



|   |                                      |     |           |
|---|--------------------------------------|-----|-----------|
| Product designation                                       | Rotary cam switches                  |     |           |
| Product type designation                                  | 7GN32                                |     |           |
| <b>General characteristics</b>                            |                                      |     |           |
| Switching diagram   | 12 - Star-delta motor starter switch |     |           |
| N° of elements  | 4                                    |     |           |
| Mounting form   | U - Front 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   | 32        |
|   | UL/CSA                               | A   | 40        |
| Rated operational voltage                                 |                                      | V   | 480       |
| Rated operational impulse voltage                         |                                      | kV  | 4         |
| Maximum fuse size for short-circuit protection $I_n$ (gG) | 10kA                                 | A   | 32        |
|   | 15kA                                 | A   | 32        |
|   | 25kA                                 | A   | 32        |
|   | 50kA                                 | A   | 32        |
| Rated short time current $I_{cw}$                         |                                      | 1 s | A         |
|   |                                      |     | 800       |
| Conductivity  |                                      |     | 10/5 mA/V |
| Operational current $I_e$ IEC/EN                          | AC1/AC21A                            |     | A         |
|   |                                      |     | 32        |
| AC15  | 110V                                 | A   | 25        |
|   | 220/230V                             | A   | 20        |
|   | 380/400V                             | A   | 10        |
|   | 660/690V                             | A   | 2         |
|   |                                      |     |           |
| Rated operational power in AC                             | Three-phase AC-3                     |     |           |
|   | 220/230V                             | kW  | 7.5       |
|   | 380/440V                             | kW  | 11        |
|   | 500/690V                             | kW  | 11        |
| Single-phase AC-3   | 110V                                 | kW  | 2.2       |
|   | 220/230V                             | kW  | 4         |
|   | 380/440V                             | kW  | 6.5       |
|   |                                      |     |           |

|  |          |                 |                   |
|--|----------|-----------------|-------------------|
| Three-phase AC23A                      |          |                 |                   |
|  | 220/230V | kW              | 8                 |
|  | 380/440V | kW              | 15                |
|  | 500/690V | kW              | 18.5              |
| Single-phase AC23A                     |          |                 |                   |
|  | 110V     | kW              | 2.2               |
|  | 220/230V | kW              | 4                 |
|  | 380/440V | kW              | 7.5               |
| Rated operational current in DC        |          |                 |                   |
| DC21A                                  |          |                 |                   |
|  | 48V      | A               | 32                |
|  | 60V      | A               | 32                |
|  | 110V     | A               | 6                 |
|  | 220V     | A               | 0.9               |
| DC23A (poles in series)                |          |                 |                   |
|  | 24V      | A               | 32 (1)            |
|  | 48V      | A               | 32 (2)            |
|  | 60V      | A               | 32 (3)            |
|  | 110V     | A               | 15 (3)            |
|  | 220V     | A               | 12 (4)            |
| DC13                                   |          |                 |                   |
|  | 24V      | A               | 32                |
|  | 48V      | A               | 25                |
|  | 60V      | A               | 16                |
|  | 110V     | A               | 3                 |
|  | 220V     | A               | 0.5               |
| Power dissipation                      |          | W               | 1.5               |
| <b>Mechanical features</b>             |          |                 |                   |
| 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> | 4                 |
| Conductor size (IEC) - Rigid cable     |          |                 |                   |
|  | min      | mm <sup>2</sup> | 1.5               |
|  | Max      | mm <sup>2</sup> | 6                 |
| 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              | 5                 |
|  | 240V     | HP              | 10                |
|  | 480V     | HP              | 15                |
|  | 600V     | HP              | 15                |
| 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**

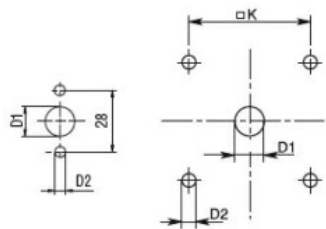
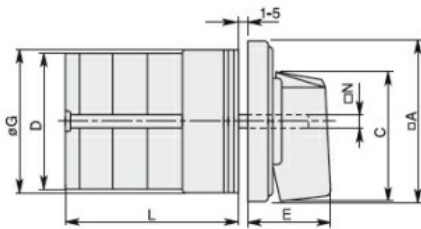
Frontal IP degree

IP40

Terminals IP degree

IP00

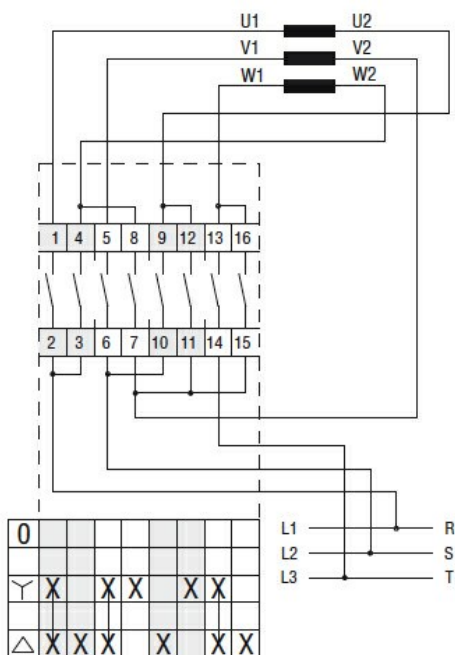
**Dimensions**



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

UL60947-4-1

Certificates

cCSAus

EAC

UL

ETIM classification

ETIM 8.0

EC001105 - Off-  
load switch