

Features

LED DRIVER

- Universal AC Input
- Constant Voltage / Constant Current Operation
- Active Power Factor Correction
- IP67 Design for Indoor and Outdoor Use
- Cooling by Free Air Convection
- PSE Certified for Japan market

Description

The RACD100-PSE LED driver series offer 100W of power with an universal input voltage range of 90-130VAC and constant current output up to 8.3A at a voltage of approximately 12V. The series feature a unique dual mode operation for either constant current or constant voltage making them suitable for driving LEDs directly or via local constant-current DC/DC modules directly on the light engine board. The RACD100-PSE series are fully sealed IP67 LED drivers and therefore ideally suited for indoor and outdoor applications including road, street and walkway lighting, high-bay, LED signage, and outdoor area lighting for car parks, public buildings, and tunnels. The LED drivers are PSE certified and come with a 5 year warranty.

Selection Guide

Part Number	CV Mode		CC Mode		Efficiency (115VAC) (%)
	Constant Voltage (V)	Current Range (A)	DC Voltage Range (V)	Constant Current (A)	
RACD100-12-PSE	12	0-8.3	9-12	8.3	87
RACD100-24-PSE	24	0-4.2	14-24	4.2	87
RACD100-36-PSE	36	0-2.8	26-36	2.8	89
RACD100-48-PSE	48	0-2.1	34-48	2.1	88

Specifications

Input Voltage Range	90 - 130 VAC	
Input Frequency Range	47-63Hz.	
Power Factor	Full Load, 115VAC	>0.98
THD	Full Load, 115VAC	8% max.
AC Current	115VAC	1.4A max.
Input/Output Isolation	3.75kVAC / 1minute	
Input/Case Isolation	1.8kVAC / 1minute	
Output/Case Isolation	0.5kVAC / 1minute	
Leakage Current	<0.75mA	
Voltage Tolerance	-1% to 5%	
Start-up Time	Full Load, 115VAC	1.5s
Ripple & Noise (at 20MHz bandwidth)	150mVp-p max.	
Over Current Protection	95%-105% rated current	Auto-Recovery
Short Circuit Protection	Hiccup Mode	
Over Voltage Protection	12V	15V typ.
Latch Mode	24V	31V typ.
(Power off to recover)	36V	45V typ.
	48V	58V typ.
Over Temperature Protection	Tcase 95°C ±10°C	
Operating Temperature Range	without derating	-20°C to +50°C(see graph)
(free air convection, according to PSE)	Case Temperature	75°C max.
Operation Humidity	20%-90% RH Non-Condensing	
Storage Temperature	-40°C to +80°C	
Storage Humidity	10%-90% RH	
Vibration	10-500Hz, 2G, 60 Min. along X, Y and Z	
IP Rating	IP67	
EMC Standards (designed to meet)	EMC Compatibility	EN55015 FCC, Part 15
	Harmonic Current	EN61000-3-2 Class C (≥75% load) EN61000-3-3
	EMC Immunity	EN61000-4-2, 3, 4, 5, 6, 11
		continued on next Page

LIGHTLINE

AC/DC-Converter

with 5 year Warranty

RECOM

100 Watt Single Output



RACD100-PSE

Note:

All LED Drivers may not be used without a load. They must be switched on the primary side only. Noncompliance may damage the LED or reduce its lifetime.

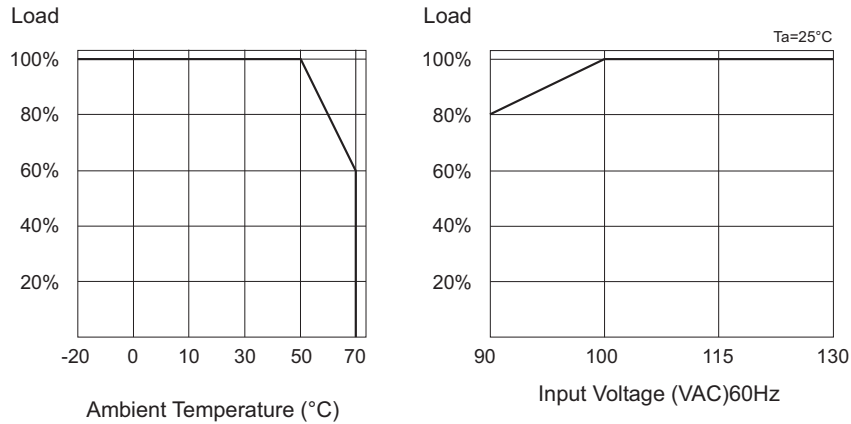
Refer to Application Notes

Specifications

Dimension	222*68*39mm	
Weight	1020g	
MTBF	using MIL-HDBK-217F (25°C)	250 x 10 ³ hours
Design Lifetime	70 x 10 ³ hours	

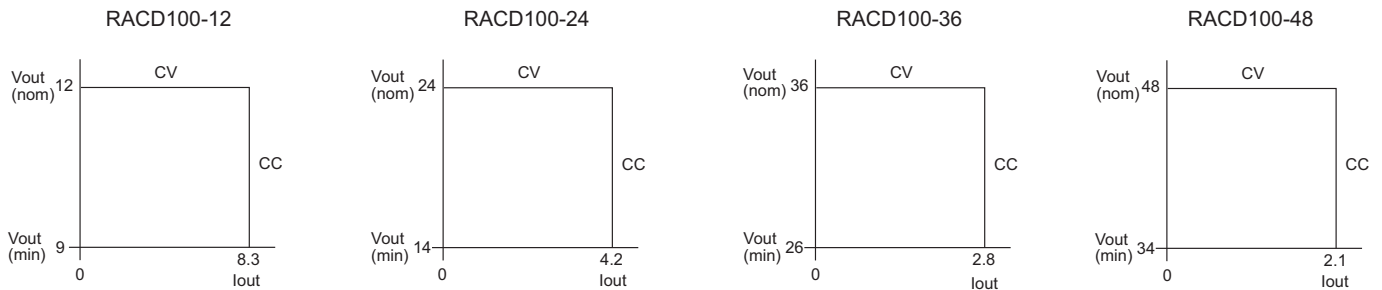
The use of a circuit breaker with C-characteristic is recommended.

Derating Curve



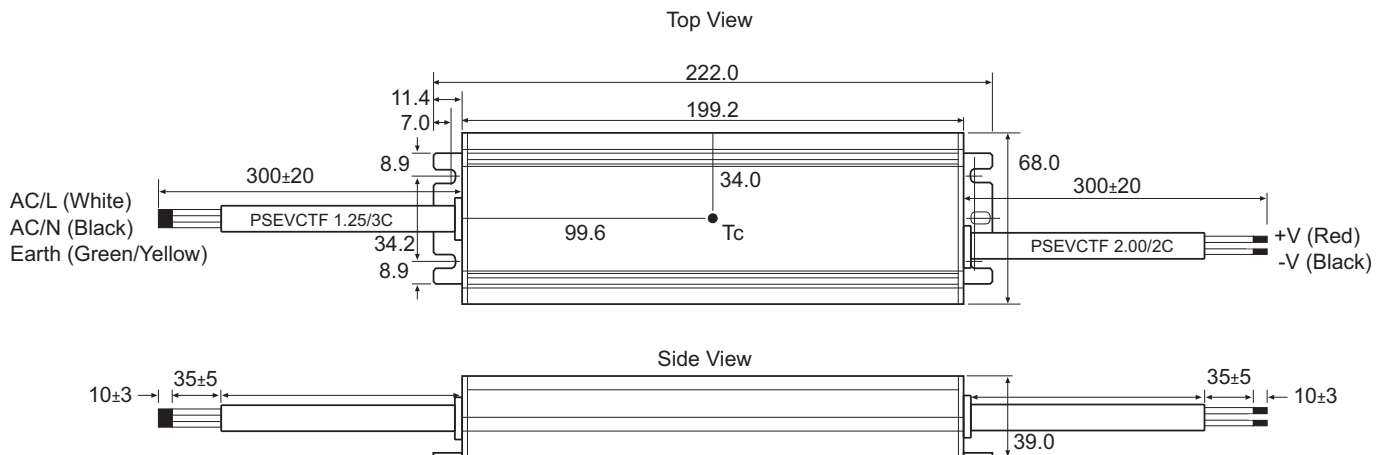
Characteristics

Constant Voltage / Constant Current Curve



RACD100-PSE

Package Style and Pinning



The product information and specifications are subject to change without prior notice. All products are designed for non-safety critical commercial and industrial applications. The Buyer agrees to implement safeguards that anticipate the consequences of any failures that might cause harm, loss of life and/or damage property.