

|                                                        |  |  |                                                                          |     |     |
|--------------------------------------------------------|--|--|--------------------------------------------------------------------------|-----|-----|
| Product designation                                    |  |  | Rotary cam switches                                                      |     |     |
| Product type designation                               |  |  | 7GN12                                                                    |     |     |
| General characteristics                                |  |  |                                                                          |     |     |
| Switching diagram                                      |  |  | 05 - ON/OFF switch 1 pole                                                |     |     |
| N° of elements                                         |  |  | 1                                                                        |     |     |
| Mounting form                                          |  |  | O48 - Modular service cover for 35mm din rail mounting with black handle |     |     |
| Contact characteristics                                |  |  |                                                                          |     |     |
| Rated insulation voltage Ui                            |  |  | IEC/EN                                                                   | V   | 690 |
|                                                        |  |  | UL/CSA                                                                   | V   | 600 |
| Rated impulse withstand voltage Uimp                   |  |  | kV                                                                       | 6   |     |
| Conventional free air thermal current Ith              |  |  | 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 In (gG) |  |  | 10kA                                                                     | A   | 16  |
|                                                        |  |  | 15kA                                                                     | A   | 10  |
|                                                        |  |  | 25kA                                                                     | A   | 10  |
| Rated short time current Icw                           |  |  | 1s                                                                       | kA  | 200 |
| Conductivity                                           |  |  | 10/5 mA/V                                                                |     |     |
| Operational current Ie 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 |

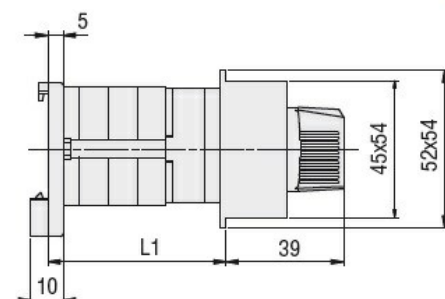
|                                        |      |                 |        |                   |
|----------------------------------------|------|-----------------|--------|-------------------|
|                                        |      | 380/440V        | kW     | 3                 |
| Rated operational current in DC        |      |                 |        |                   |
| DC21A                                  |      |                 |        |                   |
|                                        | 48V  | A               | 12     |                   |
|                                        | 60V  | A               | 12     |                   |
|                                        | 110V | A               | 4      |                   |
|                                        | 220V | A               | 0.6    |                   |
|                                        | 440V | A               | 0.25   |                   |
| 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

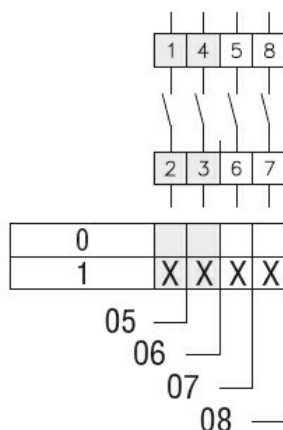
|                     |      |
|---------------------|------|
| Frontal IP degree   | IP40 |
| Terminals IP degree | IP00 |

## 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  
UL

## ETIM classification

ETIM 8.0

EC001029 -  
Selector switch,  
complete