

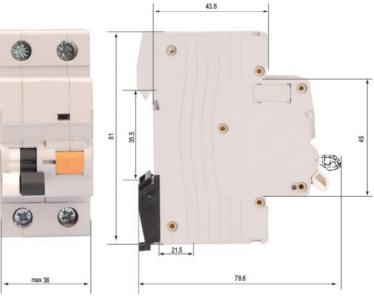
# **RCBO** with Circuit Protection

# Specifications and Dimensions

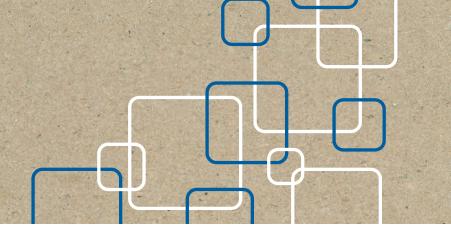
# Part No: ERS2R6xxA

- Provides protection against earth fault/leakage current, short-circuit, overload, and function of isolation
- Provides complementary protection against direct contact by human body
- Effectively protects electric equipment against insulating failure
- Provides comprehensive protection to household and commercial distribution systems
- Type: Electro-magnetic type
- Residual current characteristics: A
- Pole No: 1P+NTripping curve: C
- Rated short-circuit capacity: 6kA
- Rated current (A): 6, 10, 16, 20, 25, 32, 40
- Rated voltage: 240V AC
- Rated frequency: 50/60Hz
- Rated residual operating current (mA): 0.03, 0.1, 0.3
- Tripping duration: instantaneous: 50.1s
- Electro-mechanical endurance: 4000 cycles
- Connection terminal: pillar terminal with clamp
- Connection capacity:
  - Rigid conductor 16mm<sup>2</sup>
  - Terminal connection height: 21.5mm
- Installation:
  - On symmetrical DIN rail 35mm
  - Panel mounting
  - Wiring Diagram

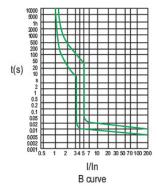


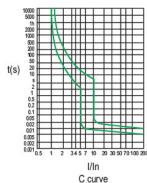


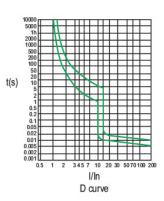




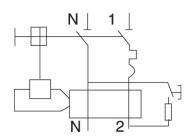
#### **Characteristic Curve**







## Wiring diagram



#### **Overload Current Protection Characteristics**

| Test Procedure | Туре    | Test Current | t Initial State Tripping or Non-tripping Time Limit Expected |  | Expected Result | Remark  |
|----------------|---------|--------------|--|--|-----------------|---|
| а              | B, C, D | 1.13ln       | cold   | t≥1h   | no tripping     |   |
| b              | B, C, D | 1.45ln       | after test a   | t<1h   | tripping        | Current in the 5s in<br>the increase of stability |
| С              | B, C, D | 2.55ln       | cold   | 1s <t<60s< td=""><td>tripping</td><td></td></t<60s<> | tripping        |   |
| d              | В       | 3In          | cold   | t≥0.1s   | no tripping     | Turn on the                                       |
|                | С       | 5In          |  |  |                 | auxiliary switch to                               |
|                | D       | 10In         |  |  |                 | close the current                                 |
| е              | В       | 5In          | cold   | t<0.1s   | tripping        | Turn on the                                       |
|                | С       | 10In         |  |  |                 | auxiliary switch to                               |
|                | D       | 20In         |  |  |                 | close the current                                 |

The terminology "cold state" refes to that no load is carried before testing at the reference setting temperature.

## **Residual Current Action Breaking Time**

| type    | In/A         | I∆n/A        | Residual Current (I△) Is Corresponding To The Following Breaking Time (S) |       |      |                                   |                |  |  |
|---------|--------------|--------------|---|-------|------|-----------------------------------|----------------|--|--|
| AC type | any<br>value | any<br>value | ln  | 2ln   | 5ln  | 5A,10A,20A,50A,<br>100A,200A,500A |                |  |  |
| A type  | any value    | >0.01        | 1.4In   | 2.8In | 7In  |                                   |                |  |  |
|         |              |              | 0.3   | 0.15  | 0.04 | 0.04                              | Max Break-time |  |  |

The general type RCBO whose current I ∆ n is 0.03mA or less can use 0.25A instead of 5I ∆ n.