

General characteristics

| | |
|-------------------|---|
| Switching diagram | 19 - Dahlander motor control switch 0-1-2 |
| 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 | 63 | |
| | UL/CSA | A | 60 | |
| Rated operational voltage | | V | 480 | |
| Rated operational impulse voltage | | kV | 4 | |
| Maximum fuse size for short-circuit protection I_n (gG) | 10kA | A | 63 | |
| | 15kA | A | 63 | |
| | 25kA | A | 63 | |
| | 50kA | A | 63 | |
| | 63kA | A | 63 | |
| Rated short time current I_{cw} | 1s | kA | 1600 | |
| | | | 10/5 mA/V | |
| Conductivity | | | 10/5 mA/V | |
| Operational current I_e IEC/EN | AC1/AC21A | A | 63 | |
| | AC15 | | | |
| | 110V | A | 32 | |
| | 220/230V | A | 25 | |
| | 380/400V | A | 15 | |
| | 660/690V | A | 4 | |
| Rated operational power in AC | Three-phase AC-3 | 220/230V | kW | 11 |
| | | 380/440V | kW | 18.5 |
| | | 500/690V | kW | 18.5 |
| | Single-phase AC-3 | 110V | kW | 3.7 |
| | | 220/230V | kW | 6.5 |
| | | 380/440V | kW | 11.5 |
| | Three-phase AC23A | 220/230V | kW | 12.5 |
| | | 380/440V | kW | 30 |
| | | 500/690V | kW | 30 |
| | Single-phase AC23A | 110V | kW | 3.7 |
| | | 220/230V | kW | 7.5 |
| | | 380/440V | kW | 12.5 |
| Rated operational current in DC | | | | |

| | | | |
|-------------------------|------|---|--------|
| DC21A | 48V | A | 63 |
| | 60V | A | 50 |
| | 110V | A | 8 |
| | 220V | A | 1 |
| <hr/> | | | |
| DC23A (poles in series) | 24V | A | 50 (1) |
| | 48V | A | 50 (2) |
| | 60V | A | 50 (3) |
| | 110V | A | 25 (3) |
| | 220V | A | 15 (4) |
| <hr/> | | | |
| DC13 | 24V | A | 63 |
| | 48V | A | 40 |
| | 60V | A | 28 |
| | 110V | A | 3.3 |
| <hr/> | | | |
| Power dissipation | | W | 3.4 |

Mechanical features

| | | | |
|-------------------------------------|--|----|----|
| Terminals screw | | | M5 |
| Tightening torque for terminals max | | Nm | 2 |

Conductor size

| | | | |
|---------------------------------------|-----|-----------------|-------------------|
| AWG - Rigid cable | min | AWG | 14 |
| | Max | AWG | 6 |
| <hr/> | | | |
| AWG - Flexible cable | min | AWG | 14 |
| | Max | AWG | 8 |
| <hr/> | | | |
| Conductor size (IEC) - Flexible cable | min | mm ² | 2.5 |
| | Max | mm ² | 10 |
| <hr/> | | | |
| Conductor size (IEC) - Rigid cable | min | mm ² | 2.5 |
| | Max | mm ² | 16 |
| <hr/> | | | |
| Mechanical life | | cycles | 5x10 ⁶ |

UL technical data

| | | | |
|---|------|----|-----|
| Motor power for direct-on-line control for three-phase motor | 120V | HP | 7.5 |
| | 240V | HP | 15 |
| | 480V | HP | 25 |
| | 600V | HP | 25 |
| <hr/> | | | |
| for single-phase motor | 120V | HP | 3 |
| | 240V | HP | 10 |

Ambient conditions

| | | | |
|---------------------|-----------------------|----|-----|
| Temperature | Operating temperature | | |
| | min | °C | -25 |
| | max | °C | +55 |
| <hr/> | | | |
| Storage temperature | min | °C | -40 |
| | max | °C | +70 |

Resistance & Protection

| | | | |
|-------------------|--|--|------|
| Frontal IP degree | | | IP40 |
|-------------------|--|--|------|

Terminals IP degree

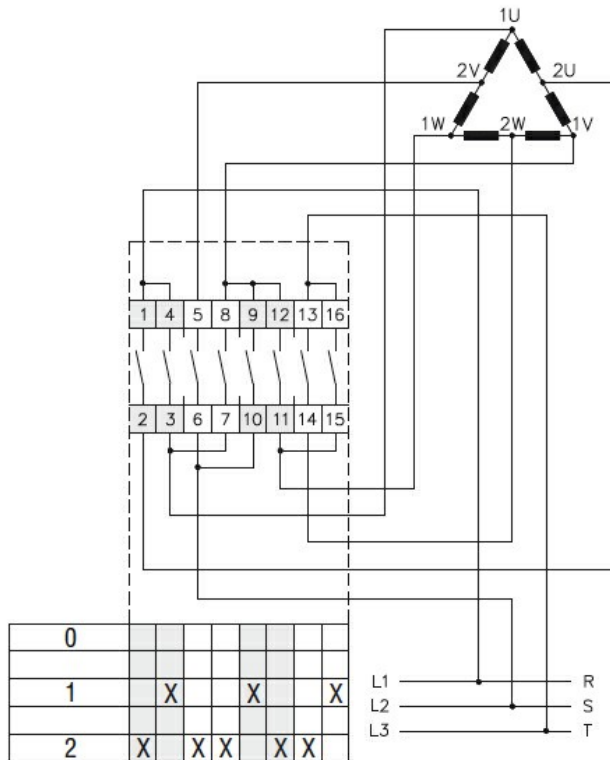
IP00

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