



Product designation Power contactor
Product type designation B400

Contact characteristics

| | | |
|---|--------------------|--------|
| Number of poles | Nr. | 4 |
| Rated insulation voltage U _i IEC/EN | V | 1000 |
| Rated impulse withstand voltage U _{imp} | kV | 8 |
| Operational frequency | min | Hz 25 |
| | max | Hz 400 |
| IEC Conventional free air thermal current I _{th} | A | 550 |
| Operational current I _e | AC-1 (≤40°C) | A 550 |
| | AC-1 (≤55°C) | A 430 |
| | AC-1 (≤70°C) | A 360 |
| | AC-3 (≤440V ≤55°C) | A 420 |
| | AC-4 (400V) | A 200 |
| Rated operational power AC-1 (T≤40°C) | 230V | kW 200 |
| | 400V | kW 345 |
| | 500V | kW 452 |
| | 690V | kW 598 |
| IEC max current I _e in DC1 with L/R ≤ 1ms with 1 poles in series | 75V | A 400 |
| | 110V | A 250 |
| | 220V | A -- |
| | 330V | A -- |
| | 460V | A -- |
| IEC max current I _e in DC1 with L/R ≤ 1ms with 2 poles in series | 75V | A 400 |
| | 110V | A 400 |
| | 220V | A 350 |
| | 330V | A -- |
| | 460V | A -- |
| IEC max current I _e in DC1 with L/R ≤ 1ms with 3 poles in series | 75V | A 400 |
| | 110V | A 400 |
| | 220V | A 400 |
| | 330V | A 350 |
| | 460V | A -- |
| IEC max current I _e in DC1 with L/R ≤ 1ms with 4 poles in series | 75V | A 400 |
| | 110V | A 400 |
| | 220V | A 400 |
| | 330V | A 400 |
| | 460V | A 350 |

IEC max current I_e in DC3-DC5 with L/R ≤ 15ms with 1 poles in series

| | | |
|------|---|-----|
| 75V | A | 350 |
| 110V | A | 200 |
| 220V | A | -- |
| 330V | A | -- |
| 460V | A | -- |

IEC max current I_e in DC3-DC5 with L/R ≤ 15ms with 2 poles in series

| | | |
|------|---|-----|
| 75V | A | 350 |
| 110V | A | 350 |
| 220V | A | 280 |
| 330V | A | -- |
| 460V | A | -- |

IEC max current I_e in DC3-DC5 with L/R ≤ 15ms with 3 poles in series

| | | |
|------|---|-----|
| 75V | A | 350 |
| 110V | A | 350 |
| 220V | A | 350 |
| 330V | A | 280 |
| 460V | A | -- |

IEC max current I_e in DC3-DC5 with L/R ≤ 15ms with 4 poles in series

| | | |
|------|---|-----|
| 75V | A | 350 |
| 110V | A | 350 |
| 220V | A | 350 |
| 330V | A | 280 |
| 460V | A | 280 |

Short-time allowable current for 10s (IEC/EN60947-1)

| | |
|---|------|
| A | 3600 |
|---|------|

Protection fuse

| | | |
|----------|---|-----|
| gG (IEC) | A | 630 |
| aM (IEC) | A | 400 |

Making capacity (RMS value)

| | |
|---|------|
| A | 4200 |
|---|------|

Breaking capacity at voltage

| | | |
|------|---|------|
| 440V | A | 4000 |
| 500V | A | 3400 |
| 690V | A | 3360 |

Resistance per pole (average value)

| | |
|----|-----|
| mΩ | 0.2 |
|----|-----|

Power dissipation per pole (average value)

| | | |
|-----------------|---|----|
| I _{th} | W | 52 |
| AC-3 | W | 32 |

Tightening torque for terminals

| | | |
|-----|------------------|------|
| min | Nm | 35 |
| max | Nm | 35 |
| min | I _{bin} | 25.8 |
| max | I _{bin} | 25.8 |

Tightening torque for coil terminal

| | | |
|-----|------------------|------|
| min | Nm | 1 |
| max | Nm | 1 |
| min | I _{bin} | 0.74 |
| max | I _{bin} | 0.74 |

Max number of wires simultaneously connectable

| | |
|-----|---|
| Nr. | 2 |
|-----|---|

Conductor section

AWG/Kcmil

| | |
|-----|--------------|
| max | 2x 300 kcmil |
|-----|--------------|

Power terminal protection according to IEC/EN 60529

| |
|------|
| IP00 |
|------|

Mechanical features

Operating position

| | | |
|-------------------|-----------------------------|--------------------|
| | normal allowable | Vertical plan ±30° |
| Fixing | | Screw |
| Weight | g | 11 |
| Conductor section | AWG/kcmil conductor section | |
| | max | 2x 300 kcmil |

Operations

| | | |
|-----------------|--------|---------|
| Mechanical life | cycles | 1000000 |
| Electrical life | cycles | 700000 |

Safety related data

| | | | |
|--|----------------------------|--------|----------|
| Performance level B10d according to EN/ISO 13489-1 | rated load mechanical load | cycles | 700000 |
| | | cycles | 10000000 |
| Mirror contacts according to IEC/EN 60947-4-1 | | | yes |
| EMC compatibility | | | yes |

AC coil operating

| | | |
|-----------------------------|---|----|
| Rated AC voltage at 50/60Hz | V | 48 |
|-----------------------------|---|----|

| | | | |
|---------------------------------|-----|-----|-----|
| AC operating voltage | | | |
| of 50/60Hz coil powered at 50Hz | | | |
| pick-up | min | %Us | 80 |
| | max | %Us | 110 |
| drop-out | min | %Us | 20 |
| | max | %Us | 60 |
| of 50/60Hz coil powered at 60Hz | | | |
| pick-up | min | %Us | 80 |
| | max | %Us | 110 |
| drop-out | min | %Us | 20 |
| | max | %Us | 60 |
| of 60Hz coil powered at 60Hz | | | |
| pick-up | min | %Us | 80 |
| | max | %Us | 110 |
| drop-out | min | %Us | 20 |
| | max | %Us | 60 |

| | | | |
|-------------------------------------|---------|----|-----|
| AC average coil consumption at 20°C | | | |
| of 50/60Hz coil powered at 50Hz | in-rush | VA | 300 |
| | holding | VA | 10 |
| of 50/60Hz coil powered at 60Hz | in-rush | VA | 300 |
| | holding | VA | 10 |

| | | |
|-----------------------------------|---|----|
| Dissipation at holding ≤20°C 50Hz | W | 10 |
|-----------------------------------|---|----|

DC coil operating

| | | |
|--------------------------|---|----|
| DC rated control voltage | V | 48 |
|--------------------------|---|----|

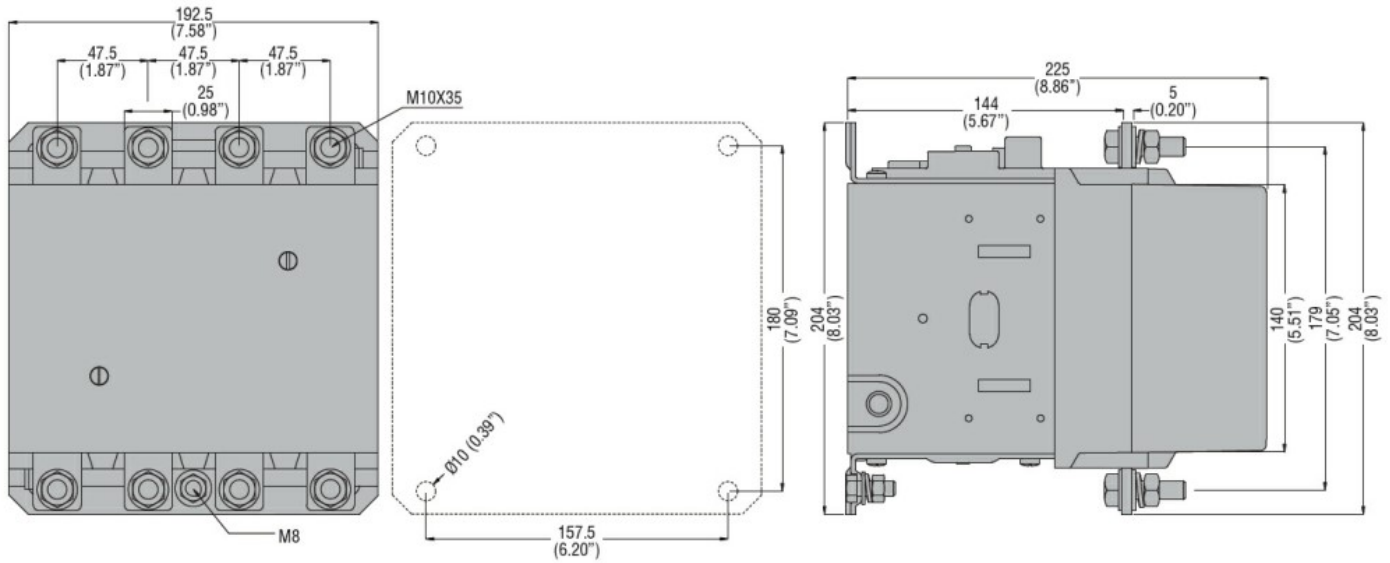
| | | |
|----------------------|--|--|
| DC operating voltage | | |
| pick-up | | |

| | | | | |
|--|--------------------------|-----------------------|-----|---------------|
| | | min | %Us | 80 |
| | | max | %Us | 110 |
| drop-out | | | | |
| | | min | %Us | 20 |
| | | max | %Us | 60 |
| Average coil consumption ≤20°C | | | | |
| | | in-rush | W | 300 |
| | | holding | W | 10 |
| Max cycles frequency | | | | |
| Mechanical operation | | | | cycles/h 2400 |
| Operating times | | | | |
| Average time for Us control | | | | |
| | in AC | | | |
| | | Closing NO | | |
| | | min | ms | 80 |
| | | max | ms | 120 |
| | | Opening NO | | |
| | | min | ms | 30 |
| | | max | ms | 75 |
| | in DC | | | |
| | | Closing NO | | |
| | | min | ms | 80 |
| | | max | ms | 120 |
| | | Opening NO | | |
| | | min | ms | 30 |
| | | max | ms | 75 |
| UL technical data | | | | |
| Full-load current (FLA) for three-phase AC motor | | | | |
| | | at 480V | A | 414 |
| | | at 600V | A | 382 |
| Yielded mechanical performance | | | | |
| | for three-phase AC motor | | | |
| | | 200/208V | HP | 125 |
| | | 220/230V | HP | 150 |
| | | 460/480V | HP | 350 |
| | | 575/600V | HP | 400 |
| General USE | | | | |
| | Contactor | | | |
| | | AC current | A | 550 |
| Short-circuit protection fuse, 600V | | | | |
| | Standard fault | | | |
| | | Short circuit current | kA | 18 |
| | | Fuse rating | A | 800 |
| | | Fuse class | | L |
| 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 | | | | |

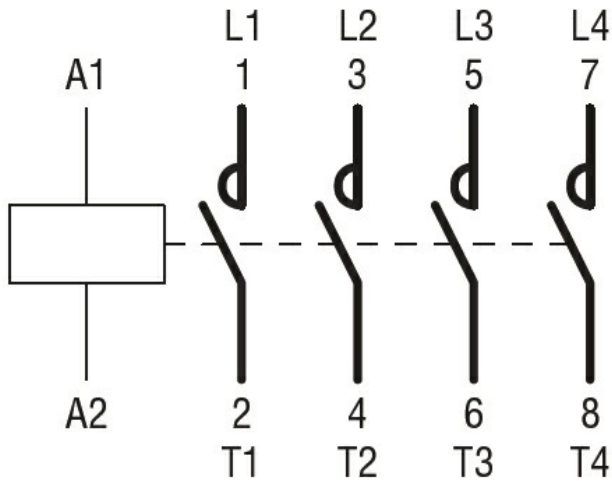
Pollution degree

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