



| Product designation  |                    |        | Power contactor |
|--|--------------------|--------|-----------------|
| Product type designation<br>Contact characteristics                  |                    |        | B145            |
| Number of poles  |                    | Nr.    | 3               |
| Rated insulation voltage Ui IEC/EN                                   |                    | V      | 1000            |
| Rated impulse withstand voltage Uimp                                 |                    | kV     | 8               |
| Operational frequency  |                    | IX V   | 0               |
|  | min                | Hz     | 25              |
|  | max                | Hz     | 400             |
| IEC Conventional free air thermal current Ith                        |                    | A      | 250             |
| Operational current le   |                    |        |                 |
|  | AC-1 (≤40°C)       | А      | 250             |
|  | AC-1 (≤55°C)       | A      | 235             |
|  | AC-1 (≤70°C)       | А      | 190             |
|  | AC-3 (≤440V ≤55°C) | А      | 150             |
|  | AC-4 (400V)        | А      | 57              |
| Rated operational power AC-3 (T≤55°C)                                |                    |        |                 |
|  | 230V               | kW     | 46              |
|  | 400V               | kW     | 80              |
|  | 415V               | kW     | 88              |
|  | 440V               | kW     | 93              |
|  | 500V               | kW     | 100             |
|  | 690V               | kW     | 120             |
|  | 1000V              | kW     | 75              |
| Rated operational power AC-1 (T≤40°C)                                |                    |        |                 |
|  | 230V               | kW     | 91              |
|  | 400V               | kW     | 150             |
|  | 500V               | kW     | 196             |
| IEC may aurrent to in DC1 with L/R < 1ma with 1 palas in series      | 690V               | kW     | 270             |
| IEC max current le in DC1 with $L/R \le 1$ ms with 1 poles in series | 75V                | ۸      | 220             |
|  | 75V<br>110V        | A<br>A | 220<br>110      |
|  | 220V               | A      | _               |
|  | 330V               | A      | _               |
|  | 460V               | A      | _               |
| IEC max current le in DC1 with $L/R \le 1$ ms with 2 poles in series | 1001               |        |                 |
|  | 75V                | А      | 220             |
|  | 110V               | A      | 150             |
|  | 220V               | A      | 130             |
|  | 330V               | А      | _               |
|  | 460V               | А      | _               |
| IEC max current le in DC1 with L/R ≤ 1ms with 3 poles in series      |                    |        |                 |
|  | 75V                | А      | 220             |
|  | 110V               | А      | 150             |
|  | 220V               | А      | 150             |

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ENERGY AND AUTOMATION

THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 150A, AC/DC COIL, 380...415VAC/DC

|   | 330V                 | А      | 130        |
|---|----------------------|--------|------------|
|   | 460V                 | А      | -          |
| IEC max current le in DC1 with $L/R \le 1$ ms with 4 poles in series      |                      |        |            |
|   | 75V                  | А      | 220        |
|   | 110V                 | А      | 150        |
|   | 220V                 | А      | 150        |
|   | 330V                 | А      | 150        |
|   | 460V                 | Α      | 130        |
| IEC max current le in DC3-DC5 with L/R $\leq$ 15ms with 1 poles in series |                      |        |            |
|   | 75V                  | A      | 160        |
|   | 110V                 | А      | 80         |
|   | 220V                 | А      | -          |
|   | 330V                 | Α      | -          |
|   | 460V                 | A      | _          |
| IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 2 poles in series |                      |        |            |
|   | 75V                  | A      | 160        |
|   | 110V                 | A      | 120        |
|   | 220V                 | A      | 90         |
|   | 330V                 | A      | _          |
|   | 460V                 | A      | _          |
| IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 3 poles in series |                      |        |            |
|   | 75V                  | A      | 160        |
|   | 110V                 | A      | 140        |
|   | 220V                 | A      | 120        |
|   | 330V                 | A      | 90         |
|   | 460V                 | A      | -          |
| IEC max current le in DC3-DC5 with $L/R \le 15$ ms with 4 poles in series |                      |        | 100        |
|   | 75V                  | A      | 160        |
|   | 110V                 | A      | 140        |
|   | 220V<br>330V         | A      | 140        |
|   | 330V<br>460V         | A      | 140<br>90  |
| Short-time allowable current for 10s (IEC/EN60947-1)                      | 400 V                | A<br>A | 1300       |
|   |                      | A      | 1300       |
| Protection fuse   |                      | ۸      | 250        |
|   | gG (IEC)<br>aM (IEC) | A      | 250<br>160 |
| Making capacity (RMS value)   |                      | A<br>A | 1500       |
| Breaking capacity at voltage  |                      | A      | 1500       |
| Dicaning capacity at voltage  | 440V                 | А      | 1500       |
|   | 440V<br>500V         | A      | 1400       |
|   | 500V<br>690V         | A      | 1200       |
| Resistance per pole (average value)                                       | 0301                 | <br>mΩ | 0.3        |
| Power dissipation per pole (average value)                                |                      | 11122  | 0.0        |
| i over assipation per pole (average value)                                | lth                  | W      | 14.5       |
|   | AC-3                 | W      | 6.8        |
| Tightening torque for terminals   | AC-3                 | vv     | 0.0        |
| ngnioning torque for terminals  | min                  | Nm     | 18         |
|   | max                  | Nm     | 18         |
|   | min                  | Ibin   | 13.3       |
|   | max                  | Ibin   | 13.3       |
| Tightening torque for coil terminal                                       | Παλ                  |        | 10.0       |
|   | min                  | Nm     | 1          |
|   | max                  | Nm     | 1          |
|   | Παλ                  | INIII  | I          |

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# 11B14500380 THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 150A, AC/DC COIL,

380...415VAC/DC

|   |  | min   | Ibin   | 0.74  |
|---|--|---|--|---|
| Max number of wires   |  | max   | lbin<br>Nr.  | 0.74  |
| Conductor section   | s simultaneously connectable   |   | INF.   | 2   |
|   | AWG/Kcmil  |   |  |   |
|   | AWO/Kemi   | max   |  | 4/0   |
| Power terminal prote  | ection according to IEC/EN 60529   | Пах   |  | IP00  |
| Mechanical features   |  |   |  |   |
| Operating position  |  |   |  |   |
| 1 01  |  | normal  |  | Vertical plan   |
|   |  | allowable   |  | ±30°  |
| Fixing  |  |   |  | Screw   |
| Weight  |  |   | g  | 5390  |
| Conductor section   |  |   |  |   |
|   | AWG/kcmil conductor section  |   |  |   |
|   |  | max   |  | 4/0   |
| Operations  |  |   |  |   |
| Mechanical life   |  |   | cycles   | 1000000   |
| Electrical life   |  |   | cycles   | 1100000   |
| Safety related data   |  |   |  |   |
| Performance level B   | 10d according to EN/ISO 13489-1  |   |  | 4400000   |
|   |  | rated load  | cycles   | 1100000   |
|   |  | mechanical load   | cycles   | 1000000   |
| Mirror contate case   | ding to IEC/EN 600/7/ / 1  |   |  |   |
|   | ding to IEC/EN 609474-4-1  |   |  | yes   |
| EMC compatibility   | ding to IEC/EN 609474-4-1  |   |  | yes   |
| EMC compatibility<br>AC coil operating                        |  |   |  | -   |
| EMC compatibility   |  | min   | V  | yes   |
| EMC compatibility<br>AC coil operating                        |  | min<br>max  | V<br>V   | yes<br>380  |
| EMC compatibility<br>AC coil operating                        | 50/60Hz, 60Hz  |   |  | yes   |
| EMC compatibility<br>AC coil operating<br>Rated AC voltage at | 50/60Hz, 60Hz<br>э   |   |  | yes<br>380  |
| EMC compatibility<br>AC coil operating<br>Rated AC voltage at | 50/60Hz, 60Hz  |   |  | yes<br>380  |
| EMC compatibility<br>AC coil operating<br>Rated AC voltage at | 50/60Hz, 60Hz<br>e<br>of 50/60Hz coil powered at 50Hz  |   |  | yes<br>380  |
| EMC compatibility<br>AC coil operating<br>Rated AC voltage at | 50/60Hz, 60Hz<br>e<br>of 50/60Hz coil powered at 50Hz  | max   | V  | yes<br>380<br>415   |
| EMC compatibility<br>AC coil operating<br>Rated AC voltage at | 50/60Hz, 60Hz<br>e<br>of 50/60Hz coil powered at 50Hz  | max<br>min  | V<br>%Us<br>%Us                                    | yes<br>380<br>415<br>80<br>110  |
| EMC compatibility<br>AC coil operating<br>Rated AC voltage at | 50/60Hz, 60Hz<br>e<br>of 50/60Hz coil powered at 50Hz<br>pick-up   | max<br>min  | V<br>%Us<br>%Us<br>%Us                             | yes<br>380<br>415<br>80<br>110<br>20  |
| EMC compatibility<br>AC coil operating<br>Rated AC voltage at | 50/60Hz, 60Hz<br>e<br>of 50/60Hz coil powered at 50Hz<br>pick-up<br>drop-out   | max<br>min<br>max   | V<br>%Us<br>%Us                                    | yes<br>380<br>415<br>80<br>110  |
| EMC compatibility<br>AC coil operating<br>Rated AC voltage at | 50/60Hz, 60Hz<br>of 50/60Hz coil powered at 50Hz<br>pick-up<br>drop-out<br>of 50/60Hz coil powered at 60Hz   | max<br>min<br>max<br>min  | V<br>%Us<br>%Us<br>%Us                             | yes<br>380<br>415<br>80<br>110<br>20  |
| EMC compatibility<br>AC coil operating<br>Rated AC voltage at | 50/60Hz, 60Hz<br>e<br>of 50/60Hz coil powered at 50Hz<br>pick-up<br>drop-out   | max<br>min<br>max<br>min<br>max   | V<br>%Us<br>%Us<br>%Us<br>%Us                      | yes<br>380<br>415<br>80<br>110<br>20<br>60  |
| EMC compatibility<br>AC coil operating<br>Rated AC voltage at | 50/60Hz, 60Hz<br>of 50/60Hz coil powered at 50Hz<br>pick-up<br>drop-out<br>of 50/60Hz coil powered at 60Hz   | max<br>min<br>max<br>min<br>max<br>min                                    | V<br>%Us<br>%Us<br>%Us<br>%Us                      | yes<br>380<br>415<br>80<br>110<br>20<br>60<br>80  |
| EMC compatibility<br>AC coil operating<br>Rated AC voltage at | 50/60Hz, 60Hz<br>of 50/60Hz coil powered at 50Hz<br>pick-up<br>drop-out<br>of 50/60Hz coil powered at 60Hz<br>pick-up  | max<br>min<br>max<br>min<br>max   | V<br>%Us<br>%Us<br>%Us<br>%Us                      | yes<br>380<br>415<br>80<br>110<br>20<br>60  |
| EMC compatibility<br>AC coil operating<br>Rated AC voltage at | 50/60Hz, 60Hz<br>of 50/60Hz coil powered at 50Hz<br>pick-up<br>drop-out<br>of 50/60Hz coil powered at 60Hz   | max<br>min<br>max<br>min<br>max<br>min<br>max                             | V<br>%Us<br>%Us<br>%Us<br>%Us<br>%Us               | yes<br>380<br>415<br>80<br>110<br>20<br>60<br>80<br>110   |
| EMC compatibility<br>AC coil operating<br>Rated AC voltage at | 50/60Hz, 60Hz<br>of 50/60Hz coil powered at 50Hz<br>pick-up<br>drop-out<br>of 50/60Hz coil powered at 60Hz<br>pick-up  | max<br>min<br>max<br>min<br>max<br>min<br>max<br>min                      | V<br>%Us<br>%Us<br>%Us<br>%Us<br>%Us<br>%Us        | yes<br>380<br>415<br>80<br>110<br>20<br>60<br>80<br>110<br>20<br>20   |
| EMC compatibility<br>AC coil operating<br>Rated AC voltage at | 50/60Hz, 60Hz<br>e of 50/60Hz coil powered at 50Hz<br>pick-up<br>drop-out<br>of 50/60Hz coil powered at 60Hz<br>pick-up<br>drop-out  | max<br>min<br>max<br>min<br>max<br>min<br>max                             | V<br>%Us<br>%Us<br>%Us<br>%Us<br>%Us               | yes<br>380<br>415<br>80<br>110<br>20<br>60<br>80<br>110   |
| EMC compatibility<br>AC coil operating<br>Rated AC voltage at | 50/60Hz, 60Hz<br>e of 50/60Hz coil powered at 50Hz<br>pick-up<br>drop-out<br>of 50/60Hz coil powered at 60Hz<br>pick-up<br>drop-out<br>drop-out                              | max<br>min<br>max<br>min<br>max<br>min<br>max<br>min                      | V<br>%Us<br>%Us<br>%Us<br>%Us<br>%Us<br>%Us        | yes<br>380<br>415<br>80<br>110<br>20<br>60<br>80<br>110<br>20<br>20   |
| EMC compatibility<br>AC coil operating<br>Rated AC voltage at | 50/60Hz, 60Hz<br>e of 50/60Hz coil powered at 50Hz<br>pick-up<br>drop-out<br>of 50/60Hz coil powered at 60Hz<br>pick-up<br>drop-out  | max<br>min<br>max<br>min<br>max<br>min<br>max<br>min<br>max               | V<br>%Us<br>%Us<br>%Us<br>%Us<br>%Us<br>%Us        | yes<br>380<br>415<br>80<br>110<br>20<br>60<br>80<br>110<br>20<br>60<br>80<br>110<br>20<br>60  |
| EMC compatibility<br>AC coil operating<br>Rated AC voltage at | 50/60Hz, 60Hz<br>e of 50/60Hz coil powered at 50Hz<br>pick-up<br>drop-out<br>of 50/60Hz coil powered at 60Hz<br>pick-up<br>drop-out<br>drop-out                              | max<br>min<br>max<br>min<br>max<br>min<br>max<br>min<br>max<br>min<br>max | V<br>%Us<br>%Us<br>%Us<br>%Us<br>%Us<br>%Us<br>%Us | yes<br>380<br>415<br>80<br>110<br>20<br>60<br>80<br>110<br>20<br>60<br>80<br>110<br>20<br>60<br>80<br>80<br>110<br>80<br>110<br>80<br>80<br>110<br>80<br>80<br>110<br>80<br>80<br>80<br>80<br>80<br>80<br>80<br>80<br>80<br>8 |
| EMC compatibility<br>AC coil operating<br>Rated AC voltage at | 50/60Hz, 60Hz<br>of 50/60Hz coil powered at 50Hz<br>pick-up<br>drop-out<br>of 50/60Hz coil powered at 60Hz<br>pick-up<br>drop-out<br>of 60Hz coil powered at 60Hz<br>pick-up | max<br>min<br>max<br>min<br>max<br>min<br>max<br>min<br>max               | V<br>%Us<br>%Us<br>%Us<br>%Us<br>%Us<br>%Us        | yes<br>380<br>415<br>80<br>110<br>20<br>60<br>80<br>110<br>20<br>60<br>80<br>110<br>20<br>60  |
| EMC compatibility<br>AC coil operating<br>Rated AC voltage at | 50/60Hz, 60Hz<br>e of 50/60Hz coil powered at 50Hz<br>pick-up<br>drop-out<br>of 50/60Hz coil powered at 60Hz<br>pick-up<br>drop-out<br>drop-out                              | max<br>min<br>max<br>min<br>max<br>min<br>max<br>min<br>max<br>min<br>max | V<br>%Us<br>%Us<br>%Us<br>%Us<br>%Us<br>%Us<br>%Us | yes<br>380<br>415<br>80<br>110<br>20<br>60<br>80<br>110<br>20<br>60<br>80<br>110<br>20<br>60<br>80<br>80<br>110<br>80<br>110<br>80<br>80<br>110<br>80<br>80<br>110<br>80<br>80<br>80<br>80<br>80<br>80<br>80<br>80<br>80<br>8 |

## of 50/60Hz coil powered at 50Hz

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THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 150A, AC/DC COIL,

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|   |  |                | in-rush   | VA                            | 300                                 |
|---|--|----------------|---|-------------------------------|-------------------------------------|
|   | ( = 0 / 0 0 1 1 1  |                | holding   | VA                            | 10                                  |
|   | of 50/60Hz coil p  | owered at 60Hz | in much   | ١/٨                           | 200                                 |
|   |  |                | in-rush   | VA<br>VA                      | 300                                 |
| Dissipation at holding ≤  | <20°C 50U-   |                | holding   | W VA                          | 10<br>10                            |
| Dissipation at holding a  | ≤20 C 30112  |                |   | VV                            | 10                                  |
| DC rated control voltag   | re   |                |   |                               |                                     |
|   | <b>J</b> C   |                | min   | V                             | 380                                 |
|   |  |                | max   | v                             | 415                                 |
| DC operating voltage  |  |                |   |                               |                                     |
|   | pick-up  |                |   |                               |                                     |
|   | 1 1  |                | min   | %Us                           | 80                                  |
|   |  |                | max   | %Us                           | 110                                 |
|   | drop-out   |                |   |                               |                                     |
|   | -  |                | min   | %Us                           | 20                                  |
|   |  |                | max   | %Us                           | 60                                  |
| Average coil consumpt   | tion ≤20°C   |                |   |                               |                                     |
|   |  |                | in-rush   | W                             | 300                                 |
|   |  |                | holding   | W                             | 10                                  |
| Max cycles frequency  |  |                |   |                               |                                     |
| Mechanical operation  |  |                |   | cycles/h                      | 2400                                |
| Operating times   |  |                |   |                               |                                     |
| Average time for Us co  |  |                |   |                               |                                     |
|   | in AC  |                |   |                               |                                     |
|   |  | Closing NO     | min   | ms                            | 60                                  |
|   |  |                | max   | ms                            | 100                                 |
|   |  | Opening NO     | IIIdA   | 1113                          | 100                                 |
|   |  | oponing ito    | min   | ms                            | 25                                  |
|   |  |                | max   | ms                            | 60                                  |
|   | in DC  |                |   |                               |                                     |
|   |  | Closing NO     |   |                               |                                     |
|   |  | -              | min   | ms                            | 60                                  |
|   |  |                | max   | ms                            | 100                                 |
|   |  | Opening NO     |   |                               |                                     |
|   |  | 1 0            |   |                               |                                     |
|   |  | 1 0            | min   | ms                            | 25                                  |
|   |  |                | min<br>max  | ms<br>ms                      | 25<br>60                            |
|   | for the second second                                      |                |   |                               |                                     |
|   | for three-phase A(   |                | max   | ms                            | 60                                  |
|   | for three-phase A  |                | max<br>at 480V  | ms<br>A                       | 60<br>124                           |
| Full-load current (FLA)   |  |                | max   | ms                            | 60                                  |
| UL technical data<br>Full-load current (FLA)<br>Yielded mechanical pe | rformance  | C motor        | max<br>at 480V  | ms<br>A                       | 60<br>124                           |
| Full-load current (FLA)   |  | C motor        | max<br>at 480V<br>at 600V                                       | ms<br>A<br>A                  | 60<br>124<br>125                    |
| Full-load current (FLA)   | rformance  | C motor        | max<br>at 480V<br>at 600V<br>200/208V                           | MS<br>A<br>A<br>HP            | 60<br>124<br>125<br>50              |
| Full-load current (FLA)<br>Yielded mechanical pe                      | rformance  | C motor        | max<br>at 480V<br>at 600V                                       | ms<br>A<br>A                  | 60<br>124<br>125                    |
| Full-load current (FLA)<br>Yielded mechanical pe                      | rformance<br>for three-phase A                             | C motor        | max<br>at 480V<br>at 600V<br>200/208V                           | MS<br>A<br>A<br>HP            | 60<br>124<br>125<br>50              |
| Full-load current (FLA)<br>Yielded mechanical pe                      | rformance  | C motor        | max<br>at 480V<br>at 600V<br>200/208V                           | MS<br>A<br>A<br>HP            | 60<br>124<br>125<br>50              |
| Full-load current (FLA)<br>Yielded mechanical pe<br>General USE       | for three-phase A<br>Contactor                             | C motor        | max<br>at 480V<br>at 600V<br>200/208V<br>220/230V               | MS<br>A<br>A<br>HP<br>HP      | 60<br>124<br>125<br>50<br>50        |
| Full-load current (FLA)<br>Yielded mechanical pe<br>General USE       | for three-phase A<br>Contactor                             | C motor        | max<br>at 480V<br>at 600V<br>200/208V<br>220/230V               | MS<br>A<br>A<br>HP<br>HP      | 60<br>124<br>125<br>50<br>50        |
| Full-load current (FLA)<br>Yielded mechanical pe<br>General USE       | erformance<br>for three-phase A<br>Contactor<br>fuse, 600V | C motor        | max<br>at 480V<br>at 600V<br>200/208V<br>220/230V               | MS<br>A<br>A<br>HP<br>HP      | 60<br>124<br>125<br>50<br>50        |
| Full-load current (FLA)   | erformance<br>for three-phase A<br>Contactor<br>fuse, 600V | C motor        | max<br>at 480V<br>at 600V<br>200/208V<br>220/230V<br>AC current | MS<br>A<br>A<br>HP<br>HP<br>A | 60<br>124<br>125<br>50<br>50<br>250 |

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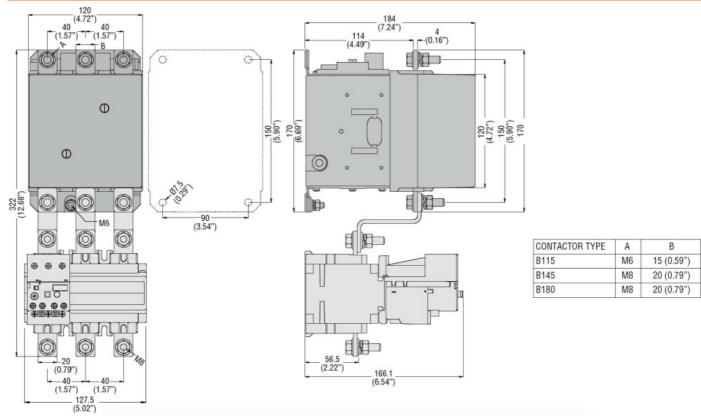


Ambient conditions

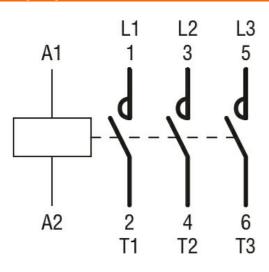
## Temperature

|                   | Operating temperature |     |    |      |
|-------------------|-----------------------|-----|----|------|
|                   |                       | min | °C | -50  |
|                   |                       | max | °C | 70   |
|                   | Storage temperature   |     |    |      |
|                   |                       | min | °C | -60  |
|                   |                       | max | °C | 80   |
| Max altitude      |                       |     | m  | 3000 |
| Resistance & Prot | tection               |     |    |      |
| Pollution degree  |                       |     |    | 3    |
|                   |                       |     |    |      |





Wiring diagrams



#### Certifications and compliance Compliance

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#### **11B14500380** THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 150A, AC/DC COIL, 380...415VAC/DC

|                     | 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 |                        |            |
|                     |                        | EC000066 - |

**ETIM 8.0** 

EC000066 -Power contactor, AC switching