

(1) **Certificate of Conformity**

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres – Directive 2014/34/EU

(3) Certificate Number:

EPS 08 ATEX 1 142 X

Revision 5

(4) Equipment: Power Supply (built-in):
CD5.241, CD5.241-S1, CD5.241-L1, CD5.121, CD5.242, CD5.243

(5) Manufacturer: PULS GmbH

(6) Address: Elektrastr. 6
81925 München
Germany

(7) This equipment and any acceptable variation thereto are specified in the schedule to this Certificate of Conformity and the documents therein referred to.

(8) Bureau Veritas Consumer Products Services Germany GmbH certifies based on a voluntary assessment that this equipment 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 atmospheres, given in Annex II of the Directive 2014/34/EU. The examination and test results are recorded in the confidential documentation under the reference number 08TH0347.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018

EN 60079-7:2015 + A1:2018

EN 60079-15:2010

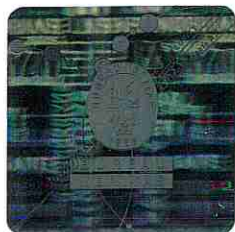
(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This Certificate of Conformity relates only to the design and the construction of the specified equipment in accordance with Directive 2014/34/EU. Further requirements of this Directive apply to the manufacture and supply of this equipment. Those requirements are not covered by this certificate.

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



II 3G Ex ec nC IIC T4 Gc



Certification department of explosion protection

H. Schaffer

Hamburg, 2020-11-11

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Certificates without signature and seal are void. This certificate is allowed to be distributed only if not modified. Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH. EPS 08 ATEX 1 142 X, Revision 5.

(13)

Annexe

(14) **Certificate of Conformity EPS 08 ATEX 1 142 X**

Revision 5

(15) Description of equipment:

The product is a DC/DC power supply intended for built-in use. The DC/DC converter is supplied with 12 / 24 / 48 Vdc and provides an isolated output with 24 Vdc.

The equipment is type of protection "ec"; type of protection "nC" was applied for the relays only.

All devices are designed for installation in an enclosure providing protection against electrical, mechanical and fire hazards and are intended for general use such as in industrial control, power distribution and instrumentation equipment.

CD5.241-S1: This model is identical to CD5.241, but is provided with quick-connect spring clamp terminals.
CD5.241-L1: This model is identical to CD5.241, but is provided with limited power for special purposes (NEC Class 2 power limitation).

Revision 1: Standard-update, all models were investigated according to the latest revision of standards (EN 60079-0:2009, EN 60079-15:2010). EPL „Gc“ was added to the marking.

Revision 2: Standard-update, all models were investigated according to the latest revision of standards (EN 60079-0:2012, EN 60079-15:2010). No modifications on the product.

Revision 3: New models added: CD5.121, CD5.242, CD5.243; Change of ratings for initially tested models: mounting orientations, de-ratings at high ambient temperatures; EN 60079-0/A11:2013 added

Revision 4: Type of protection changed from "nA" to "ec"; update to current edition of standards

Revision 5: Update of ATEX standards to current version. Minor editorial changes, not safety relevant.

Electrical data:

<p><u>CD5.121:</u> Input: DC 24 V^(-25%/ +35%) 5.6 A Output: DC 12-15 V 9.6-7.7 A (below +45 °C) DC 12-15 V 8.0-6.4 A (at +60 °C) DC 12-15 V 6.0-4.8 A (at +70 °C) Derate linearly between +45 °C and +70 °C</p>	<p><u>CD5.241:</u> Input: DC 24 V^(-25%/ +35%) 7.0 A Output: DC 24-28 V 6.0-5.1 A (below +45 °C) DC 24-28 V 5.0-4.3 A (at +60 °C) DC 24-28 V 3.8-3.2 A (at +70 °C) Derate linearly between +45 °C and +70 °C</p>
<p><u>CD5.241-L1:</u> Input: DC 24 V^(-40%/ +35%) 5.5 A Output: DC 24 V 3.8 A (max. +70 °C)</p>	<p><u>CD5.241-S1:</u> Input: DC 24 V^(-25%/ +35%) 7.0 A Output: DC 24-28 V 6.0-5.1 A (below +45 °C) DC 24-28 V 5.0-4.3 A (at +60 °C) DC 24-28 V 3.8-3.2 A (at +70 °C) Derate linearly between + 45 °C and +70 °C</p>



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<p>CD5.242: Input: DC 48 V ($\pm 25\%$) 3.5 A Output: DC 24-28 V 6.0-5.1 A (below +45 °C) DC 24-28 V 5.0-4.3 A (at +60 °C) DC 24-28 V 3.8-3.2 A (at +70 °C) Derate linearly between +45 °C and +70 °C</p>	<p>CD5.243: Input: DC 12 V (-10% / $+35\%$), 12 A Output: DC 24-28 V 4.8-4.1 A (below +45 °C) DC 24-28 V 4.0-3.4 A (at +60 °C) DC 24-28 V 3.0-2.6 A (at +70 °C) Input: DC 12 V (-30%) 12 A Output: DC 24-28 V 4.0-3.4 A (below +45 °C) DC 24-28 V 3.2-2.7 A (at +60 °C) DC 24-28 V 2.4-2.1 A (at +70 °C) Derate linearly between +45 °C and +70 °C</p>
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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

(16) Reference number: 08TH0347

(17) Schedule of Limitations:

- The equipment shall be installed in an enclosure that provides a minimum ingress protection of IP54 in accordance with EN 60079-0.
- The equipment shall only be used in an area of not more than pollution degree 2, as defined in EN 60664-1.
- Reduced output current conditions must be considered for high ambient temperatures and non-standard mounting orientations.



(18) Essential health and safety requirements:

Met by standards.



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