

# SSM1A112BDR

Solid state modular relay, 12 A, random switching, input 4...32 V DC, output 24...280 V AC



## Main

|                           |                   |
|---------------------------|-------------------|
| Range of product          | Harmony Relay     |
| Product or component type | Solid state relay |
| Device short name         | SSM               |
| Number of channels        | 1                 |
| Number of phases          | 1 phase           |

## Complementary

|                                     |                                                                                                                                                           |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mounting support                    | Symmetrical DIN rail                                                                                                                                      |
| Line Rated Current                  | 12 A                                                                                                                                                      |
| Output voltage                      | 24...280 V AC                                                                                                                                             |
| [Uc] control circuit voltage        | 4...32 V DC                                                                                                                                               |
| Contacts type and configuration     | 1 NO                                                                                                                                                      |
| Tightening torque                   | 0.5...0.8 N.m input<br>0.5...0.8 N.m output                                                                                                               |
| Connections - terminals             | Screw terminals 1 x 0.3...1 x 1.5 mm <sup>2</sup> , AWG 22...AWG 16) input<br>Screw terminals 1 x 0.3...1 x 2.5 mm <sup>2</sup> , AWG 22...AWG 14) output |
| Maximum capacitance                 | 10 pF input/output                                                                                                                                        |
| Insulation resistance               | 1000 MOhm 500 V DC                                                                                                                                        |
| Local signalling                    | Input status LED green)                                                                                                                                   |
| Minimum switching voltage           | 4 V DC turn-on                                                                                                                                            |
| Maximum switching voltage           | 1 V DC turn-off                                                                                                                                           |
| Input current                       | 9...11 mA                                                                                                                                                 |
| Solid state output type             | SCR output<br>Random voltage switching                                                                                                                    |
| Load current                        | 0.15...12 A                                                                                                                                               |
| Transient overvoltage               | 600 V                                                                                                                                                     |
| Surge current                       | 715 A 16.6 ms<br>750 A 20 ms                                                                                                                              |
| Maximum voltage drop                | <1.3 V on-state                                                                                                                                           |
| Maximum Horse Power Rating          | 0.33 hp 104 °F (40 °C) 240 V AC                                                                                                                           |
| Maximum I <sup>2</sup> t for fusing | 2560 A <sup>2</sup> .S 10 ms 50 Hz<br>2330 A <sup>2</sup> .s 8.33 ms 60 Hz                                                                                |
| Maximum leakage current             | 0.1 mA off-state                                                                                                                                          |
| DV/dt                               | 500 V/μs off-state at maximum voltage                                                                                                                     |
| Response time                       | 0.5 cycle turn-off)                                                                                                                                       |
| Power factor                        | 0.5 with maximum load)                                                                                                                                    |
| Overvoltage category                | III                                                                                                                                                       |
| Maximum Width                       | 0.71 in (18 mm)                                                                                                                                           |
| Height                              | 3.56 in (90.3 mm)                                                                                                                                         |
| Depth                               | 3.30 in (83.7 mm)                                                                                                                                         |
| Net Weight                          | 0.20 lb(US) (0.09 kg)                                                                                                                                     |

## Environment

|                                       |                                                         |
|---------------------------------------|---------------------------------------------------------|
| Flame retardance                      | V0 UL 94                                                |
| Dielectric strength                   | 4 KV AC input/output<br>4 kV AC input or output to case |
| Pollution degree                      | 2                                                       |
| Standards                             | IEC 60950-1<br>IEC 61000<br>IEC 62314                   |
| Product certifications                | UL<br>CSA                                               |
| Marking                               | CE                                                      |
| IP degree of protection               | IP20                                                    |
| Ambient air temperature for operation | -22...176 °F (-30...80 °C)                              |
| Ambient air temperature for storage   | -22...212 °F (-30...100 °C)                             |

## Ordering and shipping details

|                       |                                   |
|-----------------------|-----------------------------------|
| Category              | 22375 - INTERFACE MODULE(ABA,R,S) |
| Discount Schedule     | CP2                               |
| GTIN                  | 00785901970866                    |
| Nbr. of units in pkg. | 1                                 |
| Package weight(Lbs)   | 0.22 lb(US) (0.10 kg)             |
| Returnability         | Yes                               |
| Country of origin     | MX                                |

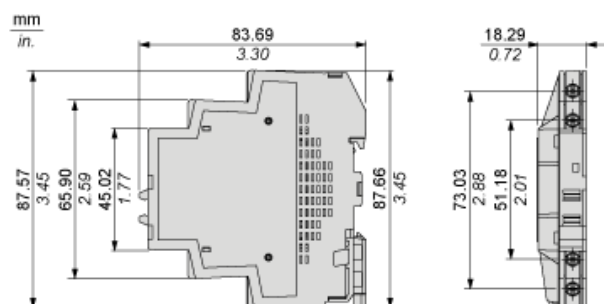
## Packing Units

|                  |          |
|------------------|----------|
| Package 1 Height | 0.250 dm |
| Package 1 width  | 0.900 dm |
| Package 1 Length | 0.950 dm |

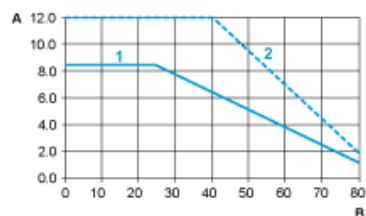
## Offer Sustainability

|                            |                                                                                                                                                                                                                                                                                             |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                                                                                                                                                                                                           |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>                                                                                                                                                                                              |
| Mercury free               | Yes                                                                                                                                                                                                                                                                                         |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                                                                                                                                                                                         |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>                                                                                                                                                                                                                                                      |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                                                                                                                                                                                                               |
| Circularity Profile        | <a href="#">End Of Life Information</a>                                                                                                                                                                                                                                                     |

Dimensions



## 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 18 mm