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 EPS 12.0031X**	Page 1 of 5	Certificate history:
Status:	**Current**	Issue No: 5	Issue 4 (2020-11-11) Issue 3 (2019-01-08) Issue 2 (2016-01-21) Issue 1 (2015-04-14) Issue 0 (2012-11-12)
Date of Issue:	2021-04-29		
Applicant:	**PULS GmbH** Elektrastr. 6 81925 München **Germany**		
Equipment:	**Power Supply (built-in): QS3.241-A1; QS5.241-A1; QS5.DNET-A1; QS10.121-A1; QS10.241-A1; QS10.301-A1; QS10.481-A1; QS10.DNET-A1; QS20.241-A1; QS20.244-A1; QS20.361-A1; QS20.481-A1**		
Optional accessory:	N/A		
Type of Protection:	**ec nC**		
Marking:	Ex ec nC IIC T3 Gc Ex ec nC IIC T4 Gc T3: QS10.481-A1; QS20.241-A1; QS20.361-A1; QS20.481-A1 T4: QS3.241-A1; QS5.241-A1; QS5.DNET-A1; QS10.121-A1; QS10.241-A1; QS10.301-A1; QS10.DNET-A1; QS20.244-A1		

Approved for issue on behalf of the IECEx Certification Body:

Holger Schaffer

Position:

Certification Manager

Signature:
(for printed version)

Date:

2021-04-29

ZERTIFIZIERUNGSSTELLE BUREAU VERITAS 1828 Bureau Veritas CPS Germany GmbH

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:

Bureau Veritas Consumer Products Services Germany GmbH
Businesspark A96
86842 Türkheim
Germany

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Manufacturer: **PULS GmbH**
Elektrastr. 6
81925 München
Germany

Additional manufacturing locations: **PULS Investicni s.r.o.**
Prazska 5639
43001 Chomutov
Czech Republic

PULS Electronics (Suzhou C) Co., Ltd
No. 1 Rui-en Lane Xingpu Road
Suzhou Industrial Park, 21512 Suzhou City
Jiang Su Province
China

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 Edition:7.0 — Explosive atmospheres - Part 0: Equipment - General requirements

IEC 60079-15:2017 Edition:5.0 — Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

IEC 60079-7:2017 Edition:5.1 — Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

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:

DE/EPS/ExTR12.0003/05

Quality Assessment Report:

DE/EPS/QAR12.0010/14

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

The QS-Series is a range of AC/DC power supplies, which is designed for installation in an enclosure or cabinet and is intended for the general use such as in industrial control, office, communication, and instrumentation equipment.

The PCBs are covered by a conformal coating. The coating material complies with IEC / EN 60664-3 (classification: type 2, solid insulation) and/or with UL746E (classification: conformal coating). Material used: Lackwerke Peters GmbH, type PS1306 N-FLZ; minimum thickness must be obtained. Alternate material with equivalent ratings may be used without additional test.

Refer to "Electrical data (continued)" for electrical rating.

SPECIFIC CONDITIONS OF USE: YES as shown below:
The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1.

The equipment shall be installed in an enclosure that provides a minimum ingress protection of IP 54 in accordance with IEC 60079-0.

The equipment was tested for the standard operating conditions only (special operating conditions are allowed in non-hazardous areas only):
- The equipment shall be used in the standard mounting orientation only (input terminal on bottom / output terminal on top)
- The equipment shall be operated at max. +60 °C ambient temperature.
- The equipment shall be operated at the nominal a.c. input voltage range only (no d.c. input).

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Equipment (continued):

Electrical Data:

QS3.241-A1
Input:
100-240 Vac | 1,8-1,0 A | 50-60 Hz
Output:
24-28 Vdc | 3,4-3,0 A (below +60 °C)

QS5.241-A1
Input:
100-240 Vac | 1,4-0,65 A | 50-60 Hz
Output:
24-28 Vdc | 5,0-4,5 A (below +60 °C)

QS5.DNET-A1
Input:
100-240 Vac | 1,1-0,5 A | 50-60 Hz
Output:
24 Vdc | 3,8 A (below +60 °C)

QS10.121-A1
Input:
100-240 Vac | 2,1-0,9 A | 50-60 Hz
Output:
12-15 Vdc | 15,0-12,0 A (below +60 °C

QS10.241-A1
Input:
100-240 Vac | 2,8-1,2 A | 50-60 Hz
Output:
24-28 Vdc | 10,0-9,0 A (below +60 °C)

QS10.301-A1
Input:
100-240 Vac | 2,8-1,2 A | 50-60 Hz
Output:
28-32 Vdc | 8,6-7,5 A (below +60 °C)

QS10.481-A1
Input:
100-240 Vac | 2,8-1,2 A | 50-60 Hz
Output:
48-56 Vdc | 5,0-4,3 A (below +60 °C)

QS10.DNET-A1
Input:
100-240 Vac | 2,3-1,0 A | 50-60 Hz
Output:
24-24,5 Vdc; 8,0 A (below +60 °C)

QS20.241-A1
Input:
100-240 Vac | 5,4-2,4 A | 50-60 Hz
Output:
24-28 Vdc | 20,0-17,1 A (below +60 °C)

QS20.244-A1
Input:
200-240 Vac | 4,8A | 50-60Hz
Output:
24-28 Vdc | 20,0-17,1 A (below +60 °C)

QS20.361-A1
Input:
100-240 Vac | 5,4-2,4 A | 50-60 Hz
Output:
36-42 Vdc | 13,3-11,4 A (below +60 °C)

QS20.481-A1
Input:
100-240 Vac | 5,4-2,4 A | 50-60 Hz
Output:
48-55 Vdc | 10,0-8,7 A (below +60 °C)

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Addition of two alternative manufacturing locations. Minor editorial changes, not safety relevant.

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