

Proprietary Information of:  bel POWER SOLUTIONS & PROTECTION a bel group	Title: EN 50155 Declaration of Conformity	Document No. URR.20179	Rev. B
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Declaration of Conformity

We, Bel Fuse Inc., hereby declare under our sole responsibility that the products herein after referred to are in compliance with the **EN 50155:2021**.

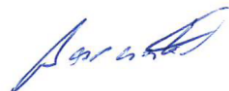
Manufacturer/Address: **Bel Fuse Inc.**
300 Executive Drive
Suite 300
West Orange, NJ 07052

Product: **AC-DC Converter**

Type Designation: **LRSA Series**
 (Refer to Table 1 listing part number Description)

Standard(s): **EN 50155:2021**
EN 50124-1:2017
EN 50125-1:2014
EN 50121-3-2:2016
EN 60529:1991
EN 61373:2010
EN 45545-2:2020
 (Refer to Table 2 listing achieved compliance)

Prepared by:



Dubnica nad Váhom, Slovakia

April 10th, 2024

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Place

Date

Approved by:



Uster, Switzerland

April 10th, 2024

Silvan Mueller,
 Business Development
 Manager

Place

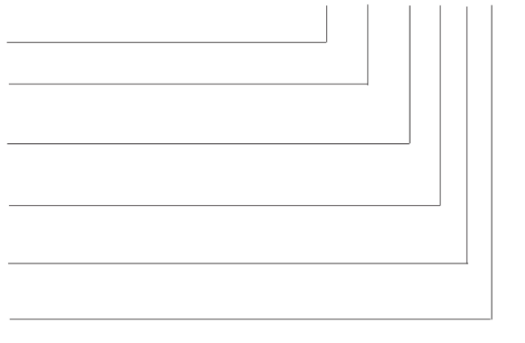
Date

Table 1: Product part number description

Part Number Description for Single Output System

LRSA 20-48 - 9 0 0 Sxxx

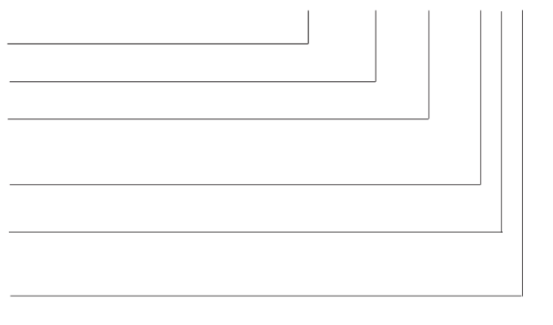
Series (product family)..... LRSA
 Output current..... 08, 10, 16, 20, 24, 30, 32, 40,
 48, 50, 60, 64, 80, 96, 100, 120
 Output voltage 12, 15, 24, 28, 30, 48, 60
 Operating ambient temperature range
 $T_A = -40$ to $+71$ °C -9
 Options: Bel Power logo on front panel0
 Custom logo on front panel5
 Features: Independent input (no, yes) 0, 1
 Customer specific model..... Sxxx¹



Part Number Description for Double Output System

LRSA 2016-1215 - 9 0 0 Sxxx

Series (product family)..... LRSA
 Output current..... 08, 10, 16, 20, 24, 30, 32, 40, 48, 60
 Output voltage 12, 15, 24, 28, 30
 Operating ambient temperature range
 $T_A = -40$ to $+71$ °C -9
 Options: Bel Power logo on front panel0
 Custom logo on front panel5
 Features: Independent input (no, yes) 0, 1
 Customer specific model..... Sxxx¹



¹ Applicable for non safety critical deviations. xxx are 3 digits assigned for each customer-specific model

¹ Customer-specific models. No safety-relevant changes compared to the respective basic model, e.g. different mechanical details, special markings, mounted front plates, reduced output voltage, etc.

Note: The sequence of options must follow the order above.

Example: LRSA30-48-900: AC-DC converter, operating input voltage range 90 to 264 VAC, 1 isolated output, providing 48 V, 30 A, RoHS-compliant for all six substances.

Table 2: Compliance status

Subclause	Title	Default requirement	Product compliance
4.4.1	Altitude	Class A1 (1400 meters) Table 1 of EN 50125-1	Fulfilled (2000 meters)
4.4.2	Operating temperature	Class OT4 (-40 to +70 degC)	Fulfilled (OT4) with forced cooling min. 400LFM
4.4.3	Switch-on extended op. temp.	Class ST1 (Test cycle B)	Fulfilled (ST1)
4.4.4	Rapid temperature variation	Class H1 (No requirements)	Fulfilled (H1)
4.4.5	Shock and Vibration	Category 1; Class B of EN 61373:2010	Fulfilled
4.4.6	Electromagnetic compatibility	In compliance with EN 50121-3-2	Fulfilled EN55011/55032 cl.A
4.4.7	Relative humidity	In compliance with EN 50125-1	Fulfilled
4.5.2	Atmospheric pollutants	No requirements apply by default	Fulfilled (Salt Mist per EN 60068-2-11) for LR modules
5.2.2	The nominal voltage of equipment (Un)	Either of following values: 24 V, 28 V, 36 V, 48 V, 72 V, 96 V, 110 V	Not applicable (Un=230VAC)
	Continuous DC power supply range	0.7 x Un – 1.25 x Un	Fulfilled for 90-264Vac
5.2.3	Temporary DC power supply fluctuation	0.6 x Un – 1.4 x Un (for 100msec)	Fulfilled
5.2.4	Interruption of voltage supply	Class S2 (10 msec)	Fulfilled (S2)
5.2.5	Supply Change-Over	Class C1	Fulfilled (C1)
5.2.6	Grouping of supply voltages	0,7xUn – 1,25xUn	Fulfilled for 90-264Vac
5.2.7	DC ripple factor	Ripple factor of +/- 5%	Fulfilled (+/-5%)
6.2	Useful life	Class L4	Fulfilled (L4)
6.3.2	Preventive maintenance	No periodic maintenance applies	Fulfilled (No maintenance required)
7.2.1	Insulation Coordination	Pollution degree PD2 of EN 50124-1	Fulfilled (PD2)
10.2.5	Sockets and Edge connectors	Class K2 (not allowed)	Fulfilled (K2)
10.7	Protective coatings for PCB's	Class PC2	Fulfilled for LR modules. Backplane are not fully protected on both sides.
10.9	Mounting	No IP code requirements applies per EN 60529	Fulfilled (IP40) on front side of the subrack.
10.10	Cooling and ventilation		Forced cooling of min 400LFM is required.
11.4	Fire behavior requirements	Fire behavior testing shall be according to EN 45545-2.	Fulfilled for LR modules
12.7.8.3	Programmable component	Class M0	Class M0 or not applicable based on models