

|                                                        |  |  |                                     |     |     |
|--------------------------------------------------------|--|--|-------------------------------------|-----|-----|
| Product designation                                    |  |  | Rotary cam switches                 |     |     |
| Product type designation                               |  |  | 7GN25                               |     |     |
| General characteristics                                |  |  |                                     |     |     |
| Switching diagram                                      |  |  | 94 - Multi-step 1-2-3-4 3 poles     |     |     |
| N° of elements                                         |  |  | 6                                   |     |     |
| Mounting form                                          |  |  | O - Rear 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   | 25  |
|                                                        |  |  | UL/CSA                              | A   | 30  |
| Rated operational voltage                              |  |  | V                                   | 480 |     |
| Rated operational impulse voltage                      |  |  | kV                                  | 4   |     |
| Maximum fuse size for short-circuit protection In (gG) |  |  | 10kA                                | A   | 25  |
|                                                        |  |  | 15kA                                | A   | 25  |
|                                                        |  |  | 25kA                                | A   | 25  |
| Rated short time current Icw                           |  |  | 1s                                  | kA  | 400 |
| Conductivity                                           |  |  | 10/5 mA/V                           |     |     |
| Operational current Ie 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

#### Mechanical features

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>

#### UL technical data

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   |

#### Ambient conditions

Temperature

Operating temperature

|     |    |     |
|-----|----|-----|
| min | °C | -25 |
| max | °C | +55 |

Storage temperature

|     |    |     |
|-----|----|-----|
| min | °C | -40 |
| max | °C | +70 |

#### Resistance & Protection

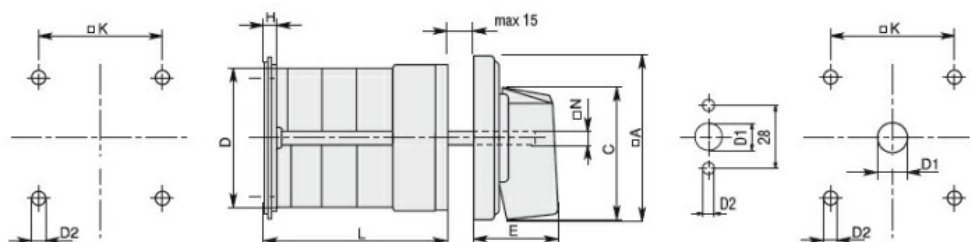
Frontal IP degree

IP40

Terminals IP degree

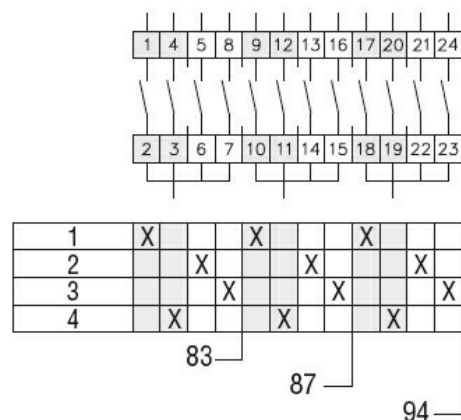
IP00

## Dimensions



| Series | Dimensions  |      |                 |                  |      |     |             |             | L Number of elements |       |      |       |       |       |       |       |       |       |       |       |
|--------|-------------|------|-----------------|------------------|------|-----|-------------|-------------|----------------------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|        | $\square A$ | C    | $\varnothing D$ | $\varnothing D2$ | E    | H   | $\square K$ | $\square N$ | 1                    | 2     | 3    | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    |
| 7GN12  | 48          | 39.5 | 39              | 5                | 26.5 | 5   | 36          | 6           | 38.1                 | 47.8  | 57.5 | 67.2  | 76.9  | 86.6  | 96.3  | 106   | 115.7 | 125.4 | 135.1 | 144.8 |
| 7GN20  | 48          | 39.5 | 39              | 5                | 26.5 | 5   | 36          | 6           | 38.1                 | 47.8  | 57.5 | 67.2  | 76.9  | 86.6  | 96.3  | 106   | 115.7 | 125.4 | 135.1 | 144.8 |
| 7GN25  | 48          | 39.5 | 43              | 5                | 26.5 | 5   | 36          | 6           | 42.5                 | 56.1  | 69.7 | 83.3  | 96.9  | 110.5 | 124.1 | 137.7 | 151.3 | 164.9 | 178.5 | 192.1 |
| 7GN32  | 65          | 53   | 58              | 5                | 34.5 | 5.5 | 48          | 7           | 48.5                 | 63.6  | 78.7 | 93.8  | 108.9 | 124   | 139.1 | 154.2 | 169.3 | 184.4 | 199.5 | 214.6 |
| 7GN40  | 65          | 53   | 58              | 5                | 34.5 | 5.5 | 48          | 7           | 48.5                 | 63.6  | 78.7 | 93.8  | 108.9 | 124   | 139.1 | 154.2 | 169.3 | 184.4 | 199.5 | 214.6 |
| 7GN63  | 65          | 53   | 62              | 6                | 34.5 | 7.5 | 68          | 7           | 53.3                 | 71.4  | 89.5 | 107.6 | 125.7 | 143.8 | 161.9 | 180   | 198.1 | 216.2 | 234.3 | 252.4 |
| 7GN125 | 90          | 70.5 | 86              | 6                | 41.4 | 7.5 | 68          | 9           | 74.8                 | 103.9 | 133  | 162.1 | 191.2 | 220.3 | 249.4 | 278.5 | 307.6 | 336.7 | 365.8 | 394.9 |

## 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