



NDN120A

MCB 1P 10kA/15kA D-20A 1M

Technical characteristics

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Rated short-circuit breaking capacity Icn under 230 V AC according to IEC 60898-1 Rated uttimate short-circuit breaking capacity Icn under 230 V AC IEC 60947-2 15 Rated current -25°C Rated current at -20°C Rated current at -20°C Rated current -10°C Rated current -10°C Rated current at 0°C Rated current 5°C Rated current 5°C Rated current 5°C Rated current 5°C Rated current 10°C Rated current 10°C Rated current 5°C Rated current 30°C Rated current 25°C Rated current 20°C Rated current 30°C Rated current 30°C Rated current 30°C Rated current 5°C Rated current 70°C Rated current 70°C Rated current 70°C Rated current 65°C Rated short-circuit breaking capacity icn AC according to IEC 60898-1 10 Nominal tightening torque top terminal		
under 230 V AC according to IEC 60898-1 10 Rated ultimate short-circuit breaking capacity lcu under 230 V AC IEC 60947-2 15 Rated current -25°C 25.08 Rated current at -20°C 24.66 Rated current -15°C 24.24 Rated current -10°C 23.36 Rated current at 0°C 22.91 Rated current 5°C 22.45 Rated current 10°C 21.96 Rated current 10°C 21.96 Rated current 10°C 21.96 Rated current 15°C 21.51 Rated current 30°C 20.51 Rated current 35°C 20.51 Rated current 35°C 19.47 Rated current 35°C 19.47 Rated current at 40°C 18.93 Rated current 55°C 17.20 Rated current 60°C 16.58 Rated current 60°C 15.26 Rated current 70°C 15.26 Architecture 15.94 Type of pole 15.26 Curve 25.26 Capacity 10 Number of modules	Rated current	20 A
15 Rated current -25°C 25.08 Rated current -25°C 25.08 Rated current at -20°C 24.66 Rated current at -20°C 24.24 Rated current -15°C 24.24 Rated current -10°C 23.36 Rated current -10°C 23.36 Rated current at 0°C 22.91 Rated current at 0°C 22.91 Rated current 5°C 22.45 Rated current 5°C 21.51 Rated current 10°C 21.96 Rated current 10°C 21.96 Rated current 10°C 21.97 Rated current 10°C 21.97 Rated current 10°C 21.97 Rated current 35°C 21.51 Rated current 35°C 20.51 Rated current 35°C 20.51 Rated current 35°C 20.51 Rated current at 40°C 21.89 Rated current at 45°C 21.89 Rated current at 55°C 21.70 Rated current at 55°C 21.70 Rated current 65°C 21.70 Rated current 70°C 21.70 Rated 2	9	10 kA
Rated current at -20°C 24.66 Rated current -15°C 24.24 Rated current -10°C 23.80 Rated current -5°C 23.36 Rated current at 0°C 22.91 Rated current 5°C 22.45 Rated current 10°C 21.96 Rated current 25°C 21.51 Rated current 25°C 20.51 Rated current 30°C 20 Rated current 35°C 19.47 Rated current at 40°C 18.93 Rated current at 45°C 17.20 Rated current 60°C 17.80 Rated current 60°C 15.94 Rated current 70°C 15.26 Architecture 17.90 Type of pole 15.26 Curve 20 Capacity Number of modules Main electrical attributes Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 10 Nominal tightening torque top terminal 2.80 - 2.80 N		15 kA
Rated current -15°C	Rated current -25°C	25.08 A
Rated current -10°C 23.80 Rated current -5°C 23.36 Rated current at 0°C 22.91 Rated current 5°C 22.45 Rated current 10°C 21.98 Rated current at 20°C 21.02 Rated current 25°C 20.51 Rated current 30°C 20 Rated current at 40°C 18.93 Rated current at 45°C 18.37 Rated current at 50°C 17.80 Rated current 60°C 16.58 Rated current 60°C 16.58 Rated current 70°C 15.28 Architecture 17.90 Type of pole 15.28 Curve 20 Capacity Number of modules Main electrical attributes 8 Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 10 Nominal tightening torque top terminal 2.80 - 2.80 N	Rated current at -20°C	24.66 A
Rated current at 0°C 22.91 Rated current 5°C 22.45 Rated current 10°C 21.96 Rated current 15°C 21.51 Rated current at 20°C 21.02 Rated current 30°C 20.51 Rated current 35°C 19.47 Rated current at 40°C 18.93 Rated current at 45°C 18.37 Rated current at 50°C 17.80 Rated current 55°C 17.20 Rated current 60°C 16.56 Rated current 70°C 15.26 Architecture 15.26 Type of pole 15.26 Curve 20.51 Capacity Number of modules Main electrical attributes 8.26 Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 10 Nominal tightening torque top terminal 2.80 - 2.80 No.	Rated current -15°C	24.24 A
Rated current at 0°C 22.91 Rated current 5°C 22.45 Rated current 10°C 21.96 Rated current 15°C 21.51 Rated current at 20°C 20.51 Rated current 30°C 20 Rated current 35°C 19.47 Rated current at 40°C 18.93 Rated current at 45°C 17.80 Rated current at 50°C 17.20 Rated current 60°C 16.58 Rated current 60°C 15.94 Rated current 70°C 15.26 Architecture Type of pole 20 Capacity Number of modules 8 Main electrical attributes Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 10 Nominal tightening torque top terminal 2.80 - 2.80 No.00	Rated current -10°C	23.80 A
Rated current 10°C 21.98 Rated current 10°C 21.98 Rated current 15°C 21.51 Rated current at 20°C 21.02 Rated current at 20°C 20.51 Rated current 30°C 20.51 Rated current 35°C 19.47 Rated current at 40°C 18.33 Rated current at 40°C 18.37 Rated current at 50°C 17.80 Rated current at 50°C 17.20 Rated current 60°C 16.58 Rated current 65°C 15.94 Rated current 70°C 15.28 Architecture Type of pole Curve Capacity Number of modules Main electrical attributes Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 10 Nominal tightening torque top terminal 2.80 - 2.80 N	Rated current -5°C	23.36 A
Rated current 10°C 21.96 Rated current 15°C 21.51 Rated current at 20°C 21.02 Rated current at 20°C 20.51 Rated current 30°C 20.51 Rated current 35°C 19.47 Rated current at 40°C 18.33 Rated current at 40°C 18.37 Rated current at 50°C 17.20 Rated current at 50°C 17.20 Rated current 65°C 15.34 Rated current 65°C 15.26 Architecture Type of pole Curve Capacity Number of modules Main electrical attributes Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 10 Nominal tightening torque top terminal 2.80 - 2.80 Nominal tightening torque top termina	Rated current at 0°C	22.91 A
Rated current 15°C 21.51 Rated current at 20°C 21.02 Rated current 25°C 20.51 Rated current 30°C 20 Rated current 35°C 19.47 Rated current at 40°C 18.93 Rated current at 45°C 18.37 Rated current at 55°C 17.20 Rated current at 50°C 17.80 Rated current 65°C 17.20 Rated current 65°C 15.94 Rated current 65°C 15.28 Architecture Type of pole Curve Capacity Number of modules Main electrical attributes Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 10 Nominal tightening torque top terminal 2.80 - 2.80 N	Rated current 5°C	22.45 A
Rated current at 20°C 21.02 Rated current 25°C 20.51 Rated current 30°C 20 Rated current 35°C 19.47 Rated current at 40°C 18.93 Rated current at 45°C 18.37 Rated current at 55°C 17.20 Rated current at 50°C 17.20 Rated current 65°C 17.20 Rated current 65°C 15.94 Rated current 65°C 15.26 Architecture Type of pole Curve Capacity Number of modules Main electrical attributes Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 10 Nominal tightening torque top terminal 2.80 - 2.80 N	Rated current 10°C	21.98 A
Rated current 25°C 20.51 Rated current 30°C 20 Rated current 35°C 19.47 Rated current at 40°C 18.93 Rated current at 45°C 18.37 Rated current at 55°C 17.20 Rated current 55°C 17.20 Rated current 60°C 16.58 Rated current 60°C 15.28 Rated current 70°C 15.28 Architecture Type of pole Curve Capacity Number of modules Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 10 Nominal tightening torque top terminal 2.80 - 2.80 N	Rated current 15°C	21.51 A
Rated current 30°C 20 Rated current 35°C 19.47 Rated current at 40°C 18.93 Rated current at 45°C 18.37 Rated current at 50°C 17.30 Rated current 55°C 17.20 Rated current 60°C 16.58 Rated current 65°C 15.94 Rated current 70°C 15.28 Architecture Type of pole Curve Capacity Number of modules Main electrical attributes Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 10 Nominal tightening torque top terminal 2.80 - 2.80 N	Rated current at 20°C	21.02 A
Rated current 35°C 19.47 Rated current at 40°C 18.93 Rated current at 45°C 18.37 Rated current at 50°C 17.80 Rated current 55°C 17.20 Rated current 60°C 16.58 Rated current 65°C 15.94 Rated current 70°C 15.28 Architecture Type of pole Curve Capacity Number of modules Main electrical attributes Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 10 Nominal tightening torque top terminal 2.80 - 2.80 N	Rated current 25°C	20.51 A
Rated current at 40°C Rated current at 45°C Rated current at 50°C Rated current 55°C Rated current 60°C Rated current 65°C Rated current 70°C Architecture Type of pole Curve Capacity Number of modules Main electrical attributes Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 Nominal tightening torque top terminal 18.93 17.80 18.37 18.37 18.37 18.37 19.38 10.38	Rated current 30°C	20 A
Rated current at 45°C 18.37 Rated current at 50°C 17.80 Rated current 55°C 17.20 Rated current 60°C 16.58 Rated current 65°C 15.94 Rated current 70°C 15.28 Architecture Type of pole Curve Capacity Number of modules Main electrical attributes Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 10 Nominal tightening torque top terminal 2.80 - 2.80 N	Rated current 35°C	19.47 A
Rated current at 50°C 17.80 Rated current 55°C 17.20 Rated current 60°C 16.58 Rated current 65°C 15.94 Rated current 70°C 15.28 Architecture Type of pole Curve Capacity Number of modules Main electrical attributes Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 10 Nominal tightening torque top terminal 2.80 - 2.80 N	Rated current at 40°C	18.93 A
Rated current 55°C 17.20 Rated current 60°C 16.58 Rated current 65°C 15.94 Rated current 70°C 15.28 Architecture Type of pole Curve Capacity Number of modules Main electrical attributes Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 10 Nominal tightening torque top terminal 2.80 - 2.80 N	Rated current at 45°C	18.37 A
Rated current 60°C Rated current 65°C 15.94 Rated current 70°C 15.28 Architecture Type of pole Curve Capacity Number of modules Main electrical attributes Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 Nominal tightening torque top terminal 2.80 - 2.80 N	Rated current at 50°C	17.80 A
Rated current 65°C 15.94 Rated current 70°C 15.28 Architecture Type of pole Curve Capacity Number of modules Main electrical attributes Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 10 Nominal tightening torque top terminal 2.80 - 2.80 N	Rated current 55°C	17.20 A
Rated current 70°C 15.28 Architecture Type of pole Curve Capacity Number of modules Main electrical attributes Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 10 Nominal tightening torque top terminal 2.80 - 2.80 N	Rated current 60°C	16.58 A
Architecture Type of pole Curve Capacity Number of modules Main electrical attributes Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 10 Nominal tightening torque top terminal 2.80 - 2.80 N	Rated current 65°C	15.94 A
Type of pole Curve Capacity Number of modules Main electrical attributes Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 Nominal tightening torque top terminal 2.80 - 2.80 N	Rated current 70°C	15.28 A
Capacity Number of modules Main electrical attributes Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 10 Nominal tightening torque top terminal 2.80 - 2.80 N		
Capacity Number of modules Main electrical attributes Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 10 Nominal tightening torque top terminal 2.80 - 2.80 N	Type of pole	1P
Number of modules Main electrical attributes Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 10 Nominal tightening torque top terminal 2.80 - 2.80 N	Curve	D
Main electrical attributes Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 10 Nominal tightening torque top terminal 2.80 - 2.80 N	Capacity	
Rated short-circuit breaking capacity Icn AC according to IEC 60898-1 10 Nominal tightening torque top terminal 2.80 - 2.80 N	Number of modules	1
according to IEC 60898-1 10 Nominal tightening torque top terminal 2.80 - 2.80 N	Main electrical attributes	
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Nominal tightening torque down terminal 2.80 - 2.80 N	Nominal tightening torque top terminal	2.80 - 2.80 Nm
	Nominal tightening torque down terminal	2.80 - 2.80 Nm

Voltage	
Rated operational voltage Ue	230 - 400 V
Type voltage supply	AC
Rated insulation voltage Ui	500 V
Rated impulse withstand voltage Uimp	6,000 V
Frequency	
Frequency	50 - 60 Hz
Connection	
Cross-section of input and output with screws, for massive conductors	1 - 35 mm²
Cross-section of input and output with screws, for flexible conductors	1 - 25 mm²
Cross-section of input with screws, for flex- ible conductors	1 - 25 mm²
Cross-section of input with screws, for massive conductors	1 - 35 mm²
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
Use conditions	
Degree of pollution according to IEC 60664 / IEC 60947-2	2
Operating temperature	-25 - 70 °C
Power	
Total power loss under IN	2.56 W
Endurance	
Electric endurance in number of cycles	4,000
Number of mechanical operations	20,000
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	17.50 mm
Depth	70 mm