

| | | | | |
|---|------------------|----|-----|---|
| Product designation | | | | Enclosed rotary cam switch |
| Product type designation | | | | 7GN12 |
| General characteristics | | | | |
| Switching diagram | | | | 82 - Multi-step 1-2-3 1 pole |
| N° of elements | | | | 2 |
| Mounting form | | | | P - Plastic enclosure with black handle |
| Contact characteristics | | | | |
| 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 | 16 | |
| | UL/CSA | A | 15 | |
| Rated operational voltage | | | V | 480 |
| Rated operational impulse voltage | | | kV | 4 |
| Maximum fuse size for short-circuit protection I_n (gG) | 10kA | A | 16 | |
| | 15kA | A | 10 | |
| | 25kA | A | 10 | |
| Rated short time current I_{cw} | 1s | kA | 200 | |
| | | | | 10/5 mA/V |
| Conductivity | | | | 10/5 mA/V |
| Operational current I_e IEC/EN | AC1/AC21A | | | A 16 |
| | AC15 | | | |
| Rated operational power in AC | Three-phase AC-3 | | | |
| | 220/230V | kW | 2.5 | |
| | 380/440V | kW | 4 | |
| | 500/690V | kW | 5.5 | |
| Single-phase AC-3 | 110V | kW | 0.8 | |
| | 220/230V | kW | 1.5 | |
| | 380/440V | kW | 2.2 | |
| Three-phase AC23A | 220/230V | kW | 3 | |
| | 380/440V | kW | 5.5 | |
| | 500/690V | kW | 7.5 | |
| Single-phase AC23A | 110V | kW | 0.8 | |
| | 220/230V | kW | 1.7 | |
| | 380/440V | kW | 3 | |
| Rated operational current in DC | | | | |

| | | | |
|-------------------------|------|---|--------|
| DC21A | 48V | A | 12 |
| | 60V | A | 12 |
| | 110V | A | 4 |
| | 220V | A | 0.6 |
| | 440V | A | 0.25 |
| DC23A (poles in series) | 24V | A | 10 (1) |
| | 48V | A | 10 (2) |
| | 60V | A | 10 (3) |
| | 110V | A | 5 (3) |
| | 220V | A | 5 (4) |
| DC13 | 24V | A | 12 |
| | 48V | A | 10 |
| | 60V | A | 8 |
| | 110V | A | 1 |
| | 220V | A | 0.4 |
| | 440V | A | 0.15 |
| Power dissipation | | W | 0.8 |

Mechanical features

Terminals screw M3

Tightening torque for terminals max Nm 0.5

Conductor size

| | | | |
|---------------------------------------|-----|-----------------|-----|
| AWG - Rigid cable | min | AWG | 20 |
| | Max | AWG | 12 |
| AWG - Flexible cable | min | AWG | 20 |
| | Max | AWG | 14 |
| Conductor size (IEC) - Flexible cable | min | mm ² | 0.5 |
| | Max | mm ² | 2.5 |
| Conductor size (IEC) - Rigid cable | min | mm ² | 0.5 |
| | Max | mm ² | 2.5 |

Mechanical life cycles 3x10⁶

UL technical data

| | | | |
|---|------|----|-----|
| Motor power for direct-on-line control for three-phase motor | 120V | HP | 1.5 |
| | 240V | HP | 3 |
| for single-phase motor | 120V | HP | 0.5 |
| | 240V | HP | 1 |

Ambient conditions

| | | | |
|---------------------|-----------------------|----|-----|
| Temperature | Operating temperature | | |
| | min | °C | -25 |
| | max | °C | +55 |
| Storage temperature | min | °C | -40 |
| | max | °C | +70 |

Resistance & Protection

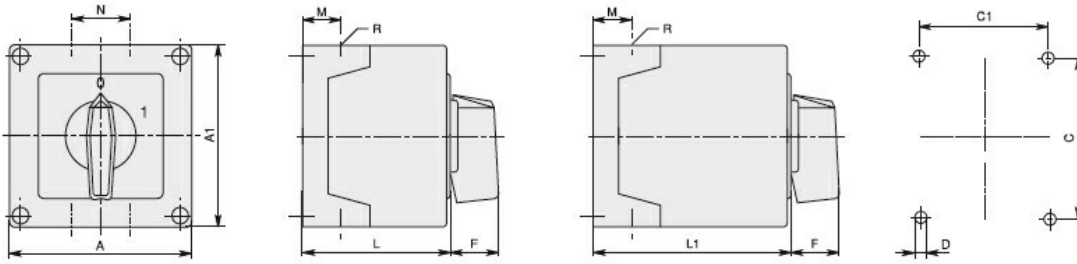
Frontal IP degree

IP65

Terminals IP degree

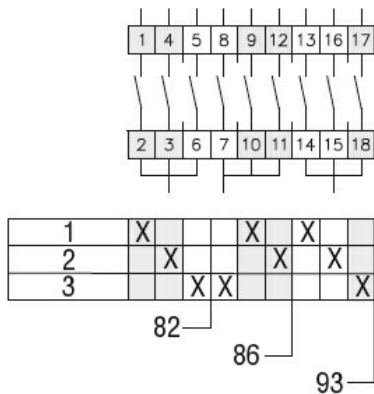
IP00

Dimensions



| Series | Enclosure size | Number of elements | | Dimensions | | | | | | | | | | Cable entry | Protection degree |
|--------|----------------|--------------------|-----|------------|-----|------|-----|-----|----|----|------|------|-------|------------------|-------------------|
| | | L | L1 | A | A1 | C | C1 | D | F | M | N | L | L1 | | |
| 7GN12 | 75x75 | 1-2 | 3-4 | 75 | 75 | 50 | 64 | 4.5 | 19 | 14 | 28 | 57.5 | 79.8 | 4xPG13.5 | IP65 |
| 7GN20 | | 1-2 | 3-4 | | | | | | | | | | | | |
| 7GN25 | | 1 | 2-3 | | | | | | | | | | | | |
| 7GN12 | 90x90 | 1-3 | 4-6 | 90 | 90 | 79 | 63 | 4.5 | 25 | 19 | 30 | 71.3 | 98.3 | 4xPG16 | IP65 |
| 7GN20 | | 1-3 | 4-6 | | | | | | | | | | | | |
| 7GN25 | | 1-2 | 3-4 | | | | | | | | | | | | |
| 7GN32 | | 1-2 | 3-4 | | | | | | | | | | | | |
| 7GN40 | 1 | 2-3 | | | | | | | | | | | | | |
| 7GN12 | 110x110 | 1-4 | 5-8 | 110 | 110 | 98.4 | 83 | 4.5 | 32 | 21 | 39.5 | 85.5 | 119.5 | 4xPG21 | IP65 |
| 7GN20 | | 1-4 | 5-8 | | | | | | | | | | | | |
| 7GN25 | | 1-3 | 4-5 | | | | | | | | | | | | |
| 7GN32 | | 1-3 | 4-5 | | | | | | | | | | | | |
| 7GN40 | | 1-2 | 3-5 | | | | | | | | | | | | |
| 7GN63 | 1-2 | 3-4 | | | | | | | | | | | | | |
| 7GN32 | 125x175 | 1-3 | 4-5 | 125 | 175 | 146 | 112 | 5.5 | 32 | 21 | 68 | 84.3 | 118.3 | 4xPG21 2xPG11 | IP65 |
| 7GN40 | | 1-2 | 3-4 | | | | | | | | | | | | |
| 7GN63 | | 1-2 | 3-4 | | | | | | | | | | | | |
| 7GN125 | | 1 | 2 | | | | | | | | | | | | |
| 7GN32 | 180x254 | 1-5 | 6-8 | 180 | 254 | 120 | 190 | 5.5 | 32 | 35 | 76 | 121 | 175 | 4xPG29 2xPG11 | IP65 |
| 7GN40 | | 1-4 | 5-7 | | | | | | | | | | | | |
| 7GN63 | | 1-3 | 4-6 | | | | | | | | | | | | |
| 7GN125 | | 1-2 | 3-4 | | | | | | | | | | | | |

Wiring diagrams



Certifications and compliance

Compliance

IEC/EN/BS 60947-1

IEC/EN/BS 60947-3

IEC/EN/BS 60947-5-1

Certificates

EAC

ETIM classification

ETIM 8.0

EC001029 -
Selector switch,
complete