



NRN140

MCB 1P 20kA C-40A 1M

Technical characteristics

Architecture

Neutral position	without neutral
Number of protected poles	1
Number of poles	1 P
Type of pole	1 P
Fixing mode	Din-Rail
Curve	C

Functions

Concurrently switching N-neutral	No
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Configuration

Number of modules	1
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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	240 / 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	64.1 A
Rating current -15°C according to IEC 60947	66.46 A
Rating current -20°C according to IEC 60947	68.43 A
Rating current -25°C according to IEC 60947	70.41 A
Rating current -5°C according to IEC 60947	62.5 A
Rating current 0°C according to IEC 60947	60.53 A
Rating current 10°C according to IEC 60947	56.57 A
Rating current 15°C according to IEC 60947	54.59 A
Rating current 20°C according to IEC 60947	52.62 A
Rating current 25°C according to IEC 60947	50.64 A
Rating current 30°C according to IEC 60947	49.8 A
Rating current 35°C according to IEC 60947	46.69 A
Rating current 40°C according to IEC 60947	44.71 A
Rating current 45°C according to IEC 60947	42.73 A
Rating current 5°C according to IEC 60947	58.55 A
Rating current 50°C according to IEC 60947	40 A
Rating current 55°C according to IEC 60947	38.78 A
Rating current 60°C according to IEC 60947	36.8 A
Rating current 65°C according to IEC 60947	34.82 A
Rating current 70°C according to IEC 60947	32.85 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 ultimate short-circuit breaking capacity Icu under 230V AC IEC 60947-2	20 kA
Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2	20 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	20 kA
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
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Dimensions

Depth of installed product	70 mm
Height of installed product	83 mm
Width of installed product	17.5 mm

Frequency

Frequency	50 to 60 Hz
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Power

Maximum power loss per pole according to the product standard	7.5 W
Total power loss under IN	3.71 W
Power loss per pole at In	3.71 W

Tripping

Time of response when opening	7 ms
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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
Top removability for modular devices	Yes
Bottom removability for modular devices	Yes
Suitable for flush-mounting	Yes

Connection

Connection cross-section at output with screw, for flexible conductor	1 / 25 mm ²
Connection cross-section at output with screw, for massive conductor	1 / 35 mm ²
Connection cross-section for rigid conductor, upstream terminals with screws	1 / 35 mm ²
Connection cross-section of the access with screws, with flexible conductor	1 / 25 mm ²
Downstream cage clamp delivery status	opened
Upstream cage clamp delivery status	opened

Equipment

Can be accessorized	Yes
With transparent product label holder	Yes

Standards

Standard text	IEC 60947-2
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Safety

Protection index IP	IP20
REACH conform	No
RoHS conform	Yes
Halogen free	No

Use conditions

Operating temperature	-25...70 °C
Class of energy limitation I ² t	3
Altitude	2000 m
Storage/transport temperature	-25...80 °C

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Temperature of calibration	50 °C
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