



Product designation

RF420

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 630 |
| | aM (IEC) | A 500 |
| | K5 (UL) | A 800 |
| Phase failure detection | | yes |
| Reset mode | | Manual or automatic |

Power circuit characteristics

| | | |
|---|-------------------------|-------|
| Rated insulation voltage U_i IEC/EN | V | 1000 |
| Rated impulse withstand voltage U_{imp} | kV | 6 |
| Rated operational voltage | V | 690 |
| Operational frequency | | |
| | min | Hz 50 |
| | max | Hz 60 |
| Operational current I_e | | |
| | Operational current min | A 250 |
| | Operational current max | A 420 |
| Tripping class | | 10A |
| Test Button | | yes |
| Trip indicator | | yes |

Terminals

| | |
|-------|--------------------------|
| type | screw and flat washer |
| screw | M10 |
| width | mm 25 |
| tool | Bar 18mm |

Tightening torque for terminals

| | | |
|-----|------|------|
| min | Nm | 35 |
| max | Nm | 35 |
| min | lbin | 25.9 |
| max | lbin | 25.9 |

Auxiliary circuit characteristics

Auxiliary contacts

| | | |
|----|-----|---|
| NO | Nr. | 1 |
| NC | Nr. | 1 |

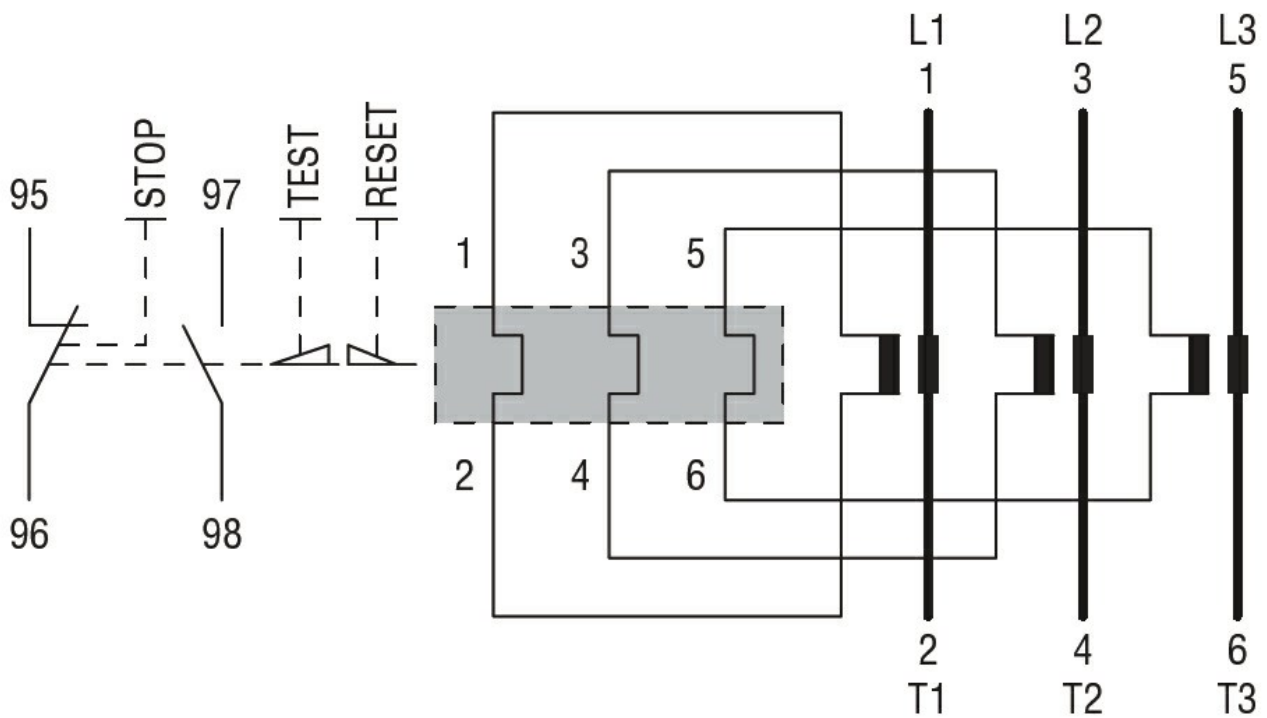
Auxiliary Rated insulation voltage U_i IEC/EN

V 690

| | | | |
|---|--|-----------------|--------------------|
| Auxiliary Rated impulse withstand voltage Uimp | | 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 |
| Operating current DC13 | 600V | A | 0.6 |
| | 125V | A | 0.11 |
| | 600V | A | 0.22 |
| IEC Conventional free air thermal current Ith | | 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 | | | Screw |
| Weight | | g | 2460 |
| UL technical data | | | |
| Full-load current (FLA) for three-phase AC motor | | | |
| | at 480V | A | 420 |
| | at 600V | A | 420 |

Dimensions

Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 14

IEC/EN 60947-1

IEC/EN 60947-4-1

UL508

Certifications

cULus

EAC

ETIM classification

ETIM 8.0

EC000106 -
Thermal overload
relay