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 KTL 21.0034X**	Page 1 of 3	Certificate history:
Status:	**Current**	Issue No: 0	
Date of Issue:	2021-12-29		
Applicant:	**POWER-GENEX Ltd.** 99, Eunbong-ro, Namdong-Gu Incheon 21639 **Korea, Republic of**		
Equipment:	**Smart Valve Positioner, ASD-7 series**		
Optional accessory:			
Type of Protection:	**Flameproof enclosure "d" and Dust ignition protection enclosure "t"**		
Marking:	Ex db IIC T6/T5 Gb Ex tb IIIC T80 °C/T95 °C Db		

Approved for issue on behalf of the IECEx Certification Body: **Park, Jong-koo**

Position: **Certification Manager**

Signature: (for printed version)

Date: 2021-12-29

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

Certificate issued by:

Korea Testing Laboratory
87, Digital-ro, 26-gil, Guro-gu
Seoul
Korea, Republic of

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Date of issue: 2021-12-29

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Manufacturer: **POWER-GENEX Ltd.**
99, Eunbong-ro, Namdong-Gu
Incheon 21639
Korea, Republic of

Additional manufacturing locations:

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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

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:

KR/KTL/ExTR21.0033/00

Quality Assessment Report:

KR/KTL/QAR11.0002/06

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

Smart Positioner, ASD-7 series, is made of aluminium alloy(ALDC12.1) or stainless steel(SUS316) and controls the valve stroke in responsive to an input signal using (4-20) mA DC. In products operation minimum supplying current, the standard type positioner is 3.6 mA but maximum ampere of input signal should be 24 mA or under. In case, there is feedback option in ASD-7 series, separated power must be supplied to feedback signal, and supplying voltage must be (10-30) V and not exceed into maximum 30 V.
The equipment provides a degree of protection IP66 in accordance with IEC 60529 and IEC 60079-0. A certified cable entry device with IP66 should be used.

2 conduit/cable entries: 1/2 NPT or M20 x P1.5
Air connection: 1/4 NPT, 1/4 PT

Ambient temperature
-40 °C to +70 °C (T6 or T80 °C) / +80 °C (T5 or T95 °C)

Electrical data
Input signal: DC (4~20) mA and 6.8 V@20 mA
Feedback signal: DC (4~20) mA and (12-30) V

Model Configuration
ASD-7(a)(b)(c)-F(d)(e)(f)(g)(h)(i)(j)(k)
(a, Body material): 0(Aluminium), 1(SUS316)
(b, Actuator type): 0(Linear), 1(Rotary)
(c, Feedback type): 0(Linkage), 1(Linkage-less), 2(Remote)

(d, Feedback size):	Linkage	Linear (ASD-7*00)	B(Stroke 10-60 mm) C(Stroke 10-120 mm)
		Rotary (ASD-7*10)	F(Fork lever) N(NAMUR shaft)
	Linkage-less	Linear (ASD-7*01)	B(Stroke 10-120 mm)
		Rotary (ASD-7*11)	6(M6 Connector) 8(M8 Connector)

(e, Guage): 1(6 bar, 90 psi), 2(10 bar, 150 psi)
(f, Options): N(None), O(Position transmitter), A(Advanced diagnostics)
(g, Limit switches): N(Noe), L(2 x S/W switch - Alarm limit), S(2 x Micro switches - SPDT), P(2 x P&F sensors)
(h, Communication): N(None), H(Hart), P(Profibus PA), F(Foundation Fieldbus)
(i, Connetion Threads): 3(PT1/4 – NPT1/2), 4(NPT1/4 – NPT1/2), 5(PT1/4 – M20xP1.5), 6(NPT1/4 – M20xP1.5)
(j, Mounting Bracket): N(None), L(Linear), R(Rotary)
(k, Remote cable for ASD-7**2* series): 3, 5, 10, 20 ,30 (meters)

SPECIFIC CONDITIONS OF USE: YES as shown below:
- Special fasteners with at least 500 N/mm2 shall be used.

- For details on flameproof joints, the manufacturer shall be contacted.
- WARNING - POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS.
  (For enclosure covered with a non-conductive material, propagating brush discharges shall be avoided.)
- Cable and cable glands suitable for at least 90 °C shall be used.