# Product data sheet ADM440T





ADM440T

## RCBO 4P 6kA C-40A 30mA A

## **Technical properties**

| Neutral position   | right                 |
|--|-----------------------|
| Number of protected poles  | 4                     |
| Type of pole   | 4 P                   |
| Fixing mode  | Din-Rail              |
| Curve  | С                     |
| Configuration  |                       |
| Number of modules  | 4                     |
| Controls and indicators  |                       |
| Ground fault signalisation   | yes                   |
| Connectivity   |                       |
| Top connection alignement for modular devices                        | Aligned terminal      |
| Bottom connection alignement for modular<br>devices                  | Aligned terminal      |
| Main electrical features   |                       |
| Rated short circuit breaking capacity Icn AC<br>according IEC60898-1 | 6 kA                  |
| Rated operational voltage Ue   | 230/400 V - 240/415 V |
| Type of supply voltage   | AC                    |
| Frequency  | 50 Hz                 |
| Voltage  |                       |
| Dielectric strength value of power<br>frequency                      | 2 kV                  |
| Rated insulation voltage   | 500 V                 |
| Rated impulse withstand voltage                                      | 4 kV                  |
| Electric current   |                       |
| Rated residual operating current                                     | 30 mA                 |
| Rated current  | 40 A                  |
| Withstand not tripping on 8-20 μs wave                               | 3000 A                |
| Rated service breaking capacity Ics AC<br>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 In        |
| Magnetic regulating currrent   | 5 / 10 In             |

#### 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**

| Dimensions   |     |
|--|-----|
| devices placed side-by-side  | 0.  |
| Correction factor of rating current for 6                                      |     |
| Correction factor of rating current for 4 and<br>5 devices placed side-by-side | 0.  |
| Correction factor of rating current for 3<br>devices placed side-by-side       | 0.  |
| Correction factor of rating current for 2<br>devices placed side-by-side       | 0.8 |

| 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 |
|  |            |

2Nm

Plastic

Tightening torque Type of top rail clip for modular devices

| Type of bottom rail clip for modular devices  | plastic  |
|---|--|
| Type of Bottom Connection for modular<br>devices  | Blconnect + bypass   |
| Top removability for modular devices  | Yes  |
| Bottom removability for modular devices   | Yes  |
| 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<br>conductor, upstream terminals with screws   | 1 / 25 mm²   |
| Connection cross-section of the access with<br>screws, with flexible conductor  | 1 / 16 mm²   |
| Cage clamp position   | in line  |
| Downstream cage clamp delivery status   | opened   |
| Upstream cage clamp delivery status   | opened   |
| Connection cross-section of input and<br>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   |  |
| test (m) according to product standard  | 1 m  |
| test (m) according to product standard<br>Conductor cross-section used for heating<br>test(mm²) according to product standard   |  |
| Conductor cross-section used for heating<br>test(mm <sup>2</sup> ) according to product standard<br>Equipment   | 10 mm²   |
| Conductor cross-section used for heating<br>test(mm <sup>2</sup> ) according to product standard<br>Equipment<br>Type selective   | 10 mm²   |
| Conductor cross-section used for heating<br>test(mm <sup>2</sup> ) according to product standard<br>Equipment<br>Type selective<br>Can be accessorized  | 10 mm²<br>No<br>Yes  |
| Conductor cross-section used for heating<br>test(mm <sup>2</sup> ) according to product standard<br>Equipment<br>Type selective   | 10 mm²<br>No<br>Yes  |
| Conductor cross-section used for heating<br>test(mm <sup>2</sup> ) according to product standard<br>Equipment<br>Type selective<br>Can be accessorized  | 10 mm²<br>No<br>Yes  |
| Conductor cross-section used for heating<br>test(mm <sup>2</sup> ) according to product standard<br>Equipment<br>Type selective<br>Can be accessorized<br>With transparent product label holder   | 10 mm²<br>No<br>Yes<br>Yes   |
| Conductor cross-section used for heating<br>test(mm <sup>2</sup> ) according to product standard<br>Equipment<br>Type selective<br>Can be accessorized<br>With transparent product label holder<br>Standards  | 10 mm <sup>2</sup><br>No<br>Yes<br>IEC 61009-1 ; AS/NZS 61009-1  |
| Conductor cross-section used for heating<br>test(mm <sup>2</sup> ) according to product standard<br>Equipment<br>Type selective<br>Can be accessorized<br>With transparent product label holder<br>Standards<br>Standard text   | 10 mm <sup>2</sup><br>No<br>Yes<br>IEC 61009-1 ; AS/NZS 61009-1  |
| Conductor cross-section used for heating<br>test(mm <sup>2</sup> ) according to product standard<br>Equipment<br>Type selective<br>Can be accessorized<br>With transparent product label holder<br>Standards<br>Standard text<br>European directive WEEE  | 10 mm <sup>2</sup><br>No<br>Yes<br>IEC 61009-1 ; AS/NZS 61009-1<br>concerned   |
| Conductor cross-section used for heating<br>test(mm <sup>2</sup> ) according to product standard<br>Equipment<br>Type selective<br>Can be accessorized<br>With transparent product label holder<br>Standards<br>Standard text<br>European directive WEEE<br>Safety  | 10 mm <sup>2</sup><br>No<br>Yes<br>IEC 61009-1 ; AS/NZS 61009-1<br>concerned   |
| Conductor cross-section used for heating<br>test(mm <sup>2</sup> ) according to product standard<br>Equipment<br>Type selective<br>Can be accessorized<br>With transparent product label holder<br>Standards<br>Standard text<br>European directive WEEE<br>Safety<br>Protection index IP   | 10 mm <sup>2</sup><br>No<br>Yes<br>IEC 61009-1 ; AS/NZS 61009-1<br>concerned<br>IP2X   |
| Conductor cross-section used for heating<br>test(mm²) according to product standard<br>Equipment<br>Type selective<br>Can be accessorized<br>With transparent product label holder<br>Standards<br>Standard text<br>European directive WEEE<br>Safety<br>Protection index IP<br>Residual current type   | 10 mm <sup>2</sup><br>No<br>Yes<br>IEC 61009-1 ; A5/NZS 61009-1<br>concerned<br>IP2X<br>A  |
| Conductor cross-section used for heating<br>test(mm <sup>2</sup> ) according to product standard<br>Equipment<br>Type selective<br>Can be accessorized<br>With transparent product label holder<br>Standards<br>Standard text<br>European directive WEEE<br>Safety<br>Protection index IP<br>Residual current type<br>REACH conform   | 10 mm <sup>2</sup><br>No<br>Yes<br>IEC 61009-1 ; AS/NZS 61009-1<br>concerned<br>IP2X<br>A<br>No<br>Yes   |
| Conductor cross-section used for heating<br>test(mm <sup>2</sup> ) according to product standard<br>Equipment<br>Type selective<br>Can be accessorized<br>With transparent product label holder<br>Standards<br>Standard text<br>European directive WEEE<br>Safety<br>Protection index IP<br>Residual current type<br>REACH conform<br>ROHS conform   | 10 mm <sup>2</sup><br>No<br>Yes<br>IEC 61009-1 ; AS/NZS 61009-1<br>concerned<br>IP2X<br>A<br>No<br>Yes   |
| Conductor cross-section used for heating<br>test(mm <sup>2</sup> ) according to product standard<br>Equipment<br>Type selective<br>Can be accessorized<br>With transparent product label holder<br>Standards<br>Standard text<br>European directive WEEE<br>Safety<br>Protection index IP<br>Residual current type<br>REACH conform<br>RoHS conform<br>Halogen free                               | 10 mm²<br>No<br>Yes<br>IEC 61009-1 ; A5/NZS 61009-1<br>concerned<br>IP2X<br>A<br>No<br>Yes<br>No   |
| Conductor cross-section used for heating<br>test(mm <sup>2</sup> ) according to product standard<br>Equipment<br>Type selective<br>Can be accessorized<br>With transparent product label holder<br>Standards<br>Standard text<br>European directive WEEE<br>Safety<br>Protection index IP<br>Residual current type<br>REACH conform<br>RoHS conform<br>Halogen free<br>Use conditions             | 10 mm <sup>2</sup><br>No<br>Yes<br>IEC 61009-1 ; AS/NZS 61009-1<br>concerned<br>IP2X<br>A<br>No<br>Yes<br>No   |
| Conductor cross-section used for heating<br>test(mm²) according to product standard<br>Equipment<br>Type selective<br>Can be accessorized<br>With transparent product label holder<br>Standards<br>Standard text<br>European directive WEEE<br>Safety<br>Protection index IP<br>Residual current type<br>REACH conform<br>RoHS conform<br>Halogen free<br>Use conditions<br>Operating temperature | 1 m<br>10 mm <sup>2</sup><br>10 mm <sup>2</sup><br>No<br>Yes<br>IEC 61009-1 ; AS/NZS 61009-1<br>concerned<br>IP2X<br>A<br>No<br>Yes<br>No<br>Yes<br>No<br>2000 m |

# temperatur

| 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<br>parts (manual operating means)        | 55 °C   |
| Max. admissible temperature on access.<br>parts (not touched for normal operation) | 100 °C  |
| Max. admissible temperature on terminals   | 81.3 °C |
| Temprise limits for access. parts (toggle)<br>according to product standard        | 25 K    |
| Temprise limits for access. parts (not<br>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<br>parts at In (manual operating means)    | 15 K    |
| Temperature-rise measured on access.<br>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<br>In                                    | 41.3 K  |