



Certificate of Compliance

Certificate: 70175456

Master Contract: 170351

Project: 80149413

Date Issued: 2022-12-05

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: *Gwangyeol Park*
Gwangyeol Park



PRODUCTS

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

CLASS - C531197 - POWER SUPPLIES - Component Type (UL 62368-1) - Component Type (UL 62368-1)

- Certified to US 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, Model SQE Series, rated Input: 18-36 V dc (24 V dc nominal) or 36-75 V dc (48 V dc nominal), specified as follows:

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



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I - Product Series, Eighth Brick Format: SQE

II - Input Voltage:

48 = 36 - 75 V dc: 48 V dc nominal
485 = 36 - 75 V dc: 48 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:

10 = 10 Amps
17 = 17 Amps
20 = 20 Amps
30 = 30 Amps
40 = 40 Amps
50 = 50 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 (20 A maximum for SQE)
060 = 6.0 Volts dc (17 A maximum)
092 = 9.2 Volts dc (20 A maximum)
120 = 12.0 Volts dc (20 A maximum)

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

CONDITIONS OF ACCEPTABILITY

When installed in the end-use equipment, the following are among the considerations to be made:

1. All models are intended to be supplied from an isolated secondary circuit and have only been evaluated for basic insulation between the input and output circuits.
2. The power supplies have been evaluated for use in a Pollution Degree 2 environment.
3. Abnormal and Component Failure Tests were conducted with the power supply unprotected by an external fuse except for models with 10 A, 40 A and 50 A output current rating in which abnormal and component failure testing were conducted with 7 A, 125 Vdc external fuse.

4. All models submitted and tested for use at the maximum case temperature (T_c) permitted by the manufacturer's specification of: 130 °C measured on T401 coil PWB on all models except for 12V output models. The 12 V and 9.2 V, 10 A max. output models shall not exceed 125°C case temperature on L500, PWB at Q403 and T401 core. The 12V, 20 A model shall not exceed 125°C case temperature on T400 coil and Q506 case, not exceed 110°C on IC105 case , and not exceed 105° on baseplate.
5. If the input meets all of the requirements for ES1, the outputs may be considered ES1. Output voltages remain within ES1 limits, even with internally generated non-ES1 voltages, if any. Single Component Failure and Basic Insulation Bypass Tests were performed on the power supply.
6. The units were tested for zero tolerance input voltage.
7. Special spacing consideration should be given to the end-use product, as the spacings between the unit and mounting surface have not been evaluated.
8. Special enclosure consideration should be given to the end-use installation. Hazardous voltage is available on the surface of the PWB. The end-use product should be reviewed to determine whether accessibility requirements are met for the end-use product.
9. The unit is tested with air-cooling applied from -Vin to +Vin pins.

APPLICABLE REQUIREMENTS

- CAN/CSA-C22.2 No. 62368-1:19 – Audio/video, information and communication technology equipment – Part 1: Safety requirements
- UL 62368-1 3rd Ed. – Audio/video, information and communication technology equipment – Part 1: Safety requirements

Notes:

Products certified under Class C531167 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca





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
80149413	2022-12-05	Update CSA Report 70175456 (SQE Series) to add alternate sources of components, removed coating of baseplate with minor change, and upgrade approval to CAN/CSA-C22.2 No. 62368-1:19 and UL 62368-1 3rd Edition - based on data provided under the CPC program
70175456	2018-02-27	DC-DC Power Supply, Model SQE Series (C/US).