



Product designation

RFNA82

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 100     |
|                         | aM (IEC) | A 50      |
|                         | K5 (UL)  | A 175     |
| Phase failure detection |          | no        |
| 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 35   |
|   | Operational current max | A 50   |
| Tripping class                            |                         | 10A    |
| Test Button                               |                         | yes    |
| Trip indicator                            |                         | yes    |

Terminals

|       |            |
|-------|------------|
| type  | Yoke clamp |
| screw | M5         |
| width | mm 9       |
| tool  | Phillips 2 |

Tightening torque for terminals

|     |      |      |
|-----|------|------|
| min | Nm   | 3.9  |
| max | Nm   | 3.9  |
| min | lbin | 2.88 |
| max | lbin | 2.88 |

Conductor section

|               |   |
|---------------|---|
| AWG/kcmil max | 2 |
|---------------|---|

**Auxiliary circuit characteristics**

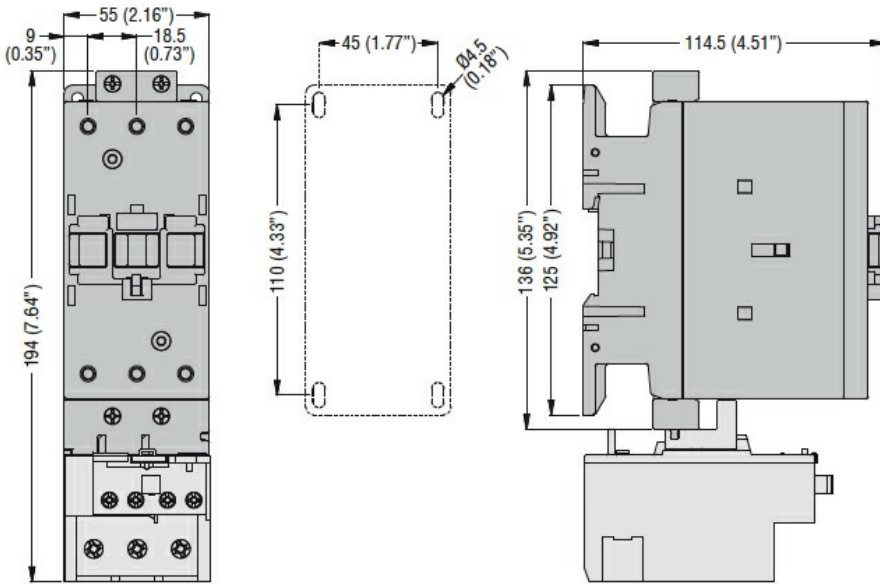
Auxiliary contacts

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

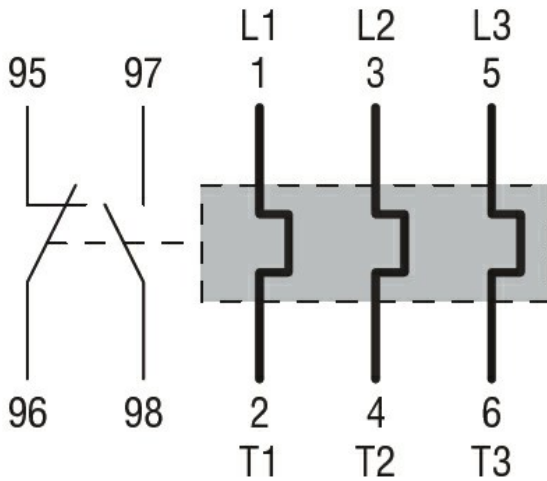
Auxiliary Rated insulation voltage  $U_i$  IEC/EN

|   |     |
|---|-----|
| V | 690 |
|---|-----|

|   |  |                 |                                       |
|---|--|-----------------|---------------------------------------|
| Auxiliary Rated impulse withstand voltage Uimp          |  | kV              | 6                                     |
| Auxiliary Rated operational voltage                     |  | V               | 690                                   |
| Operating current AC15                                  | 24V                                    | A               | 1.5                                   |
|   | 120V                                   | A               | 1.5                                   |
|   | 240V                                   | A               | 0.75                                  |
| IEC Conventional free air thermal current Ith           |  | A               | 10                                    |
| <b>Terminals</b>  |  |                 |                                       |
|   | Auxiliary circuit type                 |                 | screw and washer                      |
|   | Auxiliary circuit screw                |                 | M3,5                                  |
|   | Auxiliary circuit width                | mm              | 8                                     |
|   | Auxiliary circuit tool                 |                 | Phillips 1                            |
| <b>Conductor section</b>                                |  |                 |                                       |
|   | 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                                   |
| <b>Tightening torque for terminals</b>                  |  |                 |                                       |
|   | 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>                               |  |                 |                                       |
| <b>Operating temperature</b>                            |  |                 |                                       |
|   | min                                    | °C              | -20                                   |
|   | max                                    | °C              | 55                                    |
| <b>Storage temperature</b>                              |  |                 |                                       |
|   | min                                    | °C              | -55                                   |
|   | max                                    | °C              | 80                                    |
| <b>Compensation temperature</b>                         |  |                 |                                       |
|   | min                                    | °C              | -15                                   |
|   | max                                    | °C              | 55                                    |
| Max altitude  |  | m               | 3000                                  |
| <b>Mechanical features</b>                              |  |                 |                                       |
| <b>Operating position</b>                               |  |                 |                                       |
|   | normal                                 |                 | Vertical plan                         |
|   | allowable                              |                 | ±30°                                  |
| Fixing  |  |                 | Direct mounting on BF40...<br>BF94... |
| Weight  |  | g               | 365                                   |
| <b>UL technical data</b>                                |  |                 |                                       |
| <b>Full-load current (FLA) for three-phase AC motor</b> |  |                 |                                       |
|   | at 480V                                | A               | 50                                    |
|   | at 600V                                | A               | 50                                    |
| <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**

cULus

**ETIM classification**

ETIM 8.0

EC000106 -  
Thermal overload  
relay