Certificate of Compliance

Certificate: 70203793 **Master Contract:** 170351

Project: 80169848 **Date Issued:** 2023-06-05

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

C US

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 RCM300 series, see below for details.

Model Name Nomenclature

Typical Model Designation:	110	RCM	300	-	24	DMQF K
	I	II	III		IV	V

I– Input Voltage, Vdc: 16.8 - 45 Vdc, 24 Vdc nominal (Input voltage range is adjustable)
110 - 50.4 to 137.5 Vdc, 110 Vdc nominal (Input voltage range is adjustable)

II – Model Series: RCM

III – Output Power 300 – 300 W

IV – Nominal Voltage, Vdc 12 -12 V
24 -24 V
2424 - +24 V / -24 V

V Auxiliary functions and options: D - Out OK, output voltage adjust, shutdown (Single output models)
M - Interruption time (Single output models)
Q - ORing FET
F – Fuse built-in
K - Pluggable Connectors
DM - Out OK, interruption time, shutdown (Dual output models)

Note: Any model name can be formulated based on output voltage and different options. Model name may be followed by alpha-numeric characters indicating non-safety critical options.

Electrical Rating:

Model	Input (DC)		Output 1 (DC)		Output 2 (DC)	
	V	A	V	A	V	A
24RCM300-12 models	16.8 - 45Vdc	24	12	25	-	-
24RCM300-24 models	16.8 - 45Vdc	24	24	12.5	-	-
24RCM300-2424 models	16.8 - 45Vdc	24	+24	6.25	-24	6.25
110RCM300-12 models	50.4 - 137.5Vdc	8	12	25	-	-
110RCM300-24 models	50.4 - 137.5Vdc	8	24	12.5	-	-
110RCM300-2424 models	50.4 - 137.5Vdc	8	+24	6.25	-24	6.25

Maximum operating ambient: 70°C

Conditions of Acceptability:

1. The power supply is to be installed in the end product where the suitability of installation is to be evaluated in the end product.
2. Evaluated as Class I (earthed equipment). Reliable earth connection shall be provided in the end use installation.
3. Evaluated for use in a Pollution Degree 2 environment.
4. The product was evaluated at maximum Case Temperature, Tc of 90°C with full output power.

   Accessibility to high component temperature must be considered on end system equipment.
5. Temperature tests shall be considered for specific installation conditions in the end system.
6. Suitability of the enclosure provided with the equipment as a FIRE, MECHANICAL and ELECTRICAL enclosure is to be determined in the end system except front panel which complies with the FIRE, MECHANICAL and ELECTRICAL enclosure requirements.
7. The secondary outputs are ES1 at PS3. Accessibility is to be determined in the end system.
8. The input and output connectors are approved for use as field wiring (Non K-option models).
9. The unit was tested per manufacturer's recommended rated input voltage with zero tolerance.
10. The Clearance values of the Power Supply unit (PSU) have been evaluated for an altitude of 3000m, under IEC60664-1:2007 Table A.2 (altitude correction factor is 1.14).
11. Measured temperature of outside surfaces are within the limit of TS1 based on 25°C ambient. Accessibility must be determined in the end system when operating at higher ambient temperatures.
12. The unit was tested on a DC power source of max. 20 A capacity for 110RCM300 models and 40A for 24RCM300 models. Additional evaluation may be needed if higher current source current is used.
13. The ground path from the input connector to the PSU case meets protective bonding at 40 A for 110RCM300 models and 80 A for 24RCM300 models, and bonding trace on PCB meets 1500 A limited short circuit test.
14. Safety isolating transformers T103, T104, T105, T107 in Dual output models and T04, T02, T01 in Single output models employ an insulation system designated Class F.
15. 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.
16. Basic insulation is provided between input to metal enclosure. If the unit is operated within an IT Power system, the Power system shall provide an additional safety measure against electrical shock in case of failure (e.g. Insulation monitor).

Certificate: 70203793
Project: 80169848

Master Contract: 170351
Date Issued: 2023-06-05

APPLICABLE REQUIREMENTS

CAN/CSA C22.2 No. 62368-1-19	1. Audio/video, information and communication technology equipment – Part 1: Safety requirements
UL 62368-1 3rd Ed.	2. 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: 70203793 **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
80169848	2023-06-05	Update CSA Report 70203793 (RCM300) to add 24RCM300 Series and 110RCM300-2424 Series, add alternate transformer part numbers due to different insulation system, and upgrade to CSA/UL 62368-1 3rd Edition. - based on acceptance of data under the CPC / CTF-3 program
70203793	2018-11-13	DC-DC Power Supply, Model RCM300 (cCSAus)