## Circuit-breaker, 4 pole, 1250A, 50 kA, Selective operation, IEC, Fixed



Part no. IZMX16N4-V12F-1

183552

**EL Number 4398106** 

(Norway)

General specifications	
Product name	Eaton Moeller series IZMX/INX circuit-breaker
Part no.	IZMX16N4-V12F-1
EAN	4015081792887
Product Length/Depth	584 millimetre
Product height	597 millimetre
Product width	521 millimetre
Product weight	23.37 kilogram
Compliances	IEC/EN 60947 IEC 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	Four-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 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.
Frame	IZMX16
Fitted with:	Switched-off indicator
Used with	Open circuit breaker Air circuit breakers/switch-disconnector
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)	1250 A
Rated uninterrupted current (Iu) at 50°C	1250 A
Rated uninterrupted current (Iu) at 60°C	1250 A
Rated uninterrupted current (Iu) at 70°C	1250 A
Rated short-time withstand current (t = 1 s)	42 kA
Overload release current setting - min	500 A
Overload release current setting - max	1250 A
Short-circuit release delayed setting - min	937.5 A
Short-circuit release delayed setting - max	12500 A
Short-circuit release non-delayed setting	1.5 - 10 x lr
Short-circuit release non-delayed setting - min	0 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
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	10000 operations (switching capacity) 20000 operations (switching cycles ON/OFF, with maintenance)
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 IP55 with protective cover IP31 with door seals
Protection	Selective operation
	2
Number of auxiliary contacts (change-over contacts)	
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 (4-pole)  Lifespan, mechanical	24 kg 25000 operations (switching capacity, with maintenance) 12500 switching cycles (ON/OFF)
Technical Data - Mechanical - Terminals	
Terminal capacity (copper bar)	5 mm x 80 mm (2x) for fixed mounting (black)
	3 min x oo min (2x) for fixed modifying (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 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 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 lou at 400 V, 50 Hz  Avious delease current setting Adjustment range short-term delayed short-circuit release Adjustment range undelayed short-circuit release Adjustment range undel			
Rated short-circuit breaking capacity lcu at 400 V, 50 Hz Overload release current setting Adjustment range short-term delayed short-circuit release Adjustment range undelayed short-ci	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         Q           With switched-off indicator         Yes           With integrated under voltage release         No           Number of poles         4           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 potional         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 Andjustment in device fixed built-in technique Andjustment range undelayed short-circuit Anount range the full tyrotection unit Anount range the full tyrotection Anount range the full tyrotect	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 With switched-off indicator With integrated under voltage release With integrated under voltage release Nounter of poles Position of connection for main current circuit 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-in device fixed built-in technique Built-due Built-due Built-due Built-due Built-due B	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 Vith switched-off indicator With integrated under voltage release With integrated under voltage release Vith integrated under voltage release Vith connection for main current circuit Type of control element Complete device with protection unit Motor drive integrated Motor drive integrated Motor drive optional  Vitage  Built-in device fixed built-in technique Built-in te	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  With switched-off indicator  With integrated under voltage release  No  Number of poles  Pesition 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 connection  Roil Connection  Roil Connection  Roil Connection  No  Roil Connection  No  Roil Connection  Push button  Yes  Motor drive integrated  Motor drive optional	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  Number of auxiliary contacts as normally closed 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  Type of control element  Complete device with protection unit  Motor drive integrated  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 change-over 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  Type of control element  Complete device with protection unit  Motor drive integrated  Motor drive optional  Rail connection  No  No  No  No  No  No  No  No  Rail connection  No  No  No  No  No  No  No  No  No	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 O Number of auxiliary contacts as normally open contact O Number of auxiliary contacts as change-over contact U Number of poles V No No Number of poles A Position of connection for main current circuit Back side Type of control element Complete device with protection unit Motor drive integrated No No Motor drive optional No	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 change-over contact  Number of auxiliary contacts as change-over contact  Ves  With switched-off indicator  With integrated under voltage release  No  Number of poles  A Position of connection for main current circuit  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  Number of auxiliary contacts as change-over contact  Yes  With switched-off indicator  With integrated under voltage release  No  Number of poles  A  Position of connection for main current circuit  Back side  Type of control element  Complete device with protection unit  Yes  Motor drive integrated  No  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  Wotor drive integrated  Motor drive optional  O  O  O  O  O  O  O  O  O  O  O  O  O	DIN rail (top hat rail) mounting optional		No
Number of auxiliary contacts as change-over contact  With switched-off indicator  Yes  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  Wes  No  Yes	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 Apposition of connection for main current circuit Back side Type of control element Complete device with protection unit Wotor drive integrated Motor drive optional Yes  Yes  Yes  Yes  Yes  Yes  Yes  Yes	Number of auxiliary contacts as normally open contact		0
With integrated under voltage release  No Number of poles  4 Position of connection for main current circuit  Type of control element  Complete device with protection unit  Wotor drive optional  No	Number of auxiliary contacts as change-over contact		2
Number of poles 4 Position of connection for main current circuit Back side Type of control element Complete device with protection unit Motor drive integrated Motor drive optional  4 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  Wood of 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		4
Complete device with protection unit  Yes  Motor drive optional  Yes  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