## RF110095



MOTOR PROTECTION RELAY, PHASE FAILURE/SINGLE-PHASE SENSITIVE. THREE-POLE (THREE-PHASE), MANUAL RESETTING. DIRECT MOUNTING ON BF95 - BF150 CONTACTORS, 70...95A



| Product designation                                 |   |                          | RF110  |
|---|---|--------------------------|--|
| Product type designation                            |   |                          | Motor protection<br>relay                          |
| General characteristics                             |   |                          |  |
| Number of poles                                     |   | Nr.                      | 3  |
| Overvoltage category                                |   |                          |  |
| Pollution degree                                    |   |                          | 3  |
| Frontal IP degree                                   |   |                          | IP20   |
| Type of release                                     |   |                          | Thermal  |
| Protection fuse                                     |   |                          |  |
|   | gG (IEC)  | А                        | 200  |
|   | aM (IEC)  | А                        | 100  |
|   | K5 (UL)   | А                        | 350  |
| Phase failure detection                             |   |                          | yes  |
| 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                               |   |                          |  |
|   | min   | Hz                       | 0  |
|   | max   | Hz                       | 400  |
| Operational current le                              |   |                          |  |
|   | Operational current min                                 | А                        | 70   |
|   | Operational current max                                 | A                        | 95   |
| Tripping class                                      |   |                          | 10A  |
| Test Button   |   |                          | yes  |
| Trip indicator                                      |   |                          | yes  |
| Terminals   |   |                          | ,  |
|   | type  |                          | Yoke clamp   |
|   | screw   |                          | M5   |
|   | width   | mm                       | 9  |
|   |   |                          |  |
|   |   |                          |  |
| Tightening torque for terminals                     | tool  |                          | Phillips 2   |
| Tightening torque for terminals                     | tool  |                          | Phillips 2   |
| Tightening torque for terminals                     | tool<br>min   | Nm                       | Phillips 2<br>3.9                                  |
| Tightening torque for terminals                     | tool<br>min<br>max                                      | Nm<br>Nm                 | Phillips 2<br>3.9<br>3.9                           |
| Tightening torque for terminals                     | tool<br>min<br>max<br>min                               | Nm<br>Nm<br>Ibin         | Phillips 2<br>3.9<br>3.9<br>2.88                   |
|   | tool<br>min<br>max                                      | Nm<br>Nm                 | Phillips 2<br>3.9<br>3.9                           |
| Tightening torque for terminals                     | tool<br>min<br>max<br>min<br>max                        | Nm<br>Nm<br>Ibin         | Phillips 2<br>3.9<br>3.9<br>2.88<br>2.88           |
| Conductor section                                   | tool<br>min<br>max<br>min                               | Nm<br>Nm<br>Ibin         | Phillips 2<br>3.9<br>3.9<br>2.88                   |
| Conductor section Auxiliary circuit characteristics | tool<br>min<br>max<br>min<br>max                        | Nm<br>Nm<br>Ibin         | Phillips 2<br>3.9<br>3.9<br>2.88<br>2.88           |
| Conductor section                                   | tool<br>min<br>max<br>min<br>max<br>AWG/kcmil max       | Nm<br>Nm<br>Ibin<br>Ibin | Phillips 2<br>3.9<br>3.9<br>2.88<br>2.88<br>2.88   |
| Conductor section Auxiliary circuit characteristics | tool<br>min<br>max<br>min<br>max<br>AWG/kcmil max<br>NO | Nm<br>Nm<br>Ibin<br>Ibin | Phillips 2<br>3.9<br>3.9<br>2.88<br>2.88<br>2<br>1 |
| Conductor section Auxiliary circuit characteristics | tool<br>min<br>max<br>min<br>max<br>AWG/kcmil max       | Nm<br>Nm<br>Ibin<br>Ibin | Phillips 2<br>3.9<br>3.9<br>2.88<br>2.88<br>2.88   |



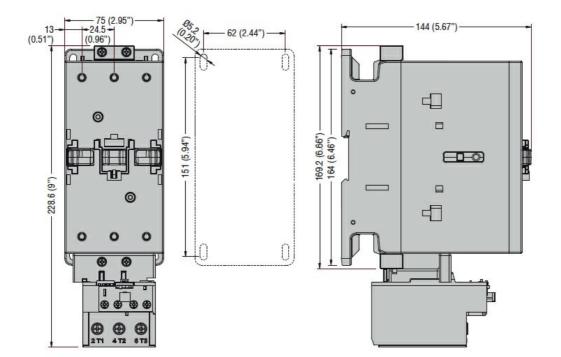
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| Auxiliary Rated impulse withstand voltage Uimp   |   | kV    | 6                   |
|--|---|-------|---------------------|
| Auxiliary Rated operational voltage              |   | V     | 690                 |
| Operating current AC15                           |   |       |                     |
|  | 24V                                     | А     | 1.5                 |
|  | 120V                                    | А     | 1.5                 |
|  | 240V                                    | А     | 0.75                |
|  | 500V                                    | A     | 0.72                |
| Operating current DC13                           |   |       | 0112                |
|  | 125V                                    | А     | 0.11                |
|  | 600V                                    | A     | 0.22                |
| IEC Conventional free air thermal current Ith    | 8007                                    | A     |                     |
|  |   | A     | 10                  |
| Terminals  |   |       |                     |
|  | Auxiliary circuit type                  |       | screw and<br>washer |
|  | Auxiliary circuit screw                 |       | M3,5                |
|  | Auxiliary circuit width                 | mm    | 8                   |
|  | Auxiliary circuit tool                  |       | Phillips 1          |
| Conductor section                                |   |       | 1                   |
|  | Auxiliary circuit Flexible w/o lug max  | mm²   | 2.5                 |
|  | Auxiliary circut Flexible c/w lug max   | mm²   | 2.5                 |
| Tightening torque for terminals                  | Auxiliary Circul Flexible C/W lug Illax | 11111 | 2.0                 |
| rightening torque for terminals                  |   | N1    |                     |
|  | 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                            |   |       |                     |
|  | min                                     | °C    | -20                 |
|  | max                                     | °C    | 55                  |
| Storage temperature                              |   |       |                     |
| - ·  | min                                     | °C    | -55                 |
|  | max                                     | °Č    | 80                  |
| Compensation temperature                         | Пах                                     |       | ~~                  |
|  | min                                     | °C    | -15                 |
|  |   | °C    | -15<br>55           |
| Max altitude                                     | max                                     |       |                     |
|  |   | m     | 3000                |
| Mechanical features                              |   |       |                     |
| Operating position                               |   |       |                     |
|  | normal                                  |       | Vertical plan       |
|  | allowable                               |       | ±30°                |
| Weight   |   | g     | 365                 |
| JL technical data                                |   |       |                     |
| Full-load current (FLA) for three-phase AC motor |   |       |                     |
| · · ·  | at 480V                                 | А     | 95                  |
|  |   |       |                     |
|  | at 600V                                 | Α     | 95                  |

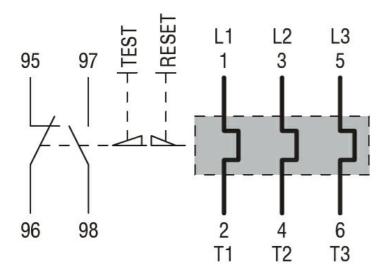
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Wiring diagrams



cULus

## Certifications and compliance

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

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ETIM classification

ETIM 8.0

EC000106 -Thermal overload relay