

Circuit-breaker 4p, 630A, fixed

Part no. IZMX16B4-V06F Article no. 123471



Delivery programme

Product range Current Range Cu	Delivery hrogianinie			
Protective function stallation type Protective function installation type Protective function size Release system Release system Release system Release system Release Protection Release system Relea	Product range			Air circuit-breakers/switch-disconnectors
Protective function Installation type Construction size Construction size Construction size Release system Standard/Approval Construction Standard/Approval Construction Const	Product range			Open circuit-breakers
Fixed Fi	Current Range			Up to 4000 A
Exertification size Construction size Constructio	Protective function			Selective operation
Release system Standard/Approval Number of poles Degree of Protection Release system Lease Protection Lease Protec	Installation type			Fixed
Standard/Approval Number of poles Degree of Protection Protection In = lu A 630 Breaking capacity cu = cs to 440 V 50/60 Hz lcs whith comprehensive accessories lcs whith lcs whith lcs whith lcs whith lcs whith	Construction size			IZMX16
Number of poles Degree of Protection Degree of Protective cover, IP41 door sealing frame Suitable for zone selectivity optionally fittable by user with comprehensive accessories Degree of Suitable for zone selectivity optionally fittable by user with comprehensive accessories Degree of Suitable for zone selectivity optionally fittable by user with comprehensive accessories Degree of Suitable for zone selectivity optionally fittable by user with comprehensive accessories Degree of Suitable for zone selectivity optionally fittable by user with comprehensive accessories Degree of Suitable for zone selectivity optionally fittable by user with comprehensive accessories Degree of Suitable for zone selectivity optionally fittable by user with comprehensive accessories Degree of Suitable for zone selectivity optionally fittable by user with comprehensive accessories	Release system			Electronic release
Degree of Protection P20, IP55 with protective cover, IP41 door sealing frame suitable for zone selectivity optionally fittable by user with comprehensive accessories suitable for zone selectivity optionally fittable by user with comprehensive accessories suitable for zone selectivity optionally fittable by user with comprehensive accessories suitable for zone selectivity optionally fittable by user with comprehensive accessories suitable for zone selectivity optionally fittable by user with comprehensive accessories suitable for zone selectivity optionally fittable by user with comprehensive accessories suitable for zone selectivity optionally fittable by user with comprehensive accessories suitable for zone selectivity optionally fittable by user with comprehensive accessories suitable for zone selectivity optionally fittable by user with comprehensive accessories suitable for zone selectivity optionally fittable by user with comprehensive accessories suitable for zone selectivity optionally fittable by user with comprehensive accessories suitable for zone selectivity optionally fittable by user with comprehensive accessories suitable for zone selectivity optionally fittable by user with comprehensive accessories suitable for zone selectivity optionally fittable by user with comprehensive accessories and suitable for zone selectivity optionally fittable by user with comprehensive accessories and suitable for zone selectivity optionally fittable by user with comprehensive accessories and suitable for zone selectivity optionally fittable by user with comprehensive accessories and suitable for zone selectivity optionally fittable by user with comprehensive accessories and suitable for zone selectivity optionally fittable by user with comprehensive accessories and suitable for zone selectivity optionally fittable by user with comprehensive accessories and suitable for zone selectivity optionally fittable by user with comprehensive accessories and suitable for zone selectivity optionally fittable by user with c	Standard/Approval			IEC
Saled current = rated uninterrupted current In = Iu A Gao Breaking capacity Icu = Ics to 440 V 50/60 Hz Icu KA Icu KA 42 Deverload release, min. Ir A Gao Deverload release, max. In A Gao In A In A Gao In A In A Gao In A In A Gao In A Gao In A Gao In A Gao In A In A Gao In A Gao In A In A Gao In A Gao In A I	Number of poles			4 pole
Particular optionally fittable by user with comprehensive accessories optionally accessories optiona	Degree of Protection			IP20, IP55 with protective cover, IP41 door sealing frame
Breaking capacity Icu = Ics to 440 V 50/60 Hz Icu kA 42 Breaking capacity Ics to 440 V 50/60 Hz Ics kA 42 Diverload release, min. Ir A 315 Diverload release, max. In A 630 Non-delayed Isd = In x Isd = In				
Breaking capacity Ics to 440 V 50/60 Hz I _{cs} I _r A 315 Overload release, min. I _r A 630 Non-delayed I _{sd} = I _r x I _{sd} = I _r x Votes	Rated current = rated uninterrupted current	$I_n = I_u$	Α	630
Overload release, min. I_r A 315 Overload release, max. I_r A 630 Non-delayed $I_i = I_n \times$ $I_i = I_n \times$ 2 - 12, OFF Oelayed $I_{sd} = I_r \times$ 2 - 10 Notes	Breaking capacity Icu = Ics to 440 V 50/60 Hz	I _{cu}	kA	42
Diverload release, max. I_r A 630 Non-delayed $I_i = I_n \times$	Breaking capacity lcs to 440 V 50/60 Hz	I _{cs}	kA	42
Non-delayed $I_{i} = I_{n} \times$ 2 - 12, OFF $I_{sd} = I_{r} \times$ 2 - 10 Notes	Overload release, min.	Ir	Α	315
Delayed $I_{sd} = I_r \times \dots \qquad 2-10$ Notes	Overload release, max.	I _r	Α	630
Notes	Non-delayed	$I_i = I_n \times \dots$		2 - 12, OFF
	Delayed XI>	$I_{sd} = I_r x \dots$		2 - 10
	Notes			
Main terminals not included, need to be ordered separately.	Main terminals not included, need to be ordered separately.			

Technical data

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			
Rated current = rated uninterrupted current	$I_n = I_u$	Α	630

Rated uninterrupted current at 50 °C

630

Rated uninterrupted current at 60 °C	lu	Α	630
Rated uninterrupted current at 70 °C	I _u	A	630
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	23
Overvoltage category/pollution degree			III/3
Rated insulation voltage	Ui	V	1000
Switching capacity Rated short-circuit making capacity			
	I _{cm}	1. 4	.00
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} 0-t-C0			
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	I _{cs}	kA	42
Operating times	'CS	NA.	72
Closing delay via spring release		ma	30
Total opening delay via shunt release		ms	25
Total opening delay via undervoltage release		ms	50
total opening delay via undervoltage release		ms	30
Total opening delay on non-delayed short-circuit release (up to complete arc		ms	25
quenching)		1113	23
Lifespan		S	
Lifespan, mechanical	Switching cycles (ON/ OFF)		12500
Lifespan, mechanical with maintenance	Switching cycles (ON/ OFF)		20000
Lifespan, electrical	Switching cycles (ON/ OFF)		10000
Lifespan, electrical with maintenance	Switching cycles (ON/ OFF)		10000
Maximum operating frequency	Operations/h		60
Heat dissipation at rated current I_n			
Fixed mounting		W	36
Weight			
Fixed mounting			
3-pole		kg	19
4-pole		kg	24
Terminal capacities			
Copper bar			
Fixed mounting			
Black		mm	2 x 5 x 50
Withdrawable units			0.5.50
Black		mm	2 x 5 x 50
			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 provi	de
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::::0a:::0 po:::20,2::10:::00			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	630
Equipment heat dissipation, current-dependent	P _{vid}	W	36
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 switch gear must be observed. $\label{eq:constraint}$
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])

Overload release current setting A 315 - 630 Adjustment range short-term delayed short-circuit release A 1260 - 6300 Adjustment range undelayed short-circuit release A 1260 - 7560 Integrated earth fault protection Type of electrical connection of main circuit Device construction Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional A 315 - 630 A 1260 - 6300 A 1260 - 7560 Rail connection Built-in device fixed built-in technique No No No No	protection (eci@ssa.1-27-37-04-09 [AJZ/10010])		
Rated short-circuit breaking capacity Icu at 400 V, 50 Hz kA 42 Overload release current setting Adjustment range short-term delayed short-circuit release A) 1260 - 6300 Adjustment range undelayed short-circuit release A) 1260 - 7560 No Type of electrical connection of main circuit Device construction Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional A) 24 42 42 43 46 40 40 40 40 40 40 40 40 40	Rated permanent current lu	Α	630
Overload release current setting A 315 - 630 Adjustment range short-term delayed short-circuit release A 1260 - 6300 Adjustment range undelayed short-circuit release A 1260 - 7560 Integrated earth fault protection Type of electrical connection of main circuit Device construction Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional A 315 - 630 A 1260 - 6300 A 1260 - 7560 Rail connection Built-in device fixed built-in technique No No No No	Rated voltage	V	690 - 690
Adjustment range short-term delayed short-circuit release Adjustment range undelayed short-circuit release Adjustment range undelayed short-circuit release Alignated earth fault protection Alignated	Rated short-circuit breaking capacity Icu at 400 V, 50 Hz	kA	42
Adjustment range undelayed short-circuit release Integrated earth fault protection Ivpe of electrical connection of main circuit Device construction Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional A 1260 - 7560 No Rail connection Built-in device fixed built-in technique No No No	Overload release current setting	Α	315 - 630
Integrated earth fault protection Type of electrical connection of main circuit Device construction Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional No No No No No No No No No N	Adjustment range short-term delayed short-circuit release	Α	1260 - 6300
Type of electrical connection of main circuit Device construction Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional Rail connection Built-in device fixed built-in technique No No	Adjustment range undelayed short-circuit release	Α	1260 - 7560
Device construction Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional Mo No	Integrated earth fault protection		No
Suitable for DIN rail (top hat rail) mounting DIN rail (top hat rail) mounting optional No	Type of electrical connection of main circuit		Rail connection
DIN rail (top hat rail) mounting optional No	Device construction		Built-in device fixed built-in technique
	Suitable for DIN rail (top hat rail) mounting		No
Number of auxiliary contacts as normally closed contact 0	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

Dimensions

