

## Features

### LED DRIVER

- 12W Class II AC/DC LED Power Supply
- ENEC, UL, RCM and CB Certified
- 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	
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.
Storage Temperature Range	-40°C to +100°C	
Weight	100g	
Packing Quantity	1pc	
Humidity	95% RH max.	

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## 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 )

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 Limits for Harmonics Emissions EMC Compatability: Flicker and Voltage Variations Electrical Lighting: EMC Immunity Class II Power Supply Safety FCC	EN55015:2006 + A1: 2007 + A2:2009 EN 61000-3-2:2006 EN 61000-3-3:2006 EN 61547:1995 + A1:2000 complies with UL1310 complies with FCC18A
THD	<20%	
Certifications	LED Lighting Safety LED Lighting Safety (Canada) RCM (U21381) ENEC Certification, General Safety ENEC Certification, Safety of AC supplied Control Gear for LED Modules PSE	UL8750 cUL8750 AS/NZS 61347.1:2002, IEC 61347-2-13 EN 61347-1: 2008 EN 61347-2-13: 2006 J61347-1(H20), J61347-2-13(H21), J55015(H20)
Design Lifetime	25°C ambient	>70 x 10 <sup>3</sup> hours in operation
Connections	AC Input LED Output LED Output	Screw terminal Screw Terminal 5.5mm Socket with 2mm Pin (Suitable matching plug Switchcraft S760 or similar)*

### Note:

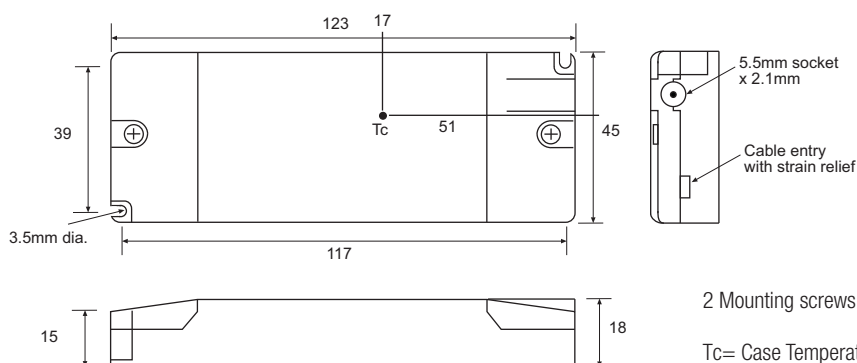
All LED Drivers may not be used without a load. They must be switched on the primary side only. Noncompliance may damage the LED or reduce its lifetime.

## Characteristic

### Maximum Number of LED drivers per circuit breakers

Condition	Circuit Breaker	Circuit Breaker Current			
	Typ	10A	16A	20A	25A
115VAC, 10hm 90° phase angle	C	101	128	171	228
230VAC, 10hm 90° phase angle	B	61	100	121	150
	C	121	164	221	291
277VAC, 10hm 90° phase angle	B	70	115	139	172
	C	139	188	254	334

## Package Style and Pinning



2 Mounting screws are included

Tc= Case Temperature Measuring Point

### 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	

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# AMEYA360

## Components Supply Platform

Authorized Distribution Brand :



Website :

Welcome to visit [www.ameya360.com](http://www.ameya360.com)

Contact Us :

➤ Address :

401 Building No.5, JiuGe Business Center, Lane 2301, Yishan Rd  
Minhang District, Shanghai , China

➤ Sales :

Direct +86 (21) 6401-6692

Email [amall@ameya360.com](mailto:amall@ameya360.com)

QQ 800077892

Skype ameyasales1 ameyasales2

➤ Customer Service :

Email [service@ameya360.com](mailto:service@ameya360.com)

➤ Partnership :

Tel +86 (21) 64016692-8333

Email [mkt@ameya360.com](mailto:mkt@ameya360.com)