

Circuit-breaker, 4 pole, 1600 A, 66 kA, P measurement, IEC, Withdrawable

Powering Business Worldwide*

Part no. IZMX16H4-P16W-1 Article no. 183416

Delivery program

belivery program			
Product range			Air circuit-breakers/switch-disconnectors
Product range			Open circuit-breakers
Current Range			Up to 4000 A
Protective function			P measurement
Installation type			Withdrawable
			Cassette must be separately ordered.
			IZMX-DTP-PTM external voltage measuring module required
Construction size			IZMX16
Release system			Electronic release
Standard/Approval			IEC
Number of poles			4 pole
Degree of Protection			IP31 with door seals, IP55 with protective cover
			suitable for zone selectivity suitable for communication with integrated system monitor with integrated test possibility With graphic LCD display optionally fittable by user with comprehensive accessories
Rated current = rated uninterrupted current	$I_n = I_u$	Α	1600
up to 440 V 50/60 Hz	I _{cu}	kA	66
up to 440 V 50/60 Hz	I _{cs}	kA	50
Overload release, min.	I _r	Α	640
Overload release, max.	I _r	Α	1600
Non-delayed	$I_i = I_n x \dots$		2 - 15, OFF
Delayed >	$I_{sd} = I_r x \dots$		1,5 - 10

Technical data

General

Storage Operating (open) Ounting position Storage Operating (open) Ounting position Ounting position Storage Operating (open) Ounting position O	General			
Storage Operating (open) Ounting position Storage Storage C -20 + 70 -20 - + 70 -20	Standards			IEC/EN 60947
Operating (open) **C*** -20 - +70 **Jordan Survey	Ambient temperature			
ounting position 30°	Storage	θ	°C	-20 - +70
ilization category gree of Protection B IP31 with door seals, IP55 with protective cover	Operating (open)		°C	-20 - +70
ilization category B IP31 with door seals, IP55 with protective cover	Mounting position			30° 30°
egree of Protection IP31 with door seals, IP55 with protective cover				\wedge 1 \wedge
	Utilization category			В
rection of incoming supply as required	Degree of Protection			IP31 with door seals, IP55 with protective cover
	Direction of incoming supply			as required

Part	Main conducting paths			
Marked uninterrupted corrent at 70°C U,	Rated current = rated uninterrupted current	$I_n = I_u$	Α	1600
Table	Rated uninterrupted current at 50 °C	Iu	Α	1500
Rated impulse withinstand voltage 1	Rated uninterrupted current at 60 °C	Iu	Α	1400
Rated impulse withinstand voltage 1	Rated uninterrupted current at 70 °C	I _{II}	Α	1350
Name of pecentional vellage Ue VAC 08			V AC	12000
Use in IT electrical power networks up to U = 480 V				
Marie Inf electrical proces networks up to U = 680 V				
Deverophage category/pollution degree 10 10 10 10 Read instruction voltage 10 10 10 10 10 10 10				
Name		ΙΙΤ	kA	
Name				
Rated short-circult making capacity Imm		Ui	V	1000
up to 648 V 5609 Hz Icm IA 18 to p to 689 V 5609 Hz Icm Icm ICM 88 Retact short-rise withstand current 5080 Hz Icm				
Image Ima				
Stand short-line withstand current \$9080 Hz		I _{cm}		
Table Section Sectio	up to 690 V 50/60 Hz	I _{cm}	kA	88
Rated short-circuit breaking capacity I _{cn} IEC/EN 60947 operating sequence I _{cn} O+-CO up to 240 V 5060 Hz up to 840 V 5080 Hz up	Rated short-time withstand current 50/60 Hz			
ECPC N 60947 operating sequence 1	t = 1 s	I _{cw}	kA	42
Lifespan, mechanical with maintenance Switching cycles (DN) Coper bar (Span) Cope	Rated short-circuit breaking capacity I_{cn}	I _{cn}		
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EC/EN 60947 operating sequence 1 _{cs} 0-t-CO-t-CO	up to 440 V 50/60 Hz	I _{cu}	kA	66
EC/EN 60947 operating sequence 1 _{cs} 0-t-CO-t-CO	up to 690 V 50/60 Hz	Icu	kA	42
up to 240 V 5050 Hz I _{ES} KA 50 up to 460 V 5050 Hz I _{CB} KA 50 up to 690 V 5050 Hz I _{CB} KA 42 Opporating times IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII				
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Heat dissipation at rated current In Withdrawable units (switch with cassette) Weight Withdrawable 4-pole 4-pole kg 33 Cassette 4 pole kg 21 Terminal capacities Copper bar				
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4 pole kg 21 Ferminal capacities Copper bar	4-pole		kg	33
Copper bar	Cassette			
Copper bar			kg	21
	-			
Withdrawahla unite	Copper par Withdrawable units			

Copper bar		
Withdrawable units		
Black	mm	2 x 5 x 100

	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.
Notes	External IZMX-DTP-PTM-1 voltage measuring module required (1 module is suitable for 16 circuit-breakers)

Design verification as per IEC/EN 61439

Design vernication as per IEG/EN 01439			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	1600
Equipment heat dissipation, current-dependent	P_{vid}	W	320
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 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])

protection (ecresso: 1-27-07-04-03 [A02710010])		
Rated permanent current lu	Α	1600
Rated voltage	V	690 - 690
Rated short-circuit breaking capacity Icu at 400 V, 50 Hz	kA	65
Overload release current setting	А	800 - 1600
Adjustment range short-term delayed short-circuit release	А	3200 - 16000
Adjustment range undelayed short-circuit release	Α	3200 - 19200
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)	IP31

Dimensions

