Circuit-breaker, 3 pole, 1250A, 50 kA, Selective operation, IEC, Fixed



Part no. IZMX16N3-V12F-1

183334

EL Number 4398008

(Norway)

General specifications	
Product name	Eaton Moeller series IZMX/INX circuit-breaker
Part no.	IZMX16N3-V12F-1
EAN	4015081789221
Product Length/Depth	584 millimetre
Product height	597 millimetre
Product width	521 millimetre
Product weight	18.715 kilogram
Compliances	IEC
Compnances	IEC/EN 60947 RoHS conform
Product Tradename	IZMX/INX
Product Type	Circuit-breaker
Product Sub Type	None
Delivery program	
Туре	Air circuit breakers/switch-disconnector Open circuit breaker
Number of poles	Three-pole
Amperage Rating	1250 A
Release system	Electronic release
Features	Complete device with protection unit Motor drive optional
Special features	Main terminals must be separately ordered. suitable for zone selectivity optionally fittable by user with comprehensive accessories Terminal capacity hint: These are values used in separate switchgear. The actu values will depend on the temperature around the circuit breaker, which is influenced by the ambient temperature, the degree of protection (IP), the mount 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.
Frame	IZMX16
Fitted with:	Switched-off indicator
Used with	Open circuit breaker
Technical Data - Electrical	Air circuit breakers/switch-disconnector
	Air circuit breakers/switch-disconnector
Voltage rating at AC	Air circuit breakers/switch-disconnector
Voltage rating at AC Rated operating voltage (Ue) - min	
• •	690 V AC
Rated operating voltage (Ue) - min	690 V AC 690 V
Rated operating voltage (Ue) - min Rated operating voltage (Ue) - max	690 V AC 690 V 690 V
Rated operating voltage (Ue) - min Rated operating voltage (Ue) - max Rated insulation voltage (Ui)	690 V AC 690 V 690 V 1000 V
Rated operating voltage (Ue) - min Rated operating voltage (Ue) - max Rated insulation voltage (Ui) Rated impulse withstand voltage (Uimp)	690 V AC 690 V 690 V 1000 V 12 kV AC
Rated operating voltage (Ue) - min Rated operating voltage (Ue) - max Rated insulation voltage (Ui) Rated impulse withstand voltage (Uimp) Rated uninterrupted current (Iu)	690 V AC 690 V 690 V 1000 V 12 kV AC 1250 A
Rated operating voltage (Ue) - min Rated operating voltage (Ue) - max Rated insulation voltage (Ui) Rated impulse withstand voltage (Uimp) Rated uninterrupted current (Iu) Rated uninterrupted current (Iu) at 50°C	690 V AC 690 V 690 V 1000 V 12 kV AC 1250 A
Rated operating voltage (Ue) - min Rated operating voltage (Ue) - max Rated insulation voltage (Ui) Rated impulse withstand voltage (Uimp) Rated uninterrupted current (Iu) Rated uninterrupted current (Iu) at 50°C Rated uninterrupted current (Iu) at 60°C	690 V AC 690 V 690 V 1000 V 12 kV AC 1250 A 1250 A
Rated operating voltage (Ue) - min Rated operating voltage (Ue) - max Rated insulation voltage (Ui) Rated impulse withstand voltage (Uimp) Rated uninterrupted current (Iu) Rated uninterrupted current (Iu) at 50°C Rated uninterrupted current (Iu) at 60°C Rated uninterrupted current (Iu) at 70°C	690 V AC 690 V 690 V 1000 V 12 kV AC 1250 A 1250 A 1250 A
Rated operating voltage (Ue) - min Rated operating voltage (Ue) - max Rated insulation voltage (Ui) Rated impulse withstand voltage (Uimp) Rated uninterrupted current (Iu) Rated uninterrupted current (Iu) at 50°C Rated uninterrupted current (Iu) at 60°C Rated uninterrupted current (Iu) at 70°C Rated short-time withstand current (t = 1 s)	690 V AC 690 V 690 V 1000 V 12 kV AC 1250 A 1250 A 1250 A 1250 A
Rated operating voltage (Ue) - min Rated operating voltage (Ue) - max Rated insulation voltage (Ui) Rated impulse withstand voltage (Uimp) Rated uninterrupted current (Iu) Rated uninterrupted current (Iu) at 50°C Rated uninterrupted current (Iu) at 60°C Rated uninterrupted current (Iu) at 70°C Rated short-time withstand current (t = 1 s) Overload release current setting - min	690 V AC 690 V 690 V 1000 V 12 kV AC 1250 A 1250 A 1250 A 1250 A 42 kA 500 A
Rated operating voltage (Ue) - min Rated operating voltage (Ue) - max Rated insulation voltage (Ui) Rated impulse withstand voltage (Uimp) Rated uninterrupted current (Iu) Rated uninterrupted current (Iu) at 50°C Rated uninterrupted current (Iu) at 60°C Rated uninterrupted current (Iu) at 70°C Rated short-time withstand current (t = 1 s) Overload release current setting - min Overload release current setting - max Short-circuit release delayed setting - min	690 V AC 690 V 690 V 1000 V 12 kV AC 1250 A 1250 A 1250 A 1250 A 1250 A
Rated operating voltage (Ue) - min Rated operating voltage (Ue) - max Rated insulation voltage (Ui) Rated impulse withstand voltage (Uimp) Rated uninterrupted current (Iu) Rated uninterrupted current (Iu) at 50°C Rated uninterrupted current (Iu) at 60°C Rated uninterrupted current (Iu) at 70°C Rated short-time withstand current (t = 1 s) Overload release current setting - min Overload release current setting - max	690 V AC 690 V 690 V 1000 V 12 kV AC 1250 A

Short-circuit release non-delayed setting - max	18750 A
Adjustment range short-term delayed short-circuit release - min	750 A
, , , , , , , , , , , , , , , , , , ,	12500 A
Adjustment range short-term delayed short-circuit release - max Adjustment range undelayed short-circuit release - min	2500 A
Adjustment range undelayed short-circuit release - max	18750 A
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Rated short-circuit breaking capacity at 400 V, 50 Hz	50 kA
Rated short-circuit making capacity up to 440 V, 50/60 Hz	105 kA
Rated short-circuit making capacity up to 690 V, 50/60 Hz	88 kA
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
Actuator type	Push button
Utilization category	В
Overvoltage category	III
Pollution degree	3
Lifespan, electrical	20000 operations (switching cycles ON/OFF, with maintenance) 10000 operations (switching capacity)
Direction of incoming supply	As required
Technical Data - Mechanical	
Device construction	Built-in device fixed built-in technique
Mounting Method	Fixed
Degree of protection	IP31 with door seals IP55 with protective cover IP31
Protection	Selective operation
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
Lifespan, mechanical	12500 switching cycles (ON/OFF) 25000 operations (switching capacity, with maintenance)
Technical Data - Mechanical - Terminals	
Terminal capacity (copper bar)	5 mm x 80 mm (2x) for fixed mounting (black)
Design verification as per IEC/EN 61439 - technical data	
Rated operational current for specified heat dissipation (In)	1250 A
Equipment heat dissipation, current-dependent	132 W
Heat dissipation at rated current with fixed mounting	132 W
Ambient operating temperature details	-20 °C - 70 °C
Ambient operating temperature - min	-20 °C
Ambient operating temperature - max	70 °C
Ambient operating temperature - min	-20 °C
	70 °C
Ambient storage temperature - max	70 0
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 insulating material	Is the panel builder's responsibility.
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.

Technical data ETIM 9.0

Low-voltage industrial components (EG000017) / Power circuit-breaker for trafo/generator/installation protection (EC000228)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Circuit breaker for power transformer, generator and system protection (ecl@ss13-27-37-04-09 [AJZ716018])

Rated voltage Rated short-circuit breaking capacity lcu at 400 V, 50 Hz Adjustment range short-term delayed short-circuit release Adjustment range undelayed short-circuit release Adju			
Rated short-circuit breaking capacity lou at 400 V, 50 Hz Overload release current setting Adjustment range short-term delayed short-circuit release Adjustment range undelayed short-circuit release Adjustment range short-circuit release Adjustment range undelayed short-circuit rele	Rated permanent current lu	Α	1250
Overload release current setting A 500 - 1250 Adjustment range short-term delayed short-circuit release A 750 - 12500 Adjustment range undelayed short-circuit release A 2500 - 18750 Power loss W 132 Device construction Built-in device fixed built-in technique Integrated earth fault protection No Type of electrical connection of main circuit Rail connection Suitable for DIN rail (top hat rail) mounting No Number of auxiliary contacts as normally closed contact No Number of auxiliary contacts as normally open contact 9 Number of auxiliary contacts as change-over contact 2 With switched-off indicator Yes With integrated under voltage release No Number of poles 3 Position of connection for main current circuit Back side Type of control element Push button Complete device with protection unit Yes Motor drive integrated No Motor drive optional Yes	Rated voltage	V	690 - 690
Adjustment range short-term delayed short-circuit release Adjustment range undelayed short-circuit release Built-in device fixed built-in technique Built-in device fixed built-in technique Adjustment fange short-term delayed short-circuit release Built-in device fixed built-in technique Adjustment fange short-term delayed short-circuit fange fa	Rated short-circuit breaking capacity Icu at 400 V, 50 Hz	kA	50
Adjustment range undelayed short-circuit release A 2500 - 18750 Power loss Device construction Device construction Integrated earth fault protection Type of electrical connection of main circuit Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as normally open contact With switched-off indicator With integrated under voltage release With integrated under voltage release Nounder of poles Position of connection for main current circuit Type of control element Complete device with protection unit Motor drive integrated Motor drive optional A 2500 - 18750 Built-in device fixed built-in technique Built-in device fixed built	Overload release current setting	Α	500 - 1250
Power loss Device construction Device construction Integrated earth fault protection Integrated earth fault protection Type of electrical connection of main circuit Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact With switched-off indicator With integrated under voltage release With integrated under voltage release No Number of poles Position of connection for main current circuit Supper of control element Complete device with protection unit Motor drive integrated Motor drive integrated Motor drive optional	Adjustment range short-term delayed short-circuit release	Α	750 - 12500
Device construction Integrated earth fault protection Type of electrical connection of main circuit Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Vith switched-off indicator Vith switched-off indicator Vith integrated under voltage release Number of poles Position of connection for main current circuit Type of control element Complete device with protection unit Motor drive integrated Motor drive optional Built-in device fixed built-in technique No Rail connection Rail connect	Adjustment range undelayed short-circuit release	Α	2500 - 18750
Integrated earth fault protection Type of electrical connection of main circuit Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional No No No No Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact With switched-off indicator With integrated under voltage release No Number of poles No No Sack side Type of control element Complete device with protection unit Motor drive integrated Motor drive optional No Rail connection No No Sack side Push button Yes Motor drive integrated No Yes Motor drive optional	Power loss	W	132
Type of electrical connection of main circuit Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Ves With switched-off indicator With integrated under voltage release No Number of poles Position of connection for main current circuit Sack side Type of control element Complete device with protection unit Motor drive integrated Motor drive optional	Device construction		Built-in device fixed built-in technique
Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Ves With integrated under voltage release No Number of poles Position of connection for main current circuit Back side Type of control element Complete device with protection unit Motor drive integrated Motor drive optional No No No No No No No No No N	Integrated earth fault protection		No
DIN rail (top hat rail) mounting optional Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact With switched-off indicator With integrated under voltage release No Number of poles Sack side Type of control element Complete device with protection unit Motor drive integrated Motor drive optional No No No No No No No No No N	Type of electrical connection of main circuit		Rail connection
Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Yes With switched-off indicator With switched-off indicator With integrated under voltage release No Number of poles Back side Type of control element Complete device with protection unit Yes Motor drive integrated Motor drive optional Yes	Suitable for DIN rail (top hat rail) mounting		No
Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact With switched-off indicator With integrated under voltage release With integrated under voltage release No Number of poles Position of connection for main current circuit Type of control element Complete device with protection unit Motor drive integrated Motor drive optional O Quality Ses No No Yes Motor drive optional	DIN rail (top hat rail) mounting optional		No
Number of auxiliary contacts as change-over contact With switched-off indicator With integrated under voltage release With integrated under voltage release No Number of poles Position of connection for main current circuit Back side Type of control element Complete device with protection unit Wotor drive integrated Motor drive optional 2 Yes Motor drive optional	Number of auxiliary contacts as normally closed contact		0
With switched-off indicator With switched-off indicator With integrated under voltage release No Number of poles Special Speci	Number of auxiliary contacts as normally open contact		0
With integrated under voltage release No Number of poles Some of connection for main current circuit Back side Type of control element Complete device with protection unit Wood of drive integrated Motor drive optional No Yes	Number of auxiliary contacts as change-over contact		2
Number of poles Solution of connection for main current circuit Back side Type of control element Complete device with protection unit Motor drive integrated Motor drive optional Solution 3 Back side Push button Yes No Yes	With switched-off indicator		Yes
Position of connection for main current circuit Type of control element Complete device with protection unit Motor drive optional Back side Push button Yes No Yes	With integrated under voltage release		No
Type of control element Complete device with protection unit Motor drive optional Push button Yes No Yes	Number of poles		3
Complete device with protection unit Yes Motor drive integrated No Motor drive optional Yes	Position of connection for main current circuit		Back side
Motor drive integrated No Motor drive optional Yes	Type of control element		Push button
Motor drive optional Yes	Complete device with protection unit		Yes
	Motor drive integrated		No
Degree of protection (IP)	Motor drive optional		Yes
	Degree of protection (IP)		IP31