DATASHEET - PKM0-2,5

Short-circuit protective breaker, Iu 2.5 A, Irm 38.8 A, Screw terminals, Also suitable for motors with efficiency class IE3.

Powering Business Worldwide

Part no. PKM0-2,5
072726

General specifications

Product name	Eaton Moeller® series PKM0 Short-circuit protective breaker
Part no.	PKM0-2,5
EAN	4015080727262
Product Length/Depth	76 millimetre
Product height	93 millimetre
Product width	45 millimetre
Product weight	0.287 kilogram
Certifications	IEC/EN 60947 VDE 0660
Product Tradename	PKM0
Product Type	Short-circuit protective breaker
Product Sub Type	None
Catalog Notes	An appropriate overload relay must be fitted to protect motors against overload. IE3-ready devices are identified by the logo on their packaging. Refer to catalog CA034001DE for the allocation of short circuit protection and contactor

Features & Functions

Actuator type	Turn button
Number of poles	Three-pole

General information

Connection	Screw terminals
Degree of protection	Terminals: IP00 IP20
Lifespan, electrical	100,000 operations
Lifespan, mechanical	100,000 Operations
Mounting position	Can be snapped on to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height.
Operating frequency	40 Operations/h
Overvoltage category	III
Pollution degree	3
Product category	Motor protective circuit breaker
Protection	Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274)
Rated impulse withstand voltage (Uimp)	6000 V AC
Shock resistance	25 g, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms
Suitable for	Also motors with efficiency class IE3
Temperature compensation	-5 - 40 °C to IEC/EN 60947, VDE 0660 ≤ 0.25 %/K, residual error for T > 40° -25 - 55 °C, Operating range
Type	Short-circuit protective device only

Climatic environmental conditions

Altitude	Max. 2000 m
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	55 °C
Ambient operating temperature (enclosed) - min	25 °C
Ambient operating temperature (enclosed) - max	40 °C
Ambient storage temperature - min	40 °C
Ambient storage temperature - max	80 °C
Climatic proofing	Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78

Terminal capacities

Terminal capacity (flexible with ferrule)	1 x (1 - 6) mm², ferrule to DIN 46228 2 x (1 - 6) mm², ferrule to DIN 46228
Terminal capacity (solid)	2 x (1 - 6) mm² 1 x (1 - 6) mm²
Terminal capacity (solid/stranded AWG)	18 - 10
Stripping length (main cable)	10 mm
Tightening torque	1.7 Nm, Screw terminals, Main cable 1 Nm, Screw terminals, Control circuit cables

Electrical rating

Rated frequency - min	50 Hz
Rated frequency - max	60 Hz
Rated operational current (Ie)	2.5 A
Rated operational power at AC-3, 220/230 V, 50 Hz	0.37 kW
Rated operational power at AC-3, 380/400 V, 50 Hz	0.75 kW
Rated operational power at AC-3, 440 V, 50 Hz	1.1 kW
Rated operational power at AC-3, 500 V, 50 Hz	1.1 kW
Rated operational power at AC-3, 690 V, 50 Hz	1.5 kW
Rated operational voltage (Ue) - min	690 V
Rated operational voltage (Ue) - max	690 V
Rated uninterrupted current (Iu)	2.5 A

Short-circuit rating

Rated short-circuit breaking capacity Icu at 400 V AC	150 kA
Short-circuit release	Basic device fixed 15.5 x Iu, Trip Blocks 38.8 A, Irm, Setting range max. ± 20% tolerance, Trip blocks

Switching capacity

Switching capacity	2.5 A (3 contacts in series), DC-5 up to 250V 2.5 A, AC-3 up to 690 V

Trip blocks

Overload release current setting - min	0 A
Overload release current setting - max	0 A

Design verification

Equipment heat dissipation, current-dependent Pvid	5.16 W
Heat dissipation capacity Pdiss	0 W
Heat dissipation per pole, current-dependent Pvid	1.72 W
Rated operational current for specified heat dissipation (In)	2.5 A
Static heat dissipation, non-current-dependent Pvs	0 W
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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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.
10.9.2 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 9.0

Low-voltage industrial components (EG000017) / Motor protection circuit-breaker (EC000074)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Motor protection circuit-breaker (ecl@ss13-27-37-04-01 [AGZ529021])			
Overload release current setting		A	0 - 0
Adjustment range undelayed short-circuit release		A	39 - 39
With thermal overload protection			No
Phase failure sensitive			No
Switch off technique			Magnetic
Rated operating voltage		V	690 - 690
Rated permanent current Iu		A	2.5
Rated operation power at AC-3, 230 V		kW	0.37
Rated operation power at AC-3, 400 V		kW	0.75
Power loss		W	5.16
Type of electrical connection of main circuit			Screw connection
Type of control element			Turn button
Device construction			Built-in device fixed built-in technique
With integrated auxiliary switch			No
With integrated under voltage release			No
Number of poles			3
Rated short-circuit breaking capacity Icu at 400 V, AC		kA	150
Degree of protection (IP)			IP20
Height		mm	93
Width		mm	45
Depth		mm	76