



MW120

## MCB 1P 3kA C-20A 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 | 3 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   | 20 A              |
| Rated service breaking capacity $I_{cs}$ AC according IEC 60898-1                 | 3 kA              |
| min/maxi threshold value of the AC thermal operation                              | 1.13 / 1.45 $I_n$ |
| Magnetic regulating current   | 5 / 10 $I_n$      |
| Rated short circuit breaking capacity $I_{cn}$ under 230V AC according IEC60898-1 | 3 kA              |
| Rated ultimate short-circuit breaking capacity $I_{cu}$ under 230V AC IEC 60947-2 | 3 kA              |

#### Electric current / temperature

|                      |         |
|----------------------|---------|
| Rating current -25°C | 28.03 A |
|----------------------|---------|

|                      |         |
|----------------------|---------|
| Rating current -20°C | 27.39 A |
| Rating current -15°C | 26.74 A |
| Rating current -10°C | 26.41 A |
| Rating current -5°C  | 25.45 A |
| Rating current 0°C   | 24.81 A |
| Rating current 5°C   | 24.17 A |
| Rating current 10°C  | 23.52 A |
| Rating current 15°C  | 22.88 A |
| Rating current 20°C  | 22.23 A |
| Rating current 25°C  | 21.59 A |
| Rating current 30°C  | 20 A    |
| Rating current 35°C  | 20.3 A  |
| Rating current 40°C  | 19.66 A |
| Rating current 45°C  | 19.01 A |
| Rating current 50°C  | 19 A    |
| Rating current 55°C  | 17.73 A |
| Rating current 60°C  | 17.08 A |
| Rating current 65°C  | 16.44 A |
| Rating current 70°C  | 15.79 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 | 2.1 W |
| Power loss per pole at In | 2.1 W |

#### Endurance

|  |      |
|--|------|
| Electric endurance in number of cycles | 4000 |
|--|------|

Subject to technical modifications

|                                 |       |
|---------------------------------|-------|
| 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      |

### Identification

|                                       |    |
|---------------------------------------|----|
| Aesthetic for B.G. Protection devices | FD |
|---------------------------------------|----|