

| | | | | |
|---|-------------------|-----|-----|--|
| Product designation | | | | Rotary cam switches |
| Product type designation | | | | 7GN20 |
| General characteristics | | | | |
| 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 |
| 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 | 20 | |
| | UL/CSA | A | 20 | |
| Rated operational voltage | | | V | 480 |
| Rated operational impulse voltage | | | kV | 4 |
| Maximum fuse size for short-circuit protection I_n (gG) | 10kA | A | 20 | |
| | 15kA | A | 16 | |
| | 25kA | A | 16 | |
| Rated short time current I_{cw} | | | 1s | kA |
| | | | | 250 |
| Conductivity | | | | 10/5 mA/V |
| Operational current I_e IEC/EN | AC1/AC21A | | | A |
| | | | | 20 |
| AC15 | 110V | A | 10 | |
| | 220/230V | A | 8 | |
| | 380/400V | A | 6 | |
| | 660/690V | A | 1.5 | |
| | | | | |
| Rated operational power in AC | Three-phase AC-3 | | | |
| | 220/230V | kW | 3 | |
| | 380/440V | kW | 5.5 | |
| | 500/690V | kW | 5.5 | |
| | Single-phase AC-3 | | | |
| | 110V | kW | 0.8 | |
| | 220/230V | kW | 2.2 | |
| | 380/440V | kW | 3 | |
| | Three-phase AC23A | | | |
| | 220/230V | kW | 5 | |
| | 380/440V | kW | 7.5 | |
| | 500/690V | kW | 7.5 | |
| Single-phase AC23A | | | | |
| 110V | kW | 0.8 | | |

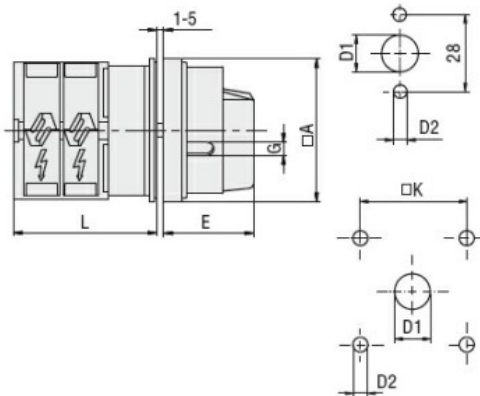
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|---|----------|-----------------|-------------------|
| | 220/230V | kW | 2.5 |
| | 380/440V | kW | 3.7 |
| Rated operational current in DC | | | |
| DC21A | | | |
| | 48V | A | 20 |
| | 60V | A | 20 |
| | 110V | A | 4 |
| | 220V | A | 0.6 |
| | 440V | A | 0.25 |
| DC23A (poles in series) | | | |
| | 24V | A | 20 (1) |
| | 48V | A | 20 (2) |
| | 60V | A | 20 (3) |
| | 110V | A | 10 (3) |
| | 220V | A | 8 (4) |
| DC13 | | | |
| | 24V | A | 20 |
| | 48V | A | 16 |
| | 60V | A | 12 |
| | 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 | 5x10 ⁶ |
| UL technical data | | | |
| Motor power for direct-on-line control | | | |
| for three-phase motor | | | |
| | 120V | HP | 1.5 |
| | 240V | HP | 3 |
| | 480V | HP | 7.5 |
| | 600V | HP | 10 |
| for single-phase motor | | | |
| | 120V | HP | 0.75 |
| | 240V | HP | 2 |
| Ambient conditions | | | |
| Temperature | | | |
| Operating temperature | | | |
| | min | °C | -25 |

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

Resistance & Protection

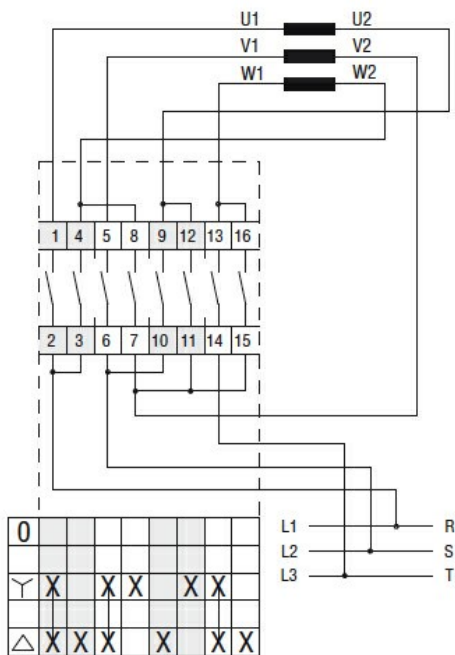
| | |
|---------------------|------|
| Frontal IP degree | IP40 |
| Terminals IP degree | IP00 |

Dimensions



| 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