



UK Type Examination Certificate CML 21UKEX21274X Issue 0

United Kingdom Conformity Assessment

- 1 Product or Protective System Intended for use in Potentially Explosive Atmospheres UKSI 2016:1107 (as amended) Schedule 3A, Part 1
- 2 Equipment Ring Initiators Types RJ... and RC...
- 3 Manufacturer **Pepperl+Fuchs SE**
- 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 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 43 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), 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 Schedule 1 of the Regulations.

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

- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to specific conditions of use (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 equipment. 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 60079-11:2012

10 The equipment shall be marked with the following:



L. A. Brisk Certification Officer





11 Description

The ring initiators of types RJ... and RC ... are used to convert displacements into electrical signals.

The level of protection as well as the explosion group of the intrinsically safe ring initiators depend on the intrinsically safe supply circuit connected to the initiators.

The changes concern the application of the state of the standard EN IEC 60079-0:2018, the reduction of the scope of the EU-Type Examination Certificate to the types listed in table 2 as well as the legal form of the manufacturing company.

Electrical data

Evaluation and supply circuit..

only for connection to certified intrinsically safe circuits Ex ia IIC/IIB or Ex ib IIC/IIB for EPL Gb

Maximum values:

Type 1	Type 2	Туре 3
Ui =16V	Ui =16V	Ui =16V
li= 25 mA	li= 25 mA	li = 52 mA
Pi = 34mW	Pi =64mW	Pi = 169 mW

Table 1

For relationship between type of connected circuit, maximum permissible ambient temperature for the application as EPL Gb-equipment and temperature class as well as the effective internal reactances for the individual types of ring initiators, reference is made to the following table 2.

			Туре 1			Туре 2			Туре 3		
Types	Li [µH]	Ci [nF]	Maximum permissible ambient temperature in °C for the application in temperature class								
			T6	T5	T4-T1	T6	T5	T4-T1	T6	T5	T4-T1
RC10N0	100	150	75	90	100	70	85	100	55	70	90
RC10N3	120	90	75	90	100	70	85	100	55	70	90
RJ15-N	20	130	75	90	100	70	85	100	55	70	90
RJ15N	20	130	75	90	100	70	85	100	55	70	90
RC15N0	100	150	75	90	100	70	85	100	55	70	90
RC15N3	70	90	75	90	100	70	85	100	55	70	90

Table 2





12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	05 Nov 2021	R14112BU/00	Prime Certificate issued.

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

13 Conditions of Manufacture

None.

14 Specific Conditions of Use

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

- i. The relationship between type of the connected circuit, maximum permissible ambient temperature for adherence to the temperature class as well as the effective internal reactance for the individual types of ring initiators is specified in tables 1 and 2 of this certificate or in the operating instructions manual.
- ii. The ring initiators shall be protected against mechanical damage due to impact if they are applied within an ambient temperature range of -60C to -20 °C. An ambient temperature below -60 °C is not permitted.
- iii. The connection facilities of the ring initiators shall be installed as such that a minimum degree of protection of IP20 according to IEC 60529 is met.
- iv. For the application of the following ring initiators in hazardous areas of group II appropriate measures shall be taken to protect the free surface of the encapsulation against mechanical damage if the encapsulation surface is freely accessible after installation.
 - a. Types
 - b. RC10-...-N0...
 - c. RC10- ...-N3...
 - d. RJ15-N...
 - e. RJ15-... -N ...
 - f. RC15- ...-N0...
 - g. RC15- ...-N3...

Certificate Annex

Certificate Number	CML 21UKEX21274X
Equipment	Ring Initiators Types RJ and RC
Manufacturer	Pepperl+Fuchs SE



The following documents describe the equipment defined in this certificate:

Issue 0

For drawings describing the equipment, refer to attached certificate PTB 99ATEX2128X. In addition to the drawings listed on PTB 99ATEX2128X the following drawings include the additional marking required for this UK Type Examination certification:

Drawing No	Sheets	Rev	Approved date	Title
16-1555CM-10	1 to 2	0	05 Nov 2021	Additional Marking Requirements for UKCA