



Certificate of Compliance

Certificate: 2254189 **Master Contract:** 215242 (215242)

Project: 70181819 **Date Issued:** 2018-05-08

Issued to: **Roxtec International AB**
Rombvägen 2
Box 540
Karlskrona, 371 65
SWEDEN
Attention: Jorgen Akesson

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.



Issued by: *Ravindra (Ravi) Kanthe*
Ravindra (Ravi) Kanthe

PRODUCTS

CLASS - C441805 - CABLE-Hardware - For Hazardous Locations

CLASS - C441885 - CABLE-Hardware-For Hazardous Locations-Certified to U.S. Standards

Canada: Ex e IIC Gb;

USA: Class I, Zone 1 AEx eb IIC Gb

PART A, CABLE TRANSIT DEVICE, ROUND EXPANSION FRAME, R...B Ex, (Sleeve bolted), RO...B Ex (Sleeve bolted Openable frame), R...W Ex, (Sleeve welded), RO...W Ex (Sleeve welded Openable frame).
Rated -60°C to +80°C.

Modules RM Ex, RM PE Ex, RM PE B Ex, RM ES Ex and RM ES B Ex.

Type designation: IP66

PART B, CABLE TRANSIT DEVICE, ROUND SEAL, RS...B Ex (Self-contained Sleeve Bolted) and RS...W Ex (Self-contained Sleeve Welded). These come in PE and ES versions and have (1) no bonding and grounding. No separate grounding fastener/equipment, (2) Potential Equalization with Foil and (3) Potential Equalization with Foil and Electro Magnetic Shielding with Conductive Rubber and come in various diametric sizes.



Certificate: 2254189
Project: 70181819

Master Contract: 215242
Date Issued: 2018-05-08

Rated -60°C to +80°C.
Type designation: IP66

PART C, CABLE TRANSIT DEVICE, FRAME CF 8 Ex (Aluminum) and CF 32 Ex (Aluminum).

Rated -40°C to +80°C.
Modules CM Ex, CM PE Ex, CM ES Ex, CM BG Ex and CM BG B Ex.
Type designation: IP66

PART C, CABLE TRANSIT DEVICE, FRAME CF 16 Ex (Mild Steel or Stainless Steel).

Rated -60°C to +80°C.
Modules CM Ex, CM PE Ex and CM ES Ex.
Type designation: IP66

PART D, CABLE TRANSIT DEVICE, FRAME G...Ex, G BG Ex, G...W Ex, S...Ex, S...S0...Ex, SRC Ex, S...WM Ex, SBTB Ex, SK Ex, SF...Ex, SF BG Ex, SFX...B Ex, SFX...B BG Ex and SF...W Ex (Steel, Stainless Steel).

Rated -60°C to +80°C.
Modules RM Ex, RM PE Ex, RM PE B Ex, RM ES Ex, RM ES B Ex, RM BG Ex and RM BG B Ex
Type designation IP 66 is ONLY for FRAMES: G...Ex, G...W Ex, S...Ex, S...S0...Ex, SRC Ex, S...WM Ex, SBTB Ex, SK Ex, SF...Ex, SFX...B Ex and SF...W Ex (Steel, Stainless Steel)

PART E, MODULES (Sealing Block)

Regular Ex Modules: (60mm deep):

RM Ex - Regular Module, no bonding and grounding or EMC Gnd.
RM PE Ex - Potential Equalization with Foil [Middle of block], 3 sectional layers
RM PE B Ex - Potential Equalization with Foil [Back of block], 2 sectional layers
RM ES Ex - Potential Equalization with Foil and Electro Magnetic Shielding with Conductive Rubber [Middle of block], 2 sectional layers
RM ES B Ex - Potential Equalization with Foil and Electro Magnetic Shielding with Conductive Rubber [End of block], 2 sectional layers
RM BG Ex - (formerly HC3) Bonding and Grounding with Braid [Middle of block], 3 sectional layers
RM BG B Ex - (Formerly HC2) Bonding and Grounding Braid [Back of block], 2 sectional layers

Compact Ex Modules: (30 mm or 40 mm deep)

CM Ex - Compact Module, no bonding and grounding or EMC Gnd., 30mm deep
CM PE Ex - Potential Equalization with Foil [Back of block], 2 sectional layers, 40mm deep
CM ES Ex - Potential Equalization with Foil and Electro Magnetic Shielding with Conductive Rubber [Back of block], 3 sectional layers, 40mm deep
CM BG Ex - (formerly HC3) Bonding and Grounding with Braid [Middle of block], 3 sectional layers, 40mm deep
CM BG B Ex - (Formerly HC2) Bonding and Grounding Braid [Back of block], 2 sectional layers, 40mm deep



Certificate: 2254189
Project: 70181819

Master Contract: 215242
Date Issued: 2018-05-08

Canada: Ex tb IIIC Db

USA: Class II, Zone 21 AEx tb IIIC Db

CABLE TRANSIT DEVICE, ROUND EXPANSION FRAME, R...B Ex, (Sleeve bolted), RO...B Ex (Sleeve bolted Openable frame), R...W Ex, (Sleeve welded), RO...W Ex (Sleeve welded Openable frame).
Rated -60°C to +80°C.

Modules RM Ex, RM PE Ex, RM PE B Ex, RM ES Ex and RM ES B Ex.

Type designation: IP66

CABLE TRANSIT DEVICE, ROUND SEAL, RS...B Ex (Self-contained Sleeve Bolted) and RS...W Ex (Self-contained Sleeve Welded). These come in PE and ES versions and have (1) no bonding and grounding. No separate grounding fastener/equipment, (2) Potential Equalization with Foil and (3) Potential Equalization with Foil and Electro Magnetic Shielding with Conductive Rubber and come in various diametric sizes.

Rated -60°C to +80°C.

Type designation: IP66

CABLE TRANSIT DEVICE, FRAME CF 8 Ex (Aluminum) and CF 32 Ex (Aluminum).

Rated -40°C to +80°C.

Modules CM Ex, CM PE Ex, CM ES Ex, CM BG Ex and CM BG B Ex.

Type designation: IP66

CABLE TRANSIT DEVICE, FRAME CF 16 Ex (Mild Steel or Stainless Steel).

Rated -60°C to +80°C.

Modules CM Ex, CM PE Ex and CM ES Ex.

Type designation: IP66

CABLE TRANSIT DEVICE, FRAME G...Ex, G...W Ex, S...Ex, S...S0...Ex, SRC Ex, S...WM Ex, SBTB Ex, SK Ex, SF...Ex, SFX...B Ex and SF...W Ex (Steel, Stainless Steel).

Rated -60°C to +80°C.

Modules RM Ex, RM PE Ex, RM PE B Ex, RM ES Ex, RM ES B Ex.

Type designation: IP66

Note:

- 1) System environmental rating: 1, 2, 3, 3S, 3R, 4, 4X, 5, 12, 13 and IP66.
- 2) "...” can denote any alpha numeric character denoting configuration of gland assembly.

Conditions of Acceptability:

1. The above listed cable transit devices have been certified as components and must be installed in accordance with the applicable local electrical code and final acceptance is subject to inspection by the local authority having jurisdiction
2. Cable Transit Devices to be approved as apparatuses concerning the following special conditions for safe use:



Certificate: 2254189
Project: 70181819

Master Contract: 215242
Date Issued: 2018-05-08

- For maintaining the explosion protection, the Assembly Instruction that accompanies the products, shall be considered.
 - Only cable for fixed installation is permitted for the Cable Transit Device.
 - The Cable Transit Device is ready for use not earlier than 24 h after being tightened according to the Assembly Instruction.
3. For Cable Transit Devices certified as a component of types S...Ex, S...S0...Ex, S...WM Ex, SBTB Ex, SK Ex and SF...W Ex) the following schedule of limitations apply:
- For maintaining the explosion protection, the Assembly Instruction, which accompanies the component, shall be considered.
 - Only cable for fixed installation is permitted for the cable transit device.
 - The Cable Transit Device is ready for use not earlier than 24 h after being tightened according to the Assembly Instruction.
 - Compliance with applicable requirements not covered by the sub-clauses stated below shall be verified. This include mechanical test (if applicable) and test of degree of protection IP and/or Type, which shall be carried out on the frame of the Cable Transit Device (excluding modules and compression unit) after it has been welded (S...Ex, S...S0...Ex, S...WM Ex, SBTB Ex, SK Ex and SF...W Ex) on the enclosure of the apparatus subject to test and certification.

APPLICABLE REQUIREMENTS

CSA Standard C22.2 No 0-10	General Requirements - Canadian Electrical Code, Part II
CSA Standard C22.2 No 0.4-04	Bonding of Electrical Equipment
CSA Std. C22.2 No. 18.3-12	Conduit, Tubing and Cable Fittings.
CSA Std. C22.2 No. 94.1-07	Enclosures for Electrical Equipment, Non-Environmental Considerations.
CAN-CSA C22.2 No. 60079-0: 15	Electrical Apparatus for Explosive Gas Atmospheres - Part 0 - General requirements.
CAN-CSA C22.2 No. 60079-7: 12	Electrical Apparatus for Explosive Gas Atmospheres - Part 7 - Increased Safety "e".
CAN-CSA C22.2 No. 60079-31: 12	Explosive Atmospheres - Part 31: Equipment Dust Ignition Protection by Enclosure "t"
UL Standard 514B (Sixth Edition)	Conduit, Tubing and Cable Fittings.
UL Standard 50 (Twelfth Edition)	Enclosures for Electrical Equipment, Non-Environmental Considerations.
UL 60079-0 - 6th Ed.	Electrical Apparatus for Explosive Gas Atmospheres - Part 0 - General Requirements.
UL 60079-7 - 4th Ed.	Electrical Apparatus for Explosive Gas Atmospheres - Part 7 - Increased Safety "e".
ANSI/UL 60079-31 (Ed. 1): 2013	Explosive Atmospheres - Part 31: Equipment Dust Ignition Protection by Enclosure "t"

MARKINGS

Please refer MARKINGS section of Descriptive Report and Test Results for details.



Supplement to Certificate of Compliance

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The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

Product Certification History

Project	Date	Description
70181819	2018-05-08	Update report 2254189 to add Class II Zone 21 AEx tb IIIC Db and IP66 based on IECEx report NO/NEM/ExTR 12.0016/04 test data and results.
70051651	2016-02-25	Update to Report 2254189 to add two new components Roxtec Wedge 120 ES Ex and 60 ES Ex with 4 new drawings, 2 files on gasket and 5 installation manual based on report ExTR:NO/NEM/ExTR12.0016/02 and numerous other drawing revisions and editorial changes.
70049285	2015-12-09	Update to Report 2254189 to include 8 new models for CSA North America rated for Class 1 Zone 1 AEx e IIC based on complete test data from IECEx and ATEX reports ; assumes no testing is required. Additional funds will be required if any testing is deemed necessary.
2628358	2013-06-05	Update report 2514543 to add the “Ex” descriptor to the various model numbers for marketing purposes.
2514543	2012-10-16	Update report 2254189 to include alternative construction of RS...B, RS...W, CF 16, new version of Cable Gland Type G...W, extensive report formatting to add clarity and a change to the Class numbers which better suit the product listing.
2385302	2011-01-17	Update of Report 2254189 to include HC-1 and HC-2 modules
2314839	2010-08-17	Update report 2254189 to include the omission of drawing S1008535, Rev C.
2254189	2009-12-23	HazLoc certification for Cable Glands RS... B, SF..., Gâ€¦, CFâ€¦, and R...B (apparatuses); RS...W, SF...W, Râ€¦W, Sâ€¦ and Sâ€¦SO... (components) for Class I, Zone 1; Ex e IIC; IP66/IP67 based on submitted IECEx report and CSA ordinary location certification. The descriptive documents have been changed to reflect these changes to stds C22.2 No. 0-M91; CSA C22.2 No. 18.3-04; CSA C22.2 No. 94.1-07; CSA E60079-0: 07; CSA E60079-7: 02; UL 514B, 5th Ed.; UL 50, 12th Ed.; UL 60079-0, 4th Ed.; UL 60079-7, 2nd Ed.