DATASHEET - PKN6-10/1N/B/003-A-MW



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



Part no. Catalog No. PKN6-10/1N/B/003-A-MW 236500

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	I _n	А	10
Rated switching capacity according to IEC/EN 61009		kA	6
Rated fault current	$I_{\Delta N}$	А	0.03
Туре			Туре А
Tripping		s	non-delayed
Product range			PKN6
Sensitivity			Pulse-current sensitive
Impulse withstand current			Partly surge-proof 250 A

Pulse-current sensitive

Technical data

Electrical

Design verification as per IEC/EN 61439

Design verification as per IEC/EIV 01439			
Technical data for design verification			
Rated operational current for specified heat dissipation	I _n	А	10
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	2.5
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 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])

Current limiting class Image: Marce			
Reted votageV30Rated votage Uin40Rated inpulse withstand votage UinpV40Rated inpulse withstand votage UinpV40Rated rurretV40Rated funct curret NpV03Corrent timing classV40Rated short-circuit breaking capacity according to EN 61009V40Rated short-circuit breaking capacity according to EN 61009-10V30Rated short-circuit breaking capacity according to EN 61009-10V90Rated short-circuit breaking capacity according to EN 61009-10V10Rated short-circuit breaking capacity functionV90Rated short-circuit breaking capacity functionV90Rated short-circuit breaking capacity functionV90Rated short-circuit breaking capacity functionV90Nage current capacityV9090Voltage typeV9090Voltage typeV9090 <t< td=""><td>Number of poles (total)</td><td></td><td>2</td></t<>	Number of poles (total)		2
Ratei ansidor voltage Uing 4 Ratei ansidor voltage Uing kW 4 Ratei ansidor voltage Uing kW 4 Ratei ansidor voltage Uing kW 10 Rated insidor voltage Uing kW 8 Ratei daut current 6 6 Lakage current type 6 8 Current liniting class 6 6 Ratei short-circuit breaking capacity according to EN 61009-10 6 6 Ratei short-circuit breaking capacity according to EN 61009-10 6 6 Surge current capacity 6 6 6 Surge current capacity 6 6 6 Surge current capacity 6 <td< td=""><td>Number of protected poles</td><td></td><td>1</td></td<>	Number of protected poles		1
Rated inpulse withs and voltage Ulinp KV 4 Rated current ID ID Rated functioner ID ID Leakage current type ID ID Current limiting class ID ID Rated short-circuit breaking capacity according to EN 61009 ID ID Rated short-circuit breaking capacity according to EN 61009-10 ID ID Store cording to EN 61009-10 ID ID ID Store cording capacity according to EN 61009-10 ID ID ID Store cording capacity according to EN 61009-10 ID ID ID Store cording capacity according to EN 61009-10 ID ID ID Store cording capacity (carding to EN 61009-10 ID ID ID Store cording capacity (carding to EN 61009-10 ID ID ID Store cording capacity (carding to EN 61009-10 ID ID ID Store cording capacity (carding to EN 61009-10 ID ID ID Store cording capacity (carding to EN 61009-10 ID ID ID ID<	Rated voltage	V	230
Rated current Image: Constraint of the sector of the s	Rated insulation voltage Ui	v	440
Relation of the second of t	Rated impulse withstand voltage Uimp	kV	4
Lakage current type A Lakage current type A Current limiting class 3 Rated short-circuit breaking capacity according to EN 61009 KA 6 Rated short-circuit breaking capacity according to EN 61009-10 KA 0 Disconnection characteristic Male add 10 Surge current capacity conding to EN 61009-10 KA 0 Vidage type KA 0 Frequency KA 0 Release characteristic S S Concurrent syniching neutral conductor KA 0 Vidi introlocing device KA 0 Pollution degrea KA 0 Anbiert temperature during operating KA 0 Ruiti namber of modular spacings KA 0 Ruiti nated for operating KA	Rated current	А	10
Current limiting class A A A Rated short-circuit breaking capacity according to EK 60094-2 KA 0 Rated short-circuit breaking capacity according to EK 0094-2 KA 0 Bisconnection characteristic Male 4 0 Disconnection characteristic Male 4 0 Vidage type Male 4 0 Frequency KA 0 Release characteristic Male 4 0 Outrout intendecing device Male 4 0 Notint intendecing device Male 4 0 Notint intendecing device Male 4 Male 4 Notint intendecing device for modular spacings Male 4 Male 4 Notint intendecing device for modular spacings Male 4 Male 4 Notint intendecing installation Male 4 Male 4 Notint intendecing installation Male 4 Male 4	Rated fault current	А	0.03
Rate shor-circuit breaking capacity according to EK 00091 KA 6 Rated short-circuit breaking capacity according to EK 000912 KA 0 Rated short-circuit breaking capacity (na according to EK 000912) KA 0 Disconnection characteristic Undelyadd Undelyadd Surge current capacity KA 0 Vatage type KA 0 Release characteristic KA 0 Concurrently switching neutral conductor KA 0 Vati interlocking device KA 0 Pollution degree KA 0 Mith interporting function C S Vith in number of modular spacings KA 0 Built-in depth KA 0 Fultion degree KA 0 Rubent tripping version KA 0 Rubent tripping v	Leakage current type		A
Rated short-circuit breaking capacity lon according to EC 60947-2 KA 0 Rated short-circuit breaking capacity lon according to EN 61009-1 KA 6 Disconnection characteristic Indelayed Indelayed Surge current capacity KA 0 Singe current capacity Voltage type KA 0 Indelayed Frequency KA 0 Singe current capacity Singe current capacity KA 0 Singe current capacity Singe current capacity </td <td>Current limiting class</td> <td></td> <td>3</td>	Current limiting class		3
Rated short-circuit breaking capacity lon according to EN 61009-1 Image: Figure Contracteristic Figure Contracteristic Image: Figure Contra	Rated short-circuit breaking capacity according to EN 61009	kA	6
Disconnection characteristic Idealeged Indealeged Surge current capacity S S Voltage type S S Frequency S S Release characteristic S S Concurrently switching neutral conductor S S Vit interlocking device S S Pollution degree S S Number of modular spacings S S Built-in unsher of modular spacings S S Anti-inxisance triping version S S Digree of protection (IP) S S Songender for the space of the space o	Rated short-circuit breaking capacity according to IEC 60947-2	kA	0
Surge current capacity A A Surge current capacity A A Voltage type A A Frequency B B Release characteristic B B Concurrently switching neutral conductor B B Vith interlocking device M M Over voltage category B S Pollution degree B S Mith interlocking device C S Pollution degree C S Motint temperature during operating C S With in number of modular spacings M G Built-in depth M S Rush-mounted installation M M Anti-nuisance tripping version M M Burge of protection (IP) M M Rundel Econductor cross section solid-core M T	Rated short-circuit breaking capacity Icn according to EN 61009-1	kA	6
Voltage type A Yoltage type A Frequency 50 Jz Release characteristic I Concurrently switching neutral conductor I With interlocking device I Over voltage category I Pollution degree I Ambient temperature during operating I With interlocking device I Vith interlocking device I Pollution degree I Ambient temperature during operating I With interlocking device I Pollution degree I Ruit-in depth I Fush-mounted installation I Anti-nuisance tripping version I Degree of protection (IP) I Concetable conductor cross section solid-core Imathination	Disconnection characteristic		Undelayed
Frequency Image: state of the state of t	Surge current capacity	kA	0.25
Release characteristic Image: Release characteristic B Concurrently switching neutral conductor Image: Release characteristic Ves With interlocking device Image: Release characteristic No Over voltage category Image: Release characteristic So Pollution degree Image: Release characteristic So Ambient temperature during operating Image: Release characteristic So With in number of modular spacings Image: Release characteristic So Built-in depth Image: Release characteristic So Fush-mounted installation Image: Release characteristic No Anti-nuisance tripping version Image: Release characteristic No Degree of protection (IP) Image: Release characteristic No Release characteristic Image: Release characteristic So Release characteristic conductor cross section solid-core Image: Release characteristic So	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 mm Built-in depth No Fush-mounted installation Mm Anti-nuisance tripping version Mo Degree of protection (IP) mm Vertex Image: Main and Main	Frequency		50 Hz
With interlocking deviceNoOver voltage category3Pollution degree2Ambient temperature during operatingC2With in number of modular spacingsC2Built-in depthMmm69.5Fush-mounted installationMinoreNoAnti-nuisance tripping versionMinoreNoDegree of protection (IP)Mmr125Vinde defineMinore125Statement of modular spacingsMinoreDegree of protection spaceMinoreStatement of protection spaceMinore <td>Release characteristic</td> <td></td> <td>В</td>	Release characteristic		В
Over voltage category Image: Constraint of the sector of	Concurrently switching neutral conductor		Yes
Pollution degree <td>With interlocking device</td> <td></td> <td>No</td>	With interlocking device		No
Ambient temperature during operating for the second seco	Over voltage category		3
Width in number of modular spacings Image: Participant spacing space spa	Pollution degree		2
Built-in depthmm89.5Flush-mounted installationNoNoAnti-nuisance tripping versionMoNoDegree of protection (IP)Imm²Ip20Connectable conductor cross section solid-coremm²1.25	Ambient temperature during operating	°C	-25 - 40
Flush-mounted installation No Anti-nuisance tripping version Pogree of protection (IP) Connectable conductor cross section solid-core mm²	Width in number of modular spacings		2
Anti-nuisance tripping version Mo Degree of protection (IP) IP20 Connectable conductor cross section solid-core mm² 1 - 25	Built-in depth	mm	69.5
Degree of protection (IP) IP20 Connectable conductor cross section solid-core mm ²	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