DATASHEET - IZMX40H4-P32W



Circuit-breaker, 4p, 3200 A, withdrawable

Powering Business Worldwide*

Part no. IZMX40H4-P32W

Catalog No. 150043

Eaton Catalog No. RESC324W12QNMNN2MNDX

Delivery program

Delivery program			
Product range			Air circuit-breakers/switch-disconnectors
Product range			Open circuit-breakers
Current Range			Up to 4000 A
Protective function			Professional protection
Installation type			Withdrawable
			Cassette must be separately ordered.
			IZMX-DTP-PTM external voltage measuring module required
Construction size			IZMX40
Release system			Electronic release
Standard/Approval			IEC
Number of poles			4 pole
Degree of Protection			IP20, IP55 with protective cover, IP41 door sealing frame
			suitable for zone selectivity suitable for communication with integrated system monitor with integrated test possibility with graphic LCD color display optionally fittable by user with comprehensive accessories
Rated current = rated uninterrupted current	$I_n = I_u$	Α	3200
up to 440 V 50/60 Hz	I _{cu}	kA	105
up to 440 V 50/60 Hz	I _{cs}	kA	105
Overload release, min.	I _r	Α	1600
Overload release, max.	I _r	Α	3200
Non-delayed	$I_i = I_n x \dots$		2 - 12, OFF
Delayed X >	$I_{sd} = I_r x \dots$		2 - 10

Technical data

General

Ambient temperature Storage 8 °C -25 - +70 (device with LCD-display -20 - +70) Operating (open) Mounting position Willization category Degree of Protection 8 °C -25 - +70 (device with LCD-display -20 - +70) C -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -25 - +70 (device with LCD-display -20 - +70) -26 - +70 (device with LCD-display -20 - +70) -26 - +70 (device with LCD-display -20 - +70) -26 - +70 (device with LCD-display -20 - +70) -26 - +70 (device with LCD-display -20 - +70) -26 - +70 (device with LCD-display -20 - +70) -26 - +70 (device with LCD-display -20 - +70) -27 - +70 (device with LCD-display -20 - +70) -27 - +70 (device with LCD-display -20 - +7	General			
Storage Operating (open) Operating (open) Outling position Outling a category Degree of Protection Operating (open) Operating (open) October 25 - +70 (device with LCD-display -20 - +70) October 25 - +70 (device with LCD-display -20 - +70) October 30	Standards			IEC/EN 60947
Operating (open) Mounting position C -25 - +70 (device with LCD-display -20 - +70) 30° 1 30° 30° 30° 30° 30° 30° 30° 30° 30° 30°	Ambient temperature			
Mounting position 30° 30° 30° 30° 30° 30° 40° 40° 40° 40° 40° 40° 40°	Storage	9	°C	-25 - +70 (device with LCD-display -20 - +70)
Utilization category Degree of Protection B IP20, IP55 with protective cover, IP41 door sealing frame	Operating (open)		°C	-25 - +70 (device with LCD-display -20 - +70)
Utilization category B Degree of Protection B IP20, IP55 with protective cover, IP41 door sealing frame	Mounting position			30° 30°
Degree of Protection IP20, IP55 with protective cover, IP41 door sealing frame				30° 30°
	Utilization category			В
Direction of incoming supply as required	Degree of Protection			IP20, IP55 with protective cover, IP41 door sealing frame
	Direction of incoming supply			as required

Main conducting paths

Main conducting paths			
Rated current = rated uninterrupted current	$I_n = I_u$	Α	3200
Rated uninterrupted current at 50 °C	I _u	Α	3200
Rated uninterrupted current at 60 °C	lu	Α	3200
Rated uninterrupted current at 70 °C	I_{u}	Α	75
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	57.6
Overvoltage category/pollution degree			III/3
Rated insulation voltage	Ui	٧	1000
Switching capacity			
Rated short-circuit making capacity	I _{cm}		
up to 440 V 50/60 Hz	I _{cm}	kA	231
up to 690 V 50/60 Hz	I _{cm}	kA	166
Rated short-time withstand current 50/60 Hz			
t=1s	I _{cw}	kA	85
t = 3 s	I _{cw}	kA	66
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	105
up to 440 V 50/60 Hz	I _{cu}	kA	105
up to 690 V 50/60 Hz	I _{cu}	kA	75
IEC/EN 60947 operating sequence I _{cs} 0-t-C0-t-C0	00		
up to 240 V 50/60 Hz	I _{cs}	kA	105
up to 440 V 50/60 Hz	I _{cs}	kA	105
up to 690 V 50/60 Hz		kA	75
	I _{cs}	KA	73
Operating times		ma	25
Closing delay via spring release		ms	35
Total opening delay via shunt release Total opening delay via undervoltage release		ms ms	37
total opening delay via undervoltage release		1115	
Total opening delay on non-delayed short-circuit release (up to complete arc		ms	45
quenching)			
Maximum operating frequency	Operations/h		60
Heat dissipation at rated current I_n			
Withdrawable units (switch with cassette)		W	560
Weight			
Withdrawable			
3-pole		kg	70
4-pole		kg	86
Cassette		ka	27
3 pole 4 pole		kg kg	35
Terminal capacities		ĸy	
Copper bar			
Withdrawable units			
Black		mm	3 x 80 x 10
			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
Notes			temperature should be estimated using the calculation methods of IEC regulation. IZMX-DTP-PTM external voltage measuring module required

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	3200
Equipment heat dissipation, current-dependent	P _{vid}	W	560
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])

А	3200
V	690 - 690
kA	105
A	1600 - 3200
A	6400 - 32000
А	6400 - 38400
	No
	Rail connection
	Built-in device slide-in technique (withdrawable)
	No
	No
	0
	0
	2
	Yes
	No
	4
	V kA A

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