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Worldwide English



IZMX16B3-V10F-1 - Circuit-breaker, 3 pole, 1000A, 42 kA, Selective operation, IEC, Fixed



183328 IZMX16B3-V10F-1

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183328 IZMX16B3-V10F-1

Circuit-breaker, 3 pole, 1000A, 42 kA, Selective operation, IEC, Fixed

EL-Nummer (Norway)

4398002

Circuit-breaker IZMX16 (Air circuit-breakers/switch-disconnectors), 3 pole, Current Range: Up to 4000 A, Rated current = rated uninterrupted current($I_n = I_u$): 1000 A, up to 440 V 50/60 Hz(I_{cu}): 42 kA, up to 440 V 50/60 Hz(I_{cs}): 42 kA, Overload release, min.(I_r): 400 A, Overload release, max.(I_r): 1000 A, Installation type: Fixed, Standard/Approval: IEC, Protective function: Selective operation

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• [Dimensions](#)

Delivery program

Product range

Air circuit-breakers/switch-disconnectors

Product range

Open circuit-breakers

Current Range

Up to 4000 A

Protective function

Selective operation

Installation type

Fixed

Main terminals must be separately ordered.

Construction size

IZMX16

Release system

Electronic release

Standard/Approval

IEC

Number of poles

3 pole

Degree of Protection



IP31 with door seals, IP55 with protective cover

suitable for zone selectivity

optionally fittable by user with comprehensive accessories

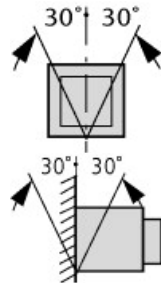
Rated current = rated uninterrupted current [$I_n = I_u$]

1000 A

up to 440 V 50/60 Hz [I_{cu}]
 42 kA
 up to 440 V 50/60 Hz [I_{cs}]
 42 kA
 Overload release, min. [I_r]
 400 A
 Overload release, max. [I_r]
 1000 A
 Non-delayed  [$I_t = I_n \times \dots$]
 2 - 15, OFF
 Delayed  [$I_{sd} = I_r \times \dots$]
 1,5 - 10

Technical data

General
 Standards
 IEC/EN 60947
 Ambient temperatureStorage [9]
 -20 - +70 °C
 Ambient temperatureAmbient temperature
 -20 - +70 °C
 Mounting position



Utilization category
 B
 Degree of Protection
 IP31 with door seals, IP55 with protective cover
 Direction of incoming supply
 as required
 Main conducting paths
 Rated current = rated uninterrupted current [$I_n = I_u$]
 1000 A
 Rated uninterrupted current at 50 °C [I_u]
 1000 A
 Rated uninterrupted current at 60 °C [I_u]
 1000 A
 Rated uninterrupted current at 70 °C [I_u]
 1000 A
 Rated impulse withstand voltage [U_{imp}]
 12000 V AC
 Rated operational voltage [U_b]
 690 V AC
 Use in IT electrical power networks up to [U]
 440 V
 Overvoltage category/pollution degree
 III/3
 Rated insulation voltage [U_i]
 1000 V
 Switching capacity
 Rated short-circuit making capacity [I_{cm}] up to 440 V 50/60 Hz [I_{cm}]
 88 kA
 Rated short-circuit making capacity [I_{cm}] up to 690 V 50/60 Hz [I_{cm}]
 88 kA
 Rated short-time withstand current 50/60 Hz $t = 1$ s [I_{cw}]
 42 kA
 Rated short-circuit breaking capacity I_{cn} [I_{cn}] IEC/EN 60947 operating sequence I_{cu} O-t-CO up to 240 V 50/60 Hz [I_{cu}]
 42 kA
 Rated short-circuit breaking capacity I_{cn} [I_{cn}] IEC/EN 60947 operating sequence I_{cu} O-t-CO up to 440 V 50/60 Hz [I_{cu}]
 42 kA
 Rated short-circuit breaking capacity I_{cn} [I_{cn}] IEC/EN 60947 operating sequence I_{cu} O-t-CO up to 690 V 50/60 Hz [I_{cu}]

42 kA
Rated short-circuit breaking capacity I_{cn} [I_{cn}] IEC/EN 60947 operating sequence I_{cs} O-t-CO-t-CO up to 240 V 50/60 Hz [I_{cs}]
42 kA
Rated short-circuit breaking capacity I_{cn} [I_{cn}] IEC/EN 60947 operating sequence I_{cs} O-t-CO-t-CO up to 440 V 50/60 Hz [I_{cs}]
42 kA
Rated short-circuit breaking capacity I_{cn} [I_{cn}] IEC/EN 60947 operating sequence I_{cs} O-t-CO-t-CO up to 690 V 50/60 Hz [I_{cs}]
42 kA
Operating times Closing delay via spring release
30 ms
Operating times Total opening delay via shunt release
30 ms
Operating times Total opening delay via undervoltage release
50 ms
Operating times Total opening delay on non-delayed short-circuit release (up to complete arc quenching)
27 ms
Lifespan Lifespan, mechanical [Switching cycles (ON/OFF)]
12500
Lifespan Lifespan, mechanical with maintenance [Switching cycles (ON/OFF)]
25000.
Lifespan Lifespan, electrical [Switching cycles (ON/OFF)]
10000
Lifespan Lifespan, electrical with maintenance [Switching cycles (ON/OFF)]
20000.
Maximum operating frequency [Operations/h]
60
Heat dissipation at rated current I_n Fixed mounting
92 W
Weight
Fixed mounting 3-pole
19 kg
Terminal capacities
Copper bar Fixed mounting Black
2 x 5 x 60 mm
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.
Permissible continuous current for circuit-breakers operating in switchboards at various internal ambient temperatures. The switchboard's internal ambient temperature should be estimated using the calculation methods of IEC regulation.

Design verification as per IEC/EN 61439

Technical data for design verification
Rated operational current for specified heat dissipation [I_n]
1000 A
Equipment heat dissipation, current-dependent [P_{vid}]
92 W
Operating ambient temperature min.
-20 °C
Operating ambient temperature max.
+70 °C
IEC/EN 61439 design verification
10.2 Strength of materials and parts 10.2.2 Corrosion resistance
Meets the product standard's requirements.
10.2 Strength of materials and parts 10.2.3.1 Verification of thermal stability of enclosures
Meets the product standard's requirements.
10.2 Strength of materials and parts 10.2.3.2 Verification of resistance of insulating materials to normal heat
Meets the product standard's requirements.
10.2 Strength of materials and parts 10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects
Meets the product standard's requirements.
10.2 Strength of materials and parts 10.2.4 Resistance to ultra-violet (UV) radiation
Meets the product standard's requirements.
10.2 Strength of materials and parts 10.2.5 Lifting

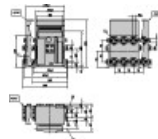
Does not apply, since the entire switchgear needs to be evaluated.
 10.2 Strength of materials and parts 10.2.6 Mechanical impact
 Does not apply, since the entire switchgear needs to be evaluated.
 10.2 Strength of materials and parts 10.2.7 Inscriptions
 Meets the product standard's requirements.
 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 Insulation properties 10.9.2 Power-frequency electric strength
 Is the panel builder's responsibility.
 10.9 Insulation properties 10.9.3 Impulse withstand voltage
 Is the panel builder's responsibility.
 10.9 Insulation properties 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 7.0

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@ss10.0.1-27-37-04-09 [AJZ716013])
 Rated permanent current I_n
 1000 A
 Rated voltage
 690 - 690 V
 Rated short-circuit breaking capacity I_{cu} at 400 V, 50 Hz
 42 kA
 Overload release current setting
 400 - 1000 A
 Adjustment range short-term delayed short-circuit release
 600 - 10000 A
 Adjustment range undelayed short-circuit release
 2000 - 15000 A
 Integrated earth fault protection
 No
 Type of electrical connection of main circuit
 Rail connection
 Device construction
 Built-in device fixed built-in technique
 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 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 optional
Yes
Degree of protection (IP)
IP31

Dimensions



- ☐ Door
- ☐ Contact surface flange terminal

CAD data

- [Product-specific CAD data](#)
(Web)
- [3D Preview](#)
(Web)

DWG files

- [DA-CD-izmx16_3pol_f](#)
File
(Web)

edz files

- [DA-CE-ETN.IZMX16B3-V10F-1](#)
File
(Web)

Step files

- [DA-CS-izmx16_3pol_f](#)
File
(Web)

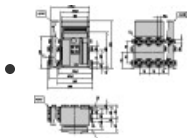
Product photo



[sg05016](#)

Photo
IZMX16B, 3 pole, fixed mounting

Dimensions single product

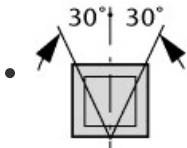


1230DIM-382

Line drawing

☐ Door

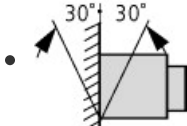
☐ Contact surface flange terminal



123ND98

Line drawing

Mounting position



123ND99

Line drawing

Mounting position

Tender text

- [Tender text ZMX16B3-V10F-1 \(TT-ZMX16B3-V10F-1-183328\)](#)
 (Microsoft Word)

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