



Certificate of Compliance

Certificate: 80019735

Master Contract: 170351

Project: 80019735

Date Issued: 2019-10-03

Issued To: Bel Fuse Inc.
206 Van Vorst St
Jersey City, New Jersey, 07302
United States

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: Jason Cleary
Jason Cleary



PRODUCTS

CLASS - C531167 - POWER SUPPLIES - Component Type(CSA 62368-1)

CLASS - C531197 - POWER SUPPLIES - Component Type (ANSI/UL 62368-1) - Cert to U.S. Stds

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 Converter, Models FND850-12DR, FND850-12R and FND850-S101(Model designation may be followed by suffix G or SXXX or SXXXG; where G indicates RoHS version and X indicates letters and/or numbers 0-9, denoting customer version.)



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Electrical Rating:

Model	DC input		DC output		
	V	A		V	A
FND850-12DR	36-44	23.5-19	Vo1	7-12	58
			Vaux	12	1
	or 44-75	23.5-14	Vo1	7-12	71
			Vaux	12	1
FND850-12R	36-44	23.5-19	Vo1	7-12	58
			Vaux	5	2
	or 44-75	23.5-14	Vo1	7-12	71
			Vaux	5	2
FND850-S101	44-75	23.5-14	Vo1	12	69.5*
			Vaux	12	1.3

* Total maximum output power is derated to 740W at 55°C ambient and 425W at 70°C.

APPLICABLE REQUIREMENTS

- CAN/CSA C22.2 No. 62368-1-14 - Audio/video, information and communication technology equipment – Part 1: Safety requirements
- UL 62368-1 2nd Ed. - Audio/video, information and communication technology equipment – Part 1: Safety requirements

Conditions of Acceptability:

- 1) Equipment shall be installed only trained service personal, according to manufacturer installation instructions.
- 2) Suitability of the equipment enclosure as a Fire, Mechanical and Electrical Enclosure is to be determined in the end use installation. Front and sides panels have been evaluated and meet fire, electrical and mechanical enclosure.
- 3) The Power supply unit (PSU) has been evaluated for use in Class I equipment, Reliable connection to Protective Earth shall be provided in the end use installation.
- 4) The PSU has been evaluated for use in Pollution Degree 2 environment, The Creepage values of PSU have been evaluated for material group IIIb, The Clearance values of PSU have been evaluated for an altitude of 3200 m, under IEC60664-1:1992 Table A.2 (altitude correction factor is 1.17)
- 5) The secondary output of PSU is Electrical energy source class 1 (ES1) and Power source class 3 (PS3).
- 6) The PSU was tested on a listed 30A branch circuit. If use on branch circuit greater than this, additional testing may be necessary, the ground path from the input connector to the PSU case meets protective bonding and has been evaluated at 60 A



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- 7) The Connector Current Interruption Test was performed on the input connector (Anderson, Type Power Pak for FND850-12 Series and Positronic Type PLB3W3M for FND850-S101) and output connector (FCI, PowerBlade, Type 51732), for 100 cycles (insertion/withdrawal), using mating connector (ECBT2) Anderson, Power Pak, Positronic Type PLB3W3F and FCI, PowerBlade, Type 51762. The Connector Current Interruption Test was not conducted on the AMP input connector. Additional testing shall be determined during end product evaluation. Testing for additional cycles shall be determined during the end product evaluation, depending on end product application.
 - 8) Installation instructions and equipment markings related to safety shall be provided in a language acceptable in the country in which the equipment is to be installed.
 - 9) The input to FND850-12 models are not evaluated for connection to DC Mains.
 - 10) The measured temperature of the (-) input terminal on FND850-12 models was 80°C at 50°C Tamb and full load. Consideration shall be taken for use of higher rated temperature supply connection conductors during the end-product evaluation.
 - 11) Limited Short Circuit Test was conducted at 1500 A on Protective Earth trace from the Input Connector to chassis mounting screw of model FND850-S101.
 - 12) The input and output connectors are suitable for hot swappable but not acceptable for field connections; only intended for connection to a mating connector of internal wiring inside the end system.
 - 13) The unit was tested per manufacturer's recommended rated input voltage with zero tolerance.
 - 14) Basic safeguard is provided between input to output and input to chassis.



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
80019735	2019-10-03	DC - DC Converter, Models FND850-12DR, FND850-12R and FND850-S101 (CSA c/us) (upgrade 70036129 to 62368-1)