Features

LED DRIVER

- 20W Class II AC-DC LED Power Supply
- 350mA , 500mA, 700mA or 1050mA Outputs
- ENEC, UL, RCM and CB Certified
- Universal AC Input
- Active Power Factor Correction >0.95
- Fused Input, Protected Output
- 3kVAC Isolation
- cUL/UL8750 Certified, CE Marked
- Output Connector to avoid miswiring
- Low Cost
- Long 5 Year Warranty

Description

A compact 20W constant current switching power module suitable for driving high power LEDs (Vf = 3.6V).The output current is fixed at 350mA, 500mA, 700mA or 1050mA. Active power factor correction is standard.
This series features both screw terminal and socket output connections. The socket connecter avoids the possibility of miswiring and damaging the LED load if the LEDs are preassembled into a wiring harness or lamp fitting.

Selection Guide

Part Number	Input Voltage Range (VAC)	Input Current at full load (mA)	Nom. Output Voltage Range (VDC)	Output Current (mA)	Max # LEDs
RACD20-350	universal	260	6-56	350	15 x 1W
RACD20-500	universal	260	6-40	500	11 x 2W
RACD20-700	universal	260	6-29	700	8 x 2W, 8+8 x 1W
RACD20-1050	universal	260	5-17	1050	6 x 3W, 5+5 x 2W

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

Input Voltage Range	Standard	90-264VAC
Rated Power		20 Watts max.
Input Frequency Range		47-63 Hz
Power Factor	Full Load, 115VAC/230VAC	0.95
THD	Full Load, 115VAC/230VAC	12% max.
Open Circuit Voltage	350mA Version	57VDC
(Zener Clamp)	500mA Version	43VDC
	700mA Version	32VDC
	1050mA Version	19VDC
Inrush Current (<2mS)	115VAC/230VAC	10A max.
Input Current	230VAC, Full Load	260mA typ.
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	2 LEDs
Hold Up Time		18ms min.
Operating Frequency		40 - 100 kHz typ.
Efficiency at Full Load		83%
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

20 Watt PFC Single Output



RoHS 2011/65/EU 6/6

E340696

UL 8750 Certified
cUL 8750 Certified*
ENEC 61347 Certified

RACD20

* RACD20-700 and -1050 only has cUL

Please Read Application Notes

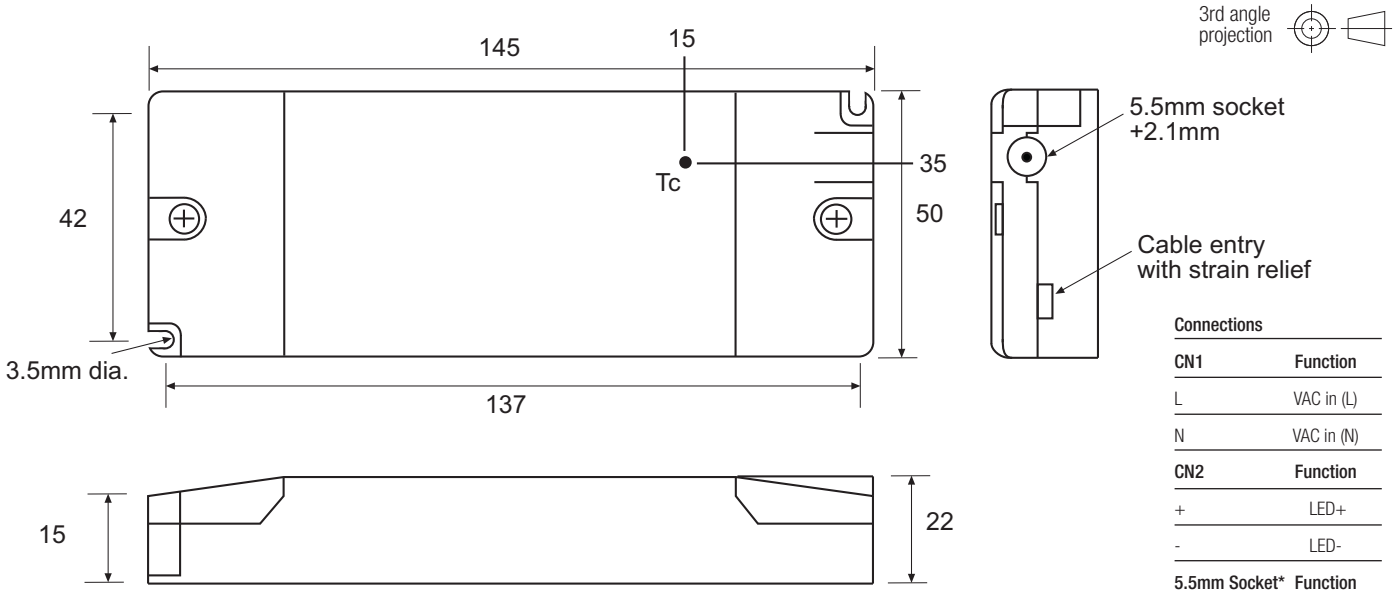
Specifications cont. (typical at 25°C and after warm up time unless otherwise specified)

Overtemperature Protection		Shutdown, Automatic restart after cooling down
Operating Temperature Range		Ambient Temperature -20°C to +50°C
(free air convection)		Case Temp. 85°C max. (350mA version: 90°C max.)
Weight		140g
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 Compatibilty: 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 (E340696)	UL8750
	LED Lighting Safety (Canada)	cUL8750 (RACD20-700 only)
	RCM (U21380)	AS/NZS 61347.1:2002, IEC 61347-2-13
	ENEC CE Certification, General Safety	EN 61347-1: 2008
	ENEC CE Certification, Safety of AC supplied Control Gear for LED Modules	EN 61347-2-13: 2006
Design Lifetime	25°C ambient	>70 x 10^3 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)*

* Do not connect or disconnect the LED load while the converter is on. This may damage the LED or reduce its life.

RACD20

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 = +/-1mm
XX.X = */-0.5mm