

# **Certificate of Compliance**

Certificate: 80123687 Master Contract: 170351

**Project:** 80123687 **Date Issued:** 2022-05-17

**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 - C531197 - POWER SUPPLIES - Component Type (UL 62368-1) - Component Type (UL 62368-1) - Certified to US Stds

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

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 Switching Power Supply, RCM150 Series see below for details



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#### **Model Name Nomenclature:**

Typical Model Designation: 110 RCM 150 - 24 DMQFK XXXX

I II III IV V VI

I – Input Voltage, Vdc: 24: 16.8 - 45 VDC

110: 50.4 - 137.5 VDC

II – Model Series: RCM

III – Output Power 150 - 150W

IV – Nominal Output Voltage, Vdc: 12 - 12 V

15 - 15 V 24 - 24 V

V – Auxiliary functions and options: D - Out OK, output voltage adjust, shutdown

M - Interruption time

Q - Oring FET F - Fuse built-in

K - Pluggable Connectors

VI - Model name maybe followed by alpha-numeric characters indicating non-safety critical options.

Note: The sequence of options must follow the order above.

Note: Any model name can be formulated based on output voltage and different options.

## **Electrical rating:**

Model	Input (DC)		Output (DC)	
	V	A	V	A
24RCM150-12 models	16.8 - 45Vdc	12	12	12.5
24RCM150-15 models	16.8 - 45Vdc	12	15	10.0
24RCM150-24 models	16.8 - 45Vdc	12	24	6.25
110RCM150-12 models	50.4 - 137.5Vdc	4	12	12.5
110RCM150-15 models	50.4 - 137.5Vdc	4	15	10.0
110RCM150-24 models	50.4 - 137.5Vdc	4	24	6.25
110RCM150-S585	46 - 137.5Vdc	4	24	5.5

Maximum operating ambient: 70°C or maximum Case Temperature 90°C (Tc)



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#### **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.
- 7. Opening of the front, sides, and rear panels is not part of the evaluation, to be evaluated in the end use of equipment.
- 8. The secondary outputs are ES1 at PS3. Accessibility is to be determined in the end system.
- 9. The input and output connectors are approved for use as field wiring (Non K-option models).
- 10. 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.
- 11. The unit was tested on a DC power source of max. 20 A capacity for 110RCM150 models and 37A for 24RCM150 models. Additional evaluation may be needed if higher current source current is used.
- 12. External fuse rated 15A, 500VDC shall be provided for the 24RCM150 model series without internal fuse. Additional evaluation is necessary if higher fuse capacity is used.
- 13. External fuse rated 5A, 650VDC shall be provided for the 110RCM150 model series without internal fuse. Additional evaluation is necessary if higher fuse capacity is used.
- 14. The ground path from the input connector to the PSU case meets protective bonding at 40 A and bonding trace on PCB meets 1500A limited short circuit test.
- 15. Safety isolating transformers T04, T02 and T01 employ an insulation system designated Class F.
- 16. The unit was tested per manufacturer's recommended rated input voltage with zero tolerance.
- 17. The Clearance values of the Power Supply unit (PSU) have been evaluated for an altitude of 3000m, under IEC 62368-1:2018 Table 16 (altitude correction factor is 1.14).
- 18. 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.

## **APPLICABLE REQUIREMENTS**

CAN/CSA C22.2 No. 62368-1-19

UL 62368-1 3rd Ed.

1. Audio/video, information and communication technology equipment – Part 1: Safety requirements

2. Audio/video, information and communication technology equipment – Part 1: Safety requirements



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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
80123687	2022-05-17	Original evaluation of DC-DC converter, RCM150 Series (CSA c/us) - acceptance of data from CPC program