

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. / 5.5W 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	130mA max.	
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	I/P to O/P	3.75kV / 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	75°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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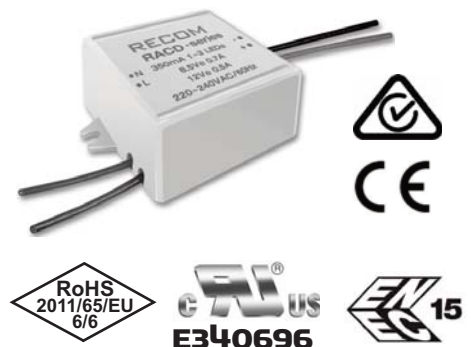
LIGHTLINE

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)

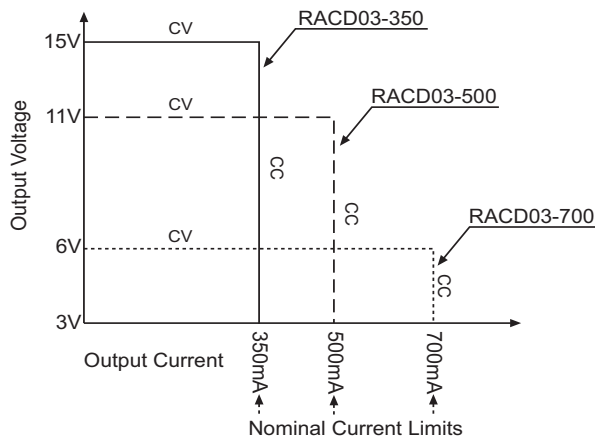
Packing Quantity			10pc
Designed to meet Standards	Electrical Lighting, EMC Emissions Limits for Harmonics Emissions EMC Compatability: Flicker and Voltage Variations Electrical Lighting: EMC Immunity Class II Power Supply Safety FCC	EN55015:2006 + A1: 2007 + A2:2009 EN 61000-3-2:2006 EN 61000-3-3:2006 EN 61547:1995 + A1:2000 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 ³ 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

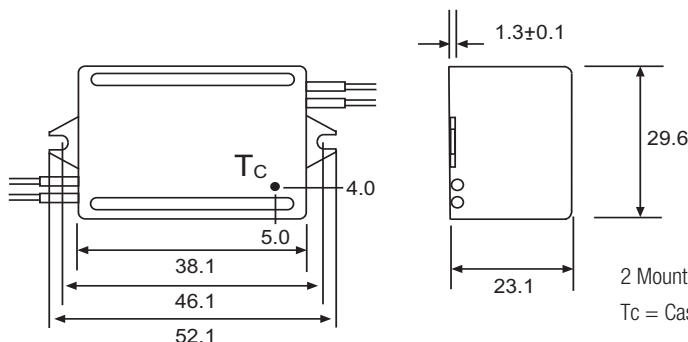
Constant Current (CC) and Constant Voltage (CV) Graph



Maximum Number of LED drivers per circuit breakers

Condition	Circuit Breaker	Circuit Breaker Current			
		10A	16A	20A	25A
115VAC, 10hm 90° phase angle	Typ				
	C	221	247	337	430
230VAC, 10hm 90° phase angle	B	80	157	200	254
	C	265	317	437	550

Package Style and Pinning



2 Mounting screws are included
T_c = 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