



MCB 1P 10kA/15kA D-63A 1M

NDN163A



NDN163A

Architecture

| | |
|---------------------------|-----------------|
| Neutral position | without neutral |
| Number of protected poles | 1 |
| Number of poles | 1 P |
| Type of pole | 1 P |
| Fixing mode | Din-Rail |
| Curve | D |

Functions

| | |
|----------------------------------|----|
| Concurrently switching N-neutral | no |
|----------------------------------|----|

Compatibility

| | |
|-----------------------------------|-----|
| Compatible with DIN rail mounting | yes |
|-----------------------------------|-----|

Controls and indicators

| | |
|----------------------|----|
| With fault indicator | no |
|----------------------|----|

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 10 kA IEC60898-1 | |
| Rated operational voltage U _e | 230 / 400 V |
| Type of supply voltage | AC |

Voltage

| | |
|--|--------|
| Rated insulation voltage | 500 V |
| Rated impulse withstand voltage | 6000 V |
| Minimum threshold voltage (U _e min) | 12 V |

Electric current

| | |
|---|----------------|
| Rated current | 63 A |
| Rated service breaking capacity Ics AC according IEC 60898-1 | 7,5 kA |
| min/maxi threshold value of the AC thermal operation | 1,13 / 1,45 In |
| Magnetic regulating current | 10 / 14,4 In |
| min/maxi threshold value of the DC magnetic operation | 15 / 30 In |
| min/maxi threshold value of the DC thermal operation | 1,13 / 1,45 In |
| Rating current -10°C according to IEC 60947 | 87,69 A |
| Rating current -15°C according to IEC 60947 | 89,44 A |
| Rating current -20°C according to IEC 60947 | 91,16 A |
| Rating current -25°C according to IEC 60947 | 92,84 A |
| Rating current -5°C according to IEC 60947 | 85,91 A |
| Rating current 0°C according to IEC 60947 | 84,08 A |
| Rating current 10°C according to IEC 60947 | 80,31 A |
| Rating current 150°C according to IEC 60947 | 78,36 A |
| Rating current 20°C according to IEC 60947 | 76,35 A |
| Rating current 25°C according to IEC 60947 | 74,29 A |
| Rating current 30°C according to IEC 60947 | 73,2 A |
| Rating current 35°C according to IEC 60947 | 70,4 A |
| Rating current 40°C according to IEC 60947 | 67,9 A |
| Rating current 45°C according to IEC 60947 | 65,3 A |
| Rating current 5°C according to IEC 60947 | 82,22 A |
| Rating current 50°C according to IEC 60947 | 63 A |
| Rating current 55°C according to IEC 60947 | 60,2 A |
| Rating current 60°C according to IEC 60947 | 57,7 A |
| Rating current 65°C according to IEC 60947 | 55,1 A |
| Rating current 70°C according to IEC 60947 | 52,6 A |
| Rated service breaking capacity Ics under 220V AC according IEC 60947-2 | 7,5 kA |
| Rated service breaking capacity Ics under 230V AC according IEC 60947-2 | 7,5 kA |
| Rated service breaking capacity Ics under 240V AC according IEC 60947-2 | 7,5 kA |
| Rated short circuit breaking capacity Icn under 230V 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 240V AC IEC 60947-2 | 15 kA |
| Rated short circuit breaking capacity Icn under 240V AC according IEC 60898-1 | 10 kA |
| Rated service breaking capacity Ics under 220V AC according IEC 60898-1 | 7,5 kA |
| Rated service breaking capacity Ics under 230V AC according IEC 60898-1 | 7,5 kA |
| Rated service breaking capacity Ics under 240V AC according IEC 60898-1 | 7,5 kA |
| Rated ultimate short-circuit breaking capacity Icu under 220V AC IEC 60947-2 | 15 kA |

Electric current / temperature

| | |
|----------------------|---------|
| Rating current -25°C | 81,04 A |
| Rating current -20°C | 79,57 A |
| Rating current -15°C | 78,07 A |
| Rating current -10°C | 76,54 A |
| Rating current -5°C | 75,05 A |
| Rating current 0°C | 73,54 A |

Technical Properties

| | |
|---------------------|---------|
| Rating current 5°C | 72,03 A |
| Rating current 10°C | 70,52 A |
| Rating current 25°C | 65,95 A |
| Rating current 30°C | 63 A |
| Rating current 35°C | 62,03 A |
| Rating current 40°C | 60,5 A |
| Rating current 45°C | 58,68 A |
| Rating current 50°C | 58,27 A |
| Rating current 55°C | 52,8 A |
| Rating current 60°C | 50,51 A |
| Rating current 65°C | 48,12 A |
| Rating current 70°C | 45,6 A |

Current correction factors

| | |
|---|------|
| Correction factor of rating current for 2 devices placed 1 side-by-side | |
| Correction factor of rating current for 3 devices placed 0,95 side-by-side | |
| 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 |

Frequency

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

Power

| | |
|---|--------|
| Maximum power loss per pole according to the product standard | 13 W |
| Total power loss under IN | 5,73 W |
| Power loss per pole at In | 5,73 W |

Endurance

| | |
|--|-------|
| Electric endurance in number of cycles | 4000 |
| Number of mechanical operations | 20000 |

Dimensions

| | |
|-----------------------------|---------|
| Depth of installed product | 70 mm |
| Height of installed product | 83 mm |
| Width of installed product | 17,5 mm |

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 |
| 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 |
| 360° product mounting position | yes |

Connection

| | |
|--|------------------------|
| Connection cross-section at output with screw, for flexible conductor | 1 / 25 mm ² |
| Connection cross-section at output with screw, for massive conductor | 1 / 35 mm ² |
| Connection cross-section for rigid conductor, upstream terminals with screws | 1 / 35 mm ² |
| Connection cross-section of the access with screws, with flexible conductor | 1 / 25 mm ² |
| Downstream cage clamp delivery status | opened |
| Upstream cage clamp delivery status | opened |

Equipment

| | |
|---------------------------------------|-----|
| Can be accessorized | yes |
| With transparent product label holder | yes |

Standards

| | |
|--|-------------------------|
| Standard text | EN 60898-1, IEC 60947-2 |
| European directive WEEE | concerned |
| Product categories described in the W3E directive 2012/19/EU | Category 5 |

Safety

| | |
|---------------------|------|
| Protection index IP | IP20 |
|---------------------|------|

Use conditions

| | |
|--|-----------|
| Operating temperature | -25 70 °C |
| Degree of pollution according to IEC 60664 / IEC 60947-2 | 2 |
| Altitude | 2000 m |
| Storage/transport temperature | -25 80 °C |

temperatur

| | |
|----------------------------|-------|
| Temperature of calibration | 50 °C |
|----------------------------|-------|