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 KTL 13.0002X issue No.:0	Certificate history:
Status:	**Current**	
Date of Issue:	**2013-03-29**	Page 1 of 3

Applicant: **Power-Genex Ltd.**
44B9L, 434-9, Nonhyun-Dong, Namdong-Gu, Incheon, 405-849
Korea, Republic of

Electrical Apparatus: **Smart Valve Positioner Model SS2 series**
Optional accessory:

Type of Protection: **Intrinsic safety "i"**

Marking: Ex ia IIC T6/T5 Ga or Gb
Ambient Temperature Range : -40℃≤Ta≤+40℃(for T6) or +80℃(for T5)
Input (Port 1 – No.1, 2) :
Ui = 28 V, Ii = 93 mA, Pi = 651 mW, Ci = 23 nF, Li ≈ 0
Output (Port 2 – No. 4, 5) :
Ui = 28 V, Ii = 93 mA, Pi = 651 mW, Ci = 22 nF, Li ≈ 0
2 x STDT LIMIT Switches (Port 4-1 – No. 11&12 or 12&13, Port 4-2 – 14&15 or 15&16) :
Ui = 28 V, Ii = 93 mA, Pi = 651 mW, Ci = 0, Li = 0

Approved for issue on behalf of the IECEx Certification Body: Jae-Hee Kim

Position: Managing director

Signature:
(for printed version) J. H. Kim

Date: 2013-03-29

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:

Korea Testing Laboratory
222-13, Guro-Dong, Guro-Gu
Seoul, 152-718
Korea, Republic of

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Date of Issue: **2013-03-29** Issue No.: **0**

Manufacturer: **Power-Genex Ltd.**
44B9L, 434-9, Nonhyun-Dong, Namdong-Gu, Incheon, 405-849
Korea, Republic of

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 Edition: 5	Explosive atmospheres - Part 0:Equipment - General requirements
IEC 60079-11 : 2006 Edition: 5	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

*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:
KR/KTL/ExTR13.0008/00

Quality Assessment Report:

KR/KTL/QAR11.0002/00 KR/KTL/QAR11.0002/01

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Schedule

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

The Model SS2 Smart Valve Positioner is an intrinsically safe equipment that is applied in hazardous area, which is used for control of linear and rotary valve position. The equipment comprises a pilot valve, a feedback lever(Shaft), a pressure gauge block, a torque motor assembly, a main control board and so on. They are housed in an aluminium or stainless steel enclosure. The valve is controlled by the main control board and the torque motor through a 4~20mA input signal and a position feedback signal from a potentiometer. The optional output signal for position feedback to external systems is generated by one of a 4~20mA position transmitter, 2 SPDT limit switches and their combination. 24V DC power is transmitted to the equipment and all external connections from safe area shall be provided to the equipment through an intrinsically safe barrier.
<Model code description>
SS2ab-cdefghijk
a=Body material : Blank-Aluminum, S-316SS
b=Actuator action : L-Linear type, R-Rotary type
c=Ex Protection type : I-Intrinsic safety (Ex ia IIC T6/T5)
d*=Feedback lever(Shaft) : A, B, C, D, F, N
e*=Pressure gauge : 0, 1, 2
f*=BY-Pass : N, Y
g=Position feedback : N, O, S, Q
h*=Communication : N
i=Pneumatic–Electrical connections : 3, 4, 5
j*=Mounting bracket : N, L, R
k*=Feedback pin guide : 0, 1
* : Options which do not affect intrinsic safety
For the detailed information, refer to the instruction manual.

CONDITIONS OF CERTIFICATION: YES as shown below:

1. Warning-Potential electrostatic charging hazard-see instructions.
The non-metallic parts incorporated in the enclosure of this equipment may generate an ignition capable level of electrostatic charge. Therefore particularly when it used for applications that specifically require Group IIC, EPL Ga equipment, the equipment shall not be installed in a location where the external conditions are conductive to the build-up of electrostatic charge on such surfaces. Additionally, the equipment shall only be cleaned with a damp cloth.

2. Models with enclosures made of aluminium are considered to present a potential risk of ignition by impact or friction. Care must be taken during installation and use to prevent impact or friction. Particularly, it must not be used for applications that specifically require EPL Ga equipment.

3. The insulation between an intrinsically safe circuit and a frame of the equipment is not capable of withstanding a 500V dielectric strength test as defined in Cl.6.3.12 of IEC 60079-11:2006. This shall be taken into account during installation.