# 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 M	ode	CC N	Efficiency	
Number	Constant Voltage	<b>Current Range</b>	DC Voltage Range	Constant Current	(230VAC)
	(V)	(A)	(V)	(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	26-36	2.8	90
RACD100-48	48	0-2.1	34-48	2.1	91

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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 C	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	1-500Hz, 2G, 60 Min. along X, Y and Z
IP Rating		IP67
Safety Standards	UL/cUL LED Lighting Safety (E340	0696) UL8750
	CE LVD Directive, Safety	EN61347-2-13
	CB Report: 12CA612	289-1 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

EN61000-4-2, 3, 4, 5, 6, 11 continued on next page

# **LIGHTLINE**

AC/DC-Converter with 5 year Warranty



# 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** 



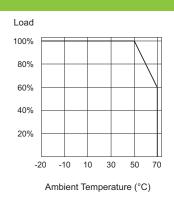
# RACD100 Series

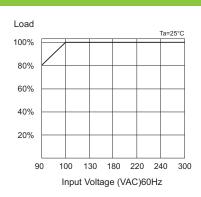
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Dimension		222*68*39mm
Weight		1020g
MTBF	using MIL-HDBK-217F (25°C)	250 x 10 <sup>3</sup> hours
Design Lifetime		70 x 10 <sup>3</sup> hours

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

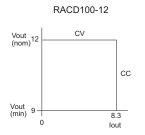
#### **Derating Curves**

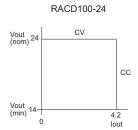


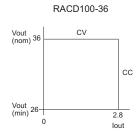


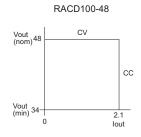
### **Typical Characteristics**

#### Constant Voltage / Constant Current Curve





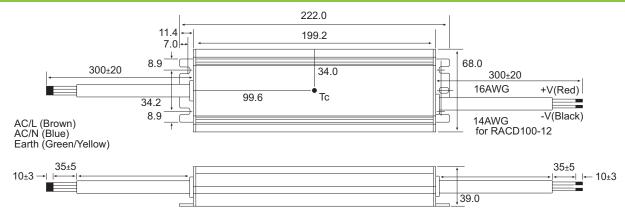




### Maximum Number of LED drivers per circuit breakers

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

### Package Style and Pinning



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