



General characteristics

| | |
|-------------------|--------------------------------------|
| Switching diagram | 12 - Star-delta motor starter switch |
| N° of elements | 4 |
| Mounting form | U - Front 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 | 25 |
| | UL/CSA | A | 30 |
| Rated operational voltage | | V | 480 |
| Rated operational impulse voltage | | kV | 4 |
| Maximum fuse size for short-circuit protection I_n (gG) | 10kA | A | 25 |
| | 15kA | A | 25 |
| | 25kA | A | 25 |
| Rated short time current I_{cw} | 1s | kA | 400 |
| | | | 10/5 mA/V |
| Conductivity | | | 10/5 mA/V |
| Operational current I_e IEC/EN | AC1/AC21A | A | 25 |
| | AC15 | | |
| | 110V | A | 16 |
| | 220/230V | A | 12 |
| | 380/400V | A | 8 |
| | 660/690V | A | 2 |
| Rated operational power in AC | Three-phase AC-3 | | |
| | | | |
| | 220/230V | kW | 5.5 |
| | 380/440V | kW | 7.5 |
| | 500/690V | kW | 7.5 |
| | Single-phase AC-3 | | |
| | 110V | kW | 1.5 |
| | 220/230V | kW | 3 |
| | 380/440V | kW | 5.5 |
| | Three-phase AC23A | | |
| | 220/230V | kW | 6.5 |
| | 380/440V | kW | 11 |
| | 500/690V | kW | 11 |

Single-phase AC23A

| | | |
|----------|----|-----|
| 110V | kW | 1.5 |
| 220/230V | kW | 3.7 |
| 380/440V | kW | 5.5 |

Rated operational current in DC

DC21A

| | | |
|------|---|-----|
| 48V | A | 25 |
| 60V | A | 25 |
| 110V | A | 4 |
| 220V | A | 0.7 |

DC23A (poles in series)

| | | |
|------|---|--------|
| 24V | A | 25 (1) |
| 48V | A | 25 (2) |
| 60V | A | 25 (3) |
| 110V | A | 12 (3) |
| 220V | A | 10 (4) |

DC13

| | | |
|------|---|-----|
| 24V | A | 25 |
| 48V | A | 20 |
| 60V | A | 16 |
| 110V | A | 1.5 |
| 220V | A | 0.4 |

Power dissipation

| | |
|---|-----|
| W | 1.1 |
|---|-----|

Mechanical features

Terminals screw

M3.5

Tightening torque for terminals max

| | |
|----|-----|
| Nm | 0.8 |
|----|-----|

Conductor size

AWG - Rigid cable

| | | |
|-----|-----|----|
| min | AWG | 20 |
| Max | AWG | 10 |

AWG - Flexible cable

| | | |
|-----|-----|----|
| min | AWG | 20 |
| Max | AWG | 12 |

Conductor size (IEC) - Flexible cable

| | | |
|-----|-----------------|-----|
| min | mm ² | 0.5 |
| Max | mm ² | 4 |

Conductor size (IEC) - Rigid cable

| | | |
|-----|-----------------|-----|
| min | mm ² | 0.5 |
| Max | mm ² | 4 |

Mechanical life

| | |
|--------|-------------------|
| cycles | 5x10 ⁶ |
|--------|-------------------|

UL technical data

Motor power for direct-on-line control

for three-phase motor

| | | |
|------|----|----|
| 120V | HP | 3 |
| 240V | HP | 5 |
| 480V | HP | 10 |
| 600V | HP | 15 |

for single-phase motor

| | | |
|------|----|-----|
| 120V | HP | 1.5 |
| 240V | HP | 3 |

Ambient conditions

Temperature

Operating temperature

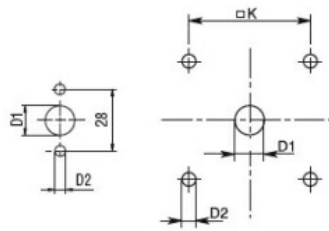
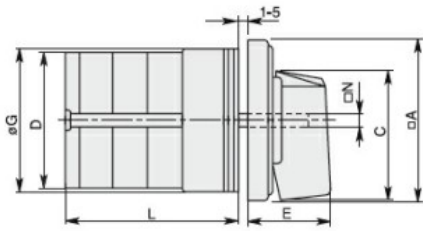
| | | |
|-----|----|-----|
| min | °C | -25 |
|-----|----|-----|

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

Resistance & Protection

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

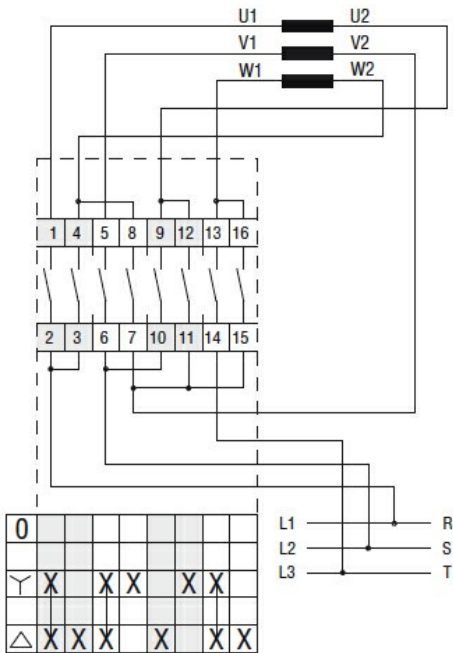
Dimensions



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