## Circuit-breaker, 3 pole, 1600A, 50 kA, P measurement, IEC, Withdrawable



Powering Business Worldwide

Part no. IZMX16N3-P16W-1

183478

**EL Number 4398092** 

(Norway)

(Norway)	
General specifications	
Product name	Eaton Moeller series IZMX/INX circuit-breaker
Part no.	IZMX16N3-P16W-1
EAN	4015081792146
Product Length/Depth	584 millimetre
Product height	597 millimetre
Product width	521 millimetre
Product weight	27.74 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	Three-pole
Amperage Rating	1600 A
Release system	Electronic release
Features	Motor drive optional Complete device with protection unit
Special features  Frame	Cassette must be separately ordered.  External IZMX-DTP-PTM-1 voltage measuring module required (1 module is suitable for 16 circuit breakers)  IZMX-DTP-PTM external voltage measuring module required 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.
Frame Fitted with:	Switched-off indicator
Used with	Air circuit breakers/switch-disconnector
	Open circuit breaker
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)	1600 A
Rated uninterrupted current (Iu) at 50°C	1500 A
Rated uninterrupted current (Iu) at 60°C	1400 A
Rated uninterrupted current (Iu) at 70°C	1350 A
Rated short-time withstand current (t = 1 s)	42 kA
Overload release current setting - min	640 A
Overload release current setting - max	1600 A

Short-circuit release delayed setting - min	1200 A
Short-circuit release delayed setting - max	16000 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	24000 A
Adjustment range short-term delayed short-circuit release - min	960 A
Adjustment range short-term delayed short-circuit release - max	16000 A
Adjustment range undelayed short-circuit release - min	3200 A
Adjustment range undelayed short-circuit release - max	24000 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
Power of withdrawable switch with cassette	320 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
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 slide-in technique (withdrawable)
Mounting Method	Withdrawable
Degree of protection	IP55 with protective cover IP31 IP31 with door seals
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 cassette version (3-pole)	18 kg
Weight of fixed withdrawable version (3-pole)	28 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 100 mm (2x) for withdrawable units (black)
Design verification as per IEC/EN 61439 - technical data	
Rated operational current for specified heat dissipation (In)	1600 A
Equipment heat dissipation, current-dependent	320 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.
4000414 77 75 74 14 177 7	Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures	
10.2.3.1 Verification of thermal stability of enclosures  10.2.3.2 Verification of resistance of insulating materials to normal heat	Meets the product standard's requirements.
, , , , , , , , , , , , , , , , , , ,	Meets the product standard's requirements.  Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat	

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 permanent current lu         A         1600           Rated voltage         V         690 - 690           Rated short-circuit breaking capacity leu at 400 V, 50 Hz         KA         50           Overload release current setting         A         640 - 1600           Adjustment range short-term delayed short-circuit release         A         960 - 16000           Adjustment range undelayed short-circuit release         A         3200 - 24000           Power loss         W         320         Built-in device slide-in technique (withdrawable)           Integrated earth fault protection         No         Rail connection           Suitable for DIN rail (top hat rail) mounting         No         Rail connection           Suitable for DIN rail (top hat rail) mounting optional         No         No           Number of auxiliary contacts as normally closed contact         No         O           Number of auxiliary contacts as normally open contact         C         C           With switched-off indicator         Yes           With integrated under voltage release         No           With integrated under voltage release         No           Solition of connection for main current circuit         Se	protection (ect@ss15-27-37-04-09 [AJZ/10010])		
Rated short-circuit breaking capacity Icu at 400 V, 50 Hz  Overload release current setting  Adjustment range short-term delayed short-circuit release  Adjustment range undelayed short-circuit release  Wadjustment range undelayed short-circuit release  Wadjustment range undelayed short-circuit release  Wadjustment range short-term delayed short-circuit release  Wadjustment range short-term delayed short-circuit release  Wadjustment range short-term delayed short-circuit release  A 3200 - 24000  Built-in device slide-in technique (withdrawable)  No  Rail connection  No  No  No  No  No  No  No  Number of auxiliary contacts as normally closed contact  Unumber of auxiliary contacts as normally open contact  With switched-off indicator  With integrated under voltage release  With integrated under voltage release  No  No  No  No  Yes  With integrated under voltage release  No  No  No  No  No  No  No  No  No  N	Rated permanent current lu	Α	1600
Overload release current setting       A       640 - 1600         Adjustment range short-term delayed short-circuit release       A       960 - 16000         Adjustment range undelayed short-circuit release       A       3200 - 240000         Power loss       W       320         Device construction       Built-in device slide-in technique (withdrawable)         Integrated earth fault protection       No         Type of electrical connection of main circuit       Rail connection         Suitable for DIN rail (top hat rail) mounting       No         DIN rail (top hat rail) mounting optional       No         Number of auxiliary contacts as normally closed contact       0         Number of auxiliary contacts as change-over contact       2         With switched-off indicator       Yes         With integrated under voltage release       No         Number of poles       3	Rated voltage	V	690 - 690
Adjustment range short-term delayed short-circuit release Adjustment range undelayed short-circuit release A 3200 - 24000  Power loss W 320  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 change-over contact With switched-off indicator With integrated under voltage release No Number of poles  A 960 - 16000 A 3200 3200 3200 3200 3200 3200 3200 3200	Rated short-circuit breaking capacity Icu at 400 V, 50 Hz	kA	50
Adjustment range undelayed short-circuit release  A 3200 - 24000  Power loss  W 320  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  Number of poles  A 3200 - 24000  Built-in device slide-in technique (withdrawable)  No  Rail connection  No  No  No  O  O  O  Vieth State of DIN rail (top hat rail) mounting optional  No  No  No  No  No  No  No  No  No  N	Overload release current setting	Α	640 - 1600
Power loss Device construction Built-in device slide-in technique (withdrawable)  Integrated earth fault protection No 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 With integrated under voltage release Number of poles  3  3  3  3  3  3  3  3  3  3  3  3  3	Adjustment range short-term delayed short-circuit release	Α	960 - 16000
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  No  Number of auxiliary contacts as normally closed contact  Number of auxiliary contacts as change-over contact  With switched-off indicator  With integrated under voltage release  No  Number of poles  Built-in device slide-in technique (withdrawable)  No  Rail connection  No  No  O  O  C  Suitable for DIN rail (top hat rail) mounting O  No  Vo  Suitable for DIN rail (top hat rail) mounting O  No  Number of auxiliary contacts as normally closed contact O  Number of auxiliary contacts as normally open contact O  With switched-off indicator  Yes  With integrated under voltage release No  Number of poles	Adjustment range undelayed short-circuit release	Α	3200 - 24000
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  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  With integrated under voltage release  No  Number of poles  No  No  No  No  No  No  No  No  No  N	Power loss	W	320
Type of electrical connection of main circuit  Suitable for DIN rail (top hat rail) mounting  DIN rail (top hat rail) mounting optional  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  Vith switched-off indicator  With integrated under voltage release  No  Number of poles  Rail connection  No  No  No  No  No  No  Sall connection  No  No  No  No  No  Sall connection  No  No  No  No  Sall connection  No  No  No  No  Sall connection  No  No  No  Sall connection  No  No  No  Sall connection	Device construction		Built-in device slide-in technique (withdrawable)
Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional No Number of auxiliary contacts as normally closed contact 0 Number of auxiliary contacts as normally open contact 0 Number of auxiliary contacts as change-over contact 2 With switched-off indicator Ves With integrated under voltage release No Number of poles 3	Integrated earth fault protection		No
DIN rail (top hat rail) mounting optional  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	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  With switched-off indicator  With integrated under voltage release  No  Number of poles  3	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  Yes  With integrated under voltage release  No  Number of poles  3	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  No  Number of poles  3	Number of auxiliary contacts as normally closed contact		0
With switched-off indicator Yes With integrated under voltage release No Number of poles 3	Number of auxiliary contacts as normally open contact		0
With integrated under voltage release No Number of poles 3	Number of auxiliary contacts as change-over contact		2
Number of poles 3	With switched-off indicator		Yes
·	With integrated under voltage release		No
Position of connection for main current circuit  Back side	Number of poles		3
	Position of connection for main current circuit		Back side
Type of control element Push button	Type of control element		Push button
Complete device with protection unit  Yes	Complete device with protection unit		Yes
Motor drive integrated No	Motor drive integrated		No
Motor drive optional Yes	Motor drive optional		Yes
Degree of protection (IP)	Degree of protection (IP)		IP31