

# **Certificate of Compliance**

**Certificate:** 70039871

**Project:** 70039871

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Issued to: PULS GmbH Arabellastr. 15 Munich, 81925 GERMANY Attention: Mr. Matthias Geiselmann Master Contract: 182790

Date Issued: January 20, 2016

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.



Issued by:

Ron Wachowicz Ron Wachowicz

#### **PRODUCTS**

CLASS - C531801 - POWER SUPPLIES-For Hazardous Locations CLASS - C531881 - POWER SUPPLIES-For Hazardous Locations - Certified to U.S. Standards

For details related to rating, size, configuration, etc. reference should be made to the CSA Certification Record or the descriptive report.

#### Class I, Division 2, Groups A, B, C, and D;

#### **Uninterruptable Power Supplies:**

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 $+70^{\circ}C$ )	
	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)	
	De-rate linearly between +60°C and +70°C	



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	Battery: Use a 12V VRLA battery between 3.9 and 40Ah
	Ambient temperature range: $-25^{\circ}$ C to $+70^{\circ}$ C
	T-Code: T3
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, 10Å (max. +50°C)
	Short-term, up to 5s: 22.3Vdc, 15A
	Battery: Use a 12V VRLA battery between 17 and 40Ah
	Ambient temperature range: $-25^{\circ}C$ to $+50^{\circ}C$
	T-Code: T3
UB10.245	Input: DC 24V (-20%/+25%), max. 17A
00101210	Outputs in power supply mode:
	Max. $360W$ at $+50^{\circ}C$ or $180W$ at $+70^{\circ}C$ for both outputs
	Output 1:
	Input - $0.3V$ , 15A (below +50°C)
	Input - $0.3V$ , $10A$ ( $at +70^{\circ}C$ )
	Output 2:
	$12V, 5A (below +50^{\circ}C)$
	$12V, 4A (at +70^{\circ}C)$
	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 $+70^{\circ}$ C)
	Short-term, up to 5s: 22.3V, 15A (at +70°C)
	Output 2:
	$12V, 5A (below + 50^{\circ}C)$
	$12V, 4A (at +70^{\circ}C)$
	Short-term, up to 5s: 12V, 5A (at +70°C)
	De-rate linearly between $+50^{\circ}$ C and $+70^{\circ}$ C
	Battery: Use a 12V VRLA battery between 3.9 and 40Ah
	Ambient temperature range: $-25^{\circ}$ C to $+70^{\circ}$ C
	T-Code: T3
UBC10.241 and	Input: DC 24V (-20%/+25%), max. 17A
UBC10.241-N1	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: $0^{\circ}$ C to $+40^{\circ}$ C
	T-Code: T3
UB20.241	Input: DC 24V (±25%), max. 28A
0020.271	Output in power supply mode:
	Suparin power suppry mode.



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Input voltage - $0.15V$ , 25.0A (below +60°C)			
Input voltage - 0.15V, 18.8A (at +70°C)			
Short-term, up to 5s: $30.0A (at + 70^{\circ}C)$			
Output in battery mode:			
Selectable: 22.5V, 24.0V, 25.0V or 26.0V			
Max. 20A or 468W (below $+60^{\circ}$ C)			
Max. 15A or 351W (at +70°C)			
Short-term, up to 4s: 50% current reserves			
De-rate linearly between $+60^{\circ}$ C and $+70^{\circ}$ C			
Battery: Use a 24V VRLA battery module between 3.9 and 150Ah.			
Ambient temperature range: $-40^{\circ}$ C to $+70^{\circ}$ C			
T-Code: T4			
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: $-40^{\circ}$ C to $+60^{\circ}$ C			
T-Code: T4			
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: $-40^{\circ}$ C to $+60^{\circ}$ C			
T-Code: T4			

#### **Battery Modules:**

Model	Ratings
UZK12.071 and	Nominal battery voltage and capacity:
UZO12.07	12Vdc, 7Ah
	Ambient Temperature ranges:
	For charging: $-10^{\circ}$ C to $+40^{\circ}$ C
	For discharging: -15°C to +50°C
	T-Code: T4
UZK12.261 and	Nominal battery voltage and capacity:
UZO12.26	12Vdc, 26Ah
	Ambient Temperature ranges:
	For charging: $-15^{\circ}$ C to $+50^{\circ}$ C
	For discharging: $-20^{\circ}$ C to $+60^{\circ}$ C
	T-Code: T3
UZK24.071 and	Nominal battery voltage and capacity:
UZO24.071	24Vdc, 7Ah



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	Ambient Temperature ranges:
	For charging: $-10^{\circ}$ C to $+40^{\circ}$ C
	For discharging: $-15^{\circ}$ C to $+50^{\circ}$ C
	T-Code: T4
UZK24.121 and	Nominal battery voltage and capacity:
UZO24.121	24Vdc, 12Ah
	Ambient Temperature ranges:
	For charging: $-10^{\circ}$ C to $+40^{\circ}$ C
	For discharging: $-15^{\circ}$ C to $+50^{\circ}$ C
	T-Code: T4

#### **Conditions of Certification:**

- The equipment shall be installed in a suitable mechanical, electrical and fire enclosure for the end use application.
- The equipment's controls and switches shall not be operated when an explosive atmosphere may be present.
- The equipment is evaluated as a component where the suitability for use must be determined by the local authority having jurisdiction in the end use application.
- Battery modules may be operated in any position, except they shall not be operated upside down. DIN-Rail modules shall be operated in standard vertical orientation (terminals on top/bottom) only.

#### APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 60950-1-07+Am1	-	Information Technology Equipment – Safety – Part 1: General Requirements
CSA Standard C22.2 No. 213-M1987	-	Non-Incendive Electrical Equipment for Use in Class I, Division 2
		Hazardous Locations
ANSI/UL 60950-1 (2nd Edition)+Am1	-	Information Technology Equipment – Safety – Part 1: General
		Requirements
ANSI/ISA-12.12.01, 2015	-	Non-Incendive Electrical Equipment for Use in Class I and II,
		Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified)
		Locations

#### **MARKINGS**

See certification report for complete details.



## Supplement to Certificate of Compliance

**Certificate:** 70039871 (095515\_0\_000)

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The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

Project	Date	Description
70039871	2016-01-20	New Class I, Division 2, Groups ABCD certification for the UPS System model series UB10.24x, UB20.241, UBC10.241, UC10.24x, UZK12.xx1, UZK24.xx1 and UZS24.100 based on IECEx certification from Bureau Veritas that includes national deviations for US & CAN and UL ordinary locations certification.

### **Product Certification History**