

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	24	0-1250	84
RACV30-12	90-264	12	0-2500	83

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	Tj=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.

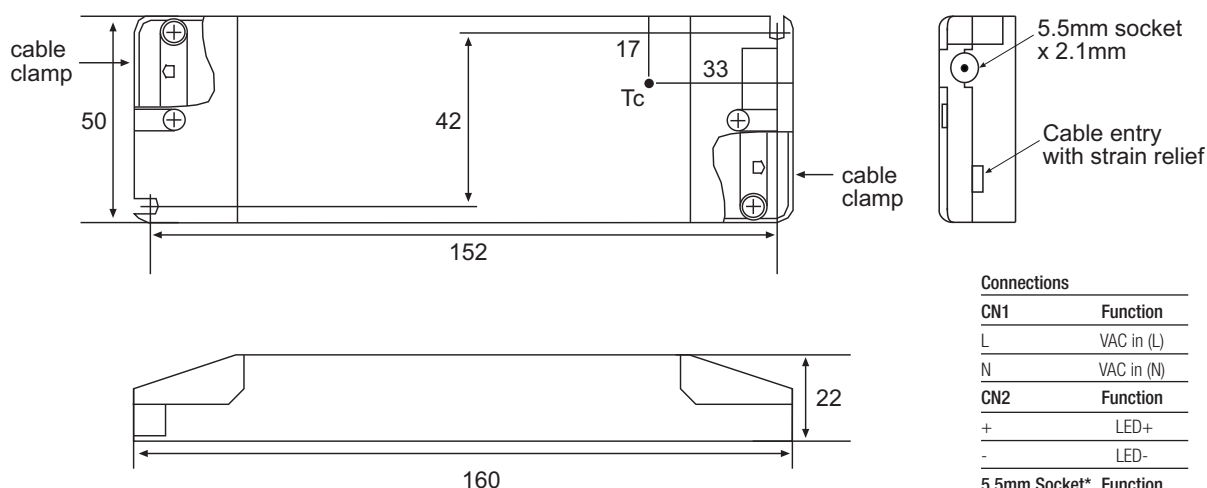
Refer to Application Notes

Characteristic

Maximum Number of LED drivers per circuit breakers

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