



NCN316A

## MCB 3P 10kA C-16A 3M

Technische Merkmale

## Architecture

Neutral position	without neutral
Number of protected poles	3
Number of poles	3 P
Type of pole	3 P
Curve	С

# Connectivity

Bottom connection alignement for modular devices	Aligned terminal
Top connection alignement for modular devices	Aligned terminal

#### Main electrical features

Type of supply voltage	AC
Rated operational voltage Ue	415 V

# Voltage

Minimum threshold voltage (Ue min)	12 V
Rated insulation voltage	500 V
Max operating voltage	440 V
Rated impulse withstand voltage	6000 V



#### **Electric current**

Rated ultimate short-circuit breaking capacity Icu	15 kA
under 400V AC IEC 60947-2	
Rated short circuit breaking capacity Icn under 230V AC according IEC60898-1	10 kA
Rated short circuit breaking capacity Icn under 400V AC according IEC60898-1	10 kA
Rated short circuit breaking capacity Icn under 240V AC according IEC 60898-1	10 kA
Rated short circuit breaking capacity Icn under 380V AC according IEC 60898-1	10 kA
Rated short circuit breaking capacity Icn under 415V AC according IEC 60898-1	10 kA
Rated service breaking capacity Ics AC according IEC 60898-1	7,5 kA
Rated service breaking capacity Ics under 220V AC according IEC 60947-2	15 kA
Rated service breaking capacity Ics under 230V AC according IEC 60947-2	15 kA
Rated service breaking capacity Ics under 240V AC according IEC 60947-2	15 kA
Rated service breaking capacity Ics under 380V AC according IEC 60947-2	7,5 kA
Rated service breaking capacity Ics under 400V AC according IEC 60947-2	7,5 kA
Rated service breaking capacity Ics under 415V AC according IEC 60947-2	7,5 kA
Rated service breaking capacity Ics under 220V AC according IEC 60898-1	7,5 kA
Rated service breaking capacity Ics under 230V AC according IEC 60898-1	7,5 kA
Rated service breaking capacity Ics under 240V AC according IEC 60898-1	7,5 kA
Rated service breaking capacity Ics under 380V AC according IEC 60898-1	7,5 kA
Rated service breaking capacity Ics under 400V AC according IEC 60898-1	7,5 kA
Rated service breaking capacity Ics under 415V AC according IEC 60898-1	7,5 kA
Rated ultimate short-circuit breaking capacity Icu under 220V AC IEC 60947-2	30 kA
Rated ultimate short-circuit breaking capacity lcu under 230V AC IEC 60947-2	30 kA
Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2	30 kA
Rated ultimate short-circuit breaking capacity Icu under 380V AC IEC 60947-2	15 kA
Rated ultimate short-circuit breaking capacity Icu under 415V AC IEC 60947-2	15 kA
Magnetic regulating currrent at 40° C	5/10 ln
min/maxi threshold value of the DC magnetic operation	7/15 ln
min/maxi threshold value of the AC thermal operation	1,13/1,45 ln
min/maxi threshold value of the DC thermal operation	1,13/1,45 ln



### Electric current / temperature

Rating current -15°C	19,56 A
Rating current -20°C	19,92 A
Rating current 0°C	18,45 A
Rating current 10°C	17,67 A
Rating current -10°C	19,2 A
Rating current 25°C	16,43 A
Rating current -25°C	20,27 A
Rating current 30°C	16 A
Rating current 35°C	15,48 A
Rating current 40°C	14,94 A
Rating current 45°C	14,38 A
Rating current 5°C	18,07 A
Rating current -5°C	18,83 A
Rating current 50°C	13,8 A
Rating current 55°C	13,19 A
Rating current 60°C	12,56 A
Rating current 65°C	11,89 A
Rating current 70°C	11,18 A
Rating current 0°C according to IEC 60947-2	20,89 A
Rating current 10°C according to IEC 60947-2	20,01 A
Rating current -10°C according to IEC 60947-2	21,74 A
Rating current 150°C according to IEC 60947-2	19,55 A
Rating current -15°C according to IEC 60947-2	22,15 A
Rating current 20°C according to IEC 60947-2	19,09 A
Rating current -20°C according to IEC 60947-2	22,55 A
Rating current 25°C according to IEC 60947-2	18,61 A
Rating current -25°C according to IEC 60947-2	22,95 A
Rating current 30°C according to IEC 60947-2	18,12 A
Rating current 35°C according to IEC 60947-2	17,61 A
Rating current 40°C according to IEC 60947-2	17,09 A
Rating current 45°C according to IEC 60947-2	16,55 A
Rating current 5°C according to IEC 60947-2	20,46 A
Rating current -5°C according to IEC 60947-2	21,32 A
Rating current 50°C according to IEC 60947-2	16 A
Rating current 55°C according to IEC 60947-2	15,3 A
Rating current 60°C according to IEC 60947-2	14,56 A
Rating current 65°C according to IEC 60947-2	13,78 A
Rating current 70°C according to IEC 60947-2	12,96 A



Current correction factors	
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
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
Power	
Power loss per pole at In	2,8 W
Maximum power loss per pole according to the product standard	3,5 W
Total power loss under IN	8,27 W
Endurance	
Electric endurance in number of cycles	4000
Number of mechanical operations	20000
Dimensions	
Depth of installed product	70 mm
Height of installed product	83 mm
Width of installed product	52,5 mm
Installation, mounting	
Type of top connection for modular devices	with screw
Tightening torque	2,8Nm
Type of bottom rail clip for modular devices	plastic
Type of top rail clip for modular devices	NA
Type of Bottom Connection for modular devices	Blconnect
Bottom removability for modular devices	yes
Top removability for modular devices	yes
Suitable for flush-mounting	yes
Connection	
Upstream cage clamp delivery status	opened
Downstream cage clamp delivery status	opened
Connection cross-section at output with screw, for flexible conductor	1/25 mm²
Connection cross-section of the access with screws, with 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



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	
Degree of pollution according to IEC 60664 / IEC 60947-2	2
Class of energy limitation I2t	3
Altitude	2000 m
Storage temperature	-25 to 80 °C
temperatur	
Temperature of calibration	30 °C