Specifications



Eaton 242180

Eaton Moeller series xPole - PLS6/M MCB. PLSM, 1-pole, tripping characteristic: B, rated current In: 16 A, rated switching capacity IEC/EN 60898-1: 10 kA

General specifications

PRODUCT NAME	Eaton Moeller series xPole - PLS6/M MCB
CATALOG NUMBER	242180
MODEL CODE	PLSM-B16-MW
EAN	4015082421809
PRODUCT LENGTH/DEPTH	80 mm
PRODUCT HEIGHT	75 mm
PRODUCT WIDTH	17.5 mm
PRODUCT WEIGHT	0.104 kg
COMPLIANCES	RoHS conform

Powering Business Worldwide

Delivery program

APPLICATION	• Switchgear for residential and commercial applications • xPole - Switchgear for residential and commercial applications
NUMBER OF POLES	Single-pole
NUMBER OF POLES (TOTAL)	1
NUMBER OF POLES (PROTECTED)	1
TRIPPING CHARACTERISTIC	B
RELEASE CHARACTERISTIC	B
AMPERAGE RATING	16 A
TYPE	• Miniature circuit breaker • PLSM

Technical data - electrical

VOLTAGE TYPE	AC
RATED OPERATIONAL VOLTAGE (UE) - MAX	230 V
RATED INSULATION VOLTAGE (UI)	440 V
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	4 kV
FREQUENCY RATING - MIN	50 Hz
FREQUENCY RATING - MAX	60 Hz
RATED SWITCHING CAPACITY (IEC/EN 60898-1)	10 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY (EN 60898) AT 230 V	10 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY (EN 60898) AT 400 V	10 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY (IEC 60947-2) AT 230 V	0 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY (IEC 60947-2) AT 400 V	0 kA
OVERVOLTAGE CATEGORY	III
POLLUTION DEGREE	2

Technical data - mechanical

WIDTH IN NUMBER OF MODULAR SPACINGS	1
BUILT-IN DEPTH	70.5 mm
DEGREE OF PROTECTION	IP20
CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MIN	1 mm^2
CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MAX	25 mm^2
CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MIN	1 mm^2
CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MAX	25 mm^2

Design verification as per IEC/EN 61439 - technical data

RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	16 A
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT	0 W
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT	2.2 W
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT	0 W
HEAT DISSIPATION CAPACITY	0 W
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT OPERATING TEMPERATURE - MAX	75 °C

Design verification as per IEC/EN 61439

10.2.2 CORROSION RESISTANCE	Meets the product standard's requirements.
10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES	Meets the product standard's requirements.
10.2.3.2 VERIFICATION OF RESISTANCE OF INSULATING MATERIALS TO NORMAL HEAT	Meets the product standard's requirements.
10.2.3.3 RESIST. OF INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS	Meets the product standard's requirements.
10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION	Meets the product standard's requirements.
10.2.5 LIFTING	Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 MECHANICAL IMPACT	Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 INSCRIPTIONS	Meets the product standard's requirements.
10.3 DEGREE OF PROTECTION OF ASSEMBLIES	Does not apply, since the entire switchgear needs to be evaluated.
10.4 CLEARANCES AND CREEPAGE DISTANCES	Meets the product standard's requirements.
10.5 PROTECTION AGAINST ELECTRIC SHOCK	Does not apply, since the entire switchgear needs to be evaluated.
10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS	Does not apply, since the entire switchgear needs to be evaluated.
10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS	Is the panel builder's responsibility.
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	Is the panel builder's responsibility.
10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH	Is the panel builder's responsibility.
10.9.3 IMPULSE WITHSTAND VOLTAGE	Is the panel builder's responsibility.
10.9.4 TESTING OF ENCLOSURES MADE OF	Is the panel builder's responsibility.

Additional information

CURRENT LIMITING CLASS	3
FEATURES	Additional equipment possible
SPECIAL FEATURES	Ambient temperature hint: a 1 °C increase results in a 0.5% linear reduction of current carrying capacity
USED WITH	PLSM Miniature circuit breaker

INSULATING MATERIAL	
10.10 TEMPERATURE RISE	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 SHORT-CIRCUIT RATING	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 ELECTROMAGNETIC COMPATIBILITY	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 MECHANICAL FUNCTION	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Resources

CATALOGUES	eaton-xpole-pls6-mcb-catalog-ca019065en-en-us.pdf eaton-xpole-protective-devices-catalog-ca019014en-en-us.pdf eaton-xpole-plsm-mcb-catalog-ca019064en-en-us.pdf
CHARACTERISTIC CURVE	eaton-xpole-mmc4-6-m-mcb-characteristic-curve.jpg
DECLARATIONS OF CONFORMITY	eaton-mcb-declaration-of-conformity-eu250405en.pdf
DRAWINGS	eaton-xpole-mmc4-6-m-mcb-dimensions.jpg eaton-xpole-mmc4-6-m-mcb-3d-drawing-006.jpg
ECAD MODEL	ETN.PLSM-B16-MW.edz
INSTALLATION INSTRUCTIONS	eaton-rccb-rcbo-g9-il019140zu.pdf
MCAD MODEL	pls_1p.stp pls_1p.dwg
PEP ECO-PASSPORT	EATO-00046-V01.01-EN
WIRING DIAGRAMS	eaton-xpole-mmc4-6-m-mcb-wiring-diagram-002.jpg

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	

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