## DATASHEET - IZMX40N4-V10F-1

## Circuit-breaker, 4 pole, 1000A, 85 kA, Selective operation, IEC, Fixed



Part no.	IZI
EL Number	183 439
(Norway)	

IZMX40N4-V10F-1 183903 4398313

General specifications

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	General specifications	
EAN   Image: Constraint of the second of t	Product name	Eaton Moeller series IZMX/INX circuit-breaker
Product lengt/Upeph Image: Constraint of the second seco	Part no.	IZMX40N4-V10F-1
Product height 537 millingtre   Product weight 521 millingtre   Product weight 521 millingtre   Compliances 162 (FV 0007) [10]   Product Tradename 12 (XX/INX   Product Tradename 100 (A   Product Tradename	EAN	4015081790470
Productivation   S21 millimetre     Productivation   S6 kilogram     Compliances   IECPN 0987     Productivation   IECNN0087     Release system   IECNN0087     Petros   IECNN0087     Special Features   IECNN0087     Special Features </td <td>Product Length/Depth</td> <td>584 millimetre</td>	Product Length/Depth	584 millimetre
Product weight   S6 kiogram     Compliances   ECCN 8937     Product Tradename   ECCN 8937     Product Tradename   ECMUNX     Product Tradename   ECMUNX     Product Sub Type   ECMUNX     Delivery program   ECMUNX     Type   ECMUNX     Number of poles   Four-pole     Amperage Raing   Electronic release     Release system   Electronic release     Features   Electronic release     Special features   Main terminals must be specified write optical in the specified write which is influenced by the aptitions, and any excessories     Frame   Frame     Fitted with:   Electronic release     Voltage rating at AC   Sourced fit indicator     Voltage rating at AC   Sourced fit indicator     Release down in the specified write which is indicator   Sourced fit indicator     Voltage rating at AC   Sourced fit indicator     Release fit operating worked (UP) - main   Sourced fit indicator     Release rationg at AC   Sourced fit indicator     Release specified write which is in the specifie	Product height	597 millimetre
Compliances   EC/LN 08947 EC BallS conform     Product Tradename   ZMX/INX     Product Type   ZMX/INX     Product Type   Circuit-breaker     Product Type   Air circuit breaker     Delivery program   Air circuit breaker     Type   Four-pole     Amperage Rating   Image: Control of the contrecontrol of the c	Product width	521 millimetre
Product Tradename   IEC     Product Tradename   IZXX/INX     Product Type   Creati-breaker     Product Sub Type   None     Delivery program   Are circuit breaker/switch-disconnector     Open circuit breaker/switch-disconnector   Open circuit breaker/switch-disconnector     Number of poles   Four-pole     Amperage Rating   Four-pole     Release system   Four-pole     Features   Moor drive opinol     Special features   Moor drive opinol     Special features   Moor drive opinol     Frame   Moor drive opinol source with protection unit     Frame   IzXXXIN     Prited with:   IzXXXIN     Used with   Switched off indicator     Voltage rating at AC   Source and the specific and detailed information.     Rated operating voltage (Uo) - max   Switched off indicator     Atted operating voltage (Uo) - max   Switched off indicator     Rated operating voltage (Uo) - max   Switched off indicator     Rated operating voltage (Uo) - max   Switched off indicator     Rated operating voltage (Uo) - max   Switched off indicator     Rated operating voltage (Uo) - max	Product weight	56 kilogram
Product Type   Cruuit-breaker     Product Sub Type   None     Delivery program   Arr circuit breakers/switch-disconnector     Type   Open circuit breakers/switch-disconnector     Mumber of poles   Four-pole     Amperage Rating   100 A     Release system   Electronic release     Features   Complete device with protection unit     Special features   Main terminals must be separately ordered.     suitable for some selectivity   optionally fittable types with comprehensive accessories     Frame   Zime Selectivity     Fitted with:   Zime Selectivity     Used with   Switched-off indicator     Votage rating voltage (Ue) - min   Selectivity     Rated operating voltage (Ue) - min   Selectivity     Rated operating voltage (Ue) - max   Selo V AC     Rated ingulate withstand voltage (Ub) - max   Selo V AC     Rated ingulate withstand voltage (Ub) - max   Selo V AC     Rated ingulate withstand voltage (Ub) - max   Selo V AC     Rated ingulate withstand voltage (Ub) - max   Selo V AC     Rated ingulate withstand voltage (Ub)   Selo V AC     Rated ingulate voltage (Ub) - max   Selo V AC <	Compliances	IEC
Product Sub Type   None     Delivery program   Ari circuit breakers/witch-disconnector     Type   Four-pole     Number of poles   Four-pole     Amperage Rating   1000 A     Release system   Electronic release     Features   Moter drive potional     Special features   Moter drive writh protection unit     Special features   Moter drives writh comprehensive accessories     Frame   Frame     Fitted writh:   Used writh protection deliad of protection (PP, the mount height, the partions, and any external ventext, which as influenced by the ambient temperature and any external ventext, which as influenced by the ambient temperature and any external ventext, which as influenced by the ambient temperature and any external ventext, which as influenced by the ambient temperature and any external ventext, which as influenced by the ambient temperature and any external ventext, which as influenced by the ambient temperature and any external ventext, which as influenced by any external ventext, which as influenced by the ambient temperature and any external ventext, which as influenced by the ambient temperature and any external ventext, which as influenced by the ambient temperature and any external ventext, which as influenced by the ambient temperature and any external ventext, which as influenced by the ambient temperature and any external ventext, which as influenced by the ambient temperature, the dagree of protection (PP, the mount height, the partions, and any external ventext, which as influenced by by increasing the cross-sectional arac. Tomperature	Product Tradename	IZMX/INX
Delivery program   Image: Constraint of the sector of th	Product Type	Circuit-breaker
Type   Air circuit breaker/switch-disconnector     Number of poles   Four-pole     Amprage Rating   Four-pole     Release system   Electronic release     Features   Motor drive optional     Special features   Motor drive optional     Special features   Motor drive optional     System   Features     Special features   Motor drive optional     System   Switched device with protection unit     System   Motor drive optional     Special features   Motor drive optional     System   Terminal capacity thir. These are values used in separate switchgear. The actur values with the ambient temperature, the degree of protection (PL, the mount height, this may team of protection (PL, the mount height, the maint temperature, the degree of protection (PL, the mount height, the maint temperature, the degree of protection (PL, the mount height, the maint temperature, the degree of protection (PL, the mount height, the maint temperature, the degree of protection (PL, the mount height, the maint temperature, the degree of protection (PL, the mount height device)     Frame   ZMX40     Voltage rating at AC   Switched-off indicator     Voltage rating at AC   Seo VAC     Rated operating voltage (Ue) - min   Seo VAC     Rated operating voltage (Ui)   Seo VAC	Product Sub Type	None
Number of poles     Open circuit breaker       Number of poles     Four-pole       Amperage Rating     1000 A       Release system     1000 A       Features     Mator drive optional Complete device with protection unit       Special features     Main terminals must be separately ordered. subscriptionally ittable by user with comprehensive accessories optionally ittable by user with comprehensive accessories requires with depend on the temperature around the circuit breaker, which is initianced by the ambient temperature around the circuit breaker, which is initianced by the ambient temperature around the circuit breaker, which is initianced by the ambient temperature around the specific switchgear can provide specific and detailed information.       Frame     IMA       Fitted with:     IMA       Used with     Switched-off indicator       Voltage rating at AC     Setted operating voltage (Ue) - min       Rated operating voltage (Ue) - max     Setted operating voltage (Uin)       Rated operating voltage (Uin)     Four- subscriptional     Setted Set VAC       Rated uninterrupted current (Iu)     IMA     IMA	Delivery program	
Amperage Rating   100 A     Release system   Electronic release     Features   Motor drive optional Complete device with protection unit     Spacial features   Motor drive optional Complete device with protection unit     Spacial 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 actur values will depend on the temperature, acuad 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. Emerprature resites that he specific switchgear can provide specific and detailed information.     Frame   IZMX40     Fitted with:   IZMX40     Used with   Switched-off indicator     Voltage rating at AC   690 V AC     Rated operating voltage (Ue) - min   690 V     Rated operating voltage (Ui)   690 V     Rated insultation voltage (Uin)   12kV AC     Rated inpulse withstand voltage (Uin)   12kV AC     Rated uninterrupted current (Lu)   1000 A	Туре	
Release system   Features   Electronic release     Features   Motor drive optional Complete device with protection unit     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 actur values with degree of protection (P), the mount height, the ambient temperature and any external vend the circuit breaker, which is similation. Degreening on the specific switchgear can provide specific and detailed information.     Frame   IMA   IMA     Fitted with:   IMA   Switched-off indicator     Used with   IMA   Switched-off indicator     Voltage rating at AC   690 V AC     Rated operating voltage (U0)   Fasted operating voltage (U0)     Rated insultation voltage (U1)   IMA     Rated insultatin voltage (U1)   IMA <	Number of poles	Four-pole
Features   Motor drive optional Complete device with protection unit     Special features   Main terminals must be separately ordered. suitable for zone selectivity optionally fittable by user with comprehensive accessories Terminal capacity him: These are values used in separate switchgear. The actur values will depend on the temperature, the degree of protection (IP), the mouth height, the partitions, and any external vanue around the circuit breaker, which is influenced by the ambient temperature, the degree of protection (IP), the mouth height, the partitions, and any external ventilation. Depending on the seperific 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 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   IZMX40     Fitted with:   Switched-off indicator     Used with   Switched-off indicator     Voltage rating at AC   680 V AC     Rated operating voltage (Ue) - min   680 V     Rated operating voltage (Ui)   1000 V     Rated inpulse withstand voltage (Uimp)   12kV AC     Rated inpulse withstand voltage (Uimp)   12kV AC     Rated inpulse withstand voltage (Uimp)   12kV AC	Amperage Rating	1000 A
Special features   Main terminals must be separately ordered.     Special features   Main terminals must be separately ordered.     Suitable for zone selectivity   suitable for zone selectivity     Special features   Frame     Frame   ZMX40     Fitted with:   Switched-off indicator     Used with   ZMX40     Fechnical Data - Electrical   Switched-off indicator     Voltage rating at AC   Sego V AC     Rated operating voltage (Ue) - max   Sego V     Rated insulation voltage (Ui)   Main terringted current (Iu)     Rated insulation voltage (Uimp)   Tool V	Release system	Electronic release
Substrain	Features	
Fitted with:   Switched-off indicator     Used with   Air circuit breakers/switch-disconnector Open circuit breaker     Technical Data - Electrical   Air circuit breakers/switch-disconnector Open circuit breaker     Voltage rating at AC   690 V AC     Rated operating voltage (Ue) - min   690 V     Rated operating voltage (Ue) - max   690 V     Rated insulation voltage (Uinp)   100 V     Rated insulation voltage (Uinp)   12 kV AC     Rated insulation voltage (Uinp)   12 kV AC	Special features	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
Used with   Air circuit breakers/switch-disconnector Open circuit breakers/switch-disconnector     Technical Data - Electrical   Mir circuit breakers/switch-disconnector Open circuit breakers/switch-disconnector     Voltage rating at AC   690 V AC     Rated operating voltage (Ue) - max   690 V     Rated insulation voltage (Ui)   690 V     Rated insulation voltage (Uinp)   1000 V     Rated insulation voltage (Uinp)   12 kV AC     Rated uninterrupted current (lu)   1000 A	Frame	IZMX40
Technical Data - Electrical   Open circuit breaker     Voltage rating at AC   690 V AC     Rated operating voltage (Ue) - min   690 V     Rated operating voltage (Ue) - max   690 V     Rated insulation voltage (Uin)   690 V     Rated insulation voltage (Uinp)   1000 V     Rated uninterrupted current (lu)   600 V	Fitted with:	Switched-off indicator
Voltage rating at AC   690 V AC     Rated operating voltage (Ue) - min   690 V AC     Rated operating voltage (Ue) - max   690 V AC     Rated insulation voltage (Ui)   690 V AC     Rated insulation voltage (Uinp)   1000 V     Rated uninterrupted current (Iu)   1000 A	Used with	
Rated operating voltage (Ue) - min 690 V   Rated operating voltage (Ue) - max 690 V   Rated insulation voltage (Ui) 690 V   Rated insulation voltage (Uinp) 1000 V   Rated uninterrupted current (Iu) 100 V	Technical Data - Electrical	
Rated operating voltage (Ue) - max 600 V   Rated insulation voltage (Ui) 1000 V   Rated impulse withstand voltage (Uimp) 12 kV AC   Rated uninterrupted current (Iu) 1000 A	Voltage rating at AC	690 V AC
Rated insulation voltage (Ui) 1000 V   Rated impulse withstand voltage (Uimp) 12 kV AC   Rated uninterrupted current (Iu) 1000 A	Rated operating voltage (Ue) - min	690 V
Rated impulse withstand voltage (Uimp) 12 kV AC   Rated uninterrupted current (lu) 1000 A	Rated operating voltage (Ue) - max	690 V
Rated uninterrupted current (lu) 1000 A	Rated insulation voltage (Ui)	1000 V
	Rated impulse withstand voltage (Uimp)	12 kV AC
Rated uninterrupted current (Iu) at 50°C 1000 A	Rated uninterrupted current (Iu)	1000 A
	Rated uninterrupted current (Iu) at 50°C	1000 A
Rated uninterrupted current (Iu) at 60°C 1000 A	Rated uninterrupted current (Iu) at 60°C	1000 A
Rated uninterrupted current (lu) at 70°C 1000 A	Rated uninterrupted current (Iu) at 70°C	1000 A
Rated short-time withstand current (t = 1 s) 85 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 short-time withstand current at 50/60 Hz (t = 3 s)	66 kA
Overload release current setting - min 400 A	Overload release current setting - min	400 A
Overload release current setting - max 1000 A	Overload release current setting - max	1000 A
Short-circuit release delayed setting - min 750 A		750 A
Short-circuit release delayed setting - max 10000 A	Short-circuit release delayed setting - min	
Short-circuit release non-delayed setting 1.5 - 10 x lr		10000 A

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	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
Closing delay via spring release	35 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)	75 kA
Actuator type	Push button
Utilization category	В
Overvoltage category	Ш
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 (4-pole)	56 kg
Lifespan, mechanical	12500 switching cycles (0N/OFF) 25000 operations (switching capacity, with maintenance)
Technical Data - Mechanical - Terminals	
Terminal capacity (copper bar)	60 mm x 10 mm (1x) for fixed mounting (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	40 W
Heat dissipation at rated current with fixed mounting	40 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])

protection (Eclessis-27-07-04-03 [A02710010])		
Rated permanent current lu	А	1000
Rated voltage	V	690 - 690
Rated short-circuit breaking capacity lcu at 400 V, 50 Hz	kA	85
Overload release current setting	А	400 - 1000
Adjustment range short-term delayed short-circuit release	А	600 - 10000
Adjustment range undelayed short-circuit release	А	2000 - 15000
Power loss	W	40
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
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		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
Degree of protection (IP)		IP31