

# RWY SERIES

## Rail DC/DC Converters Single Output: 30 - 280 Watts



### Features

- Designed to rail standards EN50155 and EN50121
- Fully potted with thermally conductive MIL-Spec silicon rubber compound
- Rugged design for on-board train applications
- Wide input voltage range
- Convection/Conduction cooled. No fans
- Fully isolated input - output 3000VDC
- Over voltage protection
- Overload and short circuit protection
- MTBF > 150,000 hours
- Single and dual output options

### General Specifications

<b>Input Voltage:</b>	<b>24VDC</b> (17 - 30), <b>72VDC</b> (50 - 90), <b>110VDC</b> (77 - 137) • Other voltages options on request.																								
<b>Input Protection:</b>	Reverse polarity protection. Inrush current limiting																								
<b>Isolation:</b>	Input - Output: 3000VDC																								
<b>Efficiency:</b>	Model dependent, typically 80%																								
<b>Output Voltage:</b>	See tables																								
<b>Output Power:</b>	30 - 280 watts																								
<b>Voltage Adjustment:</b>	Fixed output																								
<b>Regulation:</b>	Line: $\pm 1.5\%$ Load: $\pm 2\%$																								
<b>Output Protection:</b>	Over voltage protection Current limiting and short circuit protection. Thermal protection																								
<b>EMI:</b>	EN55022 Class A, EN50121 -3 -2																								
<b>Immunity:</b>	EN50155, EN50121 -3 -2 and EN61000 -4																								
<b>Operating Temp:</b>	-40°C to +50°C at full load +70°C cold plate temperature																								
<b>Dimensions/Weight:</b>	<table border="0"> <tr> <td>RWY30 -150:</td> <td>181 x 59 x 56mm</td> <td>500 -650g</td> </tr> <tr> <td>RWY200:</td> <td>210 x 69 x 58mm</td> <td>900g</td> </tr> <tr> <td>RWY280:</td> <td>201 x 113 x 61mm</td> <td>1.3Kg</td> </tr> <tr> <td>RWY72:</td> <td>180 x 105 x 60mm</td> <td>1.3Kg</td> </tr> <tr> <td>RWY182:</td> <td>201 x 113 x 61mm</td> <td>1.3Kg</td> </tr> <tr> <td>RWY272:</td> <td>180 x 105 x 58mm</td> <td>1.3Kg</td> </tr> <tr> <td>RWY250:</td> <td>201 x 113 x 61mm</td> <td>1.5Kg</td> </tr> <tr> <td>RWY282:</td> <td>201 x 113 x 61mm</td> <td>1.5Kg</td> </tr> </table>	RWY30 -150:	181 x 59 x 56mm	500 -650g	RWY200:	210 x 69 x 58mm	900g	RWY280:	201 x 113 x 61mm	1.3Kg	RWY72:	180 x 105 x 60mm	1.3Kg	RWY182:	201 x 113 x 61mm	1.3Kg	RWY272:	180 x 105 x 58mm	1.3Kg	RWY250:	201 x 113 x 61mm	1.5Kg	RWY282:	201 x 113 x 61mm	1.5Kg
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### Description

The **RWY** series DC/DC converters are designed for use on Rail Rolling Stock and for many extremely harsh environments. They are fully potted with a thermally conductive with a MIL-Spec silicon compound, meeting a high level of shock and vibration. The tables below illustrate some of the most common output voltages, but these DC/DC converters can also be manufactured to customer input and output specifications, with total flexibility to match those requirements.

The dual output models have two floating outputs, which if required, can be connected in series, for high output volatge options.

### Options

<b>Output Voltage:</b>	Special voltage outputs.
<b>Terminals:</b>	Customer specified connectors.

Model Single	Output		Power W
	V	A	
RWY30 - xx - 12	12V	2.5A	30W
RWY30 - xx - 24	24V	1.25A	
RWY60 - xx - 12	12V	5.0A	60W
RWY60 - xx - 24	24V	2.5A	
RWY100 - xx - 12	12V	8.3A	100W
RWY100 - xx - 24	24V	4.1A	
RWY150 - xx - 12	12V	12.5A	150W
RWY150 - xx - 24	24V	6.0A	
RWY200 - xx - 12	12V	16A	200W
RWY200 - xx - 24	24V	8A	
RWY280 - xx - 12	12V	23A	280W
RWY280 - xx - 24	24V	11A	

#### Notes re table (above):

- Final part numbers will be factory allocated to reflect customer input and output requirements.
- **XX** will be replaced by input voltage: RWY150 - 110 - 12
- Other output voltage options on request

#### Notes re table (left):

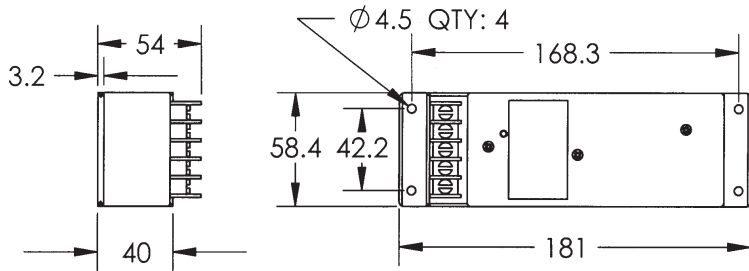
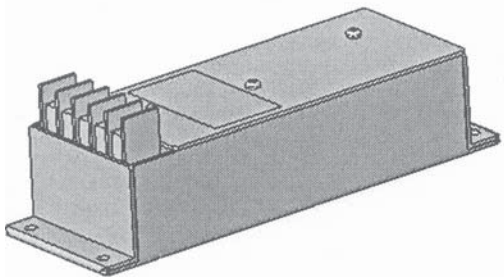
- Final part numbers will be factory allocated to reflect customer input and output requirements.
- RWY182, RWY250, RWY282: Any output voltage setting is possible between 5-72V on each of the two outputs.
- Other output voltage options on request.

Model Dual	Output				Power W
	V1		V2		
RWY72 - xx - 12	12V	6A	12V	6A	150W
RWY72 - xx - 24	24V	3A	24V	3A	
RWY272 - xx - 12	12V	8A	12V	8A	200W
RWY272 - xx - 24	24V	4A	24V	4A	
RWY182 - xxxx	5 - 72V	8A	5 - 72V	8A	200W
RWY250 - xxxx	5 - 72V	8A	5 - 72V	8A	
RWY282 - xxxx	5 - 72V	12A	5 - 72V	12A	280W

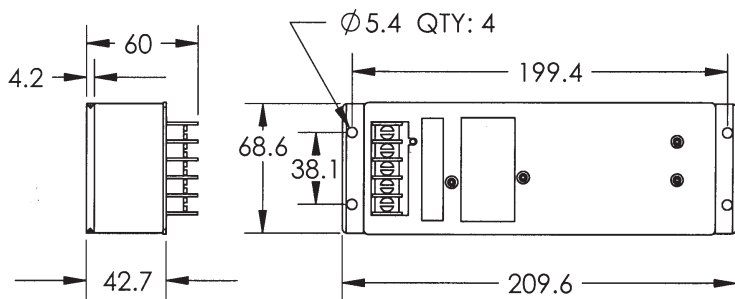
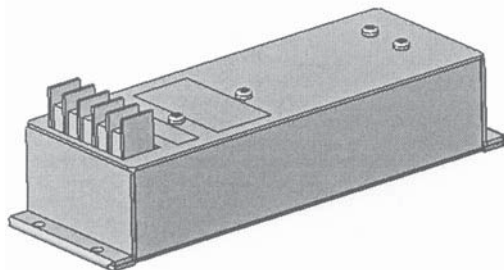
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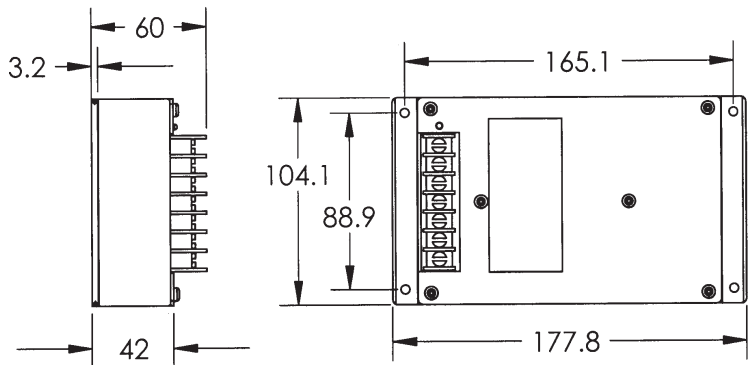
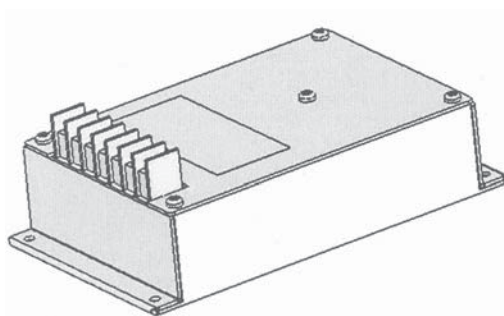
## RWY30~150



## RWY200



## RWY72



## RWY282, 182, 202, 280, 272

