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

Certificate No.: **IECEx BAS 18.0037X**

Certificate history:

Status: **Current**

Issue No: 0

Date of Issue: 2018-08-31

Applicant: **EGS Pte. Ltd.**
Blk 4008
Ang Mo Kio Ave 10
#4-16/17 Techplace 1
569625
Singapore

Equipment: **APD_C Flameproof Control Station / Junction Box**

Optional accessory:

Type of Protection: **Flameproof, Protection by enclosure**

Marking: **Ex db IIC T6/T5* Gb (-20°C ≤ Ta≤ +55°C)**
Ex tb IIIC T°C Db IP66**
*** - Refer to table for Temperature class to power dissipation relationship**
****- Refer to table for Temperature class to power dissipation relationship**

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

Position: **Technical Manager**

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 www.iecex.com or use of this QR Code.

Certificate issued by:

SGS Baseefa Limited
Rockhead Business Park
Staden Lane
Buxton, Derbyshire, SK17 9RZ
United Kingdom

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Manufacturer:
EGS Pte. Ltd.
Blk 4008
Ang Mo Kio Ave 10
#4-16/17 Techplace 1
569625
Singapore

Additional manufacturing locations:

Appleton Group - ATX
E.I.N. 35 Rue André Durouchez
CS 98017
80084 Amiens Cedex 2
France

EMERSON
Emerson Street No.4
Parc industrial Tetarom 2
400641, Cluj-Napoca
Romania

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 equipment 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 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

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 equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

GB/BAS/ExTR18.0122/00

Quality Assessment Reports:

FR/LCI/QAR07.0008/12

GB/EXV/QAR17.0006/00

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

The APDAC & APDSC enclosures are range of control stations & junction boxes, where APDAC stands for aluminium enclosure and APDSC stands for stainless steel enclosure. The APDAC enclosure body and cover are made of Cast Aluminium Alloy Al-Si7Mg - LM-25. The APDSC enclosure body and cover are made of Cast Stainless Steel 304/316L. The enclosure comes in 3 models – 80, 130 and 130P. APDAC/APDSC 130P contains Type-A cover (The cover has one entry for fitting IECEx certified components like push button lamp, switch and reset button) and APDAC/APDSC 80 and APDAC/APDSC 130 contains Type-B cover (blind cover). The equipment consists of a enclosure body and a threaded cover. Minimum wall thickness observed on APDAC/APDSC 80 enclosure body and cover is 6 mm. Minimum wall thickness observed on APDAC/APDSC 130 & APDAC/APDSC 130P enclosure body and cover is 5 mm.

The APDAC/APDSC 80 enclosure is provided with four entries of maximum size M25 X 1.5P, which may be either cable entries or entries for components. These entries have a threaded axial length of 12 mm.

The APDAC/APDSC 130 enclosure is provided with six entries of maximum size M25 X 1.5P, which may be either cable entries or entries for components, with the APDAC/APDSC 130P having an additional component only entry of maximum size M25x1.5P in the cover. The entries have a threaded axial length of 15 mm and the component only entry has a threaded axial length of 17mm. Equivalently sized N.P.T. entries may also be provided.

The entries when mated with Ex d certified cable gland or Ex d certified components, will form a flamepath meeting the requirements of the standard. Alternate entry sizes are listed in drawing no. EGS 810001, sheet 9/11 for APDAC/APDSC 130P & APDAC/APDSC 130 enclosures & drawing no. EGS 810001, sheet 5/11 for APDAC/APDSC 80 enclosure.

The APDAC / APDSC will be fitted with terminal blocks for the purpose of connecting external circuits

Table 1

* Temperature class to power dissipation relationship for Group II atmospheres.

The maximum surface temperature classification for the equipment is -

T class for Group II	Maximum Power Dissipation	Ambient Temperature
T6	10W	-20°C ≤ Ta≤ +55°C
T5	20W	

Table 2

** Temperature class to power dissipation relationship for Group III atmospheres.

The maximum surface temperature classification for the equipment is -

T class for Group III	Maximum Power Dissipation	Ambient Temperature
T75°C	10W	-20°C ≤ Ta≤ +55°C
T90°C	20W	

Mobilith SHC 100 & 220 or Tribol GR 100 PD is a non-hardening solvent free grease that is applied on the flamepath for lubrication and corrosion protection.

Table of certified components that can be installed on the enclosure

Component	Certificate No.	Description

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Devices Auxiliaries	IECEx LCI 10.0022U	These Auxiliaries are intended to be mounted on any volume of flameproof enclosures. Auxiliaries shall be: - Auxiliaries with shaft through - Auxiliaries with rotary control - Pilot Lights Auxiliaries are mounted on the cover of the enclosure

The internal gross volume of the enclosures is –

APDAC/APDSC 80 - 428 cm^3

APDAC/APDSC 130 - 1545 cm^3

APDAC/APDSC 130P - 1883 cm^3

SPECIFIC CONDITIONS OF USE: YES as shown below:
1. User should follow instruction given on name plate of the equipment for selection of cable.
2. The enclosure shall be fitted with suitably IECEx/ATEX certified Ex db IIC IP66 cable glands, suitable for a temperature of 85°C
3. The enclosure shall be fitted with suitably IECEx/ATEX certified Ex db IIC IP66 blanking elements
4. The equipment shall be routinely cleaned to prevent the build-up of dust layers.