



|   |                    |      |                 |
|---|--------------------|------|-----------------|
| Product designation   |                    |      | Power contactor |
| Product type designation  |                    |      | B250            |
| Contact characteristics   |                    |      |                 |
| Number of poles   | Nr.                | 4    |                 |
| Rated insulation voltage Ui IEC/EN                              | V                  | 1000 |                 |
| Rated impulse withstand voltage Uimp                            | kV                 | 8    |                 |
| Operational frequency   | min                | Hz   | 25              |
|   | max                | Hz   | 400             |
| IEC Conventional free air thermal current Ith                   | A                  | 350  |                 |
| Operational current Ie  | AC-1 (≤40°C)       | A    | 350             |
|   | AC-1 (≤55°C)       | A    | 300             |
|   | AC-1 (≤70°C)       | A    | 250             |
|   | AC-3 (≤440V ≤55°C) | A    | 265             |
|   | AC-4 (400V)        | A    | 115             |
| Rated operational power AC-1 (T≤40°C)                           | 230V               | kW   | 124             |
|   | 400V               | kW   | 214             |
|   | 500V               | kW   | 282             |
|   | 690V               | kW   | 380             |
| IEC max current Ie in DC1 with L/R ≤ 1ms with 1 poles in series | 75V                | A    | 350             |
|   | 110V               | A    | 160             |
|   | 220V               | A    | --              |
|   | 330V               | A    | --              |
|   | 460V               | A    | --              |
| IEC max current Ie in DC1 with L/R ≤ 1ms with 2 poles in series | 75V                | A    | 350             |
|   | 110V               | A    | 300             |
|   | 220V               | A    | 250             |
|   | 330V               | A    | --              |
|   | 460V               | A    | --              |
| IEC max current Ie in DC1 with L/R ≤ 1ms with 3 poles in series | 75V                | A    | 350             |
|   | 110V               | A    | 300             |
|   | 220V               | A    | 300             |
|   | 330V               | A    | 250             |
|   | 460V               | A    | --              |
| IEC max current Ie in DC1 with L/R ≤ 1ms with 4 poles in series | 75V                | A    | 350             |
|   | 110V               | A    | 300             |
|   | 220V               | A    | 300             |
|   | 330V               | A    | 300             |
|   | 460V               | A    | 250             |



IEC max current  $I_e$  in DC3-DC5 with  $L/R \leq 15\text{ms}$  with 1 poles in series

|      |   |     |
|------|---|-----|
| 75V  | A | 280 |
| 110V | A | 150 |
| 220V | A | --  |
| 330V | A | --  |
| 460V | A | --  |

IEC max current  $I_e$  in DC3-DC5 with  $L/R \leq 15\text{ms}$  with 2 poles in series

|      |   |     |
|------|---|-----|
| 75V  | A | 280 |
| 110V | A | 250 |
| 220V | A | 200 |
| 330V | A | --  |
| 460V | A | --  |

IEC max current  $I_e$  in DC3-DC5 with  $L/R \leq 15\text{ms}$  with 3 poles in series

|      |   |     |
|------|---|-----|
| 75V  | A | 280 |
| 110V | A | 280 |
| 220V | A | 250 |
| 330V | A | 200 |
| 460V | A | --  |

IEC max current  $I_e$  in DC3-DC5 with  $L/R \leq 15\text{ms}$  with 4 poles in series

|      |   |     |
|------|---|-----|
| 75V  | A | 280 |
| 110V | A | 280 |
| 220V | A | 280 |
| 330V | A | 200 |
| 460V | A | 200 |

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

|   |      |
|---|------|
| A | 2200 |
|---|------|

Protection fuse

|          |   |     |
|----------|---|-----|
| gG (IEC) | A | 400 |
| aM (IEC) | A | 250 |

Making capacity (RMS value)

|   |      |
|---|------|
| A | 2750 |
|---|------|

Breaking capacity at voltage

|      |   |      |
|------|---|------|
| 440V | A | 2500 |
| 500V | A | 2250 |
| 690V | A | 2200 |

Resistance per pole (average value)

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

Power dissipation per pole (average value)

|          |   |      |
|----------|---|------|
| $I_{th}$ | W | 24.5 |
| AC-3     | W | 12.5 |

Tightening torque for terminals

|     |      |      |
|-----|------|------|
| min | Nm   | 35   |
| max | Nm   | 35   |
| min | Ibin | 25.8 |
| max | Ibin | 25.8 |

Tightening torque for coil terminal

|     |      |      |
|-----|------|------|
| min | Nm   | 1    |
| max | Nm   | 1    |
| min | Ibin | 0.74 |
| max | Ibin | 0.74 |

Max number of wires simultaneously connectable

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

Conductor section

AWG/Kcmil

|     |           |
|-----|-----------|
| max | 500 kcmil |
|-----|-----------|

Power terminal protection according to IEC/EN 60529

IP00

**Mechanical features**



## Operating position

|        | normal<br>allowable | Vertical plan<br>±30° |
|--------|---------------------|-----------------------|
| Fixing |                     | Screw                 |
| Weight | g                   | 1140                  |

## Operations

|                 |        |          |
|-----------------|--------|----------|
| Mechanical life | cycles | 10000000 |
| Electrical life | cycles | 1000000  |

## Safety related data

Performance level B10d according to EN/ISO 13489-1

|   |                               |        |          |
|---|-------------------------------|--------|----------|
|   | rated load<br>mechanical load | cycles | 1000000  |
|   |                               | cycles | 10000000 |
| Mirror contacts according to IEC/EN 60947-4-1 |                               |        | Yes      |
| EMC compatibility                             |                               |        | yes      |

## AC coil operating

Rated AC voltage at 50/60Hz, 60Hz

|  |     |   |     |
|--|-----|---|-----|
|  | min | V | 220 |
|  | max | V | 240 |

## 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

|     |   |     |
|-----|---|-----|
| min | V | 220 |
| max | V | 240 |

## DC operating voltage



pick-up

|     |     |     |
|-----|-----|-----|
| min | %Us | 80  |
| max | %Us | 110 |

drop-out

|     |     |    |
|-----|-----|----|
| min | %Us | 20 |
| max | %Us | 60 |

Average coil consumption  $\leq 20^{\circ}\text{C}$

|         |   |     |
|---------|---|-----|
| 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

Rated operational voltage AC (UL)

V 600

Full-load current (FLA) for three-phase AC motor

|         |   |     |
|---------|---|-----|
| at 480V | A | 240 |
| at 600V | A | 242 |

Yielded mechanical performance

for three-phase AC motor

|          |    |     |
|----------|----|-----|
| 200/208V | HP | 75  |
| 220/230V | HP | 100 |
| 575/600V | HP | 250 |

General USE

Contactor

AC current A 350

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 | $^{\circ}\text{C}$ | -50 |
| max | $^{\circ}\text{C}$ | 70  |

Storage temperature

|     |                    |     |
|-----|--------------------|-----|
| min | $^{\circ}\text{C}$ | -60 |
| max | $^{\circ}\text{C}$ | 80  |

Max altitude

m 3000

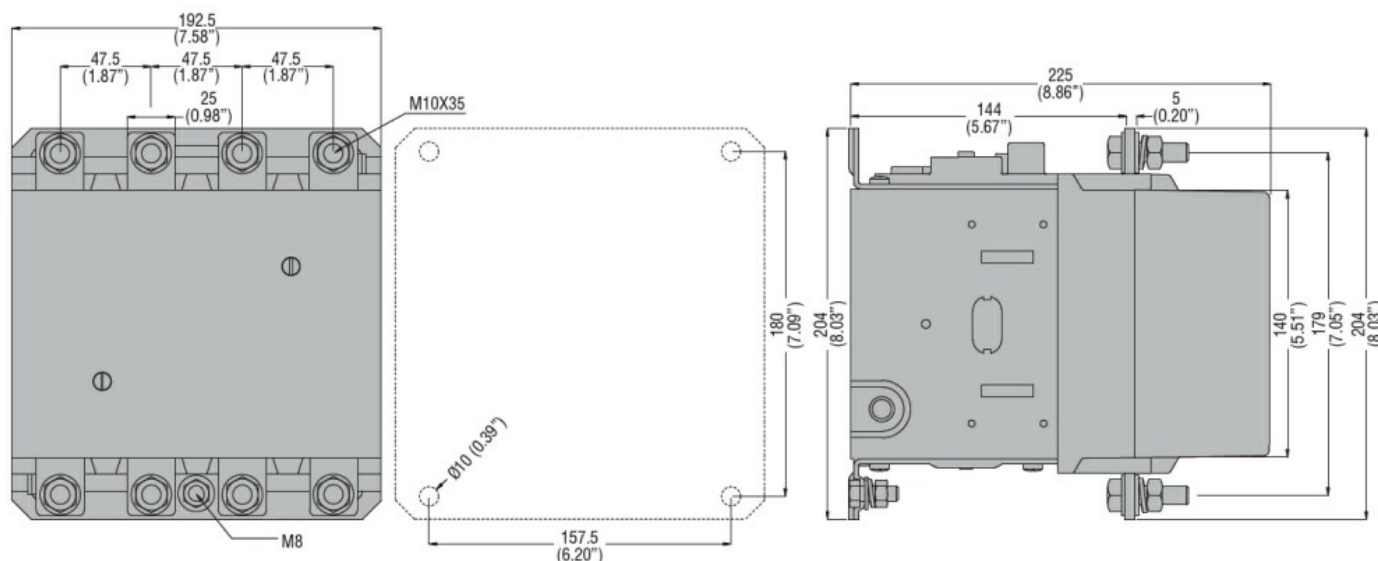


## Resistance & Protection

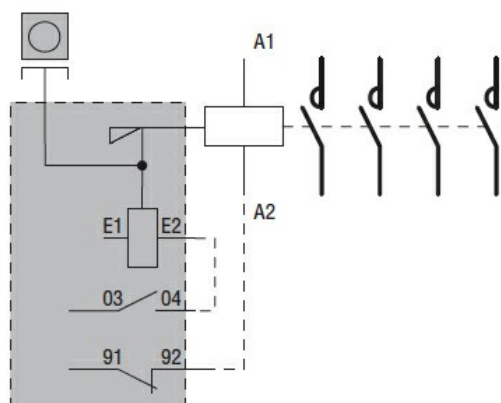
Pollution degree

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