



NDN450A

MCB 4P 10kA/15kA D-50A 4M

Technical Features

Electric current

| | |
|------------------------|---------|
| Rated current | 50 A |
| Rated current -25°C | 63.02 A |
| Rated current at -20°C | 61.95 A |
| Rated current -15°C | 60.86 A |
| Rated current -10°C | 59.75 A |
| Rated current -5°C | 58.62 A |
| Rated current at 0°C | 57.47 A |
| Rated current 5°C | 56.29 A |
| Rated current 10°C | 55.09 A |
| Rated current 15°C | 53.86 A |
| Rated current at 20°C | 52.61 A |
| Rated current 25°C | 51.32 A |
| Rated current 30°C | 50 A |
| Rated current 35°C | 48.48 A |
| Rated current at 40°C | 46.91 A |
| Rated current at 45°C | 45.29 A |
| Rated current at 50°C | 43.60 A |
| Rated current 55°C | 41.85 A |
| Rated current 60°C | 40.02 A |
| Rated current 65°C | 38.11 A |
| Rated current 70°C | 36.09 A |

Architecture

| | |
|--------------|----|
| Type of pole | 4P |
| Curve | D |

Capacity

| | |
|-------------------|---|
| Number of modules | 4 |
|-------------------|---|

Main electrical attributes

| | |
|---|-------|
| Rated short-circuit breaking capacity I _{cn} AC according to IEC 60898-1 | 10 kA |
|---|-------|

Installation, mounting

| | |
|---|----------------|
| Nominal tightening torque top terminal | 2.80 - 2.80 Nm |
| Nominal tightening torque down terminal | 2.80 - 2.80 Nm |

Voltage

| | |
|--|-------------|
| Rated operational voltage U _e | 400 - 400 V |
| Type voltage supply | AC |
| Rated insulation voltage U _i | 500 V |
| Rated impulse withstand voltage U _{imp} | 6000 V |

Frequency

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

Connection

| | |
|--|------------------------|
| Cross-section of input and output with screws, for massive conductors | 1 - 35 mm ² |
| Cross-section of input and output with screws, for flexible conductors | 1 - 25 mm ² |
| Cross-section of input with screws, for flexible conductors | 1 - 25 mm ² |
| Cross-section of input with screws, for massive conductors | 1 - 35 mm ² |

Installation, mounting

| | |
|---|----------------|
| Nominal tightening torque | 2.80 - 2.80 Nm |
| Type of bottom connection for modular devices | biconnect |
| Type of top connection for modular devices | Screw terminal |
| 360° mounting position possible | Yes |

Safety

| | |
|-------------------------------|-------|
| Ingress Protection (IP) class | IP20 |
| Grid distance | 60 mm |

Use conditions

| | |
|--|-------------|
| Degree of pollution according to IEC 60664 / IEC 60947-2 | 2 |
| Operating temperature | -25 - 70 °C |

Power

| | |
|---------------------------|---------|
| Total power loss under IN | 20.30 W |
|---------------------------|---------|

Endurance

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

Connectivity

| | |
|---|------------------|
| Type of connection | Screw terminal |
| Top connection alignment for modular devices | Aligned terminal |
| Down connection alignment for modular devices | Aligned terminal |

Dimensions

| | |
|--------|-------|
| Height | 83 mm |
| Width | 70 mm |
| Depth | 70 mm |

Sustainability

| | |
|--------------|-----|
| RoHS conform | Yes |
|--------------|-----|