



NRN402

## MCB 4P 25kA C-2A 4M

**Technical properties** 

Number of poles       4         Type of pole       4         Curve       4         Functions       6         Concurrently switching N-neutral       N         Configuration       N         Number of modules       6         Connectivity       Aligned termina         Top connection alignement for modular       Aligned termina         Bottom connection alignement for modular       Aligned termina         Main electrical features       10 k.         Rated short circuit breaking capacity Icn AC according IEC60898-1       10 k.         Rated operational voltage Ue       415 *         Type of supply voltage       Au         Voltage       20 *         Rated inpulse withstand voltage       6000 *         Electric current       20 *         Rated impulse withstand voltage       6000 *         Electric current       20 *         Rated inpulse withstand voltage       6000 *         Impulse voltage       415 *         Max operating voltage       415 *         Mated inpulse withstand voltage       6000 *         Electric current       20 *         Rated inpulse withstand voltage       6000 *         Marrent       20 *     <	Neutral position	without neutra
Type of pole       4         Curve       Functions         Functions       N         Configuration       N         Number of modules       A         Connectivity       Aligned termine         Bottom connection alignement for modular devices       Aligned termine         Main electrical features       Aligned termine         Rated short circuit breaking capacity Icn AC according IEC60898-1       10 k         Rated operational voltage Ue       415 s         Voltage       Aligned termine         Rated insulation voltage       6000 s         Electric current       2 s         Rated insulation voltage       6000 s         min/maxit threshold value of the AC thermal operation       7.5 k         min/maxit threshold value of the DC magnetic operation       5/10 1         min/maxit threshold value of the DC thermal operation       5/10 1         min/maxit threshold value of the DC thermal operation       5/15 1         min/maxit threshold value of the DC thermal operation       5/15 1         Maingenctic regulating current       5/10 1         min/maxit threshold value of the DC thermal operation       5/15 1         min/maxit threshold value of the DC thermal operation       5/15 1	Number of protected poles	2
Curve	Number of poles	4 1
Functions         Concurrently switching N-neutral       N         Configuration       N         Number of modules       S         Connectivity       Connection alignement for modular devices         Connection alignement for modular devices       Aligned termina         Bottom connection alignement for modular devices       Aligned termina         Main electrical features       Aligned termina         Rated short circuit breaking capacity Icn AC according IEC60898-1       10 k         Rated operational voltage Ue       415 1         Type of supply voltage       Aligned termina         Voltage       Aligned termina         Rated insulation voltage Ue       415 1         Type of supply voltage       Aligned termina         Rated insulation voltage       6000 1         Electric current       2.0         Rated insulation voltage       6000 1         Electric current       2.0         Rated service breaking capacity Ics AC according IC 60898-1       7.5 k         min/maxi threshold value of the AC thermal operation       1.13 / 1.45 1         Magnetic regulating current       5 / 10 1         min/maxi threshold value of the DC thermal operation       5 / 15 1         min/maxi threshold value of the DC thermal operation       5 /	Type of pole	4
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Connectivity         Top connection alignement for modular devices       Aligned terminal devices         Battom connection alignement for modular devices       Aligned terminal devices         Main electrical features       Aligned terminal devices         Rated short circuit breaking capacity Icn AC according IEC60898-1       10 k.         Rated operational voltage Ue       415 °         Type of supply voltage       Aligned terminal devices         Voltage       415 °         Rated insulation voltage       500 °         Max operating voltage       415 °         Rated insulation voltage       500 °         Max operating voltage       415 °         Rated insulation voltage       500 °         Max operating voltage       415 °         Rated service breaking capacity Ics AC according IEC 60898-1       7.5 k.         min/maxi threshold value of the AC thermal operation       1.13 / 1.45 °         Magnetic regulating currrent       5 / 10 °         min/maxi threshold value of the DC magnetic operation       5 / 15 °         min/maxi threshold value of the DC thermal operation       1.13 / 1.45 °         magnetic operation       5 / 15 °         min/maxi threshold value of the DC thermal operation       1.13 / 1.45 °         magnetic operation       5 / 15 °	Configuration	
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Voltage         Rated insulation voltage       500 Max operating voltage         Max operating voltage       415 Max operating voltage         Rated impulse withstand voltage       6000 Max operating voltage         Electric current       6000 Max operating voltage         Rated current       2 /         Rated service breaking capacity Ics AC according IEC 60898-1       7.5 k.         min/maxi threshold value of the AC thermal operation       1.13 / 1.45 I         Magnetic regulating currrent       5 / 10 I         min/maxi threshold value of the DC magnetic operation       5 / 15 I         min/maxi threshold value of the DC thermal operation       1.13 / 1.45 I         Rating current -10°C according to IEC       1.13 / 1.45 I	Rated operational voltage Ue	415
Rated insulation voltage       500 °         Max operating voltage       415 °         Rated impulse withstand voltage       6000 °         Electric current       6000 °         Rated current       2 ′         Rated service breaking capacity Ics AC according IEC 60898-1       7.5 k.         min/maxi threshold value of the AC thermal operation       1.13 / 1.45 I         Magnetic regulating currrent       5 / 10 I         min/maxi threshold value of the DC magnetic operation       5 / 15 I         min/maxi threshold value of the DC thermal operation       1.13 / 1.45 I         Rating current -10°C according to IEC       1.13 / 1.45 I	Type of supply voltage	A
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Electric current       2 /         Rated current       2 /         Rated service breaking capacity Ics AC       2 /         according IEC 60898-1       7.5 k/         min/maxi threshold value of the AC thermal       0         operation       1.13 / 1.45 I         Magnetic regulating current       5 / 10 I         min/maxi threshold value of the DC       5 / 15 I         min/maxi threshold value of the DC thermal       0         operation       1.13 / 1.45 I         Rating current -10°C according to IEC       5	Max operating voltage	415 \
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Rated service breaking capacity Ics AC       7.5 k.         according IEC 60898-1       7.5 k.         min/maxi threshold value of the AC thermal operation       1.13 / 1.45 l.         Magnetic regulating currrent       5 / 10 l         min/maxi threshold value of the DC magnetic operation       5 / 15 l.         min/maxi threshold value of the DC thermal operation       1.13 / 1.45 l.         Rating current -10°C according to IEC       1.13 / 1.45 l.	Electric current	
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	min/maxi threshold value of the DC thermal operation	1.13 / 1.45
	Rating current -10°C according to IEC	

Rating current -15°C according to IEC 60947	2.88 A
Rating current -20°C according to IEC 60947	2.93 A
Rating current -25°C according to IEC 60947	2.99 A
Rating current -5°C according to IEC 60947	2.76 A
Rating current 0°C according to IEC 60947	2.7 A
Rating current 10°C according to IEC 60947	2.57 A
Rating current 15°C according to IEC 60947	2.51 A
Rating current 20°C according to IEC 60947	2.44 A
Rating current 25°C according to IEC 60947	2.38 A
Rating current 30°C according to IEC 60947	2.31 A
Rating current 35°C according to IEC 60947	2.23 A
Rating current 40°C according to IEC 60947	2.16 A
Rating current 45°C according to IEC 60947	2.08 A
Rating current 5°C according to IEC 60947	2.64 A
Rating current 50°C according to IEC 60947	2 A
Rating current 55°C according to IEC 60947	1.9 A
Rating current 60°C according to IEC 60947	1.79 A
Rating current 65°C according to IEC 60947	1.67 A
Rating current 70°C according to IEC 60947	1.55 A
Breaking capacity on 1 pole for IT 400V 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 capa- city lcu under 230V AC IEC 60947-2	50 kA
Rated ultimate short-circuit breaking capa- city lcu under 240V AC IEC 60947-2	50 kA
Rated ultimate short-circuit breaking capa- city lcu under 400V AC IEC 60947-2	25 kA
Rated ultimate short-circuit breaking capa- city lcu under 415V AC IEC 60947-2	25 kA
Rated short circuit breaking capacity lcn 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 capa- city lcu under 220V AC IEC 60947-2	50 kA
Rated ultimate short-circuit breaking capa- city lcu under 380V AC IEC 60947-2	25 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
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	3 W
Total power loss under IN	8.63 W
Power loss per pole at In	2.36 W
Tripping	
Time of response when opening	7 ms
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 <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>;</sup>
Connection cross-section of the access with screws, with flexible conductor	1 / 25 mm
Downstream cage clamp delivery status	openec
Upstream cage clamp delivery status	opened

## Equipment

Standards	
Standard text	IEC 60947-2
Safety	
REACH conform	Να
RoHS conform	Yes
Halogen free	No
	-2570 °C
Use conditions Operating temperature Degree of pollution according to IEC 60664 / IEC 60947-2	-2570 °C
Operating temperature Degree of pollution according to IEC 60664 / IEC 60947-2	
Operating temperature Degree of pollution according to IEC 60664 / IEC 60947-2 Class of energy limitation I <sup>2</sup> t	:
Operating temperature Degree of pollution according to IEC 60664 /	

50 °C

## temperatur

Temperature of calibration