

## Features

### LED DRIVER

- 12W Class II AC/DC LED Power Supply
- 350mA, 500mA or 700mA Constant Current Output
- ENEC, UL, RCM and CB Certified
- Universal AC Input
- Active Power Factor Corrected >0.95
- Fused Input, Protected Output
- 3kVAC Input/Output Isolation
- Output Socket Connector
- cUL/UL-8750 Certified
- Low Cost
- Long 5 Year Warranty

### Description

A compact 12W constant current switching power module suitable for driving up to ten high power LEDs ( $V_f = 3.6V$ ). The output current is fixed at 350mA, 500mA or 700mA. Active power factor correction is standard and the converters are UL8750 certified for use with LED assemblies. The driver module features both screw terminal and socket output connections. The socket connector avoids the possibility of miswiring and damaging the LED load if the LEDs are pre-assembled into a wiring harness or lamp fitting.

### Selection Guide

Part Number	Nominal Input Voltage (VAC)	Input Current at 230VAC (mA)	Output Voltage Range (VDC)	Output Current (mA)	Max # LEDs
RACD12-350	universal	200	3-36	350	10 x 1W
RACD12-500	universal	200	3-24	500	6 x 2W
RACD12-700	universal	200	3-17	700	4 x 2W, 8 x 1W

### Specifications (typical at 25°C and after warm up time unless otherwise specified )

Input Voltage Range	90-264VAC
Rated Power	12 Watts max.
Input Frequency Range	47-63 Hz
Power Factor	Full Load, 115VAC/230VAC 0.95
THD	Full Load, 115VAC 7% max. Full Load, 230VAC 14% max.
Open Circuit Voltage (Zener Clamp)	350mA Version 39VDC 500mA Version 26VDC 700mA Version 19VDC
Inrush Current (<2ms)	115VAC/230VAC 10A max.
Input Current	230VAC, Full Load 200mA max.
Leakage Current	115VAC/240VAC - 60/50Hz 0.5mA typ.
Input Fuse	Standard T1A
Output Current Accuracy	(combined Tolerance, Load Regulation and Line Regulation) ±10%.
Minimum Load	Open Circuit Protected 1 LED
Hold Up Time	18ms min.
Operating Frequency	50-120kHz typ.
Efficiency at Full Load	78%
RMS Isolation Voltage (input to output)	3kVAC / 1 minute
Temperature Coefficient	±0.02%/°C typ.
Overload Protection	120% typ.
Short Circuit Protection	Continuous Current Limit
Output Overvoltage Protection	Zener Diode Clamp

continued on next page

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

**RECOM**

**12 Watt PFC  
Single  
Output**



**UL-8750 Certified  
cUL-8750 Certified  
ENEC 61347 Certified**

**RACD12**

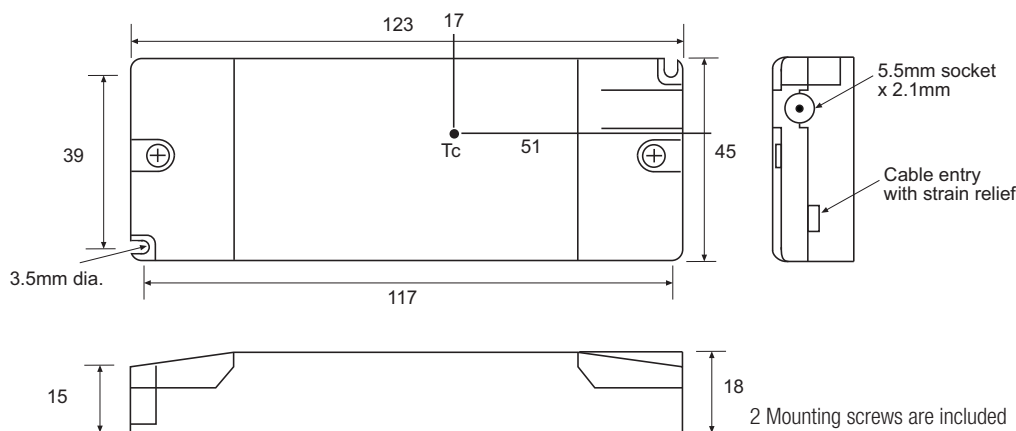
Refer to Application Notes

**Specifications** (typical at 25°C and after warm up time unless otherwise specified )

Overtemperature Protection	Shutdown, Automatic restart after cooling down	
Operating Temperature Range (free air convection, according to CE/UL)	Ambient Temperature	-20°C to +50°C
	Case Temperature	81°C max.
Operating Temperature Range (free air convection, according to ENEC)	Ambient Temperature	-20°C to +50°C
	Case Temperature	85°C max.
Weight	100g	
Packing Quantity	1pc	
Storage Temperature Range	-40°C to +100°C	
Humidity	95% RH max.	
IP Rating	IP20, Indoor Use Only	
PCB Material	Plastic Resin with Fibreglass (UL94V-0)	
Case Material	Plastic	
Designed to meet Standards	Electrical Lighting, EMC Emissions	EN55015:2006 + A1: 2007 + A2:2009
	Limits for Harmonics Emissions	EN 61000-3-2:2006
	EMC Compatability: Flicker and Voltage Variations	EN 61000-3-3:2006
	Electrical Lighting: EMC Immunity	EN 61547:1995 + A1:2000
	Class II Power Supply Safety	complies with UL1310
	FCC	complies with FCC18A
THD	<20%	
Certifications	LED Lighting Safety	UL8750
	LED Lighting Safety (Canada)	cUL8750
	RCM (U21381)	AS/NZS 61347.1:2002, IEC 61347-2-13
	ENEC Certification, General Safety	EN 61347-1: 2008
	ENEC Certification, Safety of AC supplied Control Gear for LED Modules	EN 61347-2-13: 2006
Design Lifetime	25°C ambient	>70 x 10 <sup>3</sup> hours in operation
Connections	AC Input	Screw terminal
	LED Output	Screw Terminal
	LED Output	5.5mm Socket with 2mm Pin (Suitable matching plug Switchcraft S760 or similar)*

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.

**Package Style and Pinning**



Connections	
CN1	Function
L	VAC in (L)
N	VAC in (N)
CN2	Function
+	LED+
-	LED-
5.5mm Socket* Function	
Pin	LED+
Shell	LED-
Tolerance	
XX	= +/-0.5mm
XX.X	= +/-0.25mm

Tc= Case Temperature Measuring Point

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.