

!NOT RECOMMENDED FOR NEW DESIGNS!
(LAST TIME BUY: 30TH APR 2020)

RECOM
AC/DC Converter

Features

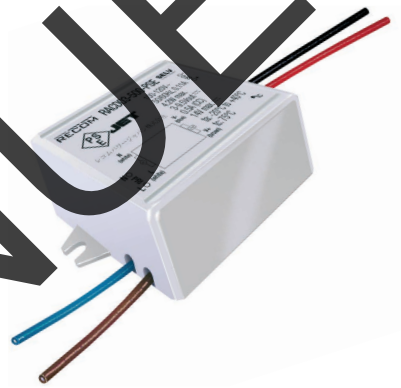
- 3W Class II AC-DC LED power supply
- 350mA, 500mA and 700mA CC/CV output
- Fused input and SCP, OVP, OLP, OTP

LED Driver

- 3.75kVAC isolation
- IP66 rated
- Low cost

RACD03-PSE

**3 Watt
CC/CV
Single Output**



Description

A compact universal AC input 3W constant current switching power module suitable for driving 1 - 6 high power LEDs. The output (dual constant voltage / constant current mode) current limit is fixed at 350mA, 500mA or 700mA. At lower output currents, the output is constant voltage. Connections are via 118mm long flying leads.

Selection Guide

Part Number	Input Voltage Range [VAC]	CC Mode		CV ⁽¹⁾ Mode		Efficiency typ. [%]	Rated Power nom./max. [W]
		[VDC]	[mA]	[VDC]	[mA]		
RACD03-350-PSE	90-130	3-12	350	15	0-300	72	3 / 4.2
RACD03-500-PSE	90-130	3-9.5	500		none	71	3 / 4.6
RACD03-700-PSE	90-130	3-4.5	700	6	0-600	62	3 / 3.15

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.

Model Numbering

RACD03- -PSE
nom. Output Power ——— nom. Output Current



J61347-1(H20) certified
J61347-2-13(H21) certified
J55015(H20) certified

Specifications (measured @ Ta= 25°C, nom. Vin, rated load and after warm-up unless otherwise stated)

BASIC CHARACTERISTICS				
Parameter	Condition	Min.	Typ.	Max.
Input Voltage Range		90VAC	115VAC	130VAC
Input Current	full load, 100VAC			110mA
Input Frequency Range		47Hz		63Hz
Hold-up Time		18ms		
Output Ripple Current				0.1Ap-p

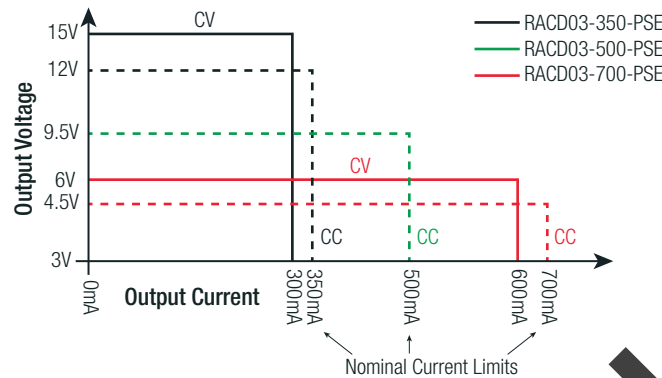
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PREFERRED ALTERNATIVES
Please consider these alternatives:

RACD03 Series

Specifications (measured @ Ta= 25°C, nom. Vin, rated load and after warm-up unless otherwise stated)

Constant Current (CC) and Constant Voltage (CV) ⁽¹⁾



Notes:

Note1: CV Mode is approved by Recom internal quality standard, but not certified according UL

PROTECTION

Parameter	Condition	Value
Input Fuse ⁽²⁾		T1A, slow blow
Short Circuit Protection (SCP)		continuous, current limit
Overload Protection (OLP)		120% typ.
Output Over Voltage Protection (OVP)	RACD03-350 zener diode clamp RACD03-500 RACD03-700	17V max. 14V max. 8V max.
Over Temperature Protection (OTP)		shutdown, automatic resatart after cooling down
Isolation Voltage	IP to O/P	3.75kVAC / 1 minute

Notes:

Note2: Refer to local safety regulations if input over-current protection is also required

Maximum loading of automatic circuit breakers*

* @ 115VAC, 10hm, 90° phase angle and max. load

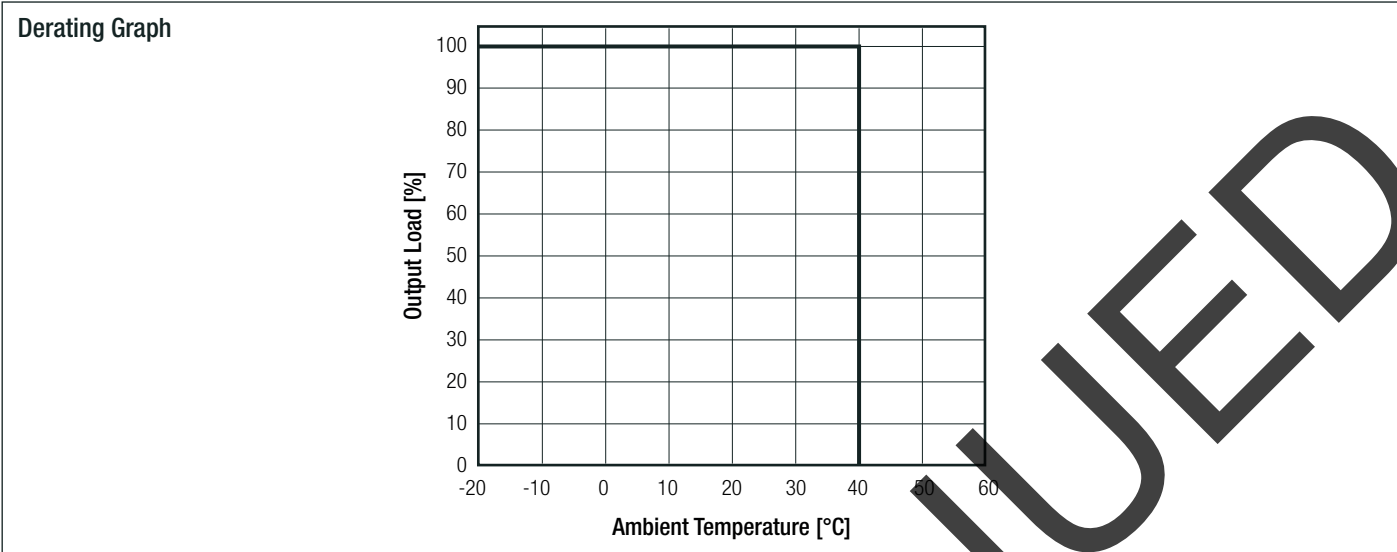
Circuit Breaker	Circuit Breaker Current			
	10A	16A	20A	25A
C	221	247	337	430

ENVIRONMENTAL

Parameter	Condition	Value
Operating Temperature Range		-20°C to +40°C
Max. Case Temperature		+75°C
IP Rating		IP66
Operating Humidity	non condensing	5%-85% RH
Design Lifetime	+25°C ambient	20 x 10 ³ hours

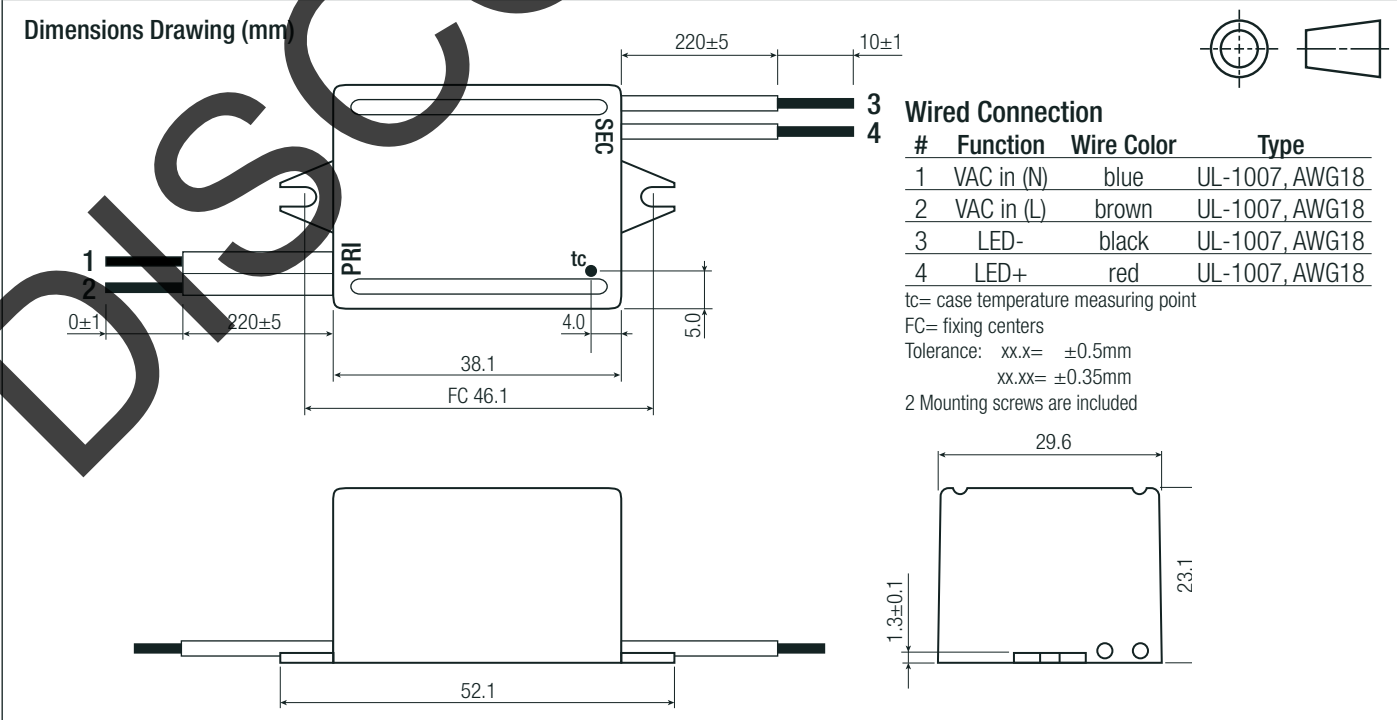
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Specifications (measured @ Ta= 25°C, nom. Vin, rated load and after warm-up unless otherwise stated)



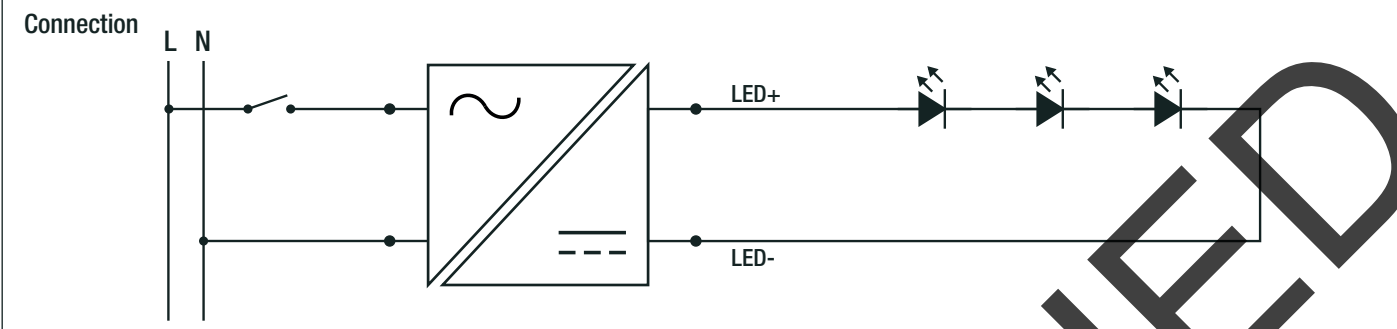
SAFETY AND CERTIFICATIONS	
Certificate Type (Safety)	Standard
Safety of control gear for LED modules	J61347-1(H20) J61347-2-13(H20)
EMC Compliance	Standard / Criterion
Radio disturbance characteristics of electrical lighting equipment	J55015(H20)

DIMENSION and PHYSICAL CHARACTERISTICS	
Parameter	Type
Material	case plastic (UL94V-2) PCB plastic resin with fibreglass (UL94V-0) potting silicone (UL94V-0)
Dimension (LxWxH)	52.1 x 29.6 x 23.1mm
Weight	45g



Specifications (measured @ Ta= 25°C, nom. Vin, rated load and after warm-up unless otherwise stated)

INSTALLATION and APPLICATION



PACKAGING INFORMATION

Parameter	Type	Value
Packaging Dimension (LxWxH)	cardboard Box	265.0 x 80.0 x 115.0mm
Packaging Quantity		10pcs
Storage Temperature Range		-30°C to +80°C
Storage Humidity	non-condensing	5%-85% RH

DISCONTINUED

The product information and specifications may be subject to changes even without prior written notice. The product has been designed for various applications; its suitability lies in the responsibility of each customer. The products are not authorized for use in safety-critical applications without RECOM's explicit written consent. A safety-critical application is an application where a failure may reasonably be expected to endanger or cause loss of life, inflict bodily harm or damage property. The applicant 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.