



NCN432

## MCB 4P 10kA/15kA C-32A 4M

## Technical properties

Arcl	hite	cture
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Neutral position	without neutral
Number of protected poles	4
Number of poles	4 P
Curve	С
Functions	
Concurrently switching N-neutral	No
Configuration	
Number of modules	4
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	400 V
Type of supply voltage	AC
Voltage	
Rated insulation voltage	500 V
Rated impulse withstand voltage	6000 V
Minimum threshold voltage (Ue min)	12 V
Electric current	
Rated current	32 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	41.08 A
Rating current -15°C according to IEC 60947	41.74 A

Rating current -20°C according to IEC 60947	42.4 A
Rating current -25°C according to IEC 60947	43.05 A
Rating current -5°C according to IEC 60947	40.4 A
Rating current 0°C according to IEC 60947	39.71 A
Rating current 10°C according to IEC 60947	38.29 A
Rating current 15°C according to IEC 60947	37.56 A
Rating current 20°C according to IEC 60947	36.82 A
Rating current 25°C according to IEC 60947	36.06 A
Rating current 30°C according to IEC 60947	35.29 A
Rating current 35°C according to IEC 60947	34.49 A
Rating current 40°C according to IEC 60947	33.68 A
Rating current 45°C according to IEC 60947	32.85 A
Rating current 5°C according to IEC 60947	39.01 A
Rating current 50°C according to IEC 60947	32 A
Rating current 55°C according to IEC 60947	31.09 A
Rating current 60°C according to IEC 60947	30.16 A
Rating current 65°C according to IEC 60947	29.19 A
Rating current 70°C according to IEC 60947	28.19 A
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 ultimate short-circuit breaking capacity Icu 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 400V AC IEC 60947-2	15 kA
Rated ultimate short-circuit breaking capacity Icu under 415V AC IEC 60947-2	15 kA
Rated short circuit breaking capacity Icn under 240V AC according IEC 60898-1	10 kA
Rated short circuit breaking capacity Icn under 415V AC according IEC 60898-1	10 kA
Rated ultimate short-circuit breaking capacity Icu under 220V AC IEC 60947-2	30 kA
Rated ultimate short-circuit breaking capacity Icu under 380V AC IEC 60947-2	15 kA
Electric current / temperature	
Rating current -25°C	39.04 A
Rating current -20°C	38.45 A
Rating current -15°C	37.86 A
Rating current -10°C	37.25 A
Rating current -5°C	36.64 A
Rating current 0°C	36.01 A
Rating current 5°C	35.37 A
Rating current 10°C	34.73 A
Rating current 25°C	32.7 A
Rating current 30°C	32 A

Rating current 45°C 29.72 A Rating current 50°C 28.92 A Rating current 50°C 28.92 A Rating current 50°C 28.1 A Rating current 60°C 27.26 A Rating current 60°C 27.26 A Rating current 65°C 26.38 A Rating current 65°C 26.38 A Rating current 70°C 25.48 A Current correction factors  Current correction factors  Current or of rating current for 2 devices placed side-by-side 1.9 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 0.95 Correction factor of rating current for 6 devices placed side-by-side 0.98 Correction factor of magnetic tripping with 100 Hz Correction factor of magnetic tripping with 100 Hz Correction factor of magnetic tripping with 100 Hz Correction factor of magnetic tripping with 1.5 Correction factor of magnetic tripping w	Rating current 35°C	31.26 A
Rating current 50°C 28.92 A Rating current 55°C 28.1 A Rating current 60°C 27.26 A Rating current 60°C 26.38 A Rating current 65°C 26.38 A Rating current 70°C 25.48 A Current correction factors  Currection 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 0.95 Correction factor of rating current for 6 devices placed side-by-side 0.95 Correction factor of rating current for 6 devices placed side-by-side 0.835 Correction factor of magnetic tripping with 100 Hz 1.1 Correction factor of magnetic tripping wit	Rating current 40°C	30.5 A
Rating current 55°C 28.1 A Rating current 60°C 27.26 A Rating current 65°C 26.38 A Rating current 70°C 25.48 A Current correction factors  Currection 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 0,95 Correction factor of rating current for 6 devices placed side-by-side 0,95 Correction factor of rating current for 6 devices placed side-by-side 0,95 Correction factor of rating current for 6 devices placed side-by-side 0,95 Correction factor of magnetic tripping with 1,1 Correction fac	Rating current 45°C	29.72 A
Rating current 60°C 27.26 A Rating current 65°C 26.38 A Rating current 70°C 25.48 A Current correction factors  Currection 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 0.95 Correction factor of rating current for 6 devices placed side-by-side 0.95 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 1.1 Correction factor of magnetic tripping with 1.1 Correction factor of magnetic tripping with 1.5 Correction factor of magnetic tripping with 1.1 Dimensions  Depth of installed product 70 mm Height of installed product 83 mm Width of installed product 70 mm Frequency 50 to 60 Hz  Power  Maximum power loss per pole according to the product standard 6 W Total power loss per pole at in 4.42 W Endurance  Electric endurance in number of cycles 4000 Number of mechanical operations 20000 Installation, mounting Type of top connection for modular devices with screw 71 placed in 71 placed in 72 placed in 72 placed in 72 placed in 72 placed in 73 placed in 74 place	Rating current 50°C	28.92 A
Rating current 65°C 26.38 A Rating current 70°C 25.48 A Rating current 70°C 25.48 A Rating current 70°C 25.48 A Current correction factor of Current for 2 devices placed side-by-side 1 Correction factor of rating current for 2 devices placed side-by-side 0.95 Correction factor of rating current for 3 devices placed side-by-side 0.95 Correction factor of rating current for 6 devices placed side-by-side 0.98 Correction factor of rating current for 6 devices placed side-by-side 0.85 Correction factor of magnetic tripping with 1.1 Correction factor of magnetic tripping with 1.1 Correction factor of magnetic tripping with 1.5 Correction factor of magn	Rating current 55°C	28.1 A
Rating current 70°C 25.48 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 0.95  Correction factor of rating current for 4 and 6 devices placed side-by-side 0.95  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 100 Hz 1.5  Correction factor of magnetic tripping with 1.1  Correction factor of magnetic tripping with 1.1  Dimensions  Depth of installed product 70 mm  Width of installed product 83 mm  Width of installed product 70 mm  Frequency 50 to 60 Hz  Power  Maximum power loss per pole according to the product standard 6 W  Total power loss per pole at in 4.42 W  Endurance  Electric endurance in number of cycles 4000  Number of mechanical operations 20000  Installation, mounting  Type of top connection for modular devices with screw Tightening torque 2.88mm  Type of bottom rail clip for modular devices plastic Type of Bottom rail clip for modular devices plastic Type of Bottom rail clip for modular devices Biconnect	Rating current 60°C	27.26 A
Current correction factors  Correction factor of rating current for 2 devices placed side-by-side 0.95 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 0.96 correction factor of rating current for 6 devices placed side-by-side 0.85 correction factor of rating current for 6 devices placed side-by-side 0.85 correction factor of magnetic tripping with 1.1 correction factor of magnetic tripping with 200 Hz 1.1 correction factor of magnetic tripping with 4.1 correction factor of magnetic tripping with 4.1 for Hz for	Rating current 65°C	26.38 A
Correction factor of rating current for 2 devices placed side-by-side	Rating current 70°C	25.48 A
devices placed side-by-side Correction factor of rating current for 3 devices placed side-by-side Correction factor of rating current for 4 and 5 devices placed side-by-side Correction factor of rating current for 6 devices placed side-by-side Correction factor of rating current for 6 devices placed side-by-side Correction factor of magnetic tripping with 100 Hz Correction factor of magnetic tripping with 200 Hz Correction factor of magnetic tripping with 400 H	Current correction factors	
devices placed side-by-side Correction factor of rating current for 4 and 5 devices placed side-by-side Correction factor of rating current for 6 devices placed side-by-side Correction factor of rating current for 6 devices placed side-by-side Correction factor of magnetic tripping with 100 hz Correction factor of magnetic tripping with 200 hz Correction factor of magnetic tripping with 400 hz Lack 400 hz Correction factor of magnetic tripping with 400 hz Lack 400	5	1
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 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 400 Hz 1.5  Correction factor of magnetic tripping with 60 Hz 1.5  Correction factor of magnetic tripping with 60 Hz 1.5  Dimensions  Depth of installed product 70 mm  Height of installed product 33 mm  Width of installed product 70 mm  Frequency 50 to 60 Hz  Power  Maximum power loss per pole according to the product standard 6 W  Total power loss under IN 16.5 W  Power loss per pole at In 4.42 W  Endurance  Electric endurance in number of cycles 4000  Number of mechanical operations 20000  Installation, mounting  Type of top connection for modular devices with screw Tightening torque 2.8 Nm  Type of bottom rail clip for modular devices plastic  Type of Bottom Connection for modular devices plastic		0.95
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 400 Hz 1.5  Correction factor of magnetic tripping with 400 Hz 1.5  Correction factor of magnetic tripping with 400 Hz 1.1  Dimensions  Depth of installed product 70 mm  Height of installed product 83 mm  Width of installed product 70 mm  Frequency 50 to 60 Hz  Power  Maximum power loss per pole according to the product standard 6 W  Total power loss under IN 16.5 W  Power loss per pole at In 4.42 W  Endurance  Electric endurance in number of cycles 4000  Number of mechanical operations 20000  Installation, mounting  Type of top connection for modular devices with screw Tightening torque 2.8 Nm  Type of bottom rail clip for modular devices plastic  Type of Bottom Connection for modular devices plastic	9	0.9
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 1.5 Correction factor of magnetic tripping with 60 Hz 1.1  Dimensions Depth of installed product 70 mm Height of installed product 83 mm Width of installed product 70 mm Frequency Frequency 50 to 60 Hz  Power Maximum power loss per pole according to the product standard 6 W Total power loss under IN 16.5 W Power loss per pole at In 4.42 W  Endurance Electric endurance in number of cycles 4000 Number of mechanical operations 20000 Installation, mounting Type of top connection for modular devices with screw 71ghtening torque 2.8Nm Type of bottom rail clip for modular devices plastic Type of Bottom Connection for modular devices plastic Type of Bottom Connection for modular devices Blconnect	9	0.85
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  Width of installed product 70 mm  Frequency 50 to 60 Hz  Power  Maximum power loss per pole according to the product standard 6 W Total power loss under IN 16.5 W Power loss under IN 16.5 W  Endurance  Electric endurance in number of cycles 4000  Number of mechanical operations 20000  Installation, mounting Type of top connection for modular devices with screw 71 plastic Type of bottom rail clip for modular devices plastic Type of Bottom Connection for modular devices Blconnect  Electric g Bottom Connection for modular devices plastic		1.1
Correction factor of magnetic tripping with 60 Hz 1.1  Dimensions  Depth of installed product 70 mm  Height of installed product 83 mm  Width of installed product 70 mm  Frequency 50 to 60 Hz  Power  Maximum power loss per pole according to the product standard 6 W Total power loss under IN 16.5 W Power loss per pole at In 4.42 W  Endurance  Electric endurance in number of cycles 4000  Number of mechanical operations 20000  Installation, mounting Type of top connection for modular devices with screw 71 per pole top remodular devices 71 plastic		1.2
Dimensions  Depth of installed product 70 mm Height of installed product 83 mm Width of installed product 70 mm  Frequency Frequency 50 to 60 Hz  Power  Maximum power loss per pole according to the product standard 6 w Total power loss under IN 16.5 w Power loss per pole at In 4.42 w  Endurance Electric endurance in number of cycles 4000 Number of mechanical operations 20000  Installation, mounting Type of top connection for modular devices with screw 71ghe of bottom rail clip for modular devices plastic Type of Bottom Connection for modular devices Blconnect Type of Bottom Connection for modular devices Blconnect	Correction factor of magnetic tripping with 400 Hz	1.5
Depth of installed product 83 mm  Height of installed product 70 mm  Width of installed product 70 mm  Frequency  Frequency  Frequency 50 to 60 Hz  Power  Maximum power loss per pole according to the product standard 6 W  Total power loss under IN 16.5 W  Power loss per pole at In 4.42 W  Endurance  Electric endurance in number of cycles 4000  Number of mechanical operations 20000  Installation, mounting  Type of top connection for modular devices with screw 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		1.1
Height of installed product 83 mm Width of installed product 70 mm  Frequency Frequency 50 to 60 Hz  Power  Maximum power loss per pole according to the product standard 6 W Total power loss under IN 16.5 W Power loss per pole at In 4.42 W  Endurance  Electric endurance in number of cycles 4000 Number of mechanical operations 20000  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 Bottom Connection for modular devices Blconnect	Dimensions	
Frequency  Frequency  Fower  Maximum power loss per pole according to the product standard 6 W Total power loss under IN 16.5 W Power loss per pole at In 4.42 W  Endurance  Electric endurance in number of cycles 4000 Number of mechanical operations 20000  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 Bottom Connection for modular devices Blconnect	Depth of installed product	70 mm
Frequency 50 to 60 Hz  Power  Maximum power loss per pole according to the product standard 6 W Total power loss under IN 16.5 W Power loss per pole at In 4.42 W  Endurance  Electric endurance in number of cycles 4000 Number of mechanical operations 20000  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 Bottom Connection for modular devices Blconnect	Height of installed product	83 mm
Frequency 50 to 60 Hz  Power  Maximum power loss per pole according to the product standard 6 W  Total power loss under IN 16.5 W  Power loss per pole at In 4.42 W  Endurance  Electric endurance in number of cycles 4000  Number of mechanical operations 20000  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 Bottom Connection for modular devices plastic  Type of Bottom Connection for modular devices plastic	Width of installed product	70 mm
Maximum power loss per pole according to the product standard 6 W Total power loss under IN 16.5 W Power loss per pole at In 4.42 W  Endurance  Electric endurance in number of cycles 4000 Number of mechanical operations 20000  Installation, mounting Type of top connection for modular devices with screw Tightening torque 2,8Nm Type of top rail clip for modular devices plastic Type of Bottom Connection for modular devices Blconnect	Frequency	
Maximum power loss per pole according to the product standard  6 W Total power loss under IN  16.5 W Power loss per pole at In  4.42 W  Endurance  Electric endurance in number of cycles  4000 Number of mechanical operations  20000  Installation, mounting  Type of top connection for modular devices  Tightening torque  2,8Nm  Type of top rail clip for modular devices  NA Type of bottom rail clip for modular devices  Type of Bottom Connection for modular devices  Type of Bottom Connection for modular devices  Blconnect	Frequency	50 to 60 Hz
the product standard 6 W  Total power loss under IN 16.5 W  Power loss per pole at In 4.42 W  Endurance  Electric endurance in number of cycles 4000  Number of mechanical operations 20000  Installation, mounting  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	Power	
Power loss per pole at In 4.42 W  Endurance  Electric endurance in number of cycles 4000  Number of mechanical operations 20000  Installation, mounting  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		6 W
Electric endurance in number of cycles 4000 Number of mechanical operations 20000 Installation, mounting 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 BIconnect	Total power loss under IN	16.5 W
Electric endurance in number of cycles 4000  Number of mechanical operations 20000  Installation, mounting  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	Power loss per pole at In	4.42 W
Number of mechanical operations 20000  Installation, mounting  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	Endurance	
Installation, mounting  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 BIconnect	Electric endurance in number of cycles	4000
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	Number of mechanical operations	20000
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	Installation, mounting	
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		with screw
Type of top rail clip for modular devices  NA  Type of bottom rail clip for modular devices  Type of Bottom Connection for modular devices  Blconnect		
Type of bottom rail clip for modular devices plastic  Type of Bottom Connection for modular devices Blconnect		· · · · · · · · · · · · · · · · · · ·
Type of Bottom Connection for modular devices BIconnect		
	Type of Bottom Connection for modular	<u>·</u>
	Top removability for modular devices	

Bottom removability for modular devices	Yes
Suitable for flush-mounting	Yes
Connection	
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	closed
Upstream cage clamp delivery status	opened
Equipment	
Can be accessorized	Yes
With transparent product label holder	Yes
Standards	
Standard text	EN 60898-1 ; IEC 60947-2
Safety	
Protection index IP	IP20
REACH conform	No
RoHS conform	Yes
Halogen free	No
Use conditions	
Operating temperature	-2570 °C
Degree of pollution according to IEC 60664 / IEC 60947-2	2
Class of energy limitation I <sup>2</sup> t	3
Altitude	2000 m
Storage/transport temperature	-2580 °C
temperatur	
Temperature of calibration	50 °C