

# **UK-TYPE EXAMINATION**

# **CERTIFICATE**

Component Intended for use on/in a Product and Protective Systems Intended for Use in Potentially Explosive Atmospheres

UKSI 2016:1107 (as amended) - Schedule 3A, Part 1

1.	UK-Type Examin	ation Certificate Number:	ITS22UKEX0655U	Issue 00
2.	Product:	Bushing Type PLD**/**** *	*** and PkLD6/690	

3. Manufacturer: Emil A. Peters GmbH & Co. KG

**4. Address:** Westfalenstraβe 85, 58636 Iserlohn, Germany

- **5.** This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- 6. Intertek Testing and Certification Limited, Approved Body number 0359, in accordance with Regulation 42 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), certifies that the product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of the product intended for use in potentially explosive atmospheres given in Schedule 1 of the Regulations.

The examination and test results are recorded in the confidential report 105242678CHE-001 dated 15<sup>th</sup> June 2023.

- 7. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN IEC 60079-0:2018, EN 60079-1:2014 and EN IEC 60079-7:2015+A1:2018 except in respect of those requirements referred within item 14 of the Schedule.
- **8.** The sign "U" is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for equipment or a protective system. This partial certification may be used as a basis for certification of a product or a protective system.
- **9.** This UK-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Regulations apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- **10.** The marking of the product shall include the following:



II 2 G Ex db eb IIC Gb

IM2ExdbebIMb

Certification Officer:		16 <sup>th</sup> June 2023 <b>Date:</b>		
	M Newman			

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Registered No 3272281 Registered Office: Academy Place, 1-9 Brook Street, Brentwood, Essex, CM14 5NQ.



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## 11. Description of Component

The bushings, type PLD\*\*/\*\*\*\* and PkLD6/690, serve as electrical connection between flameproof enclosures or between flameproof enclosures and a terminal compartment with another type of protection.

They are built in two designs, design A and design B.

Connection is made directly at the connection facilities of the conductor studs or at the connection heads, which are screwed onto the threaded bolts of the bushing and secured against self-loosening and rotation.

Technical data	
Rated insulation voltage up to:	400V, 500V, 690V, 1100V, 3300V, 6600V.
Rated cross-section, depending on the connection head max:	450 mm <sup>2</sup>
Number of studs:	1
Rated service temperature range:	-55°C to +120°C

Desi	gn A	Design B	
Type	Thread	Туре	Thread
PLD4/500	M14 x 1.5	PLD 8/690	M26 x 1.5
PLD4/400/18	M14 x 1.5	PLD10/690	M30 x 1.5
PLD4/690	M14 x 1.5	PLD12/690	M36 x 1.5
PLD4/690/18	M14 x 1.5	PLD16/690	M42 x 1.5
PLD5/690	M16 x 1.5	PLD20/690	M48 x 1.5
PLD6/690	M20 x 1.5	PLD24/690	M52 x 1.5
PLD4/1100	M14 x 1.5	PLD 8/1100	M26 x 1.5
PLD4/1100+10	M14 x 1.5	PLD10/1100	M30 x 1.5
PLD6/1100	M20 x 1.5	PLD12/1100	M36 x 1.5
PLD6/1100+10	M20 x 1.5	PLD16/1100	M42 x 1.5
PkLD6/690	M20 x 1.5	PLD20/1100	M48 x 1.5
		PLD24/1100	M52 x 1.5
		PLD12/3300	M60 x 2
		PLD12/6600	M60 x 2
		PLD16/6600	M80 x 1.5
		PLD20/6600	M80 x 1.5



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#### **Nomenclature**

PLD\*\*/\*\*\* \*\*\* and PkLD6/690

1	2	3	4
PLD	**/	****	***

1 = Type

2 = Diameter of the bolt

3 = Rated Voltage

4 = Extension of thread of bushing, no influence on the Ex-protection.

#### 12. Report Number

Intertek Report: 105242678CHE-001 dated 15th June 2023.

#### 13. Conditions of Certification

- (a). Schedule of Limitations
  - Threaded holes into which bushings are screwed have to meet the minimum requirements of EN 60079-1, table 3. The bushings are suitable for installation in electrical apparatus of the type of protection flameproof enclosure "db" of groups I, IIA, IIB or IIC.
  - Should the reference pressure exceed 20bar, the bushing shall be included into the type test according to EN 60079-1, Clause 15.1.3 (overpressure test) as required by the classification of the electrical apparatus in question (group I, IIA, IIB, IIC).
  - The bushing with cylindrical joint are to be included in the type test according to EN 60079-1, Clause 15, in compliance with the grouping of the respective electrical apparatus (Group I, IIA, IIB or IIC).
  - The bushings shall be fixed in the electrical apparatus in such a way that rotation and accidental loosening will be prevented.
  - The connecting part of the bushing must be connected inside enclosures which are in compliance with a standardized type of protection according to EN 60079-0, Clause 1.
  - The bushing is a constructional unit. The reproducible assembly and the installation conditions have been documented. According to EN 60079-1, Clause 16.2 a routine test together with the flameproof enclosure in compliance with Clause 16.1 is therefore not necessary.
  - The component can be used in both Group I and Group II, as the requirement of the standards are identical in this case.
- (b). Conditions of Manufacture
  - None.

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# 14. Essential Health and Safety Requirements (EHSRs)

The relevant Essential Health and Safety Requirements (EHSRs) have been identified and assessed in Intertek Report: 105242678CHE-001 dated 15<sup>th</sup> June 2023.

#### 15. Drawings and Documents

Title:	Drawing No.:	Rev. Level:	Date:
Delineation: Serien PLD/400, PLD/500, PLD/690, und PLD/1100, PLD/3300, PLD/6600, pkLD 6/690	-		2023/05/04
Labeling PLD Component	KenZ-PLD-04-24-39-ex-UKEX		11.04.23
Operating Manual	VD-AN-405-1	4	06/2023
Drawing PkID 6/690	112-98-Z	0	22.06.07
Drawing PLD 4/500	113-98-Z	0	22.06.07
Drawing PLD 4/420-18	114-98-Z	0	22.06.07
Drawing PLD 4/690	116-98-Z	0	22.06.07
Drawing PLD 4/690-18	117-98-Z	0	22.06.07
Drawing PLD 5/690	118-98-Z	0	22.06.07
Drawing PLD 6/690	119-98-Z	0	22.06.07
Drawing PLD 8/690	120-98-Z	0	22.06.07
Drawing PLD 10/690	121-98-Z	0	22.06.07
Drawing PLD 12/690	122-98-Z	0	22.06.07
Drawing PLD 16/690	123-98-Z	0	22.06.07
Drawing PLD 20/690	124-98-Z	0	22.06.07
Drawing PLD 24/690	125-98-Z	0	17.04.14
Drawing PLD 4/1100+10	218-98-Z	0	22.06.07
Drawing PLD 4/1100	219-98-Z	0	22.06.07
Drawing PLD 6/1100+10	220-98-Z	0	22.06.07
Drawing PLD 6/1100	221-98-Z	0	25.01.05
Drawing PLD 8/1100	222-98-Z	0	24.02.14
Drawing PLD 10/1100	223-98-Z	0	24.02.14
Drawing PLD 12/1100	224-98-Z	0	24.02.14
Drawing PLD 16/1100	225-98-Z	0	19.05.04
Drawing PLD 20/1100	226-98-Z	0	19.05.04
Drawing PLD 24/1100	227-98-Z	0	17.04.14

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Drawing PLD 12/6600	310-98-Z	0	24.02.14
Drawing PLD 16/6600	320-98-Z	0	28.05.13
Drawing PLD 20/6600	330-98-Z	0	28.05.13
Drawing PLD 12/3300	420-98-Z	0	24.02.14

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