Eaton EP-400165

Eaton Moeller® series Motor-protective circuit-breaker, 7.5 kW, 10 - 16 A, Feed-side screw terminals/output-side push-in terminals, lockable

PRODUCT NAME	Eaton Moeller® series PKZM0 Motor-protective circuit-breaker
CATALOG NUMBER	EP-400165
PRODUCT LENGTH/DEPTH	77 mm
PRODUCT HEIGHT	93 mm
PRODUCT WIDTH	45 mm
PRODUCT WEIGHT	0.306 kg
CERTIFICATIONS	VDE 0660 UL File No.: E36332 IEC/EN 60947-4-1 CSA File No.: 165628 IEC/EN 60947 UL Category Control No.: NLRV UL CSA-C22.2 No. 60947-4-1-14 CSA Class No.: 3211-05 CSA UL 60947-4-1 CE

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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	Does not apply, since the entire switchgear needs to

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DECLARATIONS OF CONFORMITY	eaton-motor-protective-circuit-breaker-declaration-of-conformity-uk251170en.pdf

ASSEMBLIES	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.
FITTED WITH:	Padlock locking
OPERATING FREQUENCY	40 Operations/h
POLLUTION DEGREE	3
LIFESPAN, MECHANICAL	100,000 Operations
MOUNTING METHOD	DIN rail (top hat rail) mounting optional
CLIMATIC PROOFING	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
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	248 A
ADJUSTMENT RANGE UNDELAYED SHORT-CIRCUIT RELEASE - MIN	248 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	1 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	5 HP
ASSIGNED MOTOR POWER AT 460/480 V, 60 HZ, 3-PHASE	10 HP
ASSIGNED MOTOR POWER AT 575/600 V, 60 HZ, 3-PHASE	10 HP
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	6.43 W
HEAT DISSIPATION CAPACITY PDISS	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	2.1 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 on output side Screw terminals on feed side
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Screw-/spring clamp 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	Terminals: IP00 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	Motor protection Phase failure sensitive
TERMINAL CAPACITY (SOLID/STRANDED AWG)	18 - 8
SWITCHING CAPACITY	16 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	16 A
OVERLOAD RELEASE CURRENT SETTING - MIN	10 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)	16 A
RATED OPERATIONAL POWER AT AC-3E, 220/230 V, 50 HZ	4 kW
RATED OPERATIONAL POWER AT AC-3E, 380/400 V, 50 HZ	7.5 kW
RATED UNINTERRUPTED CURRENT (IU)	16 A
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT	0 W

PVS	
STRIPPING LENGTH (MAIN CABLE)	10 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	9 kW
RATED OPERATIONAL POWER AT AC-3E, 500 V, 50 HZ	9 kW
RATED OPERATIONAL POWER AT AC-3E, 690 V, 50 HZ	12.5 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	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) mm² 2 x (1 - 6) mm²
SUITABLE FOR	Also motors with efficiency class IE3 Branch circuit: Manual

	type E in combination with contactor DILM and terminal BK25/3-PKZ0-E, or suitable for group installations, (UL/CSA)
SHORT-CIRCUIT RELEASE	Basic device fixed 15.5 x Iu ± 20% tolerance 248 A, Irm
TERMINAL CAPACITY (SOLID)	1 x (1 - 6) mm², Screw terminals 2 x (1 - 6) mm², Screw terminals 1 x (1 - 2.5) mm², Push-in terminals 2 x (1 - 2.5) mm², Push-in terminals
RATED OPERATIONAL CURRENT (IE)	16 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)	10 kA, 600 V High Fault, Fuse, SCCR (UL/CSA) with 150 A, 600 V High Fault, Fuse, SCCR (UL/CSA) 10 kA, 600 V High Fault, CB, SCCR (UL/CSA) with 125 A, 600 V High Fault, CB, SCCR (UL/CSA) 50 kA, 600 V High Fault, CB with CL, SCCR (UL/CSA) with 600 A, 600 V High Fault, CB with CL, SCCR (UL/CSA) 50 kA, 600 V High Fault, Fuse with CL, SCCR (UL/CSA) with 600 A, 600 V High Fault, Fuse with CL, SCCR (UL/CSA) 18 kA, 480 V High Fault, CB, SCCR (UL/CSA) with 600 A, 480 V High Fault, CB, SCCR (UL/CSA) 18 kA, 480 V High Fault, Fuse, SCCR (UL/CSA) with 600 A, 480 V High Fault, Fuse, SCCR (UL/CSA)
SHORT-CIRCUIT CURRENT RATING (TYPE E)	65 kA, 240 V, SCCR (UL/CSA) with contactor DILM17 65 kA, 480 Y/277 V, SCCR (UL/CSA) with contactor DILM17

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
TERMINAL CAPACITY (FLEXIBLE)	1 x (1 - 6) mm² 2 x (1 - 6) mm² 1 x (1 - 6) mm², Push-in terminals 2 x (1 - 6) mm², Push-in terminals
POWER LOSS	6.43 W

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