



MSN120

MCB 1P 6kA C-20A 1M

Technical properties

Architecture

Neutral position	without neutral
Number of poles	1 P
Type of pole	1 P
Fixing mode	DIN rail type O (symmetrical)
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 operational voltage Ue	240 / 415 V
Type of supply voltage	AC

Voltage

Rated insulation voltage	500 V
Max operating voltage	415 V
Rated impulse withstand voltage	4000 V

Electric current

Rated current	20 A
min/maxi threshold value of the AC thermal operation	1.13 / 1.45 I _n
Magnetic regulating current	5 / 10 I _n
Rated short circuit breaking capacity I _{cn} under 230V AC according IEC60898-1	6 kA
Rated short circuit breaking capacity I _{cn} under 240V AC according IEC 60898-1	6 kA

Electric current / temperature

Rating current -25°C	28.03 A
Rating current -20°C	27.39 A
Rating current -15°C	26.74 A

Rating current -10°C	26.41 A
Rating current -5°C	25.45 A
Rating current 0°C	24.81 A
Rating current 5°C	24.17 A
Rating current 10°C	23.52 A
Rating current 15°C	22.88 A
Rating current 20°C	22.23 A
Rating current 25°C	21.59 A
Rating current 30°C	20 A
Rating current 35°C	20.3 A
Rating current 40°C	19.66 A
Rating current 45°C	19.01 A
Rating current 50°C	19 A
Rating current 55°C	17.73 A
Rating current 60°C	17.08 A
Rating current 65°C	16.44 A
Rating current 70°C	15.79 A

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

Dimensions

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

Power

Maximum power loss per pole according to the product standard	4.5 W
Power loss per pole at In	2.1 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 rail clip for modular devices	plastic
Type of Bottom Connection for modular devices	Blconnect
Top removability for modular devices	No
Bottom removability for modular devices	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
Type of connection	with screw

Equipment

Can be accessorized	Yes
With transparent product label holder	Yes

Standards

Standard text	IEC 60898-1
European directive WEEE	concerned

Safety

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

Use conditions

Operating temperature	-25...70 °C
Degree of pollution according to IEC 60664 / IEC 60947-2	2
Class of energy limitation I ² t	3
Altitude	2000 m
Storage/transport temperature	-25...80 °C

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Temperature of calibration	30 °C
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