



MCN100



**MCB 1P 6kA C-0.5A 1M**

**Technical properties**

**Architecture**

|                           |     |
|---------------------------|-----|
| Number of protected poles | 1   |
| Number of poles           | 1 P |
| Type of pole              | 1 P |
| Curve                     | C   |

**Functions**

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

**Configuration**

|                   |   |
|-------------------|---|
| Number of modules | 1 |
|-------------------|---|

**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 $U_e$  | 230 / 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   | 0.5 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 ultimate short-circuit breaking capacity Icu under 230V AC IEC 60947-2 | 10 kA |
|--|-------|

|  |       |
|--|-------|
| Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2 | 10 kA |
|--|-------|

### Electric current / temperature

|                      |       |
|----------------------|-------|
| Rating current -25°C | 0.7 A |
| Rating current -20°C | 0.7 A |
| Rating current -15°C | 0.7 A |
| Rating current -10°C | 0.6 A |
| Rating current -5°C  | 0.6 A |
| Rating current 0°C   | 0.6 A |
| Rating current 5°C   | 0.6 A |
| Rating current 10°C  | 0.6 A |
| Rating current 15°C  | 0.6 A |
| Rating current 20°C  | 0.5 A |
| Rating current 25°C  | 0.5 A |
| Rating current 30°C  | 0.5 A |
| Rating current 35°C  | 0.5 A |
| Rating current 40°C  | 0.5 A |
| Rating current 45°C  | 0.5 A |
| Rating current 50°C  | 0.5 A |
| Rating current 55°C  | 0.5 A |
| Rating current 60°C  | 0.5 A |
| Rating current 65°C  | 0.5 A |
| Rating current 70°C  | 0.5 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  | 17.5 mm |

### Frequency

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

**Power**

|                           |       |
|---------------------------|-------|
| Total power loss under IN | 0.1 W |
| Power loss per pole at In | 0.1 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 Bottom Connection for modular devices | Blconnect  |

**Connection**

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

**Standards**

|               |            |
|---------------|------------|
| Standard text | EN 60898-1 |
|---------------|------------|

**Safety**

|               |     |
|---------------|-----|
| REACH conform | No  |
| 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 <sup>2</sup> t              | 3                |
| Altitude   | 2000 m           |
| Air humidity protection                                  | for all climates |
| Storage/transport temperature                            | -25...80 °C      |