



HMK280

MCB 2P 30kA C-80A 3M

Product Datasheet

Architecture

| | |
|---------------------------|-----|
| Number of protected poles | 2 |
| Number of poles | 2 P |
| Type of pole | 2 P |
| Curve | C |

Functions

| | |
|----------------------------------|----|
| Concurrently switching N-neutral | no |
|----------------------------------|----|

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 | 30 kA |
| Rated operational voltage U_e | 415 V |
| Type of supply voltage | AC |
| Frequency | 50/60 Hz |

Voltage

| | |
|---------------------------------|--------|
| Rated insulation voltage | 500 V |
| Rated impulse withstand voltage | 6000 V |

Electric current

| | |
|--|----------------|
| Rated current | 80 A |
| min/maxi threshold value of the AC thermal operation | 1,13 / 1,45 In |
| Magnetic regulating current | 5 / 10 In |
| Rating current -10°C according to IEC 60947 | 112 A |
| Rating current -15°C according to IEC 60947 | 115 A |
| Rating current -20°C according to IEC 60947 | 118 A |
| Rating current -25°C according to IEC 60947 | 122 A |
| Rating current -5°C according to IEC 60947 | 109 A |
| Rating current 0°C according to IEC 60947 | 106 A |
| Rating current 10°C according to IEC 60947 | 99,2 A |
| Rating current 150°C according to IEC 60947 | 96 A |
| Rating current 20°C according to IEC 60947 | 92,8 A |
| Rating current 25°C according to IEC 60947 | 89,6 A |
| Rating current 30°C according to IEC 60947 | 86,4 A |
| Rating current 35°C according to IEC 60947 | 83,2 A |
| Rating current 40°C according to IEC 60947 | 80 A |
| Rating current 45°C according to IEC 60947 | 77,6 A |
| Rating current 5°C according to IEC 60947 | 102 A |
| Rating current 50°C according to IEC 60947 | 75,1 A |
| Rating current 55°C according to IEC 60947 | 72,6 A |
| Rating current 60°C according to IEC 60947 | 70 A |
| Rating current 65°C according to IEC 60947 | 67,2 A |
| Rating current 70°C according to IEC 60947 | 64,3 A |
| Rated ultimate short-circuit breaking capacity Icu AC IEC 60947-2 | 30 kA |
| Breaking capacity on 1 pole for IT 400V NF 60947-2 | 4,5 kA |
| Breaking capacity on 1 pole for IT 415V NF 60947-2 | 4,5 kA |
| Rated service breaking capacity Ics AC according IEC 60947-2 | 25 % |
| Rated ultimate short-circuit breaking capacity Icu under 230V AC IEC 60947-2 | 30 kA |
| Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2 | 30 kA |
| Rated ultimate short-circuit breaking capacity Icu under 400V AC IEC 60947-2 | 30 kA |
| Rated ultimate short-circuit breaking capacity Icu under 415V AC IEC 60947-2 | 30 kA |

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 | 1 |
| Correction factor of rating current for 4 and 5 devices placed side-by-side | 1 |
| Correction factor of rating current for 6 devices placed side-by-side | 1 |

Frequency

| | |
|-----------|-------------|
| Frequency | 50 to 60 Hz |
|-----------|-------------|

Power

| | |
|---------------------------|---------|
| Total power loss under IN | 11,98 W |
| Power loss per pole at In | 6,13 W |

Endurance

| | |
|--|-------|
| Electric endurance in number of cycles | 1500 |
| Number of mechanical operations | 20000 |

Dimensions

| | |
|-----------------------------|-------|
| Depth of installed product | 70 mm |
| Height of installed product | 90 mm |
| Width of installed product | 53 mm |

Installation, mounting

| | |
|---|------------|
| Type of top connection for modular devices | with screw |
| Tightening torque | 3,5 to 5Nm |
| 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 | with screw |
| Top removability for modular devices | yes |
| Bottom removability for modular devices | yes |
| 360° product mounting position | yes |

Connection

| | |
|--|--|
| Connection cross-section at output with screw, for flexible conductor | 1 / 50 mm ² |
| Connection cross-section at output with screw, for massive conductor | 1 / 70 mm ² |
| Connection cross-sect. flexible conductor | 50mm ² |
| Connection cross-sect. rigid cable | 70mm ² |
| Connection cross-section for rigid conductor, upstream terminals with screws | 1 / 70 mm ² |
| Connection cross-section of the access with screws, with flexible conductor | 1 / 50 mm ² |
| Connection cross-section of input and output with screws, for massive conductors | 1 / 70 mm ² |
| Connection cross section of access and exit with screws, for flexible conductor | 1 / 50 mm ² |
| Type of connection | terminal with tightening compensation system |
| Nominal tightening torque bottom terminal | 3,6 Nm |
| Nominal tightening torque top terminal | 3,6 Nm |

Standards

| | |
|--|-------------|
| Standard text | IEC 60947-2 |
| European directive WEEE | concerned |
| Product categories described in the W3E directive 2012/19/EU | Category 5 |

Safety

| | |
|---------------------|------|
| Protection index IP | IP20 |
|---------------------|------|

Use conditions

| | |
|--|------------------|
| Degree of pollution according to IEC 60664 / IEC 60947-2 | 3 |
| Altitude | 2000 m |
| Air humidity protection | for all climates |

temperatur

| | |
|----------------------------|-------|
| Temperature of calibration | 40 °C |
|----------------------------|-------|
