DATASHEET - PKNM-10/1N/B/003-MW

Part no.

Catalog No.



RCD/MCB combination, 10 A, 30 mA, MCB trip characteristic: B, 1p+N, RCD trip characteristic: AC

PKNM-10/1N/B/003-MW

236067



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	10
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

Rated operational current for specified heat dissipation In A 10 Heat dissipation per pole, current-dependent Pvid W 23 Equipment heat dissipation, current-dependent Pvid W 0 Static heat dissipation, non-current-dependent Pvid W 0 Heat dissipation capacity Pdiss W 0 Operating ambient temperature min. °C 25 Operating ambient temperature max. M 0	Design vernication as per iec/ew 01459			
Heat dissipation per pole, current-dependent Pvid Wei Equipment heat dissipation, current-dependent Pvid Wei 2.3 Static heat dissipation, non-current-dependent Pvid Wei 0 Heat dissipation, non-current-dependent Pvid Wei 0 Operating ambient temperature min. Pdiss Wei 0 Operating ambient temperature max. °C -25 -25 Operating ambient temperature max. °C 40 -0 10.2.5 Uringtion of thermal stability of enclosures °C 40 -0 10.2.2 Corrosion resistance of insulating materials to normal heat Neets the product standard's requirements. Neets the product standard's requirements. 10.2.3.1 Verification of thermal stability of enclosures Neets the product standard's requirements. Neets the product standard's requirements. 10.2.3.3.1 Verification of resistance of insulating materials to abnormal heat Neets the product standard's requirements. Neets the product standard's requirements. 10.2.4. Resistance to ultra-violet (UV) radiation Des not apply, since the entire switchgear needs to be evaluated. 10.2.5. Lifting Des not apply, since the entire switchgear needs to	Technical data for design verification			
Equipment heat dissipation, current-dependentPvidWe2.3Static heat dissipation, non-current-dependentPvisWe0Heat dissipation capacityPdissWe0Operating ambient temperature min.PdissC25Operating ambient temperature max.C400EC/EN 61439 design verificationC40010.2.5 trength of materials and partsKest the product standard's requirements.Ne10.2.3.1 Verification of thermal stability of enclosuresMeets the product standard's requirements.Meets the product standard's requirements.10.2.3.2 Verification of resistance of insulating materials to normal heat and fire due to internal electric effectsMeets the product standard's requirements.10.2.3.2 Verification of resistance of insulating materials to normal heat and fire due to internal electric effectsMeets the product standard's requirements.10.2.4 Resistance to ultra-violet (UV) radiationMeets the product standard's requirements.10.2.5 LiftingDes not apply, since the entire switchgear needs to be evaluated.10.2.5 LiftingDes not apply, since the entire switchgear needs to be evaluated.10.3.Degree of protection of ASSEMBLIESDes not apply, since the entire switchgear needs to be evaluated.10.3.Degree of protection of ASSEMBLIESDes not apply, since the entire switchgear needs to be evaluated.10.4.Clearances and creepage distancesMeets the product standard's requirements.	Rated operational current for specified heat dissipation	In	А	10
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Operating ambient temperature min. or operating ambient temperature min. operating ambient temperature max. operating ambient temperature ambient temperature max. operatu	Static heat dissipation, non-current-dependent	P _{vs}	W	0
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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.	10.2.6 Mechanical impact			Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances Meets the product standard's requirements.	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.
10.5 Protection against electric shock 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.	10.6 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.	10.7 Internal electrical circuits and connections			Is the panel builder's responsibility.
10.8 Connections for external conductors Is the panel builder's responsibility.	10.8 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 8.0

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])

Number of protected polesImage: section pole			
Acta di voltageV30Rated insulation voltage Uinp4040Rated insulation voltage UinpKV40Rated insulation voltage UinpKV40Rated insulation voltage UinpKV40Rated fault currentCA0.30Rated fault current typeG3Current timing classG3Rated short-circuit breaking capacity according to EN 61009KA0Rated short-circuit breaking capacity according to EN 61009-10KA0Rated short-circuit breaking capacity according to EN 61009-10G0Rated short-circuit breaking capacity according to EN 61009-10Uolagy0Rated short-circuit breaking capacity according to EN 61009-10G0Rated short-circuit breaking capacity according to EN 61009-10Uolagy0Rated short-circuit breaking capacity according to EN 61009-10UolagyVoltage typeSSSVoltage typeSSSRelease characteristicSSSConcurrent short-circuit breaking capacitySSSVoltage typeSSSSPollution degreeSSSSRubit in number of modular spacingsSSS<	Number of poles (total)		2
Reade insulation voltage Uinp 4 Reade insulation voltage Uinp kV 4 Reade fault current 0.03 0.03 Reade fault current type KA 6 Current limiting class 0 0.03 Reade short-circuit breaking capacity according to EN 61009-1 KA 0 Reade short-circuit breaking capacity according to EN 61009-1 KA 0 Disconnection characteristic Undelayed 0.04 Surge current capacity KA 0 Surge current capacity KA 0 Surge current capacity KA 0 Concurrently switching neutral conductor KA 0 Release characteristic Surge 0 Concurrently switching neutral conductor KS 0 Vint introlocking device Surge 2 Over voltage category Caneed totttt introlocking device 2	Number of protected poles		1
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Rated current Image: Constraint of the second of the s	Rated insulation voltage Ui	V	440
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Leakage urrent type Leakage utrent type Leakag	Rated current	А	10
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Rated short-circuit breaking capacity lon according to EN 61009-1 KA 10 Disconnection characteristic Undelayed Surge current capacity 0.25 Voltage type S0 Hz Frequency S0 Hz Release characteristic S0 Hz Concurrently switching neutral conductor Yes With interlocking device No Over voltage category Yes Pollution degree Yes Ambient temperature during operating Yes With in number of modular spacings Yes Built-in depth Yes Rustanct ripping version Yes Anti-nuisance tripping version Yes Darge of protection (IP) No State of protection (IP) No State of protection (IP) Image State of protection (IP) Image State of protection (IP) Image	Rated short-circuit breaking capacity according to EN 61009	kA	10
Disconnection characteristic Image of the second seco	Rated short-circuit breaking capacity according to IEC 60947-2	kA	0
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Voltage type AC Frequency 50 Hz Release characteristic 60 Hz Concurrently switching neutral conductor 60 Hz With interlocking device 60 Hz Over voltage category 60 Hz Pollution degree 60 Hz Ambient temperature during operating 60 Hz With in number of modular spacings 60 Hz Built-in depth 60 Hz Fush-mounted installation 60 Hz Anti-nuisance tripping version 60 Hz Degree of protection (IP) 60 Hz Built-in depth 60 Hz Mati-nuisance tripping version 60 Hz Degree of protection (IP) 60 Hz Built-in depth 70 Pz Built-in depth 70 Hz Anti-nuisance tripping version 70 Hz Degree of protection (IP) 70 Hz Built-in depth 70 Hz	Disconnection characteristic		Undelayed
Frequency Image: Stream of the stream of t	Surge current capacity	kA	0.25
Release characteristic Image: Release characteristic <	Voltage type		AC
Concurrently switching neutral conductor Yes With interlocking device No Over voltage category 3 Pollution degree 2 Ambient temperature during operating °C With in number of modular spacings °C Built-in depth 7C Fush-mounted installation Mo Anti-nuisance tripping version Mo Degree of protection (IP) Imma Internet and the conductor cross section solid-core Imma	Frequency		50 Hz
With interlocking deviceNoOver voltage categoryIIPollution degreeIIAmbient temperature during operatingI°CIWith in number of modular spacingsIIIBuilt-in depthImmIIFlush-mounted installationIINoAnti-nuisance tripping versionIIIDegree of protection (IP)ImmIIImmediate temperature out of the space of protection space of pro	Release characteristic		В
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Ambient temperature during operating °C -25 - 40 Width in number of modular spacings 2 Built-in depth mm 70 Flush-mounted installation No Anti-nuisance tripping version No Degree of protection (IP) IP20 Connectable conductor cross section solid-core mm² 1 - 25	Over voltage category		3
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Built-in depth mm 70 Flush-mounted installation No Anti-nuisance tripping version Mo Degree of protection (IP) IP20 Connectable conductor cross section solid-core mm² 1 - 25	Ambient temperature during operating	°C	-25 - 40
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Anti-nuisance tripping version No Degree of protection (IP) IP20 Connectable conductor cross section solid-core mm ² 1 - 25	Built-in depth	mm	70
Degree of protection (IP) IP20 Connectable conductor cross section solid-core mm ² 1 - 25	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	mm²	1 - 25