

| | | | | |
|---|-------------------|-----|-----|--------------------------------------|
| 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 | | | | O - Rear mounting 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 | 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 | A | 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 | | |
| 220/230V | kW | 2.5 | | |
| 380/440V | kW | 3.7 | | |

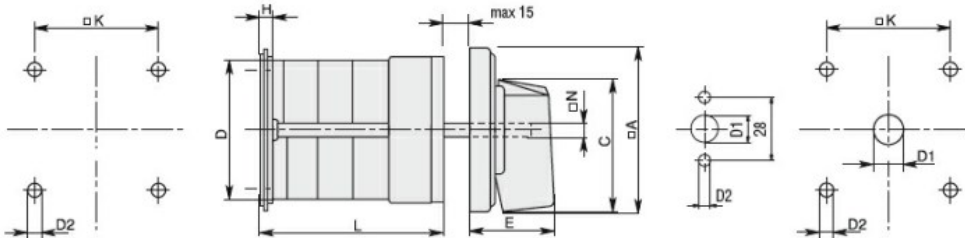
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|--|------|-----------------|-------------------|
| Rated operational current in DC | | | |
| DC21A | | | |
| | 48V | A | 20 |
| | 60V | A | 20 |
| | 110V | A | 4 |
| | 220V | A | 0.6 |
| | 440V | A | 0.25 |
| DC23A (poles in series) | | | |
| | 24V | 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 |
| | max | °C | +55 |
| Storage temperature | | | |

min °C -40
max °C +70

Resistance & Protection

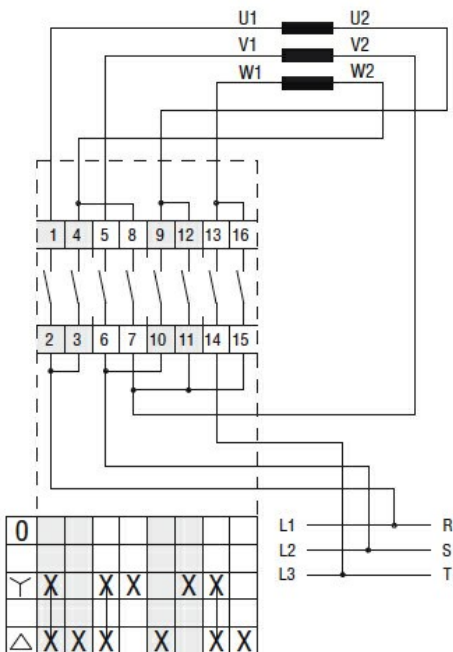
| | |
|---------------------|------|
| Frontal IP degree | IP40 |
| Terminals IP degree | IP00 |

Dimensions



| Series | Dimensions | | | | | | | | L Number of elements | | | | | | | | | | | |
|--------|------------|------|----|-----|------|-----|----|----|----------------------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | □A | C | ØD | ØD2 | E | H | □K | □N | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 7GN12 | 48 | 39.5 | 39 | 5 | 26.5 | 5 | 36 | 6 | 38.1 | 47.8 | 57.5 | 67.2 | 76.9 | 86.6 | 96.3 | 106 | 115.7 | 125.4 | 135.1 | 144.8 |
| 7GN20 | 48 | 39.5 | 39 | 5 | 26.5 | 5 | 36 | 6 | 38.1 | 47.8 | 57.5 | 67.2 | 76.9 | 86.6 | 96.3 | 106 | 115.7 | 125.4 | 135.1 | 144.8 |
| 7GN25 | 48 | 39.5 | 43 | 5 | 26.5 | 5 | 36 | 6 | 42.5 | 56.1 | 69.7 | 83.3 | 96.9 | 110.5 | 124.1 | 137.7 | 151.3 | 164.9 | 178.5 | 192.1 |
| 7GN32 | 65 | 53 | 58 | 5 | 34.5 | 5.5 | 48 | 7 | 48.5 | 63.6 | 78.7 | 93.8 | 108.9 | 124 | 139.1 | 154.2 | 169.3 | 184.4 | 199.5 | 214.6 |
| 7GN40 | 65 | 53 | 58 | 5 | 34.5 | 5.5 | 48 | 7 | 48.5 | 63.6 | 78.7 | 93.8 | 108.9 | 124 | 139.1 | 154.2 | 169.3 | 184.4 | 199.5 | 214.6 |
| 7GN63 | 65 | 53 | 62 | 6 | 34.5 | 7.5 | 68 | 7 | 53.3 | 71.4 | 89.5 | 107.6 | 125.7 | 143.8 | 161.9 | 180 | 198.1 | 216.2 | 234.3 | 252.4 |
| 7GN125 | 90 | 70.5 | 86 | 6 | 41.4 | 7.5 | 68 | 9 | 74.8 | 103.9 | 133 | 162.1 | 191.2 | 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

EC001029 -
Selector switch,
complete