

Features

LED DRIVER

- Universal AC Input
- Constant Current Operation
- Suitable for High Brightness LED Products
- Built-In Active PFC Function
- Overtoltage-, Short Circuit- and Over-temperature Protection
- Built-In 3 in 1 Dimming
- IP67 Rated
- Class 2 Power Unit UL1310

Selection Guide

Part Number	Output Voltage (VDC)	Rated Power (W)	Rated Current (mA)	Output Voltage Range (V)	Efficiency (typ.)
RACD60-1050A	57	60	105 - 1050	40 - 57	88%
RACD60-1200A	48	58	120 - 1200	33 - 48	88%
RACD60-1650A	36	60	165 - 1650	24 - 36	87%
RACD60-2500A	24	60	250 - 2500	15 - 24	86%
RACD60-4200A	12	50	420 - 4200	9 - 12	86%

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

Input Voltage Range	90-305 VAC
Input Frequency Range	47-63Hz
Power Factor (Full Load)	>0.98
	120VAC
	240VAC
	277VAC
THD	>0.94
	Full Load, 115VAC
	12% max.
	Full Load, 230VAC
	18% max.
DC Dimming	DC 1-10V
PWM Dimming	Puls: Hi=10V Low=0V, Duty: 10% - 100%, Fsw 0.5 - 3KHz
Resistance Dimming	10K - 100K Ω
Current Accuracy	±5%
AC Input Current	100-240VAC
	0.8A
	277VAC
	0.4A
Inrush Current (Cold Start)	240VAC
	70A
Leakage Current	<0.5mA / 240VAC
Start-up Time (at Full Load)	<2sec
Isolation Voltage	3.75kVAC / 1 minute
Short Circuit Protection	Hiccup
Over Voltage Protection	12V
	13.2 - 15.6V
	24V
	26.4 - 31.2V
	36V
	39.6 - 46.8V
	48V
	52.8 - 62.4V
	57V
	62.7 - 70V
Over Temperature Protection	105 ± 10°C, Latch Mode
Vibration	10-500Hz, 2G, 60 Min. along X, Y and Z
Storage Humidity	10% - 90% RH
Operating Humidity	20% - 90% RH Non-Condensing
Weight	420g
Operating Temperature	-30°C to +50°C
Storage Temperature	-40°C to +60°C
Ripple & Noise	12V, 24V
(at 20MHz bandwidth using 0.1uF & 47uF capacitor)	200mV
	36V, 48V, 57V
	250mV
IP Rating	IP67
Isolation Resistance	100MΩ / 500VDC at 25°C
Dimension (L*W*H)	179*45.1*32.5mm
Design Lifetime	70 x 10³ hours max.
MTBF (+25°C)	using MIL-HDBK 217F
	200 x 10³ hours min.

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LIGHTLINE
AC/DC-Converter
with 5 year Warranty

RECOM

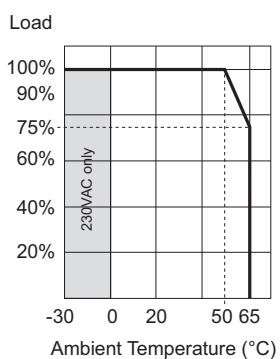
**60 Watt PFC
Single
Output**



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

RACD60-A

**Derating-Graph
(Ambient Temperature)**



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.

Refer to Application Notes

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

Safety Standards	LED Lighting Safety	Report: E340696	UL8750
	LED Lighting Safety (Canada)	Report: E340696	cUL8750
	Class 2 Power Supply Safety	Report: E340696	UL1310
	Extra Low-Voltage Class 2 Output	Report: E340696	CSA C22.2 No. 223-M91
	LED equipment for lighting application	Report: E340696	CSA C22.2 No. 250.13-12
			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

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

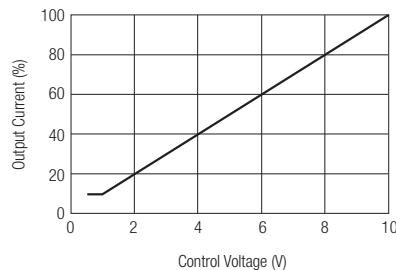
10K-100K Resistor Dimmable (Typical):

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
lout (%)		10%	20%	30%	40%	50%	60%	70%	80%	90%	100%

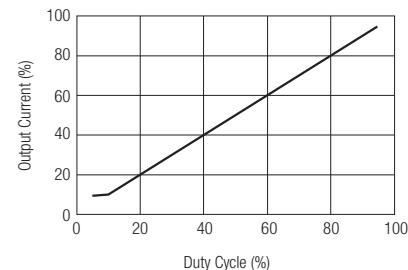
The length of extended wire for DIM+/- shall not exceed 20 meters. (wire \leq 20m)

N = The number of dimmer drivers should not exceed 15. (N \leq 15mS)

DC: 1-10V Dimmable (Typical)

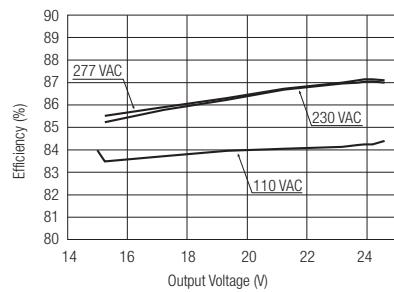


DC: 10V / PWM Dimmable (Typical)



Typical Characteristics

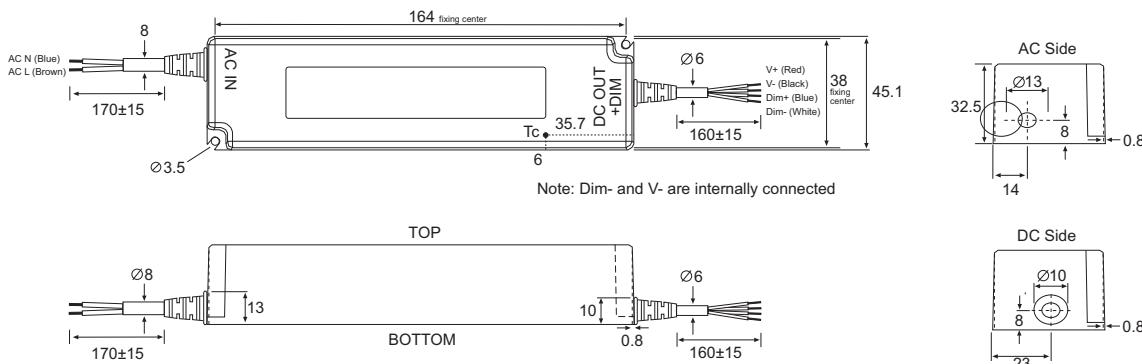
Efficiency vs Load over Vin RACD60-2500A



Maximum Number of LED drivers per circuit breakers

Condition	Circuit Breaker	Circuit Breaker Current				
		Typ	10A	16A	20A	25A
115VAC, 10hm 90° phase angle	C	12	20	24	31	
230VAC, 10hm 90° phase angle	B	13	21	25	32	
	C	21	35	41	51	
277VAC, 10hm 90° phase angle	B	15	24	29	37	
	C	24	40	47	58	

Package Style & Pinning



The product information and specifications are subject to change without prior notice. RECOM products are not authorized for use in safety-critical applications (such as life support) without RECOM's explicit written consent. A safety-critical application is defined as an application where a failure of a RECOM product may reasonably be expected to endanger or cause loss of life, inflict bodily harm or damage property. The buyer shall indemnify and hold harmless RECOM, its affiliated companies and its representatives against any damage claims in connection with the unauthorized use of RECOM products in such safety-critical applications.