

## MCB 3P 10kA C-50A 3M

### Architecture

|                           |     |
|---------------------------|-----|
| Number of protected poles | 3   |
| Number of poles           | 3 P |
| Type of pole              | 3 P |
| Curve                     | C   |

### Connectivity

|                                                 |                  |
|-------------------------------------------------|------------------|
| Bottom connection alignment for modular devices | Aligned terminal |
| Top connection alignment for modular devices    | Aligned terminal |

### Main electrical features

|                                                                               |           |
|-------------------------------------------------------------------------------|-----------|
| Frequency                                                                     | 50/60 Hz  |
| Rated short circuit breaking capacity I <sub>cn</sub> AC according IEC60898-1 | 10 kA     |
| Type of supply voltage                                                        | AC        |
| Rated operational voltage U <sub>e</sub>                                      | 230/400 V |

### Voltage

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

### Electric current

|                                                                                          |                          |
|------------------------------------------------------------------------------------------|--------------------------|
| Rated short circuit breaking capacity I <sub>cn</sub> under 400V AC according IEC60898-1 | 10 kA                    |
| Rated service breaking capacity I <sub>cs</sub> AC according IEC 60898-1                 | 7,5 kA                   |
| Breaking capacity on 1 pole with 400 V NF 60947-2                                        | 3 kA                     |
| Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 230V AC IEC 60947-2 | 10 kA                    |
| Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 415V AC IEC 60947-2 | 10 kA                    |
| Magnetic regulating current at 40° C                                                     | 5/10 I <sub>n</sub>      |
| min/maxi threshold value of the DC magnetic operation                                    | 7/15 I <sub>n</sub>      |
| min/maxi threshold value of the AC thermal operation                                     | 1,13/1,45 I <sub>n</sub> |
| min/maxi threshold value of the DC thermal operation                                     | 1,13/1,45 I <sub>n</sub> |

### Electric current / temperature

|                      |        |
|----------------------|--------|
| Rating current -15°C | 61,7 A |
| Rating current -20°C | 62,8 A |
| Rating current 0°C   | 58 A   |
| Rating current 10°C  | 55,5 A |
| Rating current -10°C | 60,5 A |
| Rating current 15°C  | 54,2 A |
| Rating current 20°C  | 52,8 A |
| Rating current 25°C  | 51,4 A |
| Rating current -25°C | 64 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 |

#### Technical Properties

|                     |        |
|---------------------|--------|
| Rating current 5°C  | 56,8 A |
| Rating current -5°C | 59,3 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 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    |
| Correction factor of rating current for 2 devices placed 1 side-by-side     |      |
| Correction factor of rating current for 3 devices placed 0,95 side-by-side  |      |
| 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 |

#### Power

|                                       |        |
|---------------------------------------|--------|
| Power loss per pole at I <sub>n</sub> | 5,75 W |
| Total power loss under I <sub>N</sub> | 14,8 W |

#### Endurance

|                                        |       |
|----------------------------------------|-------|
| Electric endurance in number of cycles | 4000  |
| Number of mechanical operations        | 20000 |

#### Dimensions

|                             |         |
|-----------------------------|---------|
| Depth of installed product  | 70 mm   |
| Height of installed product | 83 mm   |
| Width of installed product  | 52,5 mm |

#### Installation, mounting

|                                               |            |
|-----------------------------------------------|------------|
| Type of top connection for modular devices    | with screw |
| Tightening torque                             | 2,8Nm      |
| Type of bottom rail clip for modular devices  | metallic   |
| Type of top rail clip for modular devices     | NA         |
| Type of Bottom Connection for modular devices | Blconnect  |
| Bottom removability for modular devices       | no         |
| Top removability for modular devices          | no         |

#### Connection

|                                                                                  |                       |
|----------------------------------------------------------------------------------|-----------------------|
| Connection cross-sect. rigid cable                                               | 1 / 35mm <sup>2</sup> |
| Connection cross-sect. flexible conductor                                        | 1 / 25mm <sup>2</sup> |
| Type of connection                                                               | with screw            |
| Connection cross section of access and exit with screws, for flexible conductor  | 1/25 mm <sup>2</sup>  |
| Connection cross-section of input and output with screws, for massive conductors | 1/35 mm <sup>2</sup>  |

#### Standards

|                         |            |
|-------------------------|------------|
| Standard text           | EN 60898-1 |
| European directive WEEE | concerned  |

#### Safety

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

#### Use conditions

|                                                          |                  |
|----------------------------------------------------------|------------------|
| Degree of pollution according to IEC 60664 / IEC 60947-2 | 2                |
| Operating temperature                                    | -25 70 °C        |
| Class of energy limitation I <sup>2</sup> t              | 3                |
| Altitude                                                 | 2000 m           |
| Storage temperature                                      | -25 to 80 °C     |
| Air humidity protection                                  | for all climates |
| Storage/transport temperature                            | -25 80 °C        |