

|                                                        |                                                                          |    |           |
|--------------------------------------------------------|--------------------------------------------------------------------------|----|-----------|
| Product designation                                    | Rotary cam switches                                                      |    |           |
| Product type designation                               | 7GN12                                                                    |    |           |
| General characteristics                                |                                                                          |    |           |
| Switching diagram                                      | 07 - ON/OFF switch 3 poles                                               |    |           |
| N° of elements                                         | 2                                                                        |    |           |
| 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       |

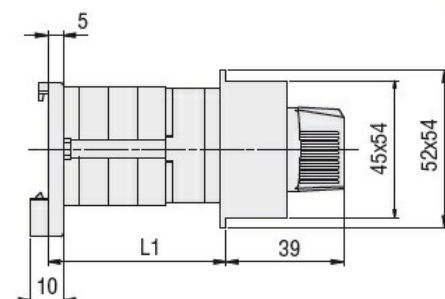
|                                        |     |                 |        |                   |
|----------------------------------------|-----|-----------------|--------|-------------------|
|                                        |     | 380/440V        | kW     | 3                 |
| Rated operational 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

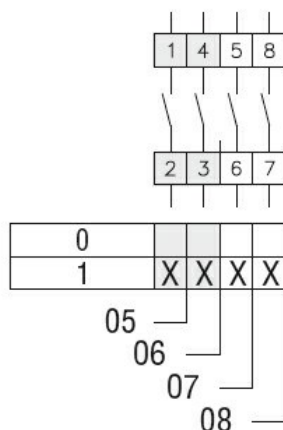
|                     |      |
|---------------------|------|
| Frontal IP degree   | IP40 |
| Terminals IP degree | IP00 |

## 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