

# Features

## LED DRIVER

- Universal AC Input
- Constant Voltage / Constant Current Operation
- CE and UL Certified Class I LED Driver
- Active Power Factor Correction
- IP67 Design for Indoor and Outdoor Use
- Cooling by Free Air Convection

### Selection Guide

Part Number	CV Mode		CC Mode		Efficiency (230VAC) (%)
	Constant Voltage (V)	Current Range (A)	Output Voltage Range (V)	Constant Current (A)	
RACD100-12	12	0-8.3	9-12	8.3	88
RACD100-24	24	0-4.2	14-24	4.2	90
RACD100-36	36	0-2.8	16-36	2.8	90
RACD100-48	48	0-2.1	34-48	2.1	91

### Specifications

Input Voltage Range	90-305 VAC or 127-430VDC	
Input Frequency Range	47-63Hz.	
Power Factor	Full Load, 115VAC	>0.98
	Full Load, 230VAC	>0.95
	Full Load, 277VAC	>0.94
THD	Full Load, 115VAC	8% max.
AC Current	115VAC	1.4A max.
	230VAC	0.7A max.
Input/Output Isolation	3.75kVAC / 1minute	
Input/Case Isolation	1.8kVAC / 1minute	
Output/Case Isolation	0.5kVAC / 1minute	
Leakage Current	240VAC	<0.75mA
Voltage Tolerance	-1% to 5%	
Start-up Time	115VAC	1.5s
(@ Full Load)	230VAC / 277VAC	0.7s
Ripple & Noise	48V Version	200mV max.
	others	150mV 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 CE/UL)	Case Temperature	90°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	
Safety Standards	UL/cUL LED Lighting Safety (E340696)	UL8750
	CE LVD Directive, Safety	EN61347-2-13
	CB Report: 12CA61289-1	IEC61347-2-13
EMC Standards	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**



**UL 8750 Certified  
EN 61347 Certified**

**RACD100**

**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.

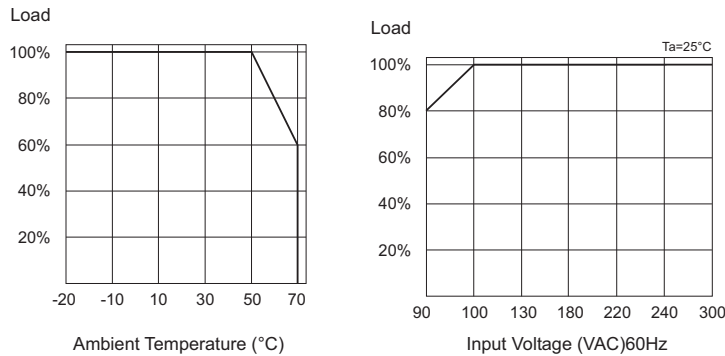
**Refer to Application Notes**

## Specifications

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

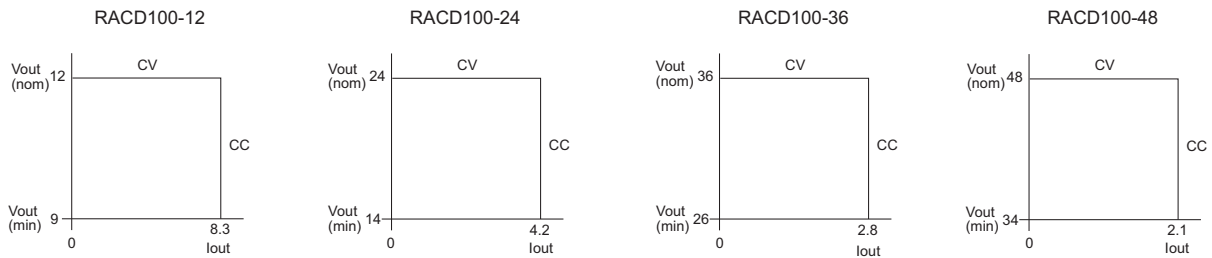
The use of a circuit breaker with C-characteristic is recommended.

## Derating Curves



## Typical Characteristics

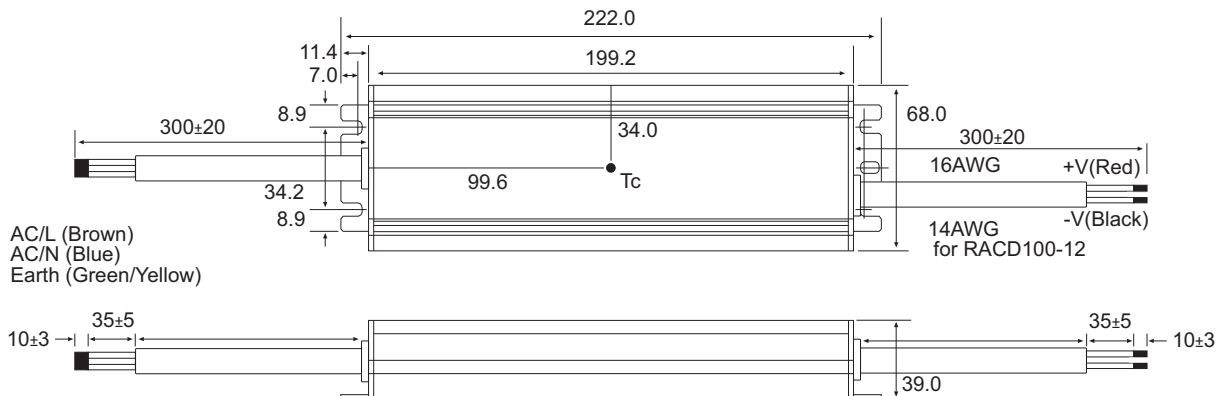
### Constant Voltage / Constant Current Curve



### Maximum Number of LED drivers per circuit breakers

Condition	Circuit Breaker	Circuit Breaker Current			
		10A	16A	20A	25A
115VAC, 10hm 90° phase angle	Typ	7	12	14	18
	C	7	12	14	18
230VAC, 10hm 90° phase angle	B	6	10	12	14
	C	13	22	24	31
277VAC, 10hm 90° phase angle	B	7	11	14	17
	C	15	25	29	36

## Package Style and Pinning



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