



| Product designation<br>Product type designation                      |                    |     | Power contactor<br>B250 |
|--|--------------------|-----|-------------------------|
| Contact characteristics  |                    |     | B230                    |
| Number of poles  |                    | Nr. | 3                       |
| 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                        | max                | A   | 350                     |
| Operational current le   |                    |     |                         |
|  | AC-1 (≤40°C)       | А   | 350                     |
|  | AC-1 (≤55°C)       | A   | 300                     |
|  | AC-1 (≤70°C)       | A   | 250                     |
|  | AC-3 (≤440V ≤55°C) | А   | 265                     |
|  | AC-4 (400V)        | А   | 115                     |
| Rated operational power AC-3 (T≤55°C)                                |                    |     |                         |
|  | 400V               | kW  | 140                     |
| Rated operational power AC-1 (T≤40°C)                                |                    |     |                         |
|  | 230V               | kW  | 124                     |
|  | 400V               | kW  | 214                     |
|  | 500V               | kW  | 282                     |
|  | 690V               | kW  | 380                     |
| IEC max current le in DC1 with $L/R \le 1$ ms with 1 poles in series |                    |     |                         |
|  | 75V                | А   | 350                     |
|  | 110V               | А   | 160                     |
|  | 220V               | А   |                         |
|  | 330V               | А   |                         |
|  | 460V               | А   |                         |
| IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series |                    |     |                         |
|  | 75V                | А   | 350                     |
|  | 110V               | А   | 300                     |
|  | 220V               | А   | 250                     |
|  | 330V               | А   |                         |
|  | 460V               | A   |                         |
| IEC max current le in DC1 with $L/R \le 1$ ms with 3 poles in series |                    |     |                         |
|  | 75V                | А   | 350                     |
|  | 110V               | A   | 300                     |
|  | 220V               | А   | 300                     |
|  | 330V               | A   | 250                     |
|  | 460V               | A   |                         |
| IEC max current le in DC1 with $L/R \le 1$ ms with 4 poles in series |                    | -   |                         |
|  | 75V                | A   | 350                     |
|  | 110V               | A   | 300                     |
|  | 220V               | А   | 300                     |

11B250SL0048



|  | 330V       | А     | 300       |
|--|------------|-------|-----------|
|  | 460V       | А     | 250       |
| EC max current le in DC3-DC5 with L/R $\leq$ 15ms with 1 poles in series |            |       |           |
|  | 75V        | А     | 280       |
|  | 110V       | А     | 150       |
|  | 220V       | А     |           |
|  | 330V       | А     |           |
|  | 460V       | A     |           |
| EC max current le in DC3-DC5 with L/R $\leq$ 15ms with 2 poles in series |            |       |           |
|  | 75V        | А     | 280       |
|  | 110V       | A     | 250       |
|  | 220V       | A     | 200       |
|  | 330V       | A     |           |
|  | 460V       | A     |           |
| EC max current le in DC3-DC5 with L/R $\leq$ 15ms with 3 poles in series | 400 V      | ~     |           |
| EC max current le in DC3-DC5 with $L/R \leq 15ms$ with 5 poles in series |            | ٨     | 200       |
|  | 75V        | A     | 280       |
|  | 110V       | A     | 280       |
|  | 220V       | A     | 250       |
|  | 330V       | А     | 200       |
|  | 460V       | A     |           |
| EC max current le in DC3-DC5 with L/R $\leq$ 15ms with 4 poles in series |            |       |           |
|  | 75V        | А     | 280       |
|  | 110V       | А     | 280       |
|  | 220V       | А     | 280       |
|  | 330V       | А     | 200       |
|  | 460V       | А     | 200       |
| Short-time allowable current for 10s (IEC/EN60947-1)                     |            | А     | 2200      |
| Protection fuse  |            |       |           |
|  | gG (IEC)   | А     | 400       |
|  | aM (IEC)   | А     | 250       |
| Making capacity (RMS value)  |            | А     | 2750      |
| Breaking capacity at voltage   |            |       |           |
|  | 440V       | А     | 2500      |
|  | 500V       | A     | 2250      |
|  | 690V       | A     | 2200      |
| Resistance per pole (average value)                                      | 0001       | mΩ    | 0.2       |
| Power dissipation per pole (average value)                               |            | 11152 | 0.2       |
| rower dissipation per pole (average value)                               | lth        | W     | 24.5      |
|  | AC-3       |       |           |
| Tink to a to any offen to any in all                                     | AC-3       | W     | 12.5      |
| Tightening torque for terminals  |            | N I - | 05        |
|  | 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        | lbin  | 0.74      |
|  | max        | lbin  | 0.74      |
| Max number of wires simultaneously connectable                           |            | Nr.   | 2         |
| Conductor section  |            |       |           |
| AWG/Kcmil  |            |       |           |
|  | <b>mov</b> |       | 500 komil |

500 kcmil

max



Power terminal protection according to IEC/EN 60529 **IP00** Mechanical features Operating position Vertical plan normal allowable ±30° Fixing Screw Weight 9200 g Conductor section AWG/kcmil conductor section 500 kcmil max Operations Mechanical life 1000000 cycles Electrical life 1000000 cycles Safety related data Performance level B10d according to EN/ISO 13489-1 rated load 1000000 cycles mechanical load 1000000 cycles Mirror contats according to IEC/EN 609474-4-1 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 %Us min 80 max %Us 110 drop-out min %Us 20 max %Us 60 of 50/60Hz coil powered at 60Hz pick-up min %Us 80 %Us 110 max drop-out min %Us 20 max %Us 60 of 60Hz coil powered at 60Hz pick-up %Us 80 min %Us 110 max drop-out min %Us 20 %Us 60 max 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 300 VA in-rush holding VA 10 W Dissipation at holding ≤20°C 50Hz 10 DC coil operating V DC rated control voltage 48

11B250SL0048

The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding



| DC operating voltage     |                        |            |                       |          |      |
|--------------------------|------------------------|------------|-----------------------|----------|------|
|                          | pick-up                |            |                       | 0/11     |      |
|                          |                        |            | min                   | %Us      | 80   |
|                          | <u> </u>               |            | max                   | %Us      | 110  |
|                          | drop-out               |            |                       |          |      |
|                          |                        |            | min                   | %Us      | 20   |
|                          |                        |            | max                   | %Us      | 60   |
| Average coil consump     | otion ≤20°C            |            |                       |          |      |
|                          |                        |            | in-rush               | W        | 300  |
|                          |                        |            | holding               | W        | 10   |
| Max cycles frequency     |                        |            |                       |          |      |
| Mechanical operation     |                        |            |                       | cycles/h | 2400 |
| Operating times          |                        |            |                       |          |      |
| Average time for Us co   | ontrol                 |            |                       |          |      |
|                          | 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 r | notor      |                       |          |      |
|                          |                        |            | at 480V               | А        | 240  |
|                          |                        |            | at 600V               | А        | 242  |
| Yielded mechanical pe    | erformance             |            |                       |          |      |
|                          | for three-phase AC     | motor      |                       |          |      |
|                          |                        |            | 200/208V              | HP       | 75   |
|                          |                        |            | 220/230V              | HP       | 100  |
|                          |                        |            | 575/600V              | HP       | 250  |
| General USE              |                        |            |                       |          |      |
|                          | Contactor              |            |                       |          |      |
|                          |                        |            | AC current            | А        | 350  |
| Short-circuit protection | n fuse, 600V           |            | -                     |          |      |
|                          | Standard fault         |            |                       |          |      |
|                          |                        |            | Short circuit current | kA       | 18   |
|                          |                        |            | Fuse rating           | A        | 800  |
|                          |                        |            | Fuse class            |          | L    |
| Ambient conditions       |                        |            |                       |          |      |
| Temperature              |                        |            |                       |          |      |
|                          | Operating temperat     | ure        |                       |          |      |
|                          | operating temperat     |            | min                   | °C       | -50  |
|                          |                        |            | max                   | °C       | 70   |
|                          | Storage temperatur     | ۵          | max                   | <u> </u> |      |
|                          | Storage temperatur     | •          | min                   | °C       | -60  |
|                          |                        |            | max                   | °C       | 80   |
| Max altitude             |                        |            | max                   | <br>     | 3000 |
|                          |                        |            |                       |          |      |

11B250SL0048

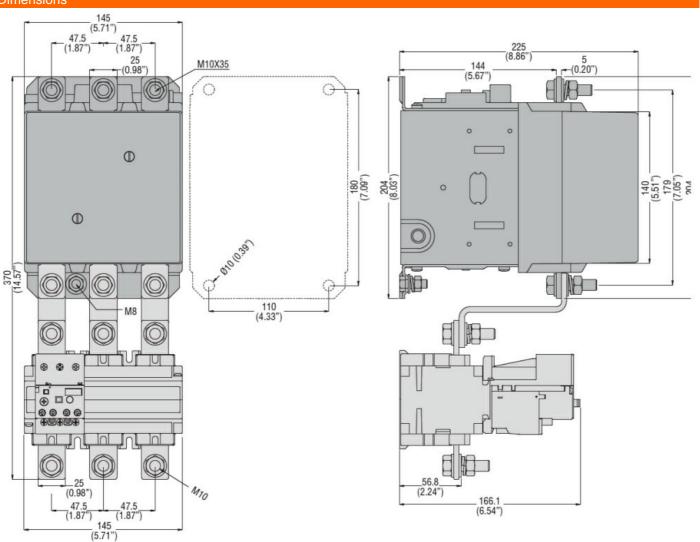


3

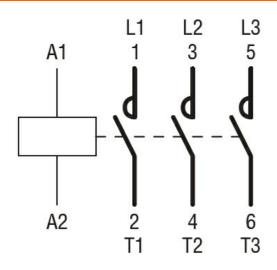
ENERGY AND AUTOMATION

# Resistance & Protection

## Pollution degree Dimensions



### Wiring diagrams



### Certifications and compliance

| Compl  | liance |
|--------|--------|
| o o mp | 1000   |

| 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 |                  |          |
|                     |                  | =0.00000 |

**ETIM 8.0** 

EC000066 -Power contactor, AC switching

11B250SL0048