

# Features

## LED Driver

- 4W AC-DC class II LED power supply
- 350mA to 700mA constant current outputs
- Fully protected (OLP, SCP, OCP, OTP)
- Low standby power, ErP conform
- IP65 (suitable for dry and damp locations)
- Low cost
- CE, CB, ENEC, CSA and UL8750 certified
- Wired connections for independent or built-in use

### Description

These constant current LED drivers have been designed for cost-sensitive applications. The SELV outputs are suitable for built-in power-supply LED luminaires. Their low profile design allows them to be invisibly built into furniture, discreetly mounted under shelves or integrated in space-restricted applications such as coving lighting, strip lighting or troffer lighting systems. The power supplies are short circuit and overload protected and come with a full 3-year warranty.

### Selection Guide

Part Number	Input Voltage Range [VAC]	Input Current [mA]	Output Voltage Range [VDC]	Output Current [mA]	Efficiency typ. [%]	Output Power max. [W]
RACD04-350	90-264	100	3-12	350	77	4.2
RACD04-500	90-264	100	3-8	500	75	4
RACD04-700	90-264	100	3-6	700	72	4.2

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.

### Specifications (measured @ ta= 25°C, 240VAC and rated load)

BASIC CHARACTERISTICS				
Parameter	Condition	Min.	Typ.	Max.
Input Voltage Range		90VAC	230VAC	264VAC
Inrush Current				10A
Start-up Time				500ms
Input Frequency Range		47Hz		63Hz
No Load Power Consumption				0.5W
Power Factor	full load, 230VAC			0.40
Internal Operating Frequency	full load		64kHz	
Output Ripple Current <sup>(1)</sup>	350mA 500mA; 700mA			80mAp-p 90mAp-p
<b>Notes:</b>				
Note1: Measured at 20MHz BW using 0.1µF & 47µF parallel capacitor.				

REGULATIONS		
Parameter	Condition	Value
Output Current Accuracy		±5% max.
Line Regulation		5% max.
Load Regulation		5% max.

PROTECTION		
Parameter	Condition	Value
Input Overcurrent Protection	internal	0.22Ω fusible resistor
Open Circuit Protection (OCP)		auto recovery after fault condition is removed

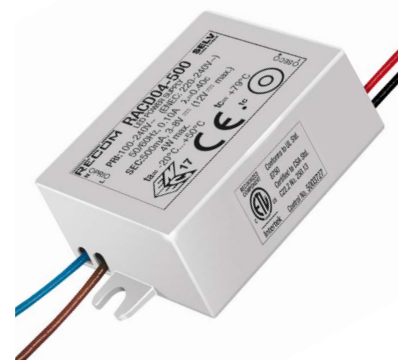
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# RECOM

## AC/DC Converter

## RACD04

### 4 Watt Constant Current Single Output



RECOGNIZED COMPONENT



Intertek

UL8750 Certified  
CSA C22.2 No. 250.13 Certified  
IEC/EN61347-1 Certified  
IEC/EN61347-2-13 Certified  
IEC62384 Certified  
EN55015 Compliant  
CB Report

**Specifications** (measured @  $t_a = 25^\circ\text{C}$ , 240VAC and rated load)

Over Load Protection (OLP)		auto recovery after fault condition is removed
Over Voltage Protection (OVP)		auto recovery after fault condition is removed
Over Temperature Protection (OTP)	110°C Tcase	auto recovery after fault condition is removed
Isolation Voltage	I/P to O/P	3.75kVAC / 1 minute
Isolation Resistance		100M $\Omega$

**Maximum loading of automatic circuit breakers**

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

Circuit Breaker	Circuit Breaker Current			
	Typ	10A	16A	20A
C	54	118	148	184

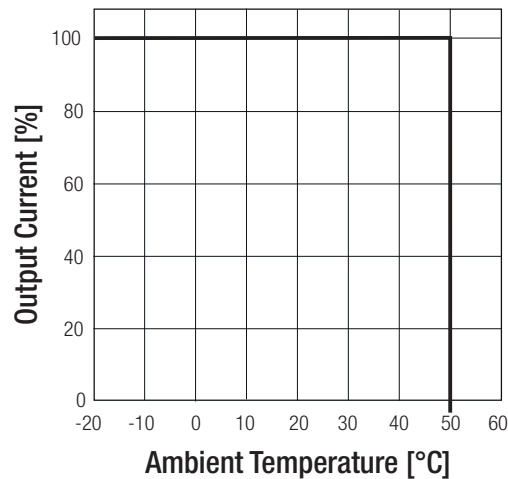
@ 230VAC, 10hm, 90° phase angle and max. load

Circuit Breaker	Circuit Breaker Current			
	Typ	10A	16A	20A
B	17	28	35	44
C	27	59	74	92

**ENVIRONMENTAL**

Parameter	Condition	Value
Operating Temperature Range		-20°C to +50°C, Ambient
Maximum Case Temperature		+79°C
Operating Altitude		2000m
Operating Humidity		5% to 85% RH, non condensing
IP Rating		IP65
Pollution Degree		PD2
Design Lifetime		30 x 10 <sup>3</sup> hours

**Derating Graph**



**SAFETY AND CERTIFICATIONS**

Certificate Type	Report Number	Standard
ETL Standard for LED Equipment for use in Lighting Products	160428123GZU-001	UL8750, 2nd Edition, 2015
LED Equipment for Lighting Applications		CSA C22.2 No. 250.13, 2014-07-01
Lamp Controlgear: General Requirements for Safety		IEC61347-1, 3rd Edition, 2015 EN61347-1, 2015
Lamp Controlgear: Particular Requirements for d.c. or a.c.		IEC61347-2-13:2014 2nd Edition +A1:2016 EN61347-2-13:2014 +A1:2017

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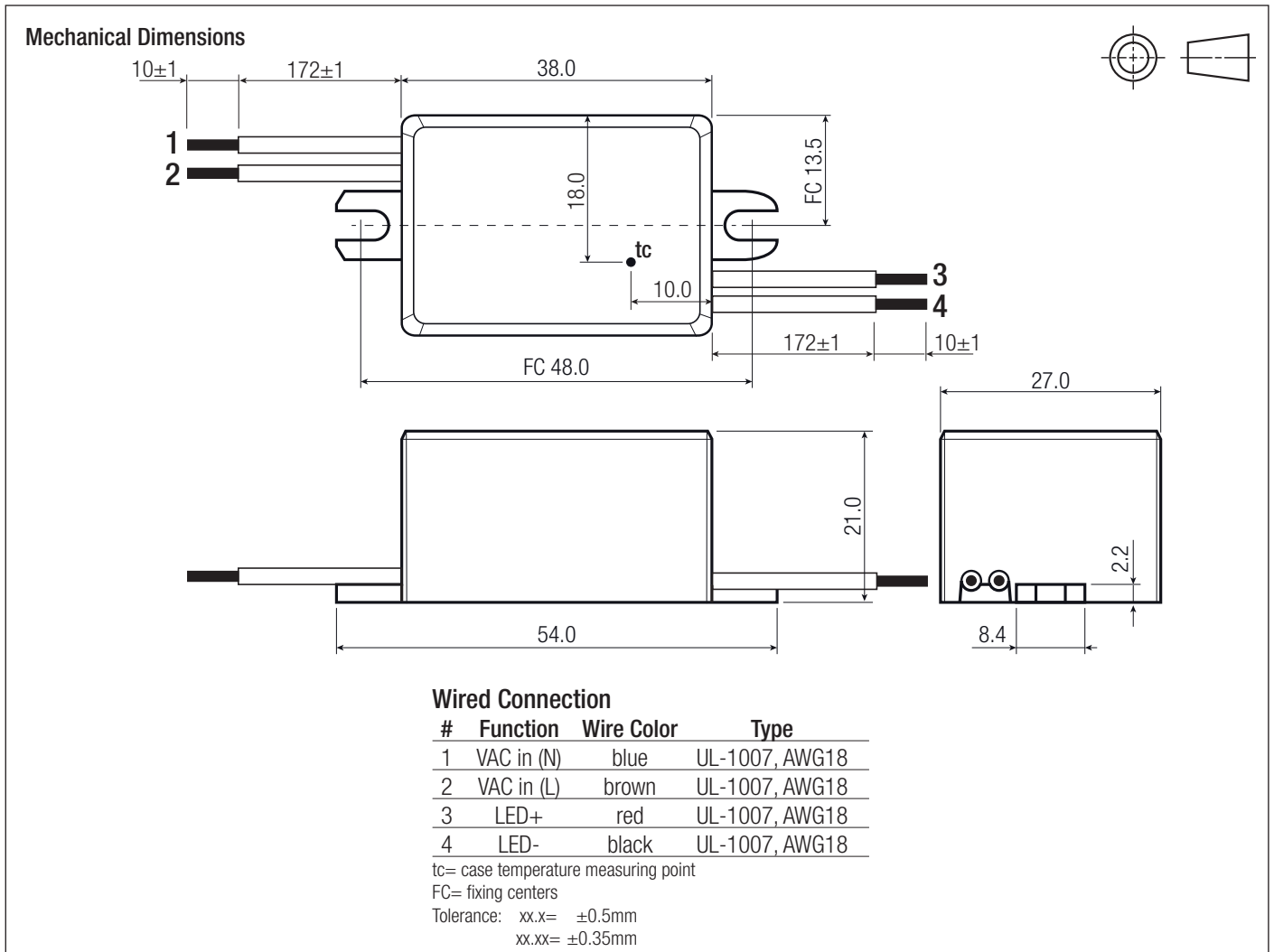
**Specifications (measured @ ta= 25°C, 240VAC and rated load)**

Certificate Type	Report Number	Standard
Lamp Controlgear: General Requirments for Safety (CB Scheme)	307649 + 307650	IEC61347-1:2007, 2nd Edition +A12:2012
Lamp Controlgear Particular Requirements for d.c. or a.c. (CB Scheme)		IEC61347-2-13, 2nd Edition, 2014
Lamp Controlgear General Requirments for Safety (ENEC)		IEC61347-1:2008 + A2:2013
Lamp Controlgear Particular Requirements for d.c. or a.c. (ENEC)		EN61347-2-13:2014
D.C. or A.C. Controlgears for LED Performance Requirements (ENEC)	307649-1 + 307650-1	IEC62384:2006, 1st Edition +A1:2009 EN62384:2006 + A1:2009
EAC	RU-AT.49.09571	TP TC 004/2011
RoHS 2.1	LCS1606201548R	RoHS-2011/65/EU + AM-2015/863
<b>EMI Compliance</b>		
Equipment for general Lighting Purpose EMC Immunity Requirements	307650	EN61547: 2009
Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment		EN55015:2013 + A1:2015
Assessment of lighting equipment related to human exposure to electromagnetic fields		EN62493: 2015
ESD Electrostatic discharge immunity test	±8kV Air Discharge, ±4kV Contact Discharge	EN61000-4-2: 2009, Criteria B
Radiated, radio-frequency, electromagnetic field immunity test	3V/m	EN61000-4-3: 2006 + A2:2010, Criteria A
Fast Transient and Burst Immunity	±0.5kV (DC Output) ±1kV (AC Input)	EN61000-4-4: 2012, Criteria B
Surge Immunity	±0.5kV (AC Input)	EN61000-4-5: 2014, Criteria C
Immunity to conducted disturbances, induced by radio-frequency fields	3V	EN61000-4-6: 2014, Criteria A
Voltage Dips and Interruptions	>95% reduction, 10ms 30% reduction, 200ms	EN61000-4-11, 2004, Criteria B EN61000-4-11, 2004, Criteria C
Limits of Harmonic Current Emissions		EN61000-3-2:2014 Class C
Voltage Fluctuations and Flicker in Public Low-Voltage Systems ≤16A per phase		EN61000-3-3: 2013 Clause 5

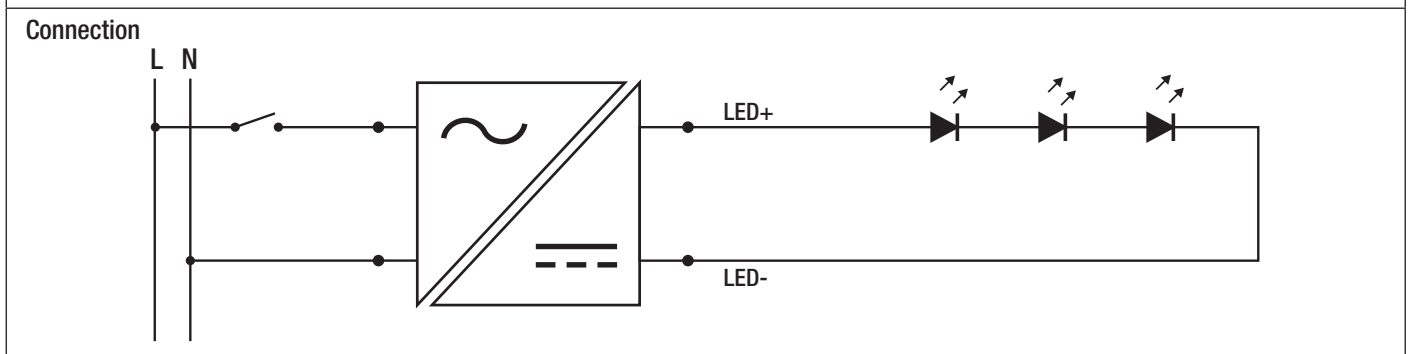
<b>DIMENSION and PHYSICAL CHARACTERISTICS</b>		
Parameter	Type	Value
Material	Case Potting	Plastic (UL94 V-2) Silicone (UL94 V-0)
Package Dimension (LxWxH)		38.0 x 27.0 x 21.0mm
Package Weight		40g

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Specifications (measured @  $t_a = 25^\circ\text{C}$ , 240VAC and rated load)



**INSTALLATION and APPLICATION**



**PACKAGING INFORMATION**

Parameter	Type	Value
Packaging Dimension (LxWxH)	Cardboard Box	290.0 x 86.0 x 76.0mm
Packaging Quantity		10pcs
Storage Temperature Range		-20°C to +70°C
Storage Humidity		5% - 85% RH

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