Certificate of Compliance

Certificate: 70040696 (170351) **Master Contract:** 170351

Project: 70040696 **Date Issued:** 2015-07-27

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.

Issued by: Juan-Carlos Olivera
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.

AC/DC or DC/DC Switching Power Supply, Models ABC600-1012, ABC600-1015, ABC600-1024, ABC600-1028 and ABC600-1048 and ABC600-1052; may be followed by suffix C or CG indicating conformal coating, G indicating ROHS compliance or SXXX or SXXXG, where X is an alpha/numeric character denoting non safety critical options.

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Electrical Ratings:

Model	Input			Output (DC)					
	V	A	Hz	V1 *		Vfan **		Vsb	
				V	A	V	A	V	A
ABC600-1012	100-250ac	8-4	50-60	12	50	12	1	5	1
ABC600-1015	or			15	40				
ABC600-1024	120-390Vdc	7-2.5		24	25				
ABC600-1028				28	21.42				
ABC600-1048				48	12.5				
ABC600-1052				52	11.53				

Notes:
The above models operate up to 70°C, with convection cooling or with 300 LFM air cooling from input to output side. Maximum output power on V1 output and Vfan are as follows:

1) *V1 is rated as follows:
Maximum 600 W at 50°C ambient, with 300 LFM air flow;
Maximum 420 W at 50 °C ambient, convection cooling
Maximum 300 W at 70 °C ambient, with 300 LFM air flow;
Maximum 210 W at 70 °C ambient, convection cooling

2) Vfan is de-rated to 0.6 A at 70 °C ambient, convection cooling and with 300 LFM airflow

APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No 60950-1-07, +Am.1:2011 +Am.2:2014	–	Information Technology Equipment - Safety - Part 1: General Requirements
UL 60950-1-2014	–	Information Technology Equipment - Safety - Part 1: General Requirements

CONDITIONS OF ACCEPTABILITY

1. This component has been judged on the basis of the required spacing in the Standard for Safety of Information Technology Equipment, CSA/UL 60950-1, Second Edition, Sub-clause 2.10, which would cover the component itself if submitted for Listing.
2. Equipment shall be installed only by trained service personnel, according to the manufacturer installation instructions.
3. Evaluated for use at 50ºC to 70 ºC ambient temperature (Tmra), in a Pollution Degree 2 environment. Output power is de-rated based on ambient temperature.
4. Temperature tests shall be performed for specific installation conditions in the end system.
5. Evaluated as Class I (earthed equipment). Reliable connection to Protective Earth shall be provided in the end use installation.

6. Evaluated for connection to AC power with a branch circuit protector rated max 20 A.
7. Evaluated for connection to TN (including TN-S and TN-C) and TT power distribution systems.
8. Suitable disconnect devices for disconnecting the equipment from power for servicing are to be provided in the end system.
9. Spacing was evaluated for an operating altitude of max 3048 m (10,000 ft), based on IEC-60664-1 altitude correction factor 1.15.
10. Suitable electrical, fire and mechanical enclosure must be provided in the end system.
11. The output circuits are SELV and V1 at hazardous energy levels (> 240 VA), 5Vsb and Vfan are non-hazardous outputs.
12. The Input & Output connectors are not suitable for field wiring; they are only intended for connection to the mating connectors in the end system.
13. The unit was evaluated with external forced air cooling of 300 LFM, and with convection cooling only; airflow direction from Input to Output.

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
70040696	2015-07-27	AC/DC or DC/DC Switching Power Supply, Models ABC600-1012, ABC600-1015, ABC600-1024, ABC600-1028 and ABC600-1048 and ABC600-1052. (C/US) (transferred from 173688 -2750937 and upgraded to include Am2).