



HMD380

**MCB 3P 15kA D-80A 4.5M**

**Technical Features**

**Architecture**

Type of pole	3P
Curve	D

**Voltage**

Rated operational voltage $U_e$	415 - 415 V
Type voltage supply	AC
Rated insulation voltage $U_i$	500 V
Rated impulse withstand voltage $U_{imp}$	6000 V

**Frequency**

Frequency	50 - 60 Hz
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**Installation, mounting**

Nominal tightening torque	3.5 - 5.0 Nm
Type of top connection for modular devices	Screw terminal
Type of bottom connection for modular devices	Screw terminal

**Electric current**

Rated current	80 A
Rated service breaking capacity $I_{cs}$ AC according to IEC 60898-1	7.50 kA
Rated short-circuit breaking capacity $I_{cn}$ under 230 V AC according to IEC 60898-1	15 kA
Rated ultimate short-circuit breaking capacity $I_{cu}$ under 230 V AC IEC 60947-2	15 kA
Rated ultimate short-circuit breaking capacity $I_{cu}$ under 400 V AC IEC 60947-2	15 kA
Rated current at -20°C	112 A
Rated current -15°C	109 A
Rated current -10°C	106 A
Rated current -5°C	102 A
Rated current at 0°C	99.20 A
Rated current 5°C	96 A
Rated current 10°C	92.80 A
Rated current 15°C	89.60 A
Rated current at 20°C	86.40 A
Rated current 25°C	83.20 A
Rated current 30°C	80 A
Rated current 35°C	77.60 A
Rated current at 40°C	75.10 A
Rated current at 45°C	72.60 A
Rated current at 50°C	70 A
Rated current 55°C	67.20 A
Rated current 60°C	64.30 A

**Main electrical attributes**

Rated short-circuit breaking capacity $I_{cn}$ AC according to IEC 60898-1	15 kA
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**Installation, mounting**

Nominal tightening torque down terminal	3.60 - 3.60 Nm
Nominal tightening torque top terminal	3.60 - 3.60 Nm

**Safety**

Ingress Protection (IP) class	IP20
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**Power**

Total power loss under $I_N$	20.32 W
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**Endurance**

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

**Connection**

Cross-section of input and output with screws, for massive conductors	1 - 70 mm <sup>2</sup>
Cross-section of input and output with screws, for flexible conductors	1 - 50 mm <sup>2</sup>
Cross-section flexible conductor	50 mm <sup>2</sup>
Cross-section rigid conductor	70 mm <sup>2</sup>

**Use conditions**

Degree of pollution according to IEC 60664 / IEC 60947-2	3
Air humidity protection	For all climates
Operating temperature	-25 - 70 °C

**Capacity**

Number of modules	4.50
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**Connectivity**

Top connection alignment for modular devices	Aligned terminal
Down connection alignment for modular devices	Aligned terminal

**Dimensions**

Height	90 mm
Width	80 mm
Depth	70 mm

**Sustainability**

REACH-SVHC free	Yes
RoHS conform	Yes

**Illustrations | Drawings**

