



1 **EC TYPE-EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: Sira 00ATEX1148X

4 Equipment: Type T3CDS, T3CDS/PB, D3CDS, T3X, B3X and C3K Cable Glands

5 Applicant: CMP Products Limited

6 Address: Glasshouse Street
St Peters
Newcastle-upon-Tyne
NE6 1BE

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Sira Certification Service, notified body number 0518 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, 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 confidential report number R53M6912A.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 50014:1997
EN 50018:1994
EN 50019:1994
EN 50281-1-1:1998

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

11 This EC type-examination certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:



II 2 GD
EEEx de IIC (Type T3CDS, T3CDS/PB, D3CDS, T3X AND B3X Cable Glands)
EEEx e II (Type C3K Cable Glands)

Re-issued 19 August 2005 to correct the description

D R Stubbings BA MIEE
Certification Manager

Project Number 51V7952
Date 9 January 2001
Latest issue 19 August 2005
C. Index 07

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Sira Certification Service

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SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE

Sira 00ATEX1148X

13 DESCRIPTION OF EQUIPMENT

T3CDS 'Ex de' Type – a range of cable glands each comprising a hollow threaded entry component containing a compensating displacement seal (CDS) system comprising of a compensator, ferrule, displacement seal, and skid washer, which are activated by the tightening of a threaded CDS nut. The cable armour is terminated between a reversible clamping cone and clamping ring when the threaded main gland body is tightened onto the entry component.

An outer seal and outer seal nut are fitted to the other end of the body. The glands are intended for use with appropriately sized SWA, strip armoured or braided cables. The design is such that a constant pressure is maintained on the displacement seal by the activation of the CDS system.

T3CDS/PB 'Ex de' Type - Identical to the T3CDS Type but incorporate a continuity washer and are suitable for use with lead sheathed cables.

D3CDS 'Ex de' Type – Identical to the T3CDS Type but the outer seal and outer seal nut are omitted.

C3K 'Ex e' Type – Identical to the T3CDS Type but with the compensating displacement seal (CDS) system comprising of, compensator, ferrule, displacement seal, and skid washer, replaced by a spacer component, the entry component and body profiles being modified accordingly.

Barrier Designs

T3X 'Ex de' Type – a range of barrier type cable glands each comprising a threaded entry component containing a compound tube, spacer and reversible armour cone. The assembly is retained by a threaded main gland body. An outer seal and outer seal nut are fitted to the other end of the body. The glands are intended for use with appropriately sized SWA, strip armoured or braided cables. The compound tube forms a flamepath within the entry component and cables are sealed within the compound tube by means of Epoxy putty either Canning Type ST574 or CEDSA Ltd Epoxy Putty 2122.

B3X 'Ex de' Type – Identical to the T3X Type but the outer seal and outer seal nut are omitted.

Options

Each type of gland is available with the following options:

Entry Thread options:	Metric to BS 3643:1981
	ET to BS 31: 1940
	PG to DIN 40430:1971
	BSPP to BS 2779:1973
	BSPT to BS 21:1985
	ISO to ISO 7/1:1982
	NPT to USAS B2.1-1968
	NPT to ANSI/ASME B1.20.1-1983
	NPSM to ANSI/ASME B1.20.1-1983

Material options for metallic parts: Brass (standard), mild steel, stainless steel or aluminium with a magnesium content less than 6% by weight

The option to have an alternative entry component profile that incorporates an earth lug

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SCHEDULE

EC TYPE-EXAMINATION CERTIFICATE

Sira 00ATEX1148X

14 **DESCRIPTIVE DOCUMENTS**

14.1	Drawing No.	Sheet	Rev.	Date	Title
	GA043	1 of 1	01	05 Aug 00	Triton CDS General Arrangement
	GA045	1 of 1	01	25 Aug 00	Triton Protex General Arrangement
	GA046	1 of 1	01	25 Aug 00	C3K General Arrangement
	GA048	1 of 1	01	25 Aug 00	B3X General Arrangement
	GA049	1 of 1	01	25 Aug 00	D3CDS General Arrangement

14.2 Report No. R53M6912A

15 **SPECIAL CONDITIONS FOR SAFE USE** (denoted by X after the certificate number)

15.1 The Types T3CDS, T3CDS/PB and D3CDS glands shall not be used with Group IIC enclosures that have a volume that exceeds 2000 cm³.

15.2 The glands shall not be used on enclosures where the temperature, at the point of mounting, exceeds the following values.

Gland Type	T3CDS	T3CDS/PB	D3CDS	C3K	T3X	B3X
°C	130	130	130	130	100	100

16 **ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II** (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in Report No. R53M6912A.

17 **CONDITIONS OF CERTIFICATION**

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of SCS Certificates.

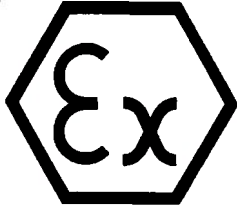
Date 9 January 2001
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EC TYPE-EXAMINATION CERTIFICATE VARIATION

CERTIFICATE NUMBER Sira 00ATEX1148X **Dated** 19 January 2001

VARIATION NUMBER 1 (ONE) **Dated** 26 April 2001

VARIATION TO EQUIPMENT

To permit:

- 1 The range of equipment to be extended to include type T3CDS and type D3CDS Cable Glands that have M100, M115 and M130 entry threads.
- 2 The Types T3CDS, T3CDS/PB, D3CDS, T3X, B3X and C3K Cable Glands with an entry thread of M90 or smaller to be used with tape armour cable.

DESCRIPTIVE DOCUMENTS

Number	Sheet	Rev	Date	Description
GA043	1 of 1	02	06 Feb 01	Triton CDS General Arrangement
GA045	1 of 1	02	06 Feb 01	Triton Protex General Arrangement
GA046	1 of 1	02	06 Feb 01	C3K General Arrangement
GA048	1 of 1	02	06 Feb 01	B3X General Arrangement
GA049	1 of 1	02	05 Feb 01	D3CDS General Arrangement

ADDITIONAL CONDITIONS OF CERTIFICATION

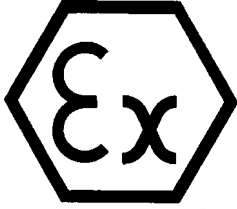
None

File No 53M7648

Report No. R53M7648A

M D Shearman
Certification Manager

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EC TYPE-EXAMINATION CERTIFICATE VARIATION

CERTIFICATE NUMBER Sira 00ATEX1148X **Dated** 19 January 2001

VARIATION NUMBER 2 (TWO) **Dated** 13 February 2002

VARIATION TO EQUIPMENT

To permit:

- 1 The T3CDS, T3CDS/PB, D3CDS, T3X and B3X cable glands to be alternatively marked:
EEx d IIC / EEx e II.
- 2 The Types T3CDS, T3CDS/PB, D3CDS and C3K cable glands to be used in an ambient temperature of -60°C and to clarify the service temperature range applicable to each gland type.

DESCRIPTIVE DOCUMENTS

Number	Sheet	Rev	Date	Description
GA043	1 of 1	03	10 Dec 01	Triton CDS General Arrangement
GA045	1 of 1	03	10 Dec 01	Triton Protex General Arrangement
GA048	1 of 1	03	10 Dec 01	B3X General Arrangement
GA049	1 of 1	03	10 Dec 01	D3CDS General Arrangement

AMENDED CONDITION OF CERTIFICATION

15.2 The glands shall not be used on enclosures where the temperature, at the point of mounting, exceeds the following values.

Gland Type	T3CDS	T3CDS/PB	D3CDS	C3K	T3X	B3X
Min. °C	-60	-60	-60	-60	-30	-30
Max. °C	+130	+130	+130	+130	+100	+100

M D Shearman
Certification Manager

File No 51V8582

Report No. NA

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EC TYPE-EXAMINATION CERTIFICATE VARIATION

CERTIFICATE NUMBER Sira 00ATEX1148X Dated 09 January 2001
Re-issued 05 June 2001

VARIATION NUMBER 3 (THREE) Dated 26 August 2003

VARIATION TO EQUIPMENT

To permit:

- 1 The introduction of an alternative outer elastomeric sealing ring for use with the M25s sizes. The alternative seal is for use with cable having a smaller than normal outer sheath diameter.

DESCRIPTIVE DOCUMENTS

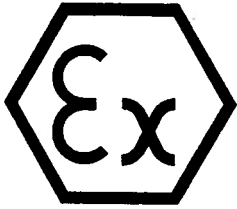
Number	Sheet	Rev	Date	Description
GA132	1 of 1	01	09 Jun 03	Alternative outer seal arrangement for size 25 glands

M D Shearman
Certification Manager

File No 51A10455

Report No. R51A10455A

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EC TYPE-EXAMINATION CERTIFICATE VARIATION

CERTIFICATE NUMBER Sira 00ATEX1148X Dated 09 January 2001
Re-issued 05 June 2001

VARIATION NUMBER 4 (FOUR) Dated 17 February 2004

VARIATION TO EQUIPMENT

To permit:

- 1 An alternative outer seal nut arrangement.

DESCRIPTIVE DOCUMENTS

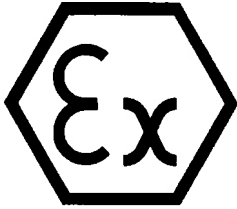
Number	Sheet	Rev	Date	Description
GA138	1 of 1	01	13 Jan 03	Alternative outer seal nut without ferrule

File No. 51V11469

Report No. R51V11469A

D R Stubbings
Certification Manager

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EC TYPE-EXAMINATION CERTIFICATE VARIATION

CERTIFICATE NUMBER Sira 00ATEX1148X **Dated** 09 January 2001
Re-issued 05 June 2001

VARIATION NUMBER 5 (FIVE) **Dated** 25 February 2004

VARIATION TO EQUIPMENT

To permit:

- 1 The T3CDS and T3CDS/PB cable glands to be modified to include an alternatively designed armour cone that is either:
 - Reversible, double sided and with an identically dimensioned plain taper each side for SWA type cables, the gland type designation becoming T3CDSW and T3CDSW/PB.
 - Reversible, double sided with an identically dimensioned grooved taper each side for strip armoured or braided type cables; the gland type designation becoming T3CDSX and T3CDSX/PB.

DESCRIPTIVE DOCUMENTS

Number	Sheet	Rev	Date	Description
SCH0210	1 of 1	2	21 Jan 03	Triton armour cone variations
GA043	1 of 1	4	29 Oct 03	Triton CDS General Arrangement
MP888	1 of 1	4	08 Dec 98	Machining tolerance detail

AMENDED CONDITIONS OF CERTIFICATION

- 15.1 The Types T3CDS, T3CDSX, T3CDSW, T3CDS/PB, T3CDSX/PB, T3CDSW/PB and D3CDS glands shall not be used with Group IIC enclosures that have a volume that exceeds 2000 cm³.
- 15.2 The glands shall not be used on enclosures where the temperature, at the point of mounting, exceeds the following values.

Gland Type	Min. °C	Max. °C
T3CDS	- 60	+ 130
T3CDSX	- 60	+ 130
T3CDSW	- 60	+ 130
T3CDS/PB	- 60	+ 130
T3CDSX/PB	- 60	+ 130

Gland Type	Min. °C	Max. °C
T3CDSW/PB	- 60	+ 130
D3CDS	- 60	+ 130
C3K	- 60	+ 130
T3K	- 30	+ 100
B3K	- 30	+ 100

File No. 51V11041

Report No. R51V11041A

C Ellaby
Certification Officer

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EC TYPE-EXAMINATION CERTIFICATE VARIATION

CERTIFICATE NUMBER Sira 00ATEX1148X Dated 09 January 2001
Re-issued 05 June 2001

VARIATION NUMBER 6 (SIX) Dated 23 December 2004

VARIATION TO EQUIPMENT

To permit:

- 1 The introduction of an additional, composite, gland size 115/130 that has an M115 x 2 – 6g entry thread and an ingress protection classification rating IP66; this cable gland accommodates S.W.A. cables within the following dimensional parameters:

Inner sheath diameter.	Armour diameter	Outer sheath diameter.
90.0 mm to 97.9 mm	3.15 mm to 4.0 mm	114 mm to 123 mm

DESCRIPTIVE DOCUMENTS

Number	Sheet	Rev	Date	Description
GA158	1 of 1	2	20 Dec 04	115/130 Triton CDS General Arrangement
SCH0210	1 of 1	3	20 Dec 04	Triton-Armour cone variations

ADDITIONAL CONDITIONS OF CERTIFICATION

None

File No. 51V12503

Report No. R51V12503A


C Ellaby
Certification Officer

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