

# Features

## LED Driver

- 3W Class II AC-DC LED Power Supply
- 350mA to 700mA CC/CV Output
- ENEC, UL, RCM and CB Certified
- Universal Input Voltage Range
- Fused Input and Protected Output
- 3kVAC Isolation
- IP66
- Low Cost
- 3 Year Warranty

## Description

A compact universal AC input 3W constant current switching power module suitable for driving 1 - 6 high power LEDs. The output (dual constant voltage / constant current mode) current limit is fixed at 350mA, 500mA or 700mA. At lower output currents, the output is constant voltage. Connections are via 118mm long flying leads.

## Selection Guide

Part Number	CV Mode		CC Mode		Efficiency typ. (%)
	(VDC)	(mA)	(VDC)	(mA)	
RACD03-350	15	0-350	2.5-15	350	72
RACD03-500	11	0-500	2.5-11	500	71
RACD03-700	6	0-700	2.5-6	700	62

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

Input Voltage Range	90-264VAC or 120-370VDC	
Rated Power	3W nom. / 5W max.	
Input Frequency Range	47-63 Hz	
Output Voltage Range	2.5 - 15VDC max.	
Inrush Current (<2mS)	230VAC	10A max.
Leakage Current	240VAC/50Hz	0.2mA typ.
Input Fuse	Built-in	T1A
Input Current	350mA Verison	20mA
	500mA Version	25mA
	700mA Version	38mA
Output Current Accuracy (combined Tolerance, Load Regulation and Line Regulation)	±10%	
Minimum Load	Open Circuit Protected	1 LED
Output Ripple	0.1Ap-p max.	
Hold Up Time	18ms min.	
Operating Frequency	66kHz typ.	
AC RMS Isolation Voltage (input to output)	3.75kV / 1 minute typ., 3kV / 1 minute min.	
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	65°C max.
Operating Temperature Range (free air convection, according to ENEC)	Ambient Temperature	-20°C to +40°C
	Case Temperature	75°C max.
Storage Temperature Range	-25°C to +85°C	
Humidity	95% RH max.	
IP Rating	IP66	
PCB Material	Plastic Resin with Fibreglass (UL94V-0)	
Case Material	Plastic	
Weight	45g	

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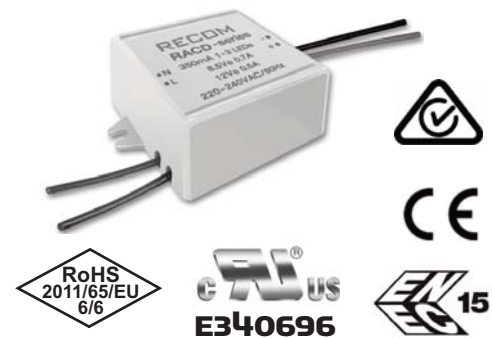
# LIGHTLINE

AC/DC-Converter

with 3 year Warranty

# RECOM

## 3 Watt Single Output



**UL-8750 Certified**  
**EN-61347 Certified**  
**ENEC Certified**

# RACD03

Refer to Application Notes

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

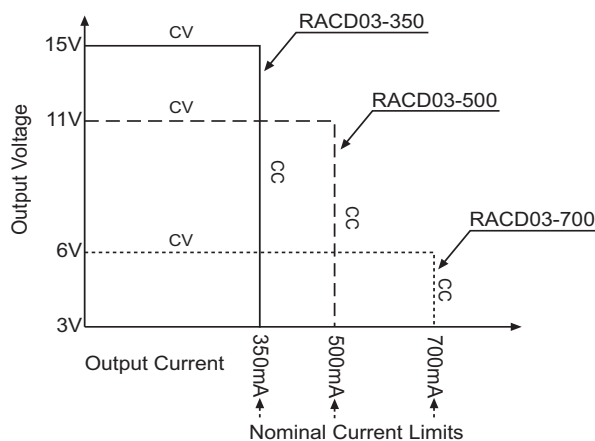
Packing Quantity			10pc
Designed to meet Standards	Electrical Lighting, EMC Emissions Limits for Harmonics Emissions EMC Compatibility: Flicker and Voltage Variations Electrical Lighting: EMC Immunity Class II Power Supply Safety FCC	EN55015:2006 + A1: 2007 + A2:2009 EN 61000-3-2:2006 EN 61000-3-3:2006 EN 61547:1995 + A1:2000 UL1310 FCC18A	
Certifications	LED Lighting Safety (E340696) RCM (U21376) ENEC General Safety ENEC Safety of AC supplied Control Gear for LED Modules	UL8750 AS/NZS 61347.1:2002, IEC 61347-2-13 EN 61347-1: 2008 EN 61347-2-13: 2006	
Design Lifetime	25°C ambient		>20 x 10 <sup>3</sup> hours in operation
Connections	AC Input Live AC Input Neutral LED + LED -	Brown Wire, AWG18, 172mm + 5-7mm stripped and tinned Blue Wire, AWG18, 172mm + 5-7mm stripped and tinned Red Wire, AWG18, 128mm + 5-7mm stripped and tinned Black Wire, AWG18, 128mm + 5-7mm stripped and tinned	

#### Note:

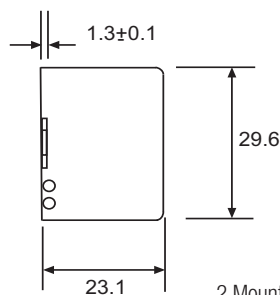
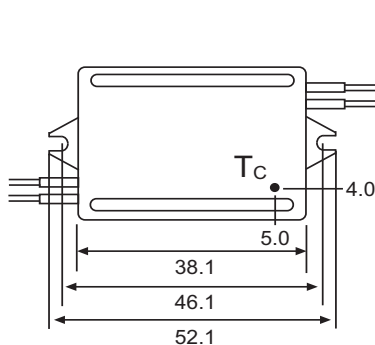
All LED Drivers may not be used without a load. They must be switched on the primary side only. Noncompliance may damage the LED or reduce its lifetime.

### Characteristics

#### Constant Current (CC) and Constant Voltage (CV) Graph



### Package Style and Pinning



2 Mounting screws are included  
Tc = Case Temperature Measuring Point

#### Wire Connections

Wire	Function
Brown	VAC in (L)
Blue	VAC in (N)
Red	LED+
Black	LED-
Tolerance	
XX	+1mm/ -0.5mm
XX.X	+/- 0.25mm