



Product designation

RF38

Product type designation

Motor protection
relay

General characteristics

| | | |
|-------------------------|----------|------------------------|
| Number of poles | Nr. | 3 |
| Overvoltage category | | III |
| Pollution degree | | 3 |
| Frontal IP degree | | IP20 |
| Type of release | | Thermal |
| Protection fuse | | |
| | gG (IEC) | A 4 |
| | aM (IEC) | A 2 |
| | RK5 (UL) | A 6 |
| Phase failure detection | | yes |
| Reset mode | | Manual or automatic |

Power circuit characteristics

| | | |
|---|-------------------------|---------------------|
| Rated insulation voltage U_i IEC/EN | V | 690 |
| Rated impulse withstand voltage U_{imp} | kV | 6 |
| Rated operational voltage | V | 690 |
| Operational frequency | min max | Hz Hz 0 400 |
| Operational current I_e | | |
| | Operational current min | A 1 |
| | Operational current max | A 1.6 |
| Tripping class | | 10A |
| Test Button | | yes |
| Trip indicator | | yes |
| Terminals | | |
| | type | screw and washer |
| | screw | M4 |
| | width | mm 12.6 |
| | tool | Phillips 2 |

Tightening torque for terminals

| | | | |
|--|-----|------|-----|
| | min | Nm | 2 |
| | max | Nm | 2.5 |
| | min | lbin | 1.5 |
| | max | lbin | 1.8 |

Conductor section

| | | | |
|--|----------------------|-----------------|----|
| | Flexible w/o lug max | mm ² | 10 |
| | Flexible c/w lug max | mm ² | 6 |
| | AWG/kcmil max | | 8 |

Auxiliary circuit characteristics

Auxiliary contacts

| | | | |
|---|------|-----|------|
| | NO | Nr. | 1 |
| | NC | Nr. | 1 |
| Auxiliary Rated insulation voltage U_i IEC/EN | | V | 690 |
| Auxiliary Rated impulse withstand voltage U_{imp} | | kV | 6 |
| Auxiliary Rated operational voltage | | V | 690 |
| Operating current AC15 | | | |
| | 24V | A | 3 |
| | 120V | A | 3 |
| | 240V | A | 1.5 |
| | 380V | A | 0.95 |
| | 480V | A | 0.75 |
| | 500V | A | 0.72 |
| | 600V | A | 0.6 |
| Operating current DC13 | | | |
| | 125V | A | 0.11 |
| | 600V | A | 0.22 |
| IEC Conventional free air thermal current I_{th} | | A | 10 |

Terminals

| | | | |
|--|-------------------------|----|------------------|
| | Auxiliary circuit type | | screw and washer |
| | Auxiliary circuit screw | | M3.5 |
| | Auxiliary circuit width | mm | 8 |
| | Auxiliary circuit tool | | Phillips 2 |

Conductor section

| | | | |
|--|--|-----------------|-----|
| | Auxiliary circuit Flexible w/o lug max | mm ² | 2.5 |
| | Auxiliary circuit Flexible c/w lug max | mm ² | 2.5 |

Tightening torque for terminals

| | | | |
|--|-----------------------|------|------|
| | Auxiliary circuit min | Nm | 0.8 |
| | Auxiliary circuit max | Nm | 1 |
| | Auxiliary circuit min | lbin | 0.59 |
| | Auxiliary circuit max | lbin | 0.74 |

UL/CSA and IEC/EN 60947-5-1 designation

B600-R300

Ambient conditions

Operating temperature

| | | | |
|--|-----|----|-----|
| | min | °C | -25 |
| | max | °C | 60 |

Storage temperature

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

Compensation temperature

| | | | |
|--|-----|----|-----|
| | min | °C | -20 |
| | max | °C | 60 |

Max altitude

m 3000

Mechanical features

Operating position

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

Fixing

Direct mounting
on BF09...
BF38...

Weight

g 160

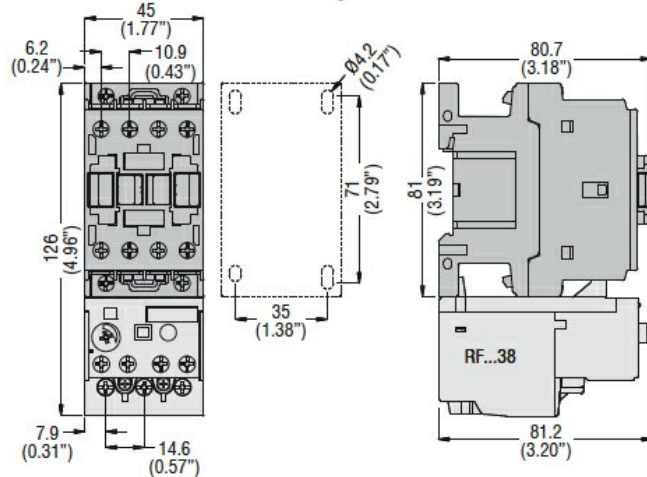
UL technical data

Full-load current (FLA) for three-phase AC motor

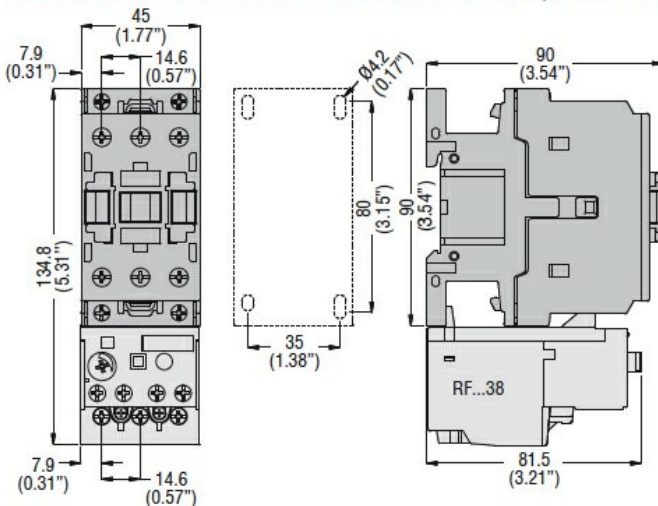
| | | |
|---------|---|-----|
| at 480V | A | 1.6 |
| at 600V | A | 1.6 |

Dimensions

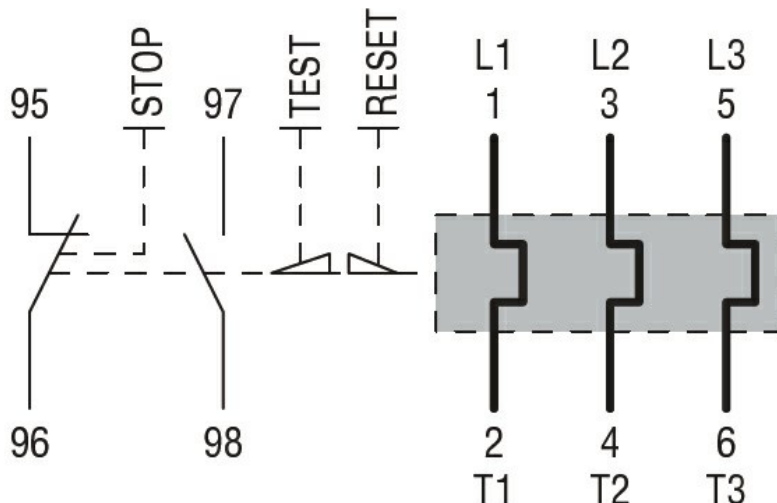
BF00 A... BF09 A... - BF12 A... - BF18 A... - BF25 A... three poles with **RF...38** thermal overload relay



BF26 00A... - BF32 00A... - BF38 00A... three poles with **RF...38** thermal overload relay



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 14

IEC/EN 60947-1

IEC/EN 60947-4-1

UL508

Certifications

CCC

cULus

EAC

ETIM classification

ETIM 8.0

EC000106 -
Thermal overload
relay