Specifications



Photo is representative



Eaton 222394

Eaton Moeller® series PKZM4 Motor-protective circuit-breaker, Ir= 50 - 58 A, Screw terminals, Terminations: IP00 PKZM4-58

General specifications	
PRODUCT NAME	Eaton Moeller® series PKZM4 Motor-protective circuit-breaker
CATALOG NUMBER	222394
MODEL CODE	PKZM4-58
EAN	4015082223946
PRODUCT LENGTH/DEPTH	160 mm
PRODUCT HEIGHT	140 mm
PRODUCT WIDTH	55 mm
PRODUCT WEIGHT	1.136 kg
CERTIFICATIONS	CSA Class No.: 3211-05 IEC/EN 60947-4-1 CSA File No.: 165628 CSA-C22.2 No. 60947-4-1-14 UL Category Control No.: NLRV VDE 0660 CE CSA IEC/EN 60947 UL File No.: E36332 UL UL 60947-4-1
GLOBAL CATALOG	222394
PRODUCT TYPE	Motor-protective circuit-breaker

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.
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.

Resources

BROCHURES	eaton-push-in-technology-product-overview-brochure-br034012-en-us.pdf eaton-motor-starters-system-xstart-brochure-br03407001en-en-us.pdf
CATALOGS	eaton-product-overview-for-machinery-catalogue-ca08103003zen-en-us.pdf
CHARACTERISTIC CURVE	eaton-manual-motor-starters-tripping-characteristic-pkzm4-characteristic-curve-003.eps eaton-manual-motor-starters-characteristic-pkzm4-characteristic-curve.eps eaton-manual-motor-starters-characteristic-pkzm4-characteristic-curve-002.eps
DECLARATIONS OF CONFORMITY	eaton-mccb-declaration-of-conformity-eu260233en.pdf eaton-motor-protective-circuit-breaker-declaration-of-conformity-uk251168en.pdf
DRAWINGS	eaton-manual-motor-starters-pkzm4-dimensions.eps eaton-manual-motor-starters-circuit-breaker-pkzm4-dimensions.eps eaton-manual-motor-starters-pkzm4-characteristic-curve-002-de.eps eaton-manual-motor-starters-mounting-3d-drawing-002.eps eaton-manual-motor-starters-circuit-breaker-pkzm4-3d-drawing.eps eaton-general-ie-ready-dilm-contactor-standards.eps eaton-manual-motor-starters-pkzm4-3d-drawing.eps
ECAD MODEL	ETN.222394.edz
INSTALLATION INSTRUCTIONS	eaton-motors-starters-pkzm4-il03407012z.pdf
INSTALLATION VIDEOS	WIN-WIN with push-in technology
MANUALS AND USER GUIDES	eaton-motor-protective-circuit-breaker-pkzm4-overload-monitoring-exe-manual-mn03402002z-de-de-en-us.pdf
MCAD MODEL	DA-CS-pkzm4 eaton-breakers-mcad-drawings-pkzm4.dwg

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
LIFESPAN, MECHANICAL	30,000 Operations (Main conducting paths)
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 UNDELAYED SHORT-CIRCUIT RELEASE - MAX	899 A
ADJUSTMENT RANGE UNDELAYED SHORT-CIRCUIT RELEASE - MIN	899 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 230/240 V, 60 HZ, 1-PHASE	10 HP
ASSIGNED MOTOR POWER AT 460/480 V, 60 HZ, 3-PHASE	40 HP
ASSIGNED MOTOR POWER AT 575/600 V, 60 HZ, 3-PHASE	50 HP
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	28.2 W
HEAT DISSIPATION CAPACITY PDISS	0 W
HEAT DISSIPATION PER POLE, CURRENT-	9.4 W

SALES NOTES	eaton-link-module-for-motor-starters-pkz-flyer-fl034003en-en-us.pdf
SPECIFICATIONS AND DATASHEETS	Eaton Specification Sheet - 222394
WIRING DIAGRAMS	eaton-manual-motor-starters-transformer-pkzm0-wiring-diagram.eps eaton-manual-motor-starters-starter-nzm-mccb-wiring-diagram.eps

DEPENDENT PVID	
INTERNAL RESISTANCE	2 mΩ
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	6000 V AC
ALTITUDE	Max. 2000 m
DEVICE CONSTRUCTION	Built-in device fixed built-in technique
EXPLOSION SAFETY CATEGORY FOR DUST	ATEX dust-ex-protection, PTB 10, ATEX 3012, Ex II(2) G
CONNECTION	Screw terminals
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Screw connection
MOUNTING POSITION	Can be snapped on to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height.
OVERVOLTAGE CATEGORY	III
DEGREE OF PROTECTION	IP20 Terminals: IP00
NUMBER OF POLES	Three-pole
LIFESPAN, ELECTRICAL	30,000 operations (at 400V, AC-3)
SHOCK RESISTANCE	15 g, Mechanical, According to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms
FUNCTIONS	Motor protection Phase failure sensitive
TERMINAL CAPACITY (SOLID/STRANDED AWG)	14 - 2
SWITCHING CAPACITY	58 A (3 contacts in series), DC-5 up to 250V 58 A, AC-3 up to 690 V
OVERLOAD RELEASE CURRENT SETTING - MAX	58 A
OVERLOAD RELEASE CURRENT SETTING - MIN	50 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)	58 A
RATED OPERATIONAL POWER AT AC-3E, 220/230 V, 50 HZ	17 kW
RATED OPERATIONAL POWER AT AC-3E, 380/400	30 kW

V, 50 HZ	
RATED UNINTERRUPTED CURRENT (IU)	58 A
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	0 W
STRIPPING LENGTH (MAIN CABLE)	14 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	37 kW
RATED OPERATIONAL POWER AT AC-3E, 500 V, 50 HZ	37 kW
RATED OPERATIONAL POWER AT AC-3E, 690 V, 50 HZ	55 kW
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 400 V AC	50 kA
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 Iu ± 20% tolerance 899 A, Irm
TERMINAL CAPACITY (SOLID)	1 x (0.75 - 16) mm², Main cables 2 x (0.75 - 16) mm²
RATED OPERATIONAL CURRENT (IE)	58 A
TEMPERATURE COMPENSATION	-25 - 55 °C, Operating range -5 - 40 °C to IEC/EN 60947, VDE 0660 ≤ 0.25 %/K, residual error for T > 40°
SHORT-CIRCUIT CURRENT	60 kA DC, up to 250 V DC, Main conducting paths
SHORT-CIRCUIT CURRENT RATING (GROUP PROTECTION)	600 A, 600 V High Fault, max. Fuse, SCCR (UL/CSA) 42 kA, 600 V High Fault, Fuse, SCCR (UL/CSA) 42 kA, 600 V High Fault, CB, SCCR (UL/CSA) 600 A, 600 V High Fault, max. CB, SCCR (UL/CSA)
SHORT-CIRCUIT CURRENT RATING (TYPE E)	Accessories required BK50/3-PKZ4-E 50 kA, 480 Y/277 V, SCCR (UL/CSA) 50 kA, 240 V, SCCR (UL/CSA)

TIGHTENING TORQUE	3.3 Nm, Screw terminals, Main cable
SWITCH OFF TECHNIQUE	Thermomagnetic
TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)	1 x (0.75 - 35) mm², Main cables 2 x (0.75 - 25) mm², Main cables
POWER LOSS	28.2 W

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	

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