



EU Type Examination Certificate CML 15ATEX3005X Issue 1

1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

2 Equipment GL Range of Terminal Enclosures

3 Manufacturer PepperI+Fuchs GmbH

4 Address Lilienthalstrasse 200,

68307 Mannheim,

Germany

- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 CML B.V., Chamber of Commerce No 6738671, Hoogoorddreef 15, Amsterdam, 1101 BA, The Netherlands, Notified Body Number 2776, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 12.

- If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN 60079-0:2012+A11:2013 EN 60079-7:2015

EN 60079-11:2012

EN 60079-31:2014

10 The equipment shall be marked with the following:



 $\langle \mathcal{E}_{x} \rangle_{\text{II 2 GD}}$

Ex ia IIC T4/T5/T6 Ga

Ex eb IIC T4/T5/T6 Gb

Ex tb IIIC T80°C/T95°C/T130°C Db

Ta:-50°C to +40°C/+50°C/+55°C/+60°C

MA

^{*} Temperature class and assigned maximum surface temperature depend on the maximum ambient temperature assigned and the parts fitted. The minimum ambient temperature also depends on the parts fitted. Refer to the Description and Conditions of Manufacture.





11 Description

The GL type junction boxes are a range of hazardous area, IP 66 terminal junction boxes. They comprise a glass fibre reinforced polyester enclosure, component certified under Sira 00ATEX3028U, fitted with separately certified terminals and/or surface mount plug and socket connectors (DXN1, DXN3 or DXN6).

The GL type range is available in 14 sizes designated GL1 to GL14D as shown in the table below. The sides of the enclosures may be drilled for entries by the manufacturer or in accordance to the manufacturer's instructions. The enclosures are available with an optional earth continuity plate or earth stud fitted by the manufacturer.

All enclosures sizes from the range may be fitted with separately certified terminals mounted on DIN rails fitted to the base of the enclosures.

Enclosures GL11 to GL14D may be fitted with separately certified plug and socket connectors (DXN1, DXN3 or DXN6). These connectors may be installed to three of the four sides of the enclosure, with a maximum of two connecters per side.

Only items from the Pepperl+Fuchs approved range may be fitted. Before they are installed, the maximum power dissipation shall be calculated in accordance with EN 60079-7, Annex E.2 and shall not exceed the values given in the table below:

GL Enclosure		Maximum Power Dissipation (W)		
		T6/T80°C (-50°C to +40°C)		
Туре	Size (WxHxD)	T5/T95°C (-50°C to +55°C)	T6/T80°C -50°C to +50°C	
		T4/T130°C (-50°C to +60°C)		
GL1	80x75x55	7.5	1.6	
GL2	110x75x55	8.0	2.0	
GL3	160x75x55	9.0	3.0	
GL4	190x75x55	9.0	3.0	
GL5	122x120x90	9.4	3.5	
GL6	220x120x90	9.4	3.5	
GL7	160x160x90	10.4	4.3	
GL8	260x160x90	12.0	5.0	
GL9	360x160x90	13.8	6.2	
GL10	560x160x90	13.8	6.2	
GL11	255x250x120	15.5	6.4	
GL11D	255x250x165	15.5	6.4	
GL12	400x250x120	15.5	6.4	
GL13	405x400x120	31.4	11.2	
GL14	405x400x165	31.4	11.2	
GL14D	405x400x200	31.4	11.2	

Terminal enclosures may also be manufactured to sizes not specified in this table provided that any given dimension is not larger than the respective dimension of the largest enclosure or smaller than the respective dimension of the smallest enclosure. The power rating applied to a terminal enclosure of intermediate size is that of the next smallest enclosure.





12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	11 Feb 2016	R630A/00	Issue of Prime Certificate
1	07 Mar 2019	R12226B/00	Transfer of Certificate to CML BV

Note: Drawings that describe the equipment or component are listed in the Annex.

13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- i. The equipment covered by this certificate incorporates the use of previously certified components, it is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with these components. The manufacturer shall notify CML of any modifications to the components that may impinge upon the explosion safety aspects of the GL range of terminal enclosures.
- ii. The power rating marking on the label shall be allocated in accordance with the table detailed in the Description on this certificate.
- iii. The manufacturer will take all reasonable steps to ensure that the power dissipated by the terminal box does not exceed the maximum value stipulated the table detailed in the Description, and shall supply all the relevant information that will allow the installer/user to calculate the power dissipation (Watts) in accordance with EN 60079-7, Annex E, E.2 for each terminal box.
- iv. When terminals are supplied with the enclosure, they shall be appropriately ATEX approved components, chosen from the Pepperl+Fuchs approved range as stated in document 16-1241CML-04 and having a minimum insulation temperature range of:
 - T6 =-50°C to +80°C
 - T5 =-50°C to +95°C
 - T4 =-50°C to +100°C
- v. All terminals fitted shall be suitably Ex eb IIC Gb certified and installed in accordance with their certification requirements. Terminals are to be similar in size to the existing terminals listed and shall not reduce creepage and clearance.
- vi. All cable glands and plugs/stoppers for unused entries shall be suitable for use with the equipment and shall be:
 - certified as group II category 2 G D
 - have a minimum ingress protection of IP 66
- vii. When the GL Range Junction Boxes are fitted with the Marechal plug/sockets (as stated in document 16-1241CML-04) the equipment shall be marked to a maximum ambient range of -40°C to +40°C.
- viii. Terminal enclosures may be manufactured to sizes not specified in the table in the description. Any given dimension shall not be larger than the respective dimension of the largest enclosure or smaller than the respective dimension of the smallest enclosure. The power rating applied to a terminal enclosure of intermediate size shall be that of the next smallest enclosure.





- ix. If enclosures are supplied with wiring, a dielectric strength test is required at 2 x rated voltage +1000V with a minimum of 1500V for 60s in accordance with clause 7.1 of EN 60079-7:2015.
- x. A metallic label shall be fitted to equipment marked with an ambient temperature below -40°C.

14 Special Conditions for Safe Use (Conditions of Certification)

The following conditions relate to safe installation and/or use of the equipment.

- i. Enclosures which are fitted with the Marechal Type DXN1, DXN3 and DXN6 sockets (as stated in document 16-1241CML-04) shall be protected from impacts greater than 4 Joules.
- ii. Non-metallic external surfaces may be a potential electrostatic charge hazard and shall therefore be cleaned only with a damp cloth.



Certificate Annex

Certificate Number CML 15ATEX3005X

Equipment GL Range of Terminal Enclosures

Manufacturer Pepperl+Fuchs GmbH

The following documents describe the equipment or component defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved Date	Title
16-1241CM-10	1 of 2	07/01/16	11 Feb 2016	GL type junction box – Ex e label
16-1241CM-10	2 of 2	07/01/16	11 Feb 2016	GL type junction box – Ex ia label
16-1241CM-04	1 of 4	07/01/16	11 Feb 2016	GL type junction box – general assembly
16-1241CM-04	2 of 4	07/01/16	11 Feb 2016	GL type junction box – list of approved terminals
16-1241CM-04	3 of 4	07/01/16	11 Feb 2016	Label/paint exceeding ESD limitations
16-1241CM-04	4 of 4	07/01/16	11 Feb 2016	GL type junction box – plugs & sockets

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None.