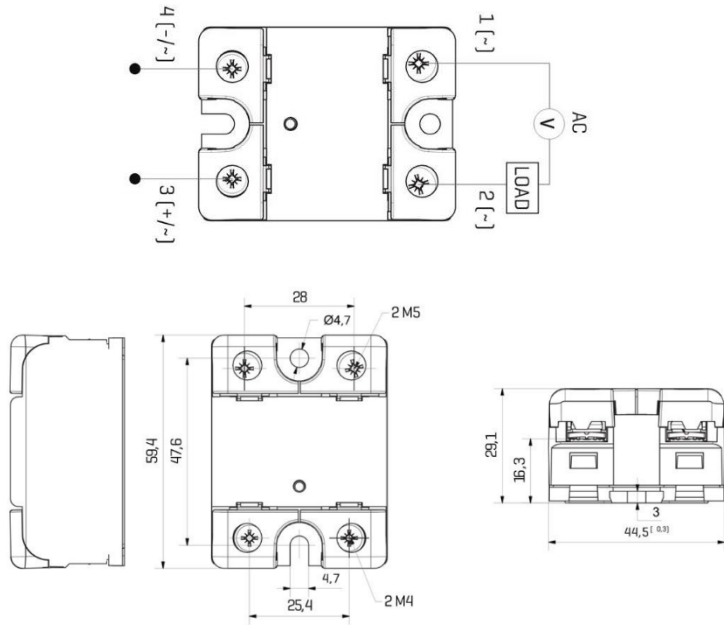


Data Sheet

VSR-8 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 10 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
- Dielectric strength 4000 VACrms
- LED input status indicator

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Technical data

Input Specifications			
Item No.	3176339	3176340	3176341
Model no.	TC-VSR8-10DA48Z	TC-VSR8-40DA48Z	TC-VSR8-60DA48Z
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	10 A	40 A	60 A
Load current	0.05 - 10 Arms	0.05 - 40 Arms	0.1 - 60 Arms
Surge current 10 mSec (Max.)	100 Arms	400 Arms	600 Arms
Load voltage range	24 - 480 Vrms		
Transient Overvoltage	1200 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		
Thermal resistance (Rthjc)	2.5 °C/W	1.3 °C/W	0.65 °C/W
General Specifications (Ta = 25°C)			
Dielectric strength, Input to Output (50/60 Hz)	4000 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		
Mounting	screw		
Input terminal screw torque range (in-lb/Nm)	11 - 18 / 1.2 - 2.0		
Load terminal screw torque range (in-lb/Nm)	18 - 26 / 2.0 - 3.0		
SSR mounting screw torque range (in-lb/Nm)	11 - 16 / 1.2 - 1.8		
Humidity per IEC60068-2-78	95%		
LED input status indicator	Red		
Housing material	PBT+30% GF		
Baseplate material	Copper		
Weight	145 g		

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- **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.