



MU450A

MCB 4P 6kA C-50A 4M

Technical characteristics

Architecture

| | |
|---------------------------|----------------|
| Neutral position | not applicable |
| Number of protected poles | 4 |
| Number of poles | 4 P |
| Type of pole | 4 P |
| Curve | C |

Functions

| | |
|----------------------------------|----|
| Concurrently switching N-neutral | No |
|----------------------------------|----|

Configuration

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

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 | 400 V |
| Type of supply voltage | AC |
| Frequency | 50/60 Hz |

Voltage

| | |
|---------------------------------|--------|
| Rated insulation voltage | 500 V |
| Rated impulse withstand voltage | 4000 V |

Electric current

| | |
|---|-------------------|
| Rated current | 50 A |
| Rated service breaking capacity I_{cs} AC according IEC 60898-1 | 6 kA |
| min/maxi threshold value of the AC thermal operation | 1.13 / 1.45 I_n |
| Magnetic regulating current | 5 / 10 I_n |
| min/maxi threshold value of the DC magnetic operation | 7 / 15 I_n |
| min/maxi threshold value of the DC thermal operation | 1.13 / 1.45 I_n |
| Breaking capacity on 1 pole for IT 400V NF 60947-2 | 3 kA |

| | |
|---|-------|
| Rated short circuit breaking capacity I_{cn} under 230V AC according IEC60898-1 | 6 kA |
| Rated short circuit breaking capacity I_{cn} under 400V AC according IEC60898-1 | 6 kA |
| Rated service breaking capacity I_{cs} AC according IEC 60947-2 | 75 % |
| Rated ultimate short-circuit breaking capacity I_{cu} under 230V AC IEC 60947-2 | 10 kA |
| Rated ultimate short-circuit breaking capacity I_{cu} under 400V AC IEC 60947-2 | 10 kA |

Electric current / temperature

| | |
|----------------------|--------|
| Rating current -25°C | 64 A |
| Rating current -20°C | 62.8 A |
| Rating current -15°C | 61.7 A |
| Rating current -10°C | 60.5 A |
| Rating current -5°C | 59.3 A |
| Rating current 0°C | 58 A |
| Rating current 5°C | 56.8 A |
| Rating current 10°C | 55.5 A |
| Rating current 15°C | 54.2 A |
| Rating current 20°C | 52.8 A |
| Rating current 25°C | 51.4 A |
| Rating current 30°C | 50 A |
| Rating current 35°C | 48.5 A |
| Rating current 40°C | 47 A |
| Rating current 45°C | 45.5 A |
| Rating current 50°C | 43.8 A |
| Rating current 55°C | 42.1 A |
| Rating current 60°C | 40.4 A |
| Rating current 65°C | 38.9 A |
| Rating current 70°C | 37.2 A |

Current correction factors

| | |
|---|------|
| Correction factor of rating current for 2 devices placed side-by-side | 1 |
| Correction factor of rating current for 3 devices placed side-by-side | 0.95 |
| Correction factor of rating current for 4 and 5 devices placed side-by-side | 0.9 |
| Correction factor of rating current for 6 devices placed side-by-side | 0.85 |
| Correction factor of magnetic tripping with 100 Hz | 1.1 |
| Correction factor of magnetic tripping with 200 Hz | 1.2 |
| Correction factor of magnetic tripping with 400 Hz | 1.5 |
| Correction factor of magnetic tripping with 60 Hz | 1 |

Dimensions

| | |
|----------------------------|-------|
| Depth of installed product | 70 mm |
|----------------------------|-------|

| | |
|--|------------------------|
| Height of installed product | 83 mm |
| Width of installed product | 70 mm |
| Frequency | |
| Frequency | 50 to 60 Hz |
| Power | |
| Total power loss under IN | 19.7 W |
| Power loss per pole at In | 5.1 W |
| Endurance | |
| Electric endurance in number of cycles | 4000 |
| Number of mechanical operations | 20000 |
| Installation, mounting | |
| Type of top connection for modular devices | with screw |
| Tightening torque | 2,8Nm |
| Type of top rail clip for modular devices | NA |
| Type of bottom rail clip for modular devices | metallic |
| Type of Bottom Connection for modular devices | Blconnect |
| Top removability for modular devices | No |
| Bottom removability for modular devices | No |
| Connection | |
| Connection cross-sect. flexible conductor | 1 / 25mm ² |
| Connection cross-sect. rigid cable | 1 / 35mm ² |
| Connection cross-section of input and output with screws, for massive conductors | 1 / 35 mm ² |
| Connection cross section of access and exit with screws, for flexible conductor | 1 / 25 mm ² |
| Type of connection | with screw |
| Equipment | |
| Quick connect | no |
| With transparent product label holder | No |
| Standards | |
| Standard text | IEC 60898-1 |
| Safety | |
| RoHS conform | Yes |
| Halogen free | No |
| Use conditions | |
| Operating temperature | -25...70 °C |
| Degree of pollution according to IEC 60664 / IEC 60947-2 | 2 |
| Class of energy limitation I ² t | 3 |
| Altitude | 2000 m |
| Air humidity protection | for all climates |
| Storage/transport temperature | -25...80 °C |

Subject to technical modifications

