

# Features

## LED DRIVER

- Universal AC Input
- Constant Current Operation
- Suitable for High Brightness LED Products
- Built-In Active PFC Function
- Overvoltage-, Short Circuit- and Over-temperature Protection
- Built-In 3 in 1 Dimming
- IP67 Rated

### Selection Guide

Part Number	Output Voltage (VDC)	Rated Power (W)	Rated Current (mA)	Constant Current Range (V)	Efficiency (typ.)
RACD45-1850A	24	45	185 - 1850	15 - 24	85%
RACD45-1250A	36	45	125 - 1250	24 - 36	86%
RACD45-1050A	48	48	105 - 1050	33 - 48	87%
RACD45-700A	57	40	70 - 700	40 - 57	87%

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

Input Voltage Range	90-305 VAC	
Input Frequency Range	47-63Hz	
Power Factor (Full Load)	120VAC	>0.98
	240VAC	>0.93
	277VAC	>0.90
DC Dimming	Open = 100%	DC 1-10V
PWM Dimming	Open = 100%	Duty 10% - 100%
	Freq.	500Hz - 3000Hz
	Voltage	Hi=10V, Low=0V
Resistance Dimming	10K - 100K Ω	
Current Accuracy	±5%	
AC Input Current	100-240VAC	0.6A
	277VAC	0.25A
Inrush Current (Cold Start)	240VAC	70A
Leakage Current	<0.5mA / 240VAC	
Set Up Time (at Full Load)	<2000ms	
Isolation Voltage	3.75kVAC	
Short Circuit Protection	Hiccup	
Over Voltage Protection	24V	26.4 - 31.2V
	36V	39.6 - 46.8V
	48V	52.8 - 62.4 V
	57V	62.7 - 70V
Over Temperature Protection	Latch Mode	105 ± 10°C
Vibration	10-500Hz	2G for 60min each along X, Y, Z axes
Storage Humidity	10% - 90% RH	
Operating Humidity	20% - 90% RH Non-Condensing	
Weight	400g	
Operating Temperature	-30°C to +50°C	
Storage Temperature	-40°C to +60°C	
Ripple & Noise (at 20MHz bandwidth using 0.1uF & 47uF capacitor)	24V	200mV
	all others	250mV
IP Rating	IP67	
Isolation Resistance	100MΩ / 500VDC at 25°C	
Dimension (L*W*H)	171.1*45.3*32.5mm	

**LIGHTLINE**  
AC/DC-Converter  
with 5 year Warranty

**RECOM**

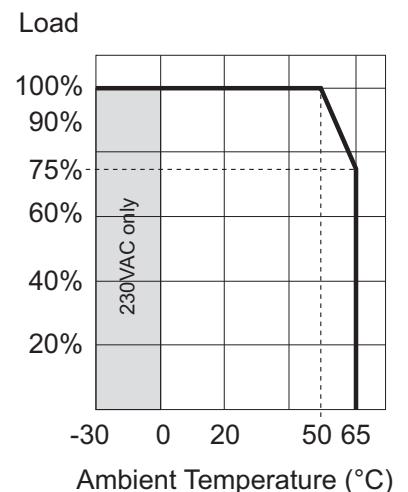
## 45 Watt PFC Single Output



**EN 61347-1 Certified**  
**EN 61347-2-13 Certified**  
**UL8750 Pending**

# RACD45-A

## Derating-Graph (Ambient Temperature)



**Specifications** (measured at 230VAC and 25°C ambient temperature)

Safety Standards (designed to meet)

- UL8750
- EN61347-1
- EN61347-2-13
- EN61000-3-2 Class C
- EN61000-3-3
- EN61000-4-2,3,4,5,6,8,11
- EN61547
- EN55015 FCC15

MTBF (+25°C)

using MIL-HDBK 217F

200 x 10<sup>3</sup> hours min.

### 3 in 1 Dimming Control (DC / PWM / Resistance)

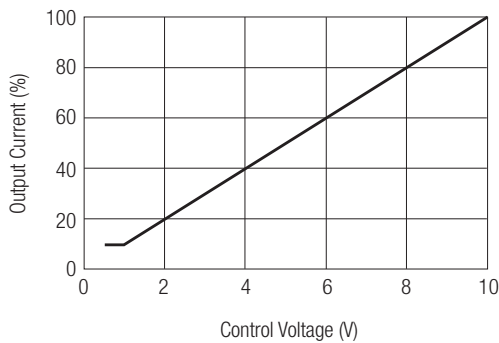
10K-100K Resistor Dimmable (Typical):

Resistor	Single-Driver	10K	20K	30K	40K	50K	60K	70K	80K	90K	100K
	Multi-Driver	10K/N	20K/N	30K/N	40K/N	50K/N	60K/N	70K/N	80K/N	90K/N	100K/N
I <sub>out</sub> (%)		10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

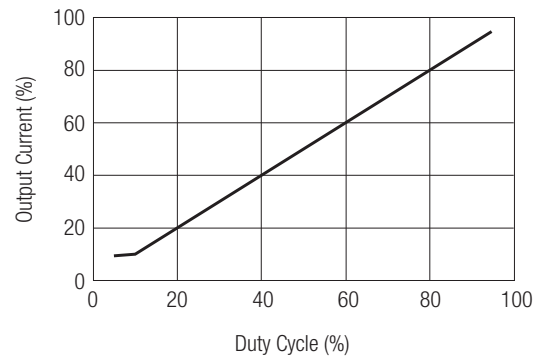
The length of extended wire for DIM+/- shall not exceed 20 meters. (wire ≤ 20mS)

N = The number of dimmer drivers should not exceed 15. (N ≤ 20mS)

DC: 1-10V Dimmable (Typical)



DC: 10V / PWM Dimmable (Typical)



### Package Style & Pinning

