Product data sheet Characteristics

SSD1A335M7C3

single phase panel, Harmony Solid State Relays, 35A, DIN rail mount, zero voltage switching, input 90...280 V AC DC, output 48...600 V AC



Main

| Range of Product | Harmony Solid State Relays |
|------------------------------|---|
| Product or Component Type | Modular DIN rail relay |
| Device short name | SSD1 |
| Number of channels | 1 |
| Number of phases | 1 phase |
| Product configuration type | Contactor configuration with pluggable spring input |
| Mounting support | 35 mm symmetrical DIN rail conforming to IEC 60715 |
| Rated current | 35 A |
| Output switching mode | Zero voltage switching |

Complementary

| Complementary | |
|---------------------------------|--|
| Operating frequency | 47440 Hz |
| Rated duty | Uninterrupted |
| Output voltage | 48600 V AC |
| Control circuit voltage | 90280 V AC/DC |
| Tightening torque | 22.2 N.m for load output 1820 lb.in for load output |
| Connections - terminals | Plug-inspring terminals, clamping connection capacity:0.133.30 mm², AWG 26AWG 12 for input Telescopic screw, clamping connection capacity:0.7510 mm², AWG 20AWG 8 for output |
| Dielectric strength | 4 KV AC for input/output circuit 4 kV AC for input or output to case |
| Rated impulse withstand voltage | 6 KV for input/output circuit 6 kV for input or output to case |
| Insulation resistance | 1000 MOhm at 500 V DC |
| Local signalling | For control voltage LED (green) |
| Pick-up voltage | 90 V AC/DC turn-on |
| Drop-out voltage | 5 V AC/DC turn-off |
| Input current range | 610 mA |
| Solid state switching type | Zero voltage switching |
| Load current | 0.1535 A |
| Transient overvoltage | 1200 V |
| Inrush current | 1350 A at 60 Hz |
| Maximum voltage drop | <1.15 V on-state |
| Motor controller rating | 1.5 KW/2 Hp at 120 V AC 3.73 KW/5 Hp at 240 V AC 7.46 kW/10 hp at 480 V AC |
| | |

| Electromagnetic compatibility | Electrostatic discharge 6 kV criteria A contact discharge conforming to IEC |
|---------------------------------------|---|
| | 61000-4-2 Electrostatic discharge 8 kV criteria A air discharge conforming to IEC 61000-4-2 |
| | Conducted RF disturbances 10 V, 0.1580 MHz criteria A level 3 conforming to |
| | IEC 61000-4-6 |
| | Electrical fast transient/burst immunity test 2 kV, 5/100 kHz criteria B output ports conforming to IEC 61000-4-4 |
| | Electrical fast transient/burst immunity test 1 kV, 5/100 kHz criteria B input ports conforming to IEC 61000-4-4 |
| | Radiated radio-frequency electromagnetic field immunity test 10 V/m, 80 MHz1 GHz criteria A conforming to IEC 61000-4-3 |
| | Radiated radio-frequency electromagnetic field immunity test 3 V/m, 1.42 GHz criteria A conforming to IEC 61000-4-3 |
| | Radiated radio-frequency electromagnetic field immunity test 1 V/m, 22.7 GHz criteria A conforming to IEC 61000-4-3 |
| | Surge immunity test 1 kV criteria A output ports line to line conforming to IEC 61000-4-5 |
| | Surge immunity test 2 kV criteria A output ports line to earth conforming to IEC 61000-4-5 |
| | Surge immunity test 1 kV criteria A input ports line to line conforming to IEC 61000-4-5 |
| | Surge immunity test 2 kV criteria A input ports line to earth conforming to IEC 61000-4-5 |
| | Radiated emission environment B for AC input supply conforming to IEC 60947-4-3 |
| | Conducted emission environment A for AC input supply conforming to IEC 60947-4-3 |
| | Immunity to microbreaks and voltage drops 30 %, 500 ms criteria A conforming to IEC 61000-4-11 |
| | Immunity to microbreaks and voltage drops 100 $\%$, 20 ms criteria B conforming to IEC 61000-4-11 |
| Device form designation | Form 5 semiconductor output DOL contactor |
| Maximum I2t for fusing | 8320 A ² .S for 10 ms |
| | 7593 A ² .s for 8.33 ms |
| Maximum leakage current | 1 mA off-state |
| DV/dt | 500 V/μs off-state at maximum rated voltage |
| Response time | 20 ms (turn-on) 30 ms (turn-off) |
| Load Power Factor Range | 0.5 with maximum load |
| Short circuit protection coordination | Type 1 |
| · | Type 2 |
| Overvoltage category | III |
| Width | 0.9 in (22.5 mm) |
| Height | 3.6 in (91.9 mm) |
| Depth | 5.3 in (133.8 mm) |
| Test button | Without test button |
| Net Weight | 0.664 lb(US) (0.301 kg) |
| Device presentation | Complete product |

Environment

| Flammability rating | V-0 conforming to UL 94 |
|---------------------------------------|---|
| Vibration resistance | 0.75 mm (f = 10150 Hz) conforming to IEC 60068-2-6 |
| Shock resistance | 50 gn for 11 ms (peak acceleration) , longitudinal position conforming to IEC 60068-2-27 30 gn for 11 ms (peak acceleration) , vertical position conforming to IEC 60068-2-27 |
| Pollution degree | 2 |
| Standards | IEC 61373:class B: category 1 IEC 60947-4-3 IEC 62314 IEC 60950-1 CSA C22.2 No 14-13 UL 508 |
| IP degree of protection | IP20 |
| Ambient Air Temperature for Operation | -4176 °F (-2080 °C) |
| Ambient Air Temperature for Storage | -40212 °F (-40100 °C) |

Ordering and shipping details

| Category | US10CP222375 | _ |
|-------------------|---------------|---|
| Discount Schedule | 0CP2 | |
| GTIN | 3606489807993 | |
| Returnability | No | |
| Country of origin | US | |

Packing Units

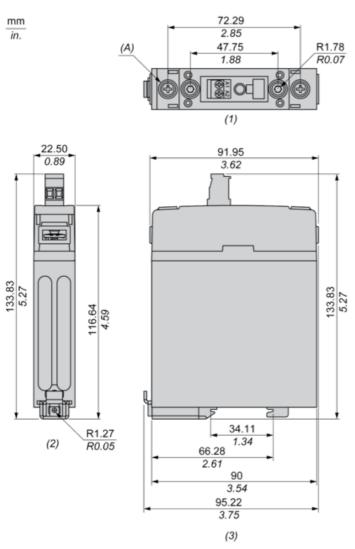
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|--------------------------|
| |
| 1.02 in (2.6 cm) |
| 3.8 in (9.7 cm) |
| 5.5 in (14.0 cm) |
| 11.5 oz (325.0 g) |
| S02 |
| 24 |
| 5.9 in (15.0 cm) |
| 11.8 in (30.0 cm) |
| 15.7 in (40.0 cm) |
| 18.223 lb(US) (8.266 kg) |
| |

Offer Sustainability

| California proposition 65 | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |
|----------------------------|---|
| REACh Regulation | ☑ REACh Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| Mercury free | Yes |
| China RoHS Regulation | China RoHS Declaration |
| RoHS exemption information | ₫Yes |
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins. |

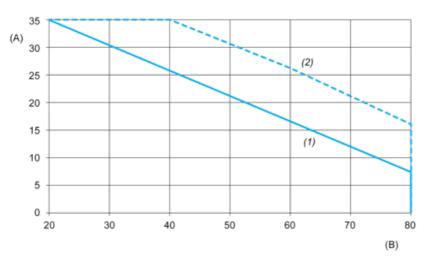
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Dimensions



- (1) Front view
- (2) Top view
- (3) Side view
- (A) Screw 8-32 Stud Elevator Profile 1/4 48 UNS (2 Places)

Derating Curves



- A: Load Current (Amperes)
- B : Ambient Temperature (°C)
- 1 : Multiple units, no minimum spacing between components
- 2 : Installed single unit, distance to adjacent components more than 22.5 mm