



# Certificate of Compliance

**Certificate:** 70049931

**Master Contract:** 170351

**Project:** 70049931

**Date Issued:** 2015-10-14

**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.*



**Issued by:** *Juan-Carlos Olivera*  
Juan-Carlos Olivera,  
MSc.

## **PRODUCTS**

CLASS – 5311 11 - POWER SUPPLIES - Component Type (CSA 60950-1-07-2nd Ed)

CLASS – 5311 91 - 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.

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, K Series and S Series, represented by YQXXXX-WZ, where:

Y represents letters A – F, or L

Q represents letters K or S

X represents a number 0-9 which represents the number of outputs and voltage ratings

W represents operating ambient temperature, and

Z represents a letter indicating non-safety critical options.

See next page for detailed description of model designation nomenclature and electrical ratings.

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	Rated Input	Rated Output	Output Power	Number of outputs
S Series YSXXXX-WZ	8 – 385 V dc 85 – 264 V ac / 50-60Hz (Only LS)	5.1-24 V dc	<100W	1-2
K Series YKXXXX-WZ	8 – 385 V dc 85 – 264 V ac / 50-60Hz (Only LK)	5.1-24 V dc	<150W	1-2
	BK/CK/DK (on request)		≤250W	1-2

Nomenclature for 100W and 150W models:  
Typical Model Designation: (e.g. LK 2660-6ER)

Y	Q	X	X	XX	-	W	Z
a	b	c	d	ee	-	f	gg

“a” can be:	And means input voltage range:	“b” can be:	Differences:
A	8 – 35 V dc	K	<p>The S-version is smaller than the K-version (smaller heat sink) and has less output power.</p> <p>Maximum output power of K version is 150 W</p> <p>Maximum output power of S version is 100 W</p>
B	14 – 70 V dc	S	
C	28 – 140 V dc		
D	44 – 220 V dc		
E	67 – 385 V dc		
F	20 – 100 V dc		
L	88 – 372 V dc or 100 – 240 V ac		
“c” can be:	And means:	“d” can be:	And means output voltage:
1	One output	0, 1, 2	5.1 V dc
2	Two outputs	3	12 V dc
6 or higher	Customer specific models: Some with mechanical changes e.g. longer housing, other front plate, other LED's, and so on (not affecting safety).	4,5	15 V dc
		6	24 V dc
		7, 8	Customer specific models (not affecting safety)
“ee” can be:	And means (for models with two outputs):	“f” can be:	And means ambient range:
00, 01	Single output models	-7	-25 to 71°C
20	12 V dc; 12 V dc	-9	-40 to 71°C

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40	15 V dc; 15 V dc	-0, -5, -6	Customer specific models (not affecting safety)
60	24 V dc; 24 V dc		
01 – 99	Other specifications and additional features (not affecting safety)		
“gg” can be:	And means auxiliary functions and options:		
E <sup>1</sup>	Inrush current limitation		
R <sup>2</sup>	Output voltage control input		
P <sup>2</sup>	Potentiometer (output voltage adjustment )		
D <sup>3</sup>	Save data signal (D0...DD, to be specified)		
V <sup>3</sup>	ACFAIL signal (V2, V3)		
T	Current sharing		
B.B1	Cooling plate standard case		
B2	Cooling plate for long case 220 mm		
<sup>1</sup> ... Option E is available for CK, DK, EK, LK, FS, CS, DS, ES and LS models; mandatory for all -9 model types.			
<sup>2</sup> ... Feature R excludes option P and vice versa.			
<sup>3</sup> ... Option D excludes Option V and vice versa; Option V is available for models with 5.1 V output only.			

Nomenclature for 250W models only: Typical Model Designation: (e.g. LK 2660-6ER)			
Y	Q	X	X
a	b	c	d
		ee	-
		f	gg
“a” can be:	And means input voltage range:	“b” is:	meaning:
B	16.8 – 31.2 V dc	K	The K-version 250 W
C	44 – 100 V dc		
D	67 – 165 V dc or 77 – 154 V dc		
“c” can be:	And means:	“d” can be:	And means output voltage:
1	One output	0, 1, 2	5.1 V dc

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2	Two outputs	3	12 V dc
6 or higher	Customer specific models: Some with mechanical changes (e.g. longer housing, other front plate, other LED's, and so on), not considered safety relevant.	4,5	15 V dc
		6	24 V dc
		7, 8	Customer specific models (not affecting safety)
“ee” can be:	And means: Other specifications and additional features (not affecting safety):	“f” can be:	And means ambient range:
00, 01	Single output models	-7	-25 to 71°C
20	12 V dc; 12 V dc	-9	-40 to 71°C
40	15 V dc; 15 V dc	-0, -5, -6	Customer specific models (not affecting safety)
60	24 V dc; 24 V dc		
01 – 99	Other specifications e.g. other input voltages (not exceeding 165 V dc), other output voltages (e.g. 13V dc), and/or additional features (not affecting safety) such as different LEDs, different adjustments of options, etc		
“gg” can be:	And means auxiliary functions and options:		
E <sup>1</sup>	Inrush current limitation		
R <sup>2</sup>	Output voltage control input		
P <sup>2</sup>	Potentiometer (output voltage adjustment )		
D	Save data signal (D0...DD, to be specified)		
T	Current sharing		
B,B1	Cooling plate standard case		
B2	Cooling plate for long case 220 mm		
<sup>1</sup> ... Option E is available for CK, DK, EK, and LK models; mandatory for all 9 model types.			
<sup>2</sup> ... Feature R excludes option P and vice versa.			



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### **APPLICABLE REQUIREMENTS**

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

- Information Technology Equipment - Safety - Part 1: General Requirements
- Information Technology Equipment - Safety - Part 1: General Requirements

### **CONDITIONS OF ACCEPTABILITY**

1. The equipment has been evaluated for use in a Pollution Degree 2 environment and overvoltage category II environment and a maximum altitude of 2000 m.
2. Models meet fire enclosure requirements.
3. All secondary output circuits are separated from mains by reinforced insulation and rated SELV non hazardous energy levels. Some BK, CK and DK models can have hazardous energy at the output.
4. The input and output connector(s) was evaluated for factory wiring.
5. The power supply is rated class I. The power supply shall be properly bonded to the main protective bonding termination in the end product. The earth leakage current is below 3.5 mA.
6. Disconnect device is to be considered in end product.
7. Transformers TR1 (main board), TR81, TR71, TR72 (auxiliary converter board) provide reinforced insulation primary to secondary.
8. The manufacturer's recommended maximum ambient operating temperature is 71°C.



## *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**

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<b>Project</b>	<b>Date</b>	<b>Description</b>
70049931	2015-10-14	Switching Power Supply, K Series and S Series. (C/US) (transferred from 173688 - 2244750 and upgraded to include Am1 and Am2).