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 SIR 03.0004X issue No.:3

Certificate history:
Issue No. 3 (2014-2-21)
Issue No. 2 (2006-1-23)

Status: **Current**

Date of Issue: **2014-02-21** Page 1 of 5

Applicant: **Alcochem Hygiene**
Zeilmaker 4
3861SM Nijkerk
The Netherlands

Electrical Apparatus: **Lamp module of the i-trap 150EX insect control module, type VL125**
Optional accessory:

Type of Protection: **Increased safety, encapsulation and Dust Protection by Enclosure**

Marking: Ex e mb IIC T4 Gb
Ex tb IIIC T100°C Db IP6X
Ta = -45°C to +50°C (VL125, 2 x 58 W) or Ta = -45°C to +55°C (VL125, 2 x 18 W or 2 x 36 W)
Ta = -15°C to +50°C (VL126, 2 x 58 W) or Ta = -15°C to +55°C (VL126, 2 x 18 W or 2 x 36 W

Approved for issue on behalf of the IECEx Certification Body: C Ellaby

Position: Deputy Certification Manager

Signature:
(for printed version)

Date: 2014-02-21

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:

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

sira CERTIFICATION

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Manufacturer: **Alcochem Hygiene**
Zeilmaker 4
3861SM Nijkerk
The Netherlands

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 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-18 : 2009 Edition: 3	Explosive atmospheres Part 18: Equipment protection by encapsulation "m"
IEC 60079-31 : 2008 Edition: 1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

*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

IECEx ATR:	File Reference:
UK/SIR/04/R53L10780A	**R53L10780A**
GB/SIR/ExTR13.0309/00	**ITS 04012519**
GB/SIR/ExTR13.0310/00	**GB/BAS/QAR06.0027/03, GB/BAS/QAR06.0027/04**

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Schedule

EQUIPMENT:
Equipment and systems covered by this certificate are as follows:

The VL125 Trident Luminaires utilise twin fluorescent lamps with rated outputs of 2 x 18 W, 2 x 36 W or 2 x 58 W. The electrical supply may be 220 to 277 V, 50 or 60 Hz a.c. or 220 to 277 V d.c. The fluorescent lamps may have Fa6 (single pin) caps or G5 or G13 (bi-pin) caps. The luminaires comprise an oval lamp enclosure manufactured from clear polycarbonate that is fixed at one end to a control gear enclosure, the other end has an integral bracket that secures it to a reflector. The reflector is designed to be fixed to the mounting surface. The control gear enclosure is manufactured from polycarbonate and is fixed to the reflector by screws. The standard luminaire has 2 cable entry positions situated within the control gear enclosure, these are suitable for looping supply cables through cable glands up to size M25. A through wired luminaire variant may be supplied, which incorporates an additional through wired box and lid that is secured to the reflector at the opposite end to the control gear enclosure. A plastic extrusion, which carries the through wired cables, runs between the control gear housing and the through wired housing. The plastic extrusion is sealed into both boxes and is secured to the underside of the reflector. The through wired variant allows up to 4 off M25 entries per luminaire. A pole mounted version may also be supplied and this utilises a control gear enclosure that incorporates additional features to secure the luminaire.

CONDITIONS OF CERTIFICATION: YES as shown below:

1. The plastic external enclosure could potentially generate an ignition-capable level of electrostatic charge under certain extreme conditions. Therefore, these units shall not be installed in a location where they may be subjected to external conditions (such as high-pressure steam) which might cause a build-up of electrostatic charges on the non-conducting surfaces. Additionally, cleaning of the equipment shall be done only with a damp cloth.

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EQUIPMENT(continued):

Inside the control gear enclosure, the control gear is connected to the lamps via three Fa6 lampholders that are fitted through a side wall in the enclosure. The lamp enclosure houses two tubular fluorescent lamps that are supported on a lamp carrier assembly. The lamp carrier assembly comprises a central rod that is fitted at each end with mouldings supporting either bi-pin or Fa6 lampholders as required. At the connection end, the lampholders and central rod are connected to Fa6 lamp pins that pass though the mouldings. The Fa6 pins are inserted into the Fa6 lampholders on the control gear enclosure when the lamp envelope and carrier assembly is fixed in place. An isolating switch for the luminaire control gear is not required because replacement of the lamps may be carried out by removing the lamp enclosure, which withdraws Fa6 connection pins from the lampholders fitted to the control gear enclosure, thus disconnecting the electrical supply to the lamps. Luminaires may be looped together subject to the maximum current permitted by the terminals. The luminaires have an ingress protection rating of IP67 and IP68. The VL126 Trident Luminaire is an emergency version of the VL125 luminaire with an electrical supply of 220 to 254V 50 or 60Hz only. The emergency versions are fitted with a clear control gear enclosure lid that is fitted with an inverter, a battery pack, an encapsulated fuse and an 11 W compact fluorescent lamp. The emergency lid assembly has an IP20 rating when removed from the luminaire. For operational reasons relating to the battery, the VL126 is marked with a minimum ambient temperature of –15°C.

Conditions of manufacture

The Manufacturer shall comply with the following:

1. The products covered by this certificate incorporate previously certified devices, it is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with these devices, and the manufacturer shall inform Sira of any modifications of the devices that may impinge upon the explosion safety design of their products.
2. The manufacturer shall carry out an electric strength test, on all units manufactured, in accordance with IEC 60079-7:2006 clause 7.1.
3. The manufacturer shall take all reasonable steps to ensure that the user/installer complies with the special conditions for certification associated with the equipment. In addition, the manufacturer shall provide the user/installer with an appropriate copy of the certificate and instruction manual for each certified device that is fitted to the equipment.
4. All component parts, including any accessories used with the Ex e terminals, shall be installed in accordance with their respective component certificates.
5. There are several options of supply voltage range, as detailed on the certificate. The voltage rating is dependent on the control gear installed. The equipment shall be marked with a voltage range appropriate to the control gear installed.

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

Issue 1 – this Issue introduced the following change:

1. Change of manufacturer name and address.

Issue 2 – this Issue introduced the following change:

1. Change of manufacturer name.

Issue 3 – this Issue introduced the following changes:

1. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, the documents previously listed, IEC 60079-0:2000 Ed 3.1, IEC 60079-7:2001 Ed 3 and IEC 60079-18:1992 Ed 1, were replaced by those currently listed. In consequence, the following changes were made:
   - The markings were updated accordingly.
   - A Condition of Certification was added necessitating the inclusion of an 'X' suffix in the certificate number.
   - The existing Conditions of Manufacture were revised to bring them into line with the new standards or simplify their application; in addition, a new Condition was added.
2. The drawings were reviewed and rationalised to form a single, common package that may also be used with other certification associated with these products.
3. Type MK 3 Range of Terminal Strips and Type VL82B Bi-Pin Lampholder were acknowledged to be included.
4. Inclusion of the options for lower supply voltages to the certificate. The two options introduced are 110 to 130 V, 50 or 60 Hz and/or 110 to 130 Vdc; the existing options remain. The new supply options apply to both the VL125 Trident and the VL126 Trident emergency luminaires. A Condition of Manufacture has been added to ensure the equipment is marked with a supply voltage range appropriate to the control gear installed.
5. The product was additionally assessed to meet the requirements of the IEC 60079-31:2008 Ed 1.