



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx CML 17.0144X**

Page 1 of 5

Certificate history:

Status: **Current**

Issue No: 3

Issue 2 (2021-01-05)

Issue 1 (2018-08-01)

Issue 0 (2018-05-29)

Date of Issue: 2021-09-12

Applicant: **Pepperl+Fuchs SE**
Lilienthalstrasse 200
68307 Mannheim
Germany

Equipment: **GR Terminal Box**

Optional accessory:

Type of Protection: **Increased Safety "eb", Intrinsic Safety "ia", Optical Radiation "op pr", Dust Ignition "tb"**

Marking:
Ex eb IIC T* Gb
Ex ia IIC T* Gb
Ex op pr IIC T6 Gb
Ex eb ia IIC T* Gb
Ex eb op pr IIC T* Gb
Ex ia op pr IIC T* Gb
Ex eb ia op pr IIC T* Gb
Ex tb IIC T**°C Db

'#' Lower ambient is dependant upon components fitted but shall be no less than -60°C

'*' Refer to description for T classes

Approved for issue on behalf of the IECEx
Certification Body:

R C Marshall

Position:

Operations Manager

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

Eurofins E&E CML Limited
Unit 1, Newport Business Park
New Port Road
Ellesmere Port, CH65 4LZ
United Kingdom





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Page 2 of 5

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Lilienthalstrasse 200
68307 Mannheim
Germany

Manufacturing
locations: **Pepperl+Fuchs SE**
Bußmatten 10 – 12
77815 Bühl/Baden
Germany

Pepperl+Fuchs srl
Via Galileo Galilei, 1B/B1
I-20875 burago di Molgora (MB)
Italy

**Pepperl+Fuchs Manufacturing
(India) Private Limited**
Plot No. A-13
Sipcot Industrial Growth centre
ORAGADAM TAMIL NADU 602105
India

See following pages for more locations

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

IEC 60079-28:2015 Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
Edition:2

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

GB/CML/ExTR17.0174/00
GB/CML/ExTR21.0185/00

GB/CML/ExTR17.0174/01

GB/CML/ExTR20.0239/00

Quality Assessment Reports:

DE/PTB/QAR06.0015/17

FR/INE/QAR12.0003/09

US/UL/QAR07.0005/16



IECEx Certificate of Conformity

Certificate No.: **IECEx CML 17.0144X**

Page 3 of 5

Date of issue: 2021-09-12

Issue No: 3

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The GR Terminal Box is a range of increased safety, black, anti-static, glass-fibre reinforced polyester enclosures with a base and screw-down cover (with optional hinges in addition to the fixing screws). The range utilises the Ex Component certified Pepperl+Fuchs GR enclosures covered under certificate numbers IECEx CML 17.0039U and CML 17ATEX3084U.

Refer to Annex for full description and conditions of manufacture.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Refer to Annex for specific conditions of use.



IECEx Certificate of Conformity

Certificate No.: **IECEx CML 17.0144X**

Page 4 of 5

Date of issue: 2021-09-12

Issue No: 3

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 1

This issue introduced the following changes:

1. Dust surface temperatures were changed from T85, T100, T135 to T80, T95, T130

Issue 2

This issue introduced the following changes:

1. Change of applicant
2. Update of QAR
3. Update of the manufacturing locations

Issue 3

This issue introduced the following changes:

1. To update the certificate to the latest editions of the standards.



IECEx Certificate of Conformity

Certificate No.: **IECEx CML 17.0144X**

Page 5 of 5

Date of issue: 2021-09-12

Issue No: 3

Additional manufacturing locations:

Pepperl+Fuchs (Aust) Pty Ltd
131-149 Link Drive
Campbellfield
Victoria 3061
Australia

**Pepperl+Fuchs (Shanghai) Automation
Engineering Co., Ltd.**
Nr. 269, Yuanzhong Rd., Huinan Town,
Pudong District, Shanghai, 201399
China

Pepperl+Fuchs Manufacturing Inc.
502 Cane Island Parkway, Katy, TX 77494
United States of America

Annex:

[IECEx CML 17.0144X Iss. 3 Certificate Annex.pdf](#)

Annexe to: IECEx CML 17.0144X Issue 3
Applicant: Pepperl+Fuchs SE
Apparatus: GR Terminal Box



Description

The GR Terminal Box is a range of increased safety, black, anti-static, glass-fibre reinforced polyester enclosures with a base and screw-down cover (with optional hinges in addition to the fixing screws). The range utilises the Ex Component certified Pepperl+Fuchs GR enclosures covered under certificate numbers IECEx CML 17.0039U and CML 17ATEX3084U.

The terminal boxes are populated with DIN rail mounted, increased safety Ex Component certified terminals.

For cable entry, the terminal boxes may be provided with clearance holes, as required, machined into the top, bottom, left and right faces.

An internal/external earth stud may be provided.

The enclosures are available in a range of standard sizes as shown in the table below, intermediate sizes are also permitted.

Enclosure type	MDP	Height	Width	Depth
GR.*.10.10.07*	3.2 W	100 mm	100 mm	65 mm
GR.*.13.13.09*	6.7 W	130 mm	130 mm	85 mm
GR.*.13.18.09*	11 W	130 mm	180 mm	91.5 mm
GR.*.18.18.10*	14 W	180 mm	180 mm	104 mm
GR.*.18.24.10*	17 W	180 mm	240 mm	104 mm
GR.*.18.36.10*	22 W	180 mm	360 mm	104 mm
GR.*.18.36.17*	27 W	180 mm	360 mm	166.5 mm
GR.*.36.36.10*	33 W	360 mm	360 mm	104 mm
GR.*.36.36.17*	39 W	360 mm	360 mm	166.5 mm
GR.*.36.36.24*	44 W	360 mm	360 mm	241.5 mm
GR.*.48.60.24*	72 W	480 mm	600 mm	241.5 mm
GR.*.36.72.17*	104 W	360 mm	720 mm	166.5 mm
GR.*.36.72.24*	104 W	360 mm	720 mm	241.5 mm

The maximum dissipated power (MDP) in the table above was derived with the terminals used at 60% of their rated current value.



The MDP is valid for the following ambient temperatures and temperature classes:

Ta 40°C T6 T85°C

Ta 55°C T5 T100°C

Ta 65°C T4 T135°C

Conditions of manufacture

The following are conditions of manufacture

- i. Where the product incorporates certified parts or safety critical components the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.
- ii. When terminals are supplied with the enclosure, they shall be ATEX/IECEx approved components as specified in the scheduled drawings and having a maximum insulation temperature as below. All terminals shall be installed in accordance with their Conditions of Safe Use/Schedule of Limitations/Conditions of Certification and the relevant codes of practice/wiring regulations, specifically to the minimum creepage and clearance requirements and to any limitations to ratings that may be observed due to method of installation.

Terminals shall have a minimum insulation temperature as per the table below

Ta = +40°C	Ta = +55°C	Ta = + 65°C
≥80°C	≥95°C	≥105°C

All terminals fitted shall be suitable for the lower operating temperature marked on the certification label.

- iii. The lower ambient temperature shall be de-rated according to the minimum temperature limitations of the components fitted to the enclosure.

Conditions Of Certification

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

- i. When fitted with the fibre optic splice tray, the fibre cables shall be sufficiently supported so as to prevent strain and their minimum bend radius shall be observed and all fibre connectors shall have dust covers fitted if not used.