



MKN510



Circuit breaker 1P+N 6kA B-characteristic 10A 1 module

Miniature circuit-breaker in narrow design (1PLE) according to OVE EN 60898-1 and DIN VDE 0641 part 11/8.92, contact protection IP2x according to DIN VDE 0106 part 100 with OVE symbol. LS with time-delayed thermal release for overload protection and electromagnetic release for short-circuit protection. Suitable for retrofitting of additional devices (mounting without tools).

Labelling option directly on the unit and individual removal from the busbar system by unlocking the top-hat rail quick-release fastening.

Technical characteristics

Architecture

Neutral position	right
Number of protected poles	1
Number of poles	2 P
Type of pole	1P+N
Auslösercharakteristik	B

Function

Concurrently switching N-neutral	yes
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Connectivity

Top connection alignment for modular devices	Shifted terminal
Bottom connection alignment for modular devices	Shifted terminal

Main electrical features

Rated short circuit breaking capacity I_{cn} AC according IEC60898-1	6 kA
Rated operational voltage U_e	230 / 240 V
Type of supply voltage	AC
Frequency	50/60 Hz

Voltage

Rated insulation voltage	500 V
Max. operating voltage	253 V
Rated impulse withstand voltage	4000 V

Current

Rated current	10 A
Rated service breaking capacity I_{cs} AC according IEC 60898-1	6 kA
Min/max. threshold value of the AC thermal operation	1,13 / 1,45 I_n
Magnetic regulating current	3 / 5 I_n
Rated short circuit breaking capacity I_{cn} under 230V AC according IEC60898-1	6 kA

Current / Temperature

Rated current -25° C	13 A
Rated current -20° C	12,8 A
Rated current -15° C	12,5 A
Rated current -10° C	12,3 A
Rated current -5° C	12 A
Rated current 0° C	11,8 A
Rated current 5° C	11,5 A
Rated current 10° C	11,2 A
Rated current 15° C	10,9 A
Rated current 20° C	10,6 A
Rated current 25° C	10,3 A
Rated current 30° C	10 A
Rated current 35° C	9,7 A
Rated current 40° C	9,3 A
Rated current 45° C	9 A
Rated current 50° C	8,6 A
Rated current 55° C	8,3 A
Rated current 60° C	7,9 A
Rated current 65° C	7,5 A
Rated current 70° C	7 A

Current correction factor

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
Correction factor of magnetic tripping with 100 Hz	1,1
Correction factor of magnetic tripping with 200 Hz	1,2
Correction factor of magnetic tripping with 400 Hz	1,5
Correction factor of magnetic tripping with 60 Hz	1

Frequency

Frequency	50 to 60 Hz
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Power

Total power loss under I _N	2,4 W
Power loss per pole at I _N	2,1 W

Endurance

Electric endurance in number of cycles	1000
Number of mechanical operations	20000

Dimensions

Depth of installed product	70 mm
Height of installed product	84,7 mm
Width of installed product	17,5 mm

Mounting

Type of top connection for modular devices	with screw
Tightening torque	1,9Nm
Type of top rail clip for modular devices	NA
Type of bottom rail clip for modular devices	plastic
Type of bottom connection for modular devices	with screw
Top removability for modular devices	no
Bottom removability for modular devices	yes
Suitable for flush-mounting	yes
360° product mounting position	yes

Connection

Connection cross-section at output with screw, for flexible conductor	1 / 16 mm ²
Connection cross-section at output with screw, for massive conductor	1 / 25 mm ²
Connection cross-section for rigid conductor, upstream terminals with screws	1 / 25 mm ²
Connection cross-section of the access with screw, with flexible conductor	1 / 16 mm ²
Connection cross-section of input and output with screws, for massive conductors	1 / 25 mm ²
Connection cross-section of access and exit with screws, for flexible conductor	1 / 16 mm ²
Type of connection	with screw

Standards

Standard text	EN 60898-1
European directive WEEE	concerned

Safety

Protection index IP	IP20
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Usage 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
Air humidity protection	for all climates
Storage/transport temperature	-25...80 °C