

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



Part no. PKNM-40/1N/C/003-MW Article no. 236334

Similar to illustration

**Design verification as per IEC/EN 61439** 

Design verification as per IEC/EN 01439			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	40
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	9.4
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	0
Heat dissipation capacity	P <sub>diss</sub>	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 6.0**

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@ss8.1-27-14-22-07 [AFZ810012])

[AFZ810012])		
Number of poles (total)		2
Number of protected poles		1
Nominal rated voltage	V	230
Nominal rated current	Α	40

Leakage current type Current limiting class Rated short-circuit breaking capacity EN 60898 Rated short-circuit breaking capacity IEC 60947-2 Rated short-circuit breaking capacity IEC 60947-2 Rated short-circuit breaking capacity IEC 60947-2 Ratease characteristic Concurrently switching N-neutral Over voltage category Pollution degree Pollution			
Current limiting class Rated short-circuit breaking capacity EN 60898 Rated short-circuit breaking capacity IEC 60947-2 Release characteristic Concurrently switching N-neutral Over voltage category Pollution degree Width in number of modular spacings Built-in depth Suitable for flush-mounted installation Degree of protection (IP) Surge current capacity Ver degree of protection (IP) Surge current capacity Ver degree of protection (IP) Surge current capacity A  Rated short-circuit breaking capacity EN 60898 Rated short-circuit breaking capacity EN 6099 Rated short-circuit breaking capacity EN 609	Rated fault current	Α	0.03
Rated short-circuit breaking capacity EN 60898 Rated short-circuit breaking capacity IEC 60947-2 Release characteristic Concurrently switching N-neutral Over voltage category Pollution degree Width in number of modular spacings Built-in depth Suitable for flush-mounted installation Degree of protection (IP) Surge current capacity Vea  No Surge current capacity  KA  Degree of Polection (IP) Surge current capacity  Surge current capacity  Surge current c	Leakage current type		AC
Rated short-circuit breaking capacity IEC 60947-2  Release characteristic  Concurrently switching N-neutral  Over voltage category  Pollution degree  Width in number of modular spacings  Built-in depth  Suitable for flush-mounted installation  Degree of protection (IP)  Surge current capacity  Voltage type  kA  0  C  Concurrently switching N-neutral  C  Ves  2  2  2  Ves  2  C  Ves  2  C  C  C  C  C  C  C  C  C  C  C  C	Current limiting class		3
Frequency Release characteristic Concurrently switching N-neutral Over voltage category Pollution degree Width in number of modular spacings Built-in depth Suitable for flush-mounted installation Degree of protection (IP) Surge current capacity Voltage type  50 Hz C C C C C C C C C C C C C C C C C C C	Rated short-circuit breaking capacity EN 60898	kA	10
Release characteristic Concurrently switching N-neutral Over voltage category Pollution degree Pollution deg	Rated short-circuit breaking capacity IEC 60947-2	kA	0
Concurrently switching N-neutral  Over voltage category  Pollution degree  Pollution	Frequency		50 Hz
Over voltage category  Over voltage category  Over voltage category  Over voltage category  3  2  Width in number of modular spacings  Built-in depth  Mm  70  Suitable for flush-mounted installation  Over voltage of protection (IP)  Surge current capacity  Voltage type  3  AC	Release characteristic		C
Pollution degree 2 Width in number of modular spacings 2 Built-in depth mm 70 Suitable for flush-mounted installation No Degree of protection (IP) IP20 Surge current capacity KA 0.25 Woltage type AC	Concurrently switching N-neutral		Yes
Width in number of modular spacings  Built-in depth  mm  70  Suitable for flush-mounted installation  Degree of protection (IP)  Surge current capacity  Voltage type  2  Mo  70  No  1P20  AC	Over voltage category		3
Built-in depth  Suitable for flush-mounted installation  Degree of protection (IP)  Surge current capacity  Voltage type  The protection of the protection o	Pollution degree		2
Suitable for flush-mounted installation  Degree of protection (IP)  Surge current capacity  Voltage type  No  IP20  KA  0.25  AC	Width in number of modular spacings		2
Degree of protection (IP)  Surge current capacity  Voltage type  IP20  AC	Built-in depth	mm	70
Surge current capacity kA 0.25 Voltage type AC	Suitable for flush-mounted installation		No
Voltage type AC	Degree of protection (IP)		IP20
• n	Surge current capacity	kA	0.25
Antinuisance tripping version No	Voltage type		AC
	Antinuisance tripping version		No