## 11RF91



MOTOR PROTECTION RELAY, PHASE FAILURE / SINGLE PHASE SENSITIVE. THREE POLE (THREE PHASE), MANUAL RESETTING. DIRECT MOUNTING ON BG06, BG09, BG12 MINI-CONTACTORS, 0.6...1A



| Product designation                  |                         |      | 11RF9            |
|--------------------------------------|-------------------------|------|------------------|
|                                      |                         |      | Motor protection |
| Product type designation             |                         |      | relay            |
| General characteristics              |                         |      |                  |
| Number of poles                      |                         | nr.  | 3                |
| Overvoltage category                 |                         |      |                  |
| Pollution degree                     |                         |      | 3                |
| Frontal IP degree                    |                         |      | IP20             |
| Гуре of release                      |                         |      | Thermal          |
| Protection fuse                      |                         |      |                  |
|                                      | gG (IEC)                | А    | 4                |
|                                      | aM (IEC)                | А    | 2                |
|                                      | RK5 (UL)                | Α    | 3                |
| 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              |
| Dperational frequency                |                         |      |                  |
|                                      | min                     | Hz   | 0                |
|                                      | max                     | Hz   | 400              |
| Operational current le               |                         |      |                  |
|                                      | Operational current min | А    | 0.6              |
|                                      | Operational current max | А    | 1                |
| Tripping class                       |                         |      | 10A              |
| Test Button                          |                         |      | yes              |
| Trip indicator                       |                         |      | yes              |
| Terminals                            |                         |      |                  |
|                                      | tupo                    |      | Screw and        |
|                                      | type                    |      | washer           |
|                                      | screw                   |      | M4               |
|                                      | width                   | mm   | 9.8              |
|                                      | tool                    |      | Phillips 2       |
| Fightening torque for terminals      |                         |      |                  |
|                                      | min                     | Nm   | 2.3              |
|                                      | max                     | Nm   | 2.3              |
|                                      | min                     | lbft | 1.7              |
|                                      | max                     | lbft | 1.7              |
| Conductor section                    |                         |      |                  |
|                                      | AWG max                 |      | 10               |
| Auxiliary circuit characteristics    |                         |      |                  |
| Auxiliary contacts                   |                         |      |                  |
|                                      | NO                      | nr.  | 1                |
|                                      | NC                      | nr.  | 1                |



MOTOR PROTECTION RELAY, PHASE FAILURE / SINGLE PHASE SENSITIVE. THREE POLE (THREE PHASE), MANUAL RESETTING. DIRECT MOUNTING ON BG06, BG09, BG12 MINI-CONTACTORS, 0.6...1A

| Rated insulation voltage Ui UL/CSA               |                              | V      | 690           |
|--|------------------------------|--------|---------------|
| Rated impulse withstand voltage Uimp             |                              | kV     | 6             |
| Operating current AC15                           |                              |        |               |
|  | 24V                          | А      | 3             |
|  | 120V                         | А      | 3             |
|  | 240V                         | А      | 1.5           |
|  | 380V                         | А      | 0.95          |
|  | 480V                         | А      | 0.75          |
|  | 500V                         | А      | 0.72          |
|  | 600V                         | А      | 0.6           |
| Operating current DC13                           |                              |        |               |
|  | 125V                         | А      | 0.11          |
|  | 600V                         | A      | 0.22          |
| Conventional free air thermal current Ith IEC/EN |                              | A      | 10            |
| Terminals  |                              | 73     | 10            |
|  |                              |        | 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                  |                              | 111111 | 2.5           |
|  | min                          | Nm     | 1             |
|  | min                          | Nm     | 1             |
|  | max                          | lbft   | 1<br>0.74     |
|  | min                          |        | 0.74          |
| UL/CCA and IEC/EN 60047 5 1 designation          | max                          | Ibin   |               |
| 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     | 70            |
| Compensation temperature                         |                              |        |               |
|  | min                          | °C     | -15           |
|  | max                          | °C     | 55            |
| Max altitude                                     |                              | m      | 3000          |
| Mechanical feautures                             |                              |        |               |
| Operational position                             |                              |        |               |
|  | Operating position normal    |        | Vertical plan |
|  | Operating position allowable |        | ±30°          |
| Weight   |                              | g      | 116           |
| UL technical data                                |                              |        |               |
| Full-load current (FLA) for three-phase AC motor |                              |        |               |
|  | at 480V                      | А      | 1             |
|  | at 600V                      | А      | 1             |
| Dimensions                                       |                              |        |               |

## Dimensions

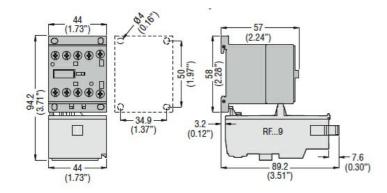
11RF91

## 11RF91

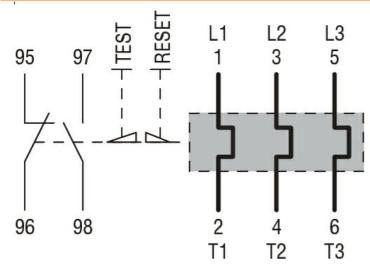


ENERGY AND AUTOMATION

MOTOR PROTECTION RELAY, PHASE FAILURE / SINGLE PHASE SENSITIVE. THREE POLE (THREE PHASE), MANUAL RESETTING. DIRECT MOUNTING ON BG06, BG09, BG12 MINI-CONTACTORS, 0.6...1A



Wiring diagrams



## Certifications and compliance

Compliance

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