## Circuit-breaker, 4 pole, 1000A, 50 kA, P measurement, IEC, Withdrawable



Part no. IZMX16N4-P10W-1

183409

**EL Number 4398053** 

(Norway)

General specifications	
Product name	Estan Maellar sociae IZMV/INV sirguit brooker
	Eaton Moeller series IZMX/INX circuit-breaker
Part no.	IZMX16N4-P10W-1
EAN  Product Length (Poeth	4015081791453
Product Length/Depth	584 millimetre
Product height	597 millimetre
Product width	521 millimetre
Product weight	32.49 kilogram
Compliances	IEC 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	Four-pole
Amperage Rating	1000 A
Release system	Electronic release
Features	Complete device with protection unit Motor drive optional
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 mountin 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.
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)	1000 A
Rated uninterrupted current (Iu) at 50°C	1000 A
Rated uninterrupted current (Iu) at 50°C	1000 A
Rated uninterrupted current (Iu) at 70°C	1000 A
Rated short-time withstand current (t = 1 s)	42 kA
	42 KA 400 A
Overload release current setting - min	
Overload release current setting - max	1000 A

Short-circuit release delayed setting - min	750 A
Short-circuit release delayed setting - max	10000 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	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-circuit release - min	2000 A
Adjustment range undelayed short-circuit release - max	15000 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	125 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	111
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 slide-in technique (withdrawable)
Mounting Method	Withdrawable
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 cassette version (4-pole)	21 kg
Weight of fixed withdrawable version (4-pole)	33 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 60 mm (2x) for withdrawable units (black)
Design verification as per IEC/EN 61439 - technical data	
Rated operational current for specified heat dissipation (In)	1000 A
Equipment heat dissipation, current-dependent	125 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.
10.2.3.1 Verification of thermal stability of enclosures	
10.2.3.2 Verification of diefinal 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 lobserved.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must 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 voltage 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-circuit release Adjust	protection (ecr@ss15-27-57-04-09 [A02710016])		
Rated short-forciti breaking capacity Icu at 400 V, 50 Hz         KA         50           Overload release current setting         A         400 - 1000           Adjustment range short-term delayed short-circuit release         A         600 - 10000           Adjustment range undelayed short-circuit release         A         2000 - 15000           Power loss         W         125           Device construction         W         125           Integrated earth fault protection         No         Rail connection           Type of electrical connection of main circuit         No         No           Suitable for DIN rail (top hat rail) mounting         No         No           Number of auxiliary contacts as normally closed contact         No         No           Number of auxiliary contacts as normally open contact         Post         2           With switched-off indicator         Yes         Yes           With switched-off indicator         No         No           With integrated under voltage release         No         A           Number of poles         Post button         Back side           Postion of connection for main current circuit         Post button         Push button           Complete device with protection unit         Yes         No <t< td=""><td>Rated permanent current lu</td><td>Α</td><td>1000</td></t<>	Rated permanent current lu	Α	1000
Overload release current setting         A         400 - 10000           Adjustment range short-term delayed short-circuit release         A         600 - 10000           Adjustment range undelayed short-circuit release         A         2000 - 150000           Power loss         W         125           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           Number of auxiliary contacts as normally closed contact         No           Number of auxiliary contacts as change-over contact         2           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 integrated         Yes	Rated voltage	V	690 - 690
Adjustment range short-term delayed short-circuit release         A         600 - 10000           Adjustment range undelayed short-circuit release         A         2000 - 15000           Power loss         W         125           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         Yes           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 optional         Yes	Rated short-circuit breaking capacity Icu at 400 V, 50 Hz	kA	50
Adjustment range undelayed short-circuit release  A 2000 - 15000  Power loss  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  Nounted of poles  Position of connection for main current circuit  Type of control element  Complete device with protection unit  Motor drive integrated  Motor drive integrated  Motor drive optional	Overload release current setting	Α	400 - 1000
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 Vift switched-off indicator Vift switched-off indicator Vift integrated under voltage release No Number of poles Vift integrated under voltage release Vift control element Complete device with protection unit Complete device with protection unit Motor drive integrated Motor drive optional	Adjustment range short-term delayed short-circuit release	А	600 - 10000
Device construction Integrated earth fault protection Integrated integrated Integrated integrated Integrated earth fault protection Integrated Inte	Adjustment range undelayed short-circuit release	А	2000 - 15000
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  Virth switched-off indicator  With integrated under voltage release  With integrated under voltage release  No  Number of connection for main current circuit  Type of control element  Complete device with protection unit  Motor drive integrated  Motor drive optional	Power loss	W	125
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  Vith 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	Device construction		Built-in device slide-in technique (withdrawable)
Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional Number of auxiliary contacts as normally closed contact Output of auxiliary contacts as normally open contact Output of auxiliary contacts as change-over contact Output of auxiliary contacts as change-over contact Ves With switched-off indicator With integrated under voltage release With integrated under voltage release Ver Ves Vith of connection for main current circuit Back side Type of control element Complete device with protection unit Motor drive integrated Motor drive optional Ves	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  Number of auxiliary contacts as change-over contact  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  With switched-off indicator  With switched-off indicator  With integrated under voltage release  No  Number of poles  4  Position of connection for main current circuit  Back side  Type of control element  Complete device with protection unit  Yes  Motor drive integrated  Motor drive optional  No  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  4  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  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  2  Yes  No  No  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  Position of connection for main current circuit  Type of control element  Complete device with protection unit  Motor drive optional  Yes  Yes  Yes  No  No  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  Motor drive optional  No  No  No  No  No  No  Yes	Number of auxiliary contacts as change-over contact		2
Number of poles 4 Position of connection for main current circuit Type of control element Complete device with protection unit Motor drive optional  4 Push button Yes No 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		4
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
Jog. do di protocolo.	Degree of protection (IP)		IP31