



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 ITS 16.0012X	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 4	Issue 3 (2019-10-23)
Date of Issue:	2022-11-09		Issue 2 (2019-02-22)
			Issue 1 (2018-04-27)
			Issue 0 (2016-12-20)
Applicant:	Eaton Electrical Systems trading as Raxton, Redapt or Capri Kingsway South Westgate Aldridge West Midlands WS9 8FS United Kingdom		
Equipment:	Types CB, CF, CK, CQM, CY, PD-U, PH-E, PA-D, PA-U, PB-U/PB-D, PD-E4 and PS Stopping plugs		
Optional accessory:			
Type of Protection:	Flameproof 'd', Increased Safety 'e', Protection by Enclosure 't'		
Marking:	IECEx ITS 16.0012X		
	Ex db I/IIc Mb/Gb		
	Ex eb I/IIc Mb/Gb		
	Ex tb IIIC Db IP66		
	(Group I marking does not apply to CY or PD-E4 Stopping Plugs) (Ex d marking does not apply to PS, CQM, PD-E4 or PH-E) Ta from -60°C to 200°C (Dependant on construction material and O-ring fitted). See equipment description for details.		

Approved for issue on behalf of the IECEx
Certification Body:

Mark Newman

Position:

Certificate Officer

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.
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Certificate issued by:

Intertek Testing & Certification Limited
ITS House, Cleeve Road
Leatherhead
Surrey, KT22 7SA
United Kingdom

intertek



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Manufacturer: **Eaton Electrical Systems trading as Raxton, Redapt or Capri**
Kingsway South
Westgate
Aldridge
West Midlands
WS9 8FS
United Kingdom

Manufacturing locations: **Eaton Electrical Systems trading as Raxton, Redapt or Capri**
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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 60079-1:2014 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

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/ITS/ExTR16.0014/00
GB/ITS/ExTR16.0014/03

GB/ITS/ExTR16.0014/01
GB/ITS/ExTR16.0014/04

GB/ITS/ExTR16.0014/02

Quality Assessment Report:

GB/SIR/QAR06.0014/10



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Type CF,CB, CK, CQ, CQM, CY, PD-U,PA-D /PA-U, PB-D/PB-U, PH-E, PD-E-4 and PS ranges of Stopping Plugs, depending on model type, can be mounted either internally or externally and comprise of either a metallic or Nylon round body with either a dome or mushroom shaped head. They may be provided with an optional hexagonal key-way recess for tightening. They may also be optionally machined with a groove to fit an 'o' ring seal.

The PH-E, PD-E-4 and PS Series are increased safety Ex eb and Ex tb and are not suitable for Ex db applications

Material Options:

- Brass BS 2872 (CZ121)
- Lead free brass
- Mild Steel to BS970 (EN1A)
- Stainless Steel to BS970 (316)
- Aluminium BS1474, 6082T6
- 30% Glass Filled Nylon
- 40% Glass Filled Nylon
- Surface Coating: Nickel, Zinc, Electroless Nickel

Entry threads options:

- Metric to BS3463
- ET Conduit to BS 31
- PG to DIN 40430
- BSP to BS 2779
- BSPT to BS 21
- NPT to ANSI/ASME B1.20.1
- Or Any thread forms conforming with Table 3 of EN 60079-1

Metric thread forms are between M12 and M120 (M16 to M75 for Nylon CQ-M type plugs; M16 to M110 for Nylon PD-E4 type plugs)
At their point of mounting, these devices are suitable for use at the following temperatures dependent on the type of 'o'-ring:

O-ring Service temperature:

- None fitted -60°C to 200°C
- EPDM -50°C to +100°C
- Nitrile -30°C to +80°C
- Neoprene -40°C to +80°C
- Viton -20°C to +180°C
- Silicone -60°C to +180°C
- Fluorosilicone -60°C to +130°C

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. If a stopping plug is machined with an undercut and is used for an Ex db application, then the wall of the enclosure into which it is fitted shall be such as to maintain five full threads engagement.
2. When used for increased safety or Ex eb or protection by enclosure Ex tb applications, a suitable method of sealing to the associated enclosure shall be fitted
3. The stopping plugs shall not be used with any form of adaptors or reducers
4. The stopping plugs, when manufactured from non-metallic material, are only suitable for installation in areas considered to be a low risk from mechanical impact
5. The stopping plugs, when manufactured from non-metallic material 40% Glass Filled Nylon, shall be adequately protected from direct exposure to sunlight
6. The stopping plugs, when construction from non-metallic material, shall only be cleaned with a damp cloth..
7. The clearance holes for metric male threaded products, suitable for clearance hole applications of increased safety enclosures are to have a diameter of 0.3 to 0.5mm larger than the major diameter of the male thread.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 1:

PA-U, PB-U as stated to be changed to PA-D, PB-D stopping plugs and addition of M12 & equivalent threadforms.

Issue 2:

Update of QAR to reflect Certificate holder's new entity and address. PA-U and PB-U re introduced as a universal option that is both Ex d and Ex e certified.

Issue 3:

Nylon material reference revised. Drawings CQ-M and PD-E revised to Issue 2.

Issue 4:

Update to IEC 60079-0:2017 Ed 7.0. Addition of Universal Stopping Plugs Type PS. Change of Brass material of construction to lead free type.

Annex:

[Annex IECEx ITS 16.0012X Issue 4.pdf](#)



Annex to IECEx Certificate of Conformity

Certificate No:	IECEx ITS 16.0012X	Issue No. 4
Annex No. 1		

Technical Documents			
Title:	Drawing No.:	Rev. Level:	Date:
R-V Label	10230	A-3	25/03/14
*Ex accessories Safety Instructions	CAP184267	2022-03b	2022-03
Stopping Plugs (CB & CF Tapered)	CB-CF	1	05/04/2016
Stopping Plugs (CQ, CK & CY)	CQ-CK-CY	1	18/04/2011
Exe Glass Filled Nylon Stopping Plugs	CQ-M	2	08/07/2018
Ex d / Ex e I & IIC Certified Tapered Stopping Plugs	PA-U, PB-U	1	08/03/2016
Ex d / Ex e I & IIC Certified Parallel Stopping Plugs	PA-U, PB-U	1	08/03/2016
EExe II Dome Head Stopping Plugs	PD-E	2	09/07/2019
Ex d I & IIC & Ex e IIC Domehead Stopping Plugs	PD-U	1	28/03/2016
Ex e II Hex Head Stopping Plugs	PH-E	1	04/04/2016
*Specification drawing – All plugs	SPEC-PLUGS	Rev-I-0	25/04/2022
*Specification drawing – PS plugs	SPEC-PS	Rev-I-0	25/04/2022
*PS plug - Metric version	PS-CERT-METRIC	1	05/05/2021
*PS plug - Metric version with collar	PS-CERT-METRIC-COL	1	05/05/2021
*PS plug – NPT version	PS-CERT-NPT	1	05/05/2021
* PS plug – NPT version with collar	PS-CERT-NPT-COL	1	05/05/2021
*Marking Drawing	MARK-PLUGS	Rev-I-0	17/06/2022

Note: An * is included before the title of documents that are new or revised.