

SSM1A120M7

Harmony, Solid state modular relay, 20 A, DIN rail mount, zero voltage switching, input 90...280 V AC, output 24...280 V AC



Main

| | |
|---------------------------|------------------------------|
| Range of Product | Harmony Solid State Relays |
| Product or Component Type | Solid state relay up to 20 A |
| Device short name | SSM1 |
| Number of phases | 1 phase |
| Output switching mode | Zero voltage switching |

Complementary

| | |
|-------------------------------------|---|
| Mounting Support | Symmetrical DIN rail |
| Line Rated Current | 20 A |
| Output voltage | 24...280 V AC |
| [Uc] control circuit voltage | 90...280 V AC |
| Tightening torque | 0.6...0.7 N.m for input 1.36...1.7 N.m for output |
| Connections - terminals | Screw terminals 1 x 0.2...1 x 5.3 mm ² , AWG 24...AWG 10) input Screw terminals 1 x 0.2...1 x 5.3 mm ² , AWG 24...AWG 10) output |
| Maximum capacitance | 8 pF for input/output |
| Insulation resistance | 1000 MOhm at 500 V DC |
| Local signalling | For input status LED (green) |
| Switching voltage | 90 V AC turn-on 10 V AC turn-off |
| Input current | 2...10 mA |
| Solid state output type | Zero voltage switching SCR output |
| Load current | 0.15...20 A |
| Transient overvoltage | 600 V |
| Surge current | 250 A 16.6 ms |
| Maximum voltage drop | <1.6 V on-state |
| Maximum I ² t for fusing | 260 A ² .s for 8.3 ms |
| Maximum leakage current | 10 mA off-state |
| DV/dt | 500 V/μs off-state at maximum voltage |
| Response time | 10 ms (turn-on) 40 ms (turn-off) |
| Overvoltage category | III |
| Net Weight | 0.62 lb(US) (0.28 kg) |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Environment

| | |
|---------------------------------------|---|
| Dielectric strength | 4 KV AC for input/output 4 kV AC for input or output to case |
| Pollution degree | 2 |
| Standards | CSA C22.2 No 14 UL 508 IEC 60950-1 |
| Product Certifications | UL EAC CSA |
| Marking | UL CE EAC CSA |
| IP degree of protection | IP20 |
| Ambient air temperature for operation | -40...176 °F (-40...80 °C) |
| Ambient Air Temperature for Storage | -40...257 °F (-40...125 °C) |

Ordering and shipping details

| | |
|-----------------------|-----------------------------------|
| Category | 22375 - INTERFACE MODULE(ABA,R,S) |
| Discount Schedule | CP2 |
| GTIN | 3606485441597 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 10.51 oz (298 g) |
| Returnability | No |
| Country of origin | MX |

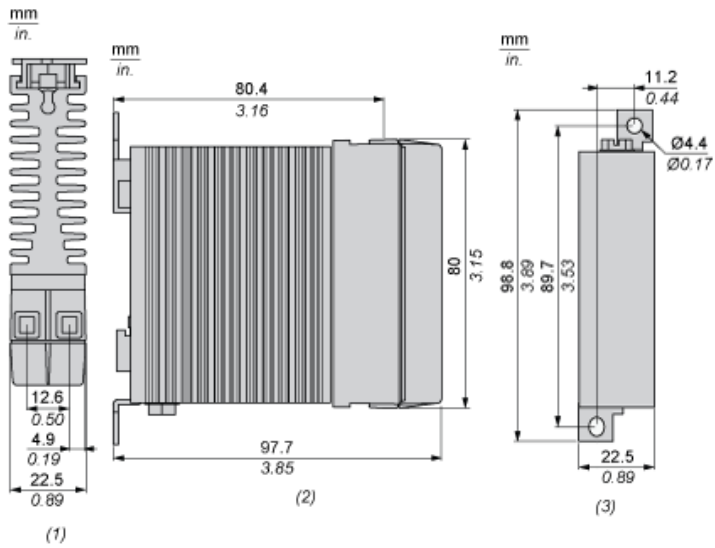
Packing Units

| | |
|------------------------------|-------------------------|
| Unit Type of Package 1 | PCE |
| Package 1 Height | 1.22 in (3.1 cm) |
| Package 1 width | 4.33 in (11 cm) |
| Package 1 Length | 4.33 in (11 cm) |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 24 |
| Package 2 Weight | 16.31 lb(US) (7.397 kg) |
| Package 2 Height | 5.91 in (15 cm) |
| Package 2 width | 11.81 in (30 cm) |
| Package 2 Length | 15.75 in (40 cm) |

Offer Sustainability

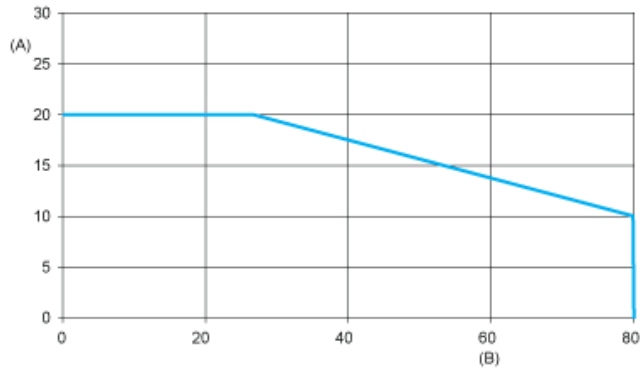
| | |
|----------------------------|---|
| Sustainable offer status | Green Premium product |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive 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) EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| China RoHS Regulation | China RoHS Declaration |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End Of Life Information |

Dimensions



- (1) Top view
- (2) Side view
- (3) Front view

Derating Curves



A : Load Current (Amperes)
B : Ambient Temperature (°C)