



NRN440



## MCB 4P 20kA C-40A 4M

### Technical characteristics

#### Architecture

Neutral position	without neutral
Number of protected poles	4
Number of poles	4 P
Type of pole	4 P
Curve	C

#### Functions

Concurrently switching N-neutral	No
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#### Configuration

Number of modules	4
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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 $U_e$	415 V
Type of supply voltage	AC

#### Voltage

Rated insulation voltage	500 V
Max operating voltage	415 V
Rated impulse withstand voltage	6000 V

#### Electric current

Rated current	40 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	5 / 10 $I_n$
min/maxi threshold value of the DC magnetic operation	5 / 15 $I_n$
min/maxi threshold value of the DC thermal operation	1.13 / 1.45 $I_n$
Rating current -10°C according to IEC 60947	58.11 A

Rating current -15°C according to IEC 60947	59.97 A
Rating current -20°C according to IEC 60947	61.45 A
Rating current -25°C according to IEC 60947	62.93 A
Rating current -5°C according to IEC 60947	57.02 A
Rating current 0°C according to IEC 60947	55.54 A
Rating current 10°C according to IEC 60947	52.58 A
Rating current 15°C according to IEC 60947	51.11 A
Rating current 20°C according to IEC 60947	49.63 A
Rating current 25°C according to IEC 60947	48.15 A
Rating current 30°C according to IEC 60947	47.82 A
Rating current 35°C according to IEC 60947	45.2 A
Rating current 40°C according to IEC 60947	43.72 A
Rating current 45°C according to IEC 60947	42.24 A
Rating current 5°C according to IEC 60947	54.06 A
Rating current 50°C according to IEC 60947	40 A
Rating current 55°C according to IEC 60947	39.29 A
Rating current 60°C according to IEC 60947	37.81 A
Rating current 65°C according to IEC 60947	36.33 A
Rating current 70°C according to IEC 60947	34.85 A
Breaking capacity on 1 pole for IT 400V NF 60947-2	3 kA
Breaking capacity on 1 pole for IT 415V NF 60947-2	3 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 ultimate short-circuit breaking capacity Icu under 230V AC IEC 60947-2	40 kA
Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2	40 kA
Rated ultimate short-circuit breaking capacity Icu under 400V AC IEC 60947-2	20 kA
Rated ultimate short-circuit breaking capacity Icu under 415V AC IEC 60947-2	20 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	40 kA
Rated ultimate short-circuit breaking capacity Icu under 380V AC IEC 60947-2	20 kA
<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
<b>Dimensions</b>	
Depth of installed product	70 mm
Height of installed product	83 mm
Width of installed product	70 mm
<b>Frequency</b>	
Frequency	50 to 60 Hz
<b>Power</b>	
Maximum power loss per pole according to the product standard	7.5 W
Total power loss under I <sub>N</sub>	15 W
Power loss per pole at I <sub>N</sub>	4.28 W
<b>Tripping</b>	
Time of response when opening	7 ms
<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

Subject to technical modifications

<b>Equipment</b>	
Can be accessorized	Yes
With transparent product label holder	Yes
<b>Standards</b>	
Standard text	IEC 60947-2
European directive WEEE	concerned
<b>Safety</b>	
Protection index IP	IP20
REACH conform	No
RoHS conform	Yes
Halogen free	No
<b>Use conditions</b>	
Operating temperature	-25...70 °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
Air humidity protection	for all climates
Storage/transport temperature	-25...80 °C
<b>temperatur</b>	
Temperature of calibration	50 °C