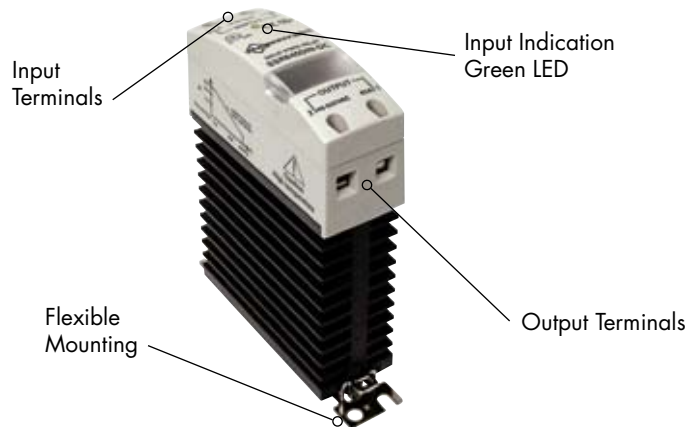


SSRDIN/SPST, 10 - 40 Amp Rating



General Specifications (@ 25° C) (UL 508)

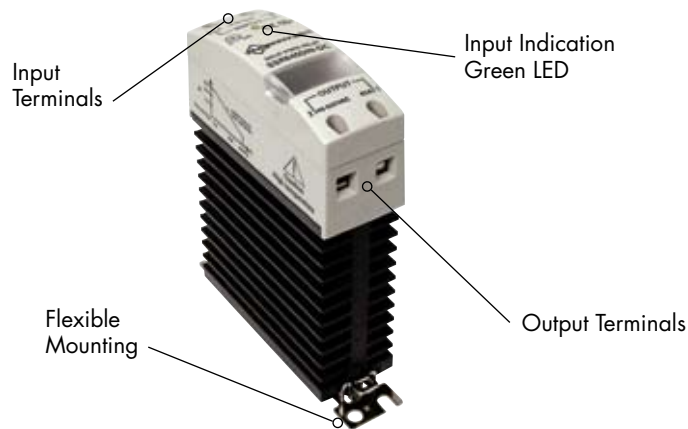
| Output Characteristics | | Units | SSR210DIN-AC | SSR225DIN-AC |
|---|-----|------------------------|----------------------------|----------------------------|
| Number and type of Contacts | | | SPST-NO | SPST-NO |
| Switching Device | | | SCR (2) | SCR (2) |
| Current rating | | A | 10 | 25 |
| Switching voltage | | V | 24....280 AC | 24....280 AC |
| Switching Type | | | Zero Cross | Zero Cross |
| Maximum zero turn-on voltage (Vpk) | | V | 35 | 35 |
| Maximum Rate of Rise Off State Voltage (dv/dt) | | V/us | 500 | 500 |
| Incandescent Lamp Ampere Rating (rms) | | A | 8 | 16 |
| Motor Load Rating (rms) | | A | 4.5 | 8 |
| Min. Load current to maintain on | | mA | 50 | 120 |
| Non-Repetitive Surge Current (1 cycle) | | A | 83 | 800 |
| Max. RMS overload current (1 second) | | A | 24 | 40 |
| Max. Off state leakage current (rms) | | mA | 10 | 10 |
| Typical On State Voltage Drop (rms) | | V | 1.25 AC | 1.35 AC |
| Max. On State Voltage Drop (rms) | | V | 1.6 AC | 1.8 AC |
| Maximum I ² T for Fusing (A ²) | | | 83 | 3700 |
| Input Characteristics | | | | |
| Voltage Range | | V | 90....280 AC, 80....140 DC | 90....280 AC, 80....140 DC |
| Must Release Voltage | | V | 10 AC | 10 AC |
| Nominal Input Impedance | | Ω | 16....25K | 16....25K |
| Typical Input Current @ 5VDC or 240VAC | | mA | 12 | 12 |
| Reverse Polarity Protection | | | N/A | N/A |
| Performance Characteristics | | | | |
| Operating time (response time) | On | ms | 8.3 | 8.3 |
| | Off | ms | 8.3 | 8.3 |
| Rated insulation voltage | | V | 4000 AC | 4000 AC |
| Dielectric strength | | V | 4000 AC | 4000 AC |
| Environment | | | | |
| Product certifications | | Standard version | UL, CSA, CE | UL, CSA, CE |
| Ambient air temperature around the device | | Storage | °C | -40...+100 |
| | | Operation | °C | -30...+80 |
| Degree of protection | | | IP 20 | IP 20 |
| Miscellaneous Characteristics | | | | |
| Thermal Resistance (Junction to Case) | | °C/W | 1.5 | 0.43 |
| Integral Heat sink | | °C/W | 2.2 | 2.2 |
| Weight | | g (oz) | 320 (11.3) | 326 (11.5) |
| LED | | Input | Green | Green |
| Terminal Wire Capacity | | AWG (mm ²) | 8 (10) | 8 (8.4) |
| Terminal Torque (maximum) | | in lb (Nm) | 12.5 (1.4) | 12.5 (1.4) |

SECTION 4



| SSR240DIN-AC | SSR610DIN-AC | SSR625DIN-AC | SSR640DIN-AC |
|----------------------------|----------------------------|----------------------------|----------------------------|
| SPST-NO | SPST-NO | SPST-NO | SPST-NO |
| SCR (2) | SCR (2) | SCR (2) | SCR (2) |
| 40 | 10 | 25 | 40 |
| 24....280 AC | 48....600 AC | 48....600 AC | 48....600 AC |
| Zero Cross | Zero Cross | Zero Cross | Zero Cross |
| 35 | 35 | 35 | 35 |
| 500 | 200 | 700 | 500 |
| 20 | 8 | 16 | 20 |
| 14 | 4.5 | 8 | 14 |
| 250 | 80 | 250 | 250 |
| 800 | 83 | 1000 | 800 |
| 100 | 24 | 50 | 100 |
| 10 | 10 | 10 | 10 |
| 1.6 AC | 1.25 AC | 1.35 AC | 1.6 AC |
| 1.6 AC | 1.6 AC | 1.6 AC | 1.6 AC |
| 3700 | 83 | 1700 | 3700 |
| 90....280 AC, 80....140 DC | 90....280 AC, 80....140 DC | 90....280 AC, 80....140 DC | 90....280 AC, 80....140 DC |
| 10 AC | 10 AC | 10 AC | 10 AC |
| 13K | 16....25K | 16....25K | 13K |
| 16 | 12 | 12 | 16 |
| N/A | N/A | N/A | N/A |
| 10 | 8.3 | 8.3 | 10 |
| 10 | 8.3 | 8.3 | 10 |
| 4000 AC | 4000 AC | 4000 AC | 4000 AC |
| 4000 AC | 4000 AC | 4000 AC | 4000 AC |
| UL, CSA, CE | UL, CSA, CE | UL, CSA, CE | UL, CSA, CE |
| -40...+100 | -40...+100 | -40...+100 | -40...+100 |
| -30...+80 | -30...+80 | -30...+80 | -30...+80 |
| IP 20 | IP 20 | IP 20 | IP 20 |
| 0.43 | 1.8 | 0.43 | 0.43 |
| 2.2 | 2.2 | 2.2 | 2.2 |
| 332 (11.7) | 320 (11.3) | 326 (11.5) | 332 (11.7) |
| Green | Green | Green | Green |
| 8 (10) | 8 (10) | 8 (10) | 8 (10) |
| 12.5 (1.4) | 12.5 (1.4) | 12.5 (1.4) | 12.5 (1.4) |

SSRDIN/SPST, 10 - 40 Amp Rating *continued*



General Specifications (@ 25° C) (UL 508)

| Output Characteristics | | Units | SSR210DIN-DC | SSR225DIN-DC |
|---|----------------------|------------------------|-------------------|-------------------|
| Number and type of Contacts | | | SPST-NO | SPST-NO |
| Switching Device | | | SCR (2) | SCR (2) |
| Current rating | | A | 10 | 25 |
| Switching voltage | | V | 24...280 AC | 24...280 AC |
| Switching Type | | | Zero Cross | Zero Cross |
| Maximum zero turn-on voltage (Vpk) | | V | 35 | 35 |
| Maximum Rate of Rise Off State Voltage (dv/dt) | | V/us | 200 | 500 |
| Incandescent Lamp Ampere Rating (rms) | | A | 8 | 16 |
| Motor Load Rating (rms) | | A | 4.5 | 8 |
| Min. Load current to maintain on | | mA | 50 | 120 |
| Non-Repetitive Surge Current (1 cycle) | | A | 83 | 800 |
| Max. RMS overload current (1 second) | | A | 24 | 40 |
| Max. Off state leakage current (rms) | | mA | 10 | 10 |
| Typical On State Voltage Drop (rms) | | V | 1.25 AC | 1.25 AC |
| Max. On State Voltage Drop (rms) | | V | 1.6 AC | 1.6 AC |
| Maximum I ² T for Fusing (A ²) | | | 83 | 3700 |
| Input Characteristics | | | | |
| Voltage Range | | V | 3...32 | 3...32 |
| Must Release Voltage | | V | 1 DC | 1 DC |
| Nominal Input Impedance | | Ω | Current Regulator | Current Regulator |
| Typical Input Current @ 5VDC or 240VAC | | mA | 16 | 16 |
| Reverse Polarity Protection | | | Yes | Yes |
| Performance Characteristics | | | | |
| Operating time (response time) | On | ms | 8.3 | 8.3 |
| | Off | ms | 8.3 | 8.3 |
| Rated insulation voltage | Input to Output | V | 4000 AC | 4000 AC |
| Dielectric strength | Terminals to Chassis | V | 4000 AC | 4000 AC |
| Environment | | | | |
| Product certifications | | | UL, CSA, CE | UL, CSA, CE |
| Ambient air temperature around the device | Storage | °C | -40...+100 | -40...+100 |
| | Operation | °C | -30...+80 | -30...+80 |
| Degree of protection | | | IP 20 | IP 20 |
| Miscellaneous Characteristics | | | | |
| Thermal Resistance (Junction to Case) | | °C/W | 1.5 | 0.43 |
| Integral Heat sink | | °C/W | 2.2 | 2.2 |
| Weight | | g (oz) | 320 (11.3) | 326 (11.5) |
| LED | | Input | Green | Green |
| Terminal Wire Capacity | | AWG (mm ²) | 8 (10) | 8 (10) |
| Terminal Torque (maximum) | | in lb (Nm) | 12.5 (1.4) | 12.5 (1.4) |

SECTION 4



| SSR240DIN-DC | SSR610DIN-DC | SSR625DIN-DC | SSR640DIN-DC |
|-------------------|-------------------|-------------------|-------------------|
| SPST-NO | SPST-NO | SPST-NO | SPST-NO |
| SCR (2) | SCR (2) | SCR (2) | SCR (2) |
| 40 | 10 | 25 | 40 |
| 24....280 AC | 48....600 AC | 48....600 AC | 48....600 AC |
| Zero Cross | Zero Cross | Zero Cross | Zero Cross |
| 35 | 35 | 35 | 35 |
| 500 | 200 | 700 | 500 |
| 20 | 8 | 16 | 20 |
| 14 | 4.5 | 8 | 14 |
| 250 | 80 | 250 | 250 |
| 800 | 83 | 1000 | 800 |
| 100 | 24 | 50 | 100 |
| 10 | 10 | 10 | 10 |
| 1.6 AC | 1.25 AC | 1.35 AC | 1.6 AC |
| 1.6 AC | 1.6 AC | 1.6 AC | 1.6 AC |
| 3700 | 83 | 1700 | 3700 |
| 3....32 | 3....32 | 3....32 | 3....32 |
| 1 DC | 1 DC | 1 DC | 1 DC |
| Current Regulator | Current Regulator | Current Regulator | Current Regulator |
| 16 | 16 | 16 | 16 |
| Yes | Yes | Yes | Yes |
| 10 | 8.3 | 8.3 | 10 |
| 10 | 8.3 | 8.3 | 10 |
| 4000 AC | 4000 AC | 4000 AC | 4000 AC |
| 4000 AC | 4000 AC | 4000 AC | 4000 AC |
| UL, CSA, CE | UL, CSA, CE | UL, CSA, CE | UL, CSA, CE |
| -40...+100 | -40...+100 | -40...+100 | -40...+100 |
| -30...+80 | -30...+80 | -30...+80 | -30...+80 |
| IP 20 | IP 20 | IP 20 | IP 20 |
| 0.43 | 1.8 | 0.43 | 0.43 |
| 2.2 | 2.2 | 2.2 | 2.2 |
| 332 (11.7) | 320 (11.3) | 326 (11.5) | 332 (11.7) |
| Green | Green | Green | Green |
| 8 (10) | 8 (10) | 8 (10) | 8 (10) |
| 12.5 (1.4) | 12.5 (1.4) | 12.5 (1.4) | 12.5 (1.4) |

SSRDIN/SPST, 10 - 40 Amp Rating *continued*



SECTION 4

Standard Part Numbers

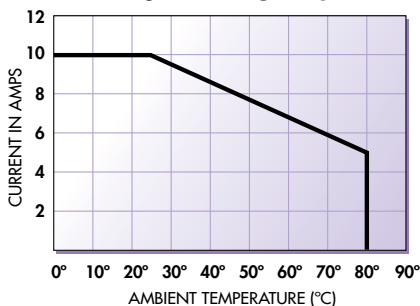
BOLD-FACED PART NUMBERS ARE NORMALLY STOCKED

| AC Operated | Input Voltage Range | Output Voltage Range | Contact Configuration | Switching Type | Rated Current Load (Amps) |
|---------------------|---------------------|----------------------|-----------------------|----------------|---------------------------|
| SSR210DIN-AC | 90...280 VAC | 24...280 VAC | SPST-NO | Zero Cross | 10 |
| SSR225DIN-AC | 90...280 VAC | 24...280 VAC | SPST-NO | Zero Cross | 25 |
| SSR240DIN-AC | 90...280 VAC | 24...280 VAC | SPST-NO | Zero Cross | 40 |
| SSR610DIN-AC | 90...280 VAC | 48...600 VAC | SPST-NO | Zero Cross | 10 |
| SSR625DIN-AC | 90...280 VAC | 48...600 VAC | SPST-NO | Zero Cross | 25 |
| SSR640DIN-AC | 90...280 VAC | 48...600 VAC | SPST-NO | Zero Cross | 40 |
| SSR210DIN-AC-2 | 90...280 VAC | 24...280 VAC | SPST-NO | Random | 10 |
| SSR210DIN-AC-4 | 90...280 VAC | 24...280 VAC | SPST-NC | Random | 10 |
| SSR225DIN-AC-2 | 90...280 VAC | 24...280 VAC | SPST-NO | Random | 25 |
| SSR225DIN-AC-4 | 90...280 VAC | 24...280 VAC | SPST-NC | Random | 25 |
| SSR610DIN-AC-2 | 90...280 VAC | 48...600 VAC | SPST-NO | Random | 10 |
| SSR610DIN-AC-4 | 90...280 VAC | 48...600 VAC | SPST-NC | Random | 10 |
| SSR625DIN-AC-2 | 90...280 VAC | 48...600 VAC | SPST-NO | Random | 25 |
| SSR625DIN-AC-4 | 90...280 VAC | 48...600 VAC | SPST-NC | Random | 25 |
| DC Operated | | | | | |
| SSR210DIN-DC | 3...32 VDC | 24...280 VAC | SPST-NO | Zero Cross | 10 |
| SSR225DIN-DC | 3...32 VDC | 24...280 VAC | SPST-NO | Zero Cross | 25 |
| SSR240DIN-DC | 3...32 VDC | 24...280 VAC | SPST-NO | Zero Cross | 40 |
| SSR610DIN-DC | 3...32 VDC | 48...600 VAC | SPST-NO | Zero Cross | 10 |
| SSR625DIN-DC | 3...32 VDC | 48...600 VAC | SPST-NO | Zero Cross | 25 |
| SSR640DIN-DC | 3...32 VDC | 48...600 VAC | SPST-NO | Zero Cross | 40 |
| SSR210DIN-DC-2 | 3...32 VDC | 24...280 VAC | SPST-NO | Random | 10 |
| SSR210DIN-DC-4 | 3...32 VDC | 24...280 VAC | SPST-NC | Random | 10 |
| SSR225DIN-DC-2 | 3...32 VDC | 24...280 VAC | SPST-NO | Random | 25 |
| SSR225DIN-DC-4 | 3...32 VDC | 24...280 VAC | SPST-NC | Random | 25 |
| SSR610DIN-DC-2 | 3...32 VDC | 48...600 VAC | SPST-NO | Random | 10 |
| SSR610DIN-DC-4 | 3...32 VDC | 48...600 VAC | SPST-NC | Random | 10 |
| SSR625DIN-DC-2 | 3...32 VDC | 48...600 VAC | SPST-NO | Random | 25 |
| SSR625DIN-DC-4 | 3...32 VDC | 48...600 VAC | SPST-NC | Random | 25 |

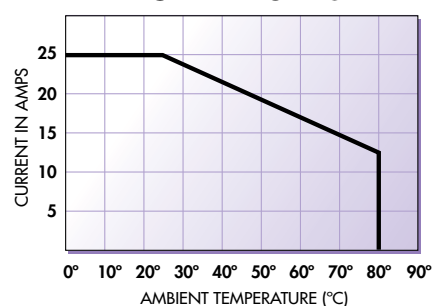
Part Number Builder

| Series | Output Voltage | Output Current | Input Voltage |
|--------|-------------------|----------------|--|
| SSR | 2 = 24 to 280 VAC | 10 = 10 AMPS | DIN-DC = 3 - 32 VDC; SPST-NO; Zero Cross |
| | 6 = 48 to 600 VAC | 25 = 25 AMPS | DIN-DC-2 = 3 - 32 VDC; SPST-NO; Random |
| | | 40 = 40 AMPS | DIN-DC-4 = 3 - 32 VDC; SPST-NC; Random |
| | | | DIN-AC = 90 - 280 VAC; SPST-NO; Zero Cross |
| | | | DIN-AC-2 = 90 - 280 VAC; SPST-NO; Random |
| | | | DIN-AC-4 = 90 - 280 VAC; SPST-NC; Random |

10 AMP MODELS



25 AMP MODELS



40 AMP MODELS

