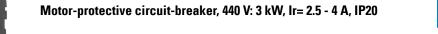
DATASHEET - PKZM01-4





Part no.	PKZM01-4
	278482
EL Number	4365017
(Norway)	

(NUT WAY)	
General specifications	
Product name	Eaton Moeller® series PKZM01 Motor-protective circuit-breaker
Part no.	PKZM01-4
EAN	4015082784829
Product Length/Depth	93 millimetre
Product height	90 millimetre
Product width	45 millimetre
Product weight	0.293 kilogram
Certifications	UL UL Category Control No.: NLRV CSA Class No.: 3211-05 CE CSA File No.: 165628 CSA CSA-C22.2 No. 60947-4-1-14 VDE 0660 IEC/EN 60947 UL File No.: E36332 UL 60947-4-1 IEC/EN 60947-4-1
Product Tradename	PKZM01
Product Type	Motor-protective circuit-breaker
Product Sub Type	None
Catalog Notes	IE3-ready devices are identified by the logo on their packaging.
Features & Functions	
Actuator type	Push button
Features	Phase-failure sensitivity (according to IEC/EN 60947-4-1, VDE 0660 Part 102)
Functions	Phase failure sensitive Motor protection
Number of poles	Three-pole
General information	
Connection	Screw terminals
Degree of protection	IP20 Terminals: IP00
Lifespan, electrical	50,000 operations (at 400V, AC-3)
Lifespan, mechanical	50,000 Operations (Main conducting paths)
Mounting position	Can be snapped on to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height.
Operating frequency	25 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	Branch circuit: Manual type E if used with terminal, or suitable for group installations, (UL/CSA) Also motors with efficiency class IE3
Temperature compensation	≤ 0.25 %/K, residual error for T > 40° -25 - 55 °C, Operating range -5 - 40 °C to IEC/EN 60947, VDE 0660
Climatic environmental conditions	
Altitude	Max. 2000 m
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	55 °C

Ambient exercting temperature (analoged) min	25 °C
Ambient operating temperature (enclosed) - min	40 °C
Ambient operating temperature (enclosed) - max	
Ambient storage temperature - min	40 °C
Ambient storage temperature - max	80 °C
Climatic proofing	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Terminal capacities	
Terminal capacity (flexible with ferrule)	2 x (1 - 6) mm², ferrule to DIN 46228 1 x (1 - 6) mm², ferrule to DIN 46228
Terminal capacity (solid)	2 x (1 - 6) mm ² 1 x (1 - 6) mm ²
Terminal capacity (solid/stranded AWG)	18 - 10
Stripping length (main cable)	10 mm
Tightening torque	1.7 Nm, Screw terminals, Main cable
Electrical rating	
Rated frequency - min	50 Hz
Rated frequency - max	60 Hz
Rated operational current (Ie)	4 A
Rated operational power at AC-3, 220/230 V, 50 Hz	0.75 kW
Rated operational power at AC-3, 380/400 V, 50 Hz	1.5 kW
Rated operational power at AC-3, 440 V, 50 Hz	1.5 kW
Rated operational voltage (Ue) - min	440 V
Rated operational voltage (Ue) - max	440 V
Rated uninterrupted current (Iu)	4 A
Short-circuit rating	
Rated short-circuit breaking capacity Icu at 400 V AC	50 kA
Short-circuit current	60 kA DC, up to 250 V DC, Main conducting paths
Short-circuit current rating (group protection)	50 kA, 600 V High Fault, Fuse, SCCR (UL/CSA) with 600 A, 600 V High Fault, Fuse,
	SCCR (UL/CSA) 50 kA, 600 V High Fault, CB, SCCR (UL/CSA) with 600 A, 600 V High Fault, CB, SCCR (UL/CSA)
Short-circuit release	62 A, Irm, Setting range max. ± 20% tolerance, Trip blocks Basic device fixed 15.5 x lu, Trip Blocks
Switching capacity	
Switching capacity	4 A (3 contacts in series), DC-5 up to 250V 4 A, AC-3 up to 440 V
Motor rating	
Assigned motor power at 115/120 V, 60 Hz, 1-phase	0.125 HP
Assigned motor power at 200/208 V, 60 Hz, 3-phase	0.75 HP
Assigned motor power at 230/240 V, 60 Hz, 1-phase	0.33 HP
Assigned motor power at 230/240 V, 60 Hz, 3-phase	0.75 HP
Assigned motor power at 230/240 V, 60 Hz, 3-phase Assigned motor power at 460/480 V, 60 Hz, 3-phase	0.75 HP 2 HP
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Assigned motor power at 460/480 V, 60 Hz, 3-phase Assigned motor power at 575/600 V, 60 Hz, 3-phase	2 HP
Assigned motor power at 460/480 V, 60 Hz, 3-phase Assigned motor power at 575/600 V, 60 Hz, 3-phase	2 HP
Assigned motor power at 460/480 V, 60 Hz, 3-phase Assigned motor power at 575/600 V, 60 Hz, 3-phase Trip blocks	2 HP 3 HP
Assigned motor power at 460/480 V, 60 Hz, 3-phase Assigned motor power at 575/600 V, 60 Hz, 3-phase Trip blocks Overload release current setting - min	2 HP 3 HP 2 5 A
Assigned motor power at 460/480 V, 60 Hz, 3-phase Assigned motor power at 575/600 V, 60 Hz, 3-phase Trip blocks Overload release current setting - min Overload release current setting - max Tripping characteristic	2 HP 3 HP 2.5 A 4 A
Assigned motor power at 460/480 V, 60 Hz, 3-phase Assigned motor power at 575/600 V, 60 Hz, 3-phase Trip blocks Overload release current setting - min Overload release current setting - max Tripping characteristic Design verification	2 HP 3 HP 2.5 A 4 A
Assigned motor power at 460/480 V, 60 Hz, 3-phase Assigned motor power at 575/600 V, 60 Hz, 3-phase Trip blocks Overload release current setting - min Overload release current setting - max Tripping characteristic Design verification Equipment heat dissipation, current-dependent Pvid	2 HP 3 HP 2.5 A 4 A Overload trigger: tripping class 10 A
Assigned motor power at 460/480 V, 60 Hz, 3-phase Assigned motor power at 575/600 V, 60 Hz, 3-phase Trip blocks Overload release current setting - min Overload release current setting - max Tripping characteristic Design verification Equipment heat dissipation, current-dependent Pvid Heat dissipation capacity Pdiss	2 HP 3 HP 2.5 A 4 A Overload trigger: tripping class 10 A 5.33 W 0 W
Assigned motor power at 460/480 V, 60 Hz, 3-phase Assigned motor power at 575/600 V, 60 Hz, 3-phase Trip blocks Overload release current setting - min Overload release current setting - max Tripping characteristic Design verification Equipment heat dissipation, current-dependent Pvid Heat dissipation per pole, current-dependent Pvid	2 HP 3 HP 2.5 A 4 A 0 verload trigger: tripping class 10 A 5.33 W 0 W 1.78 W
Assigned motor power at 460/480 V, 60 Hz, 3-phase Assigned motor power at 575/600 V, 60 Hz, 3-phase Trip blocks Overload release current setting - min Overload release current setting - max Tripping characteristic Design verification Equipment heat dissipation, current-dependent Pvid Heat dissipation capacity Pdiss Heat dissipation per pole, current-dependent Pvid Rated operational current for specified heat dissipation (In)	2 HP 3 HP 2.5 A 4 A 0verload trigger: tripping class 10 A 5.33 W 0 W 1.78 W 4 A
Assigned motor power at 460/480 V, 60 Hz, 3-phase Assigned motor power at 575/600 V, 60 Hz, 3-phase Trip blocks Overload release current setting - min Overload release current setting - max Tripping characteristic Design verification Equipment heat dissipation, current-dependent Pvid Heat dissipation capacity Pdiss Heat dissipation per pole, current-dependent Pvid Rated operational current for specified heat dissipation (In) Static heat dissipation, non-current-dependent Pvs	2 HP 3 HP 2.5 A 4 A Overload trigger: tripping class 10 A 5.33 W 5.33 W 0 W 1.78 W 4 A 0 W
Assigned motor power at 460/480 V, 60 Hz, 3-phase Assigned motor power at 575/600 V, 60 Hz, 3-phase Trip blocks Overload release current setting - min Overload release current setting - max Tripping characteristic Design verification Equipment heat dissipation, current-dependent Pvid Heat dissipation capacity Pdiss Heat dissipation per pole, current-dependent Pvid Rated operational current for specified heat dissipation (In) Static heat dissipation, non-current-dependent Pvs 10.2.2 Corrosion resistance	2 HP 3 HP 2.5 A 4 A 0verload trigger: tripping class 10 A 5.33 W 0 VV 1.78 W 1.78 W 0 VV 0 V 0 V 0 V 0 V 0 V 0 V 0 V
Assigned motor power at 460/480 V, 60 Hz, 3-phase Assigned motor power at 575/600 V, 60 Hz, 3-phase Trip blocks Overload release current setting - min Overload release current setting - max Tripping characteristic Design verification Equipment heat dissipation, current-dependent Pvid Heat dissipation capacity Pdiss Heat dissipation per pole, current-dependent Pvid Rated operational current for specified heat dissipation (In) Static heat dissipation, non-current-dependent Pvs	2 HP 3 HP 2.5 A 4 A Overload trigger: tripping class 10 A 5.33 W 5.33 W 0 W 1.78 W 4 A 0 W

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])

With thermal overload protection Mo Phase failure sensitive Ve Ves Switch off technique Ve Monoagnetic Rated operating voltage Ve Monoagnetic Rated operation power at AC-3, 230 V Ae Ve Rated operation power at AC-3, 400 V Ve Monoagnetic Power loss Ve Monoagnetic Type of electrical connection of main circuit Monoagnetic Sate				
With themal overload protection No Phase failure sensitive Fermomagnetic Switch off technique Fermomagnetic Rate operating voltage V 40 - 440 Rated operating power at AC-3, 230 V A 9 Rated operation power at AC-3, 230 V KW 0.5 Rated operation power at AC-3, 400 V KW 5.3 Power loss V 5.3 Type of electrical connection of main circuit V 9 Power loss V 9 Power loss V 9 Viti integrated auxiliary switch V 9 With integrated under voltage release V 9 Number of poles V 9 Rated short-circuit Dreaking capacity Luc at 400 V, AC Y 9 Degree of protection (IP) V 9 9 Rated short-circuit Dreaking capacity Luc at 400 V, AC Y 9 Rated short-circuit Dreaking capacity Luc at 400 V, AC Y 9 Rated short-circuit Dreaking capacity Luc at 400 V, AC Y 9 Rated short-circuit Dreaking Capacity Luc at 400 V, AC Y 9	Overload release current setting	A	۱	2.5 - 4
Phase failure sensitive Yes Yes Switch off technique Fernomagnetic Fernomagnetic Rated operating voltage V 40-440 Rated operating voltage V 40-400 Rated operating nower at AC-3,230 V K 0 Rated operation power at AC-3,230 V K 0 Power loss S 5.3 Power lose Ferromagnetic Ferromagnetic Type of electrical connection of main circuit Ferromagnetic Secondational (Secondational (Secondation (Secondational (Secondational (Secondation (Secondatio	Adjustment range undelayed short-circuit release	A	۱	62 - 62
Switch off technique Termomagnetic Switch off technique File File Rated operating voltage V 40-440 Rated operating voltage A 4 Rated operating voltage KW 0 Rated operation power at AC-3, 230 V KW 0 Rated operation power at AC-3, 400 V KW 0 Power loss KW 5 Type of electrical connection of main circuit W 5 Type of control element M Subt non Powie loss Subtin file voltage release Subtin file voltage release With integrated auxiliary switch M Subtin file voltage release With integrated space release M Subtin file voltage release Number of poles M Subtin file voltage release Rated short-circuit breaking capacity locu at 400 V, AC M Subtin file voltage release Rated short-circuit breaking capacity locu at 400 V, AC M Subtin file voltage release Rated short-circuit breaking capacity locu at 400 V, AC M Subtin file voltage release Rated file file	With thermal overload protection			No
Rated operating voltage V 40-440 Rated operating voltage 40-440 Rated operation power at AC-3, 230 V KW 75 Rated operation power at AC-3, 400 V S 53 Power loss Serve connection Serve connection Type of electrical connection of main circuit Fore your connection Serve connection Type of control element Serve connection Serve connection With integrated auxiliary switch Serve connection Serve connection With integrated nuder voltage release Serve conserve Serve conserve Number of poles Serve conserve Serve Rated short-circuit breaking capacity locu at 400 V, AC Serve Serve Pagree of protection (IP) Serve Serve Serve Height Serve Serve Serve Serve Noth Serve	Phase failure sensitive			Yes
Rated permanent current lu A 4 Rated operation power at AC-3, 230 V KW .05 Rated operation power at AC-3, 400 V KW .5 Power loss Sa 3 .5 Type of electrical connection of main circuit KW .5 Type of control element Sa cew connection With integrated auxiliary switch KW .5 Number of poles No .5 Rated short-circuit breaking capacity lcu at 400 V, AC No .5 Period for tretcion (IP) KM .5 Height mm .5 Mith .5 .5	Switch off technique			Thermomagnetic
Rated operation power at AC-3, 230 V KW 53 Rated operation power at AC-3, 400 V KW 5.33 Power loss Screw connection Type of electrical connection of main circuit MW Screw connection Type of control element Powship Sub toton Device construction MW Sub toton With integrated auxiliary switch Mumber of poles No Number of poles Screw connection (IP) Sold Height Immediate Screw connection With integrated auxiliary switch Screw connection Number of poles Screw connection Rated short-circuit breaking capacity locu at 400 V, AC MA Beight Screw connection Within tegrated under (IP) Screw connection (IP) Height Screw connection (IP) Kuth Screw connection (IP) <t< td=""><td>Rated operating voltage</td><td>V</td><td>1</td><td>440 - 440</td></t<>	Rated operating voltage	V	1	440 - 440
Rated operation power at AC-3, 400 V 5 Power loss 53 Type of electrical connection of main circuit V Type of control element V Device construction V With integrated auxiliary switch V Number of poles So Rated short-circuit breaking capacity lou at 400 V, AC V Begree of protection (IP) V With integrated auxiliary switch V Begree of protection (IP) V With integrated auxiliary switch So Solution Solution Rated short-circuit breaking capacity lou at 400 V, AC KA Begree of protection (IP) Solution Within tegrated auxiliary switch Solution Solution <	Rated permanent current lu	А	١	4
Power loss S3 Type of electrical connection of main circuit Scew connection Type of control element Powh button Device construction Mark Buil-in device fixed built-in technique With integrated auxiliary switch Mark Buil-in device fixed built-in technique With integrated under voltage release Mark Scew connection Number of poles Mark Scew connection Read short-circuit breaking capacity locu at 400 V, AC Mark Scew connection Degree of protection (IP) Mark Scew connection Height Scew connection Scew connection With indegrated auxiliary switch Scew connection Scew connection With indegrated under voltage release Scew connection Scew connection Number of poles Mark Scew connection Read short-circuit breaking capacity locu at 400 V, AC Mark Scew connection Polon Scew connection Scew connection Scew connection Height Scew connection Scew connection Scew connection With Mark Scew connection Scew connection Scew connection With Mark Scew connection Scew connection Scew connection	Rated operation power at AC-3, 230 V	k	W	0.75
Type of electrical connection of main circuit Feed of electrical connection of main circuit Type of control element Push button Device construction Buil-in device fixed built-in technique With integrated auxiliary switch No With integrated under voltage release Scew connection Number of poles Immediate Pagree of protection (IP) Feed of main Height Mon With integrated under voltage release Mon Number of poles Scew connection Pagree of protection (IP) Feed of main Height Mon With integrated under voltage collease Mon Monter of poles Mon Scew connection (IP) Monter of main Height Monter of main Mithin Collease Monter of main Mithin Collease Monter of main	Rated operation power at AC-3, 400 V	k	W	1.5
Type of control element Main Push button Device construction Main Built-in device fixed built-in technique With integrated auxiliary switch Main No With integrated under voltage release Main No Number of poles Main Sale Sale Rated short-circuit breaking capacity lou at 400 V, AC Main Sale Sale Degree of protection (IP) Main Sale Sale Height Main Sale Main Main Main Sale Sale Main Main Sale Sale Main Main Sale Sale	Power loss	V	V	5.33
Power construction Power constru	Type of electrical connection of main circuit			Screw connection
With integrated auxiliary switch Mo With integrated under voltage release Mo Number of poles Ma Rated short-circuit breaking capacity lcu at 400 V, AC MA Degree of protection (IP) Mo Height mm With integrated under voltage release Mo Bight mm Bight Mo	Type of control element			Push button
With integrated under voltage releaseImage: Constraint of polesNoNumber of polesImage: Constraint of polesImage: Constraint of polesImage: Constraint of polesRated short-circuit breaking capacity lou at 400 V, ACImage: Constraint of polesImage: Constraint of polesDegree of protection (IP)Image: Constraint of polesImage: Constraint of polesHeightImage: Constraint of polesImage: Constraint of polesWith of polesImage: Constraint of polesImage: Constraint of polesWith of polesImage: Constraint of polesImage: Constraint of poles	Device construction			Built-in device fixed built-in technique
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Rated short-circuit breaking capacity Icu at 400 V, AC KA 50 Degree of protection (IP) Mm 90 Height Mm 90	With integrated under voltage release			No
Degree of protection (IP) IPO Height mm 90 Width Imm 5	Number of poles			3
Height Midth Min	Rated short-circuit breaking capacity Icu at 400 V, AC	k	A	50
Width mm 45	Degree of protection (IP)			IP20
	Height	m	nm	90
Depth mm 93	Width	m	nm	45
	Depth	m	nm	93