



NBN450A

## MCB 4P 10kA/15kA B-50A 4M

### Technical properties

#### Electric current

Rated current	50 A
Rated service breaking capacity Ics under 230 V AC according to IEC 60947-2	15 kA
Rated ultimate short-circuit breaking capacity Icu under 230 V AC IEC 60947-2	30 kA
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	B

#### Capacity

Number of modules	4
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#### Installation, mounting

Nominal tightening torque top terminal	2.80 - 2.80 Nm
Nominal tightening torque down terminal	2.80 - 2.80 Nm
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
<b>Main electrical attributes</b>	
Rated short-circuit breaking capacity I <sub>cn</sub> AC according to IEC 60898-1	10 kA
<b>Voltage</b>	
Rated operational voltage U <sub>e</sub>	400 - 400 V
Type voltage supply	AC
Rated insulation voltage U <sub>i</sub>	500 V
Rated impulse withstand voltage U <sub>imp</sub>	6,000 V
<b>Frequency</b>	
Frequency	50 - 60 Hz
<b>Connection</b>	
Cross-section of input and output with screws, for massive conductors	1 - 35 mm <sup>2</sup>
Cross-section of input and output with screws, for flexible conductors	1 - 25 mm <sup>2</sup>
Cross-section of input with screws, for flexible conductors	1 - 25 mm <sup>2</sup>
Cross-section of input with screws, for massive conductors	1 - 35 mm <sup>2</sup>
<b>Safety</b>	
Ingress Protection (IP) class	IP20
<b>Use conditions</b>	
Degree of pollution according to IEC 60664 / IEC 60947-2	2
Class of energy limitation I <sup>2</sup> t	3
Operating temperature	-25 - 70 °C
<b>Power</b>	
Total power loss under I <sub>N</sub>	20.30 W
<b>Endurance</b>	
Electric endurance in number of cycles	4,000
Number of mechanical operations	20,000
<b>Connectivity</b>	
Type of connection	Screw terminal
Top connection alignment for modular devices	Aligned terminal
Down connection alignment for modular devices	Aligned terminal
<b>Dimensions</b>	
Height	83 mm
Width	70 mm
Depth	70 mm