



HMX163

MCB 1P 50kA C-63A 1.5M

Technical properties

Architecture

Number of protected poles	1
Number of poles	1 P
Type of pole	1 P
Curve	C

Functions

Concurrently switching N-neutral	No
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Configuration

Number of modules	1.5
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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	50 kA
Rated operational voltage U_e	240 / 415 V
Type of supply voltage	AC
Frequency	50/60 Hz

Voltage

Rated insulation voltage	500 V
Rated impulse withstand voltage	6000 V

Electric current

Rated current	63 A
min/maxi threshold value of the AC thermal operation	1.05 / 1.3 I_n
Magnetic regulating current	5 / 10 I_n
Rating current -10°C according to IEC 60947	83.75 A
Rating current -15°C according to IEC 60947	85.55 A
Rating current -20°C according to IEC 60947	87.31 A
Rating current -25°C according to IEC 60947	89.04 A
Rating current -5°C according to IEC 60947	81.92 A

Rating current 0°C according to IEC 60947	80.03 A
Rating current 10°C according to IEC 60947	76.13 A
Rating current 15°C according to IEC 60947	74.11 A
Rating current 20°C according to IEC 60947	72.02 A
Rating current 25°C according to IEC 60947	69.88 A
Rating current 30°C according to IEC 60947	67.66 A
Rating current 35°C according to IEC 60947	65.37 A
Rating current 40°C according to IEC 60947	63 A
Rating current 45°C according to IEC 60947	60.53 A
Rating current 5°C according to IEC 60947	78.11 A
Rating current 50°C according to IEC 60947	57.96 A
Rating current 55°C according to IEC 60947	55.27 A
Rating current 60°C according to IEC 60947	52.45 A
Rating current 65°C according to IEC 60947	49.46 A
Rating current 70°C according to IEC 60947	46.28 A
Rated ultimate short-circuit breaking capacity Icu AC IEC 60947-2	50 kA
Breaking capacity on 1 pole for IT 400V NF 60947-2	4.5 kA
Breaking capacity on 1 pole for IT 415V NF 60947-2	4.5 kA
Rated service breaking capacity Ics AC according IEC 60947-2	50 %
Rated ultimate short-circuit breaking capacity Icu under 230V AC IEC 60947-2	50 kA
Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2	50 kA
Rated ultimate short-circuit breaking capacity Icu under 400V AC IEC 60947-2	50 kA
Rated ultimate short-circuit breaking capacity Icu under 415V AC IEC 60947-2	50 kA
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
Height of installed product	90 mm
Width of installed product	27 mm
Frequency	
Frequency	50 to 60 Hz
Power	
Total power loss under IN	5.36 W
Power loss per pole at In	5.36 W

Subject to technical modifications

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	3,5 to 5Nm
Type of top rail clip for modular devices	Plastic
Type of bottom rail clip for modular devices	plastic
Type of Bottom Connection for modular devices	with screw
Top removability for modular devices	Yes
Bottom removability for modular devices	Yes

Connection

Connection cross-section at output with screw, for flexible conductor	1 / 50 mm ²
Connection cross-section at output with screw, for massive conductor	1 / 70 mm ²
Connection cross-sect. flexible conductor	50mm ²
Connection cross-sect. rigid cable	70mm ²
Connection cross-section for rigid conductor, upstream terminals with screws	1 / 70 mm ²
Connection cross-section of the access with screws, with flexible conductor	1 / 50 mm ²
Connection cross-section of input and output with screws, for massive conductors	1 / 70 mm ²
Connection cross section of access and exit with screws, for flexible conductor	1 / 50 mm ²
Type of connection	terminal with tightening compensation system

Standards

Standard text	IEC 60947-2
European directive WEEE	concerned

Safety

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

Use conditions

Degree of pollution according to IEC 60664 / IEC 60947-2	3
Class of energy limitation I ² t	3
Altitude	2000 m
Air humidity protection	for all climates

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Temperature of calibration	40 °C
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