Specifications

Eaton 138516

Eaton Moeller® series PKE65 Motor-protective circuit-breaker, Complete device with standard knob, Electronic, 16 - 65 A, With overload release

General specifications	
PRODUCT NAME	Eaton Moeller® series PKE System-protective circuit-breaker
CATALOG NUMBER	138516
MODEL CODE	PKE65/XTU-65
EAN	4015081352951
PRODUCT LENGTH/DEPTH	187 mm
PRODUCT HEIGHT	162 mm
PRODUCT WIDTH	55 mm
PRODUCT WEIGHT	1.469 kg
CERTIFICATIONS	CE CSA-C22.2 No. 60947-4-1-14 CSA UL Category Control No.: NLRV UL File No.: E36332 CSA File No.: 165628 UL UL 60947-4-1 VDE 0660 IEC/EN 60947 CSA Class No.: 3211-05 IEC/EN 60947-4-1
CATALOG NOTES	This is a product for Environment A (Industrial). In environment B (household) this device may cause undesirable radio interference. In this case the user may be obliged to take appropriate measures.
GLOBAL CATALOG	138516

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.
10.3 DEGREE OF PROTECTION OF	Does not apply, since the entire switchgear needs to

Resources

BROCHURES	eaton-motor-starters-system-xstart-brochure-br03407001en-en-us.pdf eaton-motor-protective-circuit-breaker-pke-and-communication-modul-pke-brochure-w12107613en-en-us.pdf
CATALOGS	Product Range Catalog Switching and protecting motors eaton-product-overview-for-machinery-catalogue-ca08103003zen-en-us.pdf
CHARACTERISTIC CURVE	eaton-manual-motor-starters-pke65-characteristic-curve-002.eps eaton-manual-motor-starters-pke65-characteristic-curve-005.eps eaton-manual-motor-starters-pke65-characteristic-curve-004.eps
DECLARATIONS OF CONFORMITY	eaton-system-protective-circuit-breaker-declaration-of-conformity-uk251177en.pdf eaton-system-protective-circuit-breaker-declaration-of-conformity-eu250694en.pdf
DRAWINGS	eaton-manual-motor-starters-pke65-dimensions.eps eaton-manual-motor-starters-mounting-3d-drawing.eps eaton-general-ie-ready-dilm-contactor-standards.eps eaton-manual-motor-starters-pke65-3d-drawing-002.eps
ECAD MODEL	ETN.138516.edz
INSTALLATION INSTRUCTIONS	IL034013ZU

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:	Standard knob
OPERATING FREQUENCY	60 Operations/h
POLLUTION DEGREE	3
CLIMATIC PROOFING	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
ACTUATOR TYPE	Turn button
ADJUSTMENT RANGE UNDELAYED SHORT-CIRCUIT RELEASE - MAX	1008 A
ADJUSTMENT RANGE UNDELAYED SHORT-CIRCUIT RELEASE - MIN	1008 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	3 HP

	eaton-motor-protective-circuit-breaker-pke-il03402019z.pdf
INSTALLATION VIDEOS	WIN-WIN with push-in technology Video Motor Protective Circuit Breaker PKE
MANUALS AND USER GUIDES	eaton-motor-protection-pke12-32-65-mn03402004z-de-de-en-us.pdf
MCAD MODEL	DA-CS-pke65_xtu65 DA-CD-pke65_xtu65
SALES NOTES	eaton-pke-modbus-rtu-modul-flyer-fl034008en-en-us.pdf

POWER AT 115/120 V, 60 HZ, 1-PHASE	
ASSIGNED MOTOR POWER AT 200/208 V, 60 HZ, 3-PHASE	15 HP
ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 1-PHASE	10 HP
ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 3-PHASE	15 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	40 HP
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	21.6 W
HEAT DISSIPATION CAPACITY PDISS	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	7.2 W
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	6000 V AC
ALTITUDE	Max. 2000 m
DEVICE CONSTRUCTION	Built-in device fixed built-in technique
CONNECTION	Screw terminals
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Screw connection
CURRENT FLOW TIMES - MIN	For all combinations with an SWD activation, you need not adhere to the minimum current flow times and minimum cut-out periods. 900 (Class 15) AC-4 cycle operation, Main conducting paths 1000 (Class 20) AC-4 cycle operation, Main conducting paths 700 (Class 10) AC-4 cycle operation, Main conducting paths 500 (Class 5) AC-4 cycle operation, Main conducting paths Note: Going below the

	minimum current flow time can cause overheating of the load (motor).
LIFESPAN, MECHANICAL	30,000 Operations (Main conducting paths)
OVERVOLTAGE CATEGORY	III
CUT-OUT PERIODS - MIN	≤ 500 ms, main conducting paths, AC-4 cycle operation
DEGREE OF PROTECTION	IP20 Terminals: IP00
NUMBER OF POLES	Three-pole
LIFESPAN, ELECTRICAL	50,000 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 for heavy starting duty Overload release Motor protection
TERMINAL CAPACITY (SOLID/STRANDED AWG)	14 - 2
SWITCHING CAPACITY	65 A, AC-3 up to 690 V 58 A, General use UL/CSA
OVERLOAD RELEASE CURRENT SETTING - MAX	65 A
OVERLOAD RELEASE CURRENT SETTING - MIN	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)	65 A
RATED OPERATIONAL POWER AT AC-3E, 220/230 V, 50 HZ	18.5 kW
RATED OPERATIONAL POWER AT AC-3E, 380/400 V, 50 HZ	30 kW
RATED UNINTERRUPTED CURRENT (IU)	65 A
STATIC HEAT	0 W

DISSIPATION, NON-CURRENT-DEPENDENT PVS	
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	45 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
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 400 V AC	12 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 440 V AC	45 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 440 V AC	11 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 500 V AC	15 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 500 V AC	3 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICU AT 690 V AC	5 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY ICS AT 690 V AC	1 kA
SUITABLE FOR	Also motors with efficiency class IE3
SHORT-CIRCUIT RELEASE	Trip block fixed 15.5 x Ir ± 20% tolerance, Trip blocks Delayed approx. 60 ms, Trip blocks Basic device fixed 15.5 x

	Iu, Trip Blocks
TERMINAL CAPACITY (SOLID)	1 x (0.75 - 16) mm² 2 x (0.75 - 16) mm²
RATED OPERATIONAL CURRENT (IE)	65 A
TEMPERATURE COMPENSATION	-5 - 40 °C to IEC/EN 60947, VDE 0660 -25 - 55 °C, Operating range
SHORT-CIRCUIT CURRENT RATING (GROUP PROTECTION)	100 kA, 600 V High Fault, Fuse, SCCR (UL/CSA) 200 A, Class J, 600 V High Fault, max. Fuse, SCCR (UL/CSA)
TIGHTENING TORQUE	3.3 Nm, Screw terminals, Main cable 1 Nm, Screw terminals, Control circuit cables
SWITCH OFF TECHNIQUE	Electronic
TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)	2 x (0.75 - 25) mm², ferrule to DIN 46228 1 x (0.75 - 35) mm², ferrule to DIN 46228
POWER LOSS	21.6 W
RESISTANCE PER POLE	1.6 mΩ

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	

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