# EPR Series
## Residual Current Circuit Breaker



## Technical data

| | | |
|---|---|---|
| Standard | | EN / IEC61008-1 |
| Rated conditional short-circuit current, Inc | | 6kA,10KA |
| Protection | | Ground fault |
| Rated current, In | | 16,25,32,40,50,63,80A |
| Number of poles | | 2(1+N),4(3+N)pole |
| Rated sensitivity currents, I△n | | 10,30,100,300mA |
| Rated residual non-operating current | | 0.5 X I△n |
| Rated impulse withstand voltage Uimp | | 4000V |
| Rated voltages | 2pole | 240VAC |
| | 4pole | 415VAC |
| Ambient temperature (°C) | | -25~+40,Max. 95%humidity |
| Residual current off-time at I△n | | ≤0.1s |
| Rated residual current making & breaking capacity, I△m | | 500A for In=16,25,32,40,50A<br>630A for In=63A<br>800A for In=80A |
| Type of trip | | Electro-magnetic release |
| Type of terminal | | Lug type and Pin type |
| Terminal capacity | | Cables up to 25mm² |
| Protection degree | | IP20 |
| Installation | | 35mm DIN rail |


EPR-2P


EPR-4P

# EPR RCD




EPR-2P


EPR-4P

| Rated current (A) | I△n | Type AC | Type A | Packing unit |
|---|---|---|---|---|
| 16 | 10mA | EPR-2/16/10 | EPR-2/16/10-A | 1 |
| 25 | | EPR-2/25/10 | EPR-2/25/10-A | 1 |
| 16 | 30mA | EPR-2/16/30 | EPR-2/16/30-A | 1 |
| 25 | | EPR-2/25/30 | EPR-2/25/30-A | 1 |
| 32 | | EPR-2/32/30 | EPR-2/32/30-A | 1 |
| 40 | | EPR-2/40/30 | EPR-2/40/30-A | 1 |
| 50 | | EPR-2/50/30 | EPR-2/50/30-A | 1 |
| 63 | | EPR-2/63/30 | EPR-2/63/30-A | 1 |
| 80 | | EPR-2/80/30 | EPR-2/80/30-A | 1 |
| 16 | 100mA | EPR-2/16/100 | EPR-2/16/100-A | 1 |
| 25 | | EPR-2/25/100 | EPR-2/25/100-A | 1 |
| 32 | | EPR-2/32/100 | EPR-2/32/100-A | 1 |
| 40 | | EPR-2/40/100 | EPR-2/40/100-A | 1 |
| 50 | | EPR-2/50/100 | EPR-2/50/100-A | 1 |
| 63 | | EPR-2/63/100 | EPR-2/63/100-A | 1 |
| 80 | | EPR-2/80/100 | EPR-2/80/100-A | 1 |
| 16 | 300mA | EPR-2/16/300 | EPR-2/16/300-A | 1 |
| 25 | | EPR-2/25/300 | EPR-2/25/300-A | 1 |
| 32 | | EPR-2/32/300 | EPR-2/32/300-A | 1 |
| 40 | | EPR-2/40/300 | EPR-2/40/300-A | 1 |
| 50 | | EPR-2/50/300 | EPR-2/50/300-A | 1 |
| 63 | | EPR-2/63/300 | EPR-2/63/300-A | 1 |
| 80 | | EPR-2/80/300 | EPR-2/80/300-A | 1 |
| 16 | 10mA | EPR-4/16/10 | EPR-4/16/10-A | 1 |
| 25 | | EPR-4/25/10 | EPR-4/25/10-A | 1 |
| 16 | 30mA | EPR-4/16/30 | EPR-4/16/30-A | 1 |
| 25 | | EPR-4/25/30 | EPR-4/25/30-A | 1 |
| 32 | | EPR-4/32/30 | EPR-4/32/30-A | 1 |
| 40 | | EPR-4/40/30 | EPR-4/40/30-A | 1 |
| 50 | | EPR-4/50/30 | EPR-4/50/30-A | 1 |
| 63 | | EPR-4/63/30 | EPR-4/63/30-A | 1 |
| 80 | | EPR-4/80/30 | EPR-4/80/30-A | 1 |
| 16 | 100mA | EPR-4/16/100 | EPR-4/16/100-A | 1 |
| 25 | | EPR-4/25/100 | EPR-4/25/100-A | 1 |
| 32 | | EPR-4/32/100 | EPR-4/32/100-A | 1 |
| 40 | | EPR-4/40/100 | EPR-4/40/100-A | 1 |
| 50 | | EPR-4/50/100 | EPR-4/50/100-A | 1 |
| 63 | | EPR-4/63/100 | EPR-4/63/100-A | 1 |
| 80 | | EPR-4/80/100 | EPR-4/80/100-A | 1 |
| 16 | 300mA | EPR-4/16/300 | EPR-4/16/300-A | 1 |
| 25 | | EPR-4/25/300 | EPR-4/25/300-A | 1 |
| 32 | | EPR-4/32/300 | EPR-4/32/300-A | 1 |
| 40 | | EPR-4/40/300 | EPR-4/40/300-A | 1 |
| 50 | | EPR-4/50/300 | EPR-4/50/300-A | 1 |
| 63 | | EPR-4/63/300 | EPR-4/63/300-A | 1 |
| 80 | | EPR-4/80/300 | EPR-4/80/300-A | 1 |

## 1. Life

| In | Operating cycles | | Operating frequency (operations/h) |
|---|---|---|---|
| | On-load operating cycles | Off-load operating cycles | |
| 16,25,32 | 2000 | 2000 | 240 |
| 40,50,63,80 | 2000 | 1000 | 120 |

## 2. Breaking time of residual current

| Max.breaking time | | | | | |
|---|---|---|---|---|---|
| In (A) | I△n(A) | I△n | 2I△n | 5I△n | 5A,10A,20A,50A,100A,200A,500A |
| 16,25,32,40,50,63,80 | 0.01,0.03,0.1,0.3 | 0.1s | 0.08s | 0.04s | 0.04s |

## 3. Wiring

The suitable conductors should be used for connection,see table below for relative parameters.

| Rated current In (A) | Nominal cross section area of lead ($mm^2$) | Tightening torque (N.m) |
|---|---|---|
| 16 | 2.5 | 2.5 |
| 25 | 4 | 2.5 |
| 32 | 6 | 2.5 |
| 40 | 10 | 2.5 |
| 50 | 16 | 2.5 |
| 63 | 16 | 2.5 |
| 80 | 25 | 2.5 |

## 4. Features

When designing residual current devices, manufacturing technology and type of routine tests, the IEC / EN 61008 standards were considered. Important features are:

Up to date design

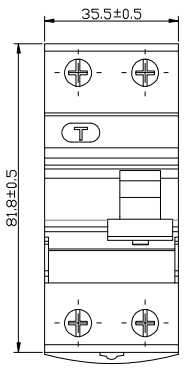
User-friendly connection of conductors and busbars

Resistance to current surges; unwanted tripping excluded

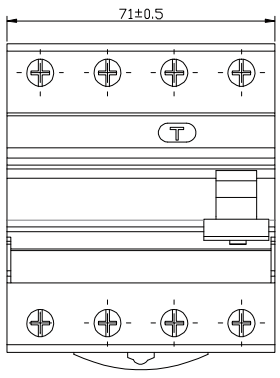
Simple and solid fixing to a 35 mm mounting rail in compliance with EN 60715

Additional colour display of main contacts position (red:contacts closed, green:contacts open)

## 5. Overall and mounting dimensions




EPR-2




EPR-4