

|   |          |    |     |   |
|---|----------|----|-----|---|
| Product designation                                       |          |    |     | Rotary cam switches   |
| Product type designation                                  |          |    |     | 7GN20   |
| <b>General characteristics</b>                            |          |    |     |   |
| Switching diagram   |          |    |     | 55 - Changeover switch without 0 2 poles  |
| N° of elements  |          |    |     | 2   |
| Mounting form   |          |    |     | U11 - Front mounting with black handle without front plate for hole diam. 22mm fixing |
| <b>Contact characteristics</b>                            |          |    |     |   |
| 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       | A  | 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 |   |

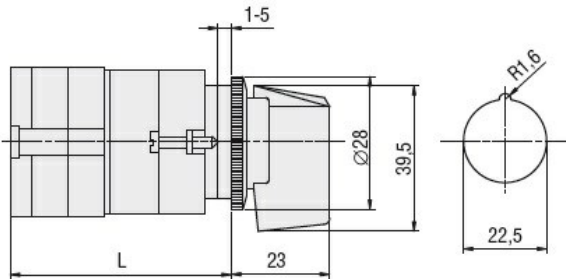
|   |          |                 |                   |
|---|----------|-----------------|-------------------|
|   | 220/230V | kW              | 2.5               |
|   | 380/440V | kW              | 3.7               |
| <b>Rated operational current in DC</b>        |          |                 |                   |
| DC21A   |          |                 |                   |
|   | 48V      | A               | 20                |
|   | 60V      | A               | 20                |
|   | 110V     | A               | 4                 |
|   | 220V     | A               | 0.6               |
|   | 440V     | A               | 0.25              |
| <b>DC23A (poles in series)</b>                |          |                 |                   |
|   | 24V      | A               | 20 (1)            |
|   | 48V      | A               | 20 (2)            |
|   | 60V      | A               | 20 (3)            |
|   | 110V     | A               | 10 (3)            |
|   | 220V     | A               | 8 (4)             |
| <b>DC13</b>                                   |          |                 |                   |
|   | 24V      | A               | 20                |
|   | 48V      | A               | 16                |
|   | 60V      | A               | 12                |
|   | 110V     | A               | 1                 |
|   | 220V     | A               | 0.4               |
|   | 440V     | A               | 0.15              |
| <b>Power dissipation</b>                      |          | W               | 0.8               |
| <b>Mechanical features</b>                    |          |                 |                   |
| <b>Terminals screw</b>                        |          |                 | M3                |
| <b>Tightening torque for terminals max</b>    |          | Nm              | 0.5               |
| <b>Conductor size</b>                         |          |                 |                   |
| 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               |
| <b>Mechanical life</b>                        |          | cycles          | 5x10 <sup>6</sup> |
| <b>UL technical data</b>                      |          |                 |                   |
| <b>Motor power for direct-on-line control</b> |          |                 |                   |
| 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                 |
| <b>Ambient conditions</b>                     |          |                 |                   |
| <b>Temperature</b>                            |          |                 |                   |
| Operating temperature                         |          |                 |                   |
|   | min      | °C              | -25               |

|                     |     |    |     |
|---------------------|-----|----|-----|
| Storage temperature | max | °C | +55 |
|                     | min | °C | -40 |
|                     | max | °C | +70 |

**Resistance & Protection**

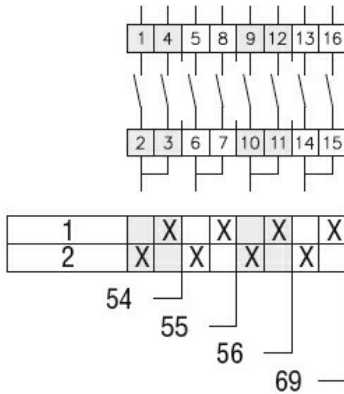
|                     |      |
|---------------------|------|
| Frontal IP degree   | IP40 |
| Terminals IP degree | IP00 |

**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

EC001029 -  
Selector switch,  
complete