



Certificate of Compliance

Certificate: 2285488

Master Contract: 182790

Project: 70083228

Date Issued: November 9, 2016


Issued to: PULS GmbH
Elektrastrasse 6
Munich, 81925
GERMANY

Attention: Mario Diener

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and US Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only



Issued by:


Jens Ensminger

PRODUCTS

CLASS 5318-01 POWER SUPPLIES-For Hazardous Locations

CLASS 5318-81 POWER SUPPLIES-For Hazardous Locations - Certified to U.S. Standards

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

Din Rail Component Type Switching Mode Power Supply, Class I

Models: QS3.241 (RPS80EEC), QS5.241 (RPS120EEC), QS5.241-C1 (RPS120EEC (CC)), QS5.DNET, QS10.121, QS10.241, QS10.241-C1, QS10.301, QS10.481, QS10.DNET, QS20.241, QS20.241-C1, QS20.244, QS20.361, QS20.481, suffix -A1 optional for models with coating; Temperature Code T3/T4.

Ratings:

QS3.241 (RPS80EEC) and QS3.241-A1

Input: 100-240Vac \pm 15%, 50-60Hz, 1.8-1.0A

Output: 24-28Vdc, 3.4-3.0A



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QS5.241 (RPS120EEC), QS5.241-C1 (RPS120EEC (CC)), and QS5.241-A1

Input: 100-240Vac +10%/-15%, 50-60Hz, 1.4-0.65A

Output: 24-28Vdc, 5.0-4.5A

QS5.DNET and QS5.DNET-A1

Input: 100-240Vac +10%/-15%, 50-60Hz; 1.1-0.5A

Output: 24Vdc, 3.8A

QS10.121 and QS10.121-A1

Input: 100-240Vac \pm 15%, 50-60Hz; 2.1-0.9A

Output: 12-15Vdc, 15.0-13.5A

QS10.241 and QS10.241-A1 and QS10.241-C1

Input: 100-240Vac \pm 15%, 50-60Hz; 2.8-1.2A

Output: 24-28Vdc, 10.0-9.0A

QS10.301 and QS10.301-A1

Input: 100-240Vac \pm 15%, 50-60Hz; 2.8-1.2A

Output: 28-32Vdc, 8.6-7.5A

QS10.481 and QS10.481-A1

Input: 100-240Vac \pm 15%, 50-60Hz; 2.8-1.2A

Output: 48-56Vdc, 5.0-4.3A

QS10.DNET and QS10.DNET-A1

Input: 100-240Vac \pm 15%, 50-60Hz; 2.3-1.0A

Output: 24Vdc, 8.0A

QS20.241 and QS20.241-A1 and QS20.241-C1

Input: 100-240Vac \pm 15%, 50-60Hz, 5.4-2.4A

Output: 24-28Vdc, 20.0-17.1A



Supplement to Certificate of Compliance

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

Product Certification History

Project	Date	Description
70083228	2016-11-09	Update of Report 2285488 to implement another marking method, alternative isolation materials and alternative varistors for series QS5 and QS10 and alternative relay for series QS20.
2705800	2014-04-01	Update to report 2285488 based on FIR dated Feb 7, 2014. Update of components to all power supplies listed in report 2285488. Updated standards CSA C22.2 No. 0-10 and ANSI/ISA-12.12.01-2013.
2424161	2011-05-13	Update of report to include models QS5.241-C1 and RPS120EEC (CC).
2285488	2010-05-05	CSAc-us certification of QS Series Power Supplies as Class I, Division 2, Groups A, B, C, and D.



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QS20.244 and QS20.244-A1

Input: 200-240Vac $\pm 15\%$, 50-60Hz, 4.8A
Output: 24-28Vdc, 20.0-17.1A

QS20.361 and QS20.361-A1

Input: 100-240Vac $\pm 15\%$, 50-60Hz, 5.4-2.4A
Output: 36-42Vdc, 13.3-11.4A

QS20.481 and QS20.481-A1

Input: 100-240Vac $\pm 15\%$, 50-60Hz, 5.4-2.4A
Output: 48-55Vdc, 10.0-8.7A

$-25^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$

Conditions of Certification:

- Units were evaluated as components where the suitability of the combination must be determined in the end use product by the local authority having jurisdiction.
- A suitable mechanical, electrical and fire enclosure must be provided for the end product.

APPLICABLE REQUIREMENTS

CSA Standard C22.2 No. 0-10	General Requirements - Canadian Electrical Code Part II
CAN/CSA-C22.2 No. 60950-1-03	Information Technology Equipment – Safety – Part 1: General Requirements
CSA-C22.2 No. 107.1-01	General Use Power Supplies
CSA Standard C22.2 No. 213-M1987	Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations
UL Std. 60950-1 (1st Edition)	Information Technology Equipment – Safety – Part 1: General Requirements
ANSI/ISA-12.12.01-2013	Non-Incendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations



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MARKINGS

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where

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- The submitter's name and/or CSA File Number "182790";
- Model or identifying designation;
- Complete electrical rating (Input and Outputs);
- Date of manufacture, serial number or date code traceable to month and year of manufacture;
- CSA Monogram, "C/US" indicator and the optional indicators "CSA 60950" and "ANSI/UL 60950".
- Hazardous Location designations
- Temperature Code – T3/T4.
- The following warning:
 - WARNING - READ INSTRUCCION MANUAL
 - ATTENTION – LIRE LE MANUAL D’INSTRUCTIONS
- The following warnings shall appear in the instruction manual:
 - WARNING - EXPLOSION HAZARD – SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2
 - WARNING - EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NON-HAZARDOUS
 - ATTENTION - RISQUE D’EXPLSION – LE REMPLACEMENT DE COMPOSANTS PEUT RENDRE LE MATERIEL IMPROPRE A UNE UTILISATION EN CLASS 1, DIVISION 2.
 - ATTENTION - RISQUE D’EXPLSION – NE DECONNECTER L’EQUIPMENT QU’HORS TENSION OU EN ZONE CONNUE COMME NON DANGEREUSE.



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