

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 |

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LIGHTLINE
AC/DC-Converter
with 5 year Warranty

RECOM

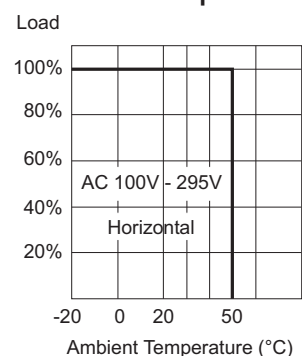
**35 Watt PFC
Single
Output**



**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.

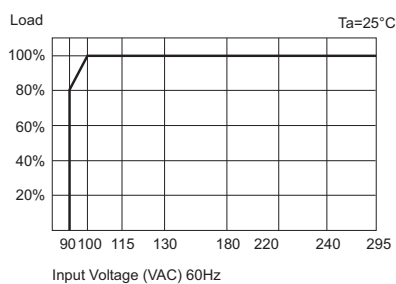
Refer to Application Notes

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

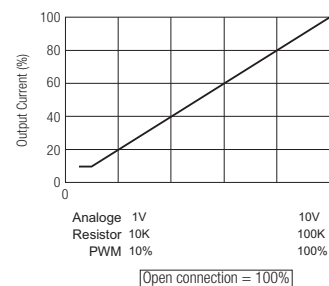
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|----------|-----------------------|--|
| Emission | Report: HA130831-SACE | EN55015, Class B IEC61000-3-2 IEC61000-3-3 Part 15, Class B |
| FCC | Report: HA130831-SAFD | IEC61000-4-2, 3, 4, 5, 6, 8, 11 |
| EMC | Report: HA130831-SACE | EN61547 |
|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

Technical Characteristics

Load vs. Input Voltage



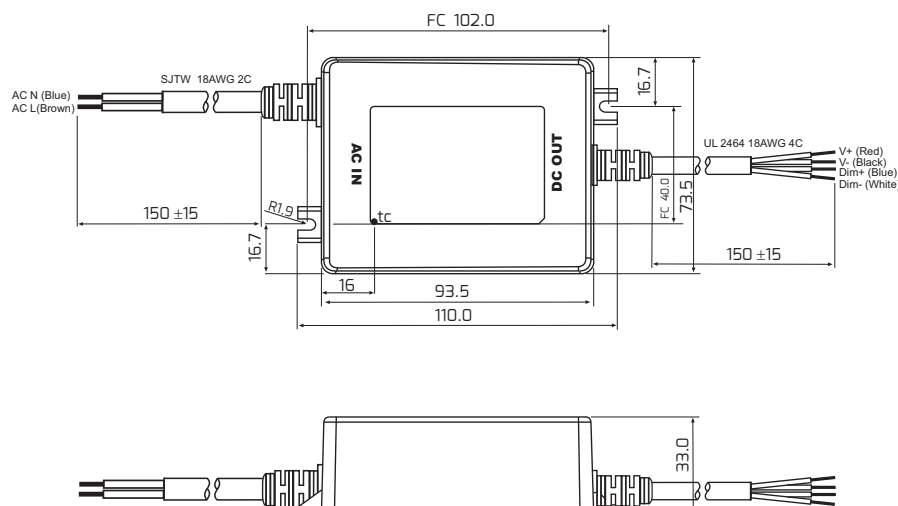
Dimming Curve



Maximum Number of LED drivers per circuit breakers

| Condition | Circuit Breaker | Circuit Breaker Current | | | |
|---------------------------------|-----------------|-------------------------|-----|-----|-----|
| | | 10A | 16A | 20A | 25A |
| 115VAC, 10hm 90° phase angle | 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



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