

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification Scheme for Explosive Atmospheres**

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

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IECEx SIR 13.0028X

issue No.:1

Certificate history: Issue No. 1 (2013-6-6) Issue No. 0 (2013-5-3)

Status:

Current

Date of Issue:

2013-06-06

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Applicant:

CMP Products Ltd

Glasshouse Street

St Peters

Newcastle upon Tyne

NE6 1BS

United Kingdom

Electrical

Cable Gland Types Triton T3** and TE**

Apparatus:

Optional accessory:

Type of Protection: Flameproof, Increased Safety, Restricted Breathing and Dust Protection by Enclosure

Marking:

Ex e I Mb Fx d I Mb

Ex e IIC Gb

Ex ta IIIC Da

Ex d IIC Gb Ex nR IIC Gc

Ta =

-60°C to +130°C Note 1

-20°C to +200°C Note2

Note 1 When fitted with the standard seal Note 2 When fitted with the high temperature seal

Approved for issue on behalf of the IECEx

Certification Body:

P J Walsh

Position:

Technical Advisor

Signature:

(for printed version)

Date:

2013-06-06

PSWahh.

1. This certificate and schedule may only be reproduced in full.

This certificate is not transferable and remains the property of the issuing body.
 The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

SIRA Certification Service Rake Lane **Eccleston** Chester CH4 9JN **United Kingdom**





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Manufacturer:

CMP Products Ltd Glasshouse Street St Peters Newcastle upon Tyne NE6 1BS United Kingdom

Additional Manufacturing location

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 electrical apparatus 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: 2011

Explosive atmospheres - Part 0: General requirements

Edition: 6.0

IEC 60079-1 : 2007-04

Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition: 6

IEC 60079-15 : 2010

Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition: 4

IEC 60079-31 : 2008

Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure 't'

Edition: 1

IEC 60079-7: 2006-07

Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

Edition: 4

This Certificate **does not** indicate compliance with electrical 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 Report:

GB/SIR/ExTR13.0066/00

Quality Assessment Report:

GB/SIR/QAR07.0009/04



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

T3CDS – a range of displacement type cable glands, each comprises of a hollow threaded entry component containing an elastomeric compensating displacement seal (CDS) system with associated ferrule, a skid washer, flameproof sealing ring with compensator, a clamping sleeve and armour cone are provided for termination of various armour types. The flameproof sealing assembly is actuated by an inner seal nut. The entry component is fitted with an 'O' ring seal to provide increased ingress and deluge protection. Clamping of the armoured or braided cable is effected by a combination of the entry component, main body and the different optional armour cone and armour sleeve combinations being fastened together. An outer seal nut, containing an elastomeric sealing ring and a Nylon 6 ferrule, threads onto the main body and effects environmental sealing onto the cable outer sheath. The glands are intended for use with appropriately sized SWA, P.W.A., strip armoured, tape armoured or braided cables. The design is such that a constant pressure is maintained on the displacement seal by the use of the compensation ferrule. For Types, Design Options and additional information refer to the Annexe

CONDITIONS OF CERTIFICATION: YES as shown below:

- 1. The T3** and TE** Type cable glands shall not be used to terminate on braided cables in Equipment Protection Level Mb applications.
- The glands when used for terminating braided cables are only suitable for fixed installations. Cables must be effectively clamped to prevent pulling or twisting.
- 3. When the cable glands are supplied with an entry thread that is one size up from the nominal gland size, designated with the letter 'B' after the gland size, e.g. 32B****, they shall not be used with any adaptor device.
- When assembled for fitting to flexible conduit, the conduit shall be effectively clamped to prevent twisting and pulling.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

| Issue 1 – this Issue introduced the following change: 1. Issued to correct a typographical error | | | | | |
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| _1. Is | ssued to correct a typographical error | | | | |
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Annexe: IECEx SIR 13.0028X Annexe Issue 1.pdf

Annexe to:

IECEx SIR 13.0028X Issue 1

Applicant:

CMP Products Ltd

Apparatus:

Cable Gland Types Triton T3CDS and

TE1FU



T3CDS/PB Identical to the T3CDS Type but incorporates a continuity washer and are suitable for use with lead sheathed cables.

TE1F* Type - Identical inner seal/armour clamp front/outer seal to the T3CDS Type but overall length is shortened. The glands are intended for use with appropriately sized SWA, P.W.A., strip armoured, tape armoured or braided cables.

Design Options

- The front entry component may be manufactured with a profiled groove to captivate an 'O' ring seal which locates on the mating face with the associated enclosure. This option having the gland type designation prefixed with the letter R, e.g. 25RT3CDS.
- Materials of manufacture:

Brass to EN12168:1998 Grade CuZn39Pb (CW614N)

Mild steel to BS EN 10088-3:2005 Grade 220M07Pb

Stainless steel to BS EN 10088-3:2005 Grade 316S11, 316S13, 316S31 or 316S33

Aluminium alloy not inferior to grade 6082 to EN755,1-3:1996 or LM25 to BS EN 1676:2010 (Not Group I)

Alternative entry component thread forms:

Metric ISO 965-1, ISO965-3 medium fit (6g) for external threads

ET(Conduit) BS 31:1940 (1979), Table A

PG DIN 40430:1971

BSPP BS 2779:1973 class A full form for external threads

BSPT BS 21:1985 standard threads only as clause 5.4, gauging to clause 5.2 system A

ISO ISO 7/1:1982, gauging to ISO 7/2 clause 6.3 for external threads NPT ANSI/ASME B1.20.1-1983 gauging to clause 8.1 for external threads NPSM ANSI/ASME B1.20.1-1983 gauging to clause 9 for external threads

- The option to manufacture glands with entry threads that are one size up from the nominal quoted gland size.
- The option to have an alternative entry component profile that incorporates an earth lug.
- Single or double sided and with an identically dimensioned plain taper each side for SWA type cables, the gland type designation becoming T3CDSW, T3CDSW/PB, TE1FW and TE1FW/PB.
- Single or double sided with an identically dimensioned grooved taper each side for SWA, P.W.A., strip
 armoured, tape armoured or braided type cables; the gland type designation becoming T3CDSX,
 T3CDSX/PB, TE1FX and TE1FX/PB.
- The use of alternative armour clamping components specified by the cable glands type designation. The various arrangements vary the cable gland suitability for differing armour or braided type cables.
- The use of seals suitable for flat form cables
- Alternative outer seal arrangement to allow the glands to be fitted to flexible conduit.
- The option to fit a blanking disc between the outer seal and the main body to maintain a minimum IP66
 rating. The disc is to be marked 'Ex e only' to indicate that the gland is not suitable for Ex d applications
 when the disc is fitted

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Sira Certification Service

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06 June 2013

Date:

Annexe to:

IECEx SIR 13.0028X Issue 1

Applicant:

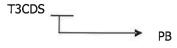
CMP Products Ltd

Apparatus:

Cable Gland Types Triton T3CDS and

TE1FU

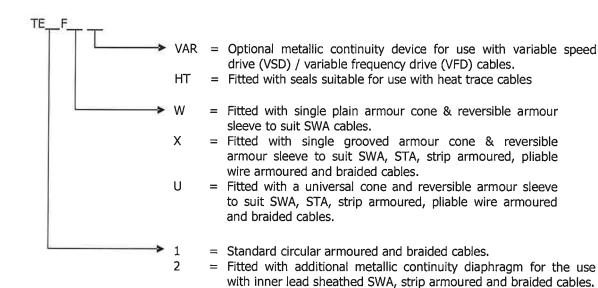




PB = Alternative cone assembly incorporating an additional metallic continuity diaphragm for the use with inner lead sheathed SWA and braided cables.

VAR = Optional metallic continuity device for use with variable speed drive (VSD) / variable frequency drive (VFD) cables.

FF = Fitted with seals suitable for use with flat form cables



Date: 06 June 2013

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Annexe to:

IECEx SIR 13.0028X Issue 1

Applicant:

CMP Products Ltd

Apparatus:

Cable Gland Types Triton T3CDS and

TE1FU



The gland and seal sizes are determined by the entry thread and cable range-take sizes:-

| Gland size | Entry thread | Entry thread 'B' version | Inner seal sheath range ø (mm) SWA, STA, strip armour, pliable wire armour & wire braid (mm) | | SWA (mm) | | Outer seal sheath range ø (mm) | | | |
|------------|-----------------|-----------------------------|--|-------|----------|------|--------------------------------------|------|-------|-------|
| | | | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. |
| 16 | M16x1.5 | | 3.1 | 8.7 | 0 | 0.8 | 0.8 | 1.25 | 6.1 | 13.2 |
| 20S16 | M20x1.5 | M25×1.5 | 3.1 | 8.7 | 0 | 0.8 | 0.8 | 1.25 | 6.1 | 13.2 |
| 20S16/20S | M20x1.5 | M25×1.5 | 3.1 | 8.7 | 0 | 0.8 | 0.8 | 1.25 | 9.5 | 15.9 |
| 20S | M20x1.5 | M25x1.5 | 6.1 | 11.7 | 0 | 0.8 | 0.8 | 1.25 | 9.5 | 15.9 |
| 20 | M20x1.5 | M25x1.5 | 6.5 | 14.0 | 0 | 0.8 | 0.8 | 1.25 | 12.5 | 20.9 |
| 25S | M25x1.5 | M32x1.5 | 11.1 | 20.0 | 0 | 1.1 | 1.25 | 1.6 | 14.0 | 22.0 |
| 25 | M25x1.5 | M32×1.5 | 11.1 | 20.0 | 0 | 1.1 | 1.25 | 1.6 | 18.2 | 26.2 |
| 32 | M32x1.5 | M40x1.5 | 17.0 | 26.3 | 0 | 1.2 | 1.6 | 2.0 | 23.7 | 33.9 |
| 40 | M40x1.5 | M50×1.5 | 22.0 | 32.2 | 0 | 1.2 | 1.6 | 2.0 | 27.9 | 40.4 |
| 50S | M50x1.5 | M63x1.5 | 29.5 | 38.2 | 0 | 1.5 | 2.0 | 2.5 | 35.2 | 46.7 |
| 50 | M50x1.5 | M63x1.5 | 35.6 | 44.1 | 0 | 1.5 | 2.0 | 2.5 | 40.4 | 53.1 |
| 63S | M63x1.5 | M75x1.5 | 40.1 | 50.0 | 0 | 1.5 | 2.0 | 2.5 | 45.6 | 59.4 |
| 63 | M63x1.5 | M75x1.5 | 47.2 | 56.0 | 0 | 1.5 | 2.0 | 2.5 | 54.6 | 65.9 |
| 75S | M75x1.5 | M90x2.0 | 52.8 | 62.0 | 0 | 1.5 | 2.5 | 3.0 | 59.0 | 72.1 |
| 75 | M75x1.5 | M90x2.0 | 59.1 | 68.0 | 0 | 1.6 | 2.5 | 3.0 | 66.7 | 78.5 |
| 90 | M90x2.0 | M100x2.0 | 66.6 | 80.0 | 0 | 1.6 | 3.15 | 4.0 | 76.2 | 90.4 |
| 100 | M100x2.0 | M115x2.0 | 76.0 | 91.0 | 0 | 1.6 | 3.15 | 4.0 | 86.1 | 101.5 |
| 115 | M115x2.0 | M130x2.0 | 86.0 | 98.0 | 0 | 1.6 | 3.15 | 4.0 | 101.5 | 110.3 |
| 130 | M130x2.0 | 222 | 97.0 | 115.0 | 0 | 1.6 | 3.15 | 4.0 | 110.2 | 123.3 |

T3* or TE*-FF in these sizes only.

| Gland size | Entry thread | Entry thread 'B' version | Cable inner seal sheath range (mm) | | Cable outer seal sheath range (mm) | | |
|------------|--------------|--------------------------|------------------------------------|------------|------------------------------------|------------|--|
| | | | Min. | Max. | Min. | Max. | |
| 20s | M20 x 1.5 | M25 x 1.5 | 4.0 x 6.2 | 6.8 x 11.7 | 4.4 x 7.8 | 6.8 x 11.7 | |
| 20 | M20 x 1.5 | M25 x 1.5 | 5.7 x 8.0 | 8.7 x 13.5 | 4.4 x 10.9 | 8.7 × 16.0 | |

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