



Contact characteristics

| | | |
|--|--------------------------------------|--------|
| Number of poles | Nr. | 4 |
| Rated insulation voltage U_i IEC/EN | V | 690 |
| Rated impulse withstand voltage U_{imp} | kV | 6 |
| Operational frequency | min | Hz 25 |
| | max | Hz 400 |
| IEC Conventional free air thermal current $I_{th} \leq 40^\circ C$ | A | 20 |
| Operational current I_e | AC-1 ($\leq 40^\circ C$) | A 20 |
| | AC-1 ($\leq 55^\circ C$) | A 18 |
| | AC-1 ($\leq 70^\circ C$) | A 15 |
| | AC-3 ($\leq 440V \leq 55^\circ C$) | A 9 |
| | AC-4 (400V) | A 4 |
| Rated operational power AC-1 ($T \leq 40^\circ C$) | 230V | kW 8 |
| | 400V | kW 14 |
| | 500V | kW 16 |
| | 690V | kW 22 |
| IEC max current I_e in DC1 with $L/R \leq 1ms$ with 1 poles in series | $\leq 24V$ | A 12 |
| | 48V | A 10 |
| | 75V | A 4 |
| | 110V | A 3 |
| | 220V | A – |
| IEC max current I_e in DC1 with $L/R \leq 1ms$ with 2 poles in series | $\leq 24V$ | A 15 |
| | 48V | A 14 |
| | 75V | A 9 |
| | 110V | A 8 |
| | 220V | A – |
| IEC max current I_e in DC1 with $L/R \leq 1ms$ with 3 poles in series | $\leq 24V$ | A 16 |
| | 48V | A 16 |
| | 75V | A 10 |
| | 110V | A 10 |
| | 220V | A 2 |
| IEC max current I_e in DC1 with $L/R \leq 1ms$ with 4 poles in series | $\leq 24V$ | A 16 |
| | 48V | A 16 |
| | 75V | A 10 |
| | 110V | A 10 |
| | 220V | A 2 |
| IEC max current I_e in DC3-DC5 with $L/R \leq 15ms$ with 1 poles in series | $\leq 24V$ | A 7 |

| | | | |
|--|------------------|--------|-----------------------|
| | 48V | A | 6 |
| | 75V | A | 2 |
| | 110V | A | 1 |
| | 220V | A | – |
| <hr/> | | | |
| IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 2 poles in series | ≤24V | A | 8 |
| | 48V | A | 8 |
| | 75V | A | 5 |
| | 110V | A | 4 |
| | 220V | A | – |
| <hr/> | | | |
| IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 3 poles in series | ≤24V | A | 10 |
| | 48V | A | 10 |
| | 75V | A | 6 |
| | 110V | A | 5 |
| | 220V | A | 0,8 |
| <hr/> | | | |
| IEC max current I _e in DC3-DC5 with L/R ≤ 15ms with 4 poles in series | ≤24V | A | 10 |
| | 48V | A | 10 |
| | 75V | A | 6 |
| | 110V | A | 5 |
| | 220V | A | 0,8 |
| <hr/> | | | |
| Short-time allowable current for 10s (IEC/EN60947-1) | | A | 96 |
| <hr/> | | | |
| Protection fuse | gG (IEC) | A | 20 |
| | aM (IEC) | A | 10 |
| <hr/> | | | |
| Making capacity (RMS value) | | A | 92 |
| <hr/> | | | |
| Breaking capacity at voltage | 440V | A | 72 |
| | 500V | A | 72 |
| | 690V | A | 72 |
| <hr/> | | | |
| Resistance per pole (average value) | | mΩ | 10 |
| <hr/> | | | |
| Power dissipation per pole (average value) | I _{th} | W | 4 |
| | AC-3 | W | 0.81 |
| <hr/> | | | |
| Conductor section | AWG/Kcmil | | |
| | | max | 12 |
| <hr/> | | | |
| Mechanical features | | | |
| Operating position | normal allowable | | Vertical plan ±30° |
| <hr/> | | | |
| Fixing | | | Screw / DIN rail 35mm |
| <hr/> | | | |
| Weight | | g | 180 |
| <hr/> | | | |
| Auxiliary contact characteristics | | | |
| Thermal current I _{th} | | A | 10 |
| <hr/> | | | |
| IEC/EN 60947-5-1 designation | | | A600 |
| <hr/> | | | |
| Operations | | | |
| Mechanical life | | cycles | 20000000 |
| <hr/> | | | |
| Electrical life | | cycles | 500000 |
| <hr/> | | | |
| Safety related data | | | |
| Performance level B10d according to EN/ISO 13489-1 | | | |

| | rated load mechanical load | cycles cycles | 500000 20000000 |
|--|-------------------------------|------------------|--------------------|
| EMC compatibility | | | yes |
| AC coil operating | | | |
| Rated AC voltage at 60Hz | | V | 220 |
| AC operating voltage | | | |
| of 60Hz coil powered at 60Hz | | | |
| pick-up | min | %Us | 75 |
| | 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 holding | VA VA | 30 4 |
| of 50/60Hz coil powered at 60Hz | in-rush holding | VA VA | 25 3 |
| of 60Hz coil powered at 60Hz | in-rush holding | VA VA | 30 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

| | | |
|--|----------|--------|
| Rated operational voltage AC (UL) | V | 600 |
| 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 |
| Short-circuit protection fuse, 600V | | | |
| High fault | | | |
| | Short circuit current | kA | 100 |
| | Fuse rating | A | 30 |
| | Fuse class | | J |
| Standard fault | | | |
| | Short circuit current | kA | 5 |
| | Fuse rating | A | 30 |

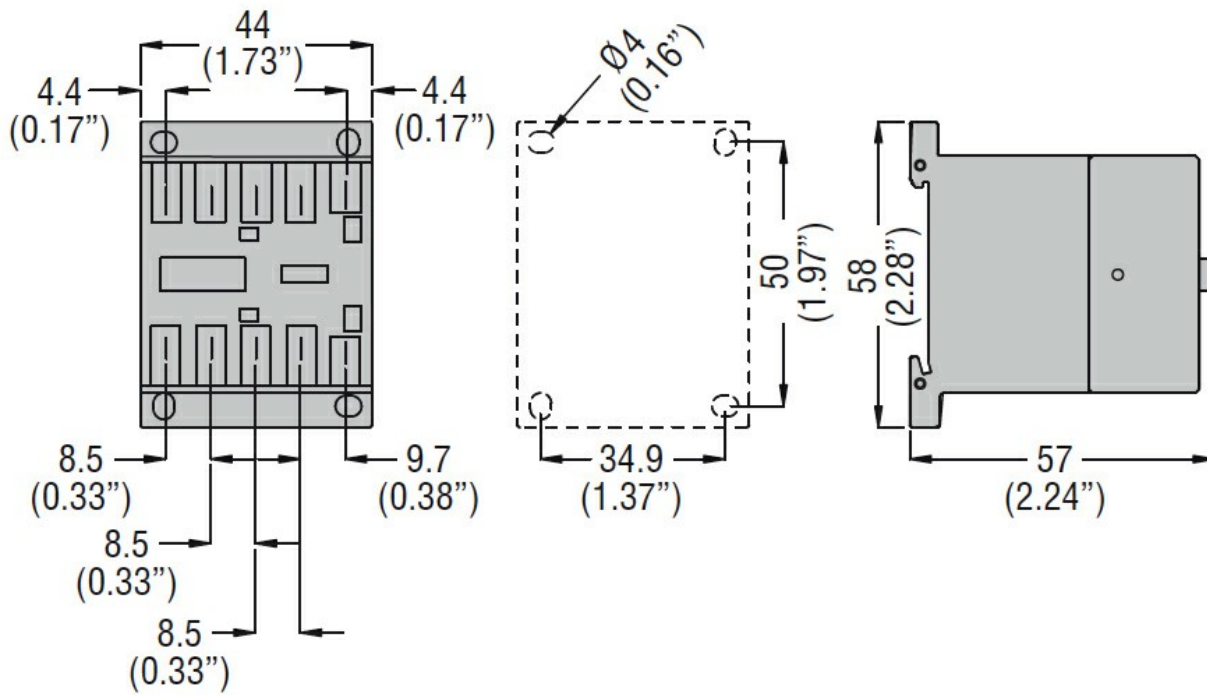
Ambient conditions

| | | | |
|-----------------------|-----|----|------|
| Temperature | | | |
| Operating temperature | | | |
| | min | °C | -50 |
| | max | °C | +70 |
| Storage temperature | | | |
| | min | °C | -60 |
| | max | °C | +80 |
| Max altitude | | m | 3000 |

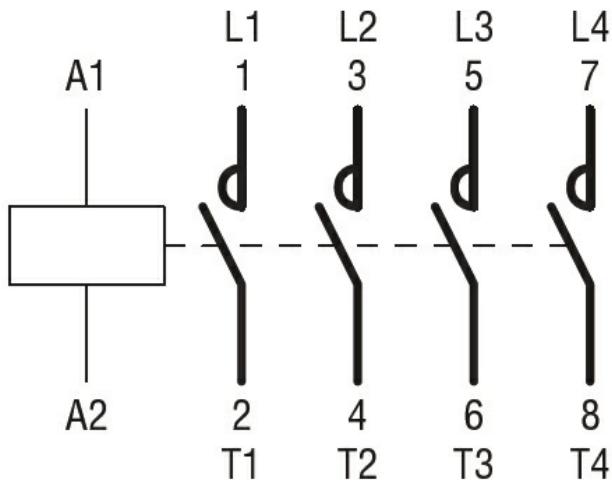
Resistance & Protection

| | |
|------------------|---|
| Pollution degree | 3 |
|------------------|---|

Dimensions



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

CCC
cULus
EAC

ETIM classification

ETIM 8.0

EC000066 -
Power contactor,
AC switching