

### Features

STRATO switch mode driver technology is designed to generate one constant current output from a wide range AC input. The size and performance of these products make them the ideal choice for LED lighting applications.

- Wide Range Input: 120, 240, or 277 VAC
- Constant Current Output for Powering LEDs Directly
- High Efficiency ~90%
- Compact Design
- Adjustable Output Current Settings
- Dimmable with (0-10VDC) Input
- Temperature Protection for LEDs
- Convection Cooled
- Long Life
- Wide Temperature Range
- ROHS Compliant



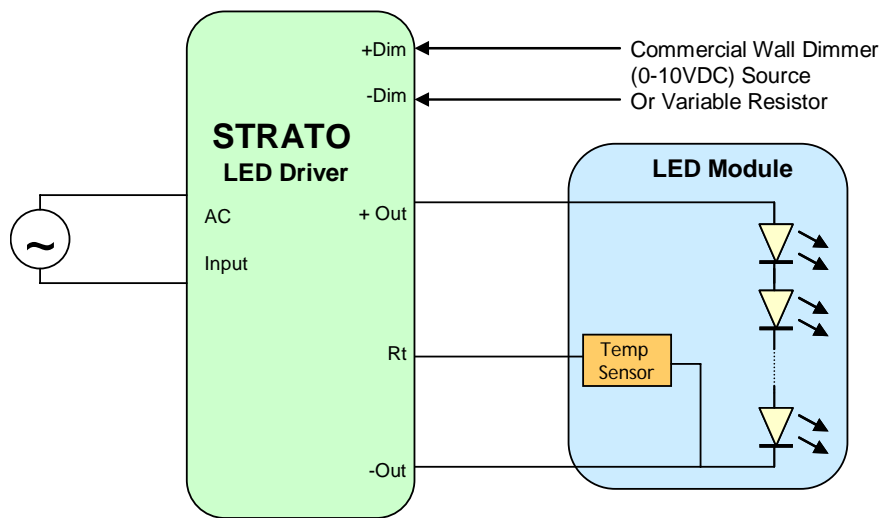
### Applications and Benefits

STRATO is designed for directly powering LEDs in commercial & industrial lighting applications.

The product's extremely **small form factor** and **high efficiency** makes it suitable for integration into most light fixtures and standard electrical junction boxes.

A host of integrated **control features:**

- Simplify Light Fixture Design
- Ease Safety Approval Cycles
- Lower Fixture Complexity and Cost



#### STRATO's versatile control features:

- A Temperature sensor (NTC thermistor) protects the LED from over-temperature.
- A 2 wire Dimming input provides both output trimming, and 10-100% Iout Dimming function.



### Input and Output Specification

Input Voltage: 120 / 240 / 277 VAC nominal  
47-63 Hz Frequency Range

Efficiency: 90% typical \*

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

Input Power Factor: >0.90 \*

Input Harmonics: Meets EN61000-3-2, -3 \*

\* @ Vin Nominal and >80% load

Output Voltage: 33 to 210 VDC  
See Model Table for details

Output Current: 0.35 to 1.40 Amps  
See Model Table for details

Output Current  
Regulation: +/- 3% of max rating

Ripple Current: <45% (P-P) of maximum Output Current

Output Over-voltage, Over-Current and Short-Circuit  
Protection (hiccup), and over-temperature protection with  
auto recovery

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

**Table 1**  
**Absolute Maximum Driver Ratings**

Model number		Iout Max	Pout max	Vout (min)	Vout (max)	Vout No Load max
Package	Dash #	mA	watts	vdc	vdc	vdc
RSLD070	-60	350	74	150	210	250
RSLD070	-55	350	67	138	193	231
RSLD070	-50	350	61	125	175	210
RSLD070	-45	350	55	113	158	190
RSLD070	-40	500	70	100	140	160
RSLD070	-35	500	61	88	123	147
RSLD070	-30	700	74	75	105	120
RSLD070	-25	700	61	63	88	100
RSLD070	-20	1000	70	50	70	84
RSLD070	-14	1400	65.8	33	47	60

Refer to Strato Application Note #3, Output Voltage Range for proper device selection.

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### Controls

**Output Controls:** Two dedicated inputs provide control and safety features.

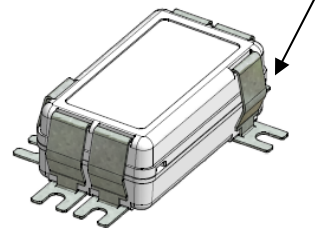
**Dim:** A dimming input can be used to adjust the output setting via a standard commercial wall dimmer, an external control voltage source (1 to 10VDC), or a variable resistor when using the recommended number of LEDs. The input permits 100% to 80% trimming and 100% to 10% dimming. This permits active control of the driver and may be used for trimming and dimming purposes. See Roal Strato Application Note 1 for details on functionality and compatibility with standard industry practices.

**Is:** The Temperature input may be connected to a 100k NTC thermistor. The thermistor should be located on the LED assembly to monitor its temperature. If the temperature exceeds a predetermined set point, the output current of the module is automatically reduced to regulate the temperature of the LED at a safe level. See Roal Strato Application Note 1 for details.

### Mechanical Details

Packaging Options:	Partially Encapsulated with ABS plastic body enclosure
I/O Connections:	Flying leads, 18AWG on power leads, 20AWG on control leads, 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:	IP64 Rated

*Universal Mount  
A Patent Pending Design*



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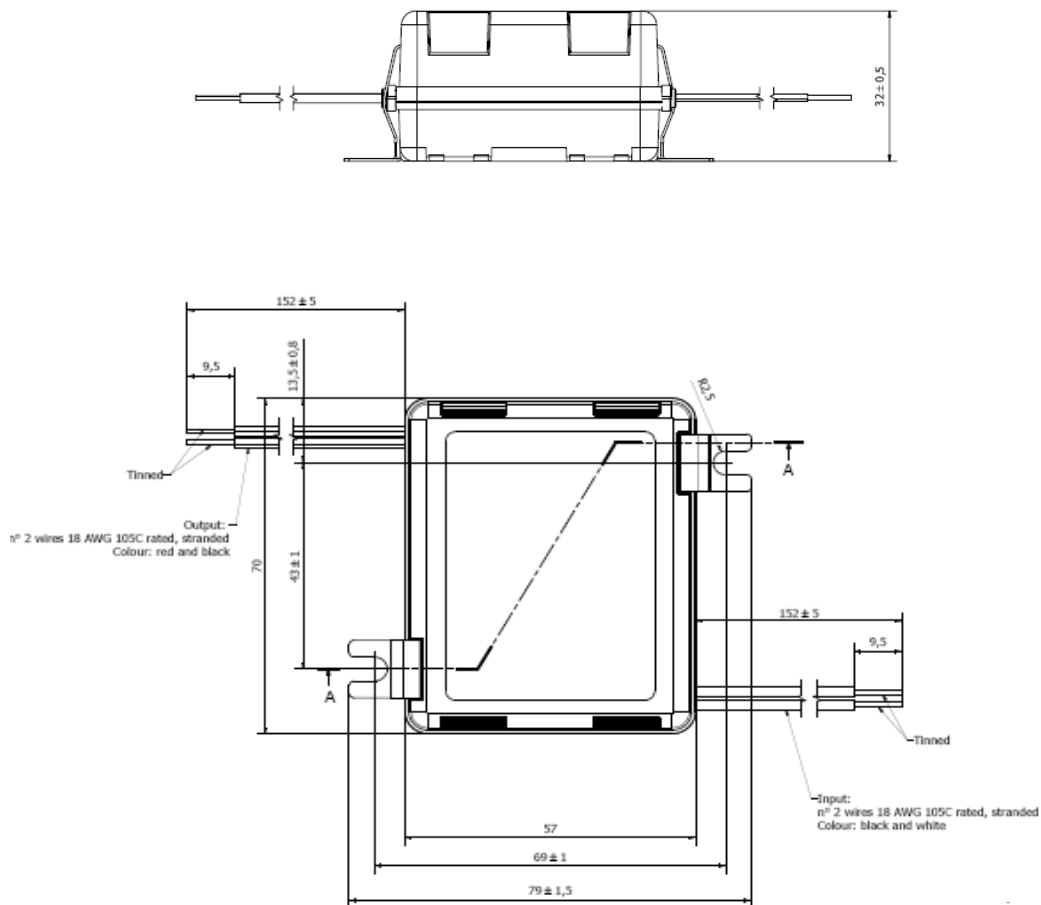
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### Outline Drawings

#### Package: RSLD070

Max Dimensions: 70mm x 57mm x 32mm,  
2.76" x 2.24" x 1.26"  
Volume : 128 cm<sup>3</sup>, 7.54  
Mass : 170 grams, 6.0 Oz.



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### Environmental / EMC

Operating Temperature:	-30 to +90C case temperature 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

#### EMI and EMC:

Conducted and Radiated EMI: EN55015 Class B, FCC 47CFR Part 15 Class B

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

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

### Safety Agency Approvals

UL60950-1 Recognized, UL8750 recognized, approved for damp locations

EN61347-2-13 electronic control gear for LED Modules

ENEC Mark and CE Mark for EU.

Notes Regarding European (ENEC) approvals:

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

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