



MCN125



## MCB 1P 6kA C-25A 1M

## **Technical properties**

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Architecture	
Number of protected poles	1
Number of poles	1 P
Type of pole	1 P
Curve	С
Functions	
Concurrently switching N-neutral	No
Configuration	
Number of modules	1
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	6 kA
Rated operational voltage Ue	230 / 400 V
Type of supply voltage	AC
Frequency	50/60 Hz
Voltage	
Rated insulation voltage	500 V
Rated impulse withstand voltage	4000 V
Electric current	
Rated current	25 A
Rated service breaking capacity Ics AC according IEC 60898-1	6 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 In
min/maxi threshold value of the DC thermal operation	1.13 / 1.45 ln
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	6 kA

Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2  Electric current / temperature  Rating current -25°C  Rating current -15°C  Rating current -15°C  Rating current -5°C  Rating current 5°C  Rating current 10°C  Rating current 10°C  Rating current 10°C  Rating current 10°C  Rating current 20°C  Rating current 20°C  Rating current 35°C  Rating current 35°C  Rating current 35°C  Rating current 35°C  Rating current 40°C  Rating current 5°C  Rating current fo°C  Rating current fo°C  Rating current fo°C  Rating current fo°C  Current correction factor of rating current for 2 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 magnetic tripping with 100 Hz  Correction factor of magnetic tripping with 400 Hz  Correction factor of magnetic tripping with 60 Hz	10 k  33.4  32.6  31.8  31  30.3  29.5  28.7  28  27.2  26.4  25.7
Rating current -25°C Rating current -15°C Rating current -10°C Rating current -10°C Rating current 0°C Rating current 0°C Rating current 5°C Rating current 10°C Rating current 10°C Rating current 10°C Rating current 10°C Rating current 20°C Rating current 20°C Rating current 30°C Rating current 35°C Rating current 35°C Rating current 40°C Rating current 40°C Rating current 50°C Rating current 60°C Rating current 60°C Rating current 60°C Current correction factor of rating current for 2 devices placed side-by-side Correction factor of rating current for 3 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	32.6 31.8 31 30.3 29.5 28.7 28 27.2 26.4 25.7
Rating current -10°C Rating current -10°C Rating current -10°C Rating current -5°C Rating current 5°C Rating current 5°C Rating current 5°C Rating current 10°C Rating current 10°C Rating current 15°C Rating current 20°C Rating current 20°C Rating current 30°C Rating current 30°C Rating current 30°C Rating current 40°C Rating current 40°C Rating current 50°C Rating current 60°C Rating current 60°C Rating current 60°C Current correction factors  Correction factor of rating current for 2 devices placed side-by-side  Correction factor of rating current for 3 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 400 Hz  Correction factor of magnetic tripping with 400 Hz  Correction factor of magnetic tripping with	32.6 31.8 31 30.3 29.5 28.7 28 27.2 26.4 25.7
Rating current -15°C Rating current -0°C Rating current -5°C Rating current 0°C Rating current 0°C Rating current 10°C Rating current 10°C Rating current 10°C Rating current 15°C Rating current 20°C Rating current 20°C Rating current 30°C Rating current 30°C Rating current 30°C Rating current 40°C Rating current 40°C Rating current 55°C Rating current 55°C Rating current 50°C Rating current 50°C Rating current 60°C Rating current 60°C Rating current 60°C Current correction factors Correction factor of rating current for 2 deevices 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 magnetic tripping with	31.8 31 30.3 29.5 28.7 28 27.2 26.4 25.7
Rating current -10°C Rating current -5°C Rating current 0°C Rating current 10°C Rating current 10°C Rating current 10°C Rating current 15°C Rating current 15°C Rating current 20°C Rating current 20°C Rating current 30°C Rating current 30°C Rating current 40°C Rating current 40°C Rating current 50°C Rating current 50°C Rating current 50°C Rating current 50°C Rating current 60°C Rating current 60°C Rating current 70°C  Current correction factors  Correction factor of rating current for 2 devices placed side-by-side  Correction factor of rating current for 3 devices placed side-by-side  Correction factor of rating current for 6 devices placed side-by-side  Correction factor of magnetic tripping with	31 30.3 29.5 28.7 28 27.2 26.4 25.7
Rating current -5°C Rating current 10°C Rating current 10°C Rating current 10°C Rating current 15°C Rating current 15°C Rating current 20°C Rating current 25°C Rating current 30°C Rating current 30°C Rating current 40°C Rating current 40°C Rating current 50°C Rating current 50°C Rating current 50°C Rating current 50°C Rating current 60°C Rating current 60°C Rating current 60°C Current correction factors  Correction factor of rating current for 2 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 magnetic tripping with	30.3 29.5 28.7 28 27.2 26.4 25.7
Rating current 0°C Rating current 10°C Rating current 10°C Rating current 15°C Rating current 15°C Rating current 20°C Rating current 20°C Rating current 30°C Rating current 30°C Rating current 40°C Rating current 45°C Rating current 45°C Rating current 50°C Rating current 50°C Rating current 60°C Rating current 60°C Rating current 60°C Rating current 70°C  Current correction factors  Correction factor of rating current for 2 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	29.5 28.7 28 27.2 26.4 25.7
Rating current 5°C Rating current 10°C Rating current 15°C Rating current 20°C Rating current 25°C Rating current 30°C Rating current 35°C Rating current 35°C Rating current 40°C Rating current 55°C Rating current 50°C Rating current 50°C Rating current 50°C Rating current 60°C Rating current 60°C Rating current 70°C  Current correction factors  Correction factor of rating current for 2 devices placed side-by-side  Correction factor of rating current for 3 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  Correction factor of magnetic tripping with  Correction factor of magnetic tripping with	28.7 28 27.2 26.4 25.7
Rating current 10°C Rating current 20°C Rating current 25°C Rating current 30°C Rating current 30°C Rating current 35°C Rating current 35°C Rating current 40°C Rating current 45°C Rating current 50°C Rating current 55°C Rating current 50°C Rating current 50°C Rating current 60°C Rating current 60°C Rating current 60°C Rating current for 2 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 magnetic tripping with 100 Hz Correction factor of magnetic tripping with 200 Hz Correction factor of magnetic tripping with 400 Hz Correction factor of magnetic tripping with	28 27.2 26.4 25.7
Rating current 15°C Rating current 20°C Rating current 25°C Rating current 30°C Rating current 35°C Rating current 40°C Rating current 45°C Rating current 45°C Rating current 55°C Rating current 55°C Rating current 50°C Rating current 60°C Rating current 60°C Rating current 60°C Rating current 70°C  Current correction factors  Correction factor of rating current for 2 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 magnetic tripping with  100 Hz  Correction factor of magnetic tripping with  200 Hz  Correction factor of magnetic tripping with	27.2 26.4 25.7
Rating current 20°C Rating current 30°C Rating current 30°C Rating current 35°C Rating current 40°C Rating current 40°C Rating current 55°C Rating current 55°C Rating current 55°C Rating current 60°C Rating current 60°C Rating current 60°C Rating current 70°C  Current correction factors  Correction factor of rating current for 2 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 magnetic tripping with 100 Hz  Correction factor of magnetic tripping with 200 Hz  Correction factor of magnetic tripping with 400 Hz  Correction factor of magnetic tripping with	26.4 25.7
Rating current 35°C Rating current 30°C Rating current 40°C Rating current 40°C Rating current 45°C Rating current 55°C Rating current 55°C Rating current 60°C Rating current 60°C Rating current 65°C Rating current 67°C  Current correction factors  Correction factor of rating current for 2 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 magnetic tripping with 100 Hz  Correction factor of magnetic tripping with 200 Hz  Correction factor of magnetic tripping with 400 Hz  Correction factor of magnetic tripping with	25.7
Rating current 30°C Rating current 40°C Rating current 45°C Rating current 50°C Rating current 55°C Rating current 55°C Rating current 60°C Rating current 60°C Rating current 70°C  Current correction factors  Correction factor of rating current for 2 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 magnetic tripping with  100 Hz  Correction factor of magnetic tripping with  200 Hz  Correction factor of magnetic tripping with  400 Hz  Correction factor of magnetic tripping with	
Rating current 45°C Rating current 45°C Rating current 50°C Rating current 50°C Rating current 55°C Rating current 60°C Rating current 65°C Rating current 60°C Rating current 70°C  Current correction factors  Correction factor of rating current for 2 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 magnetic tripping with 100 Hz  Correction factor of magnetic tripping with 200 Hz  Correction factor of magnetic tripping with 400 Hz  Correction factor of magnetic tripping with	25
Rating current 40°C Rating current 50°C Rating current 50°C Rating current 60°C Rating current 60°C Rating current 60°C Rating current 70°C  Current correction factors  Correction factor of rating current for 2 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 magnetic tripping with 100 Hz  Correction factor of magnetic tripping with 400 Hz  Correction factor of magnetic tripping with 400 Hz  Correction factor of magnetic tripping with	
Rating current 50°C  Rating current 50°C  Rating current 60°C  Rating current 65°C  Rating current 70°C  Current correction factors  Correction factor of rating current for 2 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 Hz  Correction factor of magnetic tripping with	24.1
Rating current 50°C  Rating current 60°C  Rating current 65°C  Rating current 70°C  Current correction factors  Correction factor of rating current for 2 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 Hz  Correction factor of magnetic tripping with	23.4
Rating current 60°C  Rating current 65°C  Rating current 70°C  Current correction factors  Correction factor of rating current for 2 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 Hz  Correction factor of magnetic tripping with	22.6
Rating current 60°C  Rating current 65°C  Rating current 70°C  Current correction factors  Correction factor of rating current for 2 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 Hz  Correction factor of magnetic tripping with	21.8
Rating current 65°C  Rating current 70°C  Current correction factors  Correction factor of rating current for 2 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 magnetic tripping with 100 Hz  Correction factor of magnetic tripping with 200 Hz  Correction factor of magnetic tripping with 400 Hz  Correction factor of magnetic tripping with	21.1
Rating current 70°C  Current correction factors  Correction factor of rating current for 2 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 magnetic tripping with 100 Hz  Correction factor of magnetic tripping with 200 Hz  Correction factor of magnetic tripping with 400 Hz  Correction factor of magnetic tripping with 500 Hz  Correction factor of magnetic tripping with 600 Hz	20.3
Current correction factors  Correction factor of rating current for 2 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 magnetic tripping with 100 Hz  Correction factor of magnetic tripping with 200 Hz  Correction factor of magnetic tripping with 400 Hz  Correction factor of magnetic tripping with 400 Hz	19.5
Correction factor of rating current for 2 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 magnetic tripping with 100 Hz  Correction factor of magnetic tripping with 200 Hz  Correction factor of magnetic tripping with 400 Hz  Correction factor of magnetic tripping with 400 Hz	18.8
Correction factor of rating current for 2 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 magnetic tripping with 100 Hz  Correction factor of magnetic tripping with 200 Hz  Correction factor of magnetic tripping with 400 Hz  Correction factor of magnetic tripping with 400 Hz	
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 magnetic tripping with 100 Hz  Correction factor of magnetic tripping with 200 Hz  Correction factor of magnetic tripping with 400 Hz  Correction factor of magnetic tripping with 400 Hz	
5 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  Correction factor of magnetic tripping with	0.9
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  Correction factor of magnetic tripping with	0.
100 Hz  Correction factor of magnetic tripping with 200 Hz  Correction factor of magnetic tripping with 400 Hz  Correction factor of magnetic tripping with	0.8
200 Hz  Correction factor of magnetic tripping with 400 Hz  Correction factor of magnetic tripping with	1.
400 Hz  Correction factor of magnetic tripping with	1.
	1.
Dimensions	
Depth of installed product	
Height of installed product	70 mi
Width of installed product	70 mi
Frequency	
Frequency	83 mi

Power	
Total power loss under IN	3 W
Power loss per pole at In	3 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 Connection for modular devices	Blconnect
Connection	
Connection cross-sect. flexible conductor	1 / 25mm²
Connection cross-sect. rigid cable	1 / 35mm²
Connection cross-section of input and output with screws, for massive conductors	1 / 35 mm²
Connection cross section of access and exit with screws, for flexible conductor	1 / 25 mm²
Type of connection	with screw
Standards	
Standard text	EN 60898-1
Safety	
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 I²t	3
Altitude	2000 m
Air humidity protection	for all climates

-25...80 °C

Storage/transport temperature