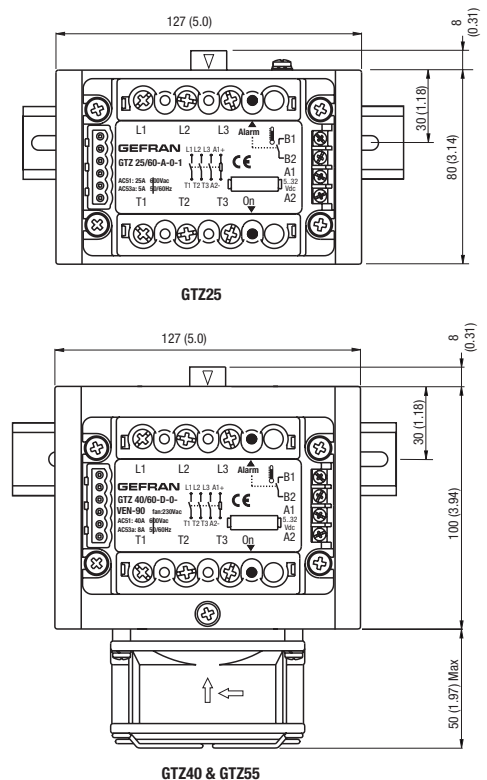
### Multi-color LED Indicator

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

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### 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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