

# Features

## LED DRIVER

- Universal AC Input 90-295VAC
- 250mA, 350mA, 500mA, 700mA Output
- Constant Current Operation
- Isolation 3.75kVAC
- Overcurrent and Short Circuit Protection
- IP67 Rated

### Selection Guide

Part Number	Rated Power (W)	Output Current (mA)	Output Voltage (VDC)	Constant Current Range (VDC)	Efficiency (min.)
RACD07-250	7	250	28	14 - 28	75%
RACD07-350	7	350	21	10 - 20	70%
RACD07-500	7	500	14.5	5 - 14.5	70%
RACD07-700	7	700	11	3 - 10.5	70%

### Specifications (measured at 115VAC / 230VAC and 25°C ambient temperature)

Input Voltage Range	90-295 VAC or 120-415VDC	
Rated Power	7W nom.	
Input Frequency Range	47-63Hz	
Current Accuracy	±3% typ. / ±7% max.	
Output Current Ripple	30mA <sub>p-p</sub> typ.	
Voltage Accuracy (includes load, line and tolerance)	±5%	
AC Input Current	0.2A	
Start-up Time	<1S	
Hold-Up Time	18ms min.	
Operating Frequency	45kHz	
Isolation Voltage	3.75kVAC / 1 minute	
Short Circuit Protection	Continuous	
Over Current Protection	Constant Current Mode Protection	
Overload Protection	105% - 120% typ.	
No Load Voltage	RACD07-250	29.3V
	RACD07-350	21.8V
	RACD07-500	15.1V
	RACD07-700	11.9V
Output Overvoltage Protection	Zener Diode Clamp	
Storage Humidity	10% - 90% RH	
Operating Humidity	20% - 90% RH Non-Condensing	
Operating Temperature Range (free air convection)	Ambient Temperature	-20°C to +40°C
	Case Temperature	65°C max.
Storage Temperature Range	-40°C to +80°C	
IP Rating	IP67	
Isolation Resistance	100MΩ / 500VDC at 25°C	
PCB Material	(UL94V-0)	Plastic Resin with Fibreglass
Case Material	(UL94V-0)	Plastic
Weight	74g	
Dimension	57 x 41 x 24mm	
Packing Quantity	25pcs	

continued on next page

**LIGHTLINE**  
AC/DC-Converter  
with 3 year Warranty

**RECOM**

**7 Watt  
Single  
Output**



**UL 8750 Certified  
EN 61347 Certified  
EN 61347-2-13 Certified**

**RACD07**

Refer to Application Notes

## Specifications (measured at 115VAC / 230VAC and 25°C ambient temperature)

### Certifications

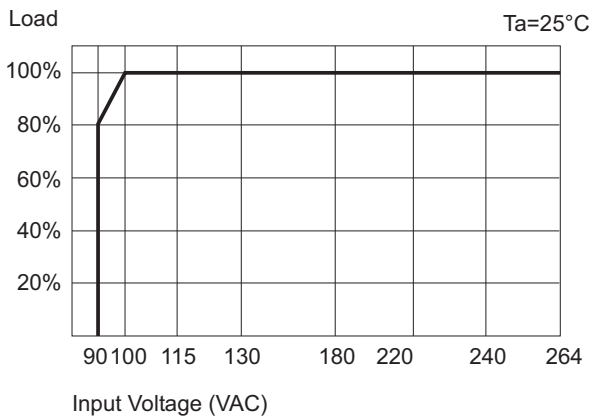
UL General Safety	(E340696)	UL8750 (based on 1310)
General Safety	(Report 1201032E-01)	EN61347-1
LVD Safety	(Report PSE101-0791)	EN61347-2-13
EMC Immunity	(Report 1307026E-01)	EN61547
EMC Harmonics	(Report 1307026E-01)	EN61000-3-2
EMC Flicker	(Report 1307026E-01)	EN61000-3-3
EMC Emissions	(Report 1307026E-01)	EN55015
Design Lifetime		70 x 10 <sup>3</sup> hours max.
MTBF (+25°C)	using MIL-HDBK 217F	200 x 10 <sup>3</sup> hours min.

### Notes:

- 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.
- The use of a circuit breaker with C-characteristic is recommended.

## Typical Characteristics

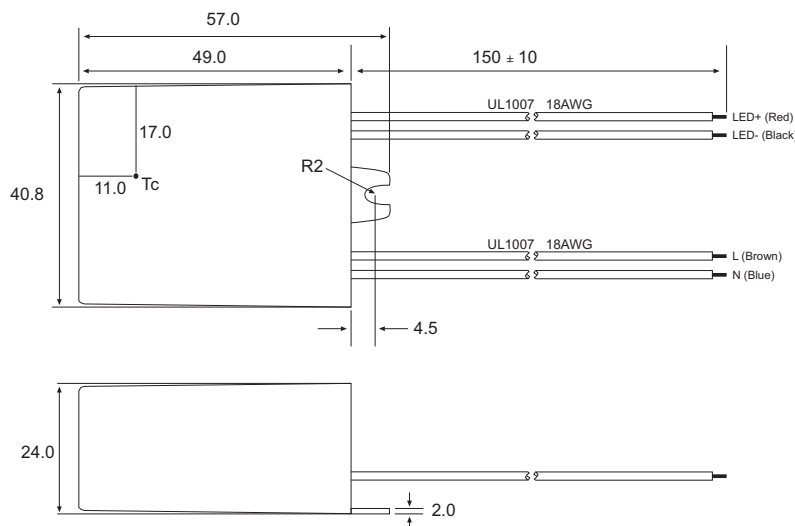
### Input Voltage vs. Output Load



### 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	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 & Pinning



### Wire Connections

Wire	Function
Red	LED+
Black	LED-
Brown	VAC in (L)
Blue	VAC in (N)

Tolerance  
XX.X = +/- 0.2mm

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