Product data sheet MSN220



MSN220

MCB 2P 6kA C-20A 2M

Architecture

Neutral position	without neutral
Number of poles	2 P
Type of pole	2 P
Fixing mode	DIN rail type O (symmetrical)
Curve	С
Functions	
Concurrently switching N-neutral	no
Compatibility	
Compatible with DIN rail mounting	yes
Controls and indicators	
With Contact position indicator	no
With fault indicator	no
Connectivity	
Top connection alignement for modular devices	Aligned terminal
Bottom connection alignement for modular devices	Aligned terminal
Main electrical features	
Rated operational voltage Ue	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
Rated service breaking capacity Ics AC according IEC 60898-1	6 kA
min/maxi threshold value of the AC thermal operation	n 1,13 / 1,45 In

60898-T	
min/maxi threshold value of the AC thermal operation	1,13 / 1,45 ln
Magnetic regulating currrent	5 / 10 ln

Technical Properties	
Rated short circuit breaking capacity Icn under 400V AC according IEC60898-1	6 kA
Rated short circuit breaking capacity Icn under 415V AC according IEC 60898-1	6 kA
Rated service breaking capacity Ics under 415V AC according IEC 60898-1	6 kA

Electric current / temperature

Rating current -25°C	27,36 A
Rating current -20°C	26,7 A
Rating current -15°C	26,03 A
Rating current -10°C	25,4 A
Rating current -5°C	24,71 A
Rating current 0°C	24,05 A
Rating current 5°C	23,39 A
Rating current 10°C	22,73 A
Rating current 15°C	22,07 A
Rating current 20°C	21,41 A
Rating current 25°C	20,75 A
Rating current 30°C	20 A
Rating current 35°C	19,42 A
Rating current 40°C	18,76 A
Rating current 45°C	18,1 A
Rating current 50°C	17,5 A
Rating current 55°C	16,78 A
Rating current 60°C	16,12 A
Rating current 65°C	15,46 A
Rating current 70°C	14,8 A

Current correction factors

Correction factor of rating current for 2 devices placed 1 side-by-side	
Correction factor of rating current for 3 devices placed 0,95 side-by-side	
Correction factor of rating current for 4 and 5 devices 0,9 placed side-by-side	
Correction factor of rating current for 6 devices placed 0,85 side-by-side	
Frequency	

Frequency

Power

Maximum power loss per pole according to the	4,5 W
product standard	
Total power loss under IN	5,57 W
Power loss per pole at In	2,85 W

50 to 60 Hz

Endurance

Electric endurance in number of cycles	4000
Number of mechanical operations	20000

Dimensions

Depth of installed product	70 mm	
Height of installed product	83 mm	
Width of installed product	35 mm	

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
360° product mounting position	yes

Connection

Connection cross-section at output with screw, for flexible conductor	1 / 25 mm²
Connection cross-section at output with screw, for massive conductor	1 / 35 mm²
Connection cross-section for rigid conductor, upstream terminals with screws	1 / 35 mm²
Connection cross-section of the access with screws, with flexible conductor	1 / 25 mm²
Downstream cage clamp delivery status	opened
Upstream cage clamp delivery status	opened
Nominal tightening torque bottom terminal	2,8 Nm
Nominal tightening torque top terminal	2,8 Nm

Equipment

Can be accessorized	yes
Accept terminal cover	no
With transparent product label holder	yes

Standards

Standard text	IEC 60898-1, AS/NZS 60898-1
European directive WEEE	not concerned

Safety

Protection index IP	IP20	

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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