



UK Type Examination Certificate CML 21UKEX3423U Issue 2

United Kingdom Conformity Assessment

1 Component Intended for use in Potentially Explosive Atmospheres UKSI 2016:1107 (as amended) – Schedule 3A, Part 1

2 Component SR Ex e Enclosures

3 Manufacturer Pepperl+Fuchs SE

4 Address Lilienthalstrasse 200

68307 Mannheim

Germany

- 5 The component is specified in the description of this certificate and the documents to which it refers.
- Eurofins E&E CML Limited, Newport Business Park, New Port Road, Ellesmere Port, CH65 4LZ, United Kingdom, Approved Body Number 2503, 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 this component 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 Schedule 1 of the Regulations.

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

- 7 The 'U' suffix after the certificate number indicates that the component is subject to limitations (affecting correct installation or safe use). These are specified in Section 14.
- 8 This UK Type Examination certificate relates only to the design and construction of the specified component. Further requirements of the Regulations apply to the manufacturing process and supply of the product. These are not covered by this certificate.
- 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 IEC 60079-0:2018 EN IEC 60079-7:2015+A1:2018 IEC 60079-31:2022

10 The equipment shall be marked with the following:



Ex eb IIC Gb

Ex tb IIIC Db

Ts= -60°C to +120°C







11 Description

The SR Ex e enclosures are square or rectangular fabricated steel increased safety enclosures with covers secured by either M6 hexagon head screws or quarter turn locks. The cover fasteners along one edge may be replaced by hinges, and quarter turn locks are always used in conjunction with hinges. Optionally the cover may be in two pieces for a double door arrangement, or flat without an edge return for special mounting applications. Sealing to IP66 between the body and cover is achieved using a silicone gasket.

Cable entries to the enclosures may be made with suitably certified cable entry devices, direct to the enclosure in the case of the smaller SRS types, or via gland plates fitted to the sidewalls in the case of the larger SRM/L/X types.

All SR types may be fitted with an internal/external earth stud to accommodate earthing or equipotential bonding connections.

The SR Ex e enclosures may be joined using a connecting flange, or to an Ex d enclosure that provides a suitable sealing surface for the connecting flange.

The service temperature range of the SR Ex e enclosures is -60°C to +120°C Where the EMI-01-255SAB adhesive and EMI-401-255FR gasket, or RAKU SIL 37-1210-1 Lichtgrau with adhesive RTV108 are used.

Variation 1

This issue introduced the following changes:

- i. To assess the SR Ex e enclosure in a larger range of sizes
- ii. To assess the alternative flange sealing arrangements
- iii. To update to the latest version of the standard: IEC 60079-31:2022 Ed 3.0
- iv. Update to schedule drawings
- v. To assess double door and flat door cover options

Variation 2

This issue introduced the following changes:

- i. Introduction of alternate window sealing arrangements
- ii. Assessment of alternate flange sealing arrangement
- iii. Assessment of alternate gasket material
- iv. Update to label drawing

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	23 Apr 2021	R14112F/00	Issue of Prime Certificate
1	11 Aug 2023	R15823A/00	Issue of variation 1
2	28 Feb 2024	R17005A/00	Issue of variation 2

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





13 Conditions of Manufacture

None.

14 Schedule of Limitations

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

i. The SR range of enclosures have the following service temperature ranges. When assessed as part of equipment, these temperatures shall not be exceeded:

Where the BR099 gasket is used, $Ts = -40^{\circ}C$ to $+120^{\circ}C$

Where the BR962 gasket is used, Ts = -40°C to +120°C

Where the EMI-01-255SAB is used, Ts = -60°C to +120°C

Where the EMI-401-255FR is used, Ts = -60°C to +120°C

Where the Fermasil gasket is used, Ts = -60°C to +120°C

Where the RAKU SIL 37-1210-1 Lichtgrau with adhesive

RTV108 is used, Ts = -60°C to +120°C

- ii. The torque applied to the flange fixing fasteners shall be at least 2.0 Nm.
- iii. Cable entry point temperature shall not exceed 120 °C
- Where no intermediate structural framework is used and only one enclosure is mounted, the flange may also serve as the mounting for another enclosure. In this case the flange shall be appropriately dimensioned such that the weight of the hanging enclosure does not affect the sealing properties of the flange.

Certificate Annex

Certificate Number CML 21UKEX3423U

Component SR Ex e Enclosures

Manufacturer Pepperl+Fuchs SE



The following documents describe the component defined in this certificate:

Issue 0

Drawing No.	Sheets	Rev.	Approved date	Title
16-1513CM-04	1 of 11	0	16 Oct 2020	SRM/L/X enclosure general assembly and sizes
16-1513CM-04	2 of 11	0	16 Oct 2020	SRS enclosure general assembly and sizes
16-1513CM-04	3 of 11	0	16 Oct 2020	SRS / SRM/L/X cover sealing arrangement
16-1513CM-04	4 of 11	0	16 Oct 2020	SRS / SRM/L/X cable entry and gland plate
16-1513CM-04	5 of 11	0	16 Oct 2020	SRS / SRM/L/X internal/external earth arrangement
16-1513CM-04	6 of 11	0	16 Oct 2020	SRM/L/X hinge arrangement
16-1513CM-04	7 of 11	0	16 Oct 2020	SRM/L/X enclosure fitted with double bit lock
16-1513CM-04	8 of 11	0	16 Oct 2020	SRM/L/X enclosure flanged to Ex d/e enclosure
16-1513CM-04	9 of 11	0	16 Oct 2020	Type A connecting Flange
16-1513CM-04	10 of 11	0	16 Oct 2020	Type B connecting Flange
16-1513CM-04	11 of 11	0	16 Oct 2020	Label/paint exceeding ESD limitations
16-1513CM-10	1 of 1	0	16 Oct 2020	SR* enclosure certification label

Issue 1

Drawing No.	Sheets	Rev	Approved date	Title
16-1513CM-04	1 of 18	Α	08 Aug 2023	SRM/L/X enclosure general assembly & sizes
16-1513CM-04	2 of 18	Α	08 Aug 2023	SRS enclosure general assembly & sizes
16-1513CM-04	3 of 18	Α	08 Aug 2023	SR cover sealing arrangement
16-1513CM-04	4 of 18	Α	08 Aug 2023	SR cable entries & gland plate
16-1513CM-04	5 of 18	Α	08 Aug 2023	SR internal / external earth arrangement
16-1513CM-04	6 of 18	Α	08 Aug 2023	SRM/L/X hinge arrangement
16-1513CM-04	7 of 18	Α	08 Aug 2023	SRM/L/X enclosure fitted with double bit lock
16-1513CM-04	8 of 18	Α	08 Aug 2023	SR enclosure flanged to Ex d/e enclosure
16-1513CM-04	9 of 18	Α	08 Aug 2023	Type A connecting flange
16-1513CM-04	10 of 18	Α	08 Aug 2023	Type B connecting flange
16-1513CM-04	11 of 18	Α	08 Aug 2023	Label/paint exceeding ESD limitations
16-1513CM-04	12 of 18	А	08 Aug 2023	Flexible Flanges Exd-Exe and Exe for SR certificate
16-1513CM-04	13 of 18	А	08 Aug 2023	Flexible Flanges Exd-Exe and Exe for SR certificate

Certificate Annex

Certificate Number CML 21UKEX3423U
Component SR Ex e Enclosures
Manufacturer Pepperl+Fuchs SE



Drawing No.	Sheets	Rev	Approved date	Title
16-1513CM-04	14 of 18	Α	08 Aug 2023	Flexible Flanges Exd-Exe and Exe for SR certificate
16-1513CM-04	15 of 18	Α	08 Aug 2023	SRS/M/L/X screen & earth terminals & bars
16-1513CM-04	16 of 18	Α	08 Aug 2023	SR enclosure with alternative flat cover
16-1513CM-04	17 of 18	Α	08 Aug 2023	SRM/L/X enclosure with double cover/doors
16-1513CM-04	18 of 18	Α	08 Aug 2023	SR enclosure mounted accessory details

Issue 2

Drawing No.	Sheets	Rev	Approved date	Title
16-1513CM-04	1 of 19	В	28 Feb 2024	SRM/L/X enclosure general assembly & sizes
16-1513CM-04	2 of 19	В	28 Feb 2024	SRS enclosure general assembly & sizes
16-1513CM-04	3 of 19	В	28 Feb 2024	SR cover sealing arrangement
16-1513CM-04	4 of 19	В	28 Feb 2024	SR cable entries & gland plate
16-1513CM-04	5 of 19	В	28 Feb 2024	SR internal / external earth arrangement
16-1513CM-04	6 of 19	В	28 Feb 2024	SRM/L/X hinge arrangement
16-1513CM-04	7 of 19	В	28 Feb 2024	SRM/L/X enclosure fitted with double bit lock
16-1513CM-04	8 of 19	В	28 Feb 2024	SR enclosure flanged to Ex d/e enclosure
16-1513CM-04	9 of 19	В	28 Feb 2024	Type A connecting flange
16-1513CM-04	10 of 19	В	28 Feb 2024	Type B connecting flange
16-1513CM-04	11 of 19	В	28 Feb 2024	Label/paint exceeding ESD limitations
16-1513CM-04	12 of 19	В	28 Feb 2024	Flexible Flanges Exd-Exe and Exe for SR certificate
16-1513CM-04	13 of 19	В	28 Feb 2024	Flexible Flanges Exd-Exe and Exe for SR certificate
16-1513CM-04	14 of 19	В	28 Feb 2024	Flexible Flanges Exd-Exe and Exe for SR certificate
16-1513CM-04	15 of 19	В	28 Feb 2024	SRS/M/L/X screen & earth terminals & bars
16-1513CM-04	16 of 19	В	28 Feb 2024	SR enclosure with alternative flat cover
16-1513CM-04	17 of 19	В	28 Feb 2024	SRM/L/X enclosure with double cover/doors
16-1513CM-04	18 of 19	В	28 Feb 2024	SR enclosure mounted accessory details
161513CM-04B	19 of 19	В	28 Feb 2024	SRS/M/L/X Window Fitment Details
16-1513CM-10B 1 of 1		В	28 Feb 2024	SR* enclosure certification label