



NC116A

**MCB 1P 10kA C-16A 1M**

**Technical characteristics**

**Architecture**

|                           |     |
|---------------------------|-----|
| Number of protected poles | 1   |
| Number of poles           | 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 | 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 | 4000 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                                                       | 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 | 10 kA             |

|                                                                              |         |
|------------------------------------------------------------------------------|---------|
| Rated short circuit breaking capacity Icn under 400V AC according IEC60898-1 | 10 kA   |
| Rated ultimate short-circuit breaking capacity Icu under 230V AC IEC 60947-2 | 15 kA   |
| Rated ultimate short-circuit breaking capacity Icu under 415V AC IEC 60947-2 | 15 kA   |
| <b>Electric current / temperature</b>                                        |         |
| Rating current -25°C                                                         | 20 A    |
| Rating current -20°C                                                         | 19.7 A  |
| Rating current -15°C                                                         | 19.3 A  |
| Rating current -10°C                                                         | 19 A    |
| Rating current -5°C                                                          | 18.6 A  |
| Rating current 0°C                                                           | 18.3 A  |
| Rating current 5°C                                                           | 17.9 A  |
| Rating current 10°C                                                          | 17.6 A  |
| Rating current 15°C                                                          | 17.2 A  |
| Rating current 20°C                                                          | 16.8 A  |
| Rating current 25°C                                                          | 16.4 A  |
| Rating current 30°C                                                          | 16 A    |
| Rating current 35°C                                                          | 15.6 A  |
| Rating current 40°C                                                          | 15.2 A  |
| Rating current 45°C                                                          | 14.7 A  |
| Rating current 50°C                                                          | 14.3 A  |
| Rating current 55°C                                                          | 13.8 A  |
| Rating current 60°C                                                          | 13.3 A  |
| Rating current 65°C                                                          | 12.9 A  |
| Rating current 70°C                                                          | 12.4 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       |
| <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>                                                             |         |

Subject to technical modifications

Frequency

50 to 60 Hz

**Power**

|                           |       |
|---------------------------|-------|
| Total power loss under IN | 2.4 W |
| Power loss per pole at In | 2.4 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 top rail clip for modular devices     | NA         |
| Type of bottom rail clip for modular devices  | metallic   |
| Type of Bottom Connection for modular devices | BIconnect  |
| Top removability for modular devices          | No         |
| Bottom removability for modular devices       | No         |

**Connection**

|                                                                                  |                        |
|----------------------------------------------------------------------------------|------------------------|
| 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**

|                     |      |
|---------------------|------|
| Protection index IP | IP20 |
| REACH conform       | Yes  |
| 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      |