



AEX420T

RCBO 4P 10kA C-20A 100mA A

Technical properties

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 | 10 kA |
| Rated operational voltage U_e | 230/400 V - 240/415 V |
| Type of supply voltage | AC |
| Frequency | 50 Hz |

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 | 20 A |
| Withstand not tripping on 8-20 μ s wave | 3 kA |
| Rated service breaking capacity I_{cs} AC according IEC 60898-1 | 7.5 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 | 23.8 A |
| Rating current -20°C | 23.5 A |
| Rating current -15°C | 23.2 A |
| Rating current -10°C | 22.9 A |
| Rating current -5°C | 22.5 A |
| Rating current 0°C | 22.2 A |
| Rating current 5°C | 21.8 A |
| Rating current 10°C | 21.5 A |
| Rating current 15°C | 21.1 A |
| Rating current 20°C | 20.8 A |
| Rating current 25°C | 20.4 A |
| Rating current 30°C | 20 A |
| Rating current 35°C | 19.6 A |
| Rating current 40°C | 19.1 A |
| Rating current 45°C | 18.6 A |
| Rating current 50°C | 18.2 A |
| Rating current 55°C | 17.7 A |
| Rating current 60°C | 17.2 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 | 11.7 W |
| Power loss per pole at In | 3 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 |

Connection

| | |
|--|------------------------|
| Connection cross-section at output with screw, for flexible conductor | 1 / 16 mm ² |
| Connection cross-section at output with screw, for massive conductor | 1 / 25 mm ² |
| Connection cross-section for rigid conductor, upstream terminals with screws | 1 / 25 mm ² |
| Connection cross-section of the access with screws, with flexible conductor | 1 / 16 mm ² |
| 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 ² |
| Connection cross section of access and exit with screws, for flexible conductor | 1 / 16 mm ² |

Cable

| | |
|---|---------------------|
| Length of conductors used for the heating test (m) according to product standard | 1 m |
| Conductor cross-section used for heating test(mm ²) according to product standard | 2.5 mm ² |

Equipment

| | |
|---------------------------------------|-----|
| Type selective | No |
| Can be accessorized | Yes |
| With transparent product label holder | Yes |

Standards

| | |
|---------------|------------------------------|
| Standard text | IEC 61009-1 ; AS/NZS 61009-1 |
|---------------|------------------------------|

Safety

| | |
|-----------------------|------|
| Protection index IP | IP20 |
| Residual current type | A |
| REACH conform | No |
| RoHS conform | Yes |
| Halogen free | No |

Use conditions

| | |
|---|-------------|
| Operating temperature | -25...40 °C |
| Class of energy limitation I ² t | 3 |
| Altitude | 2000 m |
| Storage/transport temperature | -55...70 °C |

temperatur

| | |
|----------------------------|-------|
| Temperature of calibration | 30 °C |
|----------------------------|-------|

| | |
|--|---------|
| Ambient air temperature during heating test according to the product standard | 24.5 °C |
| Max. admissible temperature on accessible parts (intended to be touched) | 71.4 °C |
| Max. admissible temperature on accessible parts (manual operating means) | 53.1 °C |
| Max. admissible temperature on access. parts (not touched for normal operation) | 95.7 °C |
| Max. admissible temperature on terminals | 75.2 °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) | 13.1 K |
| Temperature-rise measured on access. parts at In (not touched normal operation) | 55.7 K |
| Temperature-rise measured on accessible parts at In (intended to be touched) | 31.4 K |
| Temperature-rise measured on terminals at In | 35.2 K |