

Solid State Relays

Industrial, 3-Phase SS

Models: 3PSS60A75 S (Standard Din-rail) 3PSS60A75 R (Retro Fit)



- 3-phase Solid State Relay
 - Zero switching
 - Rated operational voltage: 600 VAC
 - Control voltage 24-50 VDC/24-275 VAC
 - Line & Load accepts: 8-18 AWG
 - Integral snubber network
 - Built-in varistor
 - IP 10 back-of-hand protection
 - LED indication of control input
 - Heat Sink and 24 VDC Fan Included
- Optional: 120 VAC Fan (Add -120 to P/N) E 62767
Example: (3PSS60A75 S-120)



Product Description

A Solid State Relay family designed to switch various loads such as heating elements, motors and transformers. The relay is capable of switching high voltages up to 600 VAC rms.

The built-in varistor for heavy industrial applications. For higher reliability and load cycle capability three semiconductor power units are bonded directly to the substrate.

General Specifications

| | |
|--------------------------------|---------------------|
| Operational voltage range | 42-660 VAC |
| Blocking voltage | 1600 V _p |
| Operational frequency range | 45 to 65 Hz |
| Overvoltage category | III |
| Pollution degree | 3 |
| Heat Sink Fan 24 VDC Standard | 1.4 WATTS & 58 mA |
| Heat Sink Fan 120 VAC Optional | 3.6 WATTS & 55 mA |
| Markings | cULus CE |

Output Specifications

| | |
|---------------------------------------|-----------------------|
| Rated operational current | |
| AC51 @ Ta=25°C | 75 AMPS rms |
| AC53a @ Ta=25°C | 20 AMPS rms |
| Minimum operational current | 400 mA rms |
| Rep. overload current t=1 s | < 150 A rms |
| Non-rep. surge current t = 10 ms | 1150 A _p |
| Off-state leakage current | < 3 mA rms |
| I ² t for fusing t = 10 ms | 6600 A ² s |
| On-state voltage drop | ≤ 1.6 V rms |
| Critical dV/dt off-state | ≥ 500 V/μs |

Input Specifications

| | |
|-------------------------------|------------------------|
| Control voltage range | 24-275 VAC / 24-50 VDC |
| Pick-up voltage | 18 VAC / 20 VDC |
| Drop-out voltage | 9 VAC/DC |
| Input current | ≤ 15 mA |
| Response time pick-up | |
| Power output = 50 Hz | 20 ms |
| Response time drop-out | |
| Power output = 50 Hz | 30 ms |
| All data specified at Ta=25°C | |

Thermal Specifications

| | |
|-----------------------|-------------------------------|
| Operating temperature | -30° to 80°C (-22° to 158°F) |
| Storage temperature | -40° to 100°C (-40° to 212°F) |

Isolation

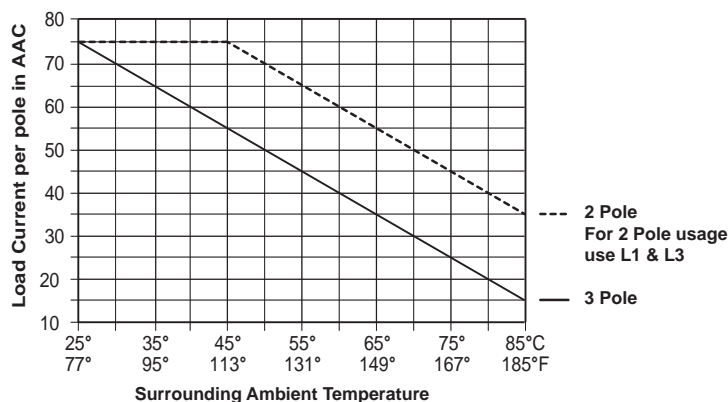
| | |
|-------------------------|----------------|
| Rated isolation voltage | |
| Input to output | ≥ 4000 VAC rms |
| Output to case | ≥ 4000 VAC rms |

Total Weight

| | S | R |
|--------|-------|-------|
| Grams | 1,370 | 1,473 |
| Ounces | 48.3 | 52 |

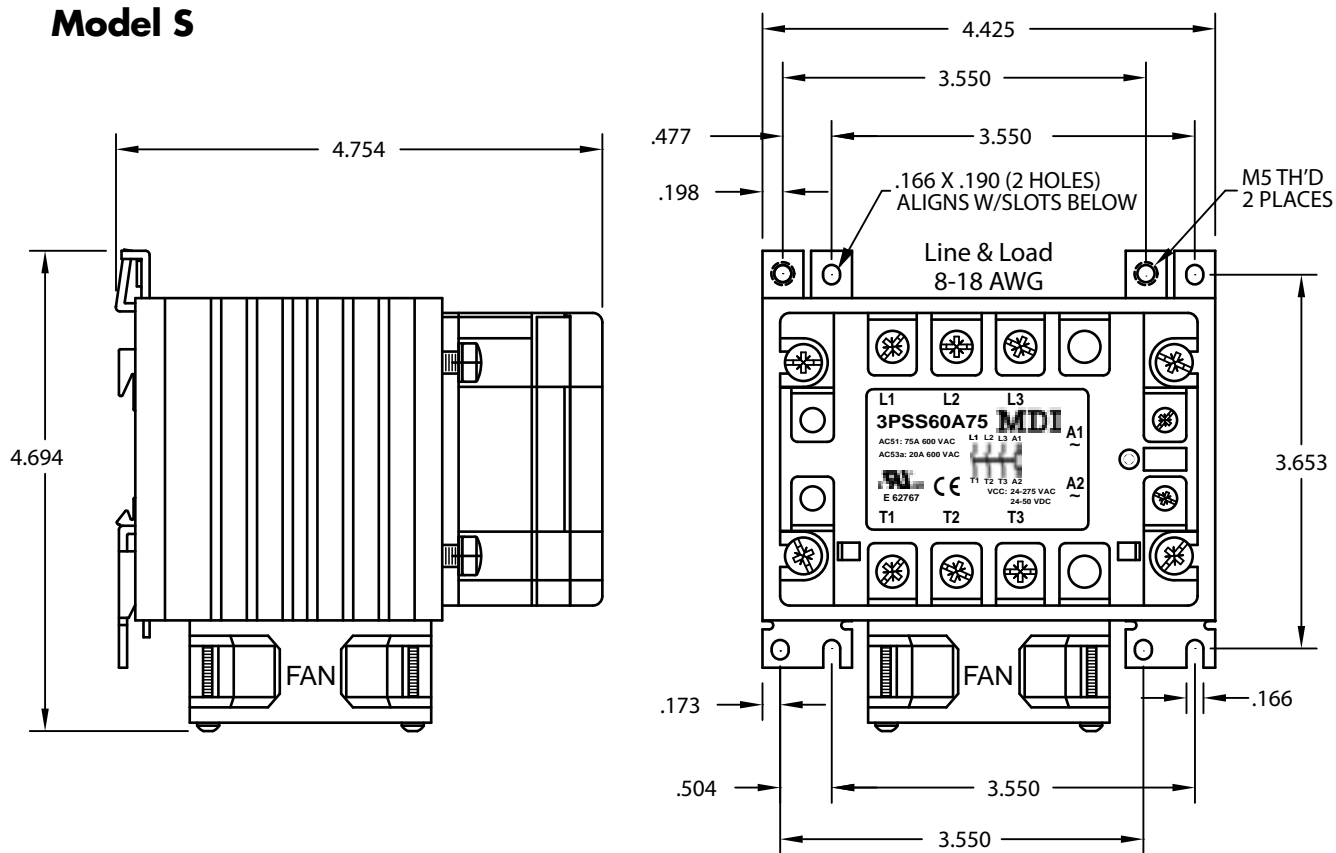
Housing Specifications

| | |
|------------------|---|
| Material | Noryl |
| Base plate | Copper, nickel-plated |
| Potting compound | Polyurethane |
| Power terminal | |
| Mounting screws | M5 |
| Mounting torque | ≤ 2.5 Nm (22 in lbs) |
| Wire size | Max. 2 x 6 mm ² (AWG 8) Min. 2 x 1 mm ² |
| Relay | |
| Mounting screws | M5 |
| Mounting torque | ≤ 1.5 Nm (13 in lbs) |
| Control terminal | |
| Mounting screws | M4 |
| Mounting torque | ≤ 0.5 Nm (5 in lbs) |
| Wire size | Max. 2 x 2.5 mm ² (AWG 14) Min. 2 x 1 mm ² |



Dimensions

Model S

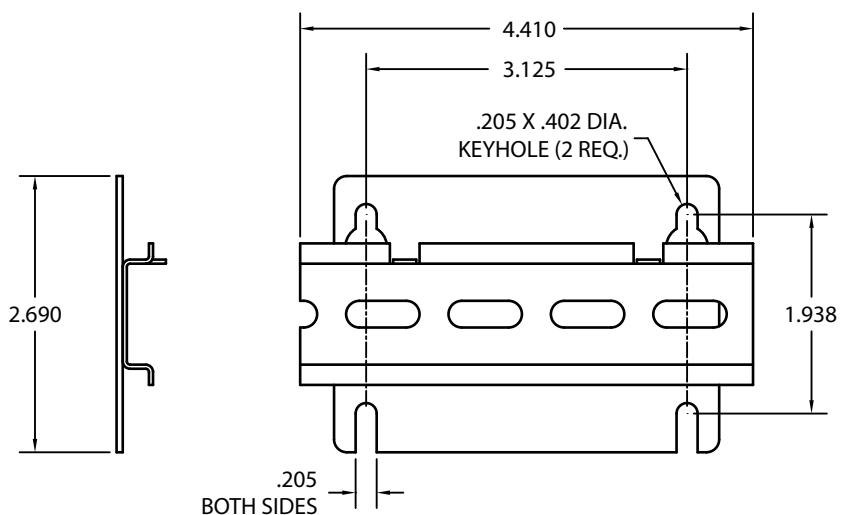


Model R

Includes Retro-Fit Back Plate

For direct replacement with standard 2 & 3 pole Mercury Relays. Using the same mounting holes.

Bracket adds 3/16" to depth



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