

# MCB 3P 10kA/15kA D-32A 3M

## NDN332A

### Architecture

Neutral position	without neutral
Number of protected poles	3
Number of poles	3 P
Type of pole	3 P
Fixing mode	Din-Rail
Curve	D
Compatibility	
Compatible with DIN rail mounting	yes
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	400 V
Voltage	
Minimum threshold voltage (Ue min)	12 V
Rated insulation voltage	500 V
Rated impulse withstand voltage	6000 V
Electric current	
Rated ultimate short-circuit breaking capacity Icu under 400V AC IEC 60947-2	15 kA
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	10 kA

Technical Properties	
Rated service breaking capacity Ics AC according IEC	7,5 kA
60898-1	
Rated service breaking capacity Ics under 220V AC	15 kA
according IEC 60947-2	
Rated service breaking capacity Ics under 230V AC	15 kA
according IEC 60947-2	
Rated service breaking capacity Ics under 240V AC	15 kA
according IEC 60947-2	
Rated service breaking capacity Ics under 380V AC	7,5 kA
according IEC 60947-2	
Rated service breaking capacity Ics under 400V AC	7,5 kA
according IEC 60947-2	
Rated service breaking capacity Ics under 415V AC	7,5 kA
according IEC 60947-2	
Rated service breaking capacity Ics under 220V AC	7,5 kA
according IEC 60898-1	
Rated service breaking capacity Ics under 230V AC	7,5 kA
according IEC 60898-1	
Rated service breaking capacity Ics under 240V AC	7,5 kA
according IEC 60898-1	
Rated service breaking capacity Ics under 380V AC	7,5 kA
according IEC 60898-1	
Rated service breaking capacity Ics under 400V AC	7,5 kA
according IEC 60898-1	
Rated service breaking capacity Ics under 415V AC	7,5 kA
according IEC 60898-1	
Rated ultimate short-circuit breaking capacity Icu	30 kA
under 220V AC IEC 60947-2	
Rated ultimate short-circuit breaking capacity Icu	30 kA
under 230V AC IEC 60947-2	
Rated ultimate short-circuit breaking capacity Icu	30 kA
under 240V AC IEC 60947-2	
Rated ultimate short-circuit breaking capacity Icu	15 kA
under 380V AC IEC 60947-2	
Rated ultimate short-circuit breaking capacity Icu	15 kA
under 415V AC IEC 60947-2	
Magnetic regulating currrent at 40° C	10/14,4 In
min/maxi threshold value of the DC magnetic	15/30 In
operation	
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
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# Electric current / temperature

Rating current -15°C	37,86 A
Rating current -20°C	38,45 A
Rating current 0°C	36,01 A
Rating current 10°C	34,73 A
Rating current -10°C	37,25 A
Rating current 25°C	32,7 A
Rating current -25°C	39,04 A
Rating current 30°C	32 A
Rating current 35°C	31,26 A
Rating current 40°C	30,5 A
Rating current 45°C	29,72 A
Rating current 5°C	35,37 A
Rating current -5°C	36,64 A
Rating current 50°C	28,92 A
Rating current 55°C	28,1 A
Rating current 60°C	27,26 A

Technical Properties	
Rating current 65°C	26,38 A
Rating current 70°C	25.48 A
Rating current 0°C according to IEC 60947-2	39,71 A
Rating current 10°C according to IEC 60947-2	38,29 A
Rating current -10°C according to IEC 60947-2	41,08 A
Rating current 150°C according to IEC 60947-2	37,56 A
Rating current -15°C according to IEC 60947-2	41,74 A
Rating current 20°C according to IEC 60947-2	36,82 A
Rating current -20°C according to IEC 60947-2	42,4 A
Rating current 25°C according to IEC 60947-2	36,06 A
Rating current -25°C according to IEC 60947-2	43,05 A
Rating current 30°C according to IEC 60947-2	35,29 A
Rating current 35°C according to IEC 60947-2	34,49 A
Rating current 40°C according to IEC 60947-2	33,68 A
Rating current 45°C according to IEC 60947-2	32,85 A
Rating current 5°C according to IEC 60947-2	39,01 A
Rating current -5°C according to IEC 60947-2	40,4 A
Rating current 50°C according to IEC 60947-2	32 A
Rating current 55°C according to IEC 60947-2	31,09 A
Rating current 60°C according to IEC 60947-2	30,16 A
Rating current 65°C according to IEC 60947-2	29,19 A
Rating current 70°C according to IEC 60947-2	28,19 A
riating current to 0 decerding to 120 00341 2	20,13 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	11
side-by-side	
Correction factor of rating current for 3 devices placed	1 0,95
side-by-side	
Correction factor of rating current for 4 and 5 devices	0,9
placed side-by-side	
Correction factor of rating current for 6 devices placed	1 0,85
side-by-side	
Power	
Power loss per pole at In	4,22 W
Maximum power loss per pole according to the	6 W
product standard	
Total power loss under IN	12,3 W
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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
man or motuned product	02,0 111111

## 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 mm <sup>2</sup>

## Equipment

Can be accessorized	ves	

#### Standards

Standard text	EN 60898-1, IEC 60947-2
European directive WEEE	concerned

# Safety

#### **Use conditions**

Degree of pollution according to IEC 60664 / IEC 60947-2	2
Altitude	2000 m
Storage temperature	-25 to 80 °C

#### temperatur

Temperature of calibration	50 °C	