



C.M. TECHNOLOGY

Designed and Manufactured in Australia

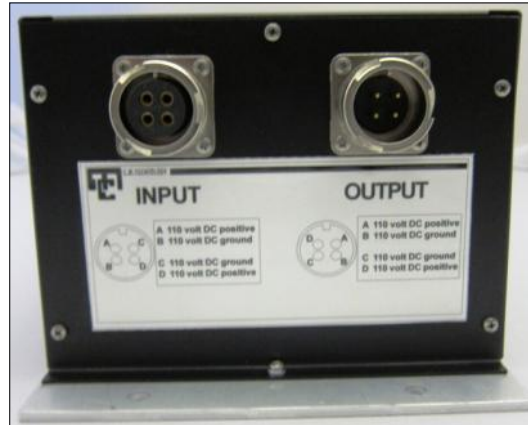
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PRODUCT SHORTFORM

Rev. A4

Tel: +61 (2) 9764 5655

Railway DC-DC Converter



RBX Series

The RBX Series is a Panel-mount Railway DC-DC Converter.

- High Efficiency (91%)
- 110V DC Input
- Overload/Overvoltage/Over temperature protection
- Built-in constant current limiting circuit
- 4000V DC Input/Output Isolation



Other Input and Output Configurations available upon request



A Caspian Technology Company

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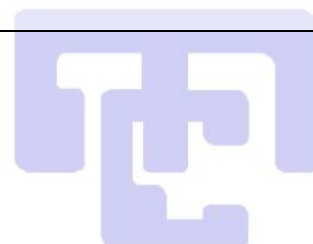
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Specifications for RBX11:

Output DC Voltage	108V
Output Rated Current	12.6A
Current Range	0-12.6A
Ripple & Noise (Maximum)	480mV peak-to-peak
Voltage Tolerance	±2.0%
Line Regulation	±0.2%
Load Regulation	±1.0%
Input Voltage Range	67.2 - 143V DC
Input DC Current (Typical)	13.4A/110V
Efficiency (Typical)	91%
Setup, Rise Time	800ms, 50ms at full load
Inrush Current (Typical)	45A/110V DC
Overload Protection	Constant Current limiting, automatic recovery after conditions removed
Overvoltage Protection	Shut down Output voltage, re-power on to recover
Overtemperature Protection	Shut down Output voltage, automatic recovery after temp. decreases
EMC Immunity	EN61000-4-2,3,4,5,6,8, Light Industrial, Criteria A, EN50121-3-2
EMC Emission	EN55022 (CISPR22) Conduction Emission: Class A, Radiation Emission: Class B, EN50121-3-2
Isolation Resistance	Input-Output, Input-Ground, Output-Ground: 100 MΩ / 500V DC / 25°C / 70% Room Humidity
Withstand Voltage	Input-Output: 4KV DC, Input-Ground: 2.5KV DC, Output-Ground: 2.5KV DC
Safety Standards	IEC60950-1(LVD)
Vibration	10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axis
Working Temperature	-40°C ~ +55°C
Working Humidity	20% ~ 90% Room Humidity Non-condensing
Storage Temperature & Humidity	-40°C ~ +85°C, 10% ~ 95% Room Humidity
MTBF	44.64K hrs min. MIL-HDBK-217F (25°C)




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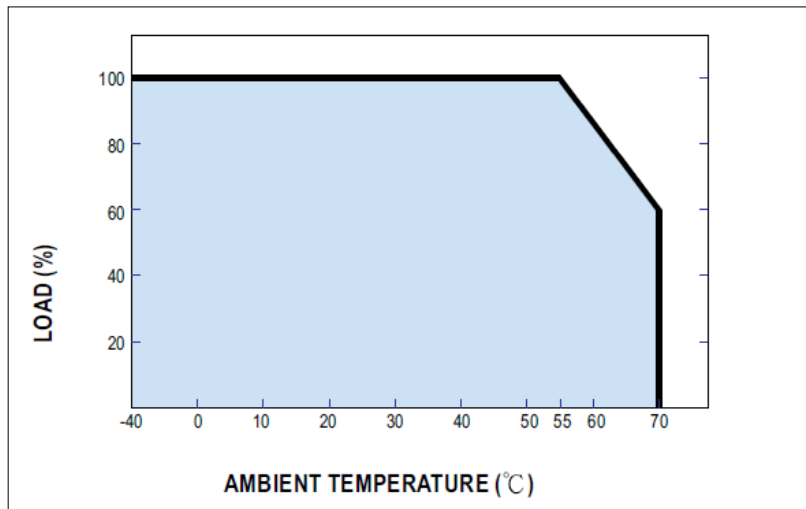
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Overview:

The RBX has been designed to suit the unique requirements of DC-DC converters used in railway applications.

By utilising our years of technical knowledge and real-world applications gained from the proven PSTR series, the RBX has been designed for railway with DC 110V supplies, without any voltage selection being needed.



Derating Curve

The RBX is an example of a generic approach to railway power system design. Essentially the same circuit configuration is used for all switchmode power units supplied made by C.M. Technology.

Manufactured using switchmode electronics, the RBX is designed for a high energy efficiency of >91%. This relatively high efficiency allows a maximum 55°C ambient working temperature. Our high quality components are housed in a quality case, allowing for easy mounting of equipment modules.

The finished DC-DC converters are all burnt in at full load to provoke any infant mortality failures, with some products held on long term burn-in.

The RBX is compliant with the Australian C-Tick Standard.

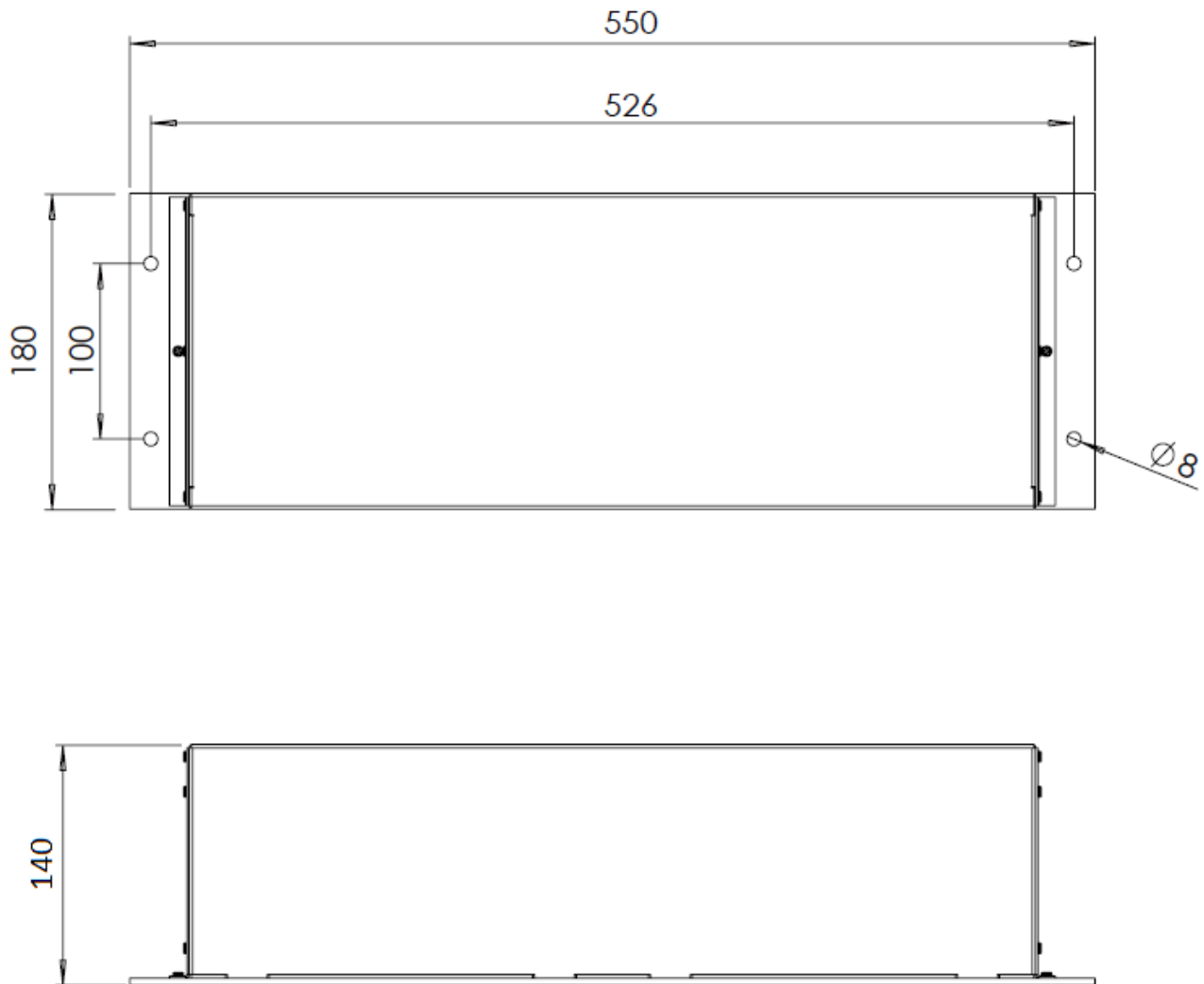


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www.cmtechnology.com.au**PRODUCT SHORTFORM****Rev. A4****Tel: +61 (2) 9764 5655****Dimensions:****A Caspian Technology Company**

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