DATASHEET - IZMX40H3-V08F-1

Circuit-breaker, 3 pole, 800A, 105 kA, Selective operation, IEC, Fixed



Part no.	IZM
	1837
EL Number	4398
(Norway)	

IZMX40H3-V08F-1 183718 4398207

General specifications

General specifications	
Product name	Eaton Moeller series IZMX/INX circuit-breaker
Part no.	IZMX40H3-V08F-1
EAN	4015081794546
Product Length/Depth	584 millimetre
Product height	597 millimetre
Product width	521 millimetre
Product weight	45 kilogram
Compliances	IEC IEC/EN 60947 RoHS conform
Product Tradename	IZMX/INX
Product Type	Circuit-breaker
Product Sub Type	None
Delivery program	
Type Number of poles	Air circuit breakers/switch-disconnector Open circuit breaker Three-pole
Amperage Rating	800 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	IZMX40
Fitted with:	Switched-off indicator
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 (lu)	800 A
Rated uninterrupted current (Iu) at 50°C	800 A
Rated uninterrupted current (Iu) at 60°C	800 A
Rated uninterrupted current (Iu) at 70°C	800 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	320 A
Overload release current setting - max	800 A
Short-circuit release delayed setting - min	600 A
Short-circuit release delayed setting - max	8000 A
Short-circuit release non-delayed setting	1.5 - 10 x lr
Short-circuit release non-delayed setting Short-circuit release non-delayed setting - min	1.5 - 10 x lr 0 A

Adjustment range short-term delayed short-circuit release - min	480 A
Adjustment range short-term delayed short-circuit release - max	8000 A
Adjustment range undelayed short-circuit release - min	1600 A
Adjustment range undelayed short-circuit release - max	12000 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
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	B
Overvoltage category	
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
	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)	
Number of auxiliary contacts (normally open contacts)	0
Position of connection for main current circuit	Back side
Weight of fixed mounting version (3-pole)	43 kg
Lifespan, mechanical	12500 switching cycles (ON/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)	800 A
Equipment heat dissipation, current-dependent	25 W
Heat dissipation at rated current with fixed mounting	25 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	Mosts the product standard's requirements
	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])

Ander voltage V 60 600 Bated short-circuit breaking capacity leu at 400 V, 50 Hz KA 05 Overload release current setting A 20 800 Adjustment range andelayed short-circuit release A 80 6000 Adjustment range undelayed short-circuit release A 80 6000 Power loss V B 5 Device construction V B Bill-in device fixed built-in technique Integrated earth fault protection V No No Suitable for DIN rail (top hat rail) mounting V No No Number of auxiliary contacts as normally copen contact V No No Number of auxiliary contacts as normally open contact V No No Number of auxiliary contacts as normally open contact V No No Number of auxiliary contacts as normally open contact V No No Number of poles V No S S Number of poles V No S S <			
Rate short-circuit breaking capacity leu at 400 V, 50 Hz Image short-circuit breaking capacity leu at 400 V, 50 Hz Image short-circuit release Image short-circuit release </td <td>Rated permanent current lu</td> <td>А</td> <td>800</td>	Rated permanent current lu	А	800
Overload release current setting A 320-800 Adjustment range short-term delayed short-circuit release A 480-8000 Adjustment range undelayed short-circuit release A 100-12000 Power loss VM 5 Device construction WM 8uit-in device fixed built-in technique Integrated earth fault protection MM 8uit-in device fixed built-in technique Suitable for DIN rail (top hat rail) mounting optional MM No Number of auxiliary contacts as normally closed contact MM 9 Number of auxiliary contacts as change-over contact MM 9 Number of poles MM 9 9 Number of poles No 9 9 Nopol	Rated voltage	V	690 - 690
Adjustment range short-ter weldayed short-circuit release A 80-8000 Adjustment range undelayed short-circuit release A 600-12000 Power loss V 5 Device construction M No Integrated earth fault protection M No Type of electrical connection of main circuit M No Number of auxiliary contacts as normally closed contact M No Number of auxiliary contacts as change-over contact M No With integrated under voltage release M No Number of poles No No Position of connection formain current circuit M No Number of poles Mo No Position of connection formain current circuit Mo No Complete device with protection unit Mo No Motor drive integrated Mo No Motor drive integrated Mo No Number of poles No No Type of control element Motor drive wells Sack side Motor drive with pr	Rated short-circuit breaking capacity lcu at 400 V, 50 Hz	kA	105
Adjustment range undelayed short-circuit release Power loss Power loss Bouit-construction Power loss Bouit-construction Bouit-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 Momen of auxiliary contacts as normally closed contact Momen of auxiliary contacts as normally closed contact Momen of auxiliary contacts as change-over contact Mumber of auxiliary contacts as change-over contact Momen of auxiliary contacts as change-over contact Momen of puese Mumber of puese Mumber of puese Moment	Overload release current setting	А	320 - 800
Power loss Bower loss S Device construction F Built-indevice fixed built-in technique Integrated earth fault protection No Rail connection Suitable for DIN rail (top hat rail) mounting No No DIN rail (top hat rail) mounting optional No No Number of auxiliary contacts as normally closed contact No No Number of auxiliary contacts as change-over contact Y O With integrated under voltage release No S Number of poles No S Postion of connection framin current circuit Y S Number of poles No S Postion of connection for main current circuit S S Number of poles S S S Postion of connection for main current circuit S S S Noned Control element	Adjustment range short-term delayed short-circuit release	А	480 - 8000
Device construction Built-in device fixed built-in technique Device construction Rail connection fixed built-in technique Integrated earth fault protection Rail connection 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 No Number of auxiliary contacts as normally conduct O Number of auxiliary contacts as change-over contact Saitable With integrated under voltage release No Number of poles Saitable Position of connection for main current circuit Saitable Type of control element Push button Complete device with protection unit Yes Motor drive integrated No Motor drive integrated No	Adjustment range undelayed short-circuit release	А	1600 - 12000
Integrated earth fault protectionNoType of electrical connection of main circuitRail connectionSuitable for DIN rail (top hat rail) mountingNoDIN rail (top hat rail) mounting optionalNoNumber of auxiliary contacts as normally closed contactNoNumber of auxiliary contacts as normally closed contactONumber of auxiliary contacts as normally open contactONumber of auxiliary contacts as change-over contactJWith integrated under voltage releaseNoNumber of polesSack sidePosition of connection for main current circuitSack sideSpecific device with protection unitYesComplete device with protection unitYesMotor drive integratedNoMotor drive optionalYesMotor drive optional <t< td=""><td>Power loss</td><td>W</td><td>25</td></t<>	Power loss	W	25
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 O Number of auxiliary contacts as normally open contact O Number of auxiliary contacts as change-over contact J With switched-off indicator Ves With integrated under voltage release No Number of poles Saide side Position of connection for main current circuit Saide side Type of control element Push button Complete device with protection unit Yes Motor drive integrated Yes Motor drive potional Yes	Device construction		Built-in device fixed built-in technique
And methods Model 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 Ves With integrated under voltage release No Number of poles Sak side Position of connection for main current circuit Back side Type of control element Push button Complete device with protection unit Yes Motor drive integrated Yes	Integrated earth fault protection		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 normally open 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 Position of connection for main current circuit Back side Type of control element Push button Complete device with protection unit Yes Motor drive pitonal Yes	Type of electrical connection of main circuit		Rail connection
Number of auxiliary contacts as normally closed contact O Number of auxiliary contacts as normally open contact O Number of auxiliary contacts as normally open contact O Number of auxiliary contacts as normally open contact O Number of auxiliary contacts as change-over contact Z With switched-off indicator Yes With integrated under voltage release No Number of poles S Position of connection for main current circuit E Type of control element Pens button Complete device with protection unit Yes Motor drive integrated Yes Motor drive optional Yes	Suitable for DIN rail (top hat rail) mounting		No
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 3 Number of poles Back side Position of connection for main current circuit Yes Complete device with protection unit Yes Motor drive integrated Yes Motor drive optional Yes	DIN rail (top hat rail) mounting optional		No
Number of auxiliary contacts as change-over contact 2 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 Yes Complete device with protection unit Yes Motor drive integrated Yes Motor drive optional Yes Motor drive optional Yes	Number of auxiliary contacts as normally closed contact		0
With switched-off indicator Kes With integrated under voltage release No Number of poles Sack side Position of connection for main current circuit Sack side Type of control element Sub s	Number of auxiliary contacts as normally open contact		0
With integrated under voltage release No Number of poles S Position of connection for main current circuit Back side Type of control element Push button Complete device with protection unit Yes Motor drive optional Yes	Number of auxiliary contacts as change-over contact		2
Number of poles 3 Position of connection for main current circuit 6 Back side Type of control element 9 Push button Complete device with protection unit 6 Yes Motor drive integrated 6 No Motor drive optional 6 Yes	With switched-off indicator		Yes
Position of connection for main current circuit Media Back side Type of control element Media Push button Complete device with protection unit Media Yes Motor drive optional Media No	With integrated under voltage release		No
Type of control element Mode Complete device with protection unit Mode Motor drive integrated Mode Motor drive optional Mode	Number of poles		3
Complete device with protection unit Yes Motor drive integrated No Motor drive optional Ses	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