

|                                                        |                                        |    |      |
|--------------------------------------------------------|----------------------------------------|----|------|
| Product designation                                    | Rotary cam switches                    |    |      |
| Product type designation                               | 7GN125                                 |    |      |
| General characteristics                                |                                        |    |      |
| Switching diagram                                      | 110 - Multi-step<br>0-1-2-3-4-5 1 pole |    |      |
| N° of elements                                         | 3                                      |    |      |
| Mounting form                                          | U - Front 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  | 125  |
|                                                        | UL/CSA                                 | A  | 130  |
| Rated operational voltage                              |                                        | V  | 690  |
| Rated operational impulse voltage                      |                                        | kV | 6    |
| Maximum fuse size for short-circuit protection In (gG) | 10kA                                   | A  | 125  |
|                                                        | 15kA                                   | A  | 100  |
|                                                        | 25kA                                   | A  | 100  |
|                                                        | 50kA                                   | A  | 100  |
|                                                        | 63kA                                   | A  | 100  |
| Rated short time current Icw                           | 1s                                     | kA | 2100 |
| Conductivity                                           | 10/5 mA/V                              |    |      |
| Operational current Ie IEC/EN                          |                                        |    |      |
| AC1/AC21A                                              |                                        | A  | 125  |
| AC15                                                   | 110V                                   | A  | 40   |
|                                                        | 220/230V                               | A  | 28   |
|                                                        | 380/400V                               | A  | 15   |
|                                                        | 660/690V                               | A  | 5    |
| Rated operational power in AC                          |                                        |    |      |
| Three-phase AC-3                                       | 220/230V                               | kW | 18.5 |
|                                                        | 380/440V                               | kW | 37   |
|                                                        | 500/690V                               | kW | 33   |
| Single-phase AC-3                                      | 110V                                   | kW | 5    |
|                                                        | 220/230V                               | kW | 11   |
|                                                        | 380/440V                               | kW | 15   |
| Three-phase AC23A                                      | 220/230V                               | kW | 30   |
|                                                        | 380/440V                               | kW | 45   |
|                                                        | 500/690V                               | kW | 37   |
| Single-phase AC23A                                     | 110V                                   | kW | 5    |

|                                        |  |          |                 |                   |
|----------------------------------------|--|----------|-----------------|-------------------|
|                                        |  | 220/230V | kW              | 11                |
|                                        |  | 380/440V | kW              | 15                |
| Rated operational current in DC        |  |          |                 |                   |
| DC21A                                  |  |          |                 |                   |
|                                        |  | 48V      | A               | 125               |
|                                        |  | 60V      | A               | 80                |
|                                        |  | 110V     | A               | 10                |
|                                        |  | 220V     | A               | 1.2               |
| DC23A (poles in series)                |  |          |                 |                   |
|                                        |  | 24V      | A               | 125 (1)           |
|                                        |  | 48V      | A               | 125 (2)           |
|                                        |  | 60V      | A               | 125 (3)           |
|                                        |  | 110V     | A               | 50 (3)            |
|                                        |  | 220V     | A               | 20 (4)            |
| DC13                                   |  |          |                 |                   |
|                                        |  | 24V      | A               | 125               |
|                                        |  | 48V      | A               | 100               |
|                                        |  | 60V      | A               | 50                |
|                                        |  | 110V     | A               | 4                 |
| Power dissipation                      |  |          | W               | 6.3               |
| Mechanical features                    |  |          |                 |                   |
| Terminals screw                        |  |          |                 | M2X5              |
| Tightening torque for terminals max    |  |          | Nm              | 2                 |
| Conductor size                         |  |          |                 |                   |
| AWG - Rigid cable                      |  |          |                 |                   |
|                                        |  | min      | AWG             | 14                |
|                                        |  | Max      | AWG             | 1/0               |
| AWG - Flexible cable                   |  |          |                 |                   |
|                                        |  | min      | AWG             | 14                |
|                                        |  | Max      | AWG             | 1/0               |
| Conductor size (IEC) - Flexible cable  |  |          |                 |                   |
|                                        |  | min      | mm <sup>2</sup> | 2.5               |
|                                        |  | Max      | mm <sup>2</sup> | 50                |
| Conductor size (IEC) - Rigid cable     |  |          |                 |                   |
|                                        |  | min      | mm <sup>2</sup> | 2.5               |
|                                        |  | Max      | mm <sup>2</sup> | 50                |
| Mechanical life                        |  |          | cycles          | 1X10 <sup>6</sup> |
| UL technical data                      |  |          |                 |                   |
| Motor power for direct-on-line control |  |          |                 |                   |
| for three-phase motor                  |  |          |                 |                   |
|                                        |  | 120V     | HP              | 15                |
|                                        |  | 240V     | HP              | 25                |
|                                        |  | 480V     | HP              | 50                |
|                                        |  | 600V     | HP              | 40                |
| for single-phase motor                 |  |          |                 |                   |
|                                        |  | 120V     | HP              | 5                 |
|                                        |  | 240V     | HP              | 15                |
| Ambient conditions                     |  |          |                 |                   |
| Temperature                            |  |          |                 |                   |
| Operating temperature                  |  |          |                 |                   |
|                                        |  | min      | °C              | -25               |
|                                        |  | max      | °C              | +55               |
| Storage temperature                    |  |          |                 |                   |
|                                        |  | min      | °C              | -40               |

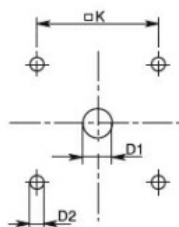
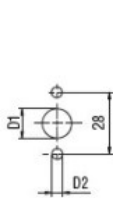
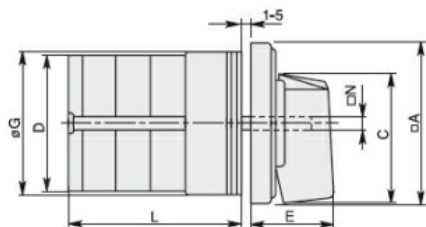
max °C +70

## Resistance & Protection

Frontal IP degree IP40

Terminals IP degree IP00

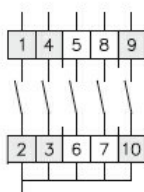
## Dimensions



Standard drillings for 7GN125.  
Drillings on request for 4 screws fixing  
(4V version).

| Series | Dimensions |      |    |     |     |      |      |    |    | L    Number of elements |      |       |       |       |       |       |       |       |       |       |       |
|--------|------------|------|----|-----|-----|------|------|----|----|-------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|        | □A         | C    | ØD | ØD1 | ØD2 | E    | ØG   | □K | □N | 1                       | 2    | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    |
| 7GN12  | 48         | 39.5 | 39 | 12  | 5   | 26.5 | 38   | 36 | 6  | 36.1                    | 45.8 | 55.5  | 65.2  | 74.9  | 84.6  | 94.3  | 104   | 113.7 | 123.4 | 133.1 | 142.8 |
| 7GN20  | 48         | 39.5 | 39 | 12  | 5   | 26.5 | 38   | 36 | 6  | 36.1                    | 45.8 | 55.5  | 65.2  | 74.9  | 84.6  | 94.3  | 104   | 113.7 | 123.4 | 133.1 | 142.8 |
| 7GN25  | 48         | 39.5 | 43 | 12  | 5   | 26.5 | 38   | 36 | 6  | 40.5                    | 54.1 | 67.7  | 81.3  | 94.9  | 108.5 | 122.1 | 135.7 | 147.3 | 162.9 | 176.5 | 190.1 |
| 7GN32  | 65         | 53   | 58 | 14  | 5   | 34.5 | 58.5 | 48 | 7  | 46.5                    | 61.6 | 76.7  | 91.8  | 106.9 | 122   | 137.1 | 152.2 | 167.3 | 182.4 | 197.5 | 212.6 |
| 7GN40  | 65         | 53   | 58 | 14  | 5   | 34.5 | 58.5 | 48 | 7  | 46.5                    | 61.6 | 76.7  | 91.8  | 106.9 | 122   | 137.1 | 152.2 | 167.3 | 182.4 | 197.5 | 212.6 |
| 7GN63  | 65         | 53   | 62 | 14  | 5   | 34.5 | 58.5 | 48 | 7  | 50.3                    | 68.4 | 86.5  | 104.6 | 122.7 | 140.8 | 158.9 | 177   | 195.1 | 213.2 | 231.3 | 249.4 |
| 7GN125 | 90         | 70.5 | 86 | 16  | 6   | 41.5 | 84   | 68 | 9  | 67.3                    | 96.4 | 125.5 | 154.6 | 183.7 | 220.3 | 249.4 | 278.5 | 307.6 | 336.7 | 365.8 | 394.9 |

## Wiring diagrams



|   |   |   |   |   |  |
|---|---|---|---|---|--|
| 0 |   |   |   |   |  |
| 1 | X |   |   |   |  |
| 2 |   |   | X |   |  |
| 3 |   |   |   | X |  |
| 4 |   | X |   |   |  |
| 5 |   |   | 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

EAC

UL

## ETIM classification

ETIM 8.0

EC001029 -  
Selector switch,  
complete