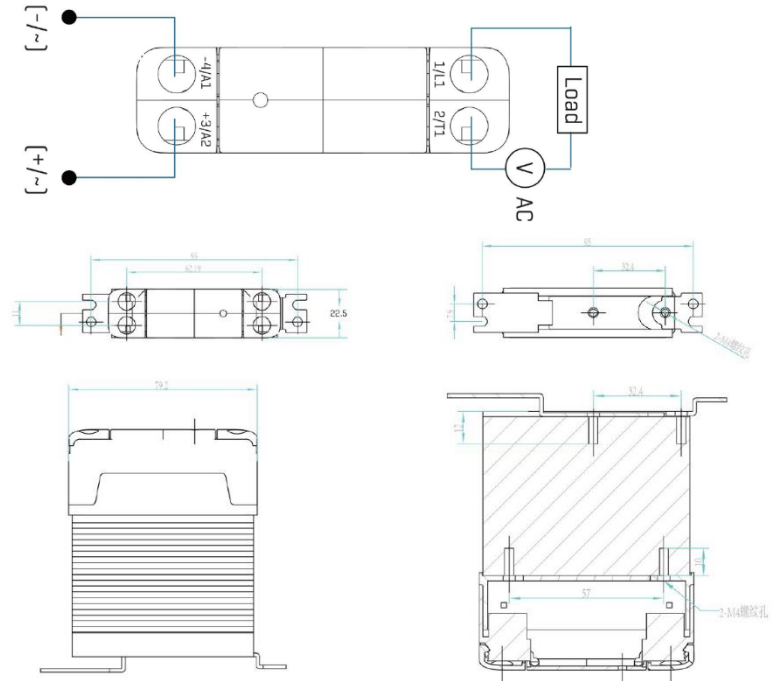


Data Sheet

GSR8 Single Phase Solid State Relay (SSR), DC to AC



Applications

- Suitable for AC switches & temp control, automated control, CNC machinery, packaging machinery, textile machinery, glass machinery and plastic machinery

Function Features

- Rating of 15 A, 25 A, 40 A, and 60 A
- Output voltage of 24 – 480 VAC
- Control voltage of 3 – 32 VDC
- Zero crossing
- Integrated IP20 touch-safe removable covers
- Integrated Heatsink
- DIN rail and Panel mount
- LED input status indicator

Item no.: 3176345, 3176346, 3176347, 3176348

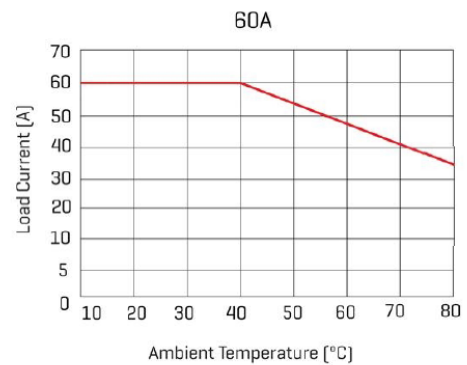
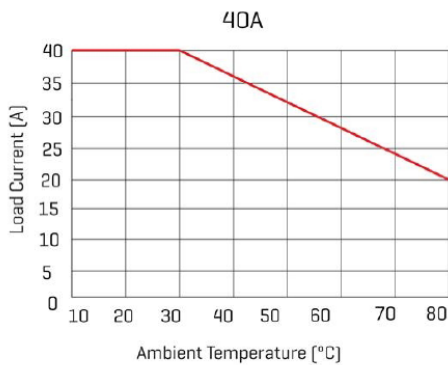
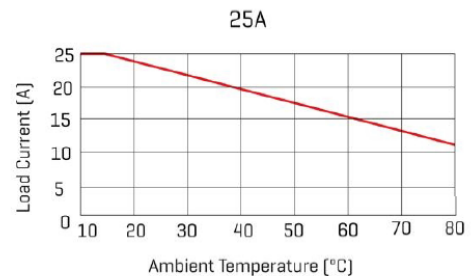
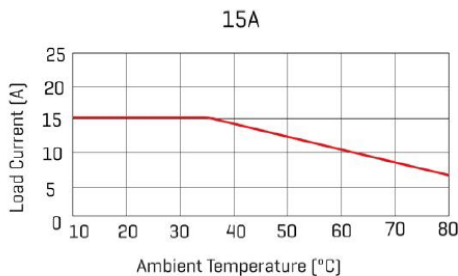
Data Sheet

Technical data

Input Specifications				
Item No.	3176345	3176346	3176347	3176348
Model no.	TC-GDR8-15DA48Z	TC-GDR8-25DA48Z	TC-GDR8-40DA48Z	TC-GDR8-60DA48Z
Input Voltage range	3-32 VDC			
Max. reverse voltage	-6 VDC			
Min. Input current (for on-state)	10 mA			
Max. Input current	20 mA			
Must operating Voltage	3 VDC			
Must releasing Voltage	1 VDC			
Max. turn-on time	1/2 Cycle			
Max. turn-off time	1/2 Cycle			
Output Specifications				
Rated current	15 A	25 A	40 A	60 A
Load current	0.05 - 15 Arms	0.05 - 25 Arms	0.05 - 40 Arms	0.1 - 60 A
Surge current 10 mSec (Max.)	150 Arms	250 Arms	400 Arms	600 Arms
Load voltage range	24 - 480 Vrms			
Transient Overvoltage	800 Vpk			
Operating frequency range	47 - 63 Hz			
Off state dv/dt (Min.)	200 V/μs			500 V/μs
Off state leakage current (Max.)	≤8 mA			
On state voltage drop (Max.)	1.5 Vrms			1.6 Vrms
Turn on time (Max.)	1/2 Cycle			
Turn off time	1/2 Cycle			
General Specifications (Ta = 25°C)				
Dielectric strength, Input to Output (50/60 Hz)	2500 Vrms			
Dielectric strength, Input to Output to base (50/60 Hz)	2500 Vrms			
Min. insulation resistance (@500 VDC)	10 ⁹ Ω			
Max. capacitance, input/output	0.8 pF			
Ambient operating temperature	-30 - 80°C			
Ambient storage temperature	-30 - 100°C			
Humidity per IEC60068-2-78	95%			
LED input status indicator	Red			
Housing material	PBT+30% GF			
Baseplate material	Copper			
Weight	280 g			

Data Sheet

Thermal derating curve



- **Recommendation:** Heat sink is recommended. It can prevent overheating and extend the SSR's service life.

- Solid State Relay with continuous load current less than 5A can choose circuit board installation type.
- Solid State Relay with high power below 10A can be installed with good heat dissipation condition instrument baseplate.
- Heat sinks are required for Solid State Relays of 10A and above. A layer of thermal grease shall be coated between Solid State Relay and the radiator mounting surface.
- When Solid State Relay is continuously used below 30A, natural air cooling can be adopted.
- When the continuous working current exceeds 30A, forced air cooling should be adopted.

English:

Danger - hazardous voltage - will cause electric shock, serious injuries or death. Installation and maintenance work on this product may only be carried out by an authorized electrician. Disconnect the electrical system and the product from the power supply before starting work.

German:

Achtung, gefährliche Spannung - kann zu elektrischem Schlag, Verletzungen oder Tod führen. Installations- und Wartungsarbeiten an diesem Produkt dürfen nur durch eine autorisierte Elektrofachkraft durchgeführt werden. Vor Beginn der Arbeiten elektrische Anlage und das Produkt spannungsfrei schalten.