



NCN163A



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

## **Technical characteristics**

Architecture	Arc	hit	ect	ure
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Neutral position	without neutral
Number of protected poles	1
Number of poles	1 P
Type of pole	1 P
Curve	С
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	63 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	5 / 10 In
min/maxi threshold value of the DC magnetic operation	7 / 15 ln
min/maxi threshold value of the DC thermal operation	1.13 / 1.45 ln

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 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	
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
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 mm
Height of installed product	83 mm
Frequency Frequency	50 to 60 Hz
Power	
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
Endurance	
Endurance Electric endurance in number of cycles	4000
Electric endurance in number of cycles	
Electric endurance in number of cycles  Number of mechanical operations	20000
Electric endurance in number of cycles  Number of mechanical operations  Installation, mounting	20000 with screv
Electric endurance in number of cycles  Number of mechanical operations  Installation, mounting  Type of top connection for modular devices	with screw
Electric endurance in number of cycles  Number of mechanical operations  Installation, mounting  Type of top connection for modular devices  Tightening torque	with screw 2,8Nm
Electric endurance in number of cycles  Number of mechanical operations  Installation, mounting  Type of top connection for modular devices  Tightening torque  Type of top rail clip for modular devices	with screw 2,8Nm NA plastic
Electric endurance in number of cycles  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 screw 2,8Nm NA plastic
Electric endurance in number of cycles  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 screw 2,8Nm NA plastic Blconnect
Electric endurance in number of cycles  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	4000 20000 with screw 2,8Nm NA plastic Blconnect Yes Yes

Connection cross-section at output with screw, for flexible conductor	1 / 25 mm²
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	
Safety Protection index IP	IP20
	IP20
Protection index IP	IP20 -2570 °C
Protection index IP  Use conditions	
Protection index IP  Use conditions  Operating temperature  Degree of pollution according to IEC 60664 /	-2570 °C
Protection index IP  Use conditions  Operating temperature  Degree of pollution according to IEC 60664 / IEC 60947-2	-2570 °C
Protection index IP  Use conditions  Operating temperature  Degree of pollution according to IEC 60664 / IEC 60947-2  Class of energy limitation I2t	-2570 °C
Protection index IP  Use conditions  Operating temperature  Degree of pollution according to IEC 60664 / IEC 60947-2  Class of energy limitation I²t  Altitude	-2570 °C  2  3  2000 m