

Certificate of Compliance

Certificate: 70027620 Master Contract: 170351

Project: 70027620 **Date Issued:** April 09, 2015

Issued to: Bel Fuse Inc.

206 Van Vorst St

Jersey City, New Jersey 07302

USA

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.



Juan-Carlos Olívera

Issued by:Juan-Carlos Olivera,

MSc.

PRODUCTS

CLASS - C531111 - POWER SUPPLIES-Component Type (CSA 60950-1-07-2nd Ed)

CLASS - C531191 - POWER SUPPLIES-Component Type (UL 60950-1-2nd Ed) Certified to U.S. Stds

For details related to rating, size, configuration, etc. reference should be made to the CSA Certification Record or the descriptive report.

DC to DC converter, IM_7 and KM_7 Series IML10 and KML10 Series

Model Series	Input V dc	Output		
		V dc	W	
IM_7, KM_7	8.4-150	3.3-24	7 maximum	
IML10, KML10	8.4-75	3-15(+)	10.8 maximum	

(+) - Can be single or double output with maximum together 10.8 W, see nomenclature.

NOMENCLATURE:



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For the IM, KM, 7 Series:

- A Nominal input voltage DC 12, 20, 24, 40, 48, 70 or 110
- B Series IM or KM
- C May be S or X or L or N
- D Output power 7 W
- E Output voltage single DC (3.3 V through 24 V)
- F Output voltage dual DC (3.3 V through 24 V)
- G Temperature index of modules
- H Additional options
- I Up to two alphanumeric characters.

For the IML10 and KML10 Series:

XX	\underline{XML}	<u>10</u>	\underline{XX}	<u>-</u>	\underline{XX}	$\underline{\mathbf{X}}$	<u>X</u>	XX
Α	В	C	D	Е	F	G	Н	I

A - Nominal input voltage DC 12, 24, 48

Input range V dc	Nominal		
8.4-16.8	12		
14.0-36.0	24		
36.0-75.0	48		

- B Series, X can be I or K
- C Nominal output power 10W
- D Single output voltage, 03-15 V dc
- (++) E Dash: Designates double output units with two independent galvanically isolated outputs.
- (++) F Second output voltage, 03-15 V dc
 - G Can be number -0 to -9
 - H Options Can be alphanumerical characters A-Z.
 - Option C only 1 output available.
 - I Can be number -0 to -9
- (++) Only available when unit has two output voltages.

APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No 60950-1-07, +Am.1:2011 +Am.2:2014

 Information Technology Equipment - Safety - Part 1: General Requirements

UL 60950-1-2014

 Information Technology Equipment - Safety - Part 1: General Requirements



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CONDITIONS OF ACCEPTABILITY

- 1. This component has been judged on the basis of the required spacings of Std. CSA/UL 60950-1 +Am1:2011 + Am2:2014.
- 2. The power supply shall be installed in compliance with the enclosure, mounting, spacing, casualty, and segregation requirements of the end use application.
- 3. Consideration should be given to measure the temperatures on the chassis when the power supply is installed in the end-use equipment.
- 4. The outputs are considered to be non-energy hazards.
- 5. The input/output connectors are not acceptable for field wiring and are only intended for connection to mating connectors of the internal wiring inside the end-use product. The acceptability of these and the mating connectors relative to secureness, insulation materials, and temperatures shall be considered.
- 6. When the input voltage is hazardous voltage, the output voltage is considered to be ELV. When the input voltage is SELV or ELV then the output is considered as SELV.
- 7. The need for conducting a leakage current test is to be determined as part of the end product evaluation.
- 8. The temperature test was conducted with the power supply 20 mm above a bench in horizontal position. All testing was performed in a 25° ambient temperature.
- 9. All abnormal testing was performed with a transformer, a bridge, and capacitors to generate the DC voltage out of an AC source. The fuse at the input of the unit was 6.0 A time delay Listed fuse for the abnormal testing.
- 10. The Series has been evaluated for basic insulation between input and secondary circuits.



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
70027620	Apr 9 2015	DC to DC converter, IM_7 and KM_7 Series, IML10 and KML10 Series. (C/US) (transferred from 173688 - 2251771 and upgraded to include Am1 and Am2)