

Circuit-breaker, 3 pole, 1250 A, 42 kA, Selective operation, IEC, Withdrawable

Powering Business Worldwide[™]

Part no. IZMX16B3-V12W-1 Article no. 183344

Delivery program

Product range Current Range Current Range Protective function Installation type Protective function Installation Installation type Protective function Installation Installa	zonro., program			
Current Range Protective function Installation type Installation Inst	Product range			Air circuit-breakers/switch-disconnectors
Protective function Installation type Installati	Product range			Open circuit-breakers
Installation type Mithdrawable Cassette must be separately ordered. Main terminals must be separately ordered. Main terminals must be separately ordered. Main terminals must be separately ordered. IZMX16	Current Range			Up to 4000 A
Construction size Release system Release system Number of poles Degree of Protection Release and up to 440 V 50/60 Hz up to 440 V 50/60 Hz Overload release, min. Non-delayed Non-delayed Non-delayed Namide reminals must be separately ordered. Rain terminals must be separately ordered. IZMX 16 Release Release Release system Release Release system Release Release system Release Release Release system Release Releas	Protective function			Selective operation
Main terminals must be separately ordered. Construction size Release system Release system Standard/Approval Number of poles Degree of Protection In = Iu A 1250 A 1250 Overload release, min. Overload release, max. Non-delayed Namin terminals must be separately ordered. Main terminals must be separately ordered. IZMX16 IZMX16 IEC IEC IEC IP31 with door seals, IP55 with protective cover suitable for zone selectivity optionally fittable by user with comprehensive accessories a 1250 Value A 2 Value A 42 Value	Installation type			Withdrawable
Construction size Release system Release system Standard/Approval Number of poles Degree of Protection In = Iu A 1250 Lup to 440 V 50/60 Hz Lup to 440 V				Cassette must be separately ordered.
Release system Standard/Approval Number of poles Degree of Protection In = Iu A 1250 up to 440 V 50/60 Hz up to 440 V 50/60 Hz Overload release, min. Overload release, max. Non-delayed In = Iu A 1250 It A				Main terminals must be separately ordered.
Standard/Approval Number of poles Degree of Protection In = Iu A It is a light of your optionally fittable by user with comprehensive accessories Rated current = rated uninterrupted current In = Iu A It is a light of your optionally fittable by user with comprehensive accessories It is a light of your optionally fittable by user with comprehensive accessories It is a light of your optionally fittable by user with comprehensive accessories It is a light of your optionally fittable by user with comprehensive accessories It is a light of your optionally fittable by user with comprehensive accessories It is a light of your optionally fittable by user with comprehensive accessories It is a light of your optionally fittable by user with comprehensive accessories It is a light of your optionally fittable by user with comprehensive accessories It is a light of your optionally fittable by user with comprehensive accessories It is a light of your optionally fittable by user with comprehensive accessories It is a light of your optionally fittable by user with comprehensive accessories It is a light of your optionally fittable by user with comprehensive accessories It is a light of your optionally fittable by user with comprehensive accessories It is a light of your optionally fittable by user with comprehensive accessories It is a light of your optionally fittable by user with comprehensive accessories It is a light of your optionally fittable by user with comprehensive accessories It is a light of your optionally fittable by user with comprehensive accessories It is a light of your optionally fittable by user with comprehensive accessories It is a light of your optionally fittable by user with comprehensive accessories It is a light of your optionally fittable by user with comprehensive accessories It is a light of your optionally fittable by user with comprehensive accessories It is a light of your optionally fittable by user with comprehensive accessories It is a light of your optionally fi	Construction size			IZMX16
Number of poles Degree of Protection Part with door seals, IP55 with protective cover suitable for zone selectivity optionally fittable by user with comprehensive accessories Part up to 440 V 50/60 Hz Part	Release system			Electronic release
Degree of Protection P31 with door seals, IP55 with protective cover suitable for zone selectivity optionally fittable by user with comprehensive accessories P31 with door seals, IP55 with protective cover suitable for zone selectivity optionally fittable by user with comprehensive accessories P31 with door seals, IP55 with protective cover suitable for zone selectivity optionally fittable by user with comprehensive accessories P31 with door seals, IP55 with protective cover suitable for zone selectivity optionally fittable by user with comprehensive accessories P31 with door seals, IP55 with protective cover suitable for zone selectivity optionally fittable by user with comprehensive accessories P32 with door seals, IP55 with protective cover suitable for zone selectivity optionally fittable by user with comprehensive accessories P32 with door seals, IP55 with protective cover suitable for zone selectivity optionally fittable by user with comprehensive accessories P32 with door seals, IP55 with protective cover suitable for zone selectivity optionally fittable by user with comprehensive accessories P32 with door seals, IP55 with protective cover suitable by user with comprehensive accessories P33 with door seals, IP55 with protective cover suitable by user with comprehensive accessories P34 with door seals, IP56 with protective cover suitable by user with comprehensive accessories P35 with protective cover with comprehensive accessories P35 with protect	Standard/Approval			IEC
Suitable for zone selectivity optionally fittable by user with comprehensive accessories Rated current = rated uninterrupted current In = Iu A 1250 up to 440 V 50/60 Hz Ics kA 42 Overload release, min. Ir A 500 Overload release, max. Ir A 1250 Non-delayed I = In x I	Number of poles			3 pole
Rated current = rated uninterrupted current In = Iu A 1250 1250	Degree of Protection			IP31 with door seals, IP55 with protective cover
up to 440 V 50/60 Hz up to 440 V 50/60 Hz up to 440 V 50/60 Hz lcs kA 42 Overload release, min. Overload release, max. Vir A 1250 Non-delayed Vir A 2-15, OFF				
up to 440 V 50/60 Hz Up to 440 V 50/60 Hz Overload release, min. Up to 440 V 50/60 Hz I to A I to	Rated current = rated uninterrupted current	$I_n = I_u$	Α	1250
Overload release, min. Ir A 500 Overload release, max. Ir A 1250 Non-delayed I = In x I =	up to 440 V 50/60 Hz	I _{cu}	kA	42
Overload release, max. Ir A 1250 Non-delayed I = I _n x 2 - 15, OFF	up to 440 V 50/60 Hz	I _{cs}	kA	42
Non-delayed	Overload release, min.	I _r	Α	500
	Overload release, max.	I _r	Α	1250
Delayed $I_{sd} = I_r \times \dots$ 1,5 - 10	Non-delayed I >	$I_i = I_n \times \dots$		2 - 15, OFF
	Delayed X >	$I_{sd} = I_r x \dots$		1,5 - 10

Technical data

General			
Standards			IEC/EN 60947
Ambient temperature			
Storage	θ	°C	-20 - +70
Ambient temperature		°C	-20 - +70
Mounting position			30° 30°
			30° 30°
Utilization category			В
Degree of Protection			IP31 with door seals, IP55 with protective cover
Direction of incoming supply			as required
Main conducting naths			

Main conducting paths

Rated current = rated uninterrupted current	$I_n = I_u$	Α	1250
Rated uninterrupted current at 50 °C	I _u	Α	1250

Rated uninterrupted current at 60 °C	l _u	Α	1250
Rated uninterrupted current at 70 °C	I _u	Α	1250
Rated impulse withstand voltage	U _{imp}	V AC	12000
Rated operational voltage	U _e	V AC	690
Use in IT electrical power networks up to U = 440 V	I _{IT}	kA	0
Use in IT electrical power networks up to U = 690 V	I _{IT}	kA	0
Overvoltage category/pollution degree			III/3
Rated insulation voltage	Ui	V	1000
Switching capacity			
Rated short-circuit making capacity	I _{cm}		
up to 440 V 50/60 Hz	I _{cm}	kA	88
up to 690 V 50/60 Hz	I _{cm}	kA	88
Rated short-time withstand current 50/60 Hz			
t=1s	I _{cw}	kA	42
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}	kA	42
up to 440 V 50/60 Hz	I _{cu}	kA	42
up to 690 V 50/60 Hz	I _{cu}	kA	42
IEC/EN 60947 operating sequence I _{cs} 0-t-C0-t-C0			
up to 240 V 50/60 Hz	I _{cs}	kA	42
up to 440 V 50/60 Hz	I _{cs}	kA	42
up to 690 V 50/60 Hz		kA	42
	I _{cs}	KA	42
Operating times			00
Closing delay via spring release		ms	30
Total opening delay via shunt release		ms	30
Total opening delay via undervoltage release		ms	50
Total opening delay on non-delayed short-circuit release (up to complete arc quenching)		ms	27
Lifespan		S	
Lifespan, mechanical	Switching cycles (ON/ OFF)		12500
Lifespan, mechanical with maintenance	Switching cycles (ON/ OFF)		25000.
Lifespan, electrical	Switching cycles (ON/ OFF)		10000
Lifespan, electrical with maintenance	Switching cycles (ON/ OFF)		20000.
Maximum operating frequency	Operations/h		60
Heat dissipation at rated current I _n			
Withdrawable units (switch with cassette)		W	180
Weight			
Withdrawable			
3-pole		kg	28
Cassette			
3 pole		kg	18
Terminal capacities			
Copper bar			
Withdrawable units			
Black		mm	2 x 5 x 80
			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

200:g.: 10::::00:::00 po: :20,2:: 01::00			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	1250
Equipment heat dissipation, current-dependent	P _{vid}	W	180
Operating ambient temperature min.		°C	-20
Operating ambient temperature max.		°C	70
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 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 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric 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 Insulation properties			
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 switch gear must be observed. $\label{eq:constraint}$
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switch gear must be observed. $\label{eq:constraint}$
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed. $\label{eq:continuous}$

Technical data ETIM 6.0

Low-voltage industrial components (EG000017) / Power circuit-breaker for trafo/generator/installation prot. (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@ss8.1-27-37-04-09 [AJZ716010])

protection (cc1@330.1 27 07 04 03 [A02710010])			
Rated permanent current lu	Α	4	1250
Rated voltage	V	/	690 - 690
Rated short-circuit breaking capacity Icu at 400 V, 50 Hz	k	κA	42
Overload release current setting	А	A	625 - 1250
Adjustment range short-term delayed short-circuit release	Α	4	2500 - 12500
Adjustment range undelayed short-circuit release	А	A	2500 - 15000
Integrated earth fault protection			No
Type of electrical connection of main circuit			Rail connection
Device construction			Built-in device slide-in technique (withdrawable)
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
Switched-off indicator available	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

