

**General characteristics**

|                   |   |
|-------------------|---|
| Switching diagram | 68 - Voltmeter switch for phase-neutral voltages                          |
| N° of elements    | 2   |
| Mounting form     | U47 - Snap on front mounting with black handle for hole diam. 22mm fixing |

**Contact characteristics**

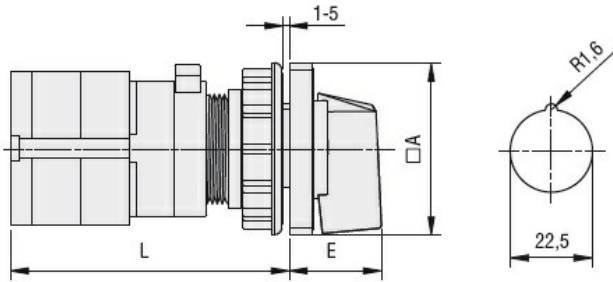
|   |                    |          |           |     |
|---|--------------------|----------|-----------|-----|
| Rated insulation voltage $U_i$                            | IEC/EN             | V        | 690       |     |
|   | UL/CSA             | V        | 600       |     |
| Rated impulse withstand voltage $U_{imp}$                 |                    | kV       | 6         |     |
| Conventional free air thermal current $I_{th}$            | IEC/EN             | A        | 16        |     |
|   | UL/CSA             | A        | 15        |     |
| Rated operational voltage                                 |                    | V        | 480       |     |
| Rated operational impulse voltage                         |                    | kV       | 4         |     |
| Maximum fuse size for short-circuit protection $I_n$ (gG) | 10kA               | A        | 16        |     |
|   | 15kA               | A        | 10        |     |
|   | 25kA               | A        | 10        |     |
| Rated short time current $I_{cw}$                         | 1s                 | kA       | 200       |     |
|   |                    |          | 10/5 mA/V |     |
| Conductivity  |                    |          | 10/5 mA/V |     |
| Operational current $I_e$ IEC/EN                          | AC1/AC21A          | A        | 16        |     |
|   | AC15               |          |           |     |
|   | 110V               | A        | 10        |     |
|   | 220/230V           | A        | 8         |     |
|   | 380/400V           | A        | 4         |     |
|   | 660/690V           | A        | 1.5       |     |
| Rated operational power in AC                             | Three-phase AC-3   | 220/230V | kW        | 2.5 |
|   |                    | 380/440V | kW        | 4   |
|   |                    | 500/690V | kW        | 5.5 |
|   | Single-phase AC-3  | 110V     | kW        | 0.8 |
|   |                    | 220/230V | kW        | 1.5 |
|   |                    | 380/440V | kW        | 2.2 |
|   | Three-phase AC23A  | 220/230V | kW        | 3   |
|   |                    | 380/440V | kW        | 5.5 |
|   |                    | 500/690V | kW        | 7.5 |
|   | Single-phase AC23A | 110V     | kW        | 0.8 |
|   |                    | 220/230V | kW        | 1.7 |
|   |                    | 380/440V | kW        | 3   |
| Rated operational current in DC                           |                    |          |           |     |
| DC21A   |                    |          |           |     |

|  |      |                 |                   |
|--|------|-----------------|-------------------|
|  | 48V  | A               | 12                |
|  | 60V  | A               | 12                |
|  | 110V | A               | 4                 |
|  | 220V | A               | 0.6               |
|  | 440V | A               | 0.25              |
| <hr/>                                  |      |                 |                   |
| DC23A (poles in series)                | 24V  | A               | 10 (1)            |
|  | 48V  | A               | 10 (2)            |
|  | 60V  | A               | 10 (3)            |
|  | 110V | A               | 5 (3)             |
|  | 220V | A               | 5 (4)             |
| <hr/>                                  |      |                 |                   |
| DC13                                   | 24V  | A               | 12                |
|  | 48V  | A               | 10                |
|  | 60V  | A               | 8                 |
|  | 110V | A               | 1                 |
|  | 220V | A               | 0.4               |
|  | 440V | A               | 0.15              |
| <hr/>                                  |      |                 |                   |
| Power dissipation                      |      | W               | 0.8               |
| <b>Mechanical features</b>             |      |                 |                   |
| Terminals screw                        |      |                 | M3                |
| Tightening torque for terminals max    |      | Nm              | 0.5               |
| <hr/>                                  |      |                 |                   |
| Conductor size                         |      |                 |                   |
| AWG - Rigid cable                      |      |                 |                   |
|  | min  | AWG             | 20                |
|  | Max  | AWG             | 12                |
| <hr/>                                  |      |                 |                   |
| AWG - Flexible cable                   |      |                 |                   |
|  | min  | AWG             | 20                |
|  | Max  | AWG             | 14                |
| <hr/>                                  |      |                 |                   |
| Conductor size (IEC) - Flexible cable  |      |                 |                   |
|  | min  | mm <sup>2</sup> | 0.5               |
|  | Max  | mm <sup>2</sup> | 2.5               |
| <hr/>                                  |      |                 |                   |
| Conductor size (IEC) - Rigid cable     |      |                 |                   |
|  | min  | mm <sup>2</sup> | 0.5               |
|  | Max  | mm <sup>2</sup> | 2.5               |
| <hr/>                                  |      |                 |                   |
| Mechanical life                        |      | cycles          | 3x10 <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                 |
| <hr/>                                  |      |                 |                   |
| for single-phase motor                 |      |                 |                   |
|  | 120V | HP              | 0.5               |
|  | 240V | HP              | 1                 |
| <hr/>                                  |      |                 |                   |
| <b>Ambient conditions</b>              |      |                 |                   |
| Temperature                            |      |                 |                   |
| Operating temperature                  |      |                 |                   |
|  | min  | °C              | -25               |
|  | max  | °C              | +55               |
| <hr/>                                  |      |                 |                   |
| Storage temperature                    |      |                 |                   |
|  | min  | °C              | -40               |
|  | max  | °C              | +70               |
| <hr/>                                  |      |                 |                   |
| <b>Resistance &amp; Protection</b>     |      |                 |                   |
| Frontal IP degree                      |      |                 | IP40              |

Terminals IP degree

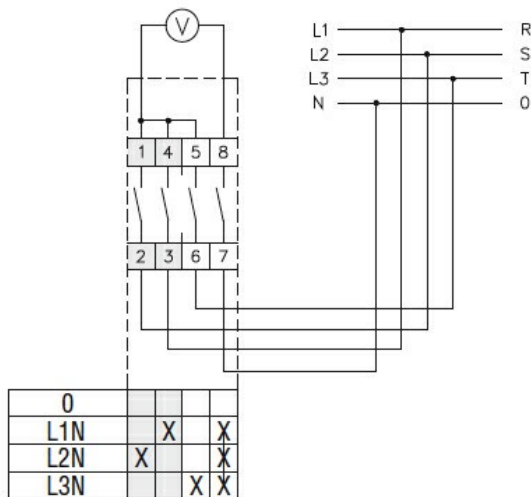
IP00

**Dimensions**



| Series | Dimensions |      | L    |      |       |       |
|--------|------------|------|------|------|-------|-------|
|        | □A         | E    | 1    | 2    | 3...8 |       |
| 7GN12  | 48         | 26.5 | 58   | 67.7 | 77.4  | 125.9 |
| 7GN20  | 48         | 26.5 | 58   | 67.7 | 77.4  | 125.9 |
| 7GN25  | 48         | 26.5 | 62.4 | 76   | 89.6  | 157.6 |

**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  
 UL

**ETIM classification**

ETIM 8.0

EC001029 -  
 Selector switch,  
 complete