

# 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	CV Mode		CC Mode		Efficiency (230VAC) (typ.)
	Constant Voltage (V)	Current Range (A)	DC Voltage Range (V)	Constant Current (A)	
RACD150-12	12	0-11	9-12	11	88%
RACD150-24	24	0-6.3	14-24	6.3	90%
RACD150-36	36	0-4.2	26-36	4.2	90%
RACD150-48	48	0-3.2	34-48	3.2	90%

### 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	2A max.
	230VAC	1A max.
Input / Output Isolation	3.75kVAC / 1minute	
Input / Case Isolation	1.8kVAC / 1minute	
Output / Case Isolation	0.5kVAC / 1minute	
Leakage Current	230VAC	<0.5mA
Current Tolerance	±5%	
Voltage Tolerance	-1% to 5%	
Start-up Time	115VAC	1.0s
(@ Full Load)	230VAC / 277VAC	0.8s
Ripple & Noise	48V Version	200mV max.
	others	150mV max.
(with 20MHz bandwidth & 47µF Elco + 0.1µF MLCC)		
Over Current Protection	95%-105% rated current	Auto-Recovery
Short Circuit Protection	Hiccup Mode	
Over Voltage Protection	12V	12.5V typ.
Latch Mode	24V	24.5V typ.
(Power off to recover)	36V	36.5V typ.
	48V	48.5V typ.
Over Temperature Protection	Tcase 95°C ±10°C	
Operating Temperature Range	without derating	-30°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)	cUL8750
	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
Dimension	222*68*39mm	
Weight	1080g	
MTBF	using MIL-HDBK-217F (25°C)	200 x 10 <sup>3</sup> hours
Design Lifetime	70 x 10 <sup>3</sup> hours	

**LIGHTLINE**  
AC/DC-Converter  
with 5 Year Warranty

**RECOM**

**150 Watt  
Single  
Output**



**UL 8750 Certified  
EN 61347 Certified**

**RACD150**

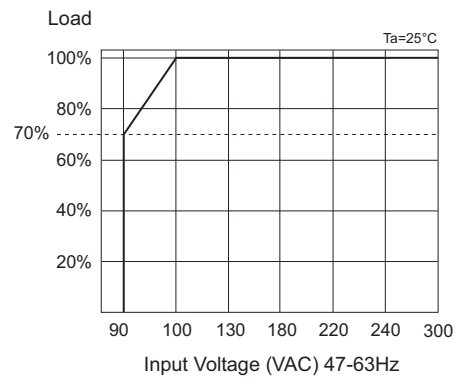
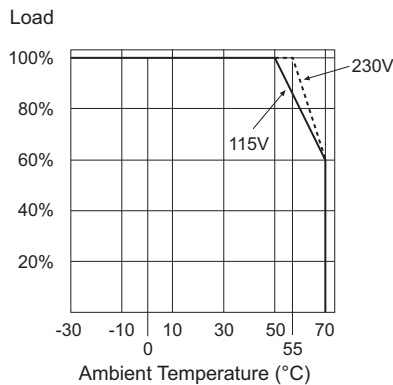
Note:

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

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.

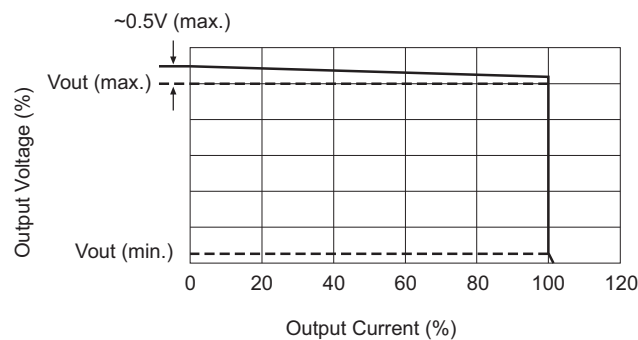
**Refer to Application Notes**

## Derating Curves



## Typical Characteristics

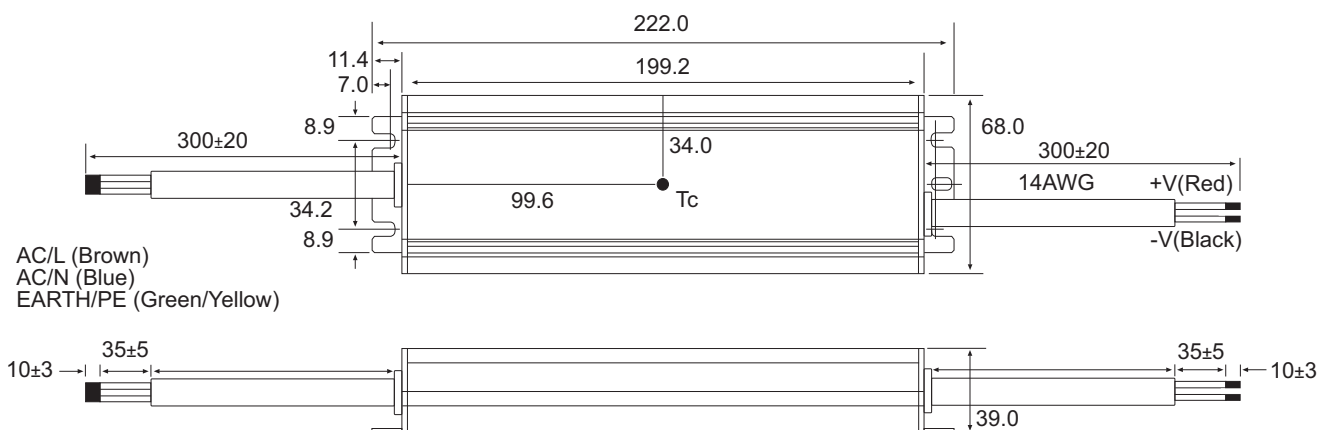
### Constant Voltage / Constant Current Curve



### Maximum Number of LED drivers per circuit breakers

Condition	Circuit Breaker	Circuit Breaker Current			
		10A	16A	20A	25A
115VAC, 10hm 90° phase angle	Typ	5	8	9	12
	C	5	8	9	12
230VAC, 10hm 90° phase angle	B	4	7	8	9
	C	5	13	16	19
277VAC, 10hm 90° phase angle	B	5	8	9	11
	C	9	15	18	21

## Package Style and Pinning



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