**ENERGY AND AUTOMATION** 

MOTOR PROTECTION RELAY, PHASE FAILURE / SINGLE PHASE SENSITIVE. THREE POLE **electric** (THREE PHASE), MANUAL RESETTING. DIRECT MOUNTING ON BF40 - BF94 CONTACTORS, 35...50A



| Product designation                  |                           |      | RF82             |
|--------------------------------------|---------------------------|------|------------------|
| Product type designation             |                           |      | Motor protection |
| ,, <u> </u>                          |                           |      | 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    | 100              |
|                                      | aM (IEC)                  | Α    | 50               |
|                                      | K5 (UL)                   | Α    | 175              |
| Phase failure detection              |                           |      | yes              |
| Reset mode                           |                           |      | Manual           |
| Power circuit characteristics        |                           |      |                  |
| Rated insulation voltage Ui          |                           | V    | 690              |
| Rated impulse withstand voltage Uimp |                           | kV   | 8                |
| Rated operational voltage            |                           | V    | 690              |
| Operating frequency                  |                           |      |                  |
|                                      | Operational frequency min | Hz   | 0                |
|                                      | Operational frequency max | Hz   | 400              |
| Operating current                    |                           |      |                  |
| operating outrons                    | Operational current min   | Α    | 35               |
|                                      | Operational current max   | Α    | 50               |
| Tripping class                       | Operational current max   |      | 10A              |
| Test Button                          |                           |      | yes              |
| Trip indicator                       |                           |      |                  |
| Terminals                            |                           |      | yes              |
| reminals                             | As one of                 |      | Valva alaman     |
|                                      | type                      |      | Yoke clamp       |
|                                      | screw                     |      | M5               |
|                                      | width                     | mm   | 9                |
| This control of the control of       | tool                      |      | Phillips 2       |
| Tightening torque for terminals      |                           |      |                  |
|                                      | min                       | Nm   | 3.9              |
|                                      | max                       | Nm   | 3.9              |
|                                      | min                       | lbft | 2.88             |
|                                      | max                       | lbft | 2.88             |
| Conductor section                    |                           |      |                  |
|                                      | AWG max                   |      | 2                |
| Auxiliary circuit characteristics    |                           |      |                  |
| Auxiliary contacts                   |                           |      |                  |
|                                      | NO                        | nr.  | 1                |
|                                      | NC                        | nr.  | 1                |
| Rated insulation voltage Ui          |                           | V    | 690              |



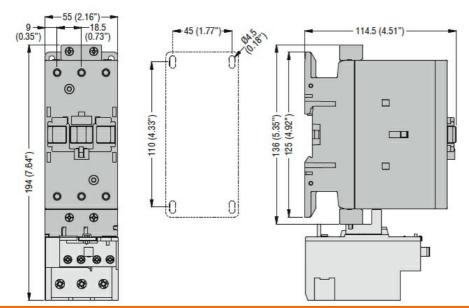
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|                     | • | • |    |    |     |
|---------------------|---|---|----|----|-----|
| ERGY AND AUTOMATION |   |   | 38 | 55 | 50A |

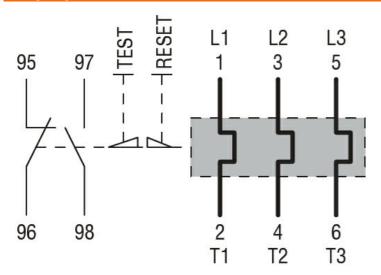
| Rated impulse withstand voltage Uimp             |                      | kV   | 6             |
|--|----------------------|------|---------------|
| Rated operational voltage                        |                      | V    | 690           |
| Operating current AC15                           |                      |      |               |
|  | 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          |
| Conventional free air thermal current Ith        |                      | Α    | 10            |
| Terminals  |                      |      |               |
|  |                      |      | Screw and     |
|  | type                 |      | washer        |
|  | screw                |      | M3,5          |
|  | width                | mm   | 8             |
|  | tool                 |      | Phillips 1    |
| Conductor section                                |                      |      |               |
|  | Flexible w/o lug max | mm²  | 2.5           |
|  | Flexible c/w lug max | mm²  | 2.5           |
| Tightening torque for terminals                  |                      |      |               |
|  | min                  | Nm   | 1             |
|  | max                  | Nm   | 1             |
|  | min                  | lbft | 0.74          |
|  | max                  | lbft | 0.74          |
| UL/CSA and IEC/EN 60947-5-1 designation          |                      |      | B600-P600     |
| Ambient conditions                               |                      |      |               |
| Operating temperature                            |                      |      |               |
|  | min                  | °C   | -20           |
|  | max                  | °C   | 55            |
| Storage temperature                              |                      |      |               |
| -  | min                  | °C   | -55           |
|  | max                  | °C   | 80            |
| Compensation temperature                         |                      |      |               |
|  | min                  | °C   | -15           |
|  | max                  | °C   | 55            |
| Max altitude                                     |                      | m    | 3000          |
| Mechanical feautures                             |                      |      |               |
| Operating position                               |                      |      |               |
|  | normal               |      | Vertical plan |
|  | allowable            |      | ±30°          |
| Weight   |                      | g    | 365           |
| UL technical data                                |                      | 3    |               |
| Full-load current (FLA) for three-phase AC motor |                      |      |               |
| . abad barrott (i Exyrior arrob pridoc /10 motor | at 480V              | Α    | 50            |
|  | at 600V              | A    | 50            |
|  | ut 000 v             | , ,  |               |

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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