DATASHEET - PKE65/XTUCP-65

System-protective circuit-breaker, Complete device with standard knob, 30 - 65 A, 65 A, With overload release

Part no.	**PKE65/XTUCP-65**
	168974
EL Number (Norway)	**4315146**

General specifications

Product name	Eaton Moeller® series PKE System-protective circuit-breaker
Part no.	PKE65/XTUCP-65
EAN	4015081654659
Product Length/Depth	187 millimetre
Product height	162 millimetre
Product width	55 millimetre
Product weight	1.469 kilogram
Certifications	VDE 0660 IEC/EN 60947
Product Tradename	PKE
Product Type	System-protective circuit-breaker
Product Sub Type	None
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.

Features & Functions

Actuator type	Turn button
Features	Complete device with protection unit
Fitted with:	Standard knob
Functions	System protection Overload release Line and cable protection
Number of poles	Three-pole

General information

Current flow times - min	1000 (Class 20) AC-4 cycle operation, Main conducting paths 700 (Class 10) AC-4 cycle operation, Main conducting paths Note: Going below the minimum current flow time can cause overheating of the load (motor). For all combinations with an SWD activation, you need not adhere to the minimum current flow times and minimum cut-out periods. 500 (Class 5) AC-4 cycle operation, Main conducting paths 900 (Class 15) AC-4 cycle operation, Main conducting paths
Cut-out periods - min	≤ 500 ms, main conducting paths, AC-4 cycle operation
Degree of protection	Terminals: IP00 IP20
Lifespan, electrical	50,000 operations (at 400V, AC-3)
Lifespan, mechanical	30,000 Operations (Main conducting paths)
Operating frequency	60 Operations/h
Overload release current setting - min	30 A
Overload release current setting - max	65 A
Overvoltage category	III
Pollution degree	3
Product category	Circuit-breaker PKE
Protection	Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274)
Rated impulse withstand voltage (Uimp)	6000 V AC
Resistance per pole	1.6 mΩ
Suitable for	DIN rail (top hat rail) mounting
Temperature compensation	-25 - 55 °C, Operating range -5 - 40 °C to IEC/EN 60947, VDE 0660

Ambient conditions, mechanical

Shock resistance	15 g, Mechanical, According to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms

Climatic environmental conditions	
Altitude	Max. 2000 m
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	55 °C
Ambient operating temperature (enclosed) - min	25 °C
Ambient operating temperature (enclosed) - max	40 °C
Ambient storage temperature - min	40 °C
Ambient storage temperature - max	80 °C
Climatic proofing	Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Terminal capacities	
Terminal capacity (flexible with ferrule)	1 x (0.75 - 35) mm^2, ferrule to DIN 46228 2 x (0.75 - 25) mm^2, ferrule to DIN 46228
Terminal capacity (solid)	1 x (0.75 - 16) mm^2 2 x (0.75 - 16) mm^2
Stripping length (main cable)	14 mm
Tightening torque	3.3 Nm, Screw terminals, Main cable 1 Nm, Screw terminals, Control circuit cables
Electrical rating	
Rated frequency - min	50 Hz
Rated frequency - max	60 Hz
Rated operational current (Ie)	65 A
Rated operational voltage (Ue) - min	690 V
Rated operational voltage (Ue) - max	690 V
Rated uninterrupted current (Iu)	65 A
Short-circuit rating	
Short-circuit release	Delayed approx. 60 ms, Trip blocks ± 20% tolerance, Trip blocks Basic device fixed 15.5 x Iu, Trip Blocks Trip block adjustable 5 - 8 x Ir
Communication	
Connection	Screw terminals
Contacts	
Number of auxiliary contacts (change-over contacts)	0
Number of auxiliary contacts (normally closed contacts)	0
Number of auxiliary contacts (normally open contacts)	0
Design verification	
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 operational current for specified heat dissipation (In)	65 A
Static heat dissipation, non-current-dependent Pvs	0 W
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.
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.
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.

Technical data ETIM 9.0

Low-voltage industrial components (EG000017) / Power circuit-breaker for trafo/generator/installation protection (EC000228)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Circuit breaker for power transformer, generator and system protection (ecl@ss13-27-37-04-09 [AJZ716018])			
Rated permanent current Iu		A	65
Rated voltage		V	690 - 690
Rated short-circuit breaking capacity Icu at 400 V, 50 Hz		kA	50
Overload release current setting		A	30 - 65
Adjustment range short-term delayed short-circuit release		A	150 - 150
Adjustment range undelayed short-circuit release		A	1008 - 1008
Power loss		W	21.6
Device construction			Built-in device fixed built-in technique
Integrated earth fault protection			No
Type of electrical connection of main circuit			Screw connection
Suitable for DIN rail (top hat rail) mounting			Yes
DIN rail (top hat rail) mounting optional			Yes
Number of auxiliary contacts as normally closed contact			0
Number of auxiliary contacts as normally open contact			0
Number of auxiliary contacts as change-over contact			0
With switched-off indicator			No
With integrated under voltage release			No
Number of poles			3
Position of connection for main current circuit			Other
Type of control element			Turn button
Complete device with protection unit			Yes
Motor drive integrated			No
Motor drive optional			No
Degree of protection (IP)			IP20

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