Circuit-breaker, 3 pole, 1600A, 105 kA, Selective operation, IEC, Withdrawable



Part no. IZMX40H3-V16W-1

183745

EL Number

4398234

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(Norway)	
General specifications	
Product name	Eaton Moeller series IZMX/INX circuit-breaker
Part no.	IZMX40H3-V16W-1
EAN	4015081794812
Product Length/Depth	584 millimetre
Product height	597 millimetre
Product width	521 millimetre
Product weight	69 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	Three-pole
Amperage Rating	1600 A
Release system	Electronic release
Features	Motor drive optional Complete device with protection unit
Special features	Cassette must be separately ordered. 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	IZMX40
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)	1600 A
Rated uninterrupted current (Iu) at 50°C	1600 A
Rated uninterrupted current (Iu) at 60°C	1600 A
Rated uninterrupted current (Iu) at 70°C	1600 A
Rated short-time withstand current (t = 1 s)	85 kA
Rated short-time withstand current at 50/60 Hz (t = 3 s)	66 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 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	105 kA
Rated short-circuit making capacity up to 440 V, 50/60 Hz	231 kA
Rated short-circuit making capacity up to 690 V, 50/60 Hz	166 kA
Power of withdrawable switch with cassette	140 W
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)	85 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 slide-in technique (withdrawable)
Mounting Method	Withdrawable
Degree of protection	IP31 IP31 with door seals IP55 with protective cover
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 cassette version (3-pole)	29 kg
Weight of fixed withdrawable version (3-pole)	69 kg
Lifespan, mechanical	12500 switching cycles (ON/OFF) 25000 operations (switching capacity, with maintenance)
Technical Data - Mechanical - Terminals	
Terminal capacity (copper bar)	80 mm x 10 mm (1x) 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	140 W
Ambient operating temperature details	-20 °C - 70 °C
Ambient operating temperature details 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	Mosts the product standard's requirements
10.2.3.1 Verification of thermal stability of enclosures	Meets the product standard's requirements. Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures 10.2.3.2 Verification of resistance of insulating materials to normal heat	
10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects	Meets the product standard's requirements. Meets the product standard's requirements.
10.2.3.3 Resist. of insul. mat. to abnormal nearlife by internal elect. effects 10.2.4 Resistance to ultra-violet (UV) radiation	Meets the product standard's requirements. 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.
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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 pormanent current lu A 1600 Rated voltage V 690-690 Rated short-circuit breaking capacity lcu at 400 V, 50 Hz A 600-1600 Overload release current setting A 600-16000 Adjustment range short-term delayed short-circuit release A 800-16000 Adjustment range undelayed short-circuit release A 900-16000 Adjustment range undelayed short-circuit release A 900-16000 Adjustment range undelayed short-circuit release A 900-16000 Power loss A 900-16000 Power loss Built-in device slide-in technique (withdrawable) Integrated earth fault protection No No Type of electrical connection of main circuit Built-in device slide-in technique (withdrawable) No Suitable for DIN rail (top hat rail) mounting optional No No Number of auxiliary contacts as normally losed contact Post Post With switched-off indicator Post Post With switched-off indicator Post Post Sex seize Vish integrated under voltage release Post<			
Rated short-circuit breaking capacity Icu at 400 V, 50 Hz kA 105 Overload release current setting A 640 - 1600 Adjustment range short-term delayed short-circuit release A 980 - 16000 Adjustment range undelayed short-circuit release A 3200 - 24000 Power loss W 140 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 optional No Number of auxiliary contacts as normally closed contact O Number of auxiliary contacts as normally closed contact O With switched-off indicator Yes With integrated under voltage release Yes Number of poles Yes Position of connection for main current circuit Yes Position of connection for main current circuit Yes Type of control element Yes Complete device with protection unit Yes Motor drive integrated Yes Motor drive optional	Rated permanent current lu	А	1600
Overload release current setting Adjustment range short-term delayed short-circuit release Adjustment range undelayed schedus (withdrawable) Adjustment range undelayed (withdrawable) Adjustment range undericale (withdrawable) Adj	Rated voltage	V	690 - 690
Adjustment range short-term delayed short-circuit release Adjustment range undelayed short-circuit release Adjustment range undelayed short-circuit release Power loss Built-in device slide-in technique (withdrawable) Integrated earth fault protection Integrated earth fault protection 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 Vith switched-off indicator Vith integrated under voltage release Vith integrated under voltage release Position of connection for main current circuit Type of control element Complete device with protection unit Motor drive optional Motor drive optional	Rated short-circuit breaking capacity Icu at 400 V, 50 Hz	kA	105
Adjustment range undelayed short-circuit release Power loss W 140 Device construction Device construction Device construction 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 schange-over contact With switched-off indicator With integrated under voltage release Number of poles Position of connection for main current circuit Complete device with protection unit Motor drive integrated Motor drive in	Overload release current setting	А	640 - 1600
Power loss W 140 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 normally open contact 2 With switched-off indicator Yes 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 integrated No	Adjustment range short-term delayed short-circuit release	Α	960 - 16000
Device construction 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 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 Vith 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 integrated Motor drive optional	Adjustment range undelayed short-circuit release	А	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 No Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Outpet of auxiliary contacts as change-over contact Virth switched-off indicator Virth switched-off indicator Virth integrated under voltage release No Number of poles Position of connection for main current circuit Surpe of control element Complete device with protection unit Virth integrated Motor drive integrated Motor drive optional Virth expectation Virth integrated Virth integ	Power loss	W	140
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 Number of auxiliary contacts as change-over contact Vith switched-off indicator With integrated under voltage release No Number of poles 3 Position of connection for main current circuit Back side 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 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 No Number of poles Socition of connection for main current circuit Socition of connection for main current circuit Vith profection unit Complete device with protection unit Motor drive integrated 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 Vith switched-off indicator With integrated under voltage release With number of poles Socition of connection for main current circuit Type of control element Complete device with protection unit Motor drive integrated Motor drive optional No O O O O No No No No No 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 Vith 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 integrated Motor drive optional O O O O O O O O O O O O O	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 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 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 Back side Type of control element Complete device with protection unit Motor drive integrated No Motor drive optional 2 Yes	Number of auxiliary contacts as normally closed contact		0
With switched-off indicator With integrated under voltage release No Number of poles Socition of connection for main current circuit Back side Type of control element Complete device with protection unit Motor drive optional Yes Yes Yes No Yes No Yes	Number of auxiliary contacts as normally open contact		0
With integrated under voltage release No Number of poles 3 Position of connection for main current circuit Type of control element Complete device with protection unit Motor drive optional No No No Yes	Number of auxiliary contacts as change-over contact		2
Number of poles 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 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) IP31	Motor drive optional		Yes
	Degree of protection (IP)		IP31