

(1) **Certificate of Conformity**

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

(3) Certificate Number:

EPS 15 ATEX 1 025 X

Revision 1

(4) **Equipment:** DC-UPS system: UB10.241, UB10.242, UB10.245, UB20.241, UBC10.241, UBC10.241-N1, UC10.241, UC10.242, UZK12.071, UZO12.07, UZK12.261, UZO12.26, UZK24.071, UZO24.071, UZK24.121, UZO24.121, UZK12.072, UZO12.072

(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 15TH0222.

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

EN 60079-0:2012 + A11:2013

EN 60079-15:2010

EN 60079-7:2015

(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 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 T3 Gc
II 3G Ex ec nC IIC T4 Gc
II 3G Ex ec IIC T4 Gc
(see Attachment No. 1)



Certification department of explosion protection

Nuernberg, 2017-09-26

Holger Schafner

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(13)

Annexe

(14) **Certificate of Conformity EPS 15 ATEX 1 025 X**

Revision 1

(15) Description of equipment:

The DC-UPS series includes DC-UPS control unit (for use with separate battery modules), battery modules (for use with control unit), DC-UPS with integrated battery, DC-UPS with integrated capacitor storage and sensor board for battery modules (accessory, UZS24.100).

Revision 1: new models UZK12.072 and UZK12.071 added; type of protection changed from "nA" to "ec"; testing of alternate components and construction

Electrical data:

See Attachment No. 1

(16) Reference number: 15TH0222

(17) Schedule of Limitations:

- 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 minimum ingress protection of IP 54 in accordance with EN 60079-0.

- DC-UPS (with integrated capacitor module); UC10.241, UC10.242: The equipment shall be installed in an enclosure that provides a minimum ingress protection of IP 54 in accordance with EN 60079-0.

- DC-UPS (with integrated battery module); UBC10.241, UBC10.241-N1: The equipment shall be installed in an enclosure that provides a minimum ingress protection of IP 54 in accordance with EN 60079-0. 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, UZK12.072, UZO12.072: The equipment shall be installed in an enclosure that provides a minimum ingress protection of IP 23 in accordance with EN 60079-0. Sufficient ventilation must be ensured in the final installation.

- The equipment shall only be used in an area of at least pollution degree 2, as defined in EN 60664-1.

- Installation orientation: 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.

- The battery modules UZKxx.yyy /UZOxx.yyy shall be connected and charged / discharged with the appropriate DC-UPS UBxx.yyy only.

(18) Essential health and safety requirements:

Met by standards.

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Attachment No. 1 for EPS 15 ATEX 1 025 X; Rev. 1

Model	Ratings
UB10.241	<p>Input: DC 24V (-20%/+25%), max. 17A</p> <p>Output in power supply mode: Input voltage - 0.3V, 15.0A (below +60°C) Input voltage - 0.3V, 11.3A (at +70°C)</p> <p>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</p> <p>Battery: Use a 12V VRLA battery between 3.9 and 40Ah</p> <p>Ambient temperature range: -25°C to +70°C</p> <p>Ex-Code: Ex ec nC IIC T3 Gc</p>
UB10.242	<p>Input: DC 24V (-20%/+25%), max. 18A</p> <p>Output in power supply mode: Input voltage - 0.3V, 15.0A (max. +50°C)</p> <p>Output in battery mode: 22.3Vdc, 10A (max. +50°C) Short-term, up to 5s: 22.3Vdc, 15A</p> <p>Battery: Use a 12V VRLA battery between 17 and 40Ah</p> <p>Ambient temperature range: -25°C to +50°C</p> <p>Ex-Code: Ex ec nC IIC T3 Gc</p>



**BUREAU
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Attachment No. 1 for EPS 15 ATEX 1 025 X; Rev. 1

Model	Ratings
UB10.245	<p>Input: DC 24V (-20%/+25%), max. 17A</p> <p>Outputs in power supply mode: Max. 360W at +50°C or 180W at +70°C for both outputs</p> <p>Output 1: Input - 0.3V, 15A (below +50°C) Input - 0.3V, 10A (at +70°C)</p> <p>Output 2: 12V, 5A (below +50°C) 12V, 4A (at +70°C)</p> <p>Outputs in battery mode: Max. 240W at 50°C or 120W at 70°C for both outputs</p> <p>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)</p> <p>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</p> <p>Battery: Use a 12V VRLA battery between 3.9 and 40Ah</p> <p>Ambient temperature range: -25°C to +70°C</p> <p>Ex-Code: Ex ec nC IIC T3 Gc</p>
UBC10.241, UBC10.241-N1	<p>Input: DC 24V (-20%/+25%), max. 17A</p> <p>Outputs in power supply mode: Input - 0.3V, 15A (max. +40°C)</p> <p>Outputs in battery mode: 22.3V, 10A (max. +40°C) Short-term, up to 5s: 22.3V, 15A</p> <p>Ambient temperature range: 0°C to +40°C</p> <p>Ex-Code: Ex ec nC IIC T3 Gc</p>
UB20.241	<p>Input: DC 24V (±25%), max. 28A</p> <p>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)</p> <p>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</p> <p>Battery: Use a 24V VRLA battery module between 3.9 and 150Ah.</p> <p>Ambient temperature range: -40°C to +70°C</p> <p>Ex-Code: Ex ec nC IIC T4 Gc</p>



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Attachment No. 1 for EPS 15 ATEX 1 025 X; Rev. 1

Model	Ratings
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 ec 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 ec 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 ec IIC T4 Gc
UZK12.261, 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 ec IIC T4 Gc
UZK24.071, 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 ec IIC T4 Gc
UZK24.121, 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 ec IIC T4 Gc
UZK12.072, UZO12.072	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 ec IIC T4 Gc
UZS24.100	N/A (accessory)