



# Certificate of Compliance

**Certificate:** 70025419

**Master Contract:** 170351

**Project:** 70025419

**Date Issued:** March 06, 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 Olivera*  
**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.

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, YN(X) Series, Y(X) Series and Models SPDHW05T16 and SPDHW12T16, rated Input: 9.6 - 14 V dc; 12 V dc nominal, 3.0 - 5.5 V dc; 5 V dc nominal, specified as follows:

YNE	12	S	25	018	-X
I	II	III	IV	V	VI

### I - Product Series

- YNE (eighth brick)
- YNS/YS
- YNL/YL
- YNC/YC



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YNM/YM  
YNV (vertically mounted SIP)  
SPDHW

**II - Input Voltage:**

05 = 4.5 - 5.5 V dc: 5 V dc nominal (for YNC/YC)

05 = 3.0 - 5.5 V dc: 5 V dc nominal

12 = 9.6 - 14 V dc: 12 V dc nominal

**III - Mounting Scheme**

S = Surface Mount

T = Through Hole

**IV - Output Current Rating:**

05 = 5 Amps

06 = 6 Amps

10 = 10 Amps

16 = 16 Amps

20 = 20 Amps (YNC/YC)

25 = 25 Amps (YNE)

**V - Output Voltage Rating:**

Blank if Output Voltage is Adjustable

(0.7525 to 3.63 V dc for Vin 05)

(0.7525 to 5.5 V dc for Vin 12)

008 = 0.8 Volts dc

009 = 0.9 Volts dc

010 = 1.0 Volts dc

012 = 1.2 Volts dc

015 = 1.5 Volts dc

018 = 1.8 Volts dc

020 = 2.0 Volts dc

025 = 2.5 Volts dc

033 = 3.3 Volts dc

050 = 5.0 Volts dc

**VI - Optional Suffixes (denoting non-safety-critical options)**

Blank if No Options Available

Notes:

1. "X" - May or may not be followed by a dash followed by letters and/or numbers denoting non-safety-critical options such as, but not limited to, positive or negative enable logic, clearance off user board, non-standard pin configuration, etc.
2. Any combination of input & output voltage within the nomenclature shown above, creates a valid model number.



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**APPLICABLE REQUIREMENTS**

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

ANSI/UL 60950-1-2014

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



## *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>
70025419	Mar 6 2015	DC to DC Converter, Model YN(X) Series, Y(X) Series and Models SPDHW05T16 and SPDHW12T16 (C/US) (Transferred from 173688 - 2194543 and upgraded to include Am1 and Am2)

Product	DC/DC Converter
Applicant	Bel Fuse Inc. 206 Van Vorst St. Jersey City, NJ 07302 USA
Manufacturer	Bel Fuse Inc. 206 Van Vorst St. Jersey City, NJ 07302 USA
Factory	BCM Electronics Corporation SDN BHD Kulim Hi-tech Park, Phase 1 Plot 21, Jalan Hi-Tech 4 09000 Kulim Malaysia <input type="checkbox"/> See next page(s)
Ratings	DC Input: 4.5- 14 V
Trade mark	<b>bel</b>
Model / Type Ref.	YN(X) Series, Y(X) Series, SPDHW Series. For further information please, refer to General Product Info
Principal characteristics	DC Output: 0.7525-5 V, 5-25 A. For more information refers to attachment. <input type="checkbox"/> See next page(s)
A sample of the product was tested and found to be in conformity with	OFF EN 60950-1:2006;A11;A1;A12;A2
Validity	This certificate documents conformity with the standards shown, and also applies as license for use of Nemkos name and certification mark. The certificate and license is valid as long as the applicable conditions are complied with, and provided that any changes to the product are notified to Nemko for acceptance prior to implementation. New standards or amendments to the standards may imply that the product design must be updated and/or that re-testing and re-certification is necessary.
Additional information	<input type="checkbox"/> See next page(s)  The abovementioned certified equipment complies with current regulatory requirements regarding electrical safety in Norway and other EU/EEA member states, as far as this can be checked. Compliance with requirements regarding building-in, protection against electric shock and Electromagnetic Compatibility (EMC) must be checked when the equipment is built-in a completed product or forms a part of a complete system.
Additional model(s)	<input type="checkbox"/> See next page(s)

Date of issue 04-05-2015



Juan Z. Kleppenes  
Certification Department

**Nemko AS**

Gaustadalléen 30, P.O. Box 73 Blindern, 0314 Oslo, Norway  
TEL +47 22 96 03 30 FAX +47 22 96 05 50 EMAIL info@nemko.com  
ENTERPRISE NUMBER NO974404532

## Attachment

### Product Description:

The products covered by this report are dc/dc converters intended to supply dc out power. They are provided with input and output pins for connection to their nominal rated dc source of supply. All components are intended to be mounted on printed wiring boards.

### Model Numbering:

YN(X) Series, Y(X) Series, where (X) is one alpha character, followed by two numeric characters, followed by 'T' or 'S', followed by five numeric characters, may or may not be followed by a dash and the letter 'G' or additional alphanumeric characters denoting non-safety critical options.

Model SPDHW Series, SPDHW05T16 and SPDHW12T16, may or may not be followed by a dash and the letter 'G' or additional alpha-numeric characters denoting non-safety critical options.

### Model Differences:

Model SPDHW05T16 is identical to previous model YNV05T16 except for the input and output pins are soldered to the board and the model designation.

Model SPDHW12T16 is identical to previous model YNV12T16 except for the input and outputs pins are soldered to the board and the model designation.

### Special Considerations:

The following items are considerations that were used when evaluating these products.

All models are intended for building-in, to be soldered onto a PWB or plugged in to special end-user socket.

### Conditions of Acceptability:

When installed in the end-use equipment, the following are among the considerations to be made:  
See base report for details.

## Attachment

### Nomenclature And Electrical Ratings

Any combination of input voltage and output voltages within the nomenclature shown above creates a valid model number.

Type Model Designations:	YNE	12	S	25	018	-X
	I	II	III	IV	V	VI
I - Product Series	YNE (eighth brick) YNS/YS YNL/YL YNC/YC YNM/YM YNV (vertically mounted SIP) SPDHW					
II - Input Voltage:	05 = 4.5 - 5.5 V dc: 5 V dc nominal (for YNC/YC) 05 = 3.0 - 5.5 V dc: 5 V dc nominal 12 = 9.6 - 14 V dc: 12 V dc nominal					
III - Mounting Scheme	T = Through Hole S = Surface Mount					
IV – Output Current Rating:	05 = 5 Amps 06 = 6 Amps 10 = 10 Amps 16 = 16 Amps 20 = 20 Amps (YNC/YC) 25 = 25 Amps (YNE)					
V – Output Voltage Rating:	Blank if Output voltage is Adjustable (0.7525 to 3.63 V dc for Vin 05) (0.7525 to 5.5 V dc for Vin 12) 008 = 0.8 Volts dc 009 = 0.9 Volts dc 010 = 1.0 Volts dc 012 = 1.2 Volts dc 015 = 1.5 Volts dc 018 = 1.8 Volts dc 020 = 2.0 Volts dc 025 = 2.5 Volts dc 033 = 3.3 Volts dc 050 = 5.0 Volts dc					
VI – Options Suffix	(denoting non-safety critical options) Blank if No Options Available 'X' – May or may not be followed by a dash followed by letters and/or numbers denoting non-safety-critical options such as, but not limited to, positive or negative enable logic, clearance off user board, non-standard pin configuration, etc.					

**CB TEST CERTIFICATE CERTIFICAT D'ESSAI OC**Product  
Produit

DC/DC Converter

Name and address of the applicant  
Nom et adresse du demandeurBel Fuse Inc.  
206 Van Vorst St.  
Jersey City, NJ 07302  
USAName and address of the manufacturer  
Nom et adresse du fabricantBel Fuse Inc.  
206 Van Vorst St.  
Jersey City, NJ 07302  
USAName and address of the factory  
Nom et adresse de l'usineBCM Electronics Corporation SDN BHD  
Kulim Hi-tech Park, Phase 1 Plot 21, Jalan Hi-Tech 4  
09000 Kulim  
MalaysiaNote: When more than one factory, please report on page 2  
Note: Lorsque il y plus d'une usine, veuillez utiliser la deuxième page Additional information on page 2Ratings and principal characteristics  
Valeurs nominales et caractéristiques principales

DC Input: 4.5-14 V

Trademark (if any)  
Marque de fabrique (si elle existe)**bel**Type of Manufacturer's Testing Laboratories used  
Type de programme du laboratoire d'essais constructeur

YN(X) Series, Y(X) Series, SPDHW Series.

Model / Type Ref.  
Ref. De type

DC Output: 0.7525-5 V, 5-25 A. For more information refers to attachment.

Additional information (if necessary may also be  
reported on page 2)  
Les informations complémentaires (si nécessaire,  
peuvent être indiqués sur la deuxième page Additional information on page 2A sample of the product was tested and found  
to be in conformity with  
Un échantillon de ce produit a été essayé et a été  
considéré conforme à la

IEC 60950-1(ed.2);am1;am2

As shown in the Test Report Ref. No. which forms part  
of this Certificate

283985

Comme indiqué dans le Rapport de tests numéro de  
référence qui constitue partie de ce CertificatThis CB Test Certificate is issued by the National Certification Body  
Ce Certificat de test OC est établi par l'Organisme **National de Certification**Gaustadalléen 30  
NO-0373 Oslo, Norway

Date: 04-05-2015

Signature: Juan Z. Kleppenes  
Certification Department



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