DATASHEET - PKE65/AK/XTU-65-SP



Motor-protective circuit-breaker, Type E DOL starters (complete devices), Electronic, 16 - 65 A, Turn button, Screw connection, North America

Part no.	**PKE65/AK/XTU-65-SP**
Catalog No.	**170482**
Alternate Catalog No.	**XTPE065DCSSP**

Delivery program

Basic function			Type E DOL starters (complete devices)
Connection technique			Screw terminals
Components for			North America
Connection to SmartWire-DT			no
Maximum motor rating			
AC HP = PS			
200 V 208 V		HP	15
230 V 240 V		HP	15
460 V 480 V		HP	40
Short Circuit Current Rating			
240 V		kA	65
480 Y 277 V		kA	65
Setting range			
Setting range of overload releases	I_r	A	16 - 65

Motor-protective circuit-breakers PKE65/AK/XTU-65

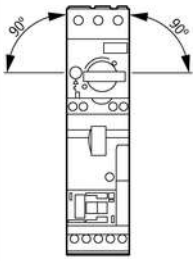
Extension terminal BK50/3-PKZ4-E

Notes

The type E DOL starter (without protection) consists of a PKE65 motor-protective circuit-breaker with AK-PKZ0 and a BK50/3-PKZ4-E extension terminal.

Technical data

General

Standards			IEC/EN 60947-4-1, VDE 0660, UL, CSA
Mounting position			
Ambient temperature			-25 - +55

Main conducting paths

Rated impulse withstand voltage	U_{imp}	V AC	6000
Overvoltage category/pollution degree			III/3
Rated operational voltage	U_e	V	208 - 480
Rated operational current			
Open, 3-pole: 50 – 60 Hz			
380 V 400 V	I_e	A	65
AC-4 cycle operation			
Minimum current flow times		ms	500 (Class 5) 700 (Class 10) 900 (Class 15) 1000 (Class 20)

Minimum cut-out periods		ms	500
Note		ms	In AC-4 cycle operation, 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.

Additional technical data

Motor protective circuit breaker PKZM0, PKE			PKE motor-protective circuit-breaker, see motor-protective circuit-breaker product group
DILM contactors			
Current heat loss			
Current heat loss at I_e to AC-3/400 V		W	19.2

Rating data for approved types

Switching capacity			
Maximum motor rating			
Three-phase			
200 V 208 V		HP	15
230 V 240 V		HP	15
460 V 480 V		HP	40
Short Circuit Current Rating, type E		SCCR	
240 V		kA	65
480 Y / 277 V		kA	65

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	61.4
Heat dissipation per pole, current-dependent	P_{vid}	W	6.4
Equipment heat dissipation, current-dependent	P_{vid}	W	19.2
Static heat dissipation, non-current-dependent	P_{vs}	W	0
Heat dissipation capacity	P_{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	55
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
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 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric 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 Insulation properties			
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 8.0

Low-voltage industrial components (EG000017) / Motor protection circuit-breaker (EC000074)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Motor protection circuit-breaker (ecl@ss10.0.1-27-37-04-01 [AGZ529016])

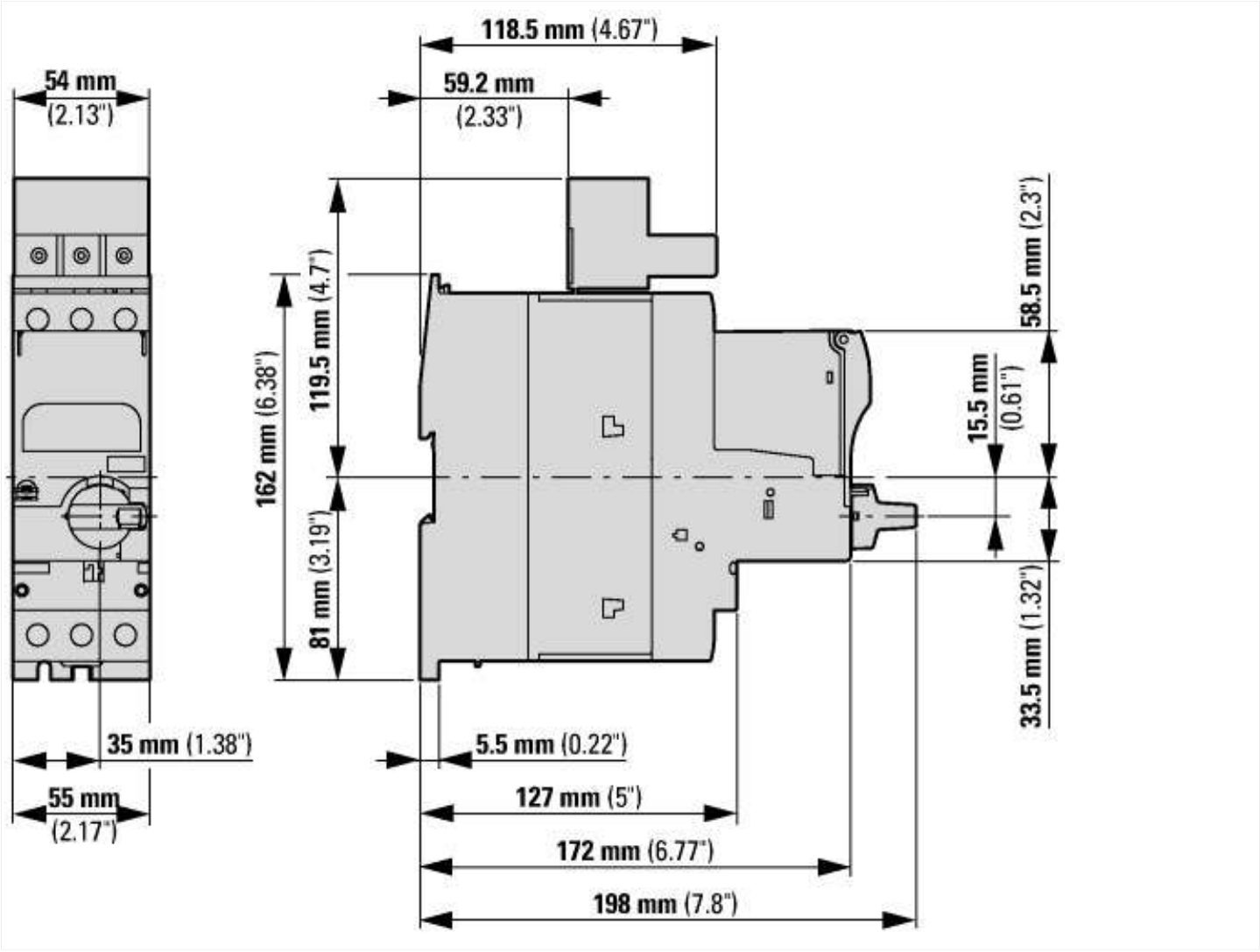
Overload release current setting		A	16 - 65
Adjustment range undelayed short-circuit release		A	0 - 0
With thermal protection			No
Phase failure sensitive			Yes
Switch off technique			Electronic
Rated operating voltage		V	690 - 690
Rated permanent current Iu		A	65
Rated operation power at AC-3, 230 V		kW	18.5
Rated operation power at AC-3, 400 V		kW	30
Type of electrical connection of main circuit			Screw connection
Type of control element			Turn button
Device construction			Built-in device fixed built-in technique
With integrated auxiliary switch			No
With integrated under voltage release			No
Number of poles			3
Rated short-circuit breaking capacity Icu at 400 V, AC		kA	80
Degree of protection (IP)			IP20
Height		mm	162
Width		mm	55
Depth		mm	198

Approvals

Product Standards			UL60947-4-1A; CSA-C22.2 No. 14-10; IEC60947-4-1; CE marking
UL File No.			E123500
UL Category Control No.			NKJH
CSA File No.			12528
CSA Class No.			3211-08
North America Certification			UL listed, CSA certified
Specially designed for North America			Yes

Characteristics

Dimensions



Additional product information (links)

IL034002ZU Type E with PKE65	
IL034002ZU Type E with PKE65	https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL034002ZU2021_07.pdf

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