



MOTOR PROTECTION RELAY, NON PHASE FAILURE/NON SINGLE-PHASE SENSITIVE. THREE-POLE (THREE-PHASE), MANUAL RESETTING. DIRECT MOUNTING ON BF40 - BF94 CONTACTORS, 28...42A



|  |                         |      | _                |
|--|-------------------------|------|------------------|
| Product designation                          |                         |      | RFN82            |
| 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)                | Α    | 80               |
|  | aM (IEC)                | Α    | 50               |
|  | K5 (UL)                 | Α    | 150              |
| Phase failure detection                      |                         |      | no               |
| Reset mode                                   |                         |      | Manual           |
| Power circuit characteristics                |                         |      |                  |
| Rated insulation voltage Ui IEC/EN           |                         | V    | 690              |
| Rated impulse withstand voltage Uimp         |                         | kV   | 8                |
| Rated operational voltage                    |                         | V    | 690              |
| Operational frequency                        |                         | •    | 000              |
| Operational frequency                        | min                     | Hz   | 0                |
|  | max                     | Hz   | 400              |
| Operational current le                       | Шах                     | 1 12 | 400              |
| Operational current le                       | Operational surrent min | ۸    | 20               |
|  | Operational current min | A    | 28               |
| Triuminus along                              | Operational current max | Α    | 42               |
| 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 Ui IEC/EN | 110                     | V    | 690              |
|  |                         |      |                  |
|  |                         |      |                  |





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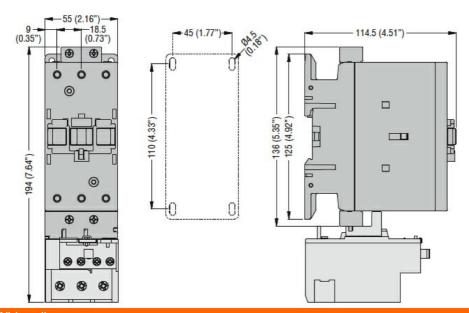
| Auxiliary Rated impulse withstand voltage Uimp   |  | kV   | 6               |
|--|--|------|-----------------|
| Auxiliary Rated operational voltage  |  | V    | 690             |
| Operating current AC15   |  |      |                 |
|  | 24V                                    | Α    | 3               |
|  | 120V                                   | Α    | 3               |
|  | 240V                                   | Α    | 1.5             |
|  | 380V                                   | Α    | 0.95            |
|  | 480V                                   | Α    | 0.75            |
|  | 500V                                   | Α    | 0.72            |
|  | 600V                                   | Α    | 0.6             |
| Operating current DC13   |  |      |                 |
|  | 125V                                   | Α    | 0.11            |
|  | 600V                                   | Α    | 0.22            |
| EC Conventional free air thermal current Ith   |  | Α    | 10              |
| Terminals  |  |      |                 |
|  | A                                      |      | screw and       |
|  | Auxiliary circuit type                 |      | 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 | mm²  | 2.5             |
|  | Auxiliary circut Flexible c/w lug max  | mm²  | 2.5             |
| Fightening 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  | •                                      |      | B600-P600       |
| Ambient conditions   |  |      |                 |
| Operating temperature  |  |      |                 |
| 3 1  | min                                    | °C   | -20             |
|  | max                                    | °C   | 55              |
| Storage temperature  |  |      |                 |
| - · · · · · · · · · · · · · · · · · · ·  | min                                    | °C   | -55             |
|  | max                                    | °C   | 80              |
| Compensation temperature   |  |      |                 |
|  | min                                    | °C   | -15             |
|  | max                                    | °C   | 55              |
| Max altitude   | max                                    | m    | 3000            |
| Mechanical features  |  |      |                 |
| Operating position   |  |      |                 |
|  | normal                                 |      | Vertical plan   |
|  | allowable                              |      | ±30°            |
|  | anowabic                               |      | Direct mounting |
| Fixing   |  |      | on BF40         |
| · ······ <del>y</del>  |  |      | BF94            |
| Weight   |  | g    | 365             |
| JL technical data  |  | 3    |                 |
| Full-load current (FLA) for three-phase AC motor   |  |      |                 |
| and the state of t | at 480V                                | Α    | 42              |
|  | at 400V                                | A    | 42              |
| Dimensions   | at 550 v                               |      | · <del>-</del>  |



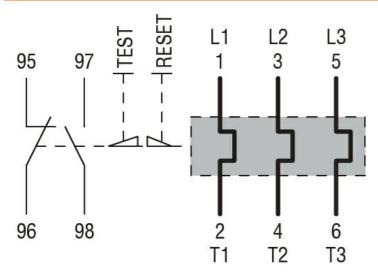


**ENERGY AND AUTOMATION** 

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## 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

EC000106 -

Thermal overload

relay

**ETIM 8.0**