



Certificate of Compliance

Certificate: 70214581

Master Contract: 170351

Project: 80119609

Date Issued: 2022-03-22

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.

Switching Power Supply, Models TCP3500-1024, TCP3500-1048, TCP3500-H048, TCP4000-H090, TXP3500-1048, TXP4000-1110; may be followed by alpha/numeric character denoting non-safety critical options.



Certificate: 70214581
Project: 80119609

Master Contract: 170351
Date Issued: 2022-03-22

Electrical Rating:

Model	Input			Output (DC)	
	V	A	Hz	V	A/W
TCP3500-1024	115-277/200-480 Vac, 3W+PE	12-5	50/60	10-32	125 A maximum 3500 W maximum
TCP3500-1048, TCP3500-H048, TXP3500-1048	115-277/200-480 Vac, 3W+PE	12-5	50/60	10-50	73 A maximum 3500 W maximum
TCP4000-H090,	115-277/200-480 Vac, 3W+PE	12-5.6	50/60	30-100	45 A maximum 4000 W maximum
TXP4000-1110	230-277/400-480 Vac, 3W+PE	7-5.2	50/60	30-137.5	36.5 A maximum 4000 W maximum

CONDITIONS OF ACCEPTABILITY

1. The power supply is to be installed only by trained service personnel, according to manufacturer installation instructions.
2. Evaluated as Class I (earthed equipment). Reliable earth connection shall be provided in the end use installation.
3. The equipment has been evaluated for use in Pollution Degree 2 environment, up to 3048m altitude, 70°C maximum ambient for TCP series and 55°C maximum ambient for TXP series.
4. TCP Series is provided with an aluminium water cooled cold plate to aid in cooling the power supply. The aluminium water cooled cold plate is not a part of this evaluation.
5. Temperature tests shall be considered for specific installation conditions in the end system.
6. Spacing of the Power Supply Unit (PSU) have been evaluated for an altitude of 10,000ft (3048m), under IEC60664-1: 1992 Table A.2 (altitude correction factor is 1.15).
7. Enclosure provided with the equipment meets FIRE and ELECTRICAL requirements except for the rear panel of models TXP3500 and TXP4000. Suitability for mechanical enclosure shall be determine at end system.
8. Evaluated for connection to AC power with a branch circuit protection rated max 40A for models TCP3500, TCP4000, TXP3500 and max. 20 A for model TXP4000.



Certificate: 70214581
Project: 80119609

Master Contract: 170351
Date Issued: 2022-03-22

-
9. The PSU has been evaluated for a TN (Including TN-S and TN-C) systems power source.
 10. The PSU has been evaluated for use with a Three Phase power source (3W+PE).
 11. The output of Models TCP3500 and TXP3500 is ES1.
 12. The output of Model TXP4000-1110 is ES3. TXP4000 output is still at ES3 after disconnection at no load condition. Output can only be accessible after 2 minutes from disconnection.
 13. All Isolating transformers isolation barrier insulation temperatures have been measured within the winding on the insulator. The internal temperature did not exceed the insulation Class limits for NORMAL operation and ABNORMAL operation.
 14. The PSU is not intended for use in vehicles, on board ships or aircraft.

APPLICABLE REQUIREMENTS

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

Certificate: 70214581

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
80119609	2022-03-22	Update CSA 70214581 (TCP3500, etc) to upgrade to 3rd Ed, add transformers due to alternate insulation systems and alternate components
80107418	2021-11-25	Update CSA 70214581 to add alternate PWB layouts for the secondary main board and power board - revisions due to reduced number of mosfets on the output rail; - add alternate PWB sources
80052529	2020-08-31	Update CSA 70214581 to roll back the standard to 62368-1 Ed. 2 - The models don't comply with 62368-1 3rd edition due the line-line varistors voltage rating less than 1.25x the rated voltage.
80044198	2020-06-01	Update CSA 70214581 to add component vendors, and upgrade to 62368-1 Ed. 3
80016654	2019-09-06	Update CSA Report 70214581 to include alternate fuse vendor
80004676	2019-05-29	Update CSA 70214581 to include new model TCP3500-1024
70214581	2019-02-06	AC-DC Converter, Models TCP3500-1048, TCP3500-H048, TCP4000-H090, TXP3500-1048, TXP4000-1110 (CSA c/us)