



HMD480



## MCB 4P 15kA D-80A 6M

## **Technical characteristics**

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Architecture	
Number of protected poles	4
Number of poles	4 P
Type of pole	4 P
Functions	
Concurrently switching N-neutral	No
Configuration	
Number of modules	6
Connectivity	
Top connection alignement for modular devices	Aligned terminal
Bottom connection alignement for modular devices	Aligned terminal
Main electrical features	
Rated short circuit breaking capacity Icn AC according IEC60898-1	15 kA
Rated operational voltage Ue	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	80 A
Rated service breaking capacity Ics AC according IEC 60898-1	7.5 kA
min/maxi threshold value of the AC thermal operation	1.13 / 1.45 In
Magnetic regulating currrent	10 / 20 In
Rating current -10°C according to IEC 60947	112 A
Rating current -15°C according to IEC 60947	115 A
Rating current -20°C according to IEC 60947	118 A
Rating current -25°C according to IEC 60947	122 A
Rating current -5°C according to IEC 60947	109 A

Rating current 0°C according to IEC 60947	106 A
Rating current 10°C according to IEC 60947	99.2 A
Rating current 15°C according to IEC 60947	96 A
Rating current 20°C according to IEC 60947	92.8 A
Rating current 25°C according to IEC 60947	89.6 A
Rating current 30°C according to IEC 60947	86.4 A
Rating current 35°C according to IEC 60947	83.2 A
Rating current 40°C according to IEC 60947	80 A
Rating current 45°C according to IEC 60947	77.6 A
Rating current 5°C according to IEC 60947	102 A
Rating current 50°C according to IEC 60947	75.1 A
Rating current 55°C according to IEC 60947	72.6 A
Rating current 60°C according to IEC 60947	70 A
Rating current 65°C according to IEC 60947	67.2 A
Rating current 70°C according to IEC 60947	64.3 A
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 short circuit breaking capacity Icn under 230V AC according IEC60898-1	15 kA
Rated short circuit breaking capacity Icn under 400V AC according IEC60898-1	15 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	15 kA
Rated ultimate short-circuit breaking capacity Icu under 240V AC IEC 60947-2	15 kA
Rated ultimate short-circuit breaking capacity Icu under 400V AC IEC 60947-2	15 kA
Rated ultimate short-circuit breaking capacity Icu under 415V AC IEC 60947-2	15 kA
Electric current / temperature	
Rating current -25°C	115 A
Rating current -20°C	112 A
Rating current -15°C	109 A
Rating current -10°C	106 A
Rating current -5°C	102 A
Rating current 0°C	99.2 A
Rating current 5°C	96 A
Rating current 10°C	92.8 A
Rating current 15°C	89.6 A
Rating current 20°C	86.4 A
Rating current 25°C	83.2 A
Rating current 30°C	80 A
Rating current 35°C	77.6 A
Rating current 40°C	75.1 A
Rating current 45°C	72.6 A
Rating current 50°C	70 A
Subject to technical modifications	

Rating current 55°C	67.2 A
Rating current 60°C	64.3 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
Height of installed product	90 mm
Width of installed product	106 mm
Frequency	
Frequency	50 to 60 Hz
Power	
Total power loss under IN	25.71 W
Power loss per pole at In	6.68 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
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 mm²
Connection cross-section at output with screw, for massive conductor	1 / 70 mm²
Connection cross-section for rigid conductor, upstream terminals with screws	1 / 70 mm²
Connection cross-section of the access with screws, with flexible conductor	1 / 50 mm²
Connection cross-section of input and output with screws, for massive conductors	1 / 70 mm²
Connection cross section of access and exit with screws, for flexible conductor	1 / 50 mm²
Standards	

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 <sup>2</sup> t	3
Altitude	2000 m
temperatur	
Temperature of calibration	30 °C