



## NDN116A

## MCB 1P 10kA D-16A 1M

## **Technical properties**

Arc	hi	tec	tu	re
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Neutral position	without neutral
Number of protected poles	1
Number of poles	1 P
Type of pole	1 P
Curve	D
Functions	
Concurrently switching N-neutral	No
Configuration	
Number of modules	1
Connectivity	
Top connection alignement for modular devices	Aligned terminal
Bottom connection alignement for modular devices	Aligned terminal
Main electrical features	
Rated short circuit breaking capacity Icn AC according IEC60898-1	10 kA
Rated operational voltage Ue	240 / 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 (Ue min)	12 V
Electric current	
Rated current	16 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 ln
Magnetic regulating currrent	10 / 14.4 ln
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 ln

Rating current -10°C according to IEC 60947	22.11 A
Rating current -15°C according to IEC 60947	22.54 A
Rating current -20°C according to IEC 60947	22.97 A
Rating current -25°C according to IEC 60947	23.39 A
Rating current -5°C according to IEC 60947	21.66 A
Rating current 0°C according to IEC 60947	21.21 A
Rating current 10°C according to IEC 60947	20.28 A
Rating current 15°C according to IEC 60947	19.79 A
Rating current 20°C according to IEC 60947	19.3 A
Rating current 25°C according to IEC 60947	18.79 A
Rating current 30°C according to IEC 60947	18.26 A
Rating current 35°C according to IEC 60947	17.73 A
Rating current 40°C according to IEC 60947	17.17 A
Rating current 45°C according to IEC 60947	16.59 A
Rating current 5°C according to IEC 60947	20.75 A
Rating current 50°C according to IEC 60947	16 A
Rating current 55°C according to IEC 60947	15.38 A
Rating current 60°C according to IEC 60947	14.74 A
Rating current 65°C according to IEC 60947	14.06 A
Rating current 70°C according to IEC 60947	13.36 A
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 ultimate short-circuit breaking capacity Icu under 220V AC IEC 60947-2	15 kA
Electric current / temperature	
Electric current / temperature  Rating current -25°C	20.49 A
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Rating current -25°C	20.12 A
Rating current -25°C Rating current -20°C	20.12 A 19.75 A
Rating current -25°C  Rating current -20°C  Rating current -15°C	20.12 A 19.75 A 19.37 A
Rating current -25°C  Rating current -20°C  Rating current -15°C  Rating current -10°C	20.12 A 19.75 A 19.37 A 18.98 A
Rating current -25°C  Rating current -20°C  Rating current -15°C  Rating current -10°C  Rating current -5°C	20.12 A 19.75 A 19.37 A 18.98 A 18.58 A
Rating current -25°C  Rating current -20°C  Rating current -15°C  Rating current -10°C  Rating current -5°C  Rating current 0°C	20.12 A 19.75 A 19.37 A 18.98 A 18.58 A
Rating current -25°C  Rating current -20°C  Rating current -15°C  Rating current -10°C  Rating current -5°C  Rating current 5°C  Rating current 5°C	20.12 A 19.75 A 19.37 A 18.98 A 18.58 A 18.18 A
Rating current -25°C  Rating current -20°C  Rating current -15°C  Rating current -10°C  Rating current -5°C  Rating current 5°C  Rating current 5°C  Rating current 5°C	20.12 A 19.75 A 19.37 A 18.98 A 18.58 A 18.18 A 17.76 A
Rating current -25°C  Rating current -20°C  Rating current -15°C  Rating current -10°C  Rating current 0°C  Rating current 5°C  Rating current 5°C  Rating current 5°C	20.12 A 19.75 A 19.37 A 18.98 A 18.58 A 18.18 A 17.76 A 16.46 A
Rating current -25°C  Rating current -20°C  Rating current -15°C  Rating current -10°C  Rating current -5°C  Rating current 0°C  Rating current 5°C  Rating current 5°C  Rating current 30°C	20.49 A 20.12 A 19.75 A 19.37 A 18.98 A 18.58 A 18.18 A 17.76 A 16.46 A 16 A 15.53 A
Rating current -25°C  Rating current -15°C  Rating current -10°C  Rating current -5°C  Rating current 0°C  Rating current 5°C  Rating current 5°C  Rating current 30°C  Rating current 30°C  Rating current 35°C	20.12 A 19.75 A 19.37 A 18.98 A 18.58 A 18.18 A 17.76 A 16.46 A 16 A

Rating current 55°C	13.48 A
Rating current 60°C	12.91 A
Rating current 65°C	12.32 A
Rating current 70°C	11.7 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 mn
Height of installed product	83 mn
Width of installed product	17.5 mm
Frequency	
Frequency	50 to 60 Hz
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Power	
Maximum power loss per pole according to the product standard	3.5 W
Total power loss under IN	2.62 W
Power loss per pole at In	2.62 W
Endurance	
	4000
Electric endurance in number of cycles	
Electric endurance in number of cycles  Number of mechanical operations	20000
<u> </u>	20000
Number of mechanical operations	
Number of mechanical operations  Installation, mounting	with screv
Number of mechanical operations  Installation, mounting  Type of top connection for modular devices	with screv 2,8Nn
Number of mechanical operations  Installation, mounting  Type of top connection for modular devices  Tightening torque	with screv 2,8Nn N/
Number of mechanical operations  Installation, mounting  Type of top connection for modular devices  Tightening torque  Type of top rail clip for modular devices	with screv 2,8Nn N/ plasti
Number of mechanical operations  Installation, mounting  Type of top connection for modular devices  Tightening torque  Type of top rail clip for modular devices  Type of bottom rail clip for modular devices  Type of Bottom Connection for modular	with screv 2,8Nm N/ plastic
Number of mechanical operations  Installation, mounting  Type of top connection for modular devices  Tightening torque  Type of top rail clip for modular devices  Type of bottom rail clip for modular devices  Type of Bottom Connection for modular devices	with screv 2,8Nm NA plastic Blconnect
Number of mechanical operations  Installation, mounting  Type of top connection for modular devices  Tightening torque  Type of top rail clip for modular devices  Type of bottom rail clip for modular devices  Type of Bottom Connection for modular devices  Top removability for modular devices	with screw 2,8Nm NA plastic Blconnect Yes Yes

Connection cross-section at output with screw, for flexible conductor	1 / 25 mm²
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Connection cross-section at output with screw, for massive conductor	1 / 35 mm²
Connection cross-section for rigid conductor, upstream terminals with screws	1 / 35 mm²
Connection cross-section of the access with screws, with flexible conductor	1 / 25 mm²
Downstream cage clamp delivery status	opened
Upstream cage clamp delivery status	opened
Equipment	
Can be accessorized	Yes
Standards	
Standard text	EN 60898-1 ; AS/NZS 60898-1
European directive WEEE	concerned
Safety	
Protection index IP	IP20
Use conditions	
Operating temperature	-2570 °C
Degree of pollution according to IEC 60664 / IEC 60947-2	2
Altitude	2000 m
Storage/transport temperature	-2580 °C
temperatur	
Temperature of calibration	30 °C