

|   |                   |     |     |  |  |
|---|-------------------|-----|-----|--|--|
| Product designation                                       |                   |     |     | Rotary cam switches  |  |
| Product type designation                                  |                   |     |     | 7GN25  |  |
| <b>General characteristics</b>                            |                   |     |     |  |  |
| Switching diagram   |                   |     |     | 85 - Multi-step 1-2-3-4-6 1 pole   |  |
| N° of elements  |                   |     |     | 3  |  |
| Mounting form   |                   |     |     | O48 - Modular service cover for 35mm din rail mounting with black handle |  |
| <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   | 25  |  |  |
|   | UL/CSA            | A   | 30  |  |  |
| Rated operational voltage                                 |                   | V   | 480 |  |  |
| Rated operational impulse voltage                         |                   | kV  | 4   |  |  |
| Maximum fuse size for short-circuit protection $I_n$ (gG) | 10kA              | A   | 25  |  |  |
|   | 15kA              | A   | 25  |  |  |
|   | 25kA              | A   | 25  |  |  |
| Rated short time current $I_{cw}$                         |                   |     |     |  |  |
|   |                   | 1s  | A   | 400  |  |
| Conductivity  |                   |     |     | 10/5 mA/V  |  |
| Operational current $I_e$ IEC/EN                          | AC1/AC21A         |     |     |  |  |
|   |                   |     | A   | 25   |  |
| AC15  | 110V              | A   | 16  |  |  |
|   | 220/230V          | A   | 12  |  |  |
|   | 380/400V          | A   | 8   |  |  |
|   | 660/690V          | A   | 2   |  |  |
|   |                   |     |     |  |  |
| Rated operational power in AC                             | Three-phase AC-3  |     |     |  |  |
|   | 220/230V          | kW  | 5.5 |  |  |
|   | 380/440V          | kW  | 7.5 |  |  |
|   | 500/690V          | kW  | 7.5 |  |  |
|   |                   |     |     |  |  |
|   | Single-phase AC-3 |     |     |  |  |
|   | 110V              | kW  | 1.5 |  |  |
|   | 220/230V          | kW  | 3   |  |  |
|   | 380/440V          | kW  | 5.5 |  |  |
|   |                   |     |     |  |  |
|   | Three-phase AC23A |     |     |  |  |
|   | 220/230V          | kW  | 6.5 |  |  |
| 380/440V  | kW                | 11  |     |  |  |
| 500/690V  | kW                | 11  |     |  |  |
|   |                   |     |     |  |  |
| Single-phase AC23A  |                   |     |     |  |  |
| 110V  | kW                | 1.5 |     |  |  |
| 220/230V  | kW                | 3.7 |     |  |  |

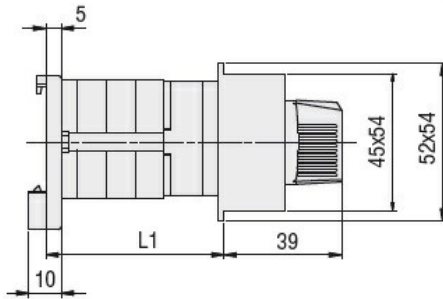
|  |      | 380/440V        | kW     | 5.5               |
|--|------|-----------------|--------|-------------------|
| Rated operational current in DC        |      |                 |        |                   |
| DC21A                                  |      |                 |        |                   |
|  |      | 48V             | A      | 25                |
|  |      | 60V             | A      | 25                |
|  |      | 110V            | A      | 4                 |
|  |      | 220V            | A      | 0.7               |
| DC23A (poles in series)                |      |                 |        |                   |
|  |      | 24V             | A      | 25 (1)            |
|  |      | 48V             | A      | 25 (2)            |
|  |      | 60V             | A      | 25 (3)            |
|  |      | 110V            | A      | 12 (3)            |
|  |      | 220V            | A      | 10 (4)            |
| DC13                                   |      |                 |        |                   |
|  |      | 24V             | A      | 25                |
|  |      | 48V             | A      | 20                |
|  |      | 60V             | A      | 16                |
|  |      | 110V            | A      | 1.5               |
|  |      | 220V            | A      | 0.4               |
| Power dissipation                      |      |                 | W      | 1.1               |
| <b>Mechanical features</b>             |      |                 |        |                   |
| Terminals screw                        |      |                 |        | M3.5              |
| Tightening torque for terminals max    |      |                 | Nm     | 0.8               |
| Conductor size                         |      |                 |        |                   |
| AWG - Rigid cable                      |      |                 |        |                   |
|  | min  | AWG             | 20     |                   |
|  | Max  | AWG             | 10     |                   |
| AWG - Flexible cable                   |      |                 |        |                   |
|  | min  | AWG             | 20     |                   |
|  | Max  | AWG             | 12     |                   |
| Conductor size (IEC) - Flexible cable  |      |                 |        |                   |
|  | min  | mm <sup>2</sup> | 0.5    |                   |
|  | Max  | mm <sup>2</sup> | 4      |                   |
| Conductor size (IEC) - Rigid cable     |      |                 |        |                   |
|  | min  | mm <sup>2</sup> | 0.5    |                   |
|  | Max  | mm <sup>2</sup> | 4      |                   |
| 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              | 3      |                   |
|  | 240V | HP              | 5      |                   |
|  | 480V | HP              | 10     |                   |
|  | 600V | HP              | 15     |                   |
| for single-phase motor                 |      |                 |        |                   |
|  | 120V | HP              | 1.5    |                   |
|  | 240V | HP              | 3      |                   |
| <b>Ambient conditions</b>              |      |                 |        |                   |
| Temperature                            |      |                 |        |                   |
| Operating temperature                  |      |                 |        |                   |
|  | min  | °C              | -25    |                   |
|  | max  | °C              | +55    |                   |
| Storage temperature                    |      |                 |        |                   |
|  | min  | °C              | -40    |                   |

max °C +70

**Resistance & Protection**

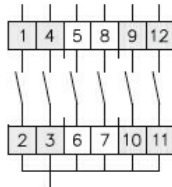
|                     |      |
|---------------------|------|
| Frontal IP degree   | IP40 |
| Terminals IP degree | IP00 |

**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**



|   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1 | X |   |   |   |   |
| 2 |   |   | X |   |   |
| 3 |   |   |   |   | X |
| 4 |   | X |   |   |   |
| 5 |   |   |   | X |   |
| 6 |   |   |   |   | X |

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**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