

# SSM1D212BD

single phase relay, Harmony Solid State  
Modular Relays, 12A, DIN rail mount, DC  
switching, input 4 to 32V DC, output 1 to 60V  
DC, 1NO



## Main

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

## Complementary

|                              |                                                                                                                                                           |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mounting Support             | Symmetrical DIN rail                                                                                                                                      |
| Line Rated Current           | 12 A                                                                                                                                                      |
| Output voltage               | 1...60 V DC                                                                                                                                               |
| [Uc] control circuit voltage | 4...32 V DC                                                                                                                                               |
| Tightening torque            | 0.5...0.8 N.m for input<br>0.5...0.8 N.m for 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 for input/output                                                                                                                                    |
| Insulation resistance        | 1000 MOhm at 500 V DC                                                                                                                                     |
| Local signalling             | For 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      | DC switching<br>Mosfet output                                                                                                                             |
| Load current                 | 0.0025...12 A                                                                                                                                             |
| Transient overvoltage        | 60 V                                                                                                                                                      |
| Surge current                | 100 A 10 ms                                                                                                                                               |
| Maximum voltage drop         | <0.5 V on-state                                                                                                                                           |
| Resistance                   | 0.045 Ohm on-state                                                                                                                                        |
| Maximum leakage current      | 0.1 mA off-state                                                                                                                                          |
| Response time                | 0.6 ms (turn-on)<br>0.3 ms (turn-off)                                                                                                                     |
| Overvoltage category         | III                                                                                                                                                       |
| 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 conforming to UL 94                                          |
| Dielectric strength                   | 4 KV DC for input/output<br>4 kV DC for input or output to case |
| Pollution degree                      | 2                                                               |
| Standards                             | IEC 61000<br>IEC 60950-1<br>IEC 62314                           |
| Product Certifications                | CSA[RETURN]UL                                                   |
| 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              | 3606480579462                   |
| Returnability     | No                              |
| Country of origin | MX                              |

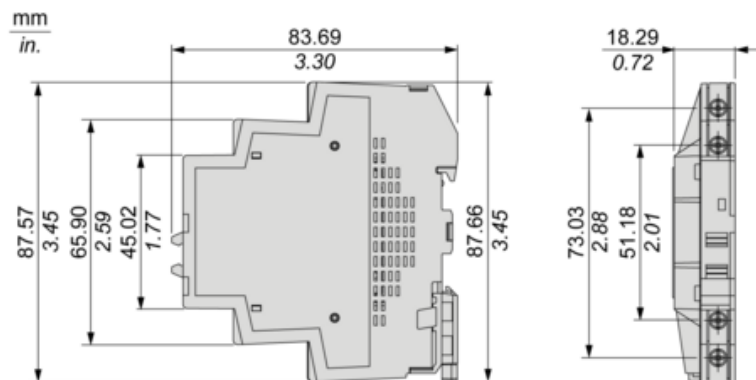
## Packing Units

|                              |                         |
|------------------------------|-------------------------|
| Unit Type of Package 1       | PCE                     |
| Number of Units in Package 1 | 1                       |
| Package 1 Height             | 0.79 in (2.000 cm)      |
| Package 1 Width              | 3.54 in (9.000 cm)      |
| Package 1 Length             | 3.74 in (9.500 cm)      |
| Package 1 Weight             | 3.14 oz (89.000 g)      |
| Unit Type of Package 2       | S02                     |
| Number of Units in Package 2 | 72                      |
| Package 2 Height             | 5.91 in (15.000 cm)     |
| Package 2 Width              | 11.81 in (30.000 cm)    |
| Package 2 Length             | 15.75 in (40.000 cm)    |
| Package 2 Weight             | 15.87 lb(US) (7.197 kg) |

## 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)                                                                                                                                                                                                                                  |
| Mercury free               | Yes                                                                                                                                                                                                                                                                                         |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>                                                                                                                                                                                                                                                      |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                                                                                                                                                                                         |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                                                                                                                                                                                                               |
| Circularity Profile        | <a href="#">End Of Life Information</a>                                                                                                                                                                                                                                                     |

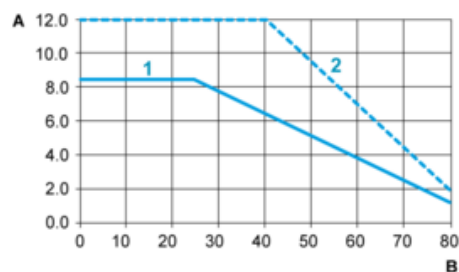
Dimensions



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Derating Curves

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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