



ADC450U

**RCBO 1M 1P 10kA C-50A 30mA Type A**

**Technical Features**

**Architecture**

|              |    |
|--------------|----|
| Type of pole | 1P |
| Curve        | C  |

**Electric current**

|   |               |
|---|---------------|
| Rated current   | 50 A          |
| Rated residual operating current I <sub>dn</sub>      | 30 mA         |
| Rated current -25°C                                   | 63.89 A       |
| Rated current at -20°C                                | 62.63 A       |
| Rated current -15°C                                   | 61.36 A       |
| Rated current -10°C                                   | 60.10 A       |
| Rated current -5°C                                    | 58.84 A       |
| Rated current at 0°C                                  | 57.58 A       |
| Rated current 5°C                                     | 56.31 A       |
| Rated current 10°C                                    | 55.05 A       |
| Rated current 15°C                                    | 53.79 A       |
| Rated current at 20°C                                 | 52.53 A       |
| Rated current 25°C                                    | 51.26 A       |
| Rated current 30°C                                    | 50 A          |
| Rated current 35°C                                    | 49.38 A       |
| Rated current at 40°C                                 | 48.75 A       |
| Rated current at 50°C                                 | 47.50 A       |
| Rated current 55°C                                    | 46.88 A       |
| Rated current 60°C                                    | 46.25 A       |
| Min./max. threshold value of the AC thermal operation | 1.13 - 1.45 A |

**Safety**

|                               |      |
|-------------------------------|------|
| Residual current type         | A    |
| Ingress Protection (IP) class | IP20 |

**Main electrical attributes**

|   |       |
|---|-------|
| Rated short-circuit breaking capacity I <sub>cn</sub> AC according to IEC 60898-1 | 10 kA |
|---|-------|

**Voltage**

|  |             |
|--|-------------|
| Rated insulation voltage U <sub>i</sub>          | 250 V       |
| Rated impulse withstand voltage U <sub>imp</sub> | 4000 V      |
| Rated operational voltage U <sub>e</sub>         | 230 - 240 V |
| Overvoltage category according to IEC 60947-1    | 3           |

**Power**

|                                       |         |
|---------------------------------------|---------|
| Total power loss under I <sub>N</sub> | 10.80 W |
|---------------------------------------|---------|

**Frequency**

|           |            |
|-----------|------------|
| Frequency | 50 - 60 Hz |
|-----------|------------|

**Use conditions**

|   |        |
|---|--------|
| Max. Altitude                               | 2000 m |
| Class of energy limitation I <sup>2</sup> t | 3      |

**Endurance**

|  |       |
|--|-------|
| Electric endurance in number of cycles | 2000  |
| Number of mechanical operations        | 10000 |

**Connection**

|   |                        |
|---|------------------------|
| Cross-section of input with screws, for flexible conductors | 1 - 10 mm <sup>2</sup> |
| Cross-section of input with screws, for massive conductors  | 1 - 16 mm <sup>2</sup> |

**Capacity**

|                   |   |
|-------------------|---|
| Number of modules | 1 |
|-------------------|---|

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**Installation, mounting**

|   |                |
|---|----------------|
| Type of top connection for modular devices    | Screw terminal |
| Type of bottom connection for modular devices | biconnect      |

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**Dimensions**

|        |          |
|--------|----------|
| Height | 115 mm   |
| Width  | 17.80 mm |
| Depth  | 70 mm    |

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**Use conditions**

|                               |             |
|-------------------------------|-------------|
| Operating temperature         | -25 - 40 °C |
| Storage/transport temperature | -40 - 70 °C |

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**Connection**

|  |                        |
|--|------------------------|
| Cross-section of input and output with screws, for flexible conductors | 1 - 16 mm <sup>2</sup> |
| Cross-section of input and output with screws, for massive conductors  | 1 - 25 mm <sup>2</sup> |

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**Compatibility**

|                       |     |
|-----------------------|-----|
| Suitable for DIN Rail | Yes |
|-----------------------|-----|

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**Sustainability**

|              |     |
|--------------|-----|
| RoHS conform | Yes |
|--------------|-----|