## Eaton 199151

Eaton Moeller® series PKZM0 Motorprotective circuit-breaker, 0.12 kW, 0.4 - 0.63 A, Push in terminals

PRODUCT NAME	Eaton Moeller® series PKZM0 Motor-protective circuit-breaker
CATALOG NUMBER	199151
PRODUCT LENGTH/DEPTH	75 mm
PRODUCT HEIGHT	109 mm
PRODUCT WIDTH	45 mm
PRODUCT WEIGHT	0.299 kg
CERTIFICATIONS	IEC/EN 60947 VDE 0660 UL CSA IEC/EN 60947-4-1 UL 60947-4-1 CSA-C22.2 No. 60947-4-1-14 CE UL File No.: E36332 UL Category Control No.: NLRV CSA File No.: 165628 CSA Class No.: 3211-05



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.
INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT.	-
INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS  10.2.4 RESISTANCE TO ULTRA-VIOLET (UV)	standard's requirements.  Meets the product
INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS  10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION	standard's requirements.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to

DECLARATIONS OF CONFORMITY	eaton-motor-protective-circuit- breaker-declaration-of-conformity- uk251170en.pdf
MCAD MODEL	motorschutzschalter bis 32a pi.dwg eaton-motor-protective-circuit- breakers-mcad-3d-models-pkzm0- pi.stp
	<u>IL122024ZU</u>
	eaton-manual-motor-starters-pkzm- pkzm0-dimensions.eps

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	ls the panel builder's responsibility.
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	Is the panel builder's responsibility.
10.9.2 POWER- FREQUENCY ELECTRIC STRENGTH	ls the panel builder's responsibility.
10.9.3 IMPULSE WITHSTAND VOLTAGE	ls the panel builder's responsibility.
10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL	ls the panel builder's responsibility.
OPERATING FREQUENCY	40 Operations/h
OPERATING FREQUENCY POLLUTION DEGREE	40 Operations/h
POLLUTION DEGREE	3 DIN rail (top hat rail)
POLLUTION DEGREE  MOUNTING METHOD	DIN rail (top hat rail) mounting optional  Damp heat, cyclic, to IEC 60068-2-30  Damp heat, constant, to
POLLUTION DEGREE  MOUNTING METHOD  CLIMATIC PROOFING	DIN rail (top hat rail) mounting optional  Damp heat, cyclic, to IEC 60068-2-30  Damp heat, constant, to IEC 60068-2-78
POLLUTION DEGREE  MOUNTING METHOD  CLIMATIC PROOFING  ACTUATOR TYPE  TRIPPING	DIN rail (top hat rail) mounting optional  Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 Turn button  Overload trigger: tripping
POLLUTION DEGREE  MOUNTING METHOD  CLIMATIC PROOFING  ACTUATOR TYPE  TRIPPING CHARACTERISTIC  ADJUSTMENT RANGE SHORT-TERM DELAYED SHORT-CIRCUIT RELEASE	DIN rail (top hat rail) mounting optional  Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78  Turn button  Overload trigger: tripping class 10 A
POLLUTION DEGREE  MOUNTING METHOD  CLIMATIC PROOFING  ACTUATOR TYPE  TRIPPING CHARACTERISTIC  ADJUSTMENT RANGE SHORT-TERM DELAYED SHORT-CIRCUIT RELEASE - MAX  ADJUSTMENT RANGE SHORT-TERM DELAYED SHORT-TERM DELAYED SHORT-CIRCUIT RELEASE	DIN rail (top hat rail) mounting optional  Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78  Turn button  Overload trigger: tripping class 10 A  0 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
EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT PVID	5.16 W
HEAT DISSIPATION CAPACITY PDISS	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	1.7 W
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	6000 V AC
(0)	
ALTITUDE	Max. 2000 m
	Max. 2000 m  Built-in device fixed built-in technique
ALTITUDE	Built-in device fixed built-
ALTITUDE  DEVICE CONSTRUCTION	Built-in device fixed built- in technique
ALTITUDE  DEVICE CONSTRUCTION  CONNECTION  ELECTRICAL  CONNECTION TYPE OF	Built-in device fixed built- in technique Push in terminals
ALTITUDE  DEVICE CONSTRUCTION  CONNECTION  ELECTRICAL  CONNECTION TYPE OF  MAIN CIRCUIT	Built-in device fixed built-in technique  Push in terminals  Spring clamp connection  Can be snapped on to IEC/EN 60715 top-hat rail
ALTITUDE  DEVICE CONSTRUCTION  CONNECTION  ELECTRICAL  CONNECTION TYPE OF  MAIN CIRCUIT  MOUNTING POSITION	Built-in device fixed built-in technique  Push in terminals  Spring clamp connection  Can be snapped on to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height.
ALTITUDE  DEVICE CONSTRUCTION  CONNECTION  ELECTRICAL  CONNECTION TYPE OF  MAIN CIRCUIT  MOUNTING POSITION  LIFESPAN, MECHANICAL  OVERVOLTAGE	Built-in device fixed built-in technique  Push in terminals  Spring clamp connection  Can be snapped on to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height.  100,000 Operations
ALTITUDE  DEVICE CONSTRUCTION  CONNECTION  ELECTRICAL  CONNECTION TYPE OF  MAIN CIRCUIT  MOUNTING POSITION  LIFESPAN, MECHANICAL  OVERVOLTAGE  CATEGORY	Built-in device fixed built-in technique Push in terminals  Spring clamp connection  Can be snapped on to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height.  100,000 Operations  III
ALTITUDE  DEVICE CONSTRUCTION  CONNECTION  ELECTRICAL  CONNECTION TYPE OF  MAIN CIRCUIT  MOUNTING POSITION  LIFESPAN, MECHANICAL  OVERVOLTAGE  CATEGORY  DEGREE OF PROTECTION	Built-in device fixed built-in technique Push in terminals  Spring clamp connection  Can be snapped on to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height.  100,000 Operations  III
ALTITUDE  DEVICE CONSTRUCTION  CONNECTION  ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT  MOUNTING POSITION  LIFESPAN, MECHANICAL OVERVOLTAGE CATEGORY  DEGREE OF PROTECTION  NUMBER OF POLES	Built-in device fixed built-in technique Push in terminals  Spring clamp connection  Can be snapped on to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height.  100,000 Operations  III  IP20  Three-pole
ALTITUDE  DEVICE CONSTRUCTION  CONNECTION  ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT  MOUNTING POSITION  LIFESPAN, MECHANICAL  OVERVOLTAGE CATEGORY  DEGREE OF PROTECTION  NUMBER OF POLES  LIFESPAN, ELECTRICAL	Built-in device fixed built-in technique Push in terminals  Spring clamp connection  Can be snapped on to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height.  100,000 Operations  III  IP20 Three-pole 100,000 operations 25 g, Mechanical, according to IEC/EN 60068-2-27, Half-

(SOLID/STRANDED AWG)	
SWITCHING CAPACITY	0.63 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	0.63 A
OVERLOAD RELEASE CURRENT SETTING - MIN	0.4 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)	0.63 A
RATED OPERATIONAL POWER AT AC-3E, 220/230 V, 50 HZ	0.09 kW
RATED OPERATIONAL POWER AT AC-3E, 380/400 V, 50 HZ	0.12 kW
RATED UNINTERRUPTED CURRENT (IU)	0.63 A
STATIC HEAT DISSIPATION, NON- CURRENT-DEPENDENT PVS	0 W
STRIPPING LENGTH (MAIN CABLE)	12 mm
PRODUCT CATEGORY	Motor 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-3E, 440 V, 50 HZ	0.18 kW

RATED OPERATIONAL POWER AT AC-3E, 500 V, 50 HZ	0.25 kW
RATED OPERATIONAL POWER AT AC-3E, 690 V, 50 HZ	0.25 kW
TERMINAL CAPACITY (FLEXIBLE WITH UNISOLATED FERRULE)	1 x (1 - 6) mm <sup>2</sup> 2 x (1 - 6) mm <sup>2</sup>
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 400 V AC	150 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 400 V AC	150 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 440 V AC	150 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 440 V AC	150 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 500 V AC	150 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 500 V AC	150 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 690 V AC	150 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 690 V AC	150 kA
TERMINAL CAPACITY (FLEXIBLE WITH ULTRASONIC WELDED CABLE END)	1 x (1 - 10) mm <sup>2</sup> 2 x (1 - 6) mm <sup>2</sup>
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 15.5 x lu ± 20% tolerance 9.8 A, Irm
TERMINAL CAPACITY (SOLID)	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
RATED OPERATIONAL O.63 A O.63 A
$ \begin{array}{ll} -5 - 40 \ ^{\circ}\text{C to IEC/EN 60947}, \\ \text{VDE 0660} \\ \textbf{TEMPERATURE} & -25 - 55 \ ^{\circ}\text{C}, \text{Operating} \\ \textbf{COMPENSATION} & \text{range} \\ \leq 0.25 \ \%/\text{K}, \text{ residual error} \\ \text{for T > } 40 \ ^{\circ} \end{array} $
SHORT-CIRCUIT CURRENT RATING (GROUP PROTECTION)  50 kA, 600 V High Fault, 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)
50 kA, 600 Y/347 V, SCCR (UL/CSA)   SHORT-CIRCUIT CURRENT   65 kA, 240 V, SCCR (UL/CSA)   65 kA, 480 Y/277 V, SCCR (UL/CSA)
SWITCH OFF TECHNIQUE Thermomagnetic
TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)  1 x (1 - 6) mm², Push-in terminals, ferrule to DIN 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
1 x (1 - 6) mm², Push-in terminals  TERMINAL CAPACITY (FLEXIBLE)  2 x (1 - 6) mm², Push-in terminals 1 x (1 - 6) mm²
2 x (1 - 6) mm <sup>2</sup>

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
:	



Eaton House 30 Pembroke Road Dublin 4, Eaton.com

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