

Specifications



Eaton 183766

Eaton Moeller series IZMX/INX - ACB. Circuit-breaker, 4 pole, 1600A, 85 kA, P measurement, IEC, Fixed

General specifications

PRODUCT NAME	Eaton Moeller series IZMX/INX circuit-breaker
CATALOG NUMBER	183766
MODEL CODE	IZMX40N4-P16F-1
EAN	4015081795024
PRODUCT LENGTH/DEPTH	584 mm
PRODUCT HEIGHT	597 mm
PRODUCT WIDTH	521 mm
PRODUCT WEIGHT	56 kg
COMPLIANCES	IEC/EN 60947 IEC RoHS conform
GLOBAL CATALOG	183766

Product specifications

USED WITH	Air circuit breakers/switch-disconnector Open circuit breaker
AMPERAGE RATING	1600 A
FEATURES	Complete device with protection unit Motor drive optional
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	Does not apply, since the

Resources

CATALOGS	eaton-acb-izm63-catalog-ca0135003en-en-us.pdf
DECLARATIONS OF CONFORMITY	eaton-circuit-breaker-declaration-of-conformity-eu250301en.pdf
DRAWINGS	eaton-circuit-breaker-mounting-izmx-inx-mccb-dimensions.eps eaton-circuit-breaker-mounting-izmx-inx-mccb-dimensions-002.eps eaton-circuit-breaker-izmx-inx-mccb-dimensions-013.eps
ECAD MODEL	DA-CE-ETN.IZMX40N4-P16F-1
INSTALLATION VIDEOS	Air Circuit Breakers Series IZMX
MANUALS AND USER GUIDES	MN013002_EN
MCAD MODEL	DA-CS-izmx40_4pol_f DA-CD-izmx40_4pol_f

IMPACT	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 INSULATING MATERIAL	Is the panel builder's responsibility.
FITTED WITH:	Switched-off indicator
FRAME	IZMX40
POLLUTION DEGREE	3
RATED UNINTERRUPTED CURRENT (IU)	1600 A
MOUNTING METHOD	Fixed
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT	100 W
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	12 kV AC
UTILIZATION CATEGORY	B
DEVICE CONSTRUCTION	Built-in device fixed built-in technique
DIRECTION OF INCOMING SUPPLY	As required
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Rail connection

ACTUATOR TYPE	Push button
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING	1.5 - 10 x I _r
ADJUSTMENT RANGE SHORT-TERM DELAYED SHORT-CIRCUIT RELEASE - MAX	16000 A
ADJUSTMENT RANGE SHORT-TERM DELAYED SHORT-CIRCUIT RELEASE - MIN	960 A
ADJUSTMENT RANGE UNDELAYED SHORT- CIRCUIT RELEASE - MAX	24000 A
ADJUSTMENT RANGE UNDELAYED SHORT- CIRCUIT RELEASE - MIN	3200 A
AMBIENT OPERATING TEMPERATURE - MAX	70 °C
AMBIENT OPERATING TEMPERATURE - MIN	-20 °C
AMBIENT STORAGE TEMPERATURE - MAX	70 °C
AMBIENT STORAGE TEMPERATURE - MIN	-20 °C
HEAT DISSIPATION AT RATED CURRENT WITH FIXED MOUNTING	100 W
NUMBER OF AUXILIARY CONTACTS (CHANGE- OVER CONTACTS)	2
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0
NUMBER OF STANDARD MECHANICAL OPERATIONS PER HOUR - MAX	60
OPERATING SEQUENCE UP TO 690 V, 50/60 HZ (IEC/EN 60947)	75 kA
OVERLOAD RELEASE CURRENT SETTING - MAX	1600 A
OVERLOAD RELEASE CURRENT SETTING - MIN	640 A
RATED INSULATION	1000 V

VOLTAGE (UI)	
LIFESPAN, MECHANICAL	25000 operations (switching capacity, with maintenance) 12500 switching cycles (ON/OFF)
OVERVOLTAGE CATEGORY	III
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MIN	0 A
WEIGHT OF FIXED MOUNTING VERSION (4- POLE)	56 kg
AMBIENT OPERATING TEMPERATURE DETAILS	-20 °C - 70 °C
PROTECTION	P measurement
VOLTAGE RATING AT AC	690 V AC
SHORT-CIRCUIT RELEASE NON-DELAYED SETTING - MAX	24000 A
SHORT-CIRCUIT RELEASE DELAYED SETTING - MAX	16000 A
NUMBER OF POLES	Four-pole
DEGREE OF PROTECTION	IP31 IP55 with protective cover IP31 with door seals
CLOSING DELAY VIA SPRING RELEASE	35 ms
LIFESPAN, ELECTRICAL	20000 operations (switching cycles ON/OFF, with maintenance) 10000 operations (switching capacity)
TYPE	• Air circuit breakers/switch-disconnector • Open circuit breaker
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 rise tests in the specific switchgear can provide specific and detailed information.

POSITION OF CONNECTION FOR MAIN CURRENT CIRCUIT	Back side
RELEASE SYSTEM	Electronic release
RATED OPERATING VOLTAGE (UE) - MAX	690 V
RATED OPERATING VOLTAGE (UE) - MIN	690 V
RATED OPERATIONAL	1600 A

CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	
RATED SHORT-CIRCUIT BREAKING CAPACITY AT 400 V, 50 HZ	85 kA
RATED SHORT-CIRCUIT MAKING CAPACITY UP TO 440 V, 50/60 HZ	187 kA
RATED SHORT-CIRCUIT MAKING CAPACITY UP TO 690 V, 50/60 HZ	166 kA
RATED SHORT-TIME WITHSTAND CURRENT (T = 1 S)	85 kA
RATED SHORT-TIME WITHSTAND CURRENT AT 50/60 HZ (T = 3 S)	66 kA
RATED UNINTERRUPTED CURRENT (IU) AT 50°C	1600 A
RATED UNINTERRUPTED CURRENT (IU) AT 60°C	1600 A
RATED UNINTERRUPTED CURRENT (IU) AT 70°C	1600 A
SHORT-CIRCUIT RELEASE DELAYED SETTING - MIN	1200 A
TERMINAL CAPACITY (COPPER BAR)	80 mm x 10 mm (1x) for fixed mounting (black)
POWER LOSS	100 W

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:
DATE:



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