

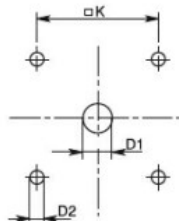
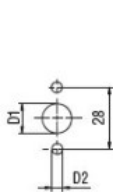
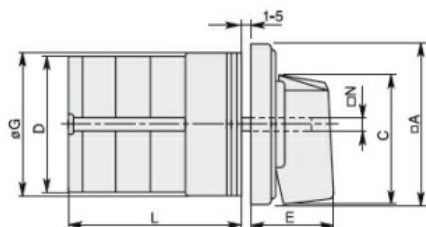
|                                                        |  |  |                                      |    |      |
|--------------------------------------------------------|--|--|--------------------------------------|----|------|
| Product designation                                    |  |  | Rotary cam switches                  |    |      |
| Product type designation                               |  |  | 7GN40                                |    |      |
| General characteristics                                |  |  |                                      |    |      |
| Switching diagram                                      |  |  | 97 - Ammeter switch                  |    |      |
| N° of elements                                         |  |  | 5                                    |    |      |
| 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  | 40   |
|                                                        |  |  | UL/CSA                               | A  | 50   |
| Rated operational voltage                              |  |  |                                      | V  | 480  |
| Rated operational impulse voltage                      |  |  |                                      | kV | 4    |
| Maximum fuse size for short-circuit protection In (gG) |  |  | 10kA                                 | A  | 40   |
|                                                        |  |  | 15kA                                 | A  | 40   |
|                                                        |  |  | 25kA                                 | A  | 40   |
|                                                        |  |  | 50kA                                 | A  | 40   |
|                                                        |  |  | 63kA                                 | A  | 40   |
| Rated short time current Icw                           |  |  | 1s                                   | kA | 1000 |
| Conductivity                                           |  |  | 10/5 mA/V                            |    |      |
| Operational current Ie IEC/EN                          |  |  |                                      |    |      |
| AC1/AC21A                                              |  |  |                                      | A  | 40   |
| AC15                                                   |  |  | 110V                                 | A  | 25   |
|                                                        |  |  | 220/230V                             | A  | 22   |
|                                                        |  |  | 380/400V                             | A  | 12   |
|                                                        |  |  | 660/690V                             | A  | 2    |
| Rated operational power in AC                          |  |  |                                      |    |      |
| Three-phase AC-3                                       |  |  | 220/230V                             | kW | 8    |
|                                                        |  |  | 380/440V                             | kW | 15   |
|                                                        |  |  | 500/690V                             | kW | 15   |
| Single-phase AC-3                                      |  |  | 110V                                 | kW | 3    |
|                                                        |  |  | 220/230V                             | kW | 6.5  |
|                                                        |  |  | 380/440V                             | kW | 8    |
| Three-phase AC23A                                      |  |  | 220/230V                             | kW | 8    |
|                                                        |  |  | 380/440V                             | kW | 18.5 |
|                                                        |  |  | 500/690V                             | kW | 22   |
| Single-phase AC23A                                     |  |  | 110V                                 | kW | 3    |
|                                                        |  |  | 220/230V                             | kW | 6    |

|                                        |  |          |                 |                   |
|----------------------------------------|--|----------|-----------------|-------------------|
|                                        |  | 380/440V | kW              | 11                |
| Rated operational current in DC        |  |          |                 |                   |
| DC21A                                  |  |          |                 |                   |
|                                        |  | 48V      | A               | 40                |
|                                        |  | 60V      | A               | 40                |
|                                        |  | 110V     | A               | 6                 |
|                                        |  | 220V     | A               | 0.9               |
| DC23A (poles in series)                |  |          |                 |                   |
|                                        |  | 24V      | A               | 40 (1)            |
|                                        |  | 48V      | A               | 40 (2)            |
|                                        |  | 60V      | A               | 40 (3)            |
|                                        |  | 110V     | A               | 20 (3)            |
|                                        |  | 220V     | A               | 12 (4)            |
| DC13                                   |  |          |                 |                   |
|                                        |  | 24V      | A               | 40                |
|                                        |  | 48V      | A               | 32                |
|                                        |  | 60V      | A               | 16                |
|                                        |  | 110V     | A               | 3                 |
| Power dissipation                      |  |          | W               | 2.0               |
| Mechanical features                    |  |          |                 |                   |
| Terminals screw                        |  |          |                 | M4                |
| Tightening torque for terminals max    |  |          | Nm              | 1.2               |
| Conductor size                         |  |          |                 |                   |
| AWG - Rigid cable                      |  |          |                 |                   |
|                                        |  | min      | AWG             | 16                |
|                                        |  | Max      | AWG             | 8                 |
| AWG - Flexible cable                   |  |          |                 |                   |
|                                        |  | min      | AWG             | 16                |
|                                        |  | Max      | AWG             | 10                |
| Conductor size (IEC) - Flexible cable  |  |          |                 |                   |
|                                        |  | min      | mm <sup>2</sup> | 1.5               |
|                                        |  | Max      | mm <sup>2</sup> | 6                 |
| Conductor size (IEC) - Rigid cable     |  |          |                 |                   |
|                                        |  | min      | mm <sup>2</sup> | 1.5               |
|                                        |  | Max      | mm <sup>2</sup> | 10                |
| Mechanical life                        |  |          | cycles          | 5x10 <sup>6</sup> |
| UL technical data                      |  |          |                 |                   |
| Motor power for direct-on-line control |  |          |                 |                   |
| for three-phase motor                  |  |          |                 |                   |
|                                        |  | 120V     | HP              | 5                 |
|                                        |  | 240V     | HP              | 10                |
|                                        |  | 480V     | HP              | 20                |
|                                        |  | 600V     | HP              | 20                |
| for single-phase motor                 |  |          |                 |                   |
|                                        |  | 120V     | HP              | 2                 |
|                                        |  | 240V     | HP              | 5                 |
| 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 |

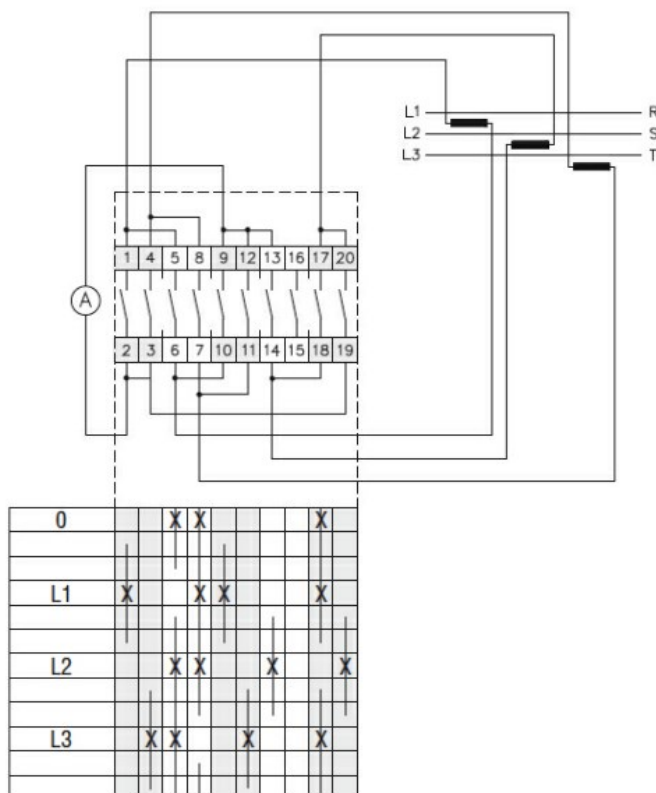
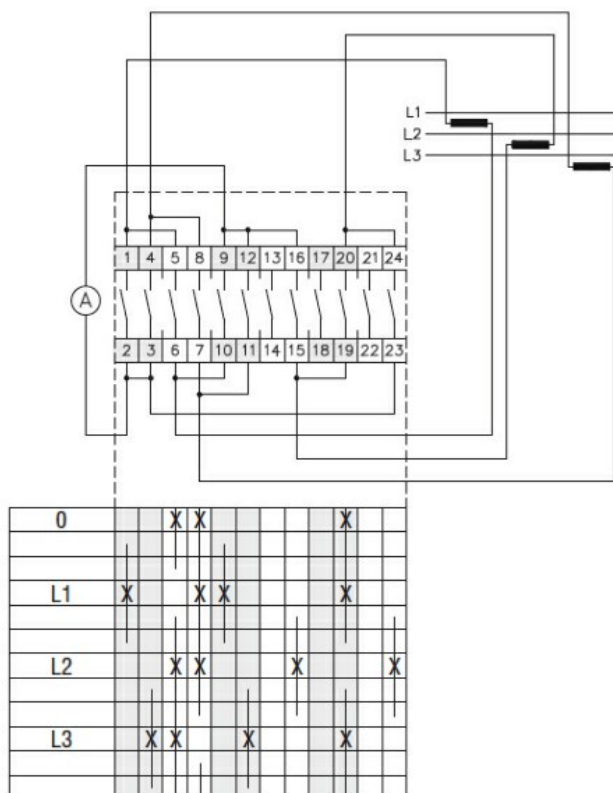
## Dimensions



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



## 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

|              |             |
|--------------|-------------|
| Certificates | UL60947-4-1 |
|              | cCSAus      |
|              | EAC         |
|              | UL          |

ETIM classification

|          |                                            |
|----------|--------------------------------------------|
| ETIM 8.0 | EC001029 -<br>Selector switch,<br>complete |
|----------|--------------------------------------------|