11BF11000400



THREE-POLE CONTACTOR, IEC OPERATING CURRENT IE (AC3) = 110A, AC COIL 50/60HZ, 400VAC



| Product designation | | | Power contactor |
|--|--|----------|-----------------|
| Product type designation | | | 11BF110 |
| Contact characteristics | | | |
| Number of poles | | nr. | 3 |
| Rated insulation voltage Ui | | V | 1000 |
| Rated impulse withstand voltage Uimp | | kV | 8 |
| Operating frequency | | | |
| | Operational frequency min | Hz | 25 |
| | Operational frequency max | Hz | 400 |
| Conventional free air thermal current Ith | | А | 125 |
| Operating current | | | |
| | Operational current AC1 (≤40°C) | А | 125 |
| | Operational current AC3 (≤440V ≤55°C) | А | 110 |
| Rated operational power AC1 (T≤40°C) | | | |
| | 230V | kW | 47 |
| | 400V | kW | 82 |
| | 500V | kW | 108 |
| | 690V | kW | 128 |
| Rated operational power AC3 (T≤55°C) | | | - |
| ······································ | 230V | kW | 33 |
| | 400V | kW | 61 |
| | 415V | kW | 66 |
| | 440V | kW | 70 |
| | 500V | kW | 59 |
| | 690V | kW | 80 |
| | 1000V | kW | 45 |
| Short-time allowable current for 10s (IEC/EN | | A | 880 |
| Protection fuse | | | |
| | gG (IEC) | А | 160 |
| | aM (IEC) | A | 125 |
| Making capacity (RMS value) | | A | 1200 |
| Breaking capacity at voltage | | 7. | 1200 |
| Breaking suparity at voltage | Breaking capacity 440V | А | 1200 |
| | Breaking capacity 500V | A | 1050 |
| | Breaking capacity 690V | A | 800 |
| Resistance per pole (average value) | Dreaking capacity 000 V | mΩ | 0.6 |
| Power dissipation per pole (average value) | | 11132 | 0.0 |
| i ower dissipation per pole (average value) | Power dissipation pole (average value) Ith | W | 9.4 |
| | AC3 | W | 9.4 7.3 |
| Tightening torque for terminals | AC3 | vv | 1.0 |
| rightening torque for terminals | min | Nm | 1 |
| | min | Nm Nm | 4 5 |
| | max | lbft | |
| | min | | 2.95 |
| | max | lbft | 3.7 |

Tightening torque for coil terminal



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| | | min | Nm | 0.8 |
|-----------------------------------|------------------------------------|-----------------|--------|--------------------------|
| | | max | Nm | 1 |
| | | min | lbft | 0.8 |
| | | max | lbft | 0.74 |
| max number of wires s | simultaneously connectable | | nr. | 1 |
| Conductor section | | | | |
| | AWG | | | |
| | | min | | 14 |
| | | max | | 2/0 |
| | Flexible w/o lug conductor section | | | |
| | | min | mm² | 6 |
| | | max | mm² | 50 |
| | Flexible c/w lug conductor section | | | |
| | | min | mm² | 6 |
| | | max | mm² | 50 |
| | tion according to IEC/EN 60529 | | | IP20 front |
| Auxiliary contact chara | | | | |
| Operational current AC | | | A | 125 |
| Operating current DC ² | 13 | 110V | A | Screw / DIN rail 35mm |
| Ambient conditions | | | | |
| Temperature | | | | |
| | Operating temperature | | | |
| | | min | °C | -50 |
| | | max | °C | 70 |
| | Storage temperature | | | |
| | 2 | min | °C | -60 |
| | | max | °C | 80 |
| Max altitude | | | m | 3000 |
| Operating position | | | | |
| | | normal | | Vertical plan |
| | | allowable | | ±30° |
| Mounting | | | | Screw / DIN rail 35mm |
| Weight | | | g | 1352 |
| Operations | | | | |
| Mechanical life | | | Cycles | 15000000 |
| Electrical life | | | Cycles | 800000 |
| Safety related data | | | | |
| Performance level B1 | 0d according to EN/ISO 13489-1 | | | |
| | | rated load | Cicli | 800000 |
| | | mechanical load | Cicli | 15000000 |
| | ng to IEC/EN 609474-4-1 | | | yes |
| EMC compatibility | | | | yes |
| AC coil operating | | | | |
| AC operating voltage | of 50/60Hz coil powered at 50Hz | | | |
| | pick-up | | | |
| | | min | %Us | 0.8 |
| | • • • • | max | %Us | 1.1 |
| | drop-out | | 0/11 | |
| | | min | %Us | 0.2 |
| | | max | %Us | 0.55 |

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| | of 50/60Hz coil po | owered at 60Hz | | | |
|---|--------------------|--|--|---|---|
| | · | pick-up | | | |
| | | | min | %Us | 0.85 |
| | | | max | %Us | 1.1 |
| | | drop-out | Παλ | ,003 | |
| | | ulop-out | min | %Us | 0.4 |
| | | | min | | |
| | | | max | %Us | 0.55 |
| | of 60Hz coil powe | | | | |
| | | pick-up | | | |
| | | | min | %Us | 0.8 |
| | | | max | %Us | 1.1 |
| | | drop-out | | | |
| | | | min | %Us | 0.2 |
| | | | max | %Us | 0.55 |
| AC operating valtage | | | Παλ | /003 | 0.00 |
| AC operating voltage | | evered of COLL- | | | |
| | of 50/60Hz coil po | owered at 50Hz | | | |
| | | | in-rush | VA | 200 |
| | | | holding | VA | 18 |
| | of 50/60Hz coil po | owered at 60Hz | | | |
| | | | in-rush | VA | 200 |
| | | | holding | VA | 15 |
| | of 60Hz coil powe | ered at 60Hz | | | - |
| | | | in-rush | VA | 220 |
| | | | | | |
| | -00%0 50!! | | holding | VA | 18 |
| Dissipation at holding | ≤20°C 50HZ | | | W | 6 |
| Max cycles frequency | | | | | |
| Mechanical operations | 5 | | | Cycles/h | n 3600 |
| Operating times | | | | | |
| Average time for Lle e | - | | | | |
| Average time for US co | ontrol | | | | |
| Average time for US co | ontrol in AC | | | | |
| Average time for US co | | Closing NO | | | |
| Average time for US co | | Closing NO | min | ms | 13 |
| Average time for US co | | Closing NO | min max | ms ms | 13 28 |
| Average time for US co | | - | min max | ms ms | 13 28 |
| Average time for US co | | Closing NO Opening NO | max | ms | 28 |
| Average time for US co | | - | max min | ms ms | 28 6 |
| Average time for US co | in AC | - | max | ms | 28 |
| Average time for US co | | Opening NO | max min | ms ms | 28 6 |
| Average time for US co | in AC | - | max min | ms ms | 28 6 |
| Average time for US co | in AC | Opening NO | max min | ms ms | 28 6 |
| Average time for US ca | in AC | Opening NO | max min max | ms ms ms | 28 6 19 40 |
| Average time for Us co | in AC | Opening NO Closing NO | max min max min | ms ms ms | 28 6 19 |
| Average time for US ca | in AC | Opening NO | max min max min max | ms ms ms ms | 28 6 19 40 85 |
| Average time for US ca | in AC | Opening NO Closing NO | max min max min max min | ms ms ms ms ms | 28 6 19 40 85 20 |
| | in AC | Opening NO Closing NO | max min max min max | ms ms ms ms | 28 6 19 40 85 |
| UL technical data | in AC | Opening NO Closing NO Opening NO | max min max min max min | ms ms ms ms ms | 28 6 19 40 85 20 |
| UL technical data | in AC | Opening NO Closing NO Opening NO | max min max min max min max | ms ms ms ms ms ms | 28 6 19 40 85 20 55 |
| UL technical data | in AC | Opening NO Closing NO Opening NO | max min max min max min max at 480V | ms ms ms ms ms ms as | 28 6 19 40 85 20 55 96 |
| UL technical data | in AC | Opening NO Closing NO Opening NO | max min max min max min max | ms ms ms ms ms ms | 28 6 19 40 85 20 55 |
| UL technical data Full-load current (FLA) | in AC in DC | Opening NO Closing NO Opening NO | max min max min max min max at 480V | ms ms ms ms ms ms as | 28 6 19 40 85 20 55 96 |
| UL technical data Full-load current (FLA) | in AC | Opening NO Closing NO Opening NO | max min max min max min max at 480V | ms ms ms ms ms ms as | 28 6 19 40 85 20 55 96 |
| UL technical data Full-load current (FLA) | in AC in DC | Opening NO Closing NO Opening NO | max min max min max min max at 480V at 600V | ms ms ms ms ms ms A A | 28 6 19 40 85 20 55 96 99 |
| UL technical data Full-load current (FLA) | in AC | Opening NO Closing NO Opening NO | max min max min max min max at 480V at 600V at 200/208V | ms ms ms ms ms A A A | 28 6 19 40 85 20 55 96 99 30 |
| UL technical data Full-load current (FLA) Yielded mechanical pe | in AC | Opening NO Closing NO Opening NO | max min max min max min max at 480V at 600V at 200/208V at 220/230V | ms ms ms ms ms A A A | 28 6 19 40 85 20 55 96 99 99 30 40 |
| UL technical data Full-load current (FLA) | in AC | Opening NO Closing NO Opening NO | max min max min max min max at 480V at 600V at 220/208V at 220/230V at 460/480V | ms ms ms ms ms ms A A A hp | 28 6 19 40 85 20 55 96 99 99 30 40 75 |
| <mark>JL technical data</mark> Full-load current (FLA) | in AC | Opening NO Closing NO Opening NO | max min max min max min max at 480V at 600V at 200/208V at 220/230V | ms ms ms ms ms A A A | 28 6 19 40 85 20 55 96 99 99 30 40 |

General USE

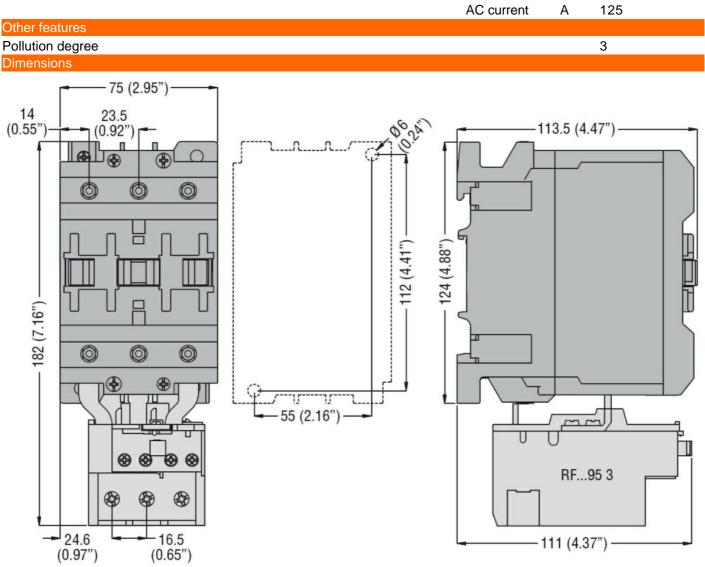
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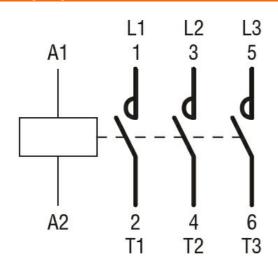
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400VAC





Wiring diagrams



Certifications and compliance

Certifications

CSA C22.2 n° 60947-1 CSA C22.2 n° 60947-4-1



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| | IEC/EN 60947-1 |
|------------|------------------|
| | IEC/EN 60947-4-1 |
| | UL 60947-1 |
| | UL 60947-4-1 |
| Compliance | |
| | CCC |
| | cULus |
| | EAC |

ETIM 6 classification

EC000066 - Power contactor, AC switching

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