Specifications

Eaton 183358

Eaton Moeller series IZMX/INX - ACB. Circuit-breaker, 3p, 1000A, 42 kA, P measurement, IEC, Fixed

General specifications	
PRODUCT NAME	Eaton Moeller series IZMX/INX circuit-breaker
CATALOG NUMBER	183358
MODEL CODE	IZMX16B3-P10F-1
EAN	4015081789467
PRODUCT LENGTH/DEPTH	584 mm
PRODUCT HEIGHT	597 mm
PRODUCT WIDTH	521 mm
PRODUCT WEIGHT	18.715 kg
COMPLIANCES	IEC IEC/EN 60947 RoHS conform

Powering Business Worldwide

Delivery program

TYPE	• Air circuit breakers/switch-disconnector • Open circuit breaker
FRAME	IZMX16
NUMBER OF POLES	Three-pole
AMPERAGE RATING	1000 A
RELEASE SYSTEM	Electronic release

Technical data - electrical

VOLTAGE RATING AT AC	690 V AC
RATED OPERATING VOLTAGE (UE) - MIN	690 V
RATED OPERATING VOLTAGE (UE) - MAX	690 V
RATED INSULATION VOLTAGE (UI)	1000 V
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	12 kV AC
RATED UNINTERRUPTED CURRENT (IU)	1000 A
RATED UNINTERRUPTED CURRENT (IU) AT 50°C	1000 A
RATED UNINTERRUPTED CURRENT (IU) AT 60°C	1000 A
RATED UNINTERRUPTED CURRENT (IU) AT 70°C	1000 A
RATED SHORT-TIME WITHSTAND CURRENT (T = 1 S)	42 kA
OVERLOAD RELEASE CURRENT SETTING - MIN	400 A
OVERLOAD RELEASE CURRENT SETTING - MAX	1000 A
SHORT-CIRCUIT RELEASE DELAYED SETTING - MIN	600 A
SHORT-CIRCUIT RELEASE DELAYED SETTING - MAX	10000 A
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING	1.5 - 10 x Ir
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MIN	0 A
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MAX	15000 A
ADJUSTMENT RANGE SHORT-TERM DELAYED SHORT-CIRCUIT RELEASE - MIN	600 A
ADJUSTMENT RANGE SHORT-TERM DELAYED SHORT-CIRCUIT RELEASE - MAX	10000 A
ADJUSTMENT RANGE UNDELAYED SHORT-	2000 A

CIRCUIT RELEASE - MIN	
ADJUSTMENT RANGE UNDELAYED SHORT-CIRCUIT RELEASE - MAX	15000 A
RATED SHORT-CIRCUIT BREAKING CAPACITY AT 400 V, 50 HZ	42 kA
RATED SHORT-CIRCUIT MAKING CAPACITY UP TO 440 V, 50/60 HZ	88 kA
RATED SHORT-CIRCUIT MAKING CAPACITY UP TO 690 V, 50/60 HZ	88 kA
POWER LOSS	92 W
CLOSING DELAY VIA SPRING RELEASE	30 ms
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Rail connection
NUMBER OF STANDARD MECHANICAL OPERATIONS PER HOUR - MAX	60
OPERATING SEQUENCE UP TO 690 V, 50/60 HZ (IEC/EN 60947)	42 kA
UTILIZATION CATEGORY	B
OVERVOLTAGE CATEGORY	III
POLLUTION DEGREE	3
DIRECTION OF INCOMING SUPPLY	As required
LIFESPAN, ELECTRICAL	10000 operations (switching capacity) 20000 operations (switching cycles ON/OFF, with maintenance)

Technical data - mechanical

DEVICE CONSTRUCTION	Built-in device fixed built-in technique
MOUNTING METHOD	Fixed
DEGREE OF PROTECTION	IP55 with protective cover IP31 with door seals IP31
PROTECTION	P measurement
NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)	2
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0
POSITION OF CONNECTION FOR MAIN CURRENT CIRCUIT	Back side
WEIGHT OF FIXED MOUNTING VERSION (3-POLE)	19 kg
ACTUATOR TYPE	Push button
TERMINAL CAPACITY (COPPER BAR)	5 mm x 60 mm (2x) for fixed mounting (black)
LIFESPAN, MECHANICAL	25000 operations (switching capacity, with maintenance) 12500 switching cycles (ON/OFF)

Design verification as per IEC/EN 61439 - technical data

RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	1000 A
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT	92 W
HEAT DISSIPATION AT RATED CURRENT WITH FIXED MOUNTING	92 W
AMBIENT OPERATING TEMPERATURE DETAILS	-20 °C - 70 °C
AMBIENT OPERATING TEMPERATURE - MIN	-20 °C
AMBIENT OPERATING TEMPERATURE - MAX	70 °C
AMBIENT STORAGE TEMPERATURE - MIN	-20 °C
AMBIENT STORAGE TEMPERATURE - MAX	70 °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

FEATURES	Complete device with protection unit Motor drive optional
FITTED WITH:	Switched-off indicator
SPECIAL FEATURES	• External IZMX-DTP-PTM-1 voltage measuring module required (1 module is suitable for 16 circuit breakers) • suitable for zone selectivity • suitable for communication • with integrated system monitor • with integrated test possibility • With graphic LCD display • optionally fittable by user with comprehensive accessories • Terminal capacity hint: These are values used in separate switchgear. The actual values will depend on the temperature around the circuit breaker, which is influenced by the ambient temperature, the degree of protection (IP), the mounting height, the partitions, and any external ventilation. Depending on the specific switchgear design, this may result in derating, which can then be compensated for by increasing the cross-sectional area. Temperature

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-acb-izm63-catalog-ca0135003en-en-us.pdf
DECLARATIONS OF CONFORMITY	DA-DC-03_IZMX16 DA-DC-03_IZMX16_111017
DRAWINGS	eaton-circuit-breaker-izmx-inx-mccb-dimensions-011.eps eaton-circuit-breaker-mounting-izmx-inx-mccb-dimensions-002.eps eaton-circuit-breaker-mounting-izmx-inx-mccb-dimensions.eps
ECAD MODEL	DA-CE-ETN.IZMX16B3-P10F-1
INSTALLATION VIDEOS	Air Circuit Breakers Series IZMX
MANUALS AND USER GUIDES	MN013001_EN
MCAD MODEL	DA-CD-izmx16_3pol_f DA-CS-izmx16_3pol_f

	rise tests in the specific switchgear can provide specific and detailed information.
USED WITH	Air circuit breakers/switch-disconnector Open circuit breaker

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	

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