

|   |          |    |      |  |
|---|----------|----|------|--|
| Product designation                                       |          |    |      | Rotary cam switches  |
| Product type designation                                  |          |    |      | 7GN40  |
| <b>General characteristics</b>                            |          |    |      |  |
| Switching diagram   |          |    |      | 12 - Star-delta motor starter switch   |
| N° of elements  |          |    |      | 4  |
| Mounting form   |          |    |      | U65 - Front mounting with red/yellow handle padlockable in 0 and protection covers |
| <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  | 40   |  |
|   | UL/CSA   | A  | 50   |  |
| Rated operational voltage                                 |          | V  | 480  |  |
| Rated operational impulse voltage                         |          | kV | 4    |  |
| Maximum fuse size for short-circuit protection $I_n$ (gG) | 10kA     | A  | 40   |  |
|   | 15kA     | A  | 40   |  |
|   | 25kA     | A  | 40   |  |
|   | 50kA     | A  | 40   |  |
|   | 63kA     | A  | 40   |  |
| Rated short time current $I_{cw}$                         | 1s       | A  | 1000 |  |
| Conductivity  |          |    |      | 10/5 mA/V  |
| Operational current $I_e$ 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               |
| <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> | 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> |
| <b>UL technical data</b>               |          |                 |                   |
| 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                 |
| <b>Ambient conditions</b>              |          |                 |                   |
| Temperature                            |          |                 |                   |
| Operating temperature                  |          |                 |                   |
|  | min      | °C              | -25               |
|  | max      | °C              | +55               |

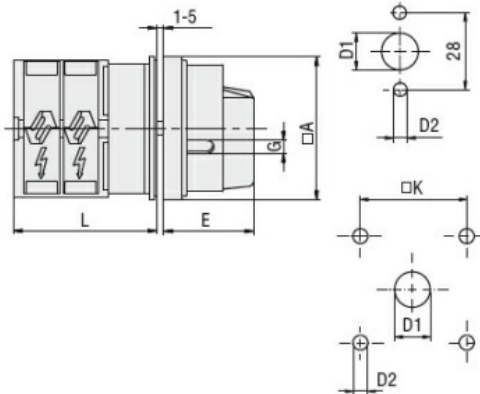
Storage temperature

min °C -40  
max °C +70

**Resistance & Protection**

Frontal IP degree IP40  
Terminals IP degree IP00

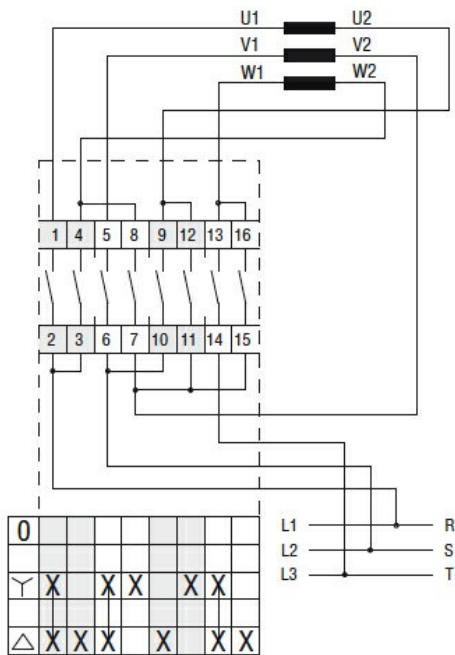
**Dimensions**



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

| Series | Dimensions |    |    |      |   |    | L    |      |        |       |
|--------|------------|----|----|------|---|----|------|------|--------|-------|
|        | □A         | D1 | D2 | E    | G | □K | 1    | 2    | 3...12 |       |
| 7GN12  | 65         | 12 | 5  | 34.2 | 5 | 36 | 36.1 | 45.8 | 55.5   | 142.8 |
| 7GN20  | 65         | 12 | 5  | 34.2 | 5 | 36 | 36.1 | 45.8 | 55.5   | 142.8 |
| 7GN25  | 65         | 12 | 5  | 34.2 | 5 | 36 | 40.5 | 54.1 | 67.7   | 190.1 |
| 7GN32  | 65         | 14 | 5  | 38   | 6 | 48 | 46.5 | 61.6 | 76.7   | 212.6 |
| 7GN40  | 65         | 14 | 5  | 38   | 6 | 48 | 46.5 | 61.6 | 76.7   | 212.6 |
| 7GN63  | 65         | 14 | 5  | 38   | 6 | 48 | 50.3 | 68.4 | 86.5   | 249.4 |
| 7GN125 | 90         | 16 | 6  | 49   | 7 | 68 | 67.3 | 96.4 | 125.5  | 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