



MBN320



**MCB 3P 6kA B-20A 3M**

**Technical properties**

**Architecture**

Number of protected poles	3
Number of poles	3 P
Type of pole	3 P

**Functions**

Concurrently switching N-neutral	No
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**Configuration**

Number of modules	3
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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	6 kA
Rated operational voltage $U_e$	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	20 A
Rated service breaking capacity $I_{cs}$ AC according IEC 60898-1	6 kA
min/maxi threshold value of the AC thermal operation	1.13 / 1.45 $I_n$
Magnetic regulating current	3 / 5 $I_n$
min/maxi threshold value of the DC magnetic operation	4 / 7 $I_n$
min/maxi threshold value of the DC thermal operation	1.13 / 1.45 $I_n$
Breaking capacity on 1 pole for IT 400V NF 60947-2	3 kA
Rated short circuit breaking capacity $I_{cn}$ under 400V AC according IEC60898-1	6 kA

Rated ultimate short-circuit breaking capacity Icu under 400V AC IEC 60947-2	10 kA
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Rated ultimate short-circuit breaking capacity Icu under 415V AC IEC 60947-2	10 kA
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### Electric current / temperature

Rating current -25°C	25.3 A
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Rating current -20°C	24.9 A
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Rating current -15°C	24.4 A
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Rating current -10°C	24 A
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Rating current -5°C	23.5 A
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Rating current 0°C	23.1 A
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Rating current 5°C	22.6 A
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Rating current 10°C	22.1 A
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Rating current 15°C	21.6 A
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Rating current 20°C	21.1 A
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Rating current 25°C	20.5 A
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Rating current 30°C	20 A
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Rating current 35°C	19.4 A
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Rating current 40°C	18.7 A
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Rating current 45°C	18 A
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Rating current 50°C	17.3 A
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Rating current 55°C	16.6 A
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Rating current 60°C	15.8 A
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Rating current 65°C	15 A
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Rating current 70°C	14.1 A
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### Current correction factors

Correction factor of rating current for 2 devices placed side-by-side	1
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Correction factor of rating current for 3 devices placed side-by-side	0.95
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Correction factor of rating current for 4 and 5 devices placed side-by-side	0.9
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Correction factor of rating current for 6 devices placed side-by-side	0.85
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Correction factor of magnetic tripping with 100 Hz	1.1
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Correction factor of magnetic tripping with 200 Hz	1.2
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Correction factor of magnetic tripping with 400 Hz	1.5
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Correction factor of magnetic tripping with 60 Hz	1
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### Dimensions

Depth of installed product	70 mm
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Height of installed product	83 mm
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Width of installed product	52.5 mm
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### Frequency

Frequency	50 to 60 Hz
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**Power**

Total power loss under IN	8.9 W
Power loss per pole at In	3.1 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-section of input and output with screws, for massive conductors	1 / 35 mm <sup>2</sup>
Connection cross section of access and exit with screws, for flexible conductor	1 / 25 mm <sup>2</sup>

**Standards**

Standard text	EN 60898-1
European directive WEEE	concerned

**Safety**

Protection index IP	IP20
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**Use conditions**

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