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 FTZU 15.0027X	Issue No: 1	Certificate history:
Status:	**Current**	Page 1 of 4	Issue No. 1 (2017-01-30) Issue No. 0 (2015-09-08)
Date of Issue:	**2017-01-30**		

Applicant:

DELTA CONTROLS LTD
Riverside Business Park
Dogflud Way
Farnham
Surrey
GU9 7SS
United Kingdom

Equipment:

Pressure Transmitter type DPC-2000ALW/XX, Differential Pressure Transmitters type DPR-2000ALW/XX, DPR-2200ALW/XX, DPR-2000GALW/XX, DPR-2000ALW/LXX, DPR-2200ALW/LXX, Level Probe type DPR-2000YALW, Level Transmitter type DPC-2000ALW/LXX

Optional accessory:

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

Marking:

Ex ia IIC T4/T5 Ga/Gb
Ex ia IIB T4/T5 Ga/Gb (version with PTFE-shilelded cable)
Ex ia I Ma (version with enclosure ss316)
Ex ia IIIC T105°C Da

Approved for issue on behalf of the IECEx Certification Body: DIpl. Ing. Lukáš Martinák

Position: Head of the Certification Body

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:

Fyzikalne technicky zkusebni ustav
(Physical -Technical Testing Institute)
Pikartska 7, 71607 Ostrava - Radvanice
Czech Republic

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Manufacturer:	**DELTA CONTROLS LTD** Riverside Business Park Dogflud Way Farnham Surrey GU9 7SS **United Kingdom**	

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 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition:6.0	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:

CZ/FTZU/ExTR15.0027/00 CZ/FTZU/ExTR15.0027/01

Quality Assessment Report:

GB/BAS/QAR06.0033/06 GB/BAS/QAR06.0033/07

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Pressure Transmitter type DPC-2000ALW/XX, Differential Pressure Transmitters type DPR-2000ALW/XX, DPR-2200ALW/XX, DPR-2000GALW/XX, DPR-2000ALW/LXX, DPR-2200ALW/LXX, Level Probe type DPR-2000YALW, Level Transmitter type DPC-2000ALW/LXX are designed to convert process pressure measurements into a 4 to 20 mA current signal. The apparatus comprises a sensor, several printed circuit boards and liquid crystal display all housed in a light alloy enclosure or stainless steel enclosure. One of the housing cover contains a window. External connections are made via an integral terminal block. In version with a sensor placed on a cable, in the transmitter's type designation before a symbol of process connection is placed letter L e.g. DPC-2000ALW/LXX.
The Transmitters in housing with light alloy and stainless steel can be used in gas, and combustible dust atmospheres in Group II and III, but only with stainless steel housing in Group I applications.

Intrinsically safe input power supply parameters:
Linear power supply output characteristic:
Ui = 30 V; Ii = 0,1 A; Pi = 0,75 W; temperature class T5
Trapezoidal power supply output characteristic:
Ui = 24 V; Ii = 50 mA; Pi = 0,7 W; temperature class T5
Rectangular power supply output characteristic:
Ui = 24 V; Ii =25mA, Pi = 0,6 W; temperature class T5
Ui = 24 V; Ii =50mA, Pi = 1,2 W; temperature class T4
Intrinsically safe parameters
Ci = 2,5 nF; Li = 18 µH,

Range of permissible ambient temperature : Ta = - 40°C to +80°C

CONDITIONS OF CERTIFICATION: YES as shown below:

Versions of transmitter with surge arrester marked on plate „SA", do not meet the requirements of Section 10.3 of the standard EN 60079-11:2012 (500Vrms). This must be taken into account when installing the equipment.

Under certain extreme circumstances in dust explosive atmospheres, the device with painting of aluminum enclosure and with plastic tables and with elements of diaphragm seals covered by PTFE may store an ignition-capable level of electrostatic charge. The device shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge

If the diaphragm seal contains titan parts, it must be protected against mechanical drops.

Galvanically separated part of apparatus placed into measuring head is electrically connected with mass of enclosure. It should be taken into account when installing the apparatus with remote measuring head on cable.

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

Added new version of main PCB, AD PCB and connection PCB
Measuring heads are compounded by casting compound
Added the ability to use sprayed layer of PTFE
Added the ability to use layer of PTFE thickness max. 0.15mm covering the wetted surfaces of diaphragm seals.
New version of marking label.
There are minor change in used electrical components and mechanical parts.
Galvanically separated part of apparatus placed into measuring head is electrically connected with mass of enclosure. There is no influence to current level of intrinsic safety.
Temperature class is changed to T4/T5