DATASHEET - PKNM-40/1N/B/003-MW



RCD/MCB combination switch, 40A, 30mA, miniature circuit-br. type B trip characteristic, 1-phase+N, residual current circuit-br. trip characteristic: AC



Part no. Catalog No. PKNM-40/1N/B/003-MW 236324

Similar to illustration

Delivery program

Basic function			Combined RCD/MCB devices
Number of poles			1 pole+N
Tripping characteristic			В
Application			Switchgear for residential and commercial applications
Rated current	In	А	40
Rated switching capacity according to IEC/EN 61009		kA	10
Rated fault current	$I_{\Delta N}$	А	0.03
Туре			Туре АС
Tripping		s	non-delayed
Product range			PKNM
Sensitivity			AC current sensitive
Impulse withstand current			Partly surge-proof 250 A

Technical data

Electrical

Sensitivity	AC current sensitive

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	А	40
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	8.2
Static heat dissipation, non-current-dependent	P _{vs}	W	0
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	40
			0
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 7.0

Circuit breakers and fuses (EG000020) / Earth leakage circuit breaker (EC000905)

Electric engineering, automation, process control engineering / Electrical installation, device / Residual current protection system / MCB/RCCB combination (ecl@ss10.0.1-27-14-22-07 [AFZ810015])

Numer of protection prioriteImage: set of a set of			
Reted voltageImage: Normal Sector	Number of poles (total)		2
Retain suitan valueg Uing V 40 Retain suitan valueg Uing V 40 Retain suitan valueg Uing N 40 Retain suitan valueg Uing A 40 Current Type A 40 Retain suitan valueg apacity acc. EN 61009 A 40 Retain suitan care statistic A 40 Surge current capacity ICE 60047-2 A 50 Concurrent Yape Capacity ICE 60047-2 A 50 Concurrent Yape Capacit	Number of protected poles		1
Reted inpulse withstand voltage Ump Image: Constraint of the section of the secti	Rated voltage	V	230
Red current Image: A get and function of the section of the secti	Rated insulation voltage Ui	V	440
Retafuid current A A B Retafud current type A A Current limiting class 3 A Retaf short-circuit breaking capacity LCE 00947-2 KA B Retaf short-circuit breaking capacity LCE 00947-2 KA D Store current capacity LCE 00947-2 LCE D Store current capacity LCE 00947-2 LCE D Store current capacity LCE 00947-2 Store Current capacity LCE 00947-2 D Store current capacity LCE 00947-2 LCE D D	Rated impulse withstand voltage Uimp	kV	4
Lakage current typeALakage current typeACurrent limiting class3Red short-circuit breaking capacity LGC 60947-2MRed short-circuit breaking capacity LGC 60947-2MSurge current capacity LGC 60947-2M	Rated current	А	40
Current limiting classIIRetad short-circuit breaking capacity LGC 60947-2KA0Retad short-circuit breaking capacity LGC 60947-2KA0Retad short-circuit breaking capacity LGC 60947-2KA0Disconnection characteristicKA0Surge current capacityKA0Vidage typeKA0FrequencyKA0Release characteristicKA0Outrourently switching N-neutralKA0Vith interlocking deviceKA0Notantet engereKA0Notantet engereKA0Notantet engereKA0Notantet engereKA0Notantet engereKA0Notantet engereKA0Notantet engereKA0Notantet engereKA0Notantet engereKA0Notantet engereNotantet engereN	Rated fault current	А	0.03
Rate shor-circuit breaking capacity acc. EN 61009 KA 0 Rated shor-circuit breaking capacity IC 60047-2 KA 0 Rated shor-circuit breaking capacity IC 60047-2 KA 0 Disconnection characteristic MA 0 Surge current capacity Construction 0 Vitage type MA 0 Release characteristic Sold Sold Concurrently switching N-neutral MA 0 Vitate type Sold Sold Vitati threaking capacity Sold Sold	Leakage current type		AC
Rated short-circuit breaking capacity IC 60947-2 KA I Rated short-circuit breaking capacity IC acc. EN 61099-1 KA I Surge current capacity KA I Surge current capacity KA I Voltage type KA I Frequency KA I I Release characteristic KA I I Concurrent yswitching N-neutral KA I I I Nitherlocking device KA I	Current limiting class		3
Rated short-circuit breaking capacity Lon acc. EN 61009-1 Image: Part of the state s	Rated short-circuit breaking capacity acc. EN 61009	kA	10
Disconnection characteristicImage of the second	Rated short-circuit breaking capacity IEC 60947-2	kA	0
Surge current capacity KA Signe current capacity Surge current capacity KA Signe current capacity Voltage type KA AC Frequency Sold Frequency Sold Frequency Release characteristic Sold Frequency B Concurrently switching N-neutral Mo Sold Frequency Vith interlocking device Mo Sold Frequency Pollution degree Mo Sold Frequency Pollution degree Mo Sold Frequency With in number of modular spacings Mo Sold Frequency Suitable for flush-mounted installation Mo Sold Frequency Anti-nuisance tripping version Mo Sold Frequency Suitable conductor cross section solid-core Mo Sold Frequency	Rated short-circuit breaking capacity Icn acc. EN 61009-1	kA	10
Voltage type A Frequency 50 Hz Release characteristic 60 Hz Concurrently switching N-neutral 60 Hz Vith interlocking device 60 Hz Over voltage category 60 Hz Pollution degree 60 Hz Ambient temperature during operating 60 Hz Vith interlocking device 60 Hz Voltage category 60 Hz Suitable for flush-mounted installation 60 Hz Anti-nuisance tripping version 60 Hz Degree of protection (IP) 60 Hz Concutable conductor cross section solid-core 60 Hz	Disconnection characteristic		
Frequency 64 64 Release characteristic 64 6 Concurrently switching N-neutral 64 6 With interlocking device 7 8 Over voltage category 64 6 Pollution degree 6 2 2 Ambient temperature during operating 6 7 2 Vidt hin number of modular spacings 6 7 2 Suitable for flush-mounted installation 7 0 0 Anti-nuisance tripping version 6 7 0 Degree of protection (P) 6 70 125	Surge current capacity	kA	0.25
Release characteristic Image: Release characteristic B Concurrently switching N-neutral Image: Release characteristic Ves With interlocking device Image: Release characteristic No Over voltage category Image: Release characteristic Sector Pollution degree Image: Release characteristic Sector Sector Ambient temperature during operating Image: Release characteristic Sector Sector With in number of modular spacings Image: Release characteristic Sector Sector Suitable for flush-mounted installation Image: Release characteristic No Anti-nuisance tripping version Image: Release characteristic No Degree of protection (IP) Image: Release characteristic No Concurrent of modular spacings Image: Release characteristic No Suitable conductor cross section solid-core Image: Release characteristic No	Voltage type		AC
Concurrently switching N-neutral Model Yes With interlocking device No Solution Over voltage category Solution Solution Solution Pollution degree Image: Solution of modular spacings Solution Solution Solution With in number of modular spacings Image: Solution of modular spacings Model Solution Solution Suitable for flush-mounted installation Image: Solution of modular spacings Model Model Model Anti-nuisance tripping version Image: Solution of modular space Model Model Model Degree of protection (IP) Image: Solution of modular space Image: Solution of model Model Model Solution consection solid-core Image: Solution of model Model Model Model Solution consection solid-core Image: Solution of model Model Model Model Solution consection solid-core Image: Solution of model Model Model Model Solution consection solid-core Image: Solution of model Model Model Model Solution consection solid-core Image: Solution of model Mode	Frequency		50 Hz
With interlocking deviceMoOver voltage categorySSPollution degreeSSAmbient temperature during operatingS°CSWith in number of modular spacingsS°CSBuilt-in depthMmTSSuitable for flush-mounted installationSMmSAnti-nuisance tripping versionSMoNoDegree of protection (IP)Image: Mark StImage: Mark StImage: Mark StSource able conductor cross section solid-coreImage: Mark StImage: Mark St	Release characteristic		В
Over voltage category 3 Pollution degree 2 Ambient temperature during operating °C 25 - 40 Width in number of modular spacings mm 70 Buit-in depth mm 70 Suitable for flush-mounted installation M Mo Pogree of protection (IP) Mm² 120 Connectable conductor cross section solid-core mm² 125	Concurrently switching N-neutral		Yes
Pollution degreeImage: selection of the selection	With interlocking device		No
Ambient temperature during operating °C 25 - 40 Width in number of modular spacings 2 2 Buit-in depth mm 70 Suitable for flush-mounted installation MM 70 Anti-nuisance tripping version MM 70 Degree of protection (IP) Mm 70 Connectable conductor cross section solid-core Mm 70	Over voltage category		3
Width in number of modular spacingsAABuilt-in depthmm70Suitable for flush-mounted installationMMAnti-nuisance tripping versionMMDegree of protection (IP)Mm²125	Pollution degree		2
Built-in depth mm 70 Suitable for flush-mounted installation M M Anti-nuisance tripping version M M Degree of protection (IP) M IP20 Connectable conductor cross section solid-core mm² 1-25	Ambient temperature during operating	°C	-25 - 40
Suitable for flush-mounted installation Mo Anti-nuisance tripping version Mo Degree of protection (IP) IP20 Connectable conductor cross section solid-core mm² 1-25	Width in number of modular spacings		2
Anti-nuisance tripping version No Degree of protection (IP) IP20 Connectable conductor cross section solid-core mm² 1-25	Built-in depth	mm	70
Degree of protection (IP) IP20 Connectable conductor cross section solid-core mm² 1 - 25	Suitable for flush-mounted installation		No
Connectable conductor cross section solid-core mm ² 1 - 25	Anti-nuisance tripping version		No
	Degree of protection (IP)		IP20
Connectable conductor cross section multi-wired mm ² 1 - 25	Connectable conductor cross section solid-core	mm²	1 - 25
	Connectable conductor cross section multi-wired	mm ²	1 - 25