

**General characteristics**

|                   |  |
|-------------------|--|
| Switching diagram | 66 - Voltmeter switch for phase-neutral and phase-phase voltages         |
| N° of elements    | 3  |
| Mounting form     | O48 - Modular service cover for 35mm din rail mounting with black handle |

**Contact characteristics**

|   |                    |          |           |     |
|---|--------------------|----------|-----------|-----|
| Rated insulation voltage $U_i$                            | IEC/EN             | V        | 690       |     |
|   | UL/CSA             | V        | 600       |     |
| Rated impulse withstand voltage $U_{imp}$                 |                    | kV       | 6         |     |
| Conventional free air thermal current $I_{th}$            | IEC/EN             | A        | 20        |     |
|   | UL/CSA             | A        | 20        |     |
| Rated operational voltage                                 |                    | V        | 480       |     |
| Rated operational impulse voltage                         |                    | kV       | 4         |     |
| Maximum fuse size for short-circuit protection $I_n$ (gG) | 10kA               | A        | 20        |     |
|   | 15kA               | A        | 16        |     |
|   | 25kA               | A        | 16        |     |
| Rated short time current $I_{cw}$                         | 1s                 | kA       | 250       |     |
|   |                    |          | 10/5 mA/V |     |
| Conductivity  |                    |          | 10/5 mA/V |     |
| Operational current $I_e$ IEC/EN                          | AC1/AC21A          | A        | 20        |     |
|   | AC15               |          |           |     |
|   | 110V               | A        | 10        |     |
|   | 220/230V           | A        | 8         |     |
|   | 380/400V           | A        | 6         |     |
|   | 660/690V           | A        | 1.5       |     |
| Rated operational power in AC                             | Three-phase AC-3   | 220/230V | kW        | 3   |
|   |                    | 380/440V | kW        | 5.5 |
|   |                    | 500/690V | kW        | 5.5 |
|   | Single-phase AC-3  | 110V     | kW        | 0.8 |
|   |                    | 220/230V | kW        | 2.2 |
|   |                    | 380/440V | kW        | 3   |
|   | Three-phase AC23A  | 220/230V | kW        | 5   |
|   |                    | 380/440V | kW        | 7.5 |
|   |                    | 500/690V | kW        | 7.5 |
|   | Single-phase AC23A | 110V     | kW        | 0.8 |
|   |                    | 220/230V | kW        | 2.5 |
|   |                    | 380/440V | kW        | 3.7 |

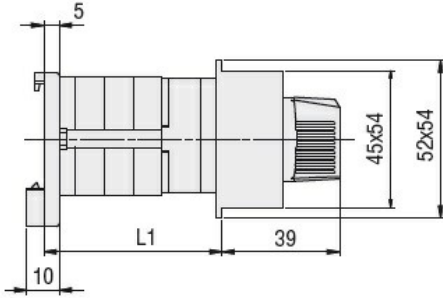
|  |      |                 |                   |
|--|------|-----------------|-------------------|
| Rated operational current in DC        |      |                 |                   |
| DC21A                                  |      |                 |                   |
|  | 48V  | A               | 20                |
|  | 60V  | A               | 20                |
|  | 110V | A               | 4                 |
|  | 220V | A               | 0.6               |
|  | 440V | A               | 0.25              |
| DC23A (poles in series)                |      |                 |                   |
|  | 24V  | A               | 20 (1)            |
|  | 48V  | A               | 20 (2)            |
|  | 60V  | A               | 20 (3)            |
|  | 110V | A               | 10 (3)            |
|  | 220V | A               | 8 (4)             |
| DC13                                   |      |                 |                   |
|  | 24V  | A               | 20                |
|  | 48V  | A               | 16                |
|  | 60V  | A               | 12                |
|  | 110V | A               | 1                 |
|  | 220V | A               | 0.4               |
|  | 440V | A               | 0.15              |
| Power dissipation                      |      | W               | 0.8               |
| <b>Mechanical features</b>             |      |                 |                   |
| Terminals screw                        |      |                 | M3                |
| Tightening torque for terminals max    |      | Nm              | 0.5               |
| Conductor size                         |      |                 |                   |
| AWG - Rigid cable                      |      |                 |                   |
|  | min  | AWG             | 20                |
|  | Max  | AWG             | 12                |
| AWG - Flexible cable                   |      |                 |                   |
|  | min  | AWG             | 20                |
|  | Max  | AWG             | 14                |
| Conductor size (IEC) - Flexible cable  |      |                 |                   |
|  | min  | mm <sup>2</sup> | 0.5               |
|  | Max  | mm <sup>2</sup> | 2.5               |
| Conductor size (IEC) - Rigid cable     |      |                 |                   |
|  | min  | mm <sup>2</sup> | 0.5               |
|  | Max  | mm <sup>2</sup> | 2.5               |
| Mechanical life                        |      | cycles          | 5x10 <sup>6</sup> |
| <b>UL technical data</b>               |      |                 |                   |
| Motor power for direct-on-line control |      |                 |                   |
| for three-phase motor                  |      |                 |                   |
|  | 120V | HP              | 1.5               |
|  | 240V | HP              | 3                 |
|  | 480V | HP              | 7.5               |
|  | 600V | HP              | 10                |
| for single-phase motor                 |      |                 |                   |
|  | 120V | HP              | 0.75              |
|  | 240V | HP              | 2                 |
| <b>Ambient conditions</b>              |      |                 |                   |
| Temperature                            |      |                 |                   |
| Operating temperature                  |      |                 |                   |
|  | min  | °C              | -25               |
|  | max  | °C              | +55               |
| Storage temperature                    |      |                 |                   |

|     |    |     |
|-----|----|-----|
| min | °C | -40 |
| max | °C | +70 |

### Resistance & Protection

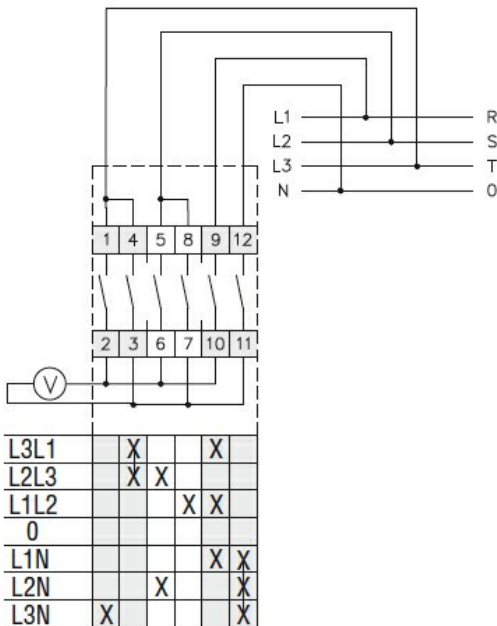
|                     |      |
|---------------------|------|
| Frontal IP degree   | IP40 |
| Terminals IP degree | IP00 |

### Dimensions



| Series | L1   |      |      |
|--------|------|------|------|
|        | 1    | 2    | 3    |
| 7GN12  | 38.1 | 47.8 | 57.5 |
| 7GN20  | 38.1 | 47.8 | 57.5 |
| 7GN25  | 42.5 | 56.1 | 69.7 |

### Wiring diagrams



### Certifications and compliance

#### Compliance

CSA C22.2 n° 14  
IEC/EN/BS 60947-1  
IEC/EN/BS 60947-3  
IEC/EN/BS 60947-5-1  
UL60947-4-1

#### Certificates

cCSAus  
EAC

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UL

ETIM classification

ETIM 8.0

EC001029 -  
Selector switch,  
complete