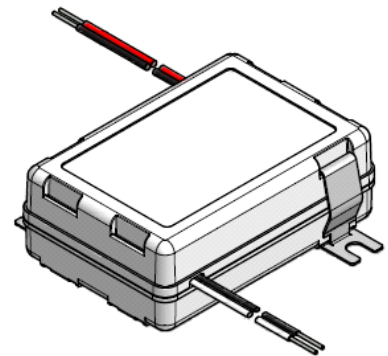


Features

TROPO switch mode power supply technology is designed to generate one constant current output from an AC input, and work with industry standard lighting controls in dimming applications.

- 120VAC and 240VAC Inputs Available
- Factory Settable Output Current between 0.35A and 1.5A
- Operates with Industry Standard Dimmers
- Compact Encapsulated Assembly
- Active Power Factor Correction
- Output Over-Voltage, Over-Current and Short-Circuit Protection and Auto Recovery
- High Temperature Operation (up to 90°C case)
- UL Approved, ENEC Approved, CE Mark
- Long Life >50,000 hrs
- ROHS Compliant



Applications and Benefits

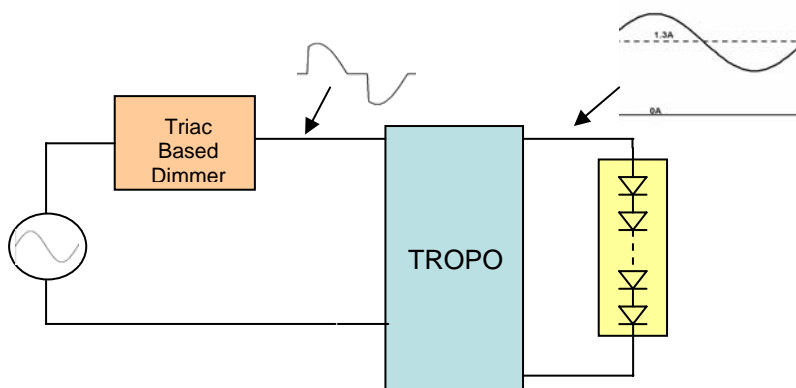
TROPO is designed for powering LED luminaries with standard lighting controls. The modules operate with:

- Standard Light Switches
- Triac based Incandescent Dimmers (Standard phase – leading edge)
- Electronic Low Voltage Dimmers (Reverse Phase – trailing edge)

TROPO is ideal for installations requiring dimmable Class 2 outputs such as:

- Commercial Lighting
- Residential Lighting

The following diagram depicts a typical installation utilizing the TROPO:



- Dimming range down to less than 10% nominal output current
- Output current does not terminate during off time of dimmer
- Output Current factory settable up to 1.5A
- Multiple Drivers / LED Assemblies may be connected to a single dimmer
- Facilitates compliance with Energy Star ratings for LED luminaires

Input and Output Specification

Input Voltage: 115/ 230 VAC Options:
Model 1: 90 - 135 VAC
Model 2: 176 - 265 VAC
47-63 Hz Frequency Range

Input Current: < 0.3A

Efficiency: 80% Typical @ >120VAC, Full load

Isolation: Meets the UL60950-1
Reinforced / double
Insulation
NEC (Class 2)
EN60598-1 Class II

Input Power Factor: >90%

Input Harmonics: Meets EN61000-3-2, 3

Output Voltage: 8 – 48 VDC (See model table for details)

Output Current: 0.35 to 1.5A (See model table for details)

Ripple Current: <40% (P-P) of maximum Output Current
with no dimming

Dimming: Output dimming is possible via industry standard
dimmers. (leading and trailing edge)

Output Accuracy: +/- 5% of set point

Output Regulation: +/- 5% of max rating

Output Over-Voltage, Over-Current and Short-Circuit
Protection (hiccup), Over-Temperature and Auto Recovery

Output Control: Output Dims without any flicker. Total
dimming range is as follows:

Conduction Angle / output: 180 degrees/ 100% max
30 degrees / 10% min

Performance Requirements: Meets the requirements of IEC 62384: control gear for LED modules

EMI and EMC:

Conducted and Radiated EMI: EN55015 Class B, FCC Class47CFR Part 15 Class B

Susceptibility: EN61000-4-2, -3, -4, -5, -6 and -11

ANSI c62.41-1991 Category A1, 2.5kV Ringwave

Life Expectancy: 50,000 hrs minimum @ 90C case temp.

Eu and RoW

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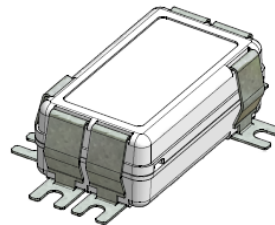
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Mechanical Details

Packaging Options:	Fully Encapsulated with ABS plastic body enclosure
I/O Connections:	Flying leads, 18AWG, 152mm long, 105C Rated, Stranded, Stripped by approximately 9.5mm and tinned
Mounting Details:	Universal Mounting Clips, and 6 mounting locations per package allow installer to choose the most suitable position for the <u>mounting feet</u>
Ingress Protection:	IP65 Rated

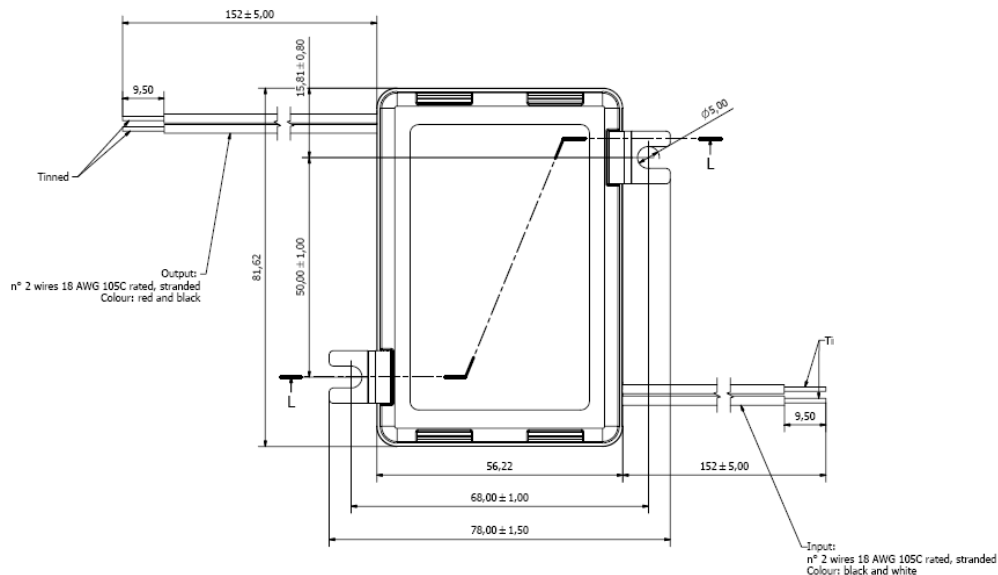
Universal Mount
A Patent Pending Design



Outline Drawing

Max Dimensions: 82mm x 56mm x 29mm, 3.21" x 2.21" x 1.13"
Mass: 145 grams, 5.1 Oz.

Volume: 133 cm³, 8.0 in³



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Environmental

Operating Temperature:	-30°C to +90°C case temp without derating
Operating Relative Humidity:	5% to 95%, non condensing
Storage Temperature:	-40°C to +85°C
Surface Temperature:	Exposed surfaces <90°C under all operating conditions
Cooling:	Convection cooled

Safety Agency Approvals (pending)

UL60950-1 Recognized. LPS Output	UL8750 compliant
EN61347-2-13 electronic control gear for LED Modules	ENEC Mark and CE Mark for EU

Notes regarding North American (UL) approvals:

1. All models with $V_{out} < 30VDC$ are approved for use in wet applications as Class 2 devices.
2. All models with $V_{out} < 60VDC$ are approved for use in dry applications as Class 2 devices.
3. All models with $V_{out} > 60VDC$ exceed NEC Class 2 limits. These units will still be marked UL recognized but not as a class 2 device.

Notes Regarding European (ENEC) approvals:

1. All models with $V_{out} < 25VDC$ are SELV equivalent per EN61347-2-13.
2. All models with $V_{out} > 25VDC$ are considered "Isolated Control Gear" per EN61347-2-13

Model Table

Model Number	Pout Max (watts)	Vin Range (vac)	Vout Min (vdc)	Vout Max (vdc)	Iout Set (mA)
RLDD015L-350	16.8	90 - 135	24	48	350
RLDD015L-700	16.8	90 - 135	16	24	700
RLDD015L-1000	16	90 - 135	10	16	1000
RLDD015L-1250	15	90 - 135	8	12	1250
RLDD015L-1500	15	90 - 135	5	10	1500
RLDD015H-350	16.8	176 - 265	24	48	350
RLDD015H-700	16.8	176 - 265	16	24	700
RLDD015H-1000	16	176 - 265	10	16	1000
RLDD015H-1250	15	176 - 265	8	12	1250
RLDD015H-1500	15	176 - 265	5	10	1500

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