

|  |  |  |   |   |
|--|--|--|---|---|
| Product designation                                    |  |  | Rotary cam switches   |   |
| Product type designation                               |  |  | 7GN20   |   |
| General characteristics                                |  |  |   |   |
| Switching diagram                                      |  |  | 110 - Multi-step<br>0-1-2-3-4-5 1 pole  |   |
| N° of elements   |  |  | 3   |   |
| Mounting form  |  |  | U47 - Snap on<br>fron mounting<br>with black handle<br>for hole diam.<br>22mm finxing |   |
| Contact characteristics                                |  |  |   |   |
| Rated insulation voltage Ui                            |  |  | IEC/EN<br>UL/CSA  | V<br>V<br>690<br>600                    |
| Rated impulse withstand voltage Uimp                   |  |  | kV  | 6                                       |
| Conventional free air thermal current Ith              |  |  | IEC/EN<br>UL/CSA  | A<br>A<br>20<br>20                      |
| Rated operational voltage                              |  |  | V   | 480                                     |
| Rated operational impulse voltage                      |  |  | kV  | 4                                       |
| Maximum fuse size for short-circuit protection In (gG) |  |  | 10kA<br>15kA<br>25kA  | A<br>A<br>A<br>20<br>16<br>16           |
| Rated short time current Icw                           |  |  | 1s  | kA<br>250                               |
| Conductivity   |  |  | 10/5 mA/V   |   |
| Operational current Ie IEC/EN                          |  |  |   |   |
| AC1/AC21A  |  |  | A   | 20                                      |
| AC15   |  |  | 110V<br>220/230V<br>380/400V<br>660/690V  | A<br>A<br>A<br>A<br>10<br>8<br>6<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<br>3<br>5.5<br>5.5       |
| Single-phase AC-3                                      |  |  | 110V<br>220/230V<br>380/440V  | kW<br>kW<br>kW<br>0.8<br>2.2<br>3       |
| Three-phase AC23A                                      |  |  | 220/230V<br>380/440V<br>500/690V  | kW<br>kW<br>kW<br>5<br>7.5<br>7.5       |
| Single-phase AC23A                                     |  |  | 110V  | kW<br>0.8                               |

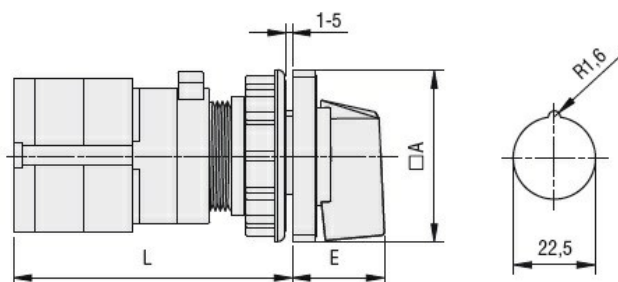
|  |  |          |                 |                   |
|--|--|----------|-----------------|-------------------|
|  |  | 220/230V | kW              | 2.5               |
|  |  | 380/440V | kW              | 3.7               |
| Rated operational current in DC        |  |          |                 |                   |
| 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

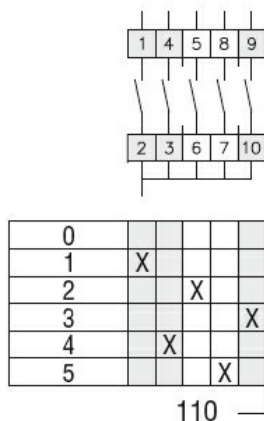
|                     |      |
|---------------------|------|
| Frontal IP degree   | IP40 |
| Terminals IP degree | IP00 |

## Dimensions



| Series | 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