

Features

LED DRIVER

- 35W Class II AC-DC LED Power Supply
- 500, 700, 1000, 1400mA or 2500mA Output
- Active Power Factor Correction >0.90
- Efficiency up to 83%
- IP67 Certified
- 3 in 1 Dimming

Description

The 35W LED drivers of the RACD35-A series come with a 3-in-1 dimming function so that the LED load can be dimmed with analog (1-10V), PWM, or resistor inputs. Due to wide input voltage range of 90 - 305VAC these LED drivers are suitable for worldwide use. They operate with efficiencies of up to 83%, feature active PFC, and are fully protected against short circuit, overvoltage, and over-temperature conditions. They are sealed against damp and wet conditions, and the warranty is 5 years.

Selection Guide

| Part Number | Rated Power (W) | Output Current (mA) | Output Voltage (VDC) | Efficiency (typ.) (%) |
|--------------|-----------------|---------------------|----------------------|-----------------------|
| RACD35-500A | 28.5 | 500 | 48 - 57 | 82 |
| RACD35-700A | 33,6 | 700 | 33 - 48 | 79 |
| RACD35-1000A | 36 | 1000 | 24 - 36 | 82 |
| RACD35-1400A | 33.6 | 1400 | 12 - 24 | 81 |
| RACD35-2500A | 30 | 2500 | 9 - 12 | 80 |

Specifications (measured at 240VAC and 25°C ambient temperature)

| | | |
|--|--|-------------------------------------|
| Input Voltage Range | 90-305 VAC | |
| Input Frequency Range | 47-63Hz | |
| Power Factor | Full Load, 277VAC | >0.90 |
| | Full Load, 230VAC | >0.95 |
| | Full Load, 110VAC | >0.98 |
| AC Input Current | 110VAC | 0.5A |
| | 230VAC | 0.3A |
| Inrush Current (Max.) | 264VAC | Cold Start 60A |
| Leakage Current | 230VAC | <0.25mA |
| Output Current Accuracy (includes Line Regulation, Load Regulation and set-up tolerance) | ±5% | |
| Isolation Voltage | 3.75kVAC / 1 minute | |
| Short Circuit Protection | Hiccup mode & recovers after fault condition removed | |
| Over Voltage Protection | 115% - 135% Output Voltage | Latch Mode |
| Over Temperature Protection | Thermistor | 105°C ± 10°C |
| | Type | Latch Mode |
| Dimming Control: | PWM | 1<Adj<10V(500Hz - 3kHz) |
| | Analogue | control by external voltage 1-10VDC |
| | Resistance | 10K - 100KΩ |
| Set Up Time | Full Load, 230VAC | 2 sec |
| Storage Humidity | 10% - 95% RH | |
| Operating Humidity | 20% - 95% RH Non-Condensing | |
| Weight | 384g | |
| Dimension (LxBxH) | 110 x 73.5 x 33mm | |
| Operating Temperature Range | Full load | -20°C to +50°C |
| (free air convection - 10LFM) | Case Temperature | 85°C ± 10°C |
| Storage Temperature | -40°C to +80°C | |
| IP Rating | IP67 | |
| Isolation Resistance | 500VDC | 100MΩ |
| MTBF (+25°C) | using MIL-HDBK 217F | 200 x 10 ³ hours |

Certifications:

| | | |
|------------------|--------------------|---------------------------|
| UL Standards | Report: E340696 | UL8750, (based on) UL1310 |
| Safety Standards | Report: P201403013 | EN61347-1; EN61347-2-13 |

continued on next page

LIGHTLINE
AC/DC-Converter
with 5 year Warranty

RECOM

35 Watt PFC
Single
Output

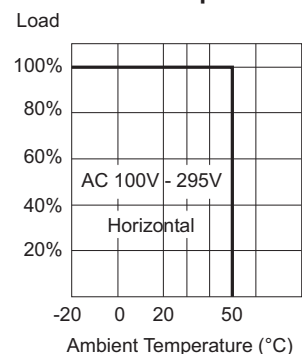


UL8750 Certified
EN61347 Certified
EN55015 Certified
EN61547 Certified

RACD35-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.

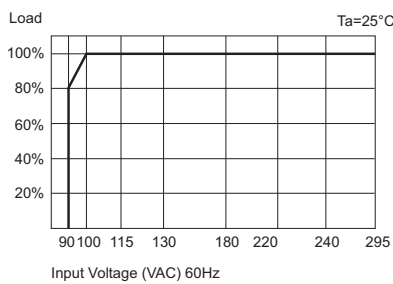
Refer to Application Notes

Specifications (measured at 240VAC and 25°C ambient temperature)

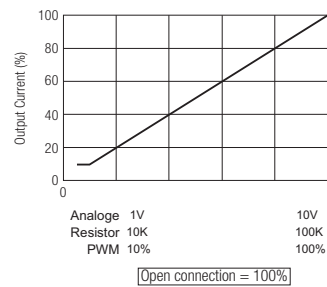
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|----------|-----------------------|--|
| Emission | Report: HA130831-SACE | EN55015, Class B IEC61000-3-2 IEC61000-3-3 |
| FCC | Report: HA130831-SAFD | Part 15, Class B |
| EMC | Report: HA130831-SACE | IEC61000-4-2, 3, 4, 5, 6, 8, 11 |
| Immunity | | EN61547 |
| IP67 | Report: 14022002 | IEC/EN 60598-1 IEC/EN 60529 |

Technical Characteristics

Load vs. Input Voltage



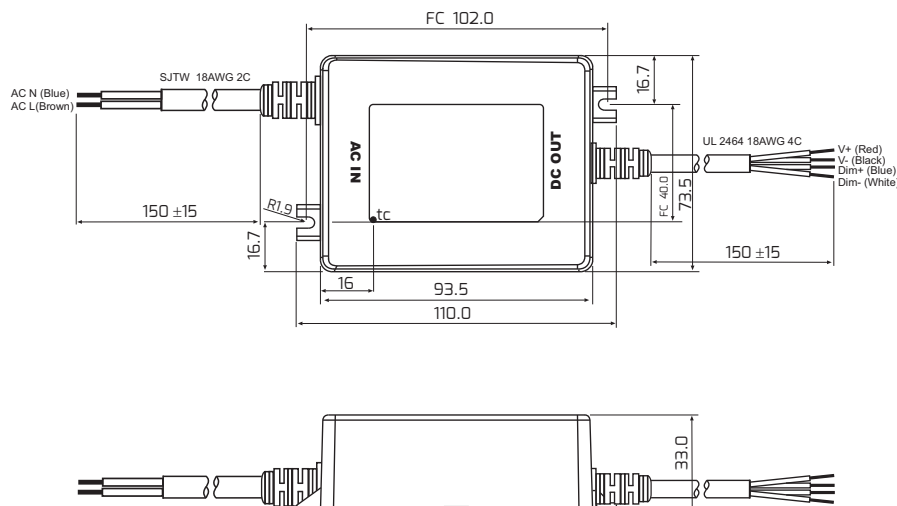
Dimming Curve



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 | 22 | 35 | 39 | 55 |
| 230VAC, 10hm 90° phase angle | B | 18 | 30 | 35 | 43 |
| | C | 29 | 46 | 55 | 69 |
| 277VAC, 10hm 90° phase angle | B | 21 | 34 | 41 | 50 |
| | C | 33 | 52 | 63 | 79 |

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.