

RWY300H SERIES

Rail DC/ DC Converters Single Output: 300 Watts



Features

- High voltage output 58 to 300Vdc options
- 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 > 160,000hrs
- Specials input / output combinations on request.

General Specifications

Input Voltage	24VDC (14.4 ~ 34) 36VDC (22 ~ 51) 48VDC (29 ~ 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 table
Output Power	300 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.	55kHz ±5kHz
Regulation	±1% Line / Load combined
Dynamic Response	Max ±5% deviation 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	Rectangular current limiting, with short-circuit protection.
Overvoltage Protection	Second regulator loop, independent of main regular 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	>160,000 hrs

Description

The **RWY300H** series dc/dc converters are designed for use on Rail Rolling Stock and for many extremely harsh environments., offering high output voltage options up to 300Vdc.

They are fully potted with a thermally conductive MIL-Spec silicon compound, meeting a high level of shock and vibration.

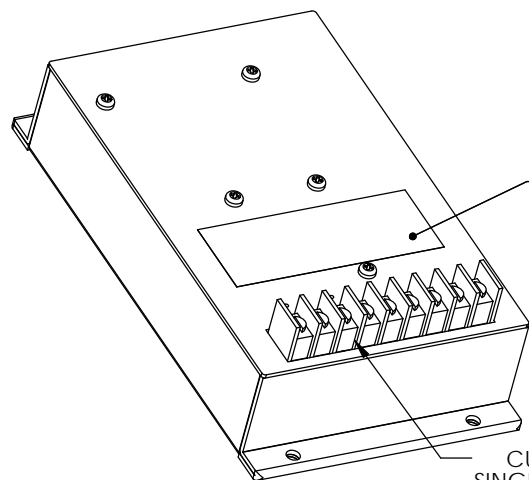
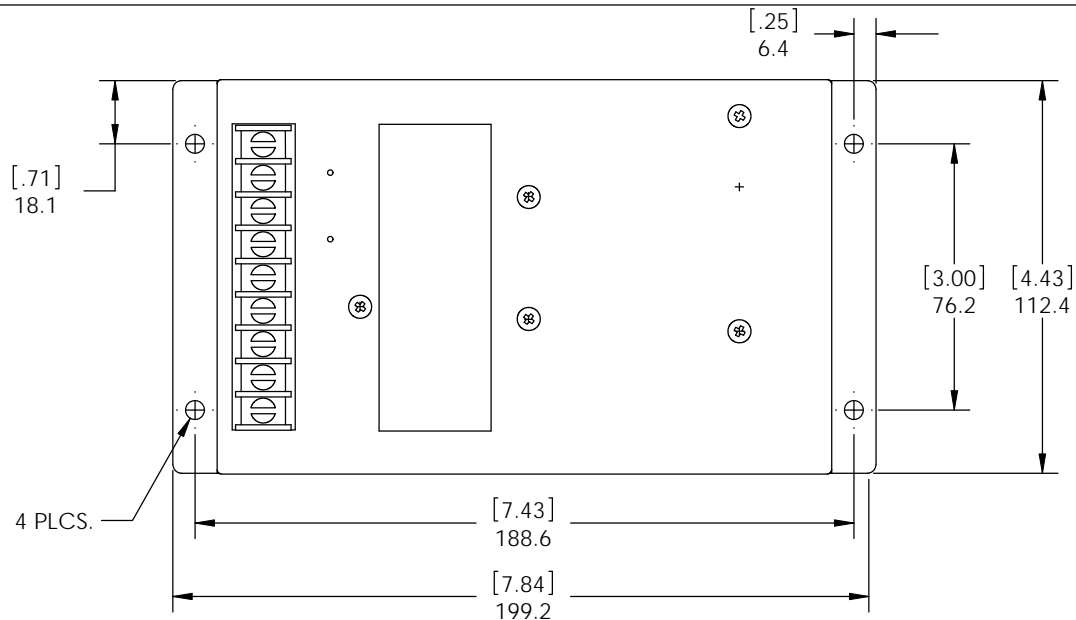
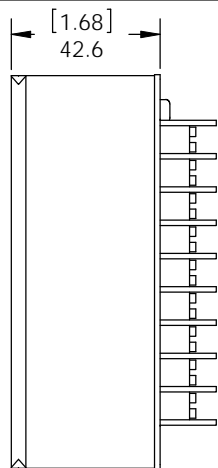
The table below illustrate the most common output voltages, but can also be manufactured to special input & output specifications with total flexibility to match customer requirements.

Model	Output		Power W
	V	A	
RWY300H	58V ~ 300V	5A	300W

1. Any output voltage from 58 ~ 300V is possible, but maximum output current and power can't exceed 5A / 300W.
2. Maximum output power will depend on final customer selection of input / output voltage combination.
3. Final part no will be factory assigned :

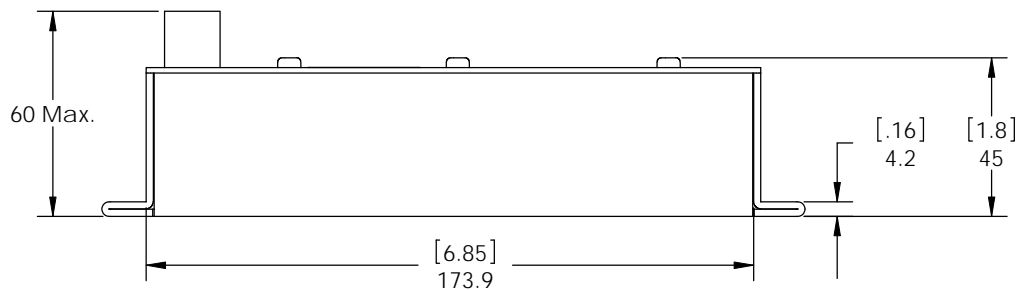
- e.g. **RWY300H-110/200PT- xxxxx**

LED / Indicator	Optional on some models
Alarm output	Optional on some models
Connector	9 pole barrier-type terminal block with 3/8"spacing. (optional cover)
Dimensions	113 x 60 x 200mm (P300H) W x H x L (includes terminal block & mounting flanges)
Weight	1.8kg



PRODUCT ID. & TERMINALS / LOGO LABEL

CURTIS 38000 SERIES 9 POLE SINGLE ROW BARRIER TYPE TERMINAL



CASE MATERIAL: ALUMINUM
 FINISH: CLEAR IRIDITE AS PER MIL-C-554E CLASS 3
 THE UNIT IS POTTED WITH SILICONE COMPOSITE POTTING COMPOUND

DIMENSIONS ARE IN MILLIMETERS
 TOLERANCES ON
 DECIMALS: XXX ± 0.2mm
 XX ± 0.3mm
 ANGLES: ± 2°
 FRACTIONS: ± 0.4mm
 UNLESS OTHERWISE STATED



Title: OUTLINE DRAWING

Part of: P300H'Bcj '&\$%\$