Eaton 199164

Eaton Moeller® series PKZM0 Transformerprotective circuit-breaker, 0.16 - 0.25 A, Push in terminals

	Eaton Moeller® series
PRODUCT NAME	PKZM0 Transformer-
	protective circuit-breaker
CATALOG NUMBER	199164
PRODUCT LENGTH/DEPTH	75 mm
PRODUCT HEIGHT	109 mm
PRODUCT WIDTH	45 mm
PRODUCT WEIGHT	0.299 kg
	VDE 0660
	IEC/EN 60947
	CE
	UL
	CSA
	IEC/EN 60947-4-1
CERTIFICATIONS	CSA Class No.: 3211-05
CERTIFICATIONS	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



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

DECLARATIONS OF CONFORMITY	DA-DC-00004316.pdf
MCAD MODEL	motorschutzschalter_bis_32a_pi.dwg eaton-motor-protective-circuit- breakers-mcad-3d-models-pkzm0- pi.stp
	<u>IL122024ZU</u>
	<u>eaton-manual-motor-starters-pkzm-</u> <u>pkzm0-dimensions.eps</u>

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	ls 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
· · · ·	le operations/n
POLLUTION DEGREE	3
POLLUTION DEGREE	3 DIN rail (top hat rail)
POLLUTION DEGREE	3 DIN rail (top hat rail) mounting optional Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC
POLLUTION DEGREE MOUNTING METHOD CLIMATIC PROOFING	3 DIN rail (top hat rail) mounting optional Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
POLLUTION DEGREE MOUNTING METHOD CLIMATIC PROOFING ACTUATOR TYPE TRIPPING	3 DIN rail (top hat rail) mounting optional Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 Turn button Overload trigger: tripping
POLLUTION DEGREEMOUNTING METHODCLIMATIC PROOFINGACTUATOR TYPETRIPPING CHARACTERISTICADJUSTMENT RANGE SHORT-TERM DELAYED SHORT-CIRCUIT RELEASE	3 DIN rail (top hat rail) mounting optional Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 Turn button Overload trigger: tripping class 10 A
POLLUTION DEGREEMOUNTING METHODCLIMATIC PROOFINGACTUATOR TYPEACTUATOR TYPETRIPPING CHARACTERISTICADJUSTMENT RANGE SHORT-CIRCUIT RELEASE SHORT-TERM DELAYED SHORT-CIRCUIT RELEASE	3 DIN rail (top hat rail) mounting optional Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 Turn button Overload trigger: tripping class 10 A
POLLUTION DEGREEMOUNTING METHODCLIMATIC PROOFINGACTUATOR TYPEACTUATOR TYPECHARACTERISTICADJUSTMENT RANGE SHORT-CIRCUIT RELEASE - MINADJUSTMENT RANGE SHORT-CIRCUIT RELEASE - MINADJUSTMENT RANGE SHORT-CIRCUIT RELEASE - MINADJUSTMENT RANGE SHORT-CIRCUIT RELEASE - MIN	3DIN rail (top hat rail) mounting optionalDamp heat, constant, to IEC 60068-2-78Damp heat, cyclic, to IEC 60068-2-30Turn buttonOverload trigger: tripping class 10 A0 A0 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	5.15 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
ALTITUDE	Max. 2000 m
DEVICE CONSTRUCTION	Built-in device fixed built- in technique
DEVICE CONSTRUCTION	
	in technique
CONNECTION ELECTRICAL CONNECTION TYPE OF	in technique Push in terminals
CONNECTION ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	in technique Push in terminals Spring clamp connection Can be snapped on to IEC/EN 60715 top-hat rail
CONNECTION ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT MOUNTING POSITION	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.
CONNECTION ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT MOUNTING POSITION LIFESPAN, MECHANICAL OVERVOLTAGE	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
CONNECTION ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT MOUNTING POSITION LIFESPAN, MECHANICAL OVERVOLTAGE CATEGORY	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
CONNECTION ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT MOUNTING POSITION LIFESPAN, MECHANICAL OVERVOLTAGE CATEGORY DEGREE OF PROTECTION	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 IIP20
CONNECTION ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT MOUNTING POSITION LIFESPAN, MECHANICAL OVERVOLTAGE CATEGORY DEGREE OF PROTECTION NUMBER OF POLES	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
CONNECTION ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT MOUNTING POSITION LIFESPAN, MECHANICAL OVERVOLTAGE CATEGORY DEGREE OF PROTECTION NUMBER OF POLES LIFESPAN, ELECTRICAL	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-

	Transformer protection
TERMINAL CAPACITY (SOLID/STRANDED AWG)	18 - 8
POSITION OF CONNECTION FOR MAIN CURRENT CIRCUIT	Other
SWITCHING CAPACITY	0.25 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	0.25 A
OVERLOAD RELEASE CURRENT SETTING - MIN	0.16 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)	0.25 A
RATED OPERATIONAL POWER AT AC-3, 220/230 V, 50 HZ	0 kW
RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ	0.06 kW
RATED UNINTERRUPTED CURRENT (IU)	0.25 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	0.06 kW
RATED OPERATIONAL POWER AT AC-3, 500 V, 50 HZ	0.06 kW
RATED OPERATIONAL POWER AT AC-3, 690 V, 50 HZ	0.12 kW
TERMINAL CAPACITY (FLEXIBLE WITH UNISOLATED FERRULE)	1 x (1 - 6) mm² 2 x (1 - 6) mm²
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) mm² 2 x (1 - 6) mm²
SUITABLE FOR	Also motors with efficiency class IE3
SHORT-CIRCUIT RELEASE	Basic device, fixed 20 x lu ± 20% tolerance 4.25 A, Irm
TERMINAL CAPACITY (SOLID)	1 x (1 - 6) mm², 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)	0.25 A
TEMPERATURE COMPENSATION	≤ 0.25 %/K, residual error for T > 40° -25 - 55 °C, Operating range -5 - 40 °C to IEC/EN 60947, VDE 0660
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)
SWITCH OFF TECHNIQUE	Thermomagnetic
	0
TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)	1 x (1 - 6) mm ² , Push-in terminals, ferrule to DIN 46228-1 2 x (1 - 6) mm ² , Push-in terminals, ferrule to DIN 46228-1 1 x (1 - 6) mm ² , Push-in terminals, ferrule to DIN 46228-4 2 x (1 - 4) mm ² , Push-in terminals, ferrule to DIN 46228-4
(FLEXIBLE WITH	1 x (1 - 6) mm ² , Push-in terminals, ferrule to DIN 46228-1 2 x (1 - 6) mm ² , Push-in terminals, ferrule to DIN 46228-1 1 x (1 - 6) mm ² , Push-in terminals, ferrule to DIN 46228-4 2 x (1 - 4) mm ² , Push-in terminals, ferrule to DIN
(FLEXIBLE WITH FERRULE) TERMINAL CAPACITY	1 x (1 - 6) mm ² , Push-in terminals, ferrule to DIN 46228-1 2 x (1 - 6) mm ² , Push-in terminals, ferrule to DIN 46228-1 1 x (1 - 6) mm ² , Push-in terminals, ferrule to DIN 46228-4 2 x (1 - 4) mm ² , Push-in terminals, ferrule to DIN 46228-4 1 x (1 - 6) mm ² , Push-in terminals 2 x (1 - 6) mm ² , Push-in terminals 1 x (1 - 6) mm ²

PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

:



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