



NCN300A



**MCB 3P 10kA C-0.5A 3M**

**Technical properties**

**Architecture**

|                           |                 |
|---------------------------|-----------------|
| Neutral position          | without neutral |
| Number of protected poles | 3               |
| Number of poles           | 3 P             |
| Type of pole              | 3 P             |
| Curve                     | C               |

**Functions**

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

**Configuration**

|                   |   |
|-------------------|---|
| Number of modules | 3 |
|-------------------|---|

**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 $U_e$  | 415 V |
| Type of supply voltage   | AC    |

**Voltage**

|  |        |
|--|--------|
| Rated insulation voltage               | 500 V  |
| Max operating voltage                  | 440 V  |
| Rated impulse withstand voltage        | 6000 V |
| Minimum threshold voltage ( $U_e$ min) | 12 V   |

**Electric current**

|   |                   |
|---|-------------------|
| Rated current   | 0.5 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 $I_n$ |

|   |        |
|---|--------|
| Rating current -10°C according to IEC 60947   | 0.78 A |
| Rating current -15°C according to IEC 60947   | 0.8 A  |
| Rating current -20°C according to IEC 60947   | 0.82 A |
| Rating current -25°C according to IEC 60947   | 0.84 A |
| Rating current -5°C according to IEC 60947  | 0.76 A |
| Rating current 0°C according to IEC 60947   | 0.74 A |
| Rating current 10°C according to IEC 60947  | 0.7 A  |
| Rating current 15°C according to IEC 60947  | 0.68 A |
| Rating current 20°C according to IEC 60947  | 0.66 A |
| Rating current 25°C according to IEC 60947  | 0.63 A |
| Rating current 30°C according to IEC 60947  | 0.61 A |
| Rating current 35°C according to IEC 60947  | 0.58 A |
| Rating current 40°C according to IEC 60947  | 0.56 A |
| Rating current 45°C according to IEC 60947  | 0.53 A |
| Rating current 5°C according to IEC 60947   | 0.72 A |
| Rating current 50°C according to IEC 60947  | 0.5 A  |
| Rating current 55°C according to IEC 60947  | 0.46 A |
| Rating current 60°C according to IEC 60947  | 0.43 A |
| Rating current 65°C according to IEC 60947  | 0.38 A |
| Rating current 70°C according to IEC 60947  | 0.34 A |
| Rated short circuit breaking capacity I <sub>cn</sub> under 230V AC according IEC60898-1  | 10 kA  |
| Rated short circuit breaking capacity I <sub>cn</sub> under 400V AC according IEC60898-1  | 10 kA  |
| Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 230V AC IEC 60947-2  | 30 kA  |
| Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 240V AC IEC 60947-2  | 30 kA  |
| Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 400V AC IEC 60947-2  | 15 kA  |
| Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 415V AC IEC 60947-2  | 15 kA  |
| Rated short circuit breaking capacity I <sub>cn</sub> under 240V AC according IEC 60898-1 | 10 kA  |
| Rated short circuit breaking capacity I <sub>cn</sub> under 415V AC according IEC 60898-1 | 10 kA  |
| Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 220V AC IEC 60947-2  | 30 kA  |
| Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 380V AC IEC 60947-2  | 15 kA  |
| <b>Electric current / temperature</b>   |        |
| Rating current -25°C  | 0.69 A |
| Rating current -20°C  | 0.67 A |
| Rating current -15°C  | 0.66 A |
| Rating current -10°C  | 0.64 A |
| Rating current -5°C   | 0.63 A |
| Rating current 0°C  | 0.61 A |
| Rating current 5°C  | 0.59 A |

Subject to technical modifications

|                     |        |
|---------------------|--------|
| Rating current 10°C | 0.58 A |
| Rating current 25°C | 0.52 A |
| Rating current 30°C | 0.5 A  |
| Rating current 35°C | 0.48 A |
| Rating current 40°C | 0.45 A |
| Rating current 45°C | 0.43 A |
| Rating current 50°C | 0.4 A  |
| Rating current 55°C | 0.37 A |
| Rating current 60°C | 0.34 A |
| Rating current 65°C | 0.31 A |
| Rating current 70°C | 0.27 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                           | 1.1  |

#### Dimensions

|                             |         |
|-----------------------------|---------|
| Depth of installed product  | 70 mm   |
| Height of installed product | 83 mm   |
| Width of installed product  | 52.5 mm |

#### Frequency

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

#### Power

|   |        |
|---|--------|
| Maximum power loss per pole according to the product standard | 3 W    |
| Total power loss under IN                                     | 4.35 W |
| Power loss per pole at In                                     | 1.47 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 | plastic    |

Subject to technical modifications

|  |                        |
|--|------------------------|
| Type of Bottom Connection for modular devices                                | Blconnect              |
| Top removability for modular devices   | Yes                    |
| Bottom removability for modular devices                                      | Yes                    |
| Suitable for flush-mounting  | Yes                    |
| <b>Connection</b>  |                        |
| Connection cross-section at output with screw, for flexible conductor        | 1 / 25 mm <sup>2</sup> |
| Connection cross-section at output with screw, for massive conductor         | 1 / 35 mm <sup>2</sup> |
| Connection cross-section for rigid conductor, upstream terminals with screws | 1 / 35 mm <sup>2</sup> |
| Connection cross-section of the access with screws, with flexible conductor  | 1 / 25 mm <sup>2</sup> |
| Downstream cage clamp delivery status  | opened                 |
| Upstream cage clamp delivery status  | opened                 |
| <b>Equipment</b>   |                        |
| Can be accessorized  | Yes                    |
| <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                 |
| Storage/transport temperature  | -25...80 °C            |
| <b>temperatur</b>  |                        |
| Temperature of calibration   | 30 °C                  |