



| | | | | |
|--|---|------|------|-----------------|
| Product designation | | | | Power contactor |
| Product type designation | | | | B145 |
| Contact characteristics | | | | |
| Number of poles | nr. | | | 3 |
| 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 | | | 250 |
| Operational current I_e | AC-1 ($\leq 40^\circ\text{C}$) | A | 250 | |
| | AC-3 ($\leq 440\text{V} \leq 55^\circ\text{C}$) | A | 150 | |
| | AC-4 (400V) | A | 57 | |
| Rated operational power AC-3 ($T \leq 55^\circ\text{C}$) | 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 ($T \leq 40^\circ\text{C}$) | 230V | kW | 91 | |
| | 400V | kW | 150 | |
| | 500V | kW | 196 | |
| | 690V | kW | 270 | |
| Short-time allowable current for 10s (IEC/EN60947-1) | A | | | 1300 |
| Protection fuse | gG (IEC) | A | 250 | |
| | aM (IEC) | A | 160 | |
| Making capacity (RMS value) | A | | | 1500 |
| Breaking capacity at voltage | 440V | A | 1500 | |
| | 500V | A | 1400 | |
| | 690V | A | 1200 | |
| Resistance per pole (average value) | m Ω | | | 0.3 |
| Power dissipation per pole (average value) | I_{th} | W | 14.5 | |
| | AC3 | W | 6.8 | |
| Tightening torque for terminals | min | Nm | 18 | |
| | max | Nm | 18 | |
| | min | lbin | 13.3 | |
| | max | lbin | 13.3 | |

Tightening torque for coil terminal

| | | |
|-----|------|------|
| min | Nm | 1 |
| max | Nm | 1 |
| min | lbft | 0.74 |
| max | lbft | 0.74 |

Max number of wires simultaneously connectable

nr. 2

Power terminal protection according to IEC/EN 60529

IP00

Mechanical features

Operating position

| | |
|------------------|--------------------|
| normal allowable | vertical plan ±30° |
|------------------|--------------------|

Fixing

Screw

Weight

g 5380

Operations

Mechanical life

cycles 10000000

Electrical life

cycles 1100000

Safety related data

Performance level B10d according to EN/ISO 13489-1

| | | |
|-----------------|--------|----------|
| rated load | cycles | 1100000 |
| mechanical load | 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 | 24 |
| max | V | 480 |

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 operating voltage at 20°C

of 50/60Hz coil powered at 50Hz

| | | |
|---------|----|-----|
| in-rush | VA | 300 |
| holding | VA | 10 |

of 50/60Hz coil powered at 60Hz

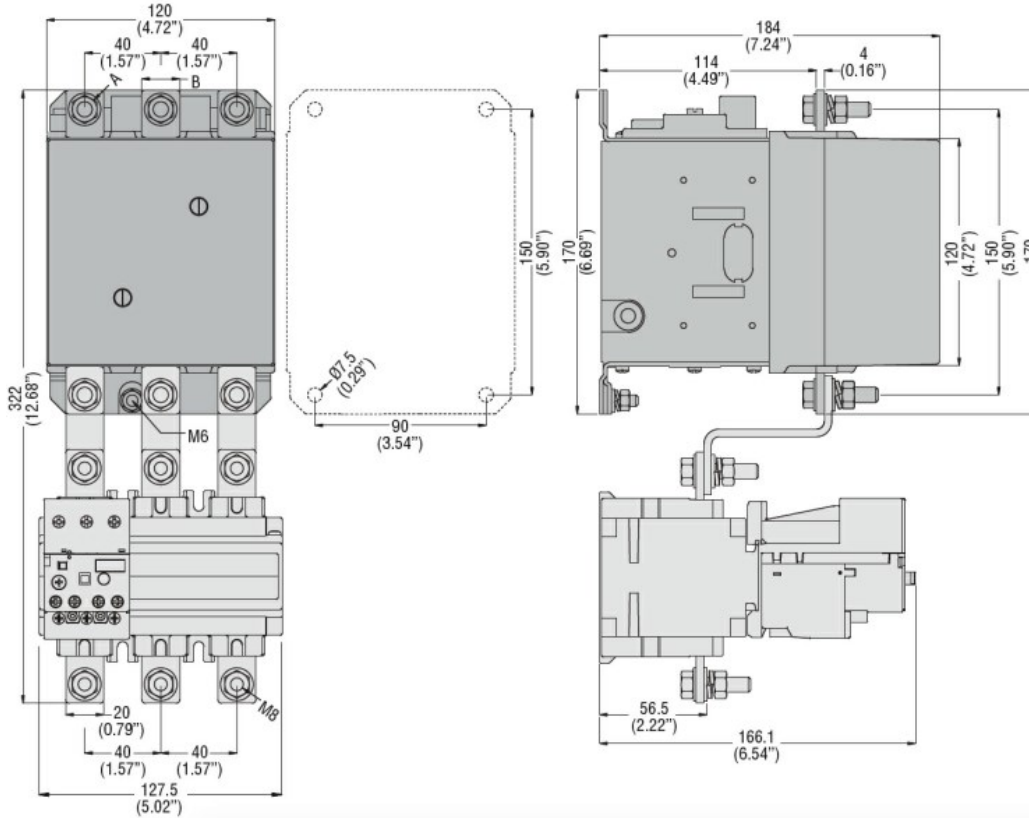
| | | | | |
|---|--------------------------|------------|--------------------|---------------|
| | | in-rush | VA | 300 |
| | | holding | VA | 10 |
| Dissipation at holding $\leq 20^{\circ}\text{C}$ 50Hz | | | | |
| | | | W | 10 |
| DC coil operating | | | | |
| DC rated control voltage | | | | |
| | | min | V | 24 |
| 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 operations | | | | cycles/h 2400 |
| Operating times | | | | |
| Average time for Us control | | | | |
| | in AC | | | |
| | | Closing NO | | |
| | | min | ms | 60 |
| | | max | ms | 100 |
| | | Opening NO | | |
| | | min | ms | 25 |
| | | max | ms | 60 |
| | in DC | | | |
| | | Closing NO | | |
| | | min | ms | 60 |
| | | max | ms | 100 |
| | | Opening NO | | |
| | | min | ms | 25 |
| | | max | ms | 60 |
| UL technical data | | | | |
| Full-load current (FLA) for three-phase AC motor | | | | |
| | | at 480V | A | 124 |
| | | at 600V | A | 125 |
| Yielded mechanical performance | | | | |
| | for three-phase AC motor | | | |
| | | 200/208V | hp | 50 |
| | | 220/230V | hp | 50 |
| | | 460/480V | hp | 100 |
| General USE | | | | |
| | Contactor | | | |
| | | AC current | A | 250 |
| 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

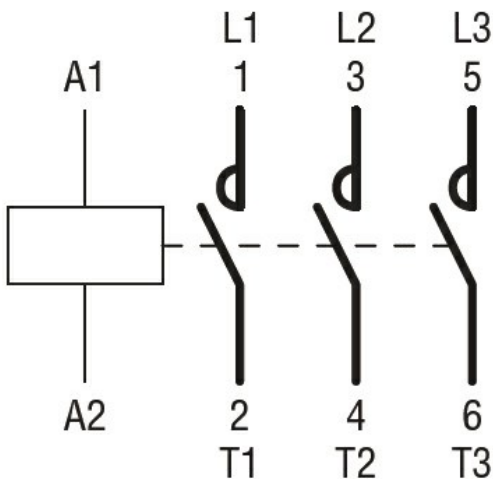
Pollution degree 3

Dimensions



| CONTACTOR TYPE | A | B |
|----------------|----|------------|
| B115 | M6 | 15 (0.59") |
| B145 | M8 | 20 (0.79") |
| B180 | M8 | 20 (0.79") |

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 6 classification

EC000066 - Power contactor, AC switching