



NBN116



## MCB 1P 10kA B-16A 1M

### Technical properties

#### Architecture

|                           |                 |
|---------------------------|-----------------|
| Neutral position          | without neutral |
| Number of protected poles | 1               |
| Number of poles           | 1 P             |
| Type of pole              | 1 P             |
| Curve                     | B               |

#### 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 | 10 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        | 6000 V |
| Minimum threshold voltage ( $U_e$ min) | 12 V   |

#### Electric current

|   |                   |
|---|-------------------|
| Rated current   | 16 A              |
| Rated service breaking capacity $I_{cs}$ AC according IEC 60898-1 | 7.5 kA            |
| min/maxi threshold value of the AC thermal operation              | 1.13 / 1.45 $I_n$ |
| Magnetic regulating current                                       | 3 / 5 $I_n$       |
| min/maxi threshold value of the DC magnetic operation             | 4 / 7 $I_n$       |
| 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 Icn under 230V AC according IEC60898-1  | 10 kA   |
| Rated short circuit breaking capacity Icn under 240V AC according IEC 60898-1 | 10 kA   |
| <b>Electric current / temperature</b>   |         |
| Rating current -25°C  | 20.49 A |
| Rating current -20°C  | 20.12 A |
| Rating current -15°C  | 19.75 A |
| Rating current -10°C  | 19.37 A |
| Rating current -5°C   | 18.98 A |
| Rating current 0°C  | 18.58 A |
| Rating current 5°C  | 18.18 A |
| Rating current 10°C   | 17.76 A |
| Rating current 15°C   | 17.34 A |
| Rating current 20°C   | 16.9 A  |
| Rating current 25°C   | 16.46 A |
| Rating current 30°C   | 16 A    |
| Rating current 35°C   | 15.53 A |
| Rating current 40°C   | 15.04 A |
| Rating current 45°C   | 14.54 A |
| Rating current 50°C   | 14.02 A |
| Rating current 55°C   | 13.48 A |
| Rating current 60°C   | 12.91 A |
| Rating current 65°C   | 12.32 A |
| Rating current 70°C   | 11.7 A  |
| <b>Current correction factors</b>   |         |
| 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                             | 1.1     |
| <b>Dimensions</b>   |         |
| Depth of installed product  | 70 mm   |
| Height of installed product   | 83 mm   |
| Width of installed product  | 17.5 mm |
| <b>Frequency</b>  |         |

|  |                        |
|--|------------------------|
| Frequency  | 50 to 60 Hz            |
| <b>Power</b>   |                        |
| Total power loss under IN  | 2.62 W                 |
| Power loss per pole at In  | 2.62 W                 |
| <b>Endurance</b>   |                        |
| Electric endurance in number of cycles   | 4000                   |
| Number of mechanical operations  | 20000                  |
| <b>Installation, mounting</b>  |                        |
| Type of top connection for modular devices                                       | with screw             |
| Tightening torque  | 2,8Nm                  |
| Type of top rail clip for modular devices  | NA                     |
| Type of bottom rail clip for modular devices                                     | plastic                |
| Type of Bottom Connection for modular devices                                    | Blconnect              |
| Top removability for modular devices   | Yes                    |
| Bottom removability for modular devices  | Yes                    |
| <b>Connection</b>  |                        |
| 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             |
| <b>Standards</b>   |                        |
| Standard text  | EN 60898-1             |
| <b>Use conditions</b>  |                        |
| 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            |
| <b>Identification</b>  |                        |
| Aesthetic for B.G. Protection devices  | PD                     |