



|   |   |     |           |
|---|---|-----|-----------|
| Product designation                                       | Rotary cam switches   |     |           |
| Product type designation                                  | 7GN20   |     |           |
| <b>General characteristics</b>                            |   |     |           |
| Switching diagram   | 91 - ON/OFF switch 2 poles  |     |           |
| N° of elements  | 1   |     |           |
| Mounting form   | U47 - Snap on front mounting with black handle 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  | kA  | 250       |
|   |   |     | 10/5 mA/V |
| Conductivity  | 10/5 mA/V   |     |           |
| Operational current $I_e$ IEC/EN                          | AC1/AC21A   |     | A 20      |
|   | AC15  |     |           |
| Rated operational power in AC                             | 110V  | A   | 10        |
|   | 220/230V  | A   | 8         |
|   | 380/400V  | A   | 6         |
|   | 660/690V  | A   | 1.5       |
|   | Three-phase AC-3  |     |           |
| 220/230V  | kW  | 3   |           |
|   | kW  | 5.5 |           |
|   | 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               |
| <b>Mechanical features</b>             |          |                 |                   |
| 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> |
| <b>UL technical data</b>               |          |                 |                   |
| 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**

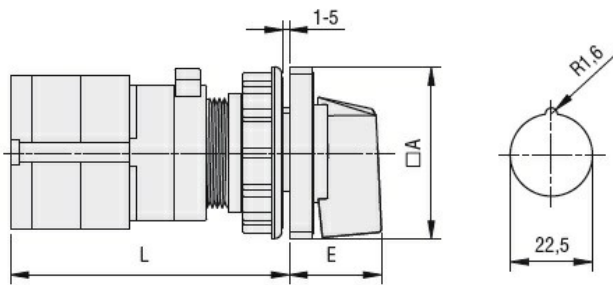
Frontal IP degree

IP40

Terminals IP degree

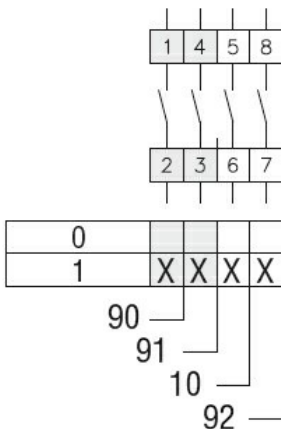
IP00

**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

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UL

ETIM classification

ETIM 8.0

EC001029 -  
Selector switch,  
complete