



Contact characteristics

| | | |
|--|---|--------|
| Number of poles | Nr. | 3 |
| Rated insulation voltage U_i IEC/EN | V | 500 |
| Rated impulse withstand voltage U_{imp} | kV | 6 |
| Operational frequency | min | Hz 25 |
| | max | Hz 400 |
| IEC Conventional free air thermal current $I_{th} \leq 40^\circ\text{C}$ | A | 20 |
| Operational current I_e | AC-1 ($\leq 40^\circ\text{C}$) | A 20 |
| | AC-1 ($\leq 55^\circ\text{C}$) | A 18 |
| | AC-1 ($\leq 70^\circ\text{C}$) | A 15 |
| | AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$) | A 9 |
| | AC-4 (400V) | A 4 |
| Rated operational power AC-3 ($T \leq 55^\circ\text{C}$) | 230V | kW 2.2 |
| | 400V | kW 4 |
| | 415V | kW 4.3 |
| | 440V | kW 4.5 |
| | 500V | kW 5 |
| Rated operational power AC-1 ($T \leq 40^\circ\text{C}$) | 230V | kW 8 |
| | 400V | kW 14 |
| | 500V | kW 16 |
| Short-time allowable current for 10s (IEC/EN60947-1) | A | 96 |
| Protection fuse | gG (IEC) | A 20 |
| | aM (IEC) | A 10 |
| Making capacity (RMS value) | A | 92 |
| Breaking capacity at voltage | 440V | A 72 |
| | 500V | A 72 |
| Resistance per pole (average value) | m Ω | 10 |
| Power dissipation per pole (average value) | I_{th} | W 4 |
| | AC-3 | W 0.81 |
| Tightening torque for terminals | min | Nm 0.8 |
| | max | Nm 1 |
| | min | Ibin 9 |
| | max | Ibin 9 |
| Tightening torque for coil terminal | min | Nm 0.8 |
| | max | Nm 1 |
| | min | Ibin 9 |

| | | | |
|---|------------------|------------------|-----------------------|
| | max | I _{bin} | 9 |
| Max number of wires simultaneously connectable | | Nr. | 2 |
| Conductor section | | | |
| AWG/Kcmil | max | | 12 |
| Flexible w/o lug conductor section | min | mm ² | 0.8 |
| | max | mm ² | 2.5 |
| Flexible c/w lug conductor section | min | mm ² | 1.5 |
| | max | mm ² | 2.5 |
| Flexible with insulated spade lug conductor section | min | mm ² | 1.5 |
| | max | mm ² | 2.5 |
| Power terminal protection according to IEC/EN 60529 | | | IP00 |
| Mechanical features | | | |
| Operating position | normal allowable | | Vertical plan ±30° |
| Fixing | | | Screw / DIN rail 35mm |
| Weight | | g | 200 |
| Auxiliary contact characteristics | | | |
| Thermal current I _{th} | | A | 10 |
| IEC/EN 60947-5-1 designation | | | A600 - Q600 |
| Operating current AC15 | 230V | A | 3 |
| | 400V | A | 1.9 |
| | 500V | A | 1.4 |
| Operating current DC12 | 110V | A | 2.9 |
| Operating current DC13 | 24V | A | 2.9 |
| | 48V | A | 1.4 |
| | 60V | A | 1.1 |
| | 125V | A | 0.3 |
| | 220V | A | 0.1 |
| | 600V | A | 0.6 |
| Operations | | | |
| Mechanical life | | cycles | 20000000 |
| Electrical life | | cycles | 500000 |
| Safety related data | | | |
| Performance level B10d according to EN/ISO 13489-1 | rated load | cycles | 500000 |
| | mechanical load | cycles | 20000000 |
| EMC compatibility | | | yes |
| AC coil operating | | | |
| Rated AC voltage at 50/60Hz | | V | 230 |
| AC operating voltage | | | |
| of 50/60Hz coil powered at 50Hz pick-up | min | %U _s | 75 |
| | max | %U _s | 115 |

| | | | | |
|--|--|---------|----------|------|
| drop-out | | min | %Us | 20 |
| | | max | %Us | 55 |
| of 50/60Hz coil powered at 60Hz | | | | |
| pick-up | | min | %Us | 80 |
| | | max | %Us | 115 |
| drop-out | | min | %Us | 20 |
| | | max | %Us | 55 |
| AC average coil consumption at 20°C | | | | |
| of 50/60Hz coil powered at 50Hz | | | | |
| | | in-rush | VA | 30 |
| | | holding | VA | 4 |
| of 50/60Hz coil powered at 60Hz | | | | |
| | | in-rush | VA | 25 |
| | | holding | VA | 3 |
| of 60Hz coil powered at 60Hz | | | | |
| | | in-rush | VA | 30 |
| | | holding | VA | 4 |
| Dissipation at holding ≤20°C 50Hz | | | W | 0.95 |
| Max cycles frequency | | | | |
| Mechanical operation | | | cycles/h | 3600 |
| Operating times | | | | |
| Average time for Us control | | | | |
| in AC | | | | |
| Closing NO | | min | ms | 12 |
| | | max | ms | 21 |
| Opening NO | | min | ms | 9 |
| | | max | ms | 18 |
| Closing NC | | min | ms | 17 |
| | | max | ms | 26 |
| Opening NC | | min | ms | 7 |
| | | max | ms | 17 |
| in DC | | | | |
| Closing NO | | min | ms | 18 |
| | | max | ms | 25 |
| Opening NO | | min | ms | 2 |
| | | max | ms | 3 |
| Closing NC | | min | ms | 3 |
| | | max | ms | 5 |
| Opening NC | | min | ms | 11 |
| | | max | ms | 17 |
| UL technical data | | | | |
| Full-load current (FLA) for three-phase AC motor | | | | |
| | | at 480V | A | 7.6 |

| | | | | |
|--------------------------------|---------------------------|----------|----|-----|
| | | at 600V | A | 6.1 |
| Yielded mechanical performance | | | | |
| | for single-phase AC motor | | | |
| | | 110/120V | HP | 0.5 |
| | | 230V | HP | 1.5 |
| | for three-phase AC motor | | | |
| | | 200/208V | HP | 2 |
| | | 220/240V | HP | 3 |
| | | 460/480V | HP | 5 |
| | | 575/600V | HP | 5 |

| | | | | |
|-------------|-----------|------------|---|----|
| General USE | Contactor | | | |
| | | AC current | A | 20 |

Contact rating of auxiliary contacts according to UL A600 - Q600

Ambient conditions

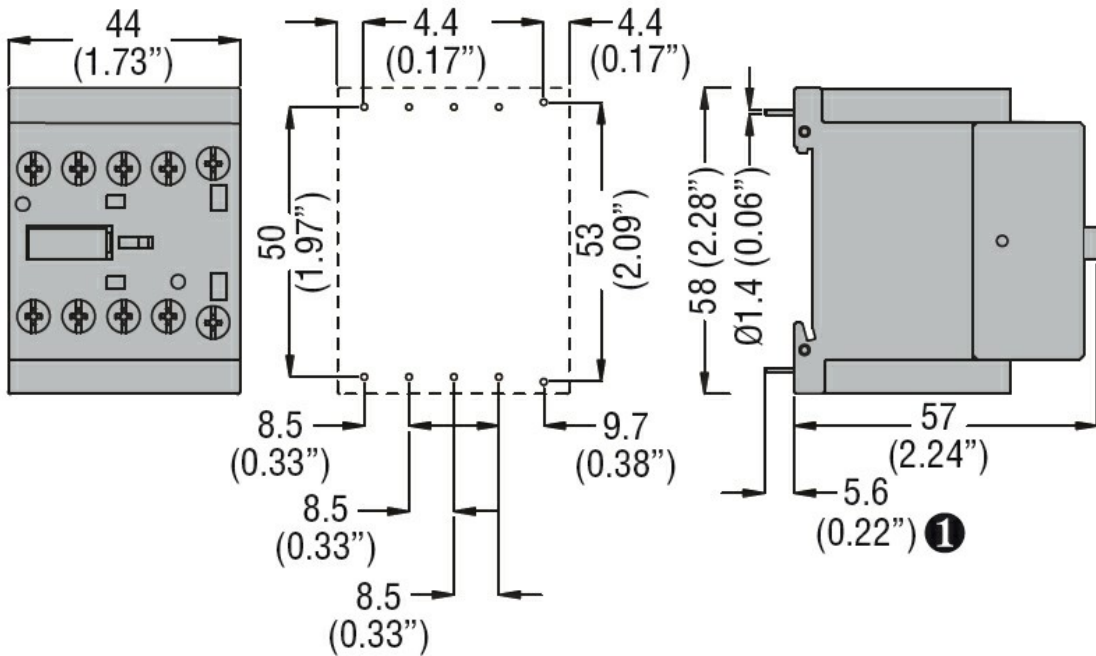
| | | | | |
|-------------|-----------------------|-----|----|-----|
| Temperature | Operating temperature | | | |
| | | min | °C | -50 |
| | | max | °C | +70 |
| | Storage temperature | | | |
| | | min | °C | -60 |
| | | max | °C | +80 |

Max altitude m 3000

Resistance & Protection

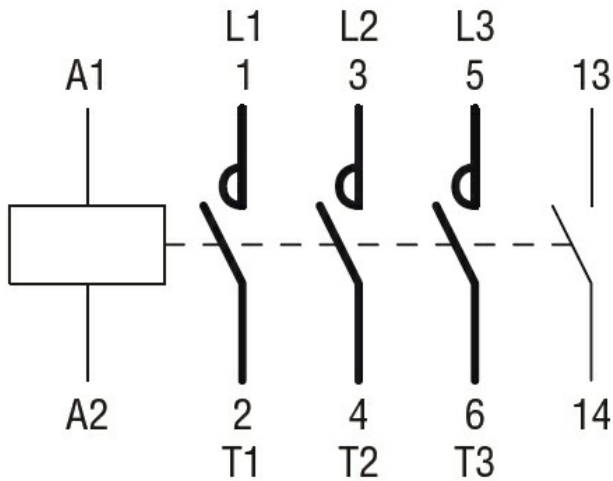
Pollution degree 3

Dimensions



① Recommended PCB drillings 1.7-2mm.

Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN 60947-1

IEC/EN 60947-4-1

UL 60947-1

UL 60947-4-1

Certificates

cURus

EAC

ETIM classification

ETIM 8.0

EC000066 -
 Power contactor,
 AC switching