

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Motor Starter**

with type designation(s)

Basic device PKE12, PKE32 & PKE65; Trip block motor device PKE-XTU...

Issued to

**Eaton Industries GmbH
Bonn Nordrhein-Westfalen, Germany**

is found to comply with

DNV GL rules for classification – Ships, offshore units, and high speed and light craft**Application :****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.****Rated voltage (V) 220-690****Rated current (A) 0,3-65****Frequency (Hz) 50-60**Issued at **Hamburg** on **2017-11-06**This Certificate is valid until **2022-11-05**.DNV GL local station: **Essen**for **DNV GL**Approval Engineer: **Harald Amberger**

**Oliver Darley
Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Product description

Motor-protective circuit breaker consists of: PKE12, PKE32, PKE65 basic device PKE-XTU-1,2, PKE-XTU-4, PKE-XTU-12, PKE-XTU(W)-32, PKE-XTU-65 trip blocks				
Ratings:				
Impulse withstand voltage U_{imp}		6kV		
Insulation voltage U_i		690V		
Operational voltage U_e		230V – 690V		
Kind of current		AC		
Trip class		5; 10; 15*; 20 *only PKE65		
Coordination Type		2		
Type	Setting range of overload releases I_r (A)	Conditional Short-Circuit Rating I_q (kA) acc. to IEC 60947-4-1		
		440V	500V	690V
PKE12-XTU-1,2	0,3 – 1,2	15	10	3
PKE12-XTU-4	1 – 4	50	10	3
PKE12-XTU-12	3 – 12	20	20	3
PKE32-XTU-32	8 – 32	25	6	3
PKE65-XTUW-32	8 – 32	45	15	5
PKE65-XTU-65	16 – 65	45	15	5
Further ratings acc. manufacturer documentation.				

Application/Limitation

Location Classes:

Temperature: D, Humidity: B, Vibration: A, EMC: A, Enclosure: IP20 device, IP00 terminals

With $U_{imp} = 6$ kV; Overvoltage category II applies for applications in IT systems >600V.

Type Approval documentation

Tests carried out

Type tests according to IEC 60947-4-1 and environmental tests (vibration, humidity, dry heat, low temperature, Power supply variation, Power supply failure and EMC).

Marking of product

Moeller - type designation - rated current - rated voltage - setting range

Name and place of manufacturer

Eaton Industries GmbH, Werk Gladbach, Neuwied, GERMANY

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

Job Id: **262.1-011487-4**
Certificate No: **TAE000023E**

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE