



## RCBO 1M 1P 6kA C-40A 30mA A Class

## **Technical properties**

| Architecture | Arc | hit | ect | ure |
|--------------|-----|-----|-----|-----|
|--------------|-----|-----|-----|-----|

| Neutral position  | right                         |
|---|-------------------------------|
| Number of protected poles   | 1                             |
| Number of poles   | 1 P                           |
| Type of pole  | 1 P                           |
| Fixing mode   | DIN rail type O (symmetrical) |
| Curve   | С                             |
| Configuration   |                               |
| Number of modules   | 1                             |
| Connectivity  |                               |
| Top connection alignement for modular devices                     | Shifted terminal              |
| Bottom connection alignement for modular devices                  | Aligned terminal              |
| Main electrical features  |                               |
| Rated short circuit breaking capacity Icn AC according IEC60898-1 | 6 kA                          |
| Rated operational voltage Ue                                      | 230 / 240 V                   |
| Type of supply voltage  | AC                            |
| Frequency   | 50/60 Hz                      |
| Voltage   |                               |
| Rated insulation voltage  | 250 V                         |
| Rated impulse withstand voltage                                   | 4000 V                        |
| Electric current  |                               |
| Rated residual operating current                                  | 30 mA                         |
| Rated current   | 40 A                          |
| Withstand not tripping on 8-20 μs wave                            | 0.25 kA                       |
| Breaking and opening capacity                                     | 6000 A                        |
| min/maxi threshold value of the AC thermal operation              | 1.13 / 1.45 ln                |
| Magnetic regulating currrent                                      | 5 / 10 In                     |
| Electric current / temperature                                    |                               |
| Rating current -25°C  | 48.66 A                       |
| Rating current -20°C  | 47.88 A                       |
| Rating current -15°C  | 47.09 A                       |
| Rating current -10°C  | 46.3 A                        |

| Rating current -5°C  | 45.51 A           |
|--|-------------------|
| Rating current 0°C   | 44.73 A           |
| Rating current 5°C   | 43.94 A           |
| Rating current 10°C  | 43.15 A           |
| Rating current 15°C  | 42.36 A           |
| Rating current 20°C  | 41.58 A           |
| Rating current 25°C  | 40.79 A           |
| Rating current 30°C  | 40 A              |
| Rating current 35°C  | 39.15 A           |
| Rating current 40°C  | 38.3 A            |
| Rating current 45°C  | 37.45 A           |
| Rating current 50°C  | 36.6 A            |
| Rating current 55°C  | 35.75 A           |
| Rating current 60°C  | 34.9 A            |
| Rating current 65°C  | 34.05 A           |
| Rating current 70°C  | 33.2 A            |
| Dimensions   |                   |
| Depth of installed product   | 70 mm             |
| Height of installed product  | 115 mm            |
| Width of installed product   | 17.8 mm           |
| Frequency  |                   |
| Frequency  | 50 to 60 Hz       |
| Power  |                   |
| Total power loss under IN  | 12.5 W            |
| Power loss per pole at In  | 7.3 W             |
|  |                   |
| Endurance  |                   |
| Electric endurance in number of cycles                                       | 2000              |
| Number of mechanical operations  | 10000             |
| Installation, mounting   |                   |
| Type of top connection for modular devices                                   | with screw        |
| Type of bottom rail clip for modular devices                                 | metallic isolated |
| Type of Bottom Connection for modular devices                                | Blconnect         |
| Top removability for modular devices   | No                |
| Bottom removability for modular devices                                      | No                |
| Suitable for flush-mounting  | Yes               |
| Connection   |                   |
| Connection cross-section at output with screw, for flexible conductor        | 1 / 16 mm²        |
| Connection cross-section at output with screw, for massive conductor         | 1 / 25 mm²        |
| Connection cross-section for rigid conductor, upstream terminals with screws | 1 / 16 mm²        |
| Connection cross-section of the access with screws, with flexible conductor  | 1 / 10 mm²        |
|  |                   |

| 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 mm²  |
| Connection cross section of access and exit with screws, for flexible conductor   | 1 / 16 mm²  |
| Cable   |   |
| Length of conductors used for the heating<br>test (m) according to product standard   | 1 m   |
| Conductor cross-section used for heating test(mm²) according to product standard  | 10 mm²  |
| Equipment   |   |
| Type selective  | No  |
| Can be accessorized   | No  |
| With transparent product label holder   | Yes   |
| Standards   |   |
| Standard text   | IEC 61009-1   |
| European directive WEEE   | concerned   |
| Safety  |   |
| Protection index IP   | IP20  |
|   |   |
| Use conditions  Operating temperature   | -5 40°C   |
| Operating temperature  Degree of pollution according to IEC 60664 /   | -540 °C   |
| Operating temperature  Degree of pollution according to IEC 60664 / IEC 60947-2   | 2   |
| Operating temperature  Degree of pollution according to IEC 60664 / IEC 60947-2  Class of energy limitation I <sup>2</sup> t  | 2   |
| Operating temperature  Degree of pollution according to IEC 60664 / IEC 60947-2  Class of energy limitation I <sup>2</sup> t  Altitude  | 2<br>3<br>2000 m  |
| Operating temperature  Degree of pollution according to IEC 60664 / IEC 60947-2  Class of energy limitation I <sup>2</sup> t  | 2   |
| Operating temperature  Degree of pollution according to IEC 60664 / IEC 60947-2  Class of energy limitation I²t  Altitude  Air humidity protection  | 2<br>3<br>2000 m<br>95% / 55°C  |
| Operating temperature  Degree of pollution according to IEC 60664 / IEC 60947-2  Class of energy limitation I²t  Altitude  Air humidity protection  Storage/transport temperature   | 2<br>3<br>2000 m<br>95% / 55°C  |
| Operating temperature  Degree of pollution according to IEC 60664 / IEC 60947-2  Class of energy limitation I²t  Altitude  Air humidity protection  Storage/transport temperature  temperatur   | 2<br>3<br>2000 m<br>95% / 55°C<br>-4070 °C                                      |
| Operating temperature  Degree of pollution according to IEC 60664 / IEC 60947-2  Class of energy limitation I²t  Altitude  Air humidity protection  Storage/transport temperature  temperatur  Temperature of calibration  Ambient air temperature during heating test  | 2<br>3<br>2000 m<br>95% / 55°C<br>-4070 °C                                      |
| Operating temperature  Degree of pollution according to IEC 60664 / IEC 60947-2  Class of energy limitation I²t  Altitude  Air humidity protection  Storage/transport temperature  temperatur  Temperature of calibration  Ambient air temperature during heating test according to the product standard  Max. admissible temperature on accessible   | 2<br>3<br>2000 m<br>95% / 55°C<br>-4070 °C<br>30 °C                             |
| Operating temperature  Degree of pollution according to IEC 60664 / IEC 60947-2  Class of energy limitation I²t  Altitude  Air humidity protection  Storage/transport temperature  temperatur  Temperature of calibration  Ambient air temperature during heating test according to the product standard  Max. admissible temperature on accessible parts (intended to be touched)  Max. admissible temperature on accessible   | 2<br>3<br>2000 m<br>95% / 55°C<br>-4070 °C<br>30 °C<br>22.4 °C<br>76.5 °C       |
| Operating temperature  Degree of pollution according to IEC 60664 / IEC 60947-2  Class of energy limitation I²t  Altitude  Air humidity protection  Storage/transport temperature  temperatur  Temperature of calibration  Ambient air temperature during heating test according to the product standard  Max. admissible temperature on accessible parts (intended to be touched)  Max. admissible temperature on accessible parts (manual operating means)  Max. admissible temperature on access.  parts (not touched for normal operation)  | 2 3 2000 m 95% / 55°C -4070 °C  30 °C  22.4 °C  76.5 °C                         |
| Operating temperature  Degree of pollution according to IEC 60664 / IEC 60947-2  Class of energy limitation I²t  Altitude  Air humidity protection  Storage/transport temperature  temperatur  Temperature of calibration  Ambient air temperature during heating test according to the product standard  Max. admissible temperature on accessible parts (intended to be touched)  Max. admissible temperature on accessible parts (manual operating means)  Max. admissible temperature on access.  | 2 3 2000 m 95% / 55°C -4070 °C  30 °C  22.4 °C  76.5 °C  54 °C                  |
| Operating temperature  Degree of pollution according to IEC 60664 / IEC 60947-2  Class of energy limitation I²t  Altitude  Air humidity protection  Storage/transport temperature  temperatur  Temperature of calibration  Ambient air temperature during heating test according to the product standard  Max. admissible temperature on accessible parts (intended to be touched)  Max. admissible temperature on accessible parts (manual operating means)  Max. admissible temperature on access. parts (not touched for normal operation)  Max. admissible temperature on terminals  Temprise limits for access. parts (toggle) according to product standard  Temprise limits for access. parts (not | 2 3 2000 m 95% / 55°C -4070 °C  30 °C  22.4 °C  76.5 °C  74.6 °C  73.3 °C       |
| Operating temperature  Degree of pollution according to IEC 60664 / IEC 60947-2  Class of energy limitation I²t  Altitude  Air humidity protection  Storage/transport temperature  temperatur  Temperature of calibration  Ambient air temperature during heating test according to the product standard  Max. admissible temperature on accessible parts (intended to be touched)  Max. admissible temperature on accessible parts (manual operating means)  Max. admissible temperature on access. parts (not touched for normal operation)  Max. admissible temperature on terminals  Temprise limits for access. parts (toggle)   | 2 3 2000 m 95% / 55°C -4070 °C  30 °C  22.4 °C  76.5 °C  74.6 °C  73.3 °C  40 K |

| Temperature-rise measured on accessible parts at In (manual operating means)    | 14 K   |
|---|--------|
| Temperature-rise measured on access. parts at In (not touched normal operation) | 34.6 K |
| Temperature-rise measured on accessible parts at In (intended to be touched)    | 36.5 K |
| Temperature-rise measured on terminals at In                                    | 33.3 K |