## **DATASHEET - PKE65/AK/XTUW-32-SP**



Motor-protective circuit-breaker, Type E DOL starters (complete devices), Electronic, 8 - 32 A, Turn button, Screw connection, North America

Powering Business Worldwide

PKE65/AK/XTUW-32-SP Part no. 170483 Catalog No.

XTPE032DCSSP Alternate Catalog

## **Delivery program**

71 - 3 -			
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	7.5
230 V 240 V		HP	7.5
460 V 480 V		HP	20
575 V 600 V		HP	25
Short Circuit Current Rating			
240 V		kA	65
480 Y 277 V		kA	65
600 Y 347 V		kA	25
Setting range			
Setting range of overload releases	I <sub>r</sub>	Α	8 - 32
Motor-protective circuit-breakers PKE65/AK/XTUW-32			

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	$U_{\text{imp}}$	V AC	6000

Rated impulse withstand voltage	$U_{imp}$	V AC	6000
Overvoltage category/pollution degree			III/3
Rated operational voltage	U <sub>e</sub>	V	208 - 600
Rated operational current			
Open, 3-pole: 50 – 60 Hz			
380 V 400 V	I <sub>e</sub>	Α	32
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		$\label{prop:protective} PKE\ motor-protective\ circuit-breaker, see\ motor-protective\ circuit-breaker\ product\ group$
DILM contactors		
Current heat loss		
Current heat loss at I <sub>e</sub> to AC-3/400 V	W	5.4
Rating data for approved types		
Switching capacity		
Maximum motor rating		
Three-phase		
200 V 208 V	HP	7.5
230 V 240 V	HP	7.5
460 V 480 V	НР	20
575 V 600 V	HP	25
Short Circuit Current Rating, type E	SCCR	
240 V	kA	65
480 Y / 277 V	kA	65
600 Y / 347 V	kA	25

# Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	32
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	1.8
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	5.4
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	0
Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	55
EC/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 [AG75/9016])

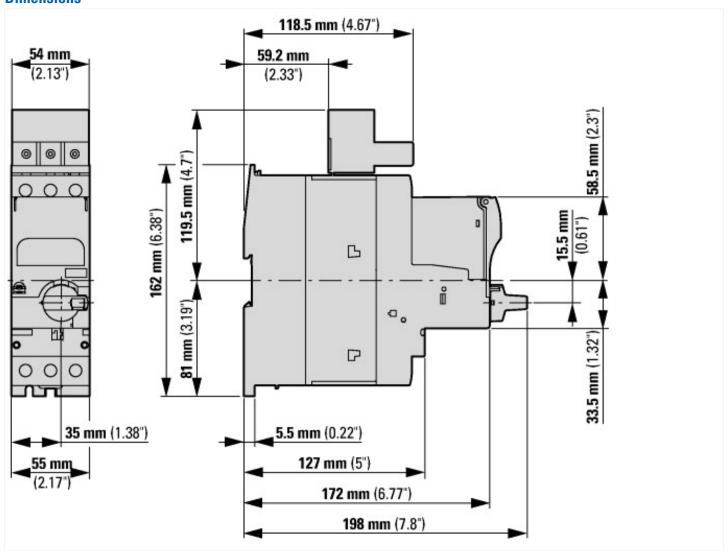
Adjustment range undelayed short-circuit release  Mith thermal protection  Mith thermal protection  Phase failure sensitive  Switch off technique  Rated operating voltage  Rated operation power at AC-3, 230 V  Rated operation power at AC-3, 400 V  Rype of electrical connection of main circuit  Rype of control element  With integrated auxiliary switch  With integrated auxiliary switch  With integrated under voltage release  No  With integrated under voltage release  No  Rated short-circuit breaking capacity Icu at 400 V, AC  Relegated operation (IP)  Height  With the Mith of the main integrated auxiliary switch  Mith integrated under voltage release  With integrated under voltage release  With integrated under voltage release  No  Rated short-circuit breaking capacity Icu at 400 V, AC  Man and short-circuit breaking capacity Icu at 400 V, AC  Man and short-circuit breaking capacity Icu at 400 V, AC  Man and short-circuit breaking capacity Icu at 400 V, AC  Mith man and short-circuit breaking capacity Icu at 400 V, AC  Mith man and short-circuit breaking capacity Icu at 400 V, AC  Mith man and short-circuit breaking capacity Icu at 400 V, AC  Mith man and short-circuit breaking capacity Icu at 400 V, AC  Mith man and short-circuit breaking capacity Icu at 400 V, AC  Mith man and short-circuit breaking capacity Icu at 400 V, AC  Mith man and short-circuit breaking capacity Icu at 400 V, AC  Mith man and short-circuit breaking capacity Icu at 400 V, AC  Mith man and short-circuit breaking capacity Icu at 400 V, AC  Mith man and short-circuit breaking capacity Icu at 400 V, AC  Mith man and short-circuit breaking capacity Icu at 400 V, AC  Mith man and short-circuit breaking capacity Icu at 400 V, AC  Mith man and short-circuit breaking capacity Icu at 400 V, AC  Mith man and short-circuit breaking capacity Icu at 400 V, AC  Mith man and short-circuit breaking capacity Icu at 400 V, AC  Mith man and short-circuit breaking capacity Icu at 400 V, AC  Mith man and short-circuit breaking capacity Icu at 400 V, AC  Mith	[AGZ529016])		
With thermal protection With thermal protection What t	Overload release current setting	Α	8 - 32
Phase failure sensitive  Switch off technique  Electronic  Rated operating voltage  Rated operating power at AC-3, 230 V  Rated operation power at AC-3, 230 V  Rated operation power at AC-3, 230 V  Rated operation power at AC-3, 400 V  Rype of electrical connection of main circuit  Rype of control element  Device construction  With integrated auxiliary switch  With integrated under voltage release  No  No  Rated short-circuit breaking capacity Icu at 400 V, AC  Degree of protection (IP)  Height  Mith  Mit	Adjustment range undelayed short-circuit release	Α	0 - 0
Switch off technique Rated operating voltage Rated operating voltage Rated operating voltage Rated operating voltage Rated operating power at AC-3, 230 V Rated operation power at AC-3, 230 V Rated operation power at AC-3, 400 V Rated operation power at AC-3, 400 V Rated operation of main circuit Rated operation of ma	With thermal protection		No
Rated perating voltage Rated permanent current lu Rated peration power at AC-3, 230 V RW Rated peration power at AC-3, 230 V RW Rated peration power at AC-3, 400 V RW RATED Rated peration power at AC-3, 230 V RW RATED Rated peration power at AC-3, 230 V RW RATED Rated peration power at AC-3, 230 V RW RATED Rated peration power at AC-3, 230 V RW RATED Rated peration power at AC-3, 230 V RW RATED Rated peration power at AC-3, 230 V RW RATED Rated peration power at AC-3, 230 V RW RATED Rated permanent current lu RW RATED Rated permanet at C-3, 230 V RW RW RATED Rated permanent current lu RW RATED	Phase failure sensitive		Yes
Rated permanent current lu Rated operation power at AC-3, 230 V Rated operation power at AC-3, 230 V Rated operation power at AC-3, 400 V Rated operation power at AC-3, 230 V Rated operation power	Switch off technique		Electronic
Rated operation power at AC-3, 230 V Rated operation power at AC-3, 230 V Rated operation power at AC-3, 400 V Rype of electrical connection of main circuit Rype of control element Rype of control e	Rated operating voltage	V	690 - 690
Rated operation power at AC-3, 400 V  Kype of electrical connection of main circuit  Type of control element  Device construction  With integrated auxiliary switch  With integrated under voltage release  No  Number of poles  Rated short-circuit breaking capacity Icu at 400 V, AC  Degree of protection (IP)  Height  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Height  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Height  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated Short-circuit breaking capacity Icu at 400 V, AC  Midth  Rated	Rated permanent current lu	Α	32
Type of electrical connection of main circuit  Type of control element  Device construction  With integrated auxiliary switch  With integrated under voltage release  No  Namber of poles  Rated short-circuit breaking capacity Icu at 400 V, AC  Degree of protection (IP)  Height  Width  Rose connection  Screw connection  Turn button  Built-in device fixed built-in technique  No  No  Rose  R	Rated operation power at AC-3, 230 V	kW	7.5
Turn button Device construction With integrated auxiliary switch With integrated under voltage release No Number of poles Rated short-circuit breaking capacity Icu at 400 V, AC Degree of protection (IP) Height Midth  Turn button Built-in device fixed built-in technique No No No Number of poles RA  8  8  8  8  8  8  8  8  8  8  8  8  8	Rated operation power at AC-3, 400 V	kW	15
Device construction  With integrated auxiliary switch  With integrated under voltage release  No  Number of poles  Rated short-circuit breaking capacity Icu at 400 V, AC  Degree of protection (IP)  Height  Midth  Built-in device fixed built-in technique  No  No  No  No  Rated built-in technique  No  No  No  12  No  12  No  14  15  16  17  17  17  18  18  18  18  18  18  18	Type of electrical connection of main circuit		Screw connection
With integrated auxiliary switch  With integrated under voltage release  No  Number of poles  Rated short-circuit breaking capacity Icu at 400 V, AC  Degree of protection (IP)  Height  mm  162  Width  mm  55	Type of control element		Turn button
Noth integrated under voltage release  State of poles  Rated short-circuit breaking capacity Icu at 400 V, AC  Degree of protection (IP)  Height  mm  162  Width  mm  55	Device construction		Built-in device fixed built-in technique
Number of poles  Rated short-circuit breaking capacity Icu at 400 V, AC  Degree of protection (IP)  Height  mm  162  Midth  mm  55	With integrated auxiliary switch		No
Rated short-circuit breaking capacity Icu at 400 V, AC  Degree of protection (IP)  Height  Midth  Rated short-circuit breaking capacity Icu at 400 V, AC  kA  1P20  IP20  IP30  IP30	With integrated under voltage release		No
Degree of protection (IP)         IP20           Height         mm         162           Width         mm         55	Number of poles		3
Height mm 162 Width 55	Rated short-circuit breaking capacity Icu at 400 V, AC	kA	80
Width mm 55	Degree of protection (IP)		IP20
	Height	mm	162
2004	Width	mm	55
Depth I38	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