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

Ex COMPONENT CERTIFICATE

Certificate No.: **IECEx DEK 20.0005U**

Certificate history:
Issue 2 (2023-07-18)
Issue 1 (2021-07-21)
Issue 0 (2020-12-16)

Status: **Current**

Issue No: 3

Date of Issue: 2026-03-27

Applicant: **Chemelex Belgium NV**
Research Park
Haasrode - Zone 2
Romeinse straat 14
Leuven B-3001
Belgium

Ex Component: RAYCHEM Low Profile Power Connection, Splice and End Seal Kits, types C-150-E, S-150 and E-150

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **Ex eb, Ex tb**

Marking: Ex eb IIC Gb
Ex tb IIIC Db

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

Position: **Certification Manager**

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.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

DEKRA Certification B.V.
Meander 1051
6825 MJ Arnhem
Netherlands

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Manufacturer:
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Research Park
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Leuven B-3001
Belgium

Manufacturing locations:

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Research Park
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INTERMEX MANUFACTURA S.A DE C.V.
Calle Los Sauces no 2051,
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Mexico

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 component 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 60079-31:2013 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 component listed has successfully met the examination and test requirements as recorded in:

Test Report:

NL/DEK/ExTR20.0006/03

Quality Assessment Reports:

GB/BAS/QAR07.0053/11 GB/BAS/QAR21.0014/02

IECEx Certificate of Conformity

Ex Component(s) covered by this certificate is described below:

The Low Profile Power Connection, Splice and End Seal Kits, types C-150-E, S-150 and E-150 are intended for use with RAYCHEM parallel Trace Heaters. The kits are certified as separate termination components for trace heaters in types of protection Ex eb or Ex tb, suitable for use underneath or outside of the thermal insulation of the heated workpiece.

SCHEDULE OF LIMITATIONS:

The maximum surface temperature depends on the configuration of the Trace Heating system, determined in accordance with IEC/ IEEE 60079-30-1.

The temperature at the power cable branching point, when connected in the Power Connection Kit type C-150-E, shall be considered in applications which expose the Power Connection Kit to temperatures higher than 70 °C for selecting a power cable with the appropriate temperature rating.

For details of temperature limitations see “thermal data” in Annex 1.

IECEx Certificate of Conformity

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
- Name change of the manufacturer
- New QAR

Annex:

230376900-ExTR20.0006.03_Annex1.pdf

NOTE: In this document a "." is used as a decimal separator.

Nomenclature

C - 150 - E
I II III

Designation	Explanation	Value	Explanation
I	Function of product	C S E	Power Connection Kit, power supply cable + Trace Heater Low Profile Splice Kit; Trace Heater Low Profile End Seal Kit, Trace Heater
II	Type designation	150	RAYCHEM Low Profile termination components
III	Option	E	for parallel Trace Heaters option for C-150 only

Details of scope

All termination components suitable for use with following RAYCHEM self-regulating parallel Trace Heaters:

- BTV
- QTVR
- KTV
- XTV
- XTVR

C-150-E for use with power supply cables with following properties:

Conductor type:	semi flexible / rigid
Amount of conductors:	2 conductors shielded or 3 conductors unshielded
Environmental protection:	outer sheath / over jacket
Minimum conductor size:	1.0 mm² (17 AWG)
Maximum conductor size:	4.0 mm² (11 AWG)
Minimum outer diameter:	6.8 mm
Maximum outer diameter:	12.6 mm

The Power Connection, Splice and End Seal Kits provide a degree of protection of at least IP66 in accordance with IEC 60079-0 and IEC 60529.

Thermal data

Minimum ambient temperature:		-55 °C
Maximum ambient temperature:		+55 °C
Maximum operating temperature, power "on":		+150 °C
Maximum exposure temperature, power "off":	continuously:	+200 °C
	intermittent:	+200 °C
Maximum surface temperature, power "on":		+154 °C

NOTE: The temperature range may be further limited by the temperature ratings of the RAYCHEM self-regulating parallel Trace Heaters and power supply to which the termination components are connected.

Ambient temperature defined as per IEC/IEEE 60079-30-1:
Surrounding the workpiece including the trace heater and any thermal insulation or weather barrier that may be applied.

Operating and exposure temperatures refer to the workpiece temperature as defined in IEC/IEEE 60079-30-1:
The temperature of the object to which the trace heater is applied.

Thermal data (continued)

The maximum surface temperature has been determined in power “on” condition on a workpiece having the maximum operating temperature power “on”, with the trace heater type XTV, representing the highest power output at steady state operating current. At maximum ambient temperature with the complete set up being thermally insulated.

Electrical data

Rated voltage:	277 Vac
Maximum nominal current rating of over-current protection:	40 A

NOTE: The rated current is based on the steady state operating current of a Trace Heating branch circuit with the maximum rated circuit length, related to the supply voltage and nominal current rating of the over-current protection.