



|                          |                        |
|--------------------------|------------------------|
| Product designation      | 11RFA9                 |
| 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 6       |
|                         | aM (IEC) | A 4       |
|                         | RK5 (UL) | A 10      |
| Phase failure detection |          | yes       |
| Reset mode              |          | Automatic |

**Power circuit characteristics**

|   |                         |        |
|---|-------------------------|--------|
| Rated insulation voltage $U_i$ IEC/EN     | V                       | 690    |
| Rated impulse withstand voltage $U_{imp}$ | kV                      | 8      |
| Rated operational voltage                 | V                       | 690    |
| Operational frequency                     |                         |        |
|   | min                     | Hz 0   |
|   | max                     | Hz 400 |
| Operational current $I_e$                 |                         |        |
|   | Operational current min | A 1.4  |
|   | Operational current max | A 2.3  |
| Tripping class                            |                         | 10A    |
| Test Button                               |                         | yes    |
| Trip indicator                            |                         | yes    |

|           |       |    |                  |
|-----------|-------|----|------------------|
| Terminals |       |    |                  |
|           | type  |    | screw and washer |
|           | screw |    | M4               |
|           | width | mm | 9.8              |
|           | tool  |    | Phillips 2       |

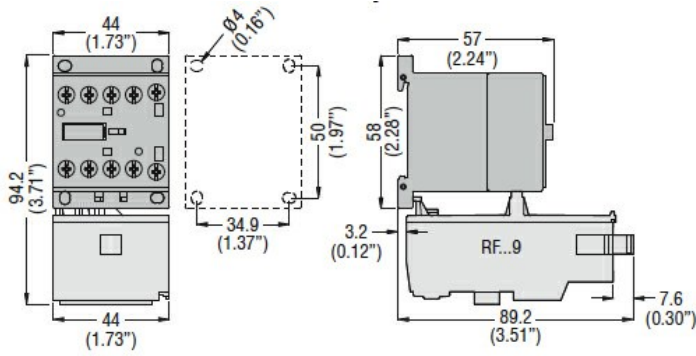
|                                 |     |      |     |
|---------------------------------|-----|------|-----|
| Tightening torque for terminals |     |      |     |
|                                 | min | Nm   | 2.3 |
|                                 | max | Nm   | 2.3 |
|                                 | min | lbin | 1.7 |
|                                 | max | lbin | 1.7 |

|                   |               |    |
|-------------------|---------------|----|
| Conductor section |               |    |
|                   | AWG/kcmil max | 10 |

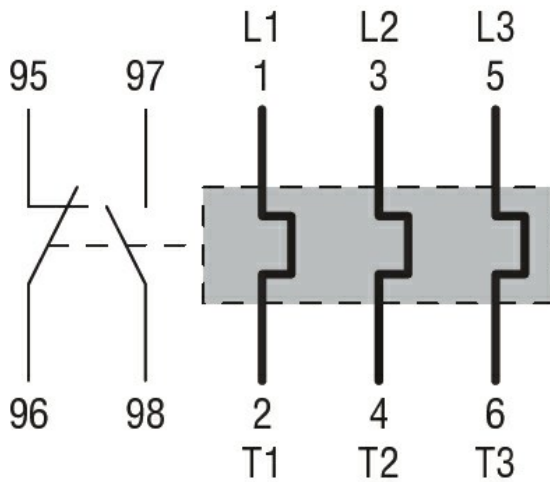
**Auxiliary circuit characteristics**

|                    |    |     |   |
|--------------------|----|-----|---|
| 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 1.5                                      |
|   | 120V                                   | A 1.5                                      |
|   | 240V                                   | A 0.75                                     |
| 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 1                                 |
| Conductor section                                   |  |  |
|   | Auxiliary circuit Flexible w/o lug max | mm <sup>2</sup> 2.5                        |
|   | Auxiliary circuit Flexible c/w lug max | mm <sup>2</sup> 2.5                        |
| Tightening torque for terminals                     |  |  |
|   | Auxiliary circuit min                  | Nm 1                                       |
|   | Auxiliary circuit max                  | Nm 1                                       |
|   | Auxiliary circuit min                  | lbin 0.74                                  |
|   | Auxiliary circuit max                  | lbin 0.74                                  |
| UL/CSA and IEC/EN 60947-5-1 designation             |  | C300-R300                                  |
| <b>Ambient conditions</b>                           |  |  |
| Operating temperature                               |  |  |
|   | min                                    | °C -20                                     |
|   | max                                    | °C 55                                      |
| Storage temperature                                 |  |  |
|   | min                                    | °C -55                                     |
|   | max                                    | °C 70                                      |
| Compensation temperature                            |  |  |
|   | min                                    | °C -15                                     |
|   | max                                    | °C 55                                      |
| Max altitude  | m                                      | 3000                                       |
| <b>Mechanical features</b>                          |  |  |
| Operating position                                  |  |  |
|   | normal allowable                       | Vertical plan ±30°                         |
| Fixing  |  | Direct mounting on BG06... BG09... BG12... |
| Weight  | g                                      | 116  |
| <b>UL technical data</b>                            |  |  |
| Full-load current (FLA) for three-phase AC motor    |  |  |
|   | at 480V                                | A 2.3                                      |
|   | at 600V                                | A 2.3                                      |
| <b>Dimensions</b>                                   |  |  |



### Wiring diagrams



### Certifications and compliance

#### Compliance

CSA C22.2 n° 14  
IEC/EN 60947-1  
IEC/EN 60947-4-1  
UL508

#### Certifications

CCC  
CSA  
cULus  
EAC

### ETIM classification

ETIM 8.0

EC000106 -  
Thermal overload  
relay