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|--|----------------------------------|----------|-----------------|-----------------|
| Product designation | | | | Power contactor |
| Product type designation | | | | BFD65 |
| 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 | | | 115 |
| Operational current I_e | AC-1 ($\leq 55^\circ\text{C}$) | | A | 130 |
| | 400V | A | 100 | |
| IEC max current I_e in DC1 with $L/R \leq 1\text{ms}$ with 3 poles in series | 600V | A | 75 | |
| | 800V | A | 45 | |
| | 1000V | A | 35 | |
| | | | A | 640 |
| Short-time allowable current for 10s (IEC/EN60947-1) | | | A | 640 |
| | Protection fuse | | | |
| | | gG (IEC) | A | 125 |
| | | aM (IEC) | A | 80 |
| Resistance per pole (average value) | | | m Ω | 0.6 |
| Power dissipation per pole (average value) | lth | | W | 7.9 |
| | Tightening torque for terminals | | | |
| | | min | Nm | 4 |
| | | max | Nm | 5 |
| | | min | lbin | 2.95 |
| | | max | lbin | 3.69 |
| Tightening torque for coil terminal | | | | |
| | | min | Nm | 0.8 |
| | | max | Nm | 1 |
| | | min | lbin | 0.8 |
| | | max | lbin | 0.74 |
| Max number of wires simultaneously connectable | | | Nr. | 2 |
| Conductor section | | | | |
| AWG/Kcmil | | | | |
| | | max | | 2 |
| Flexible w/o lug conductor section | | | | |
| | | min | mm ² | 1.5 |
| | | max | mm ² | 35 |
| Flexible c/w lug conductor section | | | | |
| | | min | mm ² | 1.5 |
| | | max | mm ² | 35 |
| Power terminal protection according to IEC/EN 60529 | | | | IP20 front |

Mechanical features

| | | |
|--------------------|-----------------------------|-----------------------|
| Operating position | normal allowable | Vertical plan ±30° |
| Fixing | | Screw / DIN rail 35mm |
| Weight | | g 1240 |
| Conductor section | AWG/kcmil conductor section | |
| | max | 2 |

Operations

| | | |
|-----------------|--------|----------|
| Mechanical life | cycles | 15000000 |
|-----------------|--------|----------|

Safety related data

| | | | |
|--|-----------------|--------|----------|
| Performance level B10d according to EN/ISO 13489-1 | mechanical load | cycles | 15000000 |
| EMC compatibility | | | yes |

AC coil operating

| | | |
|--------------------------------------|---------|-----|
| Rated AC voltage at 60Hz | V | 220 |
| AC operating voltage | | |
| of 60Hz coil powered at 60Hz pick-up | min %Us | 80 |
| | max %Us | 110 |
| drop-out | min %Us | 20 |
| | max %Us | 55 |

| | | | |
|--|-----------------|----|-----|
| AC average coil consumption at 20°C of 60Hz coil powered at 60Hz | in-rush holding | VA | 210 |
| | | VA | 15 |
| Dissipation at holding ≤20°C 50Hz | | W | 5 |

Max cycles frequency

| | | |
|----------------------|----------|------|
| Mechanical operation | cycles/h | 3600 |
|----------------------|----------|------|

Operating times

| | | | | |
|-----------------------------------|-----|----|----|--|
| Average time for Us control in AC | | | | |
| Closing NO | min | ms | 12 | |
| | max | ms | 28 | |
| Opening NO | min | ms | 8 | |
| | max | ms | 22 | |
| in DC | | | | |
| Closing NO | min | ms | 40 | |
| | max | ms | 85 | |
| Opening NO | min | ms | 20 | |
| | max | ms | 55 | |

UL technical data

| | | | | |
|-------------|-----------------------|------------|---|-----|
| General USE | Contactor | AC current | A | 115 |
| | 4 poles in series DC1 | | | |

600V A 100

Ambient conditions

Temperature

Operating temperature

| | | |
|-----|----|-----|
| min | °C | -50 |
| max | °C | 70 |

Storage temperature

| | | |
|-----|----|-----|
| min | °C | -60 |
| max | °C | 80 |

Max altitude

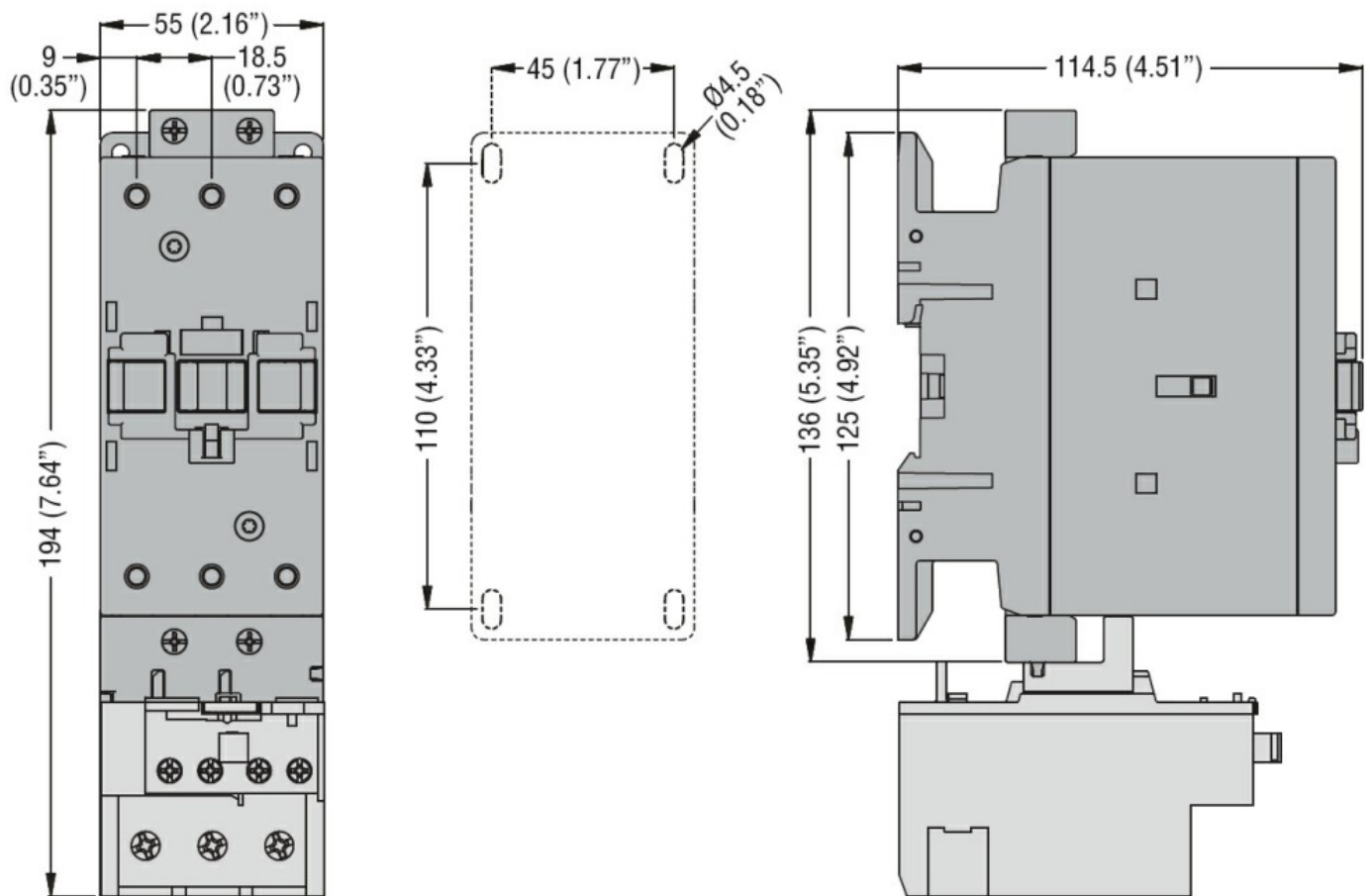
m 3000

Resistance & Protection

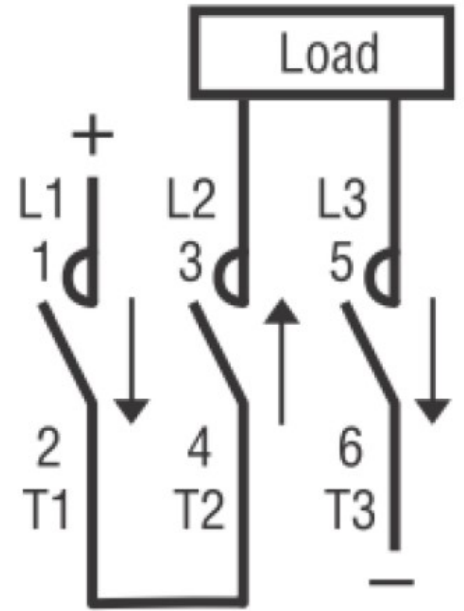
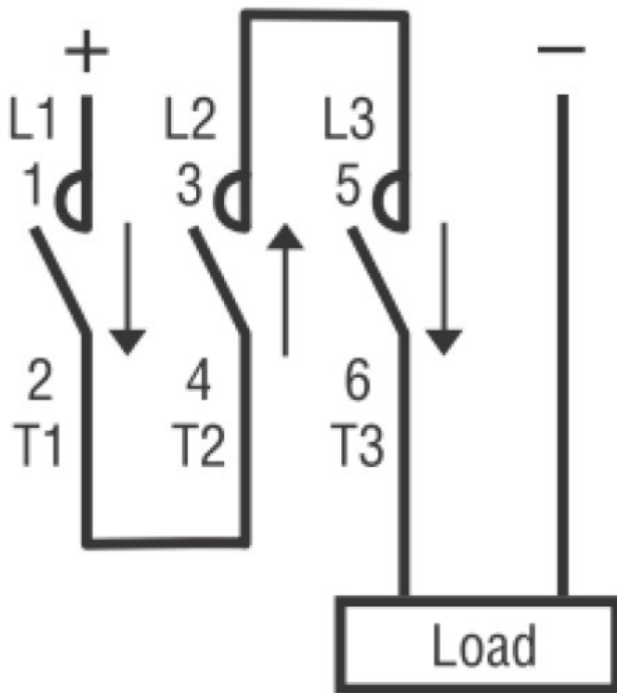
Pollution degree

3

Dimensions



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

ETIM classification

ETIM 8.0

EC002552 -
 Power contactor,
 DC switching