



### Main

|                           |                   |
|---------------------------|-------------------|
| Range of product          | Zelio Relay       |
| Product or component type | Solid state relay |
| Device short name         | SSM1              |
| Phase                     | 1 phase           |

### Complementary

|                                     |   |
|-------------------------------------|---|
| Mounting support                    | Symmetrical DIN rail  |
| Line Rated Current                  | 30 A  |
| Output voltage                      | 24...280 V AC   |
| [Uc] control circuit voltage        | 4...32 V DC   |
| Contacts type and composition       | 1 NO  |
| Tightening torque                   | Input : 0.6...0.7 N.m<br>Output : 1.36...1.7 N.m  |
| Connections - terminals             | Screw terminals : 1 x 0.2...1 x 5.3 mm <sup>2</sup> , (AWG 24...AWG 10) input<br>Screw terminals : 1 x 0.2...1 x 5.3 mm <sup>2</sup> , (AWG 24...AWG 10) output |
| Capacitance unbalance               | <= 8 pF input/output  |
| Insulation resistance               | 1000 MOhm at 500 V DC   |
| Local signalling                    | LED green input status  |
| Switching voltage                   | 4 V DC turn-on<br>1 V DC turn-off   |
| Input current limits                | 8...12 mA   |
| Solid state output type             | Zero voltage switching<br>SCR output  |
| Load current                        | 0.15...30 A   |
| Absolute maximum voltage            | 600 V   |
| Surge current                       | <= 1200 A for 16.6 ms   |
| Voltage drop                        | 1.6 V on-state  |
| Maximum I <sup>2</sup> t for fusing | 6000 A <sup>2</sup> .s 8.3 ms   |
| Leakage current                     | <= 10 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   |
| Overvoltage category                | III   |
| Product weight                      | 0.62 lb(US) (0.28 kg)   |

### Environment

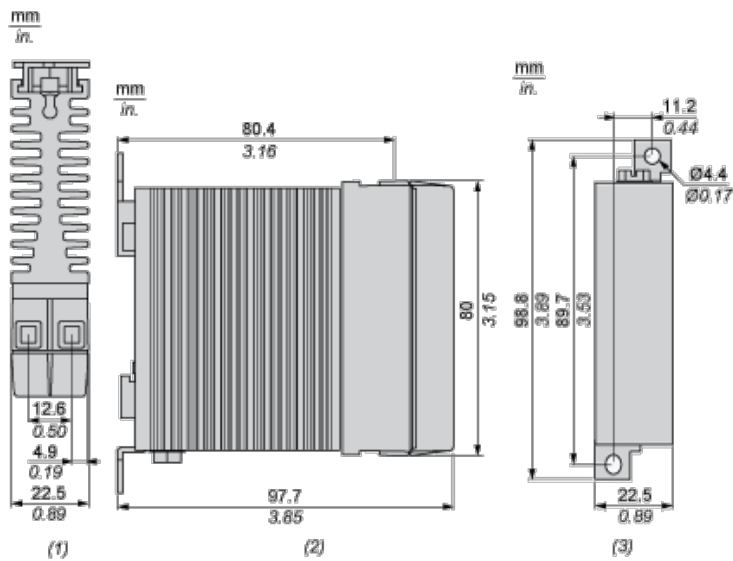
|                        |   |
|------------------------|---|
| dielectric strength    | 4 kV AC input/output<br>4 kV AC input or output to case |
| pollution degree       | 2   |
| standards              | UL 508<br>IEC 60950-1<br>CSA C22.2 No 14                |
| product certifications | CSA<br>UL<br>EAC  |

|                                       |                             |
|---------------------------------------|-----------------------------|
| marking                               | CE<br>CSA<br>UL<br>EAC      |
| 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) |

## Offer Sustainability

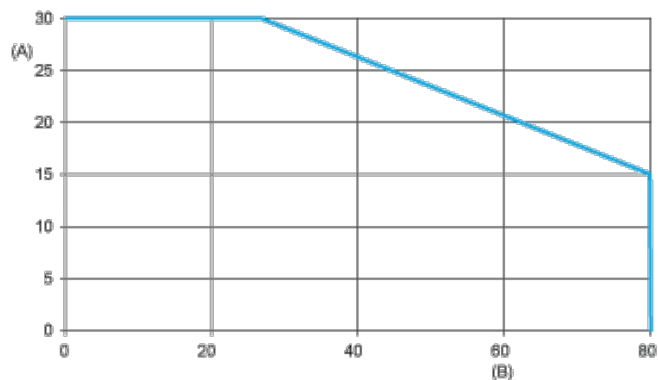
|  |  |
|--|--|
| Green Premium product  | Green Premium product  |
| Compliant - since 1522 - Schneider Electric declaration of conformity  | Compliant - since 1522 - Schneider Electric declaration of conformity  |
| Reference not containing SVHC above the threshold  | Reference not containing SVHC above the threshold  |
| Available  | Available  |
| Available  | Available  |
| WARNING: This product can expose you to chemicals including:   | 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. | 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>                                    | For more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a>                                    |

## Dimensions



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

## Derating Curves



A : Load Current (Amperes)

B : Ambient Temperature (°C)