

Circuit-breaker 4p, 1000A, AF

Part no. IZMX16H4-A10W Article no. 123268



Delivery programme

Zonio, programmo			
Product range			Air circuit-breakers/switch-disconnectors
Product range			Open circuit-breakers
Current Range			Up to 4000 A
Protective function			System protection
Installation type			Withdrawable
Construction size			IZMX16
Release system			Electronic release
Standard/Approval			IEC
Number of poles			4 pole
Degree of Protection			IP20, IP55 with protective cover, IP41 door sealing frame
			optionally fittable by user with comprehensive accessories
Rated current = rated uninterrupted current	$I_n = I_u$	Α	1000
Breaking capacity Icu = Ics to 440 V 50/60 Hz	I _{cu}	kA	65
Breaking capacity Ics to 440 V 50/60 Hz	I _{cs}	kA	50
Overload release, min.	I _r	Α	500
Overload release, max.	I _r	Α	1000
Non-delayed	$I_i = I_n x \dots$		2 - 12
Notes			
Main terminals must be separately ordered.			

Main terminals must be separately ordered.

Note concerning the product

Cassette needs to be ordered separately.

Technical data

Genera

General			
Standards			IEC/EN 60947
Ambient temperature			
Storage	9	°C	-40 - +70
Operating (open)		°C	-25 - +70
Mounting position			30° 30°
			30° 30°
Utilization category			В
Degree of Protection			IP20, IP55 with protective cover, IP41 door sealing frame
Direction of incoming supply			as required
Main conducting paths			
But the state of t			4000

Rated current = rated uninterrupted current	$I_n = I_u$	Α	1000
Rated uninterrupted current at 50 °C	I _u	Α	1000
Rated uninterrupted current at 60 °C	l _u	Α	1000

Raded proportions violages 10 pm				
Rate of operational voltage U _s V AC 28 Use in 17 caccinated proximative depth 0 = 444 V 1g. 24 29 Operatings category/bullent degree 1g. V 900 Switching capacity William 17 capacity 1g. V 900 William 27 capacity 1g. V 900 Read solution through capacity (1g. 1g. V 90 Read solution through capacity (1g. 1g. V 90 Read solution through capacity (1g. 1g. V 90 Broad solution capacity (1g. 1g. V 90 Broad solution through capacity (1g. 1g. V 90 Broad solution through capacity (1g. 1g. V 90 1g. 2g. 2g. 2g. 2g. 2g. 2g. 2g. 2g. 2g. 2	Rated uninterrupted current at 70 °C		Α	1000
See In IT affectival procur networks up to U - 464 V V V V V V V V V V V V V V V V V V	Rated impulse withstand voltage	U_{imp}	V AC	12000
December	Rated operational voltage	U _e	V AC	690
Note Part	Use in IT electrical power networks up to U = 440 V	I _{IT}	kA	23
Switch days Care cont making capacity	Overvoltage category/pollution degree			III/3
Road of Street Count making reporting Segment Seg	Rated insulation voltage	Ui	٧	1000
up to 640 V 5000 hz Lor VA 138 up to 640 V 5000 hz Inn LA 68 Extend short-rice we	Switching capacity			
Rated short-direw withstand current \$1000 Hz In AL Example of the Control of The Withstand current \$1000 Hz In	Rated short-circuit making capacity	I _{cm}		
Name of share-diseave withstand current 1900 No. 1	up to 440 V 50/60 Hz	I _{cm}	kA	136
Table Section Sectio	up to 690 V 50/60 Hz	I _{cm}	kA	88
Rated short-circuit breaking capacity I _{co} IECCR 58987 speraning sequence I _{co} 0-CO up to 26V 59080 Hz up to 46V 59080 Hz up to 66V 59080 Hz	Rated short-time withstand current 50/60 Hz			
	t = 1 s	I _{cw}	kA	42
Lifespan, mechanical with maintenance Solution So	Rated short-circuit breaking capacity I_{cn}	I _{cn}		
Up to 440 V 5000 Hz	IEC/EN 60947 operating sequence I _{cu} 0-t-C0			
up to 680 V 5080 Hz Les LA 42 IESCEN 580 897 operating sequence Lcs OCOCO Les LA 55 up to 240 V 5080 Hz Les LA 50 up to 540 V 5080 Hz Les LA 42 Operating simes Base of Mark 1 and	up to 240 V 50/60 Hz	I _{cu}	kA	85
ECICEN 80847 operating sequence _c O+CO-CO up to 240 V 50/80 Hz	up to 440 V 50/60 Hz	I _{cu}	kA	65
up to 240 Y 50,50 Hz I _{cs} kA 50 up to 580 Y 50,50 Hz I _{cs} kA 42 Operating times ————————————————————————————————————	up to 690 V 50/60 Hz	I _{cu}	kA	42
up to 440 V 50 GV Hz lcs kA 50 up to 480 V 50 GV Hz lcs kA 42 Operating times Coboling delay via sping release 30 30 Total opening delay via shunt release ms 25 Total opening delay via undervoltage release ms 50 Total opening delay via undervoltage release ms 25 Lifespan, electrical with maintenance Switching cycles (NV) 250 Lifespan, mechanical Switching cycles (NV) 2000 Lifespan, electrical with maintenance Switching cycles (NV) 2000 Maximum operating frequency Quertical with maintenance 20 20 Withdrawable units (switch with eassette) With 25 20 20 Withdr	IEC/EN 60947 operating sequence I _{cs} O-t-CO-t-CO			
up to 440 V 50/60 ltz cs kA 50 up to 890 V 50/60 ltz lcs kA 42 Operating times 30 30 Closing delay via shunt release ms 25 Total opening delay via undervoltage release ms 50 Total opening delay on non-delayed short-circuit release lup to complete are quenching! s 25 Lifespan, mechanical Switching cycles (IV) 250 Lifespan, mechanical with maintenance Switching cycles (IV) 2500 Lifespan, electrical with maintenance Switching cycles (IV) 2000 Withdrawable units (switch with cassetts) W 25 Sold 3 3		I _{cs}	kA	65
up to 890 V 5000 Hz cs IAA 42 Operating times — ms 30 Closing delay via spring release — ms 25 Total opening delay via underveltage release — ms 25 Total opening delay via underveltage release — ms 25 Lifespan, gelevin in neuronal delay via underveltage release S — Lifespan, mechanical Switching view in maintenance Switching view in Miniman intenance Switching view in Miniman intenance Switching view in Miniman intenance Doorgood Lifespan, electrical with maintenance Switching view in Miniman intenance Switching view in Miniman intenance With intenance in Miniman intenance Switching view in Miniman intenance With intenance in Miniman intenance With in	up to 440 V 50/60 Hz		kA	50
Operating times Image: Closing delay via spring release May 30 Total opening delay via shunt release may 35 Total opening delay via undervoltage release may 32 Total opening delay via undervoltage release may 32 Total opening delay via undervoltage release Some 30 Lifespan, electrical vith maintonance Switching cycles (III) V OFF Total opening delay via undervoltage release Lifespan, mechanical Switching cycles (III) V OFF Total opening delay via undervoltage release Lifespan, mechanical vith maintonance Switching cycles (III) V OFF Total opening delay via undervoltage release Lifespan, electrical vith maintonance Switching cycles (III) V OFF Total opening delay via undervoltage release Maximum operating frequency Operations) Total opening delay via undervoltage release Medid dissipation at rated current I, Vithdrawable units (switch with cassette) V 125 Withdrawable units (switch with cassette) V 125 A-pole Spole Sg 28 4-pole Sg 28 4-pole Sg 29 4-pole Sg 20	up to 690 V 50/60 Hz		kA	42
Closing delay via spring release ms 25 Total opening delay via undervoltage release ms 50 Total opening delay via undervoltage release ms 50 Total opening delay on non-delayed short-circuit release (up to complete arc quenching) ms 25 Total opening delay on non-delayed short-circuit release (up to complete arc quenching) ms 25 Lifespan, mechanical Switching Cycles (DN/ OFF) ms 2500 Lifespan, mechanical with maintenance Switching Cycles (DN/ OFF) ms 12500 Lifespan, electrical with maintenance Switching Cycles (DN/ OFF) ms 10000 Lifespan, electrical with maintenance Switching Cycles (DN/ OFF) ms 10000 Lifespan, electrical with maintenance Switching Cycles (DN/ OFF) ms 10000 Maximum operating frequency Operations/h Withdrawable units (switch with cassette) W 125 Weight Withdrawable Switching Cycles (DN/ OFF) ms 10000 Withdrawable Switch with cassette) W 125 Switching Cycles (DN/ OFF) ms 10000 Withdrawable Switching Cycles (DN/ OFF) ms 10000 Withdrawable ms 10000 ms 10000 Switching Cycles (DN/ OFF)				
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Total opening delay via undervoltage release Total opening delay via undervoltage release (up to complete arc quenching) Lifespan Lifespan, mechanical Lifespan, mechanical with maintenance Switching cycles (ON/ OFF) Lifespan, electrical Lifespan, electrical Switching cycles (ON/ OFF) Lifespan, electrical with maintenance Switching cycles (ON/ OFF) Cycles (ON/ OFF) Department of the span				
Total opening delay on non-delayed short-circuit release (up to complete arc quenching) Lifespan Lifespan, mechanical Lifespan, mechanical with maintenance Lifespan, electrical with maintenance Very less (ION OFF) Maximum operating frequency Morphia or a trated current In Withdrawable units (switch with cassette) Withdrawable 3-pole 4-pole 3-pole 4-pole 3-pole 4-pole 3-pole 4-pole 5-yole 3-pole 4-pole 5-yole 3-pole 4-pole 5-yole 5-yole 7-yole 7-yole 8-yole 9-yole 9-				
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Lifespan, electrical cycles (ON/ OFF) 10000 Lifespan, electrical with maintenance Switching cycles (ON/ OFF) 10000 Maximum operating frequency Operations/h 60 Heat dissipation at rated current In Withdrawable units (switch with cassette) W 125 Weight Withdrawable 3-pole kg 28 4-pole kg 33 Cassette kg 18 4 pole kg 18 4 pole kg 21 Terminal capacities Copper bar fixed mounting Black mounting services of the service of	Lifespan, mechanical with maintenance	Switching cycles (ON/		20000
Lifespan, electrical with maintenance systems of the spanning frequency operations/h of Fl Maximum operating frequency operations/h with drawsplus units (switch with cassette) w 125 Weight Withdrawable	Lifespan, electrical	Switching cycles (ON/		10000
Maximum operating frequency Heat dissipation at rated current In Withdrawable units (switch with cassette) Weight Withdrawable 3-pole 4-pole 4-pole 8 kg 28 4-pole 8 kg 33 Cassette 3 pole 4 pole 4 pole 5 kg 18 4 pole 7 terminal capacities Copper bar Fixed mounting Black Withdrawable units	Lifespan, electrical with maintenance	Switching cycles (ON/		10000
Heat dissipation at rated current In Withdrawable units (switch with cassette) Weight Withdrawable 3-pole kg 28 4-pole kg 33 Cassette 3 pole kg 18 4 pole kg 21 Terminal capacities Copper bar Fixed mounting Black Withdrawable units				
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Weight Withdrawable kg 28 4-pole kg 33 Cassette Cassette Cassette 3 pole kg 18 4 pole kg 21 Terminal capacities Copper bar Fixed mounting Black mm 2 x 5 x 60 Withdrawable units Withdrawable units Texture of the color of the				
Withdrawable 3-pole kg 28 4-pole kg 33 Cassette 3 pole kg 18 4 pole kg 21 Terminal capacities Copper bar Fixed mounting Black mm 2x5x60 Withdrawable units			W	125
3-pole				
4-pole kg 33 Cassette 8g 18 3 pole kg 21 Terminal capacities Copper bar Fixed mounting Black mm 2 x 5 x 60 Withdrawable units			ka	28
Cassette 3 pole kg 18 4 pole kg 21 Terminal capacities Copper bar Fixed mounting Black mm 2 x 5 x 60 Withdrawable units				
3 pole kg 18 4 pole kg 21 Terminal capacities Copper bar Fixed mounting Black mm 2 x 5 x 60 Withdrawable units Withdrawable units			J	
4 pole kg 21 Terminal capacities Copper bar Fixed mounting Black mm 2 x 5 x 60 Withdrawable units			kg	18
Terminal capacities Copper bar Fixed mounting Black Withdrawable units mm 2 x 5 x 60				
Fixed mounting Black mm 2 x 5 x 60 Withdrawable units	Terminal capacities			
Black mm 2 x 5 x 60 Withdrawable units				
Withdrawable units			mm	2 x 5 x 60
DIACK	Black		mm	2 x 5 x 60
These are values used in separate switchgear. The actual values will depend				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	In	Α	1000
Equipment heat dissipation, current-dependent	P _{vid}	W	125
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 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.

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 (aci@ses 1-27-37-04-09 (A 17716010))

protection (ecl@ss8.1-27-37-04-09 [AJZ716010])		
Rated permanent current lu	А	1000
Rated voltage	V	690 - 690
Rated short-circuit breaking capacity Icu at 400 V, 50 Hz	kA	65
Overload release current setting	А	500 - 1000
Adjustment range short-term delayed short-circuit release	Α	0 - 0
Adjustment range undelayed short-circuit release	Α	2000 - 12000
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	4
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