

# **Certificate of Compliance**

**Certificate:** 70036127 (170351) Master Contract: 170351

**Date Issued:** 2015-06-25 **Project:** 70036127

**Issued to:** Bel Fuse Inc.

206 Van Vorst St

Jersey City, New Jersey 07302

USA

**Attention:** Editha S. Vergara

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.



Juan-Carlos

Olívera **Issued by:** 

Juan-Carlos Olivera.

MSc.

#### **PRODUCTS**

CLASS – 5311 11 - POWER SUPPLIES - Component Type (CSA 60950-1-07-2nd Ed) CLASS - 5311 91 - POWER SUPPLIES - Component Type (UL 60950-1-2nd Ed) - Certified to U.S. Stds

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

Component type power supplies intended for use with Information Technology and Business Equipment, where the suitability of the combination is to be determined by CSA Group.

DC/DC Switching Power Supply, Models CPD200-4530 and CPD250-4530. Model name may be followed by "C" indicating PCB coating, "A" for faceplate without Power-One logo, L for output latch, "G" indicating RoHS version or SXXX or combinations of the different options (where X is alphanumeric character that denotes customer specific changes that do not impact safety requirements).

DQD 507 Rev. 2012-05-22



 Certificate:
 70036127
 Master Contract:
 170351

 Project:
 70036127
 Date Issued:
 2015-06-25

#### Models are rated as follows:

	Input (DC)			Output (DC)		
	Nom.	Range				Total Power
Model	(V)	(V)	A	V	A	(W)
CPD200-4530	48/60	36-75	7.0	5.0	40	200 W with 250 LFM airflow
				3.3	40	
				12.0	5.5	
				-12.0	2.0	
CPD250-4530	48/60	36-75	8.7	5.0	40	250 W with 400 LFM airflow
				3.3	40	or 200 W with 250 LFM
				12.0	5/5	
				-12.0	2.0	

#### **APPLICABLE REQUIREMENTS**

CAN/CSA-C22.2 No 60950-1-07, +Am.1:2011 +Am.2:2014

UL 60950-1-2014

 Information Technology Equipment - Safety - Part 1: General Requirements

 Information Technology Equipment - Safety - Part 1: General Requirements

#### CONDITIONS OF ACCEPTABILITY

- 1. All secondary output circuits are SELV, and are not hazardous energy levels. It was determined that under fault conditions, SELV limits were maintained. Additional testing may be needed if the component is connected to a source other than SELV or TNV-2.
- 2. All models are intended to be supplied from an isolated secondary circuit and have been evaluated for basic insulation between the input and output circuits.
- 3. The input and output connectors are not acceptable for field connections, and are only intended for connection to mating connectors of internal wiring inside the end-use equipment. The acceptability of these and the mating connectors relative to secureness, insulating materials, and temperature shall be considered.
- 4. For the purpose of applying insulation requirements, the input to this DC to DC converter is identified as TNV-2, therefore, basic insulation based on 75 V dc input is provided between the input and output of the converter. An additional evaluation is needed if the source is other than TNV-2.
- 5. The equipment has been evaluated for use in a Pollution Degree 2 environment.
- 6. A suitable Electrical, Fire and Mechanical enclosure shall be provided.
- 7. The manufacturer's recommended maximum operating ambient temperature is 50°C.

DQD 507 Rev. 2012-05-22 Page 2



 Certificate:
 70036127
 Master Contract:
 170351

 Project:
 70036127
 Date Issued:
 2015-06-25

- 8. The maximum working voltage present is 89 V rms, 186 V pk. The Electric Strength Tests in the end product shall be based on this value.
- 9. The units were tested for an input voltage of 36-75 V dc with zero tolerance. If used outside this voltage range, additional testing may be required.
- 10. The power supply shall be properly bonded to the main protective earthing termination in the end product.
- 11. This unit was investigated as Class I equipment. The power supply shall be properly bonded to the main protective earthing termination in the end product.
- 12. Magnetic devices (e.g. transformers) TR10, TR20 employ an electrical insulation system designated Class F.
- 13. Input Connector (X1) has not been evaluated for Hot Swap/Hot Plug (disconnection under load) applications. Suitability of use to be determined in the end application.

DQD 507 Rev. 2012-05-22 Page 3



## Supplement to Certificate of Compliance

**Certificate:** 70036127 (170351) **Master Contract:** 170351

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
70036127	2015-06-25	DC/DC Switching Power Supply, Models CPD200-4530 and CPD250-4530. (C/US) (transferred from 173688 - 2237847 and upgraded to include Am2).

DQD 507 Rev. 2012-05-22 Page 1