



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

Certificate No.: IECEx NEM 12.0015U Issue No: 2 Certificate history:
Status: **Current** Page 1 of 5 [Issue No. 2 \(2015-05-07\)](#)
Date of Issue: **2015-05-07** [Issue No. 1 \(2015-01-27\)](#)
[Issue No. 0 \(2013-03-15\)](#)
Applicant: **Roxtec International AB**
Rombvägen 2
Box 540
SE-371 23 KARLSKRONA
Sweden
Equipment: **Cable Transit Device**
Optional accessory:
Type of Protection: **Ex e IIC Gb Ex tb IIIC Db**
Marking:
Ex e IIC Gb
Ex tb IIIC Db

*Approved for issue on behalf of the IECEx
Certification Body:*

Asle Kaastad

Position:

Certification Manager, Ex-products

*Signature:
(for printed version)*

Date:

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.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](#).

Certificate issued by:

NEMKO
Gautadelleen 30
Oslo N-0314
Norway





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Manufacturer: **Roxtec International AB**
Rombvägen 2
Box 540
SE-371 23 KARLSKRONA
Sweden

Additional Manufacturing
location(s):

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 60079-31 : 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:

[NO/NEM/ExTR12.0016/00](#)

[NO/NEM/ExTR12.0016/01](#)

[NO/NEM/ExTR12.0016/02](#)

Quality Assessment Report:

[SE/SP/QAR09.0001/04](#)

[SE/SP/QAR09.0001/03](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Cable Transit Devices 'CTDs'(see Type Designation below), for use with circular cables both armoured and non-armoured or corrugated cables (see Corrugated cables below) of non-interrupted and non-metallic outer jacket type or conduits. The CTDs consists of multi diameter sealing modules (type RM Ex and CM Ex as standard or with EMC properties) that depending on each individual size, accepts a limited number of cable diameters in applicable types of frames or sleeves and shall be marked with the Ex symbol. The modules are made of mirrored rubber profiles and each part has a number of thin rubber layers that are ending up with a solid rubber core. The layers are made with two different colours to make the adaption to a cable exactly same on both halves and are allowed to differ one layer at most. To achieve appropriate sealing and mechanical properties to prevent the cables from slippage there shall always be a visible separation between the sealing module halves.

The modules made of EPDM are available with layers and core, but some greater sizes are also available without the core. In addition there are also single diameter- and solid modules.

The correct sizes and procedure of assembling the cables to the modules are described in detail in the enclosed installation instructions. Ex Compression devices are used to achieve appropriate compression of the modules and solids some CTDs uses compression units that expands inside the CTDs and some others have incorporated solid rubber profiles that achieve the expansion. There are also two types of CTDs that incorporates both the compression device and multi diameter modules as a single unit, but still with two halves. The method to assemble the compression devices etc. and to achieve sealing of the CTDs is described in detail in the enclosed installation instructions.

The Ex components does not have a defined and incorporated sealing against the final enclosure wall and there are needs for supplementary type examinations and certification. Applicable sub-clauses for the Ex components are listed in clause [18] below, which also give guidance for additional examination regarding type of protection when fully assembled.

Most CTDs that has a rectangular opening with or without rounded corners with modules of type RM Ex are all available for different combinations with several openings in width and/or in high. CTDs for use with rectangular openings with CM Ex modules (one type with dual opening) and round sleeves are only available with single openings.

The CTDs installation instructions listed in this report will define each variant in detail and all applicable parts that are approved for use within that variant.

CONDITIONS OF CERTIFICATION: NO



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EQUIPMENT (continued):

Type Designation

S...-, S...S0...-, S...WM-, SRC...-, SK...-, SBTB...-, SF...W-, G...W-, B...C-, R...W-, RO...W- and RS...W Ex

Temperature range

-60°C to +80°C

Corrugated cables for use with: S...-, S...S0...-, G...W- and SF...W Ex

ACIC (Armoured Control and Instrumentation Cable) according to C22.1-06 CEC,

ACWU (Armoured Cable for Wet locations) according to UL4,

TECK90 according to C22.2 No. 131-07,

MC (Metal Clad) according to UL1569.

Schedule of Limitations:

1. List of sub-clauses that has been applied for the Ex components:

2. IEC 60079-0 (Ed.6); {1 – 4, 5.2 (with respect of temperature limits), 6.1, 6.2, 7.1.1, 7.1.2.3, 7.2.1, 7.2.2, 7.5, 8.1, 8.3, 8.4, 13.1, 13.2, 13.4, 13.5, 16.3, 24, 25, 26.1, 26.2, (with respect of internal ingress protection), 26.4.1.1, 26.4.1.2, 26.4.1.2.2, 26.4.2, 26.4.4, 26.4.5.1 (with respect of internal ingress protection), 26.4.5.2, 26.7.1, 26.7.2, 26., 26.9, 29.1, 29.2, 29.4, 29.5, 29.9, 30.1, A.1, A.2.1, A.2.3, A.2.4.1, A.2.5, A.2.6, A.2.7, A.3.1.1, A.3.1.4, A.3.1.5, A.3.2.2, A.3.3, A.3.4 (with respect of internal ingress protection), A.41, A.4., and B.1}

3. IEC 60079-31 (ed.1); {1 – 4, 4.1, 5.2.1, 6.1.1 (with respect of internal ingress protection) and 7}

4. For maintaining the explosion protection, the installation instructions that accompany the products shall be considered

5. Only cable for fixed installation is permitted for the cable transit device

6. For optimum reliability wait 24 hours or longer after installation before exposing the cables/pipes to strain or pressure

7. For cable glands certified as an Ex component and marked with the symbol U (cable glands of types S...-, S...S0...-, S...WM-, SRC...-, SK...-, SBTB...-, SF...W-, G...W-, B...C-, R...W-,

RO...W- and RS...W Ex), compliance with applicable requirements not covered by sub-clauses stated below, shall be verified. This includes mechanical test (if applicable) and test of degree of protection IP, which shall be carried out on the frame of the cable transit device (excluding modules and compression unit) after it has been mounted on the enclosure of the apparatus subjected to test and certification



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

Additional variants of frames included: RO...W, SK..., SBTB... and S...WM. Additional EMC Wedge, welding instructions changed and marking of EMC modules added.