(1) EU-TYPE EXAMINATION CERTIFICATE

(2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere - **Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number:

TÜV 16 ATEX 7983 X

Issue: 02

(4) Equipment: **Pressure transmitter**

Model name: PDS Series

(5) Manufacturer: **Chongqing Chuanyi Automation Co., Ltd, Measurement & Control Technology Branch**

(6) Address: **No.61 Middle Section of Huangshan Avenue Dazhulin Street, Liangjiang New District Chongqing 401121 P.R. China**

(7) This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 21 of the Council Directive 2014/34/EU of 26th February 2014, certifies this product which has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmosphere, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report GC / Ex 7983.02 / 16.

(9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN IEC 60079-0:2018 **EN 60079-1:2014** **EN 60079-11:2012**
EN 60079-26:2015

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.

(12) The marking of the equipment shall include the following:

II 1 G Ex ia IIC T4 Ga or
II 1/2 G Ex db IIC T6…T4 Ga/Gb

Cologne, 2026-06-09

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz
Klauspeter Graffi

This EU-Type Examination Certificate without signature and stamp shall not be valid and may be circulated only without alteration.
Extracts or alterations are subject to approval by Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH.
Am Grauen Stein • 51105 Köln • Tel. +49 (0) 221 806-0 • Fax. + 49 (0) 221 806 114

(13) Annex to
(14) # EU-Type Examination Certificate

TÜV 16 ATEX 7983 X

Issue: 02

(15) Description of Equipment

Equipment and type:

Pressure transmitter
Model name: PDS Series
(PDS803, PDS805, PDS813, PDS843, PDS863, PDS873, PDS879 and PDS883)

General product information:

PDS series pressure transmitter comprises a complete range of instruments for measuring gauge, differential and absolute pressure. The function of the pressure transmitter is converting the input pressure signal into a standardized analog output current signal of 4-20 mA. Pressure transmitter is a fixed installed apparatus and the enclosure is made of aluminium alloy ADC12 or stainless steel JIS G5121-2003 SCS14, including a glass window cover and a plastic key cover.

Electronic circuits of PDS pressure transmitter comprise terminal board(anti-surge terminal board), main board, display board and acquisition board. Four PCB boards are installed in the aluminium alloy or stainless steel enclosure with IP67 rating, and the terminal board and acquisition broad are encapsulated completely by two component addition silicone rubber WR7306.
The terminal board has two different versions, one for standard version, and other one is lighting protection version.

Intended use:
PDS series pressure transmitter are designed and constructed with type ia or type db for different application purpose.
When it is used with type “ia“, PDS series pressure transmitter is powered by a certified safety barrier with same EPL.
When it is used with type “db“, a flameproof enclosure is provided for intended purpose, and the pressure transmitter will be installed into EPL Ga area and across to EPL Gb in accordance with IEC/EN 60079-26. ATEX and IECEx certified NPT1/2” or M20x1.5 entry devices(made by metallic materials) to be used on the flameproof enclosure of PDS pressure transmitter.

Note:
The same flameproof enclosure to be used even if the PDS pressure transmitter with type of protection “ia”, and only difference is the ATEX and IECEx certified cable entry devices and blind plugs are made of non-metallic materials in this case.

Refer to instruction for detailed information of model designation.

Details of Change:

The name and address of the manufacturer have been updated to:
Chongqing Chuanyi Automation Co., Ltd, Measurement & Control Technology Branch
No.61 Middle Section of Huangshan Avenue Dazhulin Street, Liangjiang New District Chongqing 401121 P.R. China

This EU-Type Examination Certificate without signature and stamp shall not be valid and may be circulated only without alteration.
Extracts or alterations are subject to approval by Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH.
Am Grauen Stein • 51105 Köln • Tel. +49 (0) 221 806-0 • Fax. + 49 (0) 221 806 114

www.tuv.com

TÜVRheinland®
Precisely Right.

TÜV 16 ATEX 7983 X

Issue: 02

Technical data:

Electrical data
Intrinsically safe parameters:
Ui=28Vdc
Ii=100mA
Pi=0.7W
Ci=40nF
Li=0.7mH
Rated voltage: +28V DC(equipment to be used with type of protection “db“)

Environmental data
The pressure transmitter PDS series to be used with the following temperature parameters:

Process connection temperature range*	Ambient temperature range Ta	Temperature class	Remark
-40°C to +70°C	-40°C to +70°C	T6	For type “db” application only
-40°C to +80°C	-40°C to +80°C	T5	
-40°C to +120°C	-40°C to +80°C	T4	For both type “db” and type “ia” application

* The actual maximum medium temperature range is -90°C~+400°C, and the temperature of process connection shall not exceed -40°C to +120°C by field installation via end user according to the approved instruction.

Medium temperature:
'"-40°C~+120°C" without remote flange module
'"-90°C~+400°C" with remote flange module

IP Rating: IP67

(16) Test report No.: GC / Ex 7983.02 / 16

(17) Special Conditions for safe use

1. When the equipment to be used with type of protection “ia“, the equipment shall be powered by an intrinsically safe associated apparatus with same EPL as a minimum, and the intrinsically safe parameters are stated in the instruction shall be observed.
2. Only ATEX/IECEx certified cable glands and blanking elements with suitable protection level can be used. Installation processes and suitable cable spec should be followed according to the manufacturer’s documents.
3. The cable entry point and the branching point of conductor is 81.8°C and 86.9°C respectively when the equipment operated under medium temperature does not exceed +80°C. The cable entry point and the branching point of conductor is 89.8°C and 94.9°C respectively when the equipment operated under medium temperature exceed +80°C (between +80°C to +120°C). End user need to choose the proper cable and cable gland for intended use accordingly.

This EU-Type Examination Certificate without signature and stamp shall not be valid and may be circulated only without alteration.
Extracts or alterations are subject to approval by Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH.
Am Grauen Stein • 51105 Köln • Tel. +49 (0) 221 806-0 • Fax. + 49 (0) 221 806 114

www.tuv.com

TÜVRheinland®
Precisely Right.

TÜV 16 ATEX 7983 X

Issue: 02

4 When some pressure transmitters used with medium temperature range “-90°C~+400°C“ (with remote flange module), the correct installation method should be observed in accordance with the instruction so that the temperature at the process connection does not exceed +120°C.

5 It is not allowed to disassemble the measuring head module to avoid the sealed silicone oil and fluorocarbon oil lost, and this action can be impacting the boundary (partition walls) from EPL Ga to EPL Gb, and it will be result in invaliding the type of protection “db“.

6 For safety, the work conditions, containing ambient temperature, medium temperature and medium pressure must be identified for different models under different application.

Process connection temperature range*	Ambient temperature range Ta	Temperature class	Remark
-40°C to +70°C	-40°C to +70°C	T6	For type “db” application only
-40°C to +80°C	-40°C to +80°C	T5	
-40°C to +120°C	-40°C to +80°C	T4	For both type “db” and type “ia” application

*The actual maximum medium temperature range is -90°C~+400°C, and the temperature of process
connection shall not exceed -40°C to +120°C by field installation via end user according to the approved instruction.

7 External earthing should be fixed before use in accordance with the instruction.

8 WARNING – DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT.

9 Do not access the plastic key assembly when an explosive atmosphere is present, and the surface cleaning of equipment with damp cloth only. For minimize the risk form electrostatic charge, the equipment is intended use in the specified humidity conditions in the instruction.

10 Additional method should be taken to void an ignition hazard due to impact or friction when the equipment to be used in Zone 0 with an aluminium alloy enclosure.

(18) Essential Health and Safety Requirements

The Essential Health and Safety Requirements are covered by the standards listed at item 9.

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz
Klauspeter Graffi

Cologne, 2026-06-09

This EU-Type Examination Certificate without signature and stamp shall not be valid and may be circulated only without alteration.
Extracts or alterations are subject to approval by Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH.
Am Grauen Stein • 51105 Köln • Tel. +49 (0) 221 806-0 • Fax. + 49 (0) 221 806 114

www.tuv.com

TÜVRheinland®
Precisely Right.