

## SSM1A16BD

solid state relay - DIN rail mount - input 4-32 V DC,  
output 24-280 V AC ,6A



### Main

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

### Complementary

|                                     |                                                                                                                                                                         |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mounting support                    | Symmetrical DIN rail                                                                                                                                                    |
| [In] rated current                  | 6 A                                                                                                                                                                     |
| Output voltage                      | 24...280 V AC                                                                                                                                                           |
| [Uc] control circuit voltage        | 4...32 V DC                                                                                                                                                             |
| Contacts type and composition       | 1 NO                                                                                                                                                                    |
| Tightening torque                   | Input : 0.5...0.8 N.m<br>Output : 0.5...0.8 N.m                                                                                                                         |
| Connections - terminals             | Screw terminals : 1 x 0.3...1 x 1.5 mm <sup>2</sup> , (AWG 22...AWG 16) for input<br>Screw terminals : 1 x 0.3...1 x 2.5 mm <sup>2</sup> , (AWG 22...AWG 14) for output |
| Capacitance unbalance               | <= 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 limits                | 8...11 mA                                                                                                                                                               |
| Solid state output type             | Zero voltage switching<br>SCR output                                                                                                                                    |
| Load current                        | 0.00015...6 A                                                                                                                                                           |
| Absolute maximum voltage            | 600 V                                                                                                                                                                   |
| Surge current                       | <= 285 A for 16.6 ms<br><= 300 A for 20 ms                                                                                                                              |
| Voltage drop                        | <= 1.3 V on-state                                                                                                                                                       |
| Motor power hp                      | 0.16 hp at 40 °C 240 V AC                                                                                                                                               |
| Maximum I <sup>2</sup> t for fusing | 375 A <sup>2</sup> .s for 8.33 ms at 60 Hz half cycle<br>410 A <sup>2</sup> .s for 10 ms at 50 Hz half cycle                                                            |
| Leakage current                     | <= 0.1 mA off-state                                                                                                                                                     |
| DV/dt                               | 500 V/μs off-state at maximum voltage                                                                                                                                   |
| Response time                       | 0.5 cycle turn-on<br>0.5 cycle turn-off                                                                                                                                 |
| Cos phi                             | >= 0.5 with maximum load                                                                                                                                                |
| Overvoltage category                | III                                                                                                                                                                     |
| Width                               | 11 mm                                                                                                                                                                   |
| Height                              | 90.3 mm                                                                                                                                                                 |
| Depth                               | 83.7 mm                                                                                                                                                                 |
| Product weight                      | 0.05 kg                                                                                                                                                                 |

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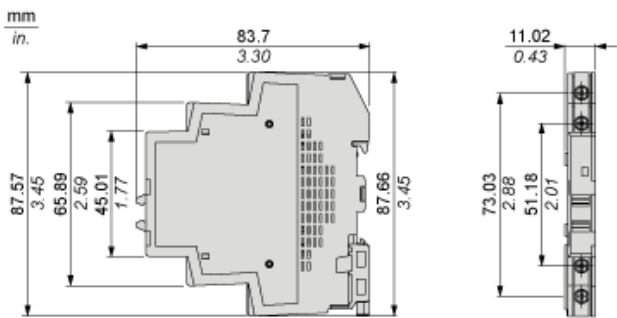
Environment

|                                       |                                                                 |
|---------------------------------------|-----------------------------------------------------------------|
| flame retardance                      | V0 conforming to UL 94                                          |
| dielectric strength                   | 4 kV AC for input/output<br>4 kV AC for input or output to case |
| pollution degree                      | 2                                                               |
| standards                             | IEC 61000<br>IEC 60950-1<br>IEC 62314                           |
| product certifications                | CSA<br>UL<br>REACH                                              |
| marking                               | CE                                                              |
| IP degree of protection               | IP20                                                            |
| ambient air temperature for operation | -30...80 °C                                                     |
| ambient air temperature for storage   | -30...100 °C                                                    |

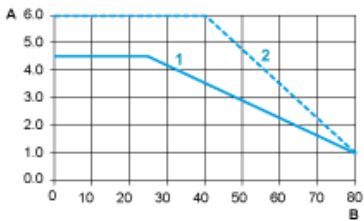
Offer Sustainability

|                                  |                                                                       |
|----------------------------------|-----------------------------------------------------------------------|
| Sustainable offer status         | Green Premium product                                                 |
| RoHS (date code: YYWW)           | Compliant - since 1328 - Schneider Electric declaration of conformity |
| REACH                            | Reference not containing SVHC above the threshold                     |
| Product environmental profile    | Available                                                             |
| Product end of life instructions | Available                                                             |

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 11 mm