

### General characteristics

|                   |                                                                                      |
|-------------------|--------------------------------------------------------------------------------------|
| Switching diagram | 108 - Multi-step<br>0-1-2-3 1 pole                                                   |
| N° of elements    | 2                                                                                    |
| Mounting form     | O48 - Modular<br>service cover for<br>35mm din rail<br>mounting with<br>black handle |

### Contact characteristics

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

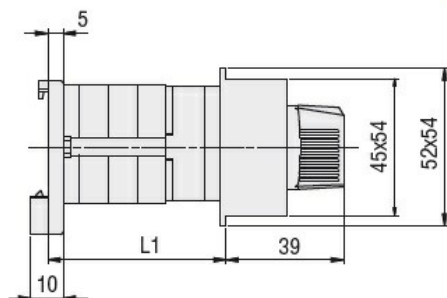
|                                        |      |                 |                   |
|----------------------------------------|------|-----------------|-------------------|
|                                        | 48V  | A               | 12                |
|                                        | 60V  | A               | 12                |
|                                        | 110V | A               | 4                 |
|                                        | 220V | A               | 0.6               |
|                                        | 440V | A               | 0.25              |
| DC23A (poles in series)                |      |                 |                   |
|                                        | 24V  | A               | 10 (1)            |
|                                        | 48V  | A               | 10 (2)            |
|                                        | 60V  | A               | 10 (3)            |
|                                        | 110V | A               | 5 (3)             |
|                                        | 220V | A               | 5 (4)             |
| DC13                                   |      |                 |                   |
|                                        | 24V  | A               | 12                |
|                                        | 48V  | A               | 10                |
|                                        | 60V  | A               | 8                 |
|                                        | 110V | A               | 1                 |
|                                        | 220V | A               | 0.4               |
|                                        | 440V | A               | 0.15              |
| Power dissipation                      |      | W               | 0.8               |
| Mechanical features                    |      |                 |                   |
| 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          | 3x10 <sup>6</sup> |
| UL technical data                      |      |                 |                   |
| Motor power for direct-on-line control |      |                 |                   |
| for three-phase motor                  |      |                 |                   |
|                                        | 120V | HP              | 1.5               |
|                                        | 240V | HP              | 3                 |
| for single-phase motor                 |      |                 |                   |
|                                        | 120V | HP              | 0.5               |
|                                        | 240V | HP              | 1                 |
| Ambient conditions                     |      |                 |                   |
| Temperature                            |      |                 |                   |
| Operating temperature                  |      |                 |                   |
|                                        | min  | °C              | -25               |
|                                        | max  | °C              | +55               |
| Storage temperature                    |      |                 |                   |
|                                        | min  | °C              | -40               |
|                                        | max  | °C              | +70               |
| Resistance & Protection                |      |                 |                   |
| Frontal IP degree                      |      |                 | IP40              |

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Terminals IP degree

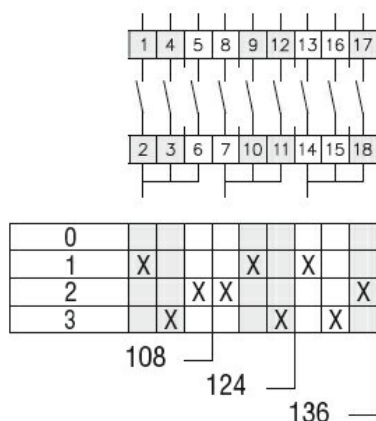
IP00

## 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

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EAC

UL

## ETIM classification

ETIM 8.0

EC001029 -  
Selector switch,  
complete