



|                          |   |
|--------------------------|---|
| Product designation      | Undervoltage trip releases with early-make contacts |
| Product type designation | SM1X  |
| Description              | Undervoltage trip releases                          |
| Accessories for          | SM1R...   |

**Auxiliary contact characteristics**

|   |      |             |
|---|------|-------------|
| Type of contact                           |      | 2NO         |
| Rated insulation voltage $U_i$ IEC/EN     | V    | 690         |
| Rated impulse withstand voltage $U_{imp}$ | kV   | 4           |
| UL/CSA and IEC/EN 60947-5-1 designation   |      | C600 - Q600 |
| Min. conductivity                         |      | 5V 10mA     |
| Operating current AC15                    |      |             |
|   | 24V  | A 2.5       |
|   | 48V  | A 2.5       |
|   | 60V  | A 2.5       |
|   | 110V | A 1.5       |
|   | 230V | A 1.5       |
|   | 400V | A 0.95      |
|   | 500V | A 0.35      |
|   | 690V | A 0.3       |

|                        |      |        |
|------------------------|------|--------|
| Operating current DC13 |      |        |
|                        | 24V  | A 2.5  |
|                        | 48V  | A 2.5  |
|                        | 60V  | A 2.5  |
|                        | 110V | A 0.55 |
|                        | 125V | A 0.55 |
|                        | 220V | A 0.27 |
|                        | 600V | A 0.1  |

**Operational characteristics**

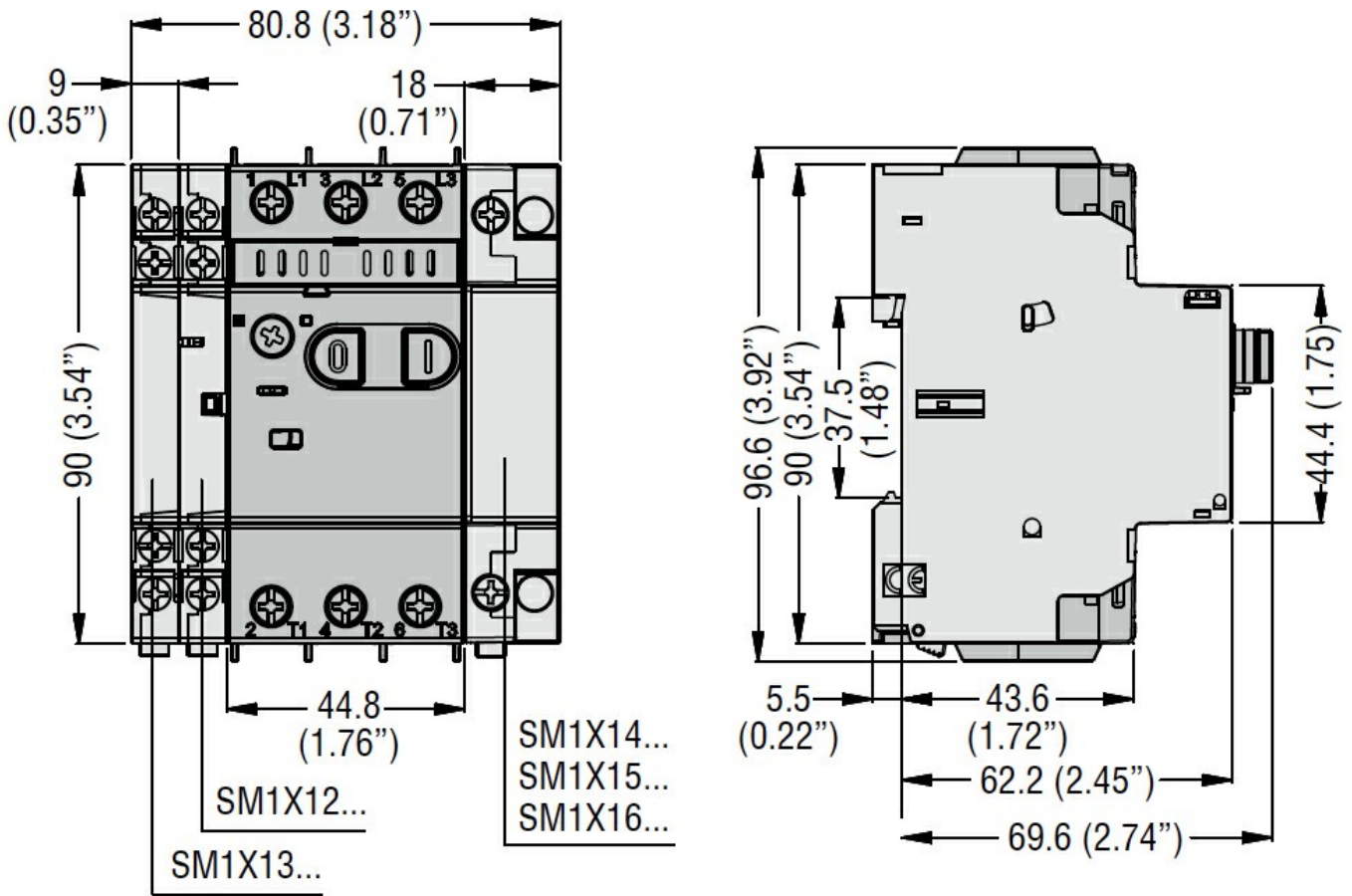
|                         |     |          |
|-------------------------|-----|----------|
| Rated supply voltage AC | VAC | 230      |
| Rated frequency         | Hz  | 50       |
| In-rush consumption     | VA  | 12       |
| Holding consumption     | VA  | 3.5      |
| Release voltage         | Us  | 35...70  |
| Operating voltage       | US  | 85...110 |

**Mechanical features**

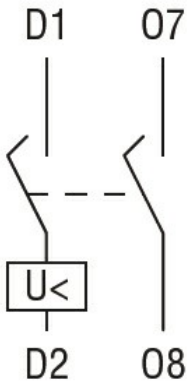
|                                 |     |        |
|---------------------------------|-----|--------|
| Tightening torque for terminals |     |        |
|                                 | min | Nm 1   |
|                                 | max | Nm 1   |
|                                 | min | lbin 9 |
|                                 | max | lbin 9 |

|                   |           |
|-------------------|-----------|
| Conductor section | AWG/Kcmil |
|-------------------|-----------|

|                                    |                       |                 |                    |
|------------------------------------|-----------------------|-----------------|--------------------|
|                                    | min                   |                 | 18                 |
|                                    | max                   |                 | 14                 |
| Flexible w/o lug conductor section | min                   | mm <sup>2</sup> | 0.75               |
|                                    | max                   | mm <sup>2</sup> | 2.5                |
| Flexible c/w lug conductor section | min                   | mm <sup>2</sup> | 0.75               |
|                                    | max                   | mm <sup>2</sup> | 2.5                |
| Operating position                 | normal allowable      |                 | Vertical Any       |
| Terminals                          | type screw width tool | mm              | Screw M3.5 7.2 Ph2 |
| Weight                             |                       | g               | 130                |
| <b>Operations</b>                  |                       |                 |                    |
| Mechanical life                    |                       | cycles          | 100000             |
| <b>Ambient conditions</b>          |                       |                 |                    |
| Temperature                        | Operating temperature | min °C          | -20                |
|                                    |                       | max °C          | +60                |
|                                    | Storage temperature   | min °C          | -50                |
|                                    |                       | max °C          | +80                |
| Max altitude                       |                       | m               | 3000               |
| IEC degree of protection           |                       |                 | IP20               |
| <b>Dimensions</b>                  |                       |                 |                    |



### Wiring diagrams



### Certifications and compliance

#### Compliance

CSA C22.2 n° 14  
IEC/EN 60947-1  
IEC/EN 60947-5-1  
UL508

#### Certificates

cULus  
EAC

### ETIM classification