

Features

LED DRIVER

- Constant Voltage Output
- ENEC, UL, RCM and CB Certified
- Power Factor Corrected
- Short Circuit, Overload and Overtemperature Protected

Description

The RACV30 is the first of a new series of constant voltage LED drivers, ideal for powering LED strips and LED modules in applications such as cove lighting, signage, back lighting, channel letters, displays or under cabinet lighting. The input voltage range of 90 to 264VAC assures full functionality worldwide. The new drivers provide up to 30 watts and are available with outputs of 12VDC or 24VDC. The output voltages are closely regulated to compensate for varying loads or supply changes (2% max.).

Selection Guide

Part Number	Input Voltage Range (VAC)	Output Voltage (VDC)	Constant Current Range (mA)	Efficiency typ. (%)
RACV30-24	90-264	12	0-1250	84
RACV30-12	90-264	24	0-2500	83

NOT RECOMMENDED**FOR
NEW DESIGNS**

Specifications (typical at 25°C, nominal input voltage and full load)

Input Voltage Range	90-264VAC or 140-370VDC	
Input Frequency Range	47-63Hz	
Input Current	Full Load	< 380mA
Power Factor Correction	Full Load	>0.92
THD	Full Load, 115VAC	12% max.
Inrush Current	(2ms peak)	30A max.
Input Fuse		internal 2A/250V
Output Voltage Accuracy	(Output Load min <-> max)	±5%
Load Regulation	(Output Load min <-> max)	2% max.
Line Regulation	(VACin min <-> VACin max)	2% max.
Output Ripple		3% max.
Operating Frequency		≤125kHz
Isolation Voltage	3kVAC / 1 minute	
Operating Temperature Range (free air convection)	Ambient Temperature	-20°C to +50°C
	Case Temperature	75°C max.
Humidity		85% RH max.
Case Material		Epoxy UL94V-0
Weight	RACV30-24	167g
	RACV30-12	170g
MTBF	MIL STD 217F	30x10 ³ hours
Design Lifetime		70 x 10 ³ hours max.
EMC Standards		EN55015 FCC18A
Certifications		
LED General Safety		UL8750, cUL8750
ENEC		EN61347-2-13:2006 EN61347-1:2008
PSE		J61347-1(H20), J61347-2-13(H21), J55015(H20)
Screw Terminal Specification		14AWG or 2.5mm ²
Connector Plug Specification		5.5mm connector
Short Circuit Protection		Current Limit, Automatic Restart
Overload Protection	Full Load	110~160%
Overtemperature Protection	T _j =110°C	Automatic Restart

LIGHTLINE

AC/DC-Converter

with 5 year Warranty

RECOM

30 Watt PFC Single CV Output



EN61347-2-13 Certified
UL-8750 Certified
cUL-8750 Certified

RACV30

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.

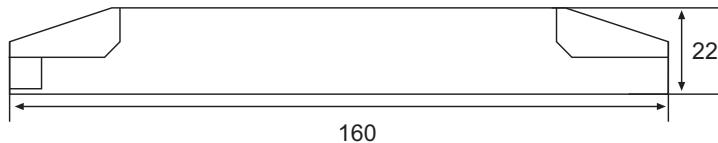
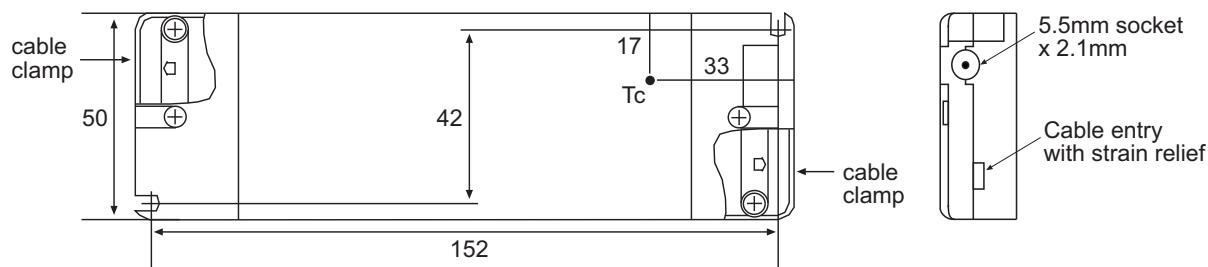
Refer to Application Notes

Characteristic

Maximum Number of LED drivers per circuit breakers

Condition	Circuit Breaker	Circuit Breaker Current			
		Typ	10A	16A	20A
115VAC, 10hm 90° phase angle	C	32	48	57	72
230VAC, 10hm 90° phase angle	B	24	38	46	58
	C	38	62	74	92
277VAC, 10hm 90° phase angle	B	28	44	53	66
	C	44	71	84	106

Package Style and Pinning



Connections	
CN1	Function
L	VAC in (L)
N	VAC in (N)
CN2	Function
+	LED+
-	LED-
5.5mm Socket*	Function
Pin	LED+
Shell	LED-

Tolerance
XX = +/-1mm
XX.X = */-0.5mm

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.