

Circuit-breaker 3p, 1250A, fixed

Part no. Article no. IZMX16N3-V12F 123374



Delivery programme

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
Construction size			IZMX16
Release system			Electronic release
Standard/Approval			IEC
Number of poles			3 pole
Degree of Protection			IP20, IP55 with protective cover, IP41 door sealing frame
			suitable for zone selectivity optionally fittable by user with comprehensive accessories
Rated current = rated uninterrupted current	$I_n = I_u$	А	1250
Breaking capacity Icu = Ics to 440 V 50/60 Hz	l _{cu}	kA	50
Breaking capacity Ics to 440 V 50/60 Hz	I _{cs}	kA	50
Overload release, min.	I _r	А	625
Overload release, max.	l _r	Α	1250
Non-delayed	I _i = I _n x		2 - 12, OFF
Delayed	I _{sd} = I _r x		2 - 10
Notes			
Main terminals not included, need to be ordered separately.			

Technical data

Ambient temperature Image: Constraint of the constand of the constraint of the constand of t	General			
Storage 40 - 70 Operating (open) ************************************	Standards			IEC/EN 60947
Operating (open) ************************************	Ambient temperature			
Mounting position Image: Signa S	Storage	θ	°C	-40 - +70
Utilization categoryMain conducting pathsDegree of ProtectionMain conducting paths	Operating (open)		°C	-25 - +70
Utilization categoryBDegree of ProtectionIP20, IP55 with protective cover, IP41 door sealing frameDirection of incoming supplyIP20, IP55 with protective cover, IP41 door sealing frameMain conducting pathsIP20, IP55 with protective cover, IP41 door sealing frame	Mounting position			
Degree of Protection IP20, IP55 with protective cover, IP41 door sealing frame Direction of incoming supply as required				30° 30°
Direction of incoming supply as required as required	Utilization category			В
Main conducting paths	Degree of Protection			IP20, IP55 with protective cover, IP41 door sealing frame
	Direction of incoming supply			as required
Rated current = rated uninterrupted current $I_n = I_u$ A 1250	Main conducting paths			
	Rated current = rated uninterrupted current	$I_n = I_u$	А	1250

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Attachan-sine withstand carent 5000 fV Image: space spac	up to 440 V 50/60 Hz	I _{cm}	kA	105
i = 1 aiveiveiRied short pircular shapen sequence in a thort pircular shapen	up to 690 V 50/60 Hz	I _{cm}	kA	88
Rate data-circuit braking capacity log Main Main <thmain< th=""> Main Main</thmain<>	Rated short-time withstand current 50/60 Hz			
EICEN 80047 joerating sequence lg, 04-00IgnI	t = 1 s	I _{cw}	kA	42
up to 240 Y 0000 hz kg Ka Second	Rated short-circuit breaking capacity I _{cn}	I _{cn}		
up to 440 Y 3000 Hz ka ka A up to 500 Y 5000 Hz Hz Ka 4 up to 500 Y 5000 Hz Hz Ka 5 up to 400 Y 3000 Hz Hz Ka 6 up to 400 Y 3000 Hz Hz Ka 6 up to 400 Y 3000 Hz Hz Ka 6 Up to 500 Y 5000 Hz Hz Ka 6 Up to 500 Y 5000 Hz Hz Ka 6 Checking imms Ka 6 6 Up span, mechanical Sketching imms 6 6 Uf span, mechanical with maintenance Sketching imms 6 6	IEC/EN 60947 operating sequence I _{cu} O-t-CO			
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up to 600 V 5060 ht/rImage of a sequence leg 0+CO-LGOImage of a sequence leg 0+CO-LG	up to 440 V 50/60 Hz		kA	50
Interpretation sequence I = 0 C - C - C - C - C - C - C - C - C				
up to 240 Y50/60 H2 Is Ka Ka Solution up to 440 Y50/60 H2 Is Ka Solution Solution up to 850 Y50/60 H2 Is Ka Solution Solution Operating times Is Solution Solution Solution Closing delay via shurt rolesse Is Solution Solution Solution Total opening delay via undervoltage relesse Is Solution Solution Solution Total opening delay via undervoltage relesse Is Is Solution Solution Urbspan, mechanical Solution Is Solution So		UU .		
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Terminal capacities Copper bar Image: Copper bar Fixed mounting Image: Copper bar Black mm 2 x 5 x 80 Withdrawable units Image: Copper bar 2 x 5 x 80 Black mm 2 x 5 x 80 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				
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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	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	Withdrawable units			
the temperature around the circuit-breaker, which is influenced by the ambient	Black		mm	2 x 5 x 80

any external ventilation. Depending on the specific switchgear design, this may result in derating, which can then be compensated for by increasing the crosssectional 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	In	А	1250
Equipment heat dissipation, current-dependent	P _{vid}	W	132
Operating ambient temperature min.		°C	-25
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 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 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])

Rated permanent current lu A Rated voltage V Rated short-circuit breaking capacity lcu at 400 V, 50 Hz kk	1	1250
		1230
Bated short-circuit breaking capacity Icu at 400 V 50 Hz	6	590 - 690
	A 5	50
Overload release current setting A	6	525 - 1250
Adjustment range short-term delayed short-circuit release A	2	2500 - 12500
Adjustment range undelayed short-circuit release A	2	2500 - 15000
Integrated earth fault protection	N	No
Type of electrical connection of main circuit	R	Rail connection
Device construction	В	Built-in device fixed built-in technique
Suitable for DIN rail (top hat rail) mounting	N	No
DIN rail (top hat rail) mounting optional	N	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)	IP20

Dimensions

