

Product data sheet

Specifications



single phase relay, Harmony Solid State Modular Relays, 12A, DIN rail mount, DC switching, input 4 to 32V DC, output 1 to 100V DC

SSM1D312BD

Product availability: Stock - Normally stocked in distribution facility

Main

| | |
|---------------------------|----------------------------|
| Range of Product | Harmony Solid State Relays |
| Device short name | SSM |
| Product or Component Type | Modular DIN rail relay |
| Number of channels | 1 |
| Number of phases | 1 phase |
| Output switching mode | DC switching |

Complementary

| | |
|------------------------------|---|
| Product configuration type | Relay configuration |
| Mounting Support | Symmetrical DIN rail |
| Line Rated Current | 12 A |
| Output voltage | 1...100 V DC |
| [Uc] control circuit voltage | 4...32 V DC |
| Tightening torque | 0.5...0.8 N.m for input 0.5...0.8 N.m for output |
| Connections - terminals | Screw terminals 1 x 0.3...1 x 1.5 mm ² , AWG 22...AWG 16) input Screw terminals 1 x 0.3...1 x 2.5 mm ² , AWG 22...AWG 14) output |
| maximum capacitance | 10 pF for input/output |
| Insulation resistance | 1000 MOhm at 500 V DC |
| Local signalling | LED (green) for input status |
| Minimum switching voltage | 4 V DC turn-on |
| Maximum switching voltage | 1 V DC turn-off |
| input current | 8...11 mA |
| Solid state output type | DC switching Mosfet output |
| Load current | 0.0025...12 A |
| transient overvoltage | 100 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 |

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

| | |
|-----------------------------|---------------------------------------|
| Response time | 1.7 ms (turn-on) 0.3 ms (turn-off) |
| Overvoltage category | III |
| Width | 0.7 in (18 mm) |
| Height | 3.6 in (90.3 mm) |
| test button | Without test button |
| Depth | 3.3 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 4 kV DC for input or output to case |
| Pollution degree | 2 |
| Standards | IEC 60950-1 IEC 62314 IEC 61000 |
| Product Certifications | CSA 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 | US10CP222375 |
| Discount Schedule | 0CP2 |
| GTIN | 3606480579479 |
| Returnability | Yes |
| Country of origin | MX |

Packing Units

| | |
|-------------------------------------|--------------------------|
| Unit Type of Package 1 | PCE |
| Nbr. of units in pkg. | 1 |
| Package 1 Height | 0.79 in (2 cm) |
| Package 1 Width | 3.54 in (9 cm) |
| Package 1 Length | 3.74 in (9.5 cm) |
| Package weight(Lbs) | 3.2 oz (91 g) |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 72 |
| Package 2 Height | 5.91 in (15 cm) |
| Package 2 Width | 11.81 in (30 cm) |
| Package 2 Length | 15.75 in (40 cm) |
| Package 2 Weight | 15.459 lb(US) (7.012 kg) |



Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Environmental footprint

[Environmental Disclosure](#)

[Product Environmental Profile](#)

Use Better

Materials and Substances

Packaging made with recycled cardboard

Yes

Packaging without single use plastic

Yes

[EU RoHS Directive](#)

Pro-active compliance (Product out of EU RoHS legal scope)

REACH Regulation

[REACH Declaration](#)

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

Use Again

Repack and remanufacture

[Circularity Profile](#)

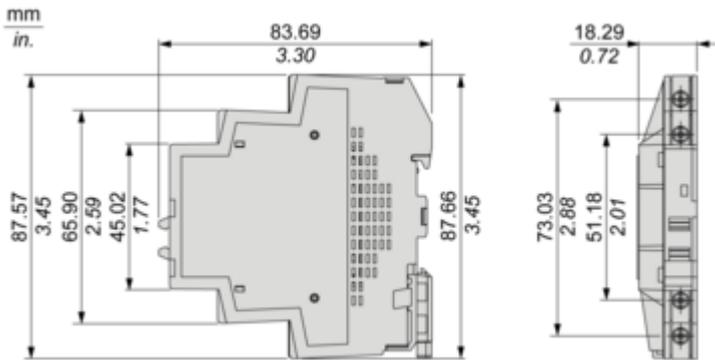
[End of Life Information](#)

Take-back

No

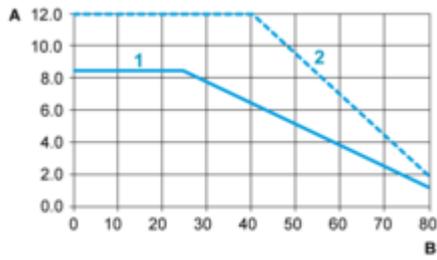
Dimensions Drawings

Dimensions



Performance Curves

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

Technical Illustration

Dimensions

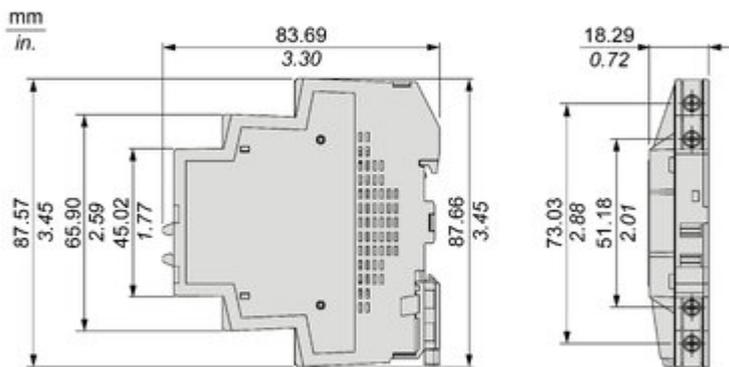


Image of product / Alternate images

Alternative

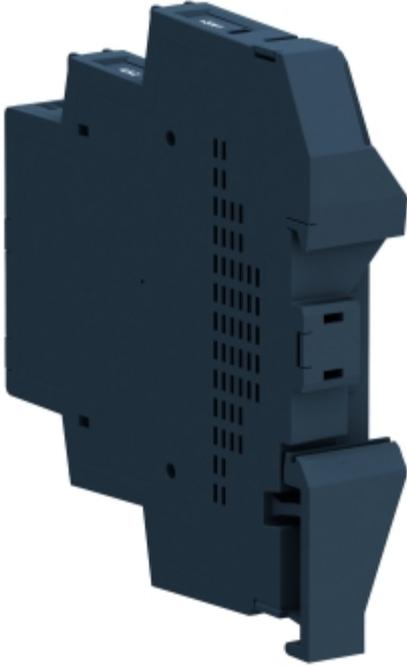




Image of product in real life situation

