

RWY200 SERIES

Rail DC/ DC Converters Single Output: 200 Watts



General Specifications

| | |
|---------------------------------|--|
| Input Voltage | 24VDC (14.4 ~ 34) 36VDC (22 ~ 51) 48VDC (28 ~ 67) 72VDC (43 ~ 101) 96VDC (58 ~ 135) 110VDC (66 ~ 154) |
| | • Other voltages on request |
| Input Protection | Reverse polarity protection. Inrush current limiting Lower voltage than specified will not damage unit |
| Isolation | Input - Output 3000vdc Input – Chassis 1500vdc Output – Chassis 1500vdc |
| Efficiency | Model dependent , typically 80-90% |
| Output voltage | See tables |
| Output Power | 200 watts |
| Voltage Adjust. | Fixed output |
| Immunity | EN50155 & EN50121-3-2 EN61000-4-2 ESD EN61000-4-3 RF Immunity EN61000-4-4 Fast Transients EN50155 Surge & Voltage variations EN61000-4-6 Conducted Immunity |
| EMI | EN5022 Class B Conducted & Radiated |
| Switching Freq. | 80kHz ±5kHz |
| Regulation | ±1% Line / Load combined |
| Dynamic Response | Max ±5% diviation for 10% - 50% load step with 1msec recovery |
| Ripple & Noise | Typically 1% pk-pk or 0.2% RMS of output voltage (20MHZ BW) |
| Overload Protection | Rectanular current limiting, with hiccup type short-circuit protection |
| Overvoltage Protection | Second regulator loop, independent of main regulator loop |
| Operating Temp. | -40°C to +70°C cold plate temperature |
| Cooling | Conduction cooling via base plate to customer chassis or heatsink |
| Environmental Protection | Full encapsulation with thermally conductive silicon potting with UL94V-0 rated |
| Shock & Vibration | IEC61373 Cat 1 A & B and Cat 2 |
| Humidity | 5-95% non-condensing, higher ration option |
| MTBF | >150,000 hrs |

Features

- Designed to rail standards EN50155 & 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 > 150,000hrs
- Specials input / output combinations on request.

Description

The **RWY200** 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 MIL-Spec silicon compound, meeting a high level of shock and vibration.

The table below illustrate the most common output voltages, but can also be manufactured to special input & output specifications with total flexibility to match customer requirements.

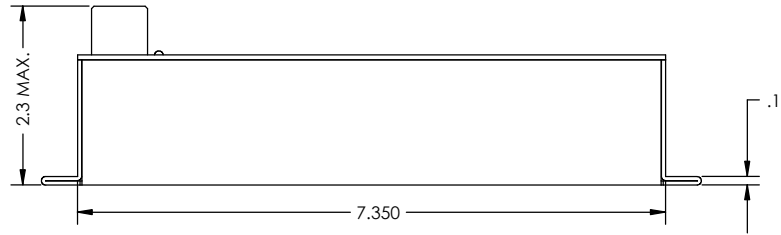
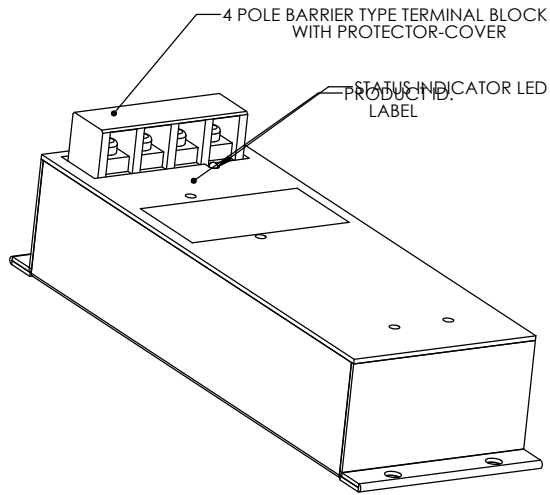
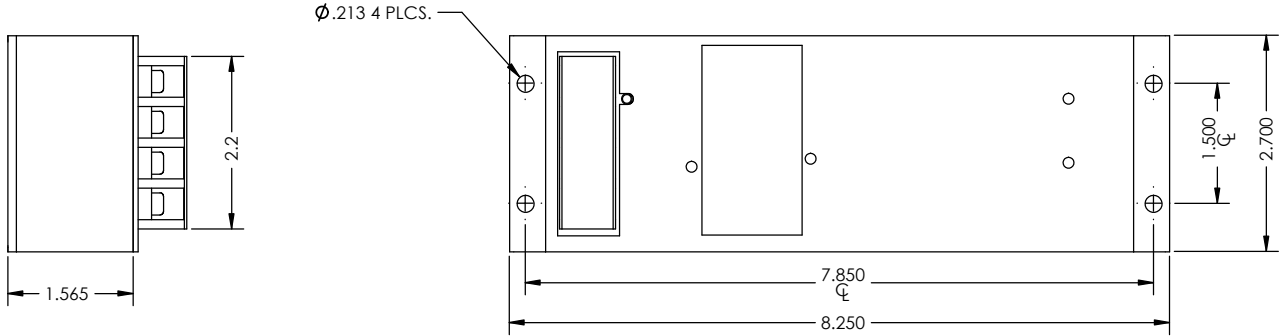
| Model | Output | | Power W |
|--------|----------------------------|-----|---------|
| | V | A | |
| RWY200 | 5V | 30A | 200W |
| | 12V | 16A | |
| | 24V | 8A | |
| | Other outputs upon request | | |

- Final part numbers will be factory allocated to reflect customer input & output requirements.

| | |
|------------------------|--|
| LED / Indicator | Optional on some models |
| Alarm output | Optional on some models |
| Connector | 5 pole barrier-type terminal block with 3/8"spacing. (optional cover) |
| Dimensions | 69 x 58 x 210mm (P200) W x H x L (includes terminal block & mounting flanges) |
| Weight | 1.0kg |

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DIMENSIONS ARE IN INCHES
TOLERANCES ON
DECIMALS: XXX ± 0.008"
 XX ± 0.012"
 X ± 0.030"
ANGLES: ± 2°
FRACTIONS: ± 1/64"
UNLESS OTHERWISE STATED
EDGES & HOLES DEBURRED
SURFACES FREE OF SCRATCHES

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| Title: | |
| Part of: | OUTLINE DRAWING |
| | P200 Package |
| | FEB.10.05 |

CASE MATERIAL: ALUMINUM
FINISH: CLEAR IRIDATED
THE UNIT IS FULLY POTTED WITH SILICONE COMPOSITE POTTING COMPOUND