

# **Certificate of Compliance**

Certificate:	80070109	Master Contract:	170351
Project:	80132425	Date Issued:	2022-07-13
Issued To:	Bol Fuso Inc		

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 - 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 Stds

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 Converter, Model 0RQB, 0RQP Series. See below model naming nomenclature for details.

0	R	QB	-	X3	S	12	В	Y
Ι	II	III	-	IV	V	VI	VII	VIII



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	Mounting Type: RoHS Status: Series Name:	0 = Through hole mount. R = RoHS. QB = 1/4th Brick; QP = 1/4th Brick, with PMbus.
	Output Power: Input Range:	X0 = 1000 W; X3=1300 W; X5=1500 W. S = 45-56Vdc or 45-57Vdc or 45-58.5Vdc or 48-60Vdc; M = 48-60Vdc, or 50-58Vdc.
VI –	Output Voltage:	10,11=10.8Vdc or $10.4$ Vdc; 12=11.6Vdc or $12.0$ Vdc
VII –	Options suffix	Active Logic and Heatsink/baseplate: A, B, C, D, F, K, N, 3, P, W = Active low, with Baseplate or heatsink or any other alphanumeric characters for non-safety changes
VIII	_	Options suffix Package Type: G = Tray package or any other alphanumeric characters for non-safety changes

Electrical Rating:

Madalaa	Inpu	ıt	Output			
Model name	Voltage (Vdc)	Current (A)	Voltage (Vdc)	Current (A)	Power (W)	
0RQB-X0S10B	45-57	25	10.4	96.2	1000	
0RQB-X0S10N	45-57	25	10.4	96.2	1000	
0RQP-X0S10D	45-57	25	10.4	96.2	1000	
0RQP-X0S10B	45-56	25	10.4	96.2	1000	
0RQP-X0M12B	50-58	21	12.0	83.3	1000	
0RQP-X0M12C						
0RQB-X3S11B	45-58.5	31	10.4	125	1300	
0RQB-X3S11F	45-58.5	31	10.4	125	1300	
0RQB-X3S11D	45-58.5	31	10.4	125	1300	
0RQB-X3S11K	45-58.5	31	10.4	125	1300	
0RQP-X3S11B	45-57	31	10.4	125	1300	
0RQB-X3S113	48-60	28	10.8	120.4	1300	
0RQB-X5M12B	48-60	33	12.0	125	1500	
0RQB-X5M12P						
0RQP-X5M12P	48-60	33	12.0	125	1500	
0RQP-X5M12B	48-60	33	12.0	125	1500	
0RQP-X5M12A	48-60	33	12.0	125	1500	
0RQP-X5M123	48-60	33	12.0	125	1500	
0RQP-X5M12D	48-60	33	12.0	125	1500	
0RQP-X5M12W	48-60	33	12.0	125	1500	



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#### **Conditions of Acceptability:**

- 1) All models are to be installed by trained service personnel per manufacturer's specifications.
- 2) Suitable fire, mechanical and electrical enclosure shall be provided in the end system.
- Models 0RQP-X3S11B, 0RQP-X5M12P, 0RQP-X5M12B, 0RQP-X5M123, 0RQP-X5M12D, 0RQP-X5M12W, 0RQP-X5M12A were evaluated for basic insulation between input to output, all other models have functional insulation between input to output circuits.
- 4) For models with basic insulation between input and output, the Clearance values of PSU have been evaluated for an altitude of 5000m, altitude correction factor is 1.48. The Creepage values of PSU have been evaluated for material group IIIa or IIIb, Pollution Degree 2 environment
- 5) The input circuit is classified as Electrical energy source class 1 (ES1) for models with functional insulation between input to output. Input is declared as ES2/PS3 for models with basic insulation between input and output.
- 6) The output circuit is classified as Electrical energy source class 1 (ES1), Power source class 3 (PS3).
- 7) All models are intended to be supplied from an isolated secondary circuit and were tested for zero tolerance input voltage.
- Abnormal and Component Failure Tests were conducted with units protected by an external fuse rated 40 A, 125 Vdc.
- 9) All models submitted and tested for use at the maximum case temperature (Tc) permitted by the manufacturer's specification of :125 °C (measured on Q2 case). with manufacturer's recommended airflow. Airflow direction for all models except for 0RQP-X5M12W is from Vout to Vin. Model 0RQP-X5M12W airflow direction is from Vin – to Vin +.
- 10) The input and output connectors (pins) are suitable for factory wiring only.

### **APPLICABLE REQUIREMENTS**

CSA C22.2 No. 62368-1:19	<ul> <li>Audio/video, information and communication technology equipment – Part 1: Safety requirements</li> </ul>
UL 62368-1 3 <sup>rd</sup> Ed.	<ul> <li>Audio/video, information and communication technology equipment – Part 1: Safety requirements</li> </ul>

#### 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

Certificate: 80070109

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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
80132425	2022-07-13	Update CSA Report 80070109 to evaluate new models 0RQP-X0M12B, 0RQP-X0M12C, 0RQP-X5M12A, 0RQB-X5M12P, 0RQP-X5M12W - based on acceptance of data under the CPC program
80070109	2021-01-28	DC-DC Converter, Model 0RQB, 0RQP Series (upgrade CSA Report 70209787 to 62368-1) (CSA c/us)