



AEM440T

## RCBO 4P 6kA C-40A 100mA A

### Technical characteristics

#### Architecture

|                           |          |
|---------------------------|----------|
| Neutral position          | right    |
| Number of protected poles | 4        |
| Type of pole              | 4 P      |
| Fixing mode               | Din-Rail |
| Curve                     | C        |

#### Configuration

|                   |   |
|-------------------|---|
| Number of modules | 4 |
|-------------------|---|

#### Controls and indicators

|                            |     |
|----------------------------|-----|
| Ground fault signalisation | yes |
|----------------------------|-----|

#### Connectivity

|   |                  |
|---|------------------|
| Top connection alignment for modular devices    | Aligned terminal |
| Bottom connection alignment for modular devices | Aligned terminal |

#### Main electrical features

|  |                       |
|--|-----------------------|
| Rated short circuit breaking capacity $I_{cn}$ AC according IEC60898-1 | 6 kA                  |
| Rated operational voltage $U_e$  | 230/400 V - 240/415 V |
| Type of supply voltage   | AC                    |
| Frequency  | 50                    |

#### Voltage

|  |       |
|--|-------|
| Dielectric strength value of power frequency | 2 kV  |
| Rated insulation voltage                     | 500 V |
| Rated impulse withstand voltage              | 4 kV  |

#### Electric current

|   |                   |
|---|-------------------|
| Rated residual operating current                                  | 100 mA            |
| Rated current   | 40 A              |
| Withstand not tripping on 8-20 $\mu$ s wave                       | 3 kA              |
| Rated service breaking capacity $I_{cs}$ AC according IEC 60898-1 | 6 kA              |
| Breaking and opening capacity                                     | 4500 A            |
| min/maxi threshold value of the AC thermal operation              | 1.13 / 1.45 $I_n$ |
| Magnetic regulating current                                       | 5 / 10 $I_n$      |

**Electric current / temperature**

|                      |        |
|----------------------|--------|
| Rating current -25°C | 49.8 A |
| Rating current -20°C | 49 A   |
| Rating current -15°C | 48.2 A |
| Rating current -10°C | 47.3 A |
| Rating current -5°C  | 46.5 A |
| Rating current 0°C   | 45.6 A |
| Rating current 5°C   | 44.7 A |
| Rating current 10°C  | 43.8 A |
| Rating current 15°C  | 42.9 A |
| Rating current 20°C  | 42 A   |
| Rating current 25°C  | 41 A   |
| Rating current 30°C  | 40 A   |
| Rating current 35°C  | 38.9 A |
| Rating current 40°C  | 37.7 A |
| Rating current 45°C  | 36.5 A |
| Rating current 50°C  | 35.2 A |
| Rating current 55°C  | 33.9 A |
| Rating current 60°C  | 32.6 A |

**Current correction factors**

|   |     |
|---|-----|
| Correction factor of rating current for 2 devices placed side-by-side       | 0.8 |
| Correction factor of rating current for 3 devices placed side-by-side       | 0.8 |
| Correction factor of rating current for 4 and 5 devices placed side-by-side | 0.7 |
| Correction factor of rating current for 6 devices placed side-by-side       | 0.6 |

**Dimensions**

|                             |       |
|-----------------------------|-------|
| Depth of installed product  | 70 mm |
| Height of installed product | 84 mm |
| Width of installed product  | 71 mm |

**Frequency**

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

**Power**

|                           |        |
|---------------------------|--------|
| Total power loss under IN | 17.7 W |
| Power loss per pole at In | 4.6 W  |

**Endurance**

|  |      |
|--|------|
| Electric endurance in number of cycles | 2000 |
| Number of mechanical operations        | 4000 |

**Installation, mounting**

|  |            |
|--|------------|
| Type of top connection for modular devices | with screw |
| Tightening torque                          | 2Nm        |
| Type of top rail clip for modular devices  | Plastic    |

|   |                            |
|---|----------------------------|
| Type of bottom rail clip for modular devices  | plastic                    |
| Type of Bottom Connection for modular devices   | Blconnect + bypass         |
| Top removability for modular devices  | Yes                        |
| Bottom removability for modular devices   | Yes                        |
| Suitable for flush-mounting   | Yes                        |
| <b>Connection</b>   |                            |
| Connection cross-section at output with screw, for flexible conductor                         | 1 / 16 mm <sup>2</sup>     |
| Connection cross-section at output with screw, for massive conductor                          | 1 / 25 mm <sup>2</sup>     |
| Connection cross-section for rigid conductor, upstream terminals with screws                  | 1 / 25 mm <sup>2</sup>     |
| Connection cross-section of the access with screws, with flexible conductor                   | 1 / 16 mm <sup>2</sup>     |
| Cage clamp position   | in line                    |
| Downstream cage clamp delivery status   | opened                     |
| Upstream cage clamp delivery status   | opened                     |
| Connection cross-section of input and output with screws, for massive conductors              | 1 / 25 mm <sup>2</sup>     |
| Connection cross section of access and exit with screws, for flexible conductor               | 1 / 16 mm <sup>2</sup>     |
| <b>Cable</b>  |                            |
| Length of conductors used for the heating test (m) according to product standard              | 1 m                        |
| Conductor cross-section used for heating test(mm <sup>2</sup> ) according to product standard | 10 mm <sup>2</sup>         |
| <b>Equipment</b>  |                            |
| Type selective  | No                         |
| Can be accessorized   | Yes                        |
| With transparent product label holder   | Yes                        |
| <b>Standards</b>  |                            |
| Standard text   | IEC 61009-1,AS/NZS 61009-1 |
| European directive WEEE   | not concerned              |
| <b>Safety</b>   |                            |
| Protection index IP   | IP20                       |
| Residual current type   | A                          |
| <b>Use conditions</b>   |                            |
| Operating temperature   | -25...40 °C                |
| Degree of pollution according to IEC 60664 / IEC 60947-2                                      | 2                          |
| Class of energy limitation I <sup>2</sup> t   | 3                          |
| Altitude  | 2000 m                     |
| Storage/transport temperature   | -55...70 °C                |
| <b>temperatur</b>   |                            |
| Temperature of calibration  | 30 °C                      |

|  |         |
|--|---------|
| Ambient air temperature during heating test according to the product standard    | 23.2 °C |
| Max. admissible temperature on accessible parts (intended to be touched)         | 80 °C   |
| Max. admissible temperature on accessible parts (manual operating means)         | 55 °C   |
| Max. admissible temperature on access. parts (not touched for normal operation)  | 100 °C  |
| Max. admissible temperature on terminals   | 81.3 °C |
| Temp.-rise limits for access. parts (toggle) according to product standard       | 25 K    |
| Temp.-rise limits for access. parts (not touched) according to product standard  | 60 K    |
| Temp.rise limits for access. parts (to be touched) according to product standard | 40 K    |
| Temperature-rise limits for terminals according to the product standard          | 65 K    |
| Temperature-rise measured on accessible parts at In (manual operating means)     | 15 K    |
| Temperature-rise measured on access. parts at In (not touched normal operation)  | 60 K    |
| Temperature-rise measured on accessible parts at In (intended to be touched)     | 40 K    |
| Temperature-rise measured on terminals at In                                     | 41.3 K  |