

Specifications

Photo is representative

Eaton 174497

Eaton Moeller series xEffect - AZ MCB.
Miniature circuit breaker (MCB), 50A, 2p,
type B characteristic

General specifications

PRODUCT NAME	Eaton Moeller series xEffect - AZ MCB
CATALOG NUMBER	174497
MODEL CODE	AZ-2-B50
EAN	4015081709533
PRODUCT LENGTH/DEPTH	75 mm
PRODUCT HEIGHT	90 mm
PRODUCT WIDTH	54 mm
PRODUCT WEIGHT	0.451 kg
COMPLIANCES	RoHS conform
CERTIFICATIONS	EN45545-2 IEC 61373
GLOBAL CATALOG	174497

Product specifications

USED WITH	Miniature circuit breaker AZ
AMPERAGE RATING	50 A
FEATURES	Additional equipment possible
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.
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.

Resources

APPLICATION NOTES	eaton-quality-standards-for-railway-applications-application-paper-ap003005en-en-us.pdf eaton-maximum-cable-lengths-for-eatons-protective-devices-brochure-br034006en-en-us.pdf
BROCHURES	eaton-pdd-railrolling-stock-brochure-br011002en-en-us.pdf
CHARACTERISTIC CURVE	eaton-xeffect-az-mcb-characteristic-curve.jpg eaton-xeffect-az-mcb-characteristic-curve-003.jpg
DECLARATIONS OF CONFORMITY	DA-DC-03_AZ
DRAWINGS	eaton-xpole-mmct-mcb-dimensions.jpg eaton-xeffect-az-mcb-3d-drawing-002.jpg eaton-xeffect-az-mcb-3d-drawing.jpg
ECAD MODEL	ETN.AZ-2-B50.edz
INSTALLATION INSTRUCTIONS	IL019148ZU
MCAD MODEL	eaton-az_mcb_2p-3d-model.stp eaton-az_mcb_2p-drawing.dwg
WIRING DIAGRAMS	eaton-xpole-mmcc4-6-m-mcb-wiring-diagram-003.jpg

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 INSULATING MATERIAL	Is the panel builder's responsibility.
POLLUTION DEGREE	2
DEGREE OF PROTECTION	IP20
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT	10.2 W
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	4 kV
TRIPPING CHARACTERISTIC	B
AMBIENT OPERATING TEMPERATURE - MAX	55 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
BUILT-IN DEPTH	75 mm
CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MAX	50 mm ²
CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MIN	2.5 mm ²

CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MAX	50 mm ²
CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MIN	2.5 mm ²
CURRENT LIMITING CLASS	3
FREQUENCY RATING - MAX	60 Hz
FREQUENCY RATING - MIN	50 Hz
HEAT DISSIPATION CAPACITY	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT	5.1 W
WIDTH IN NUMBER OF MODULAR SPACINGS	3
VOLTAGE TYPE	AC
OVERVOLTAGE CATEGORY	III
NUMBER OF POLES	Two-pole
RELEASE CHARACTERISTIC	B
TYPE	<ul style="list-style-type: none"> • AZ • Miniature circuit breaker
SPECIAL FEATURES	Ambient temperature hint: a 1 °C increase results in a 0.5% linear reduction of current carrying capacity
APPLICATION	<ul style="list-style-type: none"> • Switchgear for industrial and advanced commercial applications • xEffect - Switchgear for industrial and advanced commercial applications
NUMBER OF POLES (PROTECTED)	2
NUMBER OF POLES	2

(TOTAL)	
RATED INSULATION VOLTAGE (UI)	440 V
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	50 A
RATED OPERATIONAL VOLTAGE (UE) - MAX	400 V
RATED SHORT-CIRCUIT BREAKING CAPACITY (EN 60898) AT 230 V	0 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY (EN 60898) AT 400 V	0 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY (IEC 60947-2) AT 230 V	25 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY (IEC 60947-2) AT 400 V	25 kA
RATED SWITCHING CAPACITY (IEC/EN 60947-2)	25 kA
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT	0 W

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:
DATE:



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