



Certificate of Compliance

Certificate: 80054371

Master Contract: 170351

Project: 80054371

Date Issued: 2020-10-01

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



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 Std

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.

Component DC/DC converter, Models IMX4, IMX6, KMX4, KMX6 and NV Series, rated 4.7 to 121Vdc. See below Model Name

Nomenclature.:

Model Name Nomenclature: IM and KM series



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Typical Model Designation: 40 IM X 4 - 15 - 9 - K Z G
 I II III IV V VI VII VIII IX

I – Input Voltage, Vdc: 5 = 4.7 - 16.8 Vdc
 20 = 8.4 - 36 Vdc
 24 = 14 - 36 Vdc (IMS6 or KMS6 models only)
 40 = 16.8 - 75 Vdc
 48 = 36 - 75 Vdc (IMS6 or KMS6 models only)
 70 = 40 - 121 Vdc

II – Model Series: IM
 KM

III – Input Voltage Range: S = Small voltage range (IMS6 or KMS6 models only)
 X = Large wide voltage range

IV – Output Power Rating: 4 = 4.2 W maximum
 6 = 6W

V – Output Voltage Rating: 03 = 3.3 Vdc
 05 = 5 Vdc
 12 = 12 Vdc
 15 = 15 Vdc
 24 = 24 Vdc

(Note: Dual output models have two numbers, without dash between)

VI – Temperature range (Tc): 8 = 105°C (not available on IMS6)
 9 = 95°C

VII – Alternative Pin-out: K

VIII - Open frame: Z (models without Z are cased)

IX – Optional Suffixes: Any alpha-numeric characters indicating non-safety critical options

Any combination of input and output voltages shown above creates a valid model number.

Model Name Nomenclature: NV series

Typical Model Designation: NV S 0.7 E G - M6 X
 I II III IV V VI VII



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I – Model Series:	NV
II – Number of outputs:	S = Single D = Dual
III – Output Current rating:	0.2 = 0.16 A 0.3 = 0.28 - 0.34 A 0.4 = 0.4 A 0.5 = 0.5 A 0.7 = 0.7 A 0.9 = 0.9 A 01 = 1.0 A
IV – Input Voltage:	C = 9 - 36 Vdc E = 18 - 75 Vdc Y = 18 - 36 Vdc Z = 36 - 75 Vdc
V – Output Voltage Rating:	E = 3.3 Vdc G = 5 Vdc H = 12 Vdc J = 15 Vdc K = 24 Vdc

(Note: Dual output models have two letters)

VI – Surface Mount Identifier: M6

VII – Options: Part number may or may not be followed by suffix letters and numbers denoting non-safety critical customer specific options

Any combination of input and output voltages shown above creates a valid model number.

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. All models are intended to be supplied from an isolated secondary circuit.
3. The input and output connectors are not acceptable for field connections and are only intended for connection to mating connectors of internal wiring inside the end-use equipment. The acceptability of these and the mating connectors relative to secureness, insulating materials, and temperature shall be considered.
4. The product was evaluated at maximum operating temperatures, T_{ma} of 70°C with full output power. Maximum manufacturer's recommended case operating temperature of 95°C for -9, 105°C for -8 (not



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- available on IMS6), and 110°C for option Z and all NV series models.
5. Abnormal and Component Failure Tests on models IMX4/IMS6 were conducted with the power supply Input protected by UL Listed fuse rated 3A, time delay. NV series models were tested with the power supply protected by a UL R/C fuse, Littelfuse, Cat. No. 451-005, rated F, 125 V dc, 5 A. If a fuse rated greater than 5A is used, additional testing may be required.
 6. Temperature tests shall be considered for specific installation conditions in the end system.
 7. Suitable enclosure for FIRE, MECHANICAL and ELECTRICAL enclosure shall be provided.
 8. The secondary outputs are ES1 at PS1.
 9. The unit was tested per manufacturer's recommended rated input voltage with zero tolerance. When the input is 121 Vdc, the input current shall be limited within 25 mA max.
 10. Special spacing consideration should be given to the end-use product as the spacings between the unit and mounting surface have not been evaluated for models with Z option.
 11. Special enclosure consideration should be given to the end-use installation of models with Z option or NV series models. Hazardous voltage is available on the surface of the PWB. The end-use product should be reviewed to determine whether accessibility requirements are met for the end-use product.

APPLICABLE REQUIREMENTS

- | | |
|--------------------------------|---|
| CAN/CSA C22.2 No. 62368-1-19 | – Audio/video, information and communication technology equipment – Part 1: Safety requirements |
| UL 62368-1 3 rd Ed. | – Audio/video, information and communication technology equipment – Part 1: Safety 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

Project	Date	Description
80054371	2020-10-01	DC-DC power supply, model IMX4, IMX6, KMX4, KMX6 and NV Series (CSA c/us)