



MSN150

### MCB 1P 6kA C-50A 1M

#### Technical Features

##### Electric current

|                                                                                               |        |
|-----------------------------------------------------------------------------------------------|--------|
| Rated current                                                                                 | 50 A   |
| Rated short-circuit breaking capacity I <sub>cn</sub> under 230 V AC according to IEC 60898-1 | 6 kA   |
| Rated current -15°C                                                                           | 65.4 A |
| Rated current -10°C                                                                           | 63.7 A |
| Rated current -5°C                                                                            | 62 A   |
| Rated current at 0°C                                                                          | 60.3 A |
| Rated current 5°C                                                                             | 58.6 A |
| Rated current 10°C                                                                            | 56.9 A |
| Rated current 15°C                                                                            | 55.1 A |
| Rated current at 20°C                                                                         | 53.4 A |
| Rated current 25°C                                                                            | 51.7 A |
| Rated current 30°C                                                                            | 50 A   |
| Rated current 35°C                                                                            | 49.3 A |
| Rated current at 40°C                                                                         | 48.5 A |
| Rated current at 45°C                                                                         | 47.8 A |
| Rated current at 50°C                                                                         | 47 A   |
| Rated current 55°C                                                                            | 46.3 A |
| Rated current 60°C                                                                            | 45.5 A |
| Rated current 65°C                                                                            | 44.8 A |
| Rated current 70°C                                                                            | 44 A   |

##### Architecture

|              |    |
|--------------|----|
| Type of pole | 1P |
| Curve        | C  |

##### Capacity

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

##### Main electrical attributes

|                                                                                   |      |
|-----------------------------------------------------------------------------------|------|
| Rated short-circuit breaking capacity I <sub>cn</sub> AC according to IEC 60898-1 | 6 kA |
|-----------------------------------------------------------------------------------|------|

##### Installation, mounting

|                                         |                |
|-----------------------------------------|----------------|
| Nominal tightening torque top terminal  | 2.80 - 2.80 Nm |
| Nominal tightening torque down terminal | 2.80 - 2.80 Nm |

##### Voltage

|                                                  |             |
|--------------------------------------------------|-------------|
| Rated operational voltage U <sub>e</sub>         | 240 - 415 V |
| Type voltage supply                              | AC          |
| Rated insulation voltage U <sub>i</sub>          | 500 V       |
| Rated impulse withstand voltage U <sub>imp</sub> | 4000 V      |

##### Frequency

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

##### Connection

|                                                                        |                        |
|------------------------------------------------------------------------|------------------------|
| Cross-section of input and output with screws, for massive conductors  | 1 - 35 mm <sup>2</sup> |
| Cross-section of input and output with screws, for flexible conductors | 1 - 25 mm <sup>2</sup> |
| Cross-section of input with screws, for flexible conductors            | 1 - 25 mm <sup>2</sup> |
| Cross-section of input with screws, for massive conductors             | 1 - 35 mm <sup>2</sup> |
| Cross-section flexible conductor                                       | 1 - 25 mm <sup>2</sup> |
| Cross-section rigid conductor                                          | 1 - 35 mm <sup>2</sup> |

##### Installation, mounting

|                                               |                |
|-----------------------------------------------|----------------|
| Nominal tightening torque                     | 2.80 - 2.80 Nm |
| Type of bottom connection for modular devices | biconnect      |
| Type of top connection for modular devices    | Screw terminal |
| 360° mounting position possible               | Yes            |

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**Safety**

|                               |      |
|-------------------------------|------|
| Ingress Protection (IP) class | IP20 |
|-------------------------------|------|

**Use conditions**

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

**Power**

|                           |        |
|---------------------------|--------|
| Total power loss under IN | 5.20 W |
|---------------------------|--------|

**Connectivity**

|                                               |                  |
|-----------------------------------------------|------------------|
| Type of connection                            | Screw terminal   |
| Top connection alignment for modular devices  | Aligned terminal |
| Down connection alignment for modular devices | Aligned terminal |

**Dimensions**

|        |          |
|--------|----------|
| Height | 83 mm    |
| Width  | 17.50 mm |
| Depth  | 70 mm    |

**Sustainability**

|              |     |
|--------------|-----|
| RoHS conform | Yes |
|--------------|-----|