Solid State Relays
Industrial, 3-Phase SS
Models: 3PSS60A75 S (Standard Din-rail)
3PSS60A75 R (Retro Fit)

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.

Tested and Approved
3 Pole 50 AMP @ 480 VAC @ -30°C to 50°C 3-Phase
2 Pole 75 AMP @ 480 VAC @ -30°C to 50°C 3-Phase *
51°C to 80°C derates @ 10 AMPs per decade
*For 2 Pole usage, use L1 & L3

General Specifications
Operational voltage range 42-660 VAC
Blocking voltage 1600 Vp
Operational frequency range 45 to 65 Hz
Overvoltage category III
Pollution degree 3
Heat Sink Fan requires 70 mA @ 24 VDC
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 A₀
Off-state leakage current < 3 mA rms
I²t for fusing t = 10 ms 6600 A2s
On-state voltage drop ≤ 1.6 V rms
Critical dV/dt off-state ≥ 500 V/µs

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

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

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 20 ms
Power output = 50 Hz
Response time drop-out 30 ms

Total Weight
S 1,370
R 1,473
Ounces 48.3 52

Housing Specifications
Material Noryl
Base plate Copper, nickel-plated
Potting compound Polyurethane
Power terminal M5
Mounting screws ≤ 2.5 Nm (22 in lbs)
Mounting torque Max. 2 x 6 mm² (AWG 8)
Wire size Min. 2 x 1 mm²
Relay M5
Mounting screws ≤ 1.5 Nm (13 in lbs)
Mounting torque Max. 2 x 1 mm²
Control terminal M4
Mounting screws ≤ 0.5 Nm (5 in lbs)
Mounting torque Max. 2 x 2.5 mm² (AWG 14)
Wire size Min. 2 x 1 mm²

 Courtesy of Steven Engineering, Inc.-230 Ryan Way, South San Francisco, CA 94080-6370-Main Office: (650) 588-9200-Outside Local Area: (800) 258-9200-www.stevenengineering.com
### Model S

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measurement</th>
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<tbody>
<tr>
<td>Width</td>
<td>4.754</td>
</tr>
<tr>
<td>Height</td>
<td>4.694</td>
</tr>
</tbody>
</table>

- 166 X .190 (2 HOLES)
- ALIGNS W/SLOTS BELOW
- M5 TH’D 2 PLACES

### 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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