



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 UL 12.0037X Issue No: 2 Certificate history:
Status: **Current** Issue No. 2 (2017-06-13)
Date of Issue: **2017-06-13** Page 1 of 5 Issue No. 1 (2015-10-02)
Applicant: **Algas SDI** Issue No. 0 (2012-10-24)
151 South Michigan Street
Seattle, WA 98108
United States of America

Equipment: **Zimmer LPG Vaporizer, Z-Series**
Optional accessory:

Type of Protection: **Flameproof "d"**

Marking:
Ex d IIA T3 Gb
-20°C to +40°C

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

Lucy Frieders

Position:

Staff Engineer

*Signature:
(for printed version)*

Date:

2017-06-13

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:

UL LLC
333 Pfingsten Road
Northbrook IL 60062-2096
United States of America





IECEX Certificate of Conformity

Certificate No: IECEX UL 12.0037X

Issue No: 2

Date of Issue: 2017-06-13

Page 2 of 5

Manufacturer: **Algas SDI**
151 South Michigan Street
Seattle, WA 98108
United States of America

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 : 2007-10 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:5

IEC 60079-1 : 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:6

*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:

[US/UL/ExTR12.0026/02](#)

Quality Assessment Report:

[NO/PRE/QAR17.0007/00](#)



IECEX Certificate of Conformity

Certificate No: IECEx UL 12.0037X

Issue No: 2

Date of Issue: 2017-06-13

Page 3 of 5

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

This device is a LPG Vaporizer and is intended for the use in conjunction with an aboveground LP-Gas Storage container for converting liquefied petroleum to vapor by means of an electrical heater/heat exchanger. The LPG Vaporizer is to be mounted on a wall next to multiple 100 lb or 50 Kg LPG bottles. The device is constructed of three different parts consisting of a capacity control valve, flameproof heater with integral heat exchanger, and a plastic shell. This certificate covers the flameproof heater and plastic shell. The capacity control valve is mechanical in function and has no electrical parts. Heat is provided by a Positive Temperature Coefficient (PTC) heater assembly. The heat exchanger is steel tubing and is cast into the walls of the flameproof enclosure.

See Annex for additional information.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Flameproof joints are other than those specified in Table 1 of IEC 60079-0. Contact Algas-SDI for joint dimensions.

Only to be used with propane or LPG (liquefied propane gas).



IECEX Certificate of Conformity

Certificate No: IECEX UL 12.0037X

Issue No: 2

Date of Issue: 2017-06-13

Page 4 of 5

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

Issue 1: Updated the QAR.

Issue 2: Updating IECEX Certificate to link the new QAR issued through DNV-PreSafe. Revisions to drawing not affecting the product safety.



IECEX Certificate of Conformity

Certificate No: IECEX UL 12.0037X

Issue No: 2

Date of Issue: 2017-06-13

Page 5 of 5

Additional information:

Annex:

[Annex to IECEX UL 12.0037X Issue 2.pdf](#)

Nomenclature:

Z	20	P	UL/CE	V	1	S
I	II	III	IV	V	VI	VII

I- Series

Z- Z Series

II_Capacity

- 14 - 14 Kg/hr
- 17 - 17 Kg/hr
- 20 - 20 Kg/hr
- 23 - 23 Kg/hr
- 26 - 26 Kg/hr
- 28 - 28 Kg/hr
- 31 - 31 Kg/hr
- 34 - 34 Kg/hr
- 37 - 37 Kg/hr
- 40 - 40 Kg/hr
- 50 - 50 Kg/hr

III-Gas Type

- P – Propane
- L – LPG (liquefied propane gas)
- S – 50/50 LPG (Liquefied propane gas)

IV- Approvals

UL/CE – UL, cUL, CE, IECEx

V- Voltage Rating

V – 100-240V AC

VI- Phase

1 – 1 Phase

VII- Condition

S – Factory Seal

The relation between ambient temperature and the assigned temperature class is as follows:

Ambient temperature range

-20 °C to +40 °C

Temperature class

T3

Electrical data

100-240 V, 50/60 Hz, 1.89-5.72 kW

Installation instructions

Each unit is provided with installation instructions indicating the following information.

- CAUTION: To prevent Ignition of Hazardous Atmosphere: Any repairs internal to flameproof enclosure must be made by the manufacturer. Return to manufacturer for service.
- Keep enclosure tightly Torqued to: 40,6 NM (30 Ft.lbs.) while in service and disconnect power before installing or removing unit for service.
- A metal terminal box, IECEx certified for protection type 'd' or 'e' suitable for making necessary wiring connections.. Electrical must be rated for -20°C (-4°F) to +130°C (+266°F).
- WARNING- Potential Electrostatic Charging Hazard, clean with damp cloth.
- Connect only metal electrical conduit or armoured cable to the sealing fitting
- Do not install vaporizer in corrosive environments or expose to corrosive chemicals
- Only install vaporizer horizontally on a vertical surface

Annex to IECEx UL 12.0037X Issue 2
Applicant: Algas SDI

Mounting instructions

Refer to the Zimmer Electric Vaporizer Manual, Drawing 52690.