Specifications

Photo is representative

Eaton 199173

Eaton Moeller® series PKZM0 Transformer-protective circuit-breaker, 8 - 12 A, Push in terminals

General specifications	
PRODUCT NAME	Eaton Moeller® series PKZM0 Transformer-protective circuit-breaker
CATALOG NUMBER	199173
MODEL CODE	PKZM0-12-T-PI
EAN	4015081972579
PRODUCT LENGTH/DEPTH	75 mm
PRODUCT HEIGHT	109 mm
PRODUCT WIDTH	45 mm
PRODUCT WEIGHT	0.343 kg
CERTIFICATIONS	VDE 0660 IEC/EN 60947 CE UL CSA IEC/EN 60947-4-1 CSA Class No.: 3211-05 CSA File No.: 165628 CSA-C22.2 No. 60947-4-1-14 UL 60947-4-1 UL Category Control No.: NLRV UL File No.: E36332

Powering Business Worldwide

Product specifications

FEATURES	Phase-failure sensitivity (according to IEC/EN 60947-4-1, VDE 0660 Part 102)
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.
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.

Resources

BROCHURES	eaton-motor-starters-system-xstart-brochure-br03407001en-en-us.pdf
CATALOGS	eaton-switching-and-protecting-motors-product-range-catalog-ca034001en-en-us.pdf Product Range Catalog Switching and protecting motors eaton-product-overview-for-machinery-catalogue-ca08103003zen-en-us.pdf
DECLARATIONS OF CONFORMITY	DA-DC-00004316.pdf DA-DC-00004916.pdf DA-DC-00004885.pdf
DRAWINGS	eaton-manual-motor-starters-pkzm-pkzm0-dimensions.eps
ECAD MODEL	ETN.199173.edz
INSTALLATION INSTRUCTIONS	IL122024ZU
INSTALLATION VIDEOS	WIN-WIN with push-in technology
MCAD MODEL	pkzm0_pi.stp motorschutzschalter_bis_32a_pi.dwg
SALES NOTES	eaton-link-module-for-motor-starters-pkz-flyer-fl034003en-en-us.pdf

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.
OPERATING FREQUENCY	40 Operations/h
POLLUTION DEGREE	3
MOUNTING METHOD	DIN rail (top hat rail) mounting optional
CLIMATIC PROOFING	Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78
ACTUATOR TYPE	Turn button
TRIPPING CHARACTERISTIC	Overload trigger: tripping class 10 A
ADJUSTMENT RANGE SHORT-TERM DELAYED SHORT-CIRCUIT RELEASE - MAX	0 A
ADJUSTMENT RANGE SHORT-TERM DELAYED SHORT-CIRCUIT RELEASE - MIN	0 A
ADJUSTMENT RANGE UNDELAYED SHORT-CIRCUIT RELEASE - MAX	224 A
ADJUSTMENT RANGE UNDELAYED SHORT-CIRCUIT RELEASE - MIN	224 A

AMBIENT OPERATING TEMPERATURE - MAX	55 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX	40 °C
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN	-25 °C
AMBIENT STORAGE TEMPERATURE - MAX	80 °C
AMBIENT STORAGE TEMPERATURE - MIN	-40 °C
ASSIGNED MOTOR POWER AT 115/120 V, 60 HZ, 1-PHASE	0.5 HP
ASSIGNED MOTOR POWER AT 200/208 V, 60 HZ, 3-PHASE	3 HP
ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 1-PHASE	2 HP
ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 3-PHASE	3 HP
ASSIGNED MOTOR POWER AT 460/480 V, 60 HZ, 3-PHASE	7.5 HP
ASSIGNED MOTOR POWER AT 575/600 V, 60 HZ, 3-PHASE	10 HP
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	6.64 W
HEAT DISSIPATION CAPACITY PDISS	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	2.2 W
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	6000 V AC
ALTITUDE	Max. 2000 m
DEVICE CONSTRUCTION	Built-in device fixed built-in technique
CONNECTION	Push in terminals
ELECTRICAL CONNECTION TYPE OF	Spring clamp connection

MAIN CIRCUIT	
MOUNTING POSITION	Can be snapped on to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height.
LIFESPAN, MECHANICAL	100,000 Operations
OVERVOLTAGE CATEGORY	III
DEGREE OF PROTECTION	IP20
NUMBER OF POLES	Three-pole
LIFESPAN, ELECTRICAL	100,000 operations
SHOCK RESISTANCE	25 g, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms
FUNCTIONS	Transformer protection For the protection of transformers with a high inrush current
TERMINAL CAPACITY (SOLID/STRANDED AWG)	18 - 8
POSITION OF CONNECTION FOR MAIN CURRENT CIRCUIT	Other
SWITCHING CAPACITY	12 A, AC-3 up to 690 V
NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0
OVERLOAD RELEASE CURRENT SETTING - MAX	12 A
OVERLOAD RELEASE CURRENT SETTING - MIN	8 A
RATED FREQUENCY - MAX	60 Hz
RATED FREQUENCY - MIN	50 Hz
RATED OPERATIONAL VOLTAGE (UE) - MAX	690 V
RATED OPERATIONAL VOLTAGE (UE) - MIN	690 V
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	12 A
RATED OPERATIONAL	3 kW

POWER AT AC-3, 220/230 V, 50 HZ	
RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ	5.5 kW
RATED UNINTERRUPTED CURRENT (IU)	12 A
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	0 W
STRIPPING LENGTH (MAIN CABLE)	12 mm
PRODUCT CATEGORY	Transformer protective circuit breaker
PROTECTION	Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274)
RATED OPERATIONAL POWER AT AC-3, 440 V, 50 HZ	5.5 kW
RATED OPERATIONAL POWER AT AC-3, 500 V, 50 HZ	5.5 kW
RATED OPERATIONAL POWER AT AC-3, 690 V, 50 HZ	11 kW
TERMINAL CAPACITY (FLEXIBLE WITH UNISOLATED FERRULE)	1 x (1 - 6) mm^2 2 x (1 - 6) mm^2
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 400 V AC	50 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 400 V AC	38 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 440 V AC	15 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 440 V AC	12 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 500 V AC	15 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 500 V AC	4 kA

RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 690 V AC	3 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 690 V AC	2 kA
TERMINAL CAPACITY (FLEXIBLE WITH ULTRASONIC WELDED CABLE END)	1 x (1 - 10) mm^2 2 x (1 - 6) mm^2
SUITABLE FOR	Also motors with efficiency class IE3 Branch circuit: Manual type E if used with terminal, or suitable for group installations, (UL/CSA)
SHORT-CIRCUIT RELEASE	Basic device, fixed 20 x Iu ± 20% tolerance 224 A, Irm
TERMINAL CAPACITY (SOLID)	1 x (1 - 6) mm^2, Push-in terminals 2 x (1 - 6) mm^2, Push-in terminals 1 x (1 - 6) mm^2 2 x (1 - 6) mm^2
RATED OPERATIONAL CURRENT (IE)	12 A
TEMPERATURE COMPENSATION	-5 - 40 °C to IEC/EN 60947, VDE 0660 -25 - 55 °C, Operating range ≤ 0.25 %/K, residual error for T > 40°
SHORT-CIRCUIT CURRENT RATING (GROUP PROTECTION)	18 kA, 600 V High Fault, Fuse, SCCR (UL/CSA) with 600 A, 600 V High Fault, CB, SCCR (UL/CSA) 18 kA, 600 V High Fault, CB, SCCR (UL/CSA) with 600 A, 600 V High Fault, Fuse, SCCR (UL/CSA) 65 kA, 480 V High Fault, Fuse, SCCR (UL/CSA) with 600 A, 480 V High Fault, Fuse, SCCR (UL/CSA) 65 kA, 480 V High Fault, CB, SCCR (UL/CSA) with 600 A, 480 V High Fault, CB, SCCR (UL/CSA)
SWITCH OFF TECHNIQUE	Thermomagnetic
TERMINAL CAPACITY (FLEXIBLE WITH	1 x (1 - 6) mm^2, Push-in terminals, ferrule to DIN

FERRULE)	46228-1 2 x (1 - 6) mm², Push-in terminals, ferrule to DIN 46228-1 1 x (1 - 6) mm², Push-in terminals, ferrule to DIN 46228-4 2 x (1 - 4) mm², Push-in terminals, ferrule to DIN 46228-4
TERMINAL CAPACITY (FLEXIBLE)	1 x (1 - 6) mm², Push-in terminals 2 x (1 - 6) mm², Push-in terminals 1 x (1 - 6) mm² 2 x (1 - 6) mm²
POWER LOSS	6.37 W

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	

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