



Certificate of Compliance

Certificate: 70208510

Master Contract: 170351

Project: 80127205

Date Issued: 2022-05-20

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: *Regenald Macaranas*
Regenald Macaranas



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.

AC/DC or DC/DC Switching Power Supply, Models PFE3000-12-069RA, PFE3000-S361, PFE3600-12-069RA and SPAFFIV-05G, SPAFFIV-07; model designation may be followed by alpha numeric characters denoting non-safety critical options



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Electrical Ratings:

Models PFE3000-12-069RA and PFE3000-S361:

Input rated 100-277 Vac, 17-12.5A, 50-60 Hz or 240-380 Vdc, 13-9 A; Outputs rated (V1)* 12.3Vdc, 244A; (V2) 12Vdc, 5A. Total maximum output power shall not exceed 3060 W at 45 °C ambient.

*Note: V1 output is derated as per the below conditions:

- 1400 W at 100-200 Vac, 45 °C ambient
- 2250 W at 200-277 Vac/240-380 Vdc, 55 °C ambient
- 1050 W at 100-200 Vac, 55 °C ambient

Model PFE3600-12-069RA:

Input rated 100-277 Vac, 20 A, 50/60 Hz or 240-380 Vdc, 20 A; Outputs rated (V1)* 12.3Vdc, 293A; (V2) 12Vdc, 5A. Total maximum output power shall not exceed 3660 W at 45 °C ambient.

*Note: V1 output is derated as per the below conditions:

- 1400 W at 100-200 Vac, 45 °C ambient
- 1050 W at 100-200 Vac, 55 °C ambient
- 2700 W at 200-277 Vac/240-380 Vdc, 55 °C ambient

Model SPAFFIV-05G:

Input rated 200-277 Vac, 17-12.5A, 50-60 Hz or 240-380 Vdc, 13-9 A; Outputs rated (V1)* 12.25Vdc, 244A; (V2) 12Vdc, 5A. Total maximum output power shall not exceed 3000 W at 45 °C ambient.

*Note: V1 output is derated as per the below condition:

- 2250 W at 200-277 Vac/240-380 Vdc, 55 °C ambient

Model SPAFFIV-07:

Input rated 200-240 Vac, 17 A, 50/60 Hz or 240-380 Vdc, 13 A; Outputs rated (V1)* 12.3Vdc, 244A; (V2) 12Vdc, 5A, Total maximum output power shall not exceed 3000 W, 45 °C ambient.

*Note: V1 output is derated as per the below conditions:

- 2250 W at 200-240 Vac/240-380 Vdc, 55°C ambient

Conditions of Acceptability:

1. Spacings evaluated for an operating altitude of max 4000 m, based on IEC-60664-1 altitude correction factor 1.29.
2. The ground path from the input connector to the PSU case meets protective bonding and has been evaluated on a branch circuit protector rated max 40 A.
3. The secondary outputs of the PSU are ES1; V1 and V2 output is PS3.
4. The PSU has been evaluated for a TN (Including TN-S and TN-C) and TT systems power source and for use with a Phase-Neutral power source.

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5. All 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 and ABNORMAL operation.
6. The temperature of the Isolating Transformers, T4, T3/T9/T14/T15, T6/T7/T8/T11 isolation barrier shall be assessed in the end application. T4, T3/T9/T14/T15 employ an OBJY3 electrical insulation system designated Class F. Transformers, T6/T7/T8/T11, employs a Class A insulation system.
7. The connector current interruption test (Hot Plugging test) was conducted on the Input and secondary connector of the PSU for 100 cycles.
8. The PSU is not intended for use in vehicles, on board ships or aircraft.
9. Suitability of the enclosure provided with the equipment as a FIRE, MECHANICAL and ELECTRICAL enclosure is to be determined in the end system. Front panel has been evaluated and meets the requirements of fire, mechanical and Electrical enclosure.
10. Supply cord is not part of the evaluation, suitability of the supply cord for AC or DC supply shall be consider at the end product application.

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

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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
80127205	2022-05-20	Update CSA Report 70208510 (PFE3000-12-069RA, etc) to add alternate Bel P/N for transformers due to alternate insulation system, add alternate sources of components 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
70208510	2018-12-17	AC/DC Switching Power Supply, Models PFE3000-12-069RA, PFE3000-S361, PFE3600-12-069RA and SPAFFIV-05G, SPAFFIV-07 (Obsoletes report 70036130, upgrade to 62368-1, and add new model SPAFFIV-07)