

### INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx ITS 12.0031X Issue No: 3 Certificate history:

 Issue No. 3 (2017-05-03)

 Status:
 Current

 Issue No. 2 (2015-03-03)

atus: Current Issue No. 2 (2015-03-03)
Page 1 of 4 Issue No. 1 (2014-02-05)

Date of Issue: 2017-05-03 Issue No. 0 (2012-12-11)

Applicant: Specialist Services

Jebel Ali Industrial Area 2&3,

Dubai,

United Arab Emirates

Equipment: Pressurized Room

Optional accessory:

Type of Protection: px

Marking:

Ex px IIB T3 Gb

IECEx ITS 12.0031X

Approved for issue on behalf of the IECEx A T Austin

Certification Body:

Position: Certification Officer

Signature:

(for printed version)

Date:

- 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:

Intertek Testing & Certification Limited
ITS House, Cleeve Road,
Leatherhead,
Surrey, KT22 7SB
United Kingdom





Certificate No: IECEx ITS 12.0031X Issue No: 3

Date of Issue: 2017-05-03 Page 2 of 4

Manufacturer: Specialist Services

AL QUOZ Industrial Area

Dubai

**United Arab Emirates** 

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 Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-13: 2010-10 Explosive atmospheres - Part 13: Equipment protection by pressurised room "p"

Edition:1.0

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:

GB/ITS/ExTR12.0079/04

**Quality Assessment Report:** 

GB/ITS/QAR12.0010/00



Certificate No: IECEx ITS 12.0031X Issue No: 3

Date of Issue: 2017-05-03 Page 3 of 4

Schedule

#### **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

The Hazardous Area Modular Buildings are Transportable Ventilated Rooms (TVR's) suitable for Zone 1 hazardous areas, the TVR's have no internal source of release. Input voltages are selectable from 380Vac to 690Vac and can be powered by both 50Hz and 60 Hz supplies. Dual output voltages are available of 110 Vac and 220 Vac which are provided by the power transformer. All electrical devices external to the TVR and those used in the airlock of the TVR are IEC EX certified for Zone 1 use (minimum). The TVR electrical system utilises an Ex d certified Combined Pressurisation Fire and Gas (CPFG) system to allow use of both Ex and non Ex equipment within the TVR. The CPFG system monitors the purging cycle, the ventilation flow rate, the differential pressure as well as fire and gas alarms. The CPFG system applies power to the non-Ex equipment once the initial purge criterion has been met. On loss of pressure, flow or detection of gas the CPFG will shut down the non Ex equipment. The TVR can vary in length from 10ft to 32ft, the internal layout may vary for each TVR. The Ex equipment will be used in order to establish a safe working environment and position of these devices will vary depending on the internal set-up that is required. The TVR enclosure has a structural frame manufactured from 6mm mild steel and an outer shell manufactured from 3 mm mild steel. The TVR has a minimum height of 2.0 metres.

The ambient temperature range for this equipment is -20°C to + 40°C as standard. However, if an extended ambient range is required, the ambient range may be extended up to an absolute maximum range of -50°C to +50°C subject to all the Ex equipment fitted also being suitable for the full revised ambient range.

#### SPECIFIC CONDITIONS OF USE: YES as shown below:

#### Conditions of Use

- 1. The inlet air used to purge the pressurised room, and the air conditioning air, shall be taken from a clean air (non-hazardous) source.
- 2. Any internal equipment fitted or used within the Pressurised Room shall not form a source of release
- 3. All Equipment that remains energised when purge is lost shall have a suitable IECEx certificate for the area of use (including but not limited to a minimum EPL of Gb, gas group IIB, with a suitable ambient temperature range)
- 4. All alarms (visual and audible) shall be placed so as to be immediately perceived by responsible person

#### Routine Tests

A functionality check shall be carried out to include:

- Verification of sequence of operation of the safety devices
- Verification that the minimum overpressure is maintained inside the enclosure at minimum flow rate with outlet flaps open.



| Certificate No. | IECEX 113 12.0031X | issue ivo. 3 |
|-----------------|--------------------|--------------|
| Date of Issue:  | 2017-05-03         | Page 4 of 4  |

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

The Hazardous Area Modular Buildings are Transportable Ventilated Rooms (TVR's).

The following changes have been made to drawings listed in cover report.

- Note 12 opening cabinet doors if not vented now covered by an X condition.
- Note 15 Fire rating of windows (previously A60) no longer specified.
- Note 16 suspended ceilings shall be adequately vented achieved through adequate ventilation now clearly shown on drawings.
- Item note 6 cables shall be concealed Previously it was specified as DADO Trunking.
- Item note 18 & 19 Batteries use batteries used internally are certified.

In addition the enclosure was always described in feet not metres this is now corrected to the SI unit of metres for the minimum and maximum dimensions (3.048 metres to 10 metres)

#### Annex:

Annex to IECEx ITS 12 0031X issue 2.pdf



### ANNEX: Schedule of Drawings for Supplementary Certificate IECEx ITS 12.0031X Issue 2

| Title                                | Drawing No.:       | Rev. Level: | Date:     |
|--------------------------------------|--------------------|-------------|-----------|
| Ex PRESSURISATION TYPICAL ACCEPTABLE | SS-OH-O-T1-E-D-300 | G           | 28.DEC.14 |
|                                      |                    |             |           |
| LAYOUT OPTIONS (pages 1 to 2)        |                    |             |           |

Page 1 of 1