Certificate of Compliance

Certificate: 70025397 **Master Contract:** 170351

Project: 70025397 **Date Issued:** March 24, 2015

Issued to: **Bel Fuse Inc.**

206 Van Vorst St
Jersey City, NJ 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.

Shane Stevenson

Issued by: Shane Stevenson

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

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 Power Supply, Models SQ, ASQ or JSQ Series, rated Input: 18-36 V dc (24 V dc nominal) or 36-75 V dc (48/60 V dc nominal), specified as follows:

SQ	48	T	15	033	-X
I	II	III	IV	V	VI

I - Product Series, Eighth Brick Format: SQ, ASQ, JSQ

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II - Input Voltage:
- 48 = 36 - 75 V dc: 48/60 V dc nominal
- 24 = 18 - 36 V dc: 24 V dc nominal

III - Mounting Scheme
- T = Through Hole
- S = Surface Mount

IV - Output Current Rating:
- 03 = 3.3 Amps
- 04 = 4.0 Amps
- 05 = 5.0 Amps
- 08 = 8.0 Amps
- 10 = 10 Amps
- 15 = 15 Amps

V - Output Voltage Rating:
- 010 = 1.0 Volts dc
- 012 = 1.2 Volts dc
- 015 = 1.5 Volts dc
- 018 = 1.8 Volts dc
- 020 = 2.0 Volts dc
- 025 = 2.5 Volts dc
- 033 = 3.3 Volts dc
- 050 = 5.0 Volts dc (10 A maximum)
- 060 = 6.0 Volts dc (8 A maximum)
- 120 = 12.0 Volts dc (4 A maximum)
- 150 = 15.0 Volts dc (3.3 A maximum)

VI - Optional Suffixes (denoting non-safety critical options)

Notes:

1. X suffix may or may not be followed by a dash, followed by alphanumeric characters denoting non-safety critical options such as, but not limited to, positive or negative enable logic, clearance off user board, non-standard pin configuration, etc.

2. Any combination of input & output voltage within the nomenclature shown above, creates a valid model number.

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APPLICABLE REQUIREMENTS

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

ANSI/UL 60950-1-2014 - Information Technology Equipment - Safety - Part 1: General Requirements

CONDITIONS OF ACCEPTABILITY

1. The power supply is to be installed only by trained service personnel, according to manufacturer installation instructions provided with each unit.

2. Subject models were tested for use at a manufacturer's recommended PWB temperature of 120 °C; external airflow of 300 LFM was required to maintain the maximum temperature below 120 °C, for all models, when tested under full load conditions. Temperature tests shall be considered for specific installation conditions in the end use application.

3. Subject models were evaluated for connection to an earthed DC mains supply, entirely within a single building; max transient voltage is assumed to be 71 Vpk; for the purpose of applying minimum insulation requirements only, the input circuits are classified as TNV-2, with a maximum voltage limited to 75 V dc. The output circuits are earthed SELV and are separated from hazardous voltages generated inside the unit by basic insulation.

4. Maximum measured working voltage was 66 Vrms/111 Vpk. Dielectric strength tests in the end product shall be based on this value.

5. The units were tested for an input voltage of 36-75 V dc for nominal 48/60 Volt input and 18 - 36 Vdc for nominal 24 Volt input with zero tolerance. If used outside this voltage range additional testing may be required.

6. For nominal 48/60 Volt input units, Abnormal and Component Failure Tests were conducted with R/C (JDYX2) fuse, manufactured by LittelFuse, Type 451015, rated F, 15 A, 65 V dc. If different types of fuses are used, additional testing may be required. For nominal 24 Volt input units, no external fuse was provided during Abnormal and Component Failure Tests.

7. Outputs for all models are SELV operating at non-hazardous energy levels (<240 VA)

8. Output pins are to be connected only to internal wiring in the end system as per manufacturer specifications.

9. Suitable fire and electrical enclosure shall be provided in the end system.