



1. EC-TYPE EXAMINATION CERTIFICATE

2. **Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 94/9/EC**
3. EC-Type Examination Certificate Number: **ITS08ATEX36059X Issue 3**
4. **Equipment or Protective System: SRM/E + SRL Self Regulating Heat Trace Cable and U Series Heat Trace Connection System Accessories UPC, UMC, UES and RTES**
5. **Manufacturer: CHROMALOX**
6. **Address: 1382 Heil Quaker Boulevard
Lavergne 37086
Tennessee 37086
USA**
7. This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
8. Intertek Testing and Certification Limited, notified body number 0359 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive. The examination and test results are recorded in confidential Intertek Report Ref G101613670 Issue 1, dated August 2014
9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 60079-0:2012, EN 60079-7:2007 and EN 60079-30-1:2007 except in respect of those requirements referred to at item 18 of the Schedule.
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, examination and tests of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
12. The marking of the equipment or protective system shall include the following:-



II 2 G Ex e II T* Gb Ta -60°C to *C
* See Schedule

A T Austin
Certification Manager
22 August 2014

Intertek Testing & Certification Limited
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Registered No 3272281 Registered Office: Academy Place, 1-9 Brook Street, Brentwood, Essex, CM14 5NQ

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**13. SCHEDULE****14. EC-TYPE EXAMINATION CERTIFICATE NUMBER ITS08ATEX36059X Issue 3****15. DESCRIPTION OF EQUIPMENT OR PROTECTIVE SYSTEM**

The Chromalox SRM/E and SRL heat trace cables are self regulating types suitable for use in Zone 1 hazardous areas. The cables are used to prevent freezing of process fluids in pipes, floodgates and other similar uses. The cable is constructed with two parallel conductors in tinned copper, cased in a polymer charged with carbon and covered with an insulating jacket with braided earth screen and optional outer jacket.

Supply Voltage 120V or 208-277V (according to part number).

Output: 3, 5, 8, 10 W/Ft (type SRL) and 3, 5, 8, 10, 15 and 20 W/Ft (type SRM/E)

Cable terminations are facilitated by means of the Chromalox UPC Power Connection Kit, UMC Multiple Entry Connection Kit, UES End Seal Kit and RTES End Seal Kit. Ingress protection is provided by O-Rings for the UPC and UMC Connection Kit enclosure covers / standoffs, UES End Seal Kit and RTES End Seal Kit, and silicone rubber grommets for the heating cable inlets within the pipe standoffs. When assembled in accordance with the manufacturer's instructions, the UPC and UMC Connection Kits are rated IP66.

Electrical connections within the enclosures are made by means of rail mounted feed-through terminal blocks, maximum rating 47 Amps. Each enclosure is provided with a ¾ inch NPT threaded conduit entry. The user shall supply a suitably IECEx Component Certified Conduit Hub or Grounding Conduit Hub as directed by the manufacturer's instructions

SRM/E System is rated at T3 for an ambient of -60°C to 195°C

SRL is rated at T5 for an ambient of -60°C to 95°C

Additional sites of Manufacture

Etirex Chromalox
Route de Chateau Thierry
Noyant et Aconin
BP-107
F-02203 Soissons Cedex, France

Ogden Chromalox
2150 Rulon White Blvd
Utah 84404
USA

16. REPORT NUMBER

Intertek Report Ref G101613670 Issue 1, dated August 2014

17. SPECIAL CONDITIONS FOR SAFE USE

1. When installed in a TT or TN type system, a residual current device (RCD) with a rated residual operating current not exceeding 300 mA shall be used. Preference should be given to RCDs with a rated residual operating current of 30 mA. The device shall have a maximum break time not exceeding 5 s at the rated residual operating current and not exceeding 0.15 s at five times the rated residual operating current.

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2. When installed in an IT system, an insulation monitoring device shall be used to disconnect the supply whenever the insulation resistance is not greater than 50 Ω per volt of rated voltage.

3. Electrical entry to be provided by suitably Component Certified IECEx Conduit Hub or Component Certified IECEx Grounding Conduit Hub.

18. ESSENTIAL HEALTH AND SAFETY REQUIREMENTS (EHSR'S)

The relevant EHSR's have been identified and assessed in Intertek Report Ref G101613670 issue 1, dated August 2014

19. DRAWINGS

Number	Title	Issue	Date
135-512109-000 Sht 7 of 10	Single Entry U Kit SR Grommet	1	08/03/2004
135-512109-000 Sht 8 of 10	Single Entry U Kit CWM Grommet	1	08/03/2004
135-512109-000 Sht 9 of 10	3 Entry U Kit SR Grommet	1	08/03/2004
135-512109-000 Sht 10 of 10	3 Entry U Kit CWM Grommet	1	08/03/2004
119-562581-000 Sht 1 of 17	Compression Fitting	2	11/14/2005
119-562581-000 Sht 2 of 17	Tee Compression Fitting	1	11/14/2005
278-562581-000 Sht 3 of 17	Single Entry Pipe Standoff	2	11/14/2005
278-562581-000 Sht 4 of 17	Three Entry Pipe Standoff	1	11/14/2005
039-562581-000 Sht 5 of 17	End Cap	1	11/14/2005
168-562581-000 Sht 6 of 17	Stopping Plug	2	11/16/2005
001-562581-000 Sht 8 of 17	Small Pipe Adapter	1	11/14/2005
160-562581-000 Sht 9 of 17	SR Grommet Insert	1	11/16/2005
160-562581-000 Sht 10 of 17	CWM Grommet Insert	1	11/16/2005
168-562581-000 Sht 11 of 17	Single and 3 Entry U Kit Locknuts	2	11/20/2005
168-562581-000 Sht 12 of 17	Single and 3 Entry U Kit O-ring	3	04/04/2006
168-562581-000 Sht 13 of 17	Single Entry U Kit Junction Box Assembly	5	05/25/2006
168-562581-000 Sht 14 of 17	Three Entry U Kit Junction Box Assembly	6	01/30/2008
143-562307-000 Sht 1 of 2	Engineering Data – SRM/E	6	17/06/1999
143-562307-000 Sht 2 of 2	Engineering Data – SRM/E	6	17/06/1999
143-562307-000 Sht 3 of 3	Engineering Data – SRM/E	3	07/07/1999
143-562520-000 Sht 1 of 2	Engineering Data – SRL Cable	6	17/06/1999
143-562520-000 Sht 2 of 2	Engineering Data – SRL Cable	4	07/07/1999
143-562520-000 Sht 3 of 3	Engineering Data – SRL Cable	3	07/07/1999
168-562581-033	Type SSK and PJB Installation Instructions		05/04/2006
161-562581-028	Type UES Installation Instructions		05/03/2006
161-562581-025	Type UMC Installation Instructions		05/10/2006
161-562581-029	Type UPC Installation Instructions		05/10/2006
143-562551-PST	ATEX Print Strings SRL – ETX	1	8/18/14
143-562552-PST	ATEX Print Strings SRM – ETX	1	8/18/14

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The Intertek logo consists of the word "Intertek" in a white, sans-serif font, centered within a dark blue rounded rectangular background.

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Certificate History

Issue 1: Job number 07025310. U-Series accessories only. incorporating Job number 08037678: To permit a minimum ambient of -60°C.

Issue 2: Job number G101158915. Update of standards to EN 60079-0:2012, EN 60079-7:2007 and EN 60079-30-1:2007

Issue 3: Job number G101613670. To incorporate the SRM/E and SRL Cable into the 'system'. Addition of 2 alternative manufacturing sites

This Certificate is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Certificate. Only the Client is authorized to permit copying or distribution of this Certificate and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.

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