



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 EPS 12.0031X	Issue No: 2	<u>Certificate history:</u>
Status:	Current	Page 1 of 4	Issue No. 2 (2016-01-21)
Date of Issue:	2016-01-21		Issue No. 1 (2015-04-14)
			Issue No. 0 (2012-11-12)
Applicant:	PULS GmbH Arabellastr. 15 81925 München Germany		
Electrical Apparatus:	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:			
Type of Protection:	nA nC		
Marking:	Ex nA nC IIC T3 Gc / Ex nA nC IIC T4 Gc		

Approved for issue on behalf of the IECEx
Certification Body:

Dieter Zitzmann

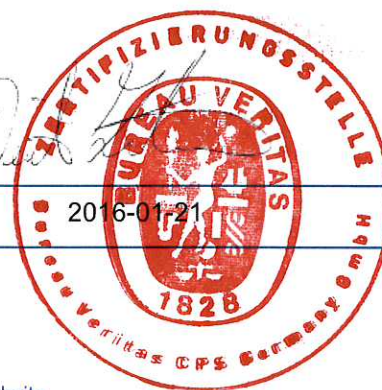
Position:

Certification Manager

Signature:
(for printed version)

Date:

2016-01-21



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](http://www.iecex.com).

Certificate issued by:

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





IECEX Certificate of Conformity

Certificate No: IECEx EPS 12.0031X

Issue No: 2

Date of Issue: 2016-01-21

Page 2 of 4

Manufacturer: PULS Investicni s.r.o.
Prazska 5639
43001 Chomutov
Czech Republic

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 Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-15 : 2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition:4

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:

DE/EPS/ExTR12.0003/01

DE/EPS/ExTR12.0003/02

Quality Assessment Report:

DE/EPS/QAR12.0010/02



IECEX Certificate of Conformity

Certificate No: IECEx EPS 12.0031X

Issue No: 2

Date of Issue: 2016-01-21

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

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

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.

CONDITIONS OF CERTIFICATION: YES as shown below:

The power supply must be installed in an IP54 enclosure or cabinet in the final installation. The enclosure / cabinet must comply with the requirements of IEC / EN 60079-15:2010.



IECEX Certificate of Conformity

Certificate No: IECEx EPS 12.0031X

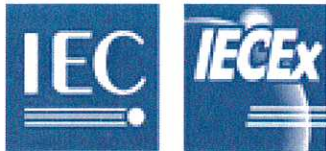
Issue No: 2

Date of Issue: 2016-01-21

Page 4 of 4

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

Minor product modification



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 EPS 12.0032X	Issue No: 2	<u>Certificate history:</u> Issue No. 2 (2016-01-21) Issue No. 1 (2014-01-14) Issue No. 0 (2012-11-12)
Status:	Current	Page 1 of 4	
Date of Issue:	2016-01-21		
Applicant:	PULS GmbH Arabellastr. 15 81925 München Germany		
Electrical Apparatus:	MLY02.100, MLY10.241, YR80.241, YR40.241, YR2.DIODE, YRM2.DIODE, YR40.242, YR40.245, YR40.482, YR80.242		
Optional accessory:	(all models optional with suffix "-C1")		
Type of Protection:	nA / nA nC		
Marking:	Ex nA IIC T4 Gc / Ex nA nC IIC T4 Gc		

Approved for issue on behalf of the IECEx
Certification Body:

Dieter Zitzmann

Position:

Certification Manager

Signature:
(for printed version)

Date:

2016-01-21



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](http://www.iecex.com).

Certificate issued by:

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





IECEX Certificate of Conformity

Certificate No: IECEx EPS 12.0032X

Issue No: 2

Date of Issue: 2016-01-21

Page 2 of 4

Manufacturer: PULS GmbH
Arabellastr. 15
81925 München
Germany

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 Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-15 : 2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition:4

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:

DE/EPS/ExTR12.0005/00

DE/EPS/ExTR12.0005/01

DE/EPS/ExTR12.0005/02

Quality Assessment Report:

DE/EPS/QAR12.0010/00



IECEX Certificate of Conformity

Certificate No: IECEx EPS 12.0032X

Issue No: 2

Date of Issue: 2016-01-21

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

MLY02.100, MLY10.241, YR2.DIODE, YRM2.DIODE, YR40.241, YR80.241, YR40.242, YR40.245, YR40.482, YR80.242 (all models optional with suffix "-C1")

Optional suffix "-C1" stands for coating of the printed circuit board; no safety relevance.

The devices are redundancy modules for parallel connection and isolation of the outputs of two power supplies. If one power supply fails, the second power supply provides the required power to the system.

CONDITIONS OF CERTIFICATION: YES as shown below:

The equipment must be installed in an IP54 enclosure or cabinet in the final installation. The enclosure / cabinet must comply with the requirements of IEC 60079-15 - Ed. 4.



IECEX Certificate of Conformity

Certificate No: IECEx EPS 12.0032X

Issue No: 2

Date of Issue: 2016-01-21

Page 4 of 4

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

Minor product modification



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 EPS 13.0016X Issue No: 1 Certificate history:
Status: Current Page 1 of 4 Issue No. 1 (2016-01-21)
Date of Issue: 2016-01-21 Issue No. 0 (2013-07-10)
Applicant: PULS GmbH
Arabellastr. 15
81925 München
Germany
Electrical Apparatus: CPS20.241, CPS20.121, CPS20.361, CPS20.481, CPS20.241-D1,
CPS20.481-D1, SLA3.100 (all models optional with suffix "-C1")
Optional accessory:
Type of Protection: nA / nA nC
Marking:
Ex nA nC IIC T3 Gc (CPS20...)
Ex nA IIC T3 Gc (SLA3.100)

Approved for issue on behalf of the IECEx
Certification Body:

Dieter Zitzmann

Position:

Certification Department

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:

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





IECEX Certificate of Conformity

Certificate No: IECEx EPS 13.0016X

Issue No: 1

Date of Issue: 2016-01-21

Page 2 of 4

Manufacturer: PULS GmbH
Arabellastraße 15
81925 München
Germany

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 Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-15 : 2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition:4

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:

DE/EPS/ExTR13.0011/00 DE/EPS/ExTR13.0011/01

Quality Assessment Report:

DE/EPS/QAR12.0010/00



IECEX Certificate of Conformity

Certificate No: IECEx EPS 13.0016X

Issue No: 1

Date of Issue: 2016-01-21

Page 3 of 4

Schedule

EQUIPMENT:

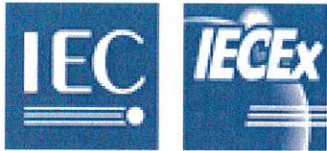
Equipment and systems covered by this certificate are as follows:

CPS20.241, CPS20.121, CPS20.361, CPS20.481, CPS20.241-D1, CPS20.481-D1, SLA3.100

(all models optional with suffix "-C1")

CONDITIONS OF CERTIFICATION: YES as shown below:

The equipment must be built into an enclosure or cabinet with min. IP54.



IECEX Certificate of Conformity

Certificate No: IECEx EPS 13.0016X

Issue No: 1

Date of Issue: 2016-01-21

Page 4 of 4

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

Minor product modification



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 EPS 14.0001X	Issue No: 1	Certificate history: Issue No. 1 (2015-12-08) Issue No. 0 (2014-01-22)
Status:	Current	Page 1 of 4	
Date of Issue:	2015-12-08		
Applicant:	PULS GmbH Arabellastraße 15 81925 München Germany		
Electrical Apparatus:	CD5 power supply series		
Optional accessory:			
Type of Protection:	Ex nA nC IIC T4 Gc		
Marking:	Ex nA nC IIC T4 Gc -25°C - +70°C (see attachment)		

Approved for issue on behalf of the IECEx
Certification Body:

Dieter Zitzmann

Position:

Manager Certification

Signature:
(for printed version)

Date:

2015-12-08



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](http://www.iecex.com).

Certificate issued by:

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





IECEx Certificate of Conformity

Certificate No: IECEx EPS 14.0001X

Issue No: 1

Date of Issue: 2015-12-08

Page 2 of 4

Manufacturer: PULS GmbH
Arabellastraße 15
81925 München
Germany

Additional Manufacturing
location(s):

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 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 Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-15 : 2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition:4

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:

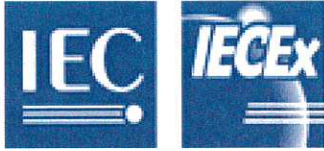
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

DE/EPS/ExTR14.0001/01

Quality Assessment Report:

DE/EPS/QAR12.0010/03



IECEx Certificate of Conformity

Certificate No: IECEx EPS 14.0001X

Issue No: 1

Date of Issue: 2015-12-08

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

CD5 power supply series

CD5.241, CD5.241-S1, CD5.241-L1, CD5.121, CD5.242, CD5.243

(see attachment)

CONDITIONS OF CERTIFICATION: YES as shown below:

- The equipment shall be installed in an enclosure that provides a degree of protection not less than IP 54 in accordance with IEC 60079-15.
- Derating conditions must be considered for high ambient temperatures and non-standard mounting orientations.



IECEX Certificate of Conformity

Certificate No: IECEx EPS 14.0001X

Issue No: 1

Date of Issue: 2015-12-08

Page 4 of 4

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

- new models added: CD5.121, CD5.242, CD5.243
- change of ratings for initially tested models: mounting orientations, de-ratings at high ambient temperatures
- factory location added

Annex:

[IECEX EPS 14.0001X - Annex.pdf](#)



Annex to Certificate
IECEx EPS 14.0001X



CD5.121:

Input: DC 24V (-25%/ +35%), 5.6A

Output:

DC 12-15V, 9.6-7.7A (below +45°C)

DC 12-15V, 8.0-6.4A (at +60°C)

DC 12-15V, 6.0-4.8A (at +70°C)

Derate linearly between +45°C and +70°C

CD5.241:

Input: DC 24V (-25%/ +35%), 7.0A

Output: DC 24-28V, 6.0-5.1A (below +45°C)

DC 24-28V, 5.0-4.3A (at +60°C)

DC 24-28V, 3.8-3.2A (at +70°C)

Derate linearly between +45°C and +70°C

CD5.241-L1:

Input: DC 24V (-40%/ +35%), 5.5A

Output: DC 24V, 3.8A (max. +70°C)

CD5.241-S1:

Input: DC 24V (-25%/ +35%), 7.0A

Output:

DC 24-28V, 6.0-5.1A (below +45°C)

DC 24-28V, 5.0-4.3A (at +60°C)

DC 24-28V, 3.8-3.2A (at +70°C)

Derate linearly between + 45°C and +70°C

CD5.242:

Input: DC 48V (±25%), 3.5A

Output:

DC 24-28V, 6.0-5.1A (below +45°C)

DC 24-28V, 5.0-4.3A (at +60°C)

DC 24-28V, 3.8-3.2A (at +70°C)

Derate linearly between +45°C and +70°C



Annex to Certificate
IECEx EPS 14.0001X



CD5.243:

Input: DC 12V (-10% / +35%), 12A

Output:

DC 24-28V, 4.8-4.1A (below +45°C)

DC 24-28V, 4.0-3.4A (at +60°C)

DC 24-28V, 3.0-2.6A (at +70°C)

Input: DC 12V (-30%), 12A

Output:

DC 24-28V, 4.0-3.4A (below +45°C)

DC 24-28V, 3.2-2.7A (at +60°C)

DC 24-28V, 2.4-2.1A (at +70°C)

Derate linearly between +45°C and +70°C

Mounting orientations:

	Standard	90° clockwise (cw) rotated	90° counter clockwise (ccw) rotated	Upside down	Table top
CD5.121	96W at +60°C	86.4W at +60°C	86.4W at +60°C	86.4W at +60°C	86.4W at +60°C
CD5.241 CD5.241-S1	120W at +60°C	108W at +60°C	108W at +60°C	108W at +60°C	108W at +60°C
CD5.241-L1	91.2W at +60°C	91.2W at +60°C	91.2W at +60°C	91.2W at +60°C	91.2W at +60°C
CD5.242	120W at +60°C	108W at +60°C	108W at +60°C	108W at +60°C	108W at +60°C
CD5.243	96W at +60°C	76.8W at +60°C	76.8W at +60°C	76.8W at +60°C	76.8W at +60°C



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 EPS 14.0007X	Issue No: 1	Certificate history:
Status:	Current	Page 1 of 4	Issue No. 1 (2016-01-21) Issue No. 0 (2014-03-14)
Date of Issue:	2016-01-21		
Applicant:	PULS GmbH Arabellastr. 15, 81925 München, Germany Germany		
Electrical Apparatus:	QS40.241*, QS40.361*, QS40.481*, QS40.244-A1, QS40.484-A1		
Optional accessory:	(*optional with suffix "-C1")		
Type of Protection:	nA nC		
Marking:	QS40.241, QS40.244-A1, QS40.484-A1: Ex nA nC IIC T4 Gc QS40.361, QS40.481: Ex nA nC IIC T3 Gc		

Approved for issue on behalf of the IECEx
Certification Body:

Dieter Zitzmann

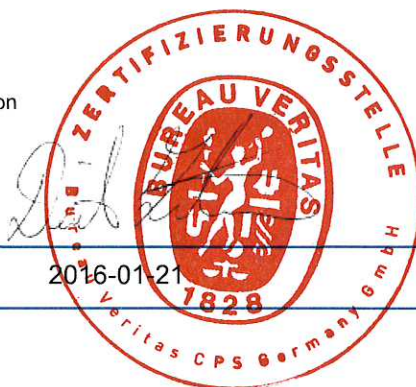
Position:

Manager Certification

Signature:
(for printed version)

Date:

2016-01-21

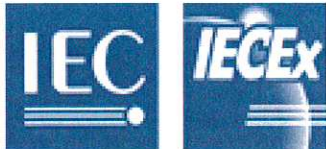


1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://OfficialIECEXWebsite).

Certificate issued by:

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





IECEx Certificate of Conformity

Certificate No: IECEx EPS 14.0007X Issue No: 1
Date of Issue: 2016-01-21 Page 2 of 4
Manufacturer: PULS GmbH
Arabellastr. 15, 81925 München, Germany
Germany

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 Explosive atmospheres - Part 0: General requirements
Edition:6.0
IEC 60079-15 : 2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition:4

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:

DE/EPS/ExTR14.0008/00 DE/EPS/ExTR14.0008/01

Quality Assessment Report:

DE/EPS/QAR12.0010/00



IECEX Certificate of Conformity

Certificate No: IECEx EPS 14.0007X

Issue No: 1

Date of Issue: 2016-01-21

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Power Supply series

QS40.241*, QS40.361*, QS40.481*, QS40.244-A1, QS40.484-A1

QS40.241, QS40.361, QS40.481 only: optional suffix "-C1" stands for coating of the printed circuit board; no safety relevance.

CONDITIONS OF CERTIFICATION: YES as shown below:

The equipment shall be installed in an enclosure that provides a degree of protection not less than IP 54 in accordance with IEC 60079-15. The equipment shall only be used in an area of not more than pollution degree 2, as defined in IEC 60664-1.



IECEx Certificate of Conformity

Certificate No:

IECEx EPS 14.0007X

Issue No: 1

Date of Issue:

2016-01-21

Page 4 of 4

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

Minor product change



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 EPS 15.0049X Issue No: 0 Certificate history:
Status: Current Page 1 of 3 Issue No. 0 (2015-10-19)
Date of Issue: 2015-10-19
Applicant: PULS GmbH
Arabellastraße 15
81925 München
Germany
Electrical Apparatus: DC-UPS
Optional accessory: Sensor board
Type of Protection: nA or nA nC
Marking:
Ex nA nC IIC T3 Gc
Ex nA nC IIC T4 Gc
Ex nA IIC T4 Gc

(depends on model, see Attachment)

Approved for issue on behalf of the IECEx
Certification Body:

Dieter Zitzmann

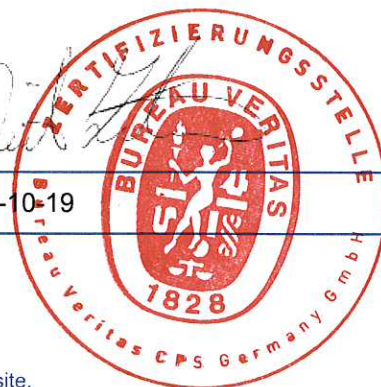
Position:

Certification Manager

Signature:
(for printed version)

Date:

2015-10-19



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](http://www.iecex.com).

Certificate issued by:

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





IECEx Certificate of Conformity

Certificate No: IECEx EPS 15.0049X

Issue No: 0

Date of Issue: 2015-10-19

Page 2 of 3

Manufacturer: PULS Investicni s.r.o.
Prazska 5639
43001 Chomutov
Czech Republic

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 Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-15 : 2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition:4

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:

DE/EPS/ExTR15.0045/00

Quality Assessment Report:

DE/EPS/QAR12.0010/03



IECEx Certificate of Conformity

Certificate No: IECEx EPS 15.0049X

Issue No: 0

Date of Issue: 2015-10-19

Page 3 of 3

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

DC-UPS (for use with external battery module):
UB10.241, UB10.242, UB10.245, UB20.241

DC-UPS (with integrated battery module):
UBC10.241, UBC10.241-N1

DC-UPS (with integrated capacitor module):
UC10.241, UC10.242

Battery modules:
UZK12.071, UZO12.07, UZK12.261, UZO12.26,
UZK24.071, UZO24.071, UZK24.121, UZO24.121

Sensor board (accessory):
UZS24.100

CONDITIONS OF CERTIFICATION: YES as shown below:

DC-UPS (for use with external battery module); UB10.241, UB10.242, UB10.245, UB20.241:
The equipment shall be installed in an enclosure that provides a degree of protection not less than IP 54 in accordance with IEC 60079-15.

DC-UPS (with integrated capacitor module); UC10.241, UC10.242:
The equipment shall be installed in an enclosure that provides a degree of protection not less than IP 54 in accordance with IEC 60079-15.

DC-UPS (with integrated battery module); UBC10.241, UBC10.241-N1:
The equipment shall be installed in an enclosure that provides a degree of protection not less than IP 54 in accordance with IEC 60079-15. Sufficient ventilation must be ensured in the final installation.

Battery modules; UZK12.071, UZO12.07, UZK12.261, UZO12.26, UZK24.071, UZO24.071, UZK24.121, UZO24.121: The equipment shall be installed in an enclosure that provides a degree of protection not less than IP 23 in accordance with IEC 60079-15. Sufficient ventilation must be ensured in the final installation.

All models:
Battery modules may be operated in any position, except upside down.
DIN-Rail modules shall be operated in standard orientation (terminals on top/bottom) only.

Annex:

Attachment to DEEPSExTR15.004500.pdf

Model	Ratings
UB10.241	Input: DC 24V (-20%/+25%), max. 17A Output in power supply mode: Input voltage - 0.3V, 15.0A (below +60°C) Input voltage - 0.3V, 11.3A (at +70°C) Output in battery mode: 22.3Vdc, 10A (below +60°C) 22.3Vdc, 7.5A (at +70°C) Short-term, up to 5s: 22.3Vdc, 15A (below +70°C) Derate linearly between +60°C and +70°C Battery: Use a 12V VRLA battery between 3.9 and 40Ah Ambient temperature range: -25°C to +70°C Ex-Code: Ex nA nC IIC T3 Gc
UB10.242	Input: DC 24V (-20%/+25%), max. 18A Output in power supply mode: Input voltage - 0.3V, 15.0A (max. +50°C) Output in battery mode: 22.3Vdc, 10A (max. +50°C) Short-term, up to 5s: 22.3Vdc, 15A Battery: Use a 12V VRLA battery between 17 and 40Ah Ambient temperature range: -25°C to +50°C Ex-Code: Ex nA nC IIC T3 Gc
UB10.245	Input: DC 24V (-20%/+25%), max. 17A Outputs in power supply mode: Max. 360W at +50°C or 180W at +70°C for both outputs Output 1: Input - 0.3V, 15A (below +50°C) Input - 0.3V, 10A (at +70°C) Output 2: 12V, 5A (below +50°C) 12V, 4A (at +70°C) Outputs in battery mode: Max. 240W at 50°C or 120W at 70°C for both outputs Output 1: 22.3V, 10A (below +50°C) 22.3V, 7.5A (at +70°C) Short-term, up to 5s: 22.3V, 15A (at +70°C) Output 2: 12V, 5A (below +50°C) 12V, 4A (at +70°C) Short-term, up to 5s: 12V, 5A (at +70°C) Derate linearly between +50°C and +70°C Battery: Use a 12V VRLA battery between 3.9 and 40Ah Ambient temperature range: -25°C to +70°C Ex-Code: Ex nA nC IIC T3 Gc

Model	Ratings
UBC10.241, UBC10.241-N1	Input: DC 24V (-20%/+25%), max. 17A Outputs in power supply mode: Input - 0.3V, 15A (max. +40°C) Outputs in battery mode: 22.3V, 10A (max. +40°C) Short-term, up to 5s: 22.3V, 15A Ambient temperature range: 0°C to +40°C Ex-Code: Ex nA nC IIC T3 Gc
UB20.241	Input: DC 24V (±25%), max. 28A Output in power supply mode: Input voltage - 0.15V, 25.0A (below +60°C) Input voltage - 0.15V, 18.8A (at +70°C) Short-term, up to 5s: 30.0A (at +70°C) Output in battery mode: Selectable: 22.5V, 24.0V, 25.0V or 26.0V Max. 20A or 468W (below +60°C) Max. 15A or 351W (at +70°C) Short-term, up to 4s: 50% current reserves Derate linearly between +60°C and +70°C Battery: Use a 24V VRLA battery module between 3.9 and 150Ah. Ambient temperature range: -40°C to +70°C Ex-Code: Ex nA nC IIC T4 Gc
UC10.241	Input: DC 24V (-20%/+25%), max. 17A Output in power supply mode: Input voltage - 0.3V, 15.0A (max. +60°C) Output in capacitor mode: 22.3Vdc, 15A (max. +60°C) Back-up time: Typ. 16.5s at 10A or 9.0s at 15A Ambient temperature range: -40°C to +60°C Ex-Code: Ex nA nC IIC T4 Gc
UC10.242	Input: DC 24V (-20%/+25%), max. 17A Output in power supply mode: Input voltage - 0.3V, 15.0A (max. +60°C) Output in capacitor mode: 22.3Vdc, 15A (max. +60°C) Back-up time: Typ. 33s at 10A or 18s at 15A Ambient temperature range: -40°C to +60°C Ex-Code: Ex nA nC IIC T4 Gc
UZK12.071, UZO12.07	Nominal battery voltage and capacity: 12Vdc, 7Ah Temperature ranges: For charging: -10°C to +40°C For discharging: -15°C to +50°C Ex-Code: Ex nA IIC T4 Gc

Model	Ratings
UZX12.261, UZO12.26	Nominal battery voltage and capacity: 12Vdc, 26Ah Temperature ranges: For charging: -15°C to +50°C For discharging: -20°C to +60°C Ex-Code: Ex nA IIC T4 Gc
UZX24.071, UZO24.071	Nominal battery voltage and capacity: 24Vdc, 7Ah Temperature ranges: For charging: -10°C to +40°C For discharging: -15°C to +50°C Ex-Code: Ex nA IIC T4 Gc
UZX24.121, UZO24.121	Nominal battery voltage and capacity: 24Vdc, 12Ah Temperature ranges: For charging: -10°C to +40°C For discharging: -15°C to +50°C Ex-Code: Ex nA IIC T4 Gc
UZX24.100	N/A (<i>accessory</i>)



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 EPS 15.0079X Issue No: 0 Certificate history:
Issue No. 0 (2015-12-08)

Status: Current Page 1 of 3

Date of Issue: 2015-12-08

Applicant: PULS GmbH
Arabellastraße 15
81925 München
Germany

Electrical Apparatus: CP10 power supply series
Optional accessory:

Type of Protection: Ex nA nC IIC T4 Gc

Marking: Ex nA nC IIC T4 Gc
(see Attachment for ratings)

Approved for issue on behalf of the IECEx
Certification Body:

Dieter Zitzmann

Position:

Certification Manager

Signature:
(for printed version)

Date:

2015-12-08

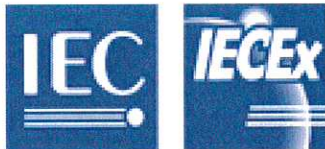


1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

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





IECEX Certificate of Conformity

Certificate No: IECEx EPS 15.0079X

Issue No: 0

Date of Issue: 2015-12-08

Page 2 of 3

Manufacturer: PULS GmbH
Arabellastraße 15
81925 München
Germany

Additional Manufacturing
location(s):

PULS Investicni s.r.o.
Pražská 5639
43001 Chomutov
Czech Republic

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 Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-15 : 2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition:4

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:

[DE/EPS/ExTR15.0077/00](#)

Quality Assessment Report:

[DE/EPS/QAR12.0010/03](#)



IECEx Certificate of Conformity

Certificate No: IECEx EPS 15.0079X

Issue No: 0

Date of Issue: 2015-12-08

Page 3 of 3

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

CP10.121, CP10.241, CP10.241-S1, CP10.242, CP10.361, CP10.481

(All models optional with suffix -C1 for conformal coated pc-boards)

CONDITIONS OF CERTIFICATION: YES as shown below:

- The equipment shall be installed in an enclosure that provides a degree of protection not less than IP 54 in accordance with IEC 60079-15.

- Ambient temperature range -25°C to +70°C. De-rating conditions for ambient temperatures above 45°C and for non-standard mounting orientations must be considered.

Annex:

[IECEx EPS 15.0079X - Annex.pdf](#)



Rating

CP10.121

Input:

AC 100-240V (-15%/+10%), 2,6-1,1A, 50-60Hz

DC 110-150V ($\pm 20\%$), 2,4-1,7A

Output:

DC 12-15V, 19,2-15,4A (below +45°C)

16,0-12,8A (at +60°C)

12,0-9,6A (at +70°C)

Derate linearly between +45°C and +70°C

Ambient temperature range: -25°C to +70°C

CP10.241

Input:

AC 100-240V (-15%/+10%), 3,3-1,4A, 50-60Hz

DC 110-150V ($\pm 20\%$), 3,0-2,2A

Output:

DC 24-28V, 12-10,3A (below +45°C)

10-8,6A (at +60°C)

7,5-6,5A (at +70°C)

Derate linearly between +45°C and +70°C

Ambient temperature range: -25°C to +70°C

CP10.241-S1

Input:

AC 100-240V (-15%/+10%), 3,3-1,4A, 50-60Hz

DC 110-150V ($\pm 20\%$), 3,0-2,2A

Output:

DC 24-28V, 12-10,3A (below +45°C)

10-8,6A (at +60°C)

7,5-6,5A (at +70°C)

Derate linearly between +45°C and +70°C

Ambient temperature range: -25°C to +70°C

CP10.242

Input:

AC 100-240V (-15%/+10%), 3,3-1,4A, 50-60Hz

DC 110-300V ($\pm 20\%$), 3,0-1,1A

Output:

DC 24-28V, 12-10,3A (below +45°C)

10-8,6A (at +60°C)

7,5-6,5A (at +70°C)

Derate linearly between +45°C and +70°C

Ambient temperature range: -25°C to +70°C

CP10.361

Input:

AC 100-240V (-15%/+10%), 3,3-1,4A, 50-60Hz

DC 110-150V ($\pm 20\%$), 3,0-2,2A

Output:



Annex to Certificate
IECEx EPS 15.0079X



DC 36-42V, 8,0-6,9A (below +45°C)
6,7-5,7A (at +60°C)
5,0-4,3A (at +70°C)
Derate linearly between +45°C and +70°C
Ambient temperature range: -25°C to +70°C

CP10.481

(The maximum output current varies depending on the supply voltage tolerances)

Input: AC 100-240V ($\pm 10\%$) 3,3-1,4A, 50-60Hz:

Output:

DC 48-56V, 6,0-5,2A (below +45°C)
5,4-4,6A (at +60°C)
4,0-3,4A (at +70°C)

Input: DC 110-150V (-15%/+20%), 3,0-2,2A

Output:

DC 48-56V, 6,0-5,2A (below +45°C)
5,4-4,6A (at +60°C)
4,0-3,4A (at +70°C)

Input: DC 110-150V ($\pm 20\%$), 3,0-2,2A

Output:

DC 48-56V, 6,0-5,2A (below +45°C)
5,0-4,3A (at +60°C)
3,8-3,2A (at +70°C)

Derate linearly between +45°C and +70°C
Ambient temperature range: -25°C to +70°C



Annex to Certificate
IECEX EPS 15.0079X



Mounting orientations:

Max. output power	Standard	90° clockwise (cw) rotated	90° counter clockwise (ccw) rotated	Upside down	Table top
CP10.121	192W at +60°C	108W at +60°C	108W at +60°C	132W at +60°C	108W at +60°C
CP10.241 CP10.242 CP10.241-S1	240W at +60°C	144W at +60°C	144W at +60°C	168W at +60°C	144W at +60°C
CP10.361	240W at +60°C	144W at +60°C	144W at +60°C	168W at +60°C	144W at +60°C
CP10.481	260W at +60°C	144W at +60°C	144W at +60°C	168W at +60°C	144W at +60°C