

Solid State Relays

Industrial, 3-Phase SS

Models: **3PSS60.75 S** (Standard Din-rail)
3PSS60.75 R (Retro Fit)



- 3-phase Solid State Relay
 - Zero switching
 - Rated operational voltage: 600 VAC
 - Control voltage (A75) 24-50 VDC/24-275 VAC
 - Control voltage (D75) 4-32 VDC
 - 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)
 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	

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

	3PSS60A75	3PSS60D75
Control voltage range	24-275 VAC 24-50 VDC	4-32 VDC
Pick-up voltage	18 VAC 20 VDC	3.8 VDC
Drop-out voltage	9 VAC/DC	1.2 VDC
Input current	≤ 15 mA	≤ 23 mA
Response time pick-up		
Power output = 50 Hz	20 ms	10 ms
Response time drop-out		
Power output = 50 Hz	30 ms	10 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

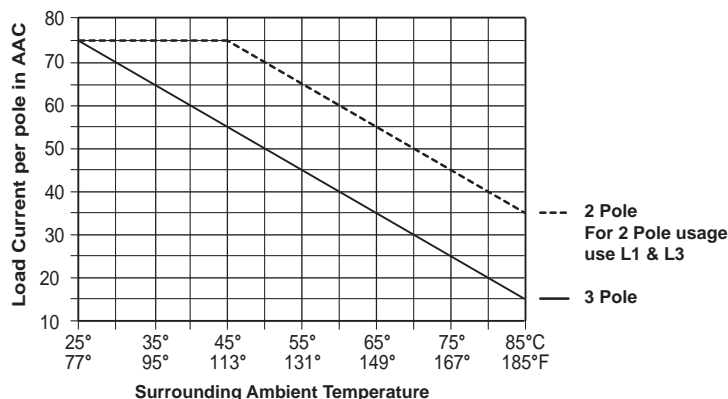
Rated isolation voltage	
Input to output	≥ 4000 VAC rms
Output to case	≥ 4000 VAC rms

Total Weight

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

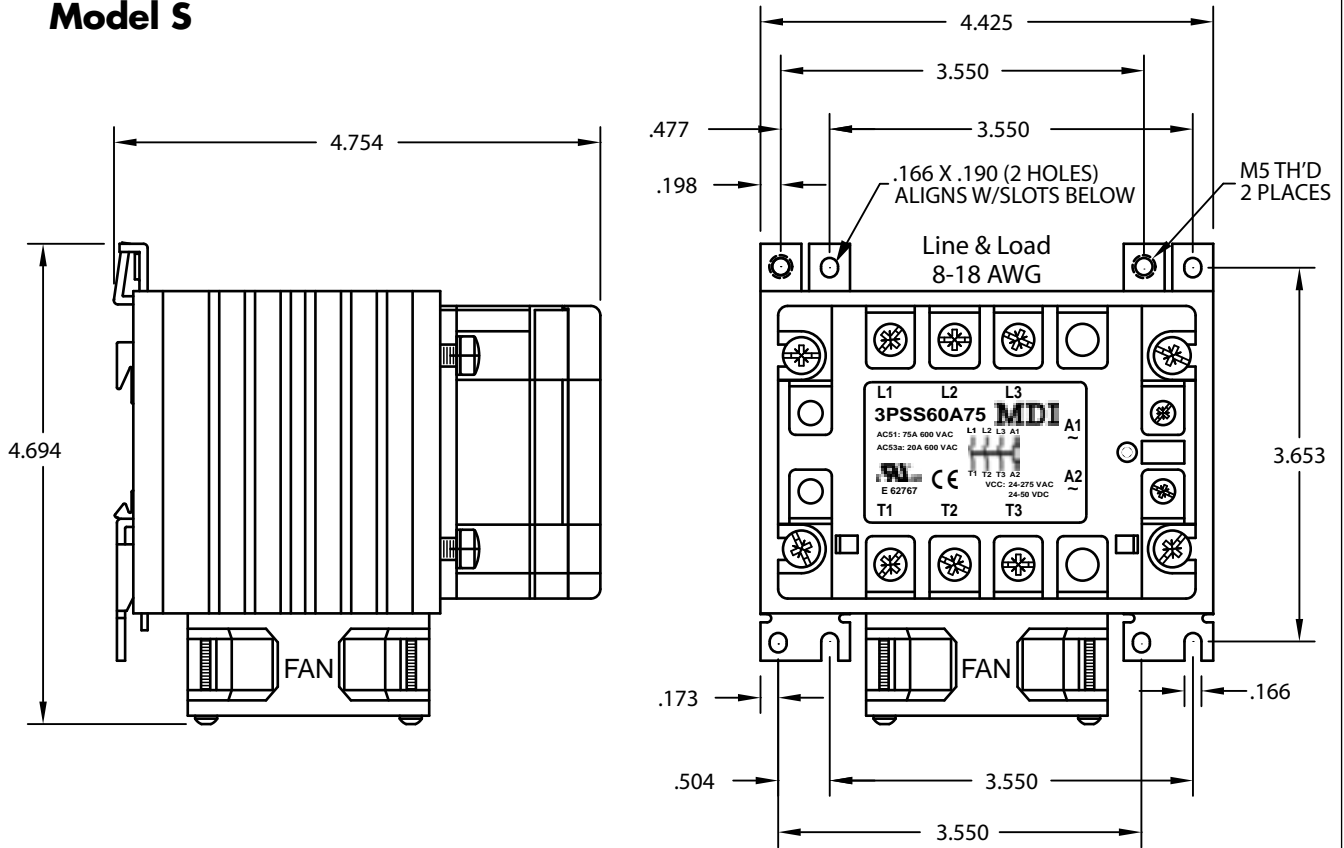
Housing Specifications

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

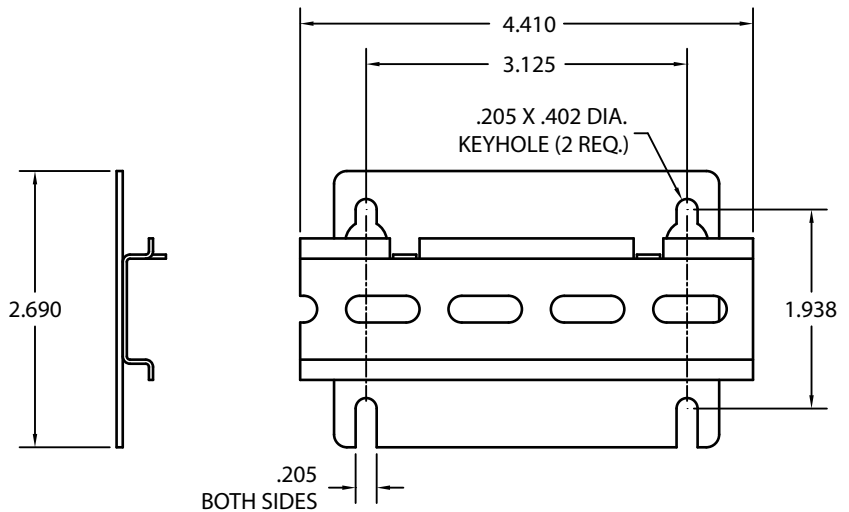


Model R

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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