



### General characteristics

|                   |                                                                                                       |
|-------------------|-------------------------------------------------------------------------------------------------------|
| Switching diagram | 91 - ON/OFF<br>switch 2 poles                                                                         |
| N° of elements    | 1                                                                                                     |
| Mounting form     | U12 - Front<br>mounting without<br>front plate with<br>key operation for<br>hole diam. 22mm<br>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  | 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       |
| 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               |
| 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          | 5x10 <sup>6</sup> |
| UL technical data                      |  |          |                 |                   |
| 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                 |

## Ambient conditions

### Temperature

#### Operating temperature

|     |    |     |
|-----|----|-----|
| min | °C | -25 |
| max | °C | +55 |

#### Storage temperature

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

## Resistance & Protection

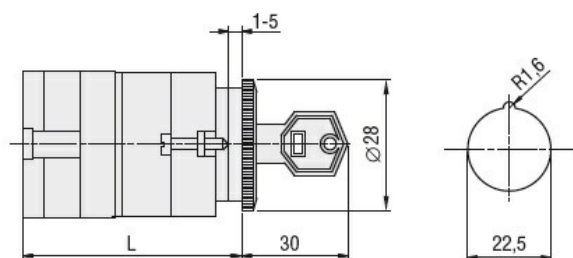
### Frontal IP degree

IP40

### Terminals IP degree

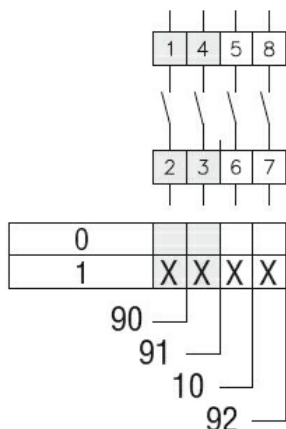
IP00

## Dimensions



| Series | L    |      |       |       |
|--------|------|------|-------|-------|
|        | 1    | 2    | 3...8 |       |
| 7GN12  | 47   | 56.7 | 66.4  | 114.9 |
| 7GN20  | 47   | 56.7 | 66.4  | 114.9 |
| 7GN25  | 51.4 | 65   | 78.6  | 146.6 |

## 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

EC001105 - Off-  
load switch