



# 100W SRE SERIES

DC/DC CONVERTER



## Description

The SRE Series is an enclosed product designed specifically for use on railway rolling stock. The SRE is rated at 100W with a peak capability of up to 120W. Units are available in single or dual output versions with input ranges to cover all of those typically found in rail applications. The unit is suitable for either rack or bulkhead mounting. The range is fully compliant with the current national and international railway standards and norms.

## Input Specifications

The following input voltage versions are available as standard:

110V	(66.0 - 137.5V) dc	(suffix A)
72V	(43.2 - 90.0V) dc	(suffix D)
52V	(31.2 - 65.0V) dc	(suffix C)
36V	(21.0 - 50.4V) dc	(suffix F)
24V	(16.8 - 33.6V) dc	(suffix B)

**Other ranges are available to order**

Product reference	All references
Input Ripple	EN50155
Input Protection	Reverse polarity protection; surges and transients to EN50155
Efficiency	typically 90%
Input Fuse	Board mounted.

## Output Specifications

Product reference	All references
Output Power	100W nominal (120W pk option)
Output Voltage	Fixed output can be specified in the range 5V to 48Vdc as standard
Minimum Load	Zero for all outputs
Setting Accuracy	±0.6% at 50% load, 15°C to 25°C
Line Regulation	±0.2% all outputs
Load Regulation	±0.5% all outputs
Temperature Coeff.	<0.02% / °C
Output Ripple	<1% Pk-Pk of output voltage
Output Noise	<1% Pk-Pk super-imposed (up to 20 MHz)
Response Time	0.5ms to within 2% (for a 20% - 90% load change)
Holdup Time	No hold up time offered
Indicators	Output OK LED
Signal	Output good signal given by an isolated open collector, optional
Protection	Output lines protected against indirect transients to EN50155
Current Limit	Operates at a minimum of 105% of nominal or peak load. Auto recovery
Thermal Protection	Shuts down PSU if safe internal temperature is exceeded. Auto recovery
Isolation	Input to Output      3.0kV dc Input to Case        1.5kV dc Output to Case       1.5kV dc Output to output     0.5 kV dc.

## Environmental Details

Product reference	All references
Operating Temperature (no derating)	-25°C to +71°C (90°C max case temp) -40°C to +71°C (option T)
Storage Temperature	-40°C to +80°C
Cooling	Convection/ Conduction
Relative Humidity	95% max.
Environmental Protection	IP54
Shock and Vibration	EN50155 para 10.2.11



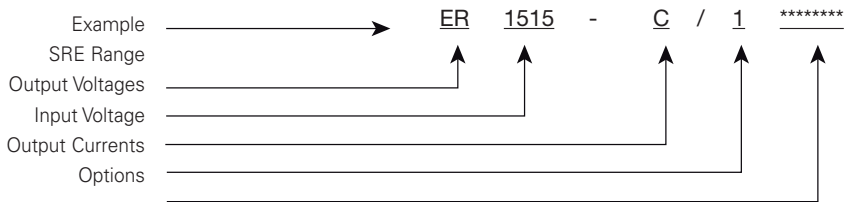
### Applicable Norms

Item	Reference
EMC	EN50155, EN50121-3-2
Other	EN50155

### Mechanical Characteristics

Product reference	All references
Construction	Open frame – Eurocard or Cold Wall mountable
Dimensions	Depth = 171.5 mm Width = 111.0 mm Height = 19.2 mm
Weight	370g
Mounting	Four M3 tapped holes in base strips (additional mounting plate with clear holes optional)
Connections	DIN 41612 H15 Class 1 (silver or gold). Alternatively, specify option Q6 for connections via flying leads (halogen free cable).

### Ordering Information



### Technical Drawing

- NOTES**
- All dimensions in mm
  - Specifications subject to change without notification

