



NDN163A



## MCB 1P 10kA D-63A 1M

### Technical properties

#### Architecture

Neutral position	without neutral
Number of protected poles	1
Number of poles	1 P
Curve	D

#### Functions

Concurrently switching N-neutral	No
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#### Configuration

Number of modules	1
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#### 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 IEC60898-1	10 kA
Rated operational voltage $U_e$	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 ( $U_e$ min)	12 V

#### Electric current

Rated current	63 A
Rated service breaking capacity $I_{cs}$ AC according IEC 60898-1	7.5 kA
min/maxi threshold value of the AC thermal operation	1.13 / 1.45 $I_n$
Magnetic regulating current	10 / 14.4 $I_n$
min/maxi threshold value of the DC magnetic operation	15 / 30 $I_n$
min/maxi threshold value of the DC thermal operation	1.13 / 1.45 $I_n$
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 15°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 short circuit breaking capacity I <sub>cn</sub> under 230V AC according IEC60898-1	10 kA
Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 230V AC IEC 60947-2	15 kA
Rated ultimate short-circuit breaking capacity I <sub>cu</sub> under 240V AC IEC 60947-2	15 kA
Rated short circuit breaking capacity I <sub>cn</sub> under 240V AC according IEC 60898-1	10 kA
Rated ultimate short-circuit breaking capacity I <sub>cu</sub> 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
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
<b>Current correction factors</b>	
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
<b>Dimensions</b>	
Depth of installed product	70 mm
Height of installed product	83 mm
Width of installed product	17.5 mm
<b>Frequency</b>	
Frequency	50 to 60 Hz
<b>Power</b>	
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
<b>Endurance</b>	
Electric endurance in number of cycles	4000
Number of mechanical operations	20000
<b>Installation, mounting</b>	
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
<b>Connection</b>	
Connection cross-section at output with screw, for flexible conductor	1 / 25 mm <sup>2</sup>

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

#### Equipment

Can be accessorized	Yes
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#### Standards

Standard text	EN 60898-1 ; AS/NZS 60898-1
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#### Safety

Protection index IP	IP20
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#### 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

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Temperature of calibration	30 °C
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