



MBN163



MCB 1P 6kA B-63A 1M

Technical properties

Δr	chi	tec	+11	re

Architecture	
Number of protected poles	1
Number of poles	1 P
Curve	В
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	63 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	3 / 5 In
min/maxi threshold value of the DC magnetic operation	4 / 7 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 capa- city Icu under 240V AC IEC 60947-2 Electric current / temperature Rating current -25°C Rating current -15°C Rating current -10°C Rating current 0°C Rating current 5°C Rating current 10°C Rating current 25°C Rating current 30°C Rating current 30°C	10 kA 83.9 A 82.1 A 80.2 A 78.7 A 76.6 A 74.8 A 72.9 A 71.1 A 69.3 A 65.6 A 63 A 62 A
Rating current -25°C Rating current -15°C Rating current -10°C Rating current -5°C Rating current 0°C Rating current 5°C Rating current 5°C Rating current 20°C Rating current 20°C Rating current 20°C Rating current 20°C	82.1 A 80.2 A 78.7 A 76.6 A 74.8 A 72.9 A 71.1 A 69.3 A 67.4 A 65.6 A
Rating current -20°C Rating current -15°C Rating current -5°C Rating current 0°C Rating current 5°C Rating current 5°C Rating current 10°C Rating current 20°C Rating current 20°C Rating current 20°C	82.1 A 80.2 A 78.7 A 76.6 A 74.8 A 72.9 A 71.1 A 69.3 A 67.4 A 65.6 A
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Rating current -10°C Rating current -5°C Rating current 0°C Rating current 5°C Rating current 10°C Rating current 20°C Rating current 20°C Rating current 25°C	78.7 A 76.6 A 74.8 A 72.9 A 71.1 A 69.3 A 67.4 A 65.6 A
Rating current -5°C Rating current 0°C Rating current 5°C Rating current 10°C Rating current 15°C Rating current 20°C Rating current 20°C	76.6 A 74.8 A 72.9 A 71.1 A 69.3 A 67.4 A 65.6 A
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Rating current 15°C Rating current 20°C Rating current 25°C	69.3 A 67.4 A 65.6 A
Rating current 20°C	67.4 A 65.6 A
Rating current 25°C	65.6 /
	63 /
Rating current 30°C	
	62 /
Rating current 35°C	
Rating current 40°C	60.1 /
Rating current 45°C	58.3 /
Rating current 50°C	57 /
Rating current 55°C	54.7 /
Rating current 60°C	52.8 /
Rating current 65°C	51 /
Rating current 70°C	49.2
Current correction factors	
Correction factor of rating current for 2 levices placed side-by-side	-
Correction factor of rating current for 3 devices placed side-by-side	0.9
Correction factor of rating current for 4 and devices placed side-by-side	0.9
Correction factor of rating current for 6 levices placed side-by-side	0.8
Correction factor of magnetic tripping with .00 Hz	1.3
Correction factor of magnetic tripping with	1.3
Correction factor of magnetic tripping with	1.5
Correction factor of magnetic tripping with 50 Hz	
Dimensions	
Depth of installed product	70 mr
leight of installed product	83 mr
Vidth of installed product	17.5 mr
requency	
requency	50 to 60 H

Power loss per pole at In 7.4 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 7.2 services 81 services 81 services 17.3 service	Power	
Electric endurance in number of cycles 4000 Number of mechanical operations 20000 Installation, mounting Type of top connection for modular devices with screw 7 ghtening torque 2,8Nm 7 year of Bottom Connection for modular devices Blconnect Connection Connection Connection of input and output with screws, for massive conductors 1,735 mm² Connection cross-section of access and exit with screws, for flexible conductor 1,25 mm² Type of connection with screws Standards Standards Standard text EN 60898-1 Safety Protection index IP IP20 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 Aktitude 2000 m	Total power loss under IN	7.4 W
Electric endurance in number of cycles 4000 Number of mechanical operations 20000 Installation, mounting Type of top connection for modular devices with screw 7:19th or 10 page 12.8Nm 7:19th or 1	Power loss per pole at In	7.4 W
Number of mechanical operations 20000 Installation, mounting Type of top connection for modular devices with screw 71 ightening torque 2.8Nm 72 peo f Bottom Connection for modular devices Blconnect Connection Connection Connection 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 screws Standards Standards Standard text EN 60898-1 Safety Protection index IP IP20 RoHS conform Yes Halogen free No Use conditions Operating temperature -2570 °C Degree of pollution according to IEC 60664 / IEC 60947-2 Class of energy limitation I²t 3 Altitude 2000 m	Endurance	
Installation, mounting Type of top connection for modular devices with screw 2,8Nm Tightening torque 2,8Nm Type of Bottom Connection for modular devices Blconnect Connection Connection 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 Standards Standard text EN 60898-1 Safety Protection index IP IP20 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	Electric endurance in number of cycles	4000
Type of top connection for modular devices Tightening torque 2,8Nm Type of Bottom Connection for modular devices Biconnect Connection Connection 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 Type of connection Standards Standards Standard text EN 60898-1 Safety Protection index IP RoHS conform Yes Halogen free No Use conditions Operating temperature Degree of pollution according to IEC 60664 / IEC 60947-2 Class of energy limitation I²t 3 Altitude 2000 m	Number of mechanical operations	20000
Tightening torque 2,8Nm Type of Bottom Connection for modular devices Blconnect Connection Connection 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 Protection index IP IP20 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	Installation, mounting	
Type of Bottom Connection for modular devices Connection 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 Standards Safety Protection index IP IP20 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	Type of top connection for modular devices	with screw
Connection Connection 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 Standards Standard text EN 60898-1 Safety Protection index IP IP20 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	Tightening torque	2,8Nm
Connection cross-section of input and output with screws, for massive conductors Connection cross section of access and exit with screws, for flexible conductor Type of connection Standards Standard text EN 60898-1 Safety Protection index IP RoHS conform Yes Halogen free No Use conditions Operating temperature -2570 °C Degree of pollution according to IEC 60664 / IEC 60947-2 Class of energy limitation I²t 3 Altitude Altitude	Type of Bottom Connection for modular devices	Blconnect
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 Protection index IP RoHS conform Yes Halogen free No Use conditions Operating temperature -2570 °C Degree of pollution according to IEC 60664 / IEC 60947-2 Class of energy limitation I²t 3 Altitude Altitude	Connection	
with screws, for flexible conductor 1 / 25 mm² Type of connection with screw Standards Standard text EN 60898-1 Safety Protection index IP IP20 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	Connection cross-section of input and output with screws, for massive conductors	1 / 35 mm²
Standard text EN 60898-1 Safety Protection index IP IP20 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	Connection cross section of access and exit with screws, for flexible conductor	1 / 25 mm²
Standard text EN 60898-1 Safety Protection index IP IP20 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	Type of connection	with screw
Safety Protection index IP IP20 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	Standards	
Protection index IP IP20 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	Standard text	EN 60898-1
RoHS conform Yes Halogen free No Use conditions Operating temperature -2570 °C Degree of pollution according to IEC 60664 / IEC 60947-2 Class of energy limitation I²t 3 Altitude	Safety	
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	Protection index IP	IP20
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	RoHS conform	Yes
Operating temperature -2570 °C Degree of pollution according to IEC 60664 / IEC 60947-2 2 Class of energy limitation I²t 3 Altitude 2000 m	Halogen free	No
Degree of pollution according to IEC 60664 / IEC 60947-2 2 Class of energy limitation I²t 3 Altitude 2000 m	Use conditions	
IEC 60947-2 2 Class of energy limitation I²t 3 Altitude 2000 m	Operating temperature	-2570 °C
Altitude 2000 m	Degree of pollution according to IEC 60664 / IEC 60947-2	2
	Class of energy limitation I ² t	3
Air humidity protection for all climates	Altitude	2000 m
	Air humidity protection	for all climates

-25...80 °C

Storage/transport temperature