



|  |                    |    |     |                 |
|--|--------------------|----|-----|-----------------|
| Product designation  |                    |    |     | Power contactor |
| Product type designation   |                    |    |     | B250            |
| <b>Contact characteristics</b>                                     |                    |    |     |                 |
| 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                  |    |     | 350             |
| Operational current $I_e$  | 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 $I_e$ 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 $I_e$ 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 $I_e$ 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 $I_e$ 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<sub>e</sub> in DC3-DC5 with L/R = 15ms with 1 poles in series

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

IEC max current I<sub>e</sub> in DC3-DC5 with L/R = 15ms with 2 poles in series

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

IEC max current I<sub>e</sub> in DC3-DC5 with L/R = 15ms with 3 poles in series

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

IEC max current I<sub>e</sub> in DC3-DC5 with L/R = 15ms 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)

|    |     |
|----|-----|
| m? | 0.2 |
|----|-----|

Power dissipation per pole (average value)

|                 |   |      |
|-----------------|---|------|
| I <sub>th</sub> | W | 24.5 |
| AC3             | W | 12.5 |

Tightening torque for terminals

|     |                  |      |
|-----|------------------|------|
| min | Nm               | 35   |
| max | Nm               | 35   |
| min | I <sub>bin</sub> | 25.8 |
| max | I <sub>bin</sub> | 25.8 |

Tightening torque for coil terminal

|     |                  |      |
|-----|------------------|------|
| min | Nm               | 1    |
| max | Nm               | 1    |
| min | I <sub>bin</sub> | 0.74 |
| max | I <sub>bin</sub> | 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 allowable            | Vertical plan<br>±30° |
|-------------------|-----------------------------|-----------------------|
| Fixing            |                             | Screw                 |
| Weight            |                             | g 1137                |
| Conductor section |                             |                       |
|                   | AWG/kcmil conductor section |                       |
|                   | max                         | 500 kcmil             |

**Operations**

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

**Safety related data**

Performance level B10d according to EN/ISO 13489-1

|  |                 |        |          |
|--|-----------------|--------|----------|
|  | rated load      | cycles | 1000000  |
|  | mechanical load | cycles | 10000000 |

Mirror contacts according to IEC/EN 60947-4-1

EMC compatibility

yes

**AC coil operating**

Rated AC voltage at 50/60Hz

V 24

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  |

**DC coil operating**

DC rated control voltage

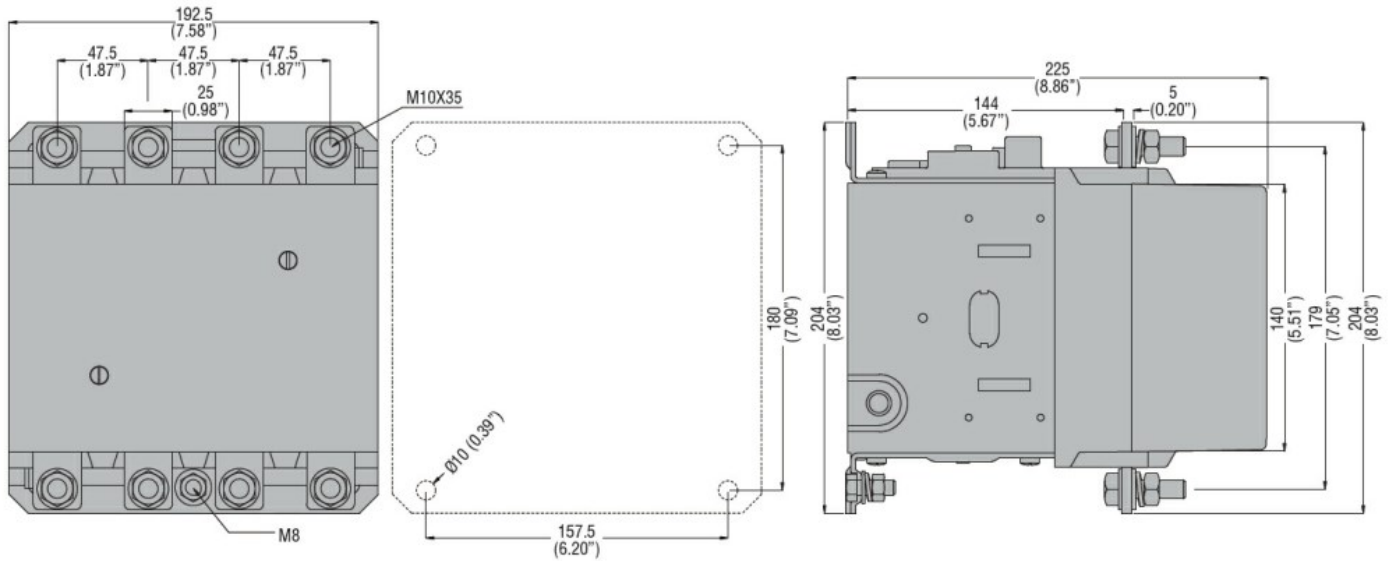
V 24

DC operating voltage

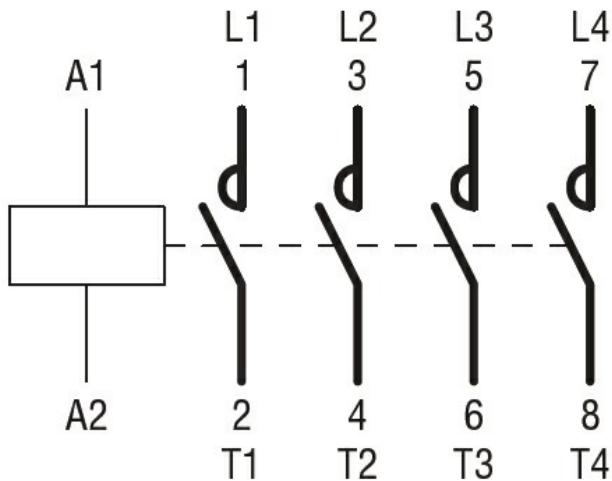
pick-up

|  |            |                       |     |               |
|--|------------|-----------------------|-----|---------------|
|  |            | 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            |
| <b>Max cycles frequency</b>                      |            |                       |     |               |
| Mechanical operation                             |            |                       |     | cycles/h 2400 |
| <b>Operating times</b>                           |            |                       |     |               |
| 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            |
| <b>UL technical data</b>                         |            |                       |     |               |
| 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             |
| <b>Ambient conditions</b>                        |            |                       |     |               |
| Temperature                                      |            |                       |     |               |
| Operating temperature                            |            |                       |     |               |
|  |            | min                   | °C  | -50           |
|  |            | max                   | °C  | 70            |
| Storage temperature                              |            |                       |     |               |
|  |            | min                   | °C  | -60           |
|  |            | max                   | °C  | 80            |
| Max altitude                                     |            |                       |     | m 3000        |
| <b>Resistance &amp; Protection</b>               |            |                       |     |               |
| 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