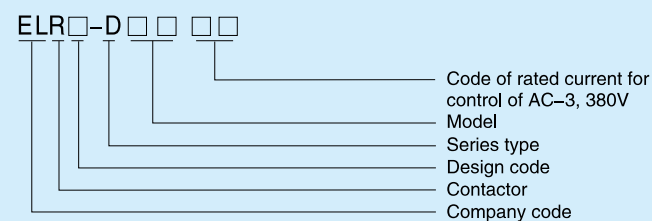


## ELR□-D Series Thermal Relay

### Application

ELR □-D series of thermal relay can be used in the circuit of 50Hz or 60Hz, rated insulation voltage 660V, rated current 0.1–630A for protecting the phase break when the electric motor is overload. The relay has different mechanism and temperature compensation & can be plugged in ELC1-D series AC contactor. It is the most advanced thermal relay in the nineties in the world.

### Type Designation



### Thermal Relay

#### Specifications

| Type     | Rated workig current of thermal relay | Thermal component |                                    |                         |                 |     |
|----------|---------------------------------------|-------------------|------------------------------------|-------------------------|-----------------|-----|
|          |                                       | Rated current(A)  | Rated or scale of rated current(A) | Compatible AC contactor | Back up fuse aM | gl  |
| ELR2-D13 | ELR2-D 1301                           | 0.16              | 0.01–0.16                          | ELC1-D09-32             | 0.25            | 2   |
|          | ELR2-D 1302                           | 0.25              | 0.16–0.25                          | ELC1-D09-32             | 0.5             | 2   |
|          | ELR2-D 1303                           | 0.40              | 0.25–0.40                          | ELC1-D09-32             | 1               | 2   |
|          | ELR2-D 1304                           | 0.63              | 0.40–0.63                          | ELC1-D09-32             | 1               | 2   |
|          | ELR2-D 1305                           | 1.0               | 0.63–1.0                           | ELC1-D09-32             | 2               | 4   |
|          | ELR2-D 1306                           | 1.6               | 1.0–1.6                            | ELC1-D09-32             | 2               | 4   |
|          | ELR2-D 13X6                           | 2.0               | 1.25–2.0                           | ELC1-D09-32             | 4               | 6   |
|          | ELR2-D 1307                           | 2.5               | 1.6–2.5                            | ELC1-D09-32             | 6               | 10  |
|          | ELR2-D 1308                           | 4.0               | 2.5–4.0                            | ELC1-D09-32             | 8               | 16  |
|          | ELR2-D 1310                           | 6.0               | 4.0–6.0                            | ELC1-D09-32             | 12              | 20  |
|          | ELR2-D 1312                           | 8.0               | 5.5–8.0                            | ELC1-D09-32             | 12              | 20  |
|          | ELR2-D 1314                           | 10.0              | 7.0–10.0                           | ELC1-D12~32             | 16              | 25  |
|          | ELR2-D 1316                           | 13.0              | 9.0–13.0                           | ELC1-D18~32             | 20              | 35  |
|          | ELR2-D 1321                           | 18.0              | 12.0–18.0                          | ELC1-D25 & -32          | 25              | 50  |
|          | ELR2-D 1322                           | 25.0              | 17.0–25.0                          |                         | 40              | 63  |
| ELR2-D23 | ELR2-D 2353                           | 32                | 23.0–32.0                          | ELC1-D32                | 40              | 80  |
|          | ELR2-D 2355                           | 36                | 28.0–36.0                          | ELC1-D40~95             | 25              | 50  |
|          | ELR2-D 3353                           | 32                | 23.0–32.0                          |                         | 40              | 63  |
|          | ELR2-D 3355                           | 40                | 30.0–40.0                          | ELC1-D50~95             | 40              | 100 |
|          | ELR2-D 3357                           | 50                | 37.0–50.0                          |                         | 63              | 100 |
| ELR2-D33 | ELR2-D 3359                           | 65                | 48.0–65.0                          | ELC1-D65~95             | 63              | 100 |
|          | ELR2-D 3361                           | 70                | 55.0–70.0                          | ELC1-D80 & -95          | 80              | 125 |
|          | ELR2-D 3363                           | 90                | 63.0–80.0                          |                         | 80              | 125 |
|          | ELR2-D 3365                           | 93                | 80.0–93.0                          | ELC1-D95                | 100             | 160 |

## Thermal Relay

### Specifications



| Type     | Number | Setting range(A) | For contactor  |
|----------|--------|------------------|----------------|
| ELR9-150 | 4365   | 80-104           | ELR9-95        |
|          | 4367   | 95-120           | ELR9-95-115    |
|          | 4369   | 110-140          | ELR9-115       |
| ELR9-200 | 5369   | 90-150           | ELR9-150       |
|          | F5357  | 30-50            | ELR9-F115-F185 |
|          | F5363  | 48-80            | ELR9-F115-F185 |
|          | F5367  | 60-100           | ELR9-F115-F185 |
|          | F5369  | 90-150           | ELR9-F115-F185 |
| ELR9-630 | F5371  | 132-220          | ELR9-F225-F265 |
|          | F7375  | 200-330          | ELR9-F225-F500 |
|          | F7379  | 300-500          | ELR9-F225-F500 |
|          | F7381  | 380-630          | ELR9-F400-F630 |

#### Characteristics for balanced load:

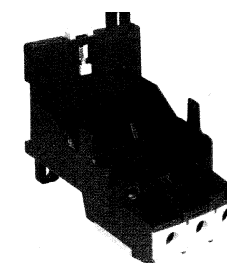
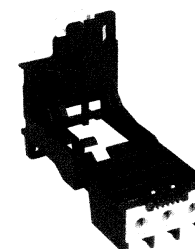
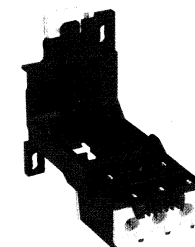
| Sequence No | IΔn        | Characteristics |       |            | Initial status | Ambient temperature                   |
|-------------|------------|-----------------|-------|------------|----------------|---------------------------------------|
| 1           | 1.05       | >2h             |       |            | Cold           | Start test after sequence 1<br>20±5°C |
| 2           | 1.20       | ≤2h             |       |            | Cold           |                                       |
| 3           | 1.50       | 10A             | <2min | ≤63A       |                |                                       |
| 4           | 7.2        | Tripping        | 10    | <4min      | >63A           |                                       |
|             |            |                 | 10A   | 2S<Tp ≤10S | ≤63A           | Cold                                  |
| 10          | 4S<Tp ≤10S | >63A            |       |            |                |                                       |

#### Characteristics for unbalanced load:

| Sequence No | IΔn         |               | Tripping time | Initial status              | Ambient temperature |
|-------------|-------------|---------------|---------------|-----------------------------|---------------------|
|             | Any 2 phase | Another phase |               |                             |                     |
| 1           | 1.00        | 0.9           | >2h           | Cold                        | 20±5°C              |
| 2           | 1.15        | 0             | ≤2h           | Start test after sequence 1 |                     |

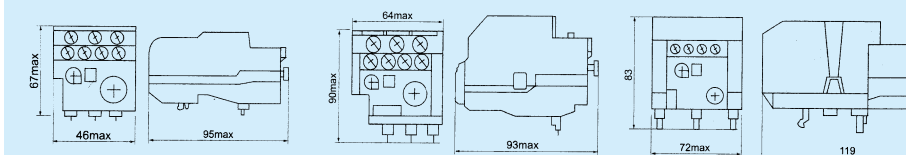
## Thermal Relay

### Specifications



Description ELR9-25 mounting base ELR9-36 mounting base ELR9-93 mounting base

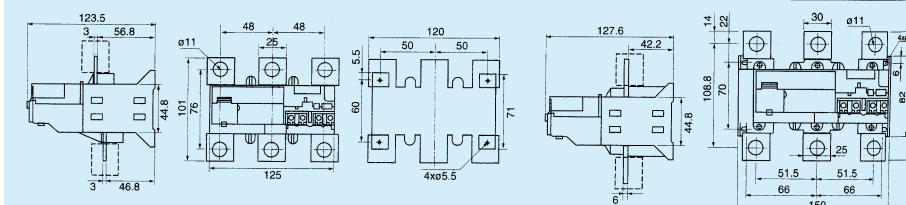
Application Assembled with ELR9-25 to form a complete set Assembled with ELR9-36 to form a complete set Assembled with ELR9-93 to form a complete set



ELR9-25

ELR9-36

ELR9-93



ELR9-200

ELR9-630