

### 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



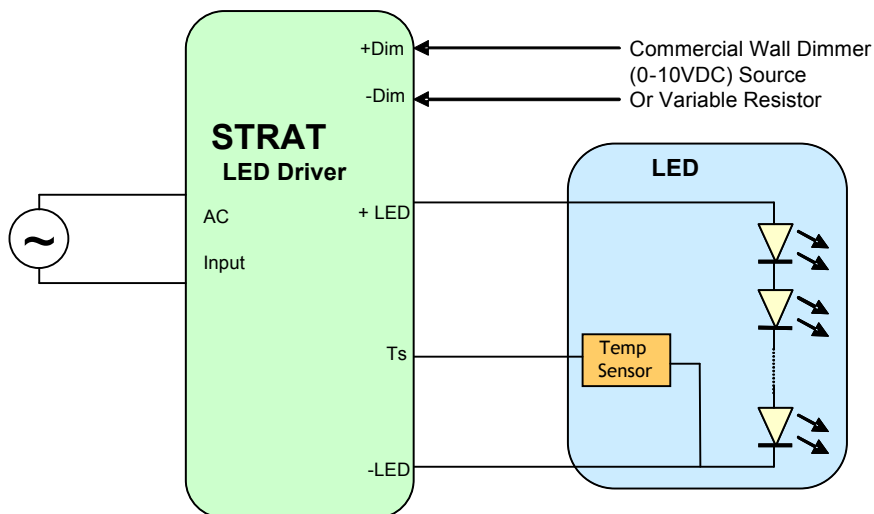
### Applications and Benefits

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 for models  
>20W and >90% for models <20W

Output Voltage: 7.5 to 73.5 VDC  
See Table 1 for details

Output Current: 0.50 to 1.75 Amps  
See Table 1 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
RSLD035	-21	500	36.75	52.5	73.5	88.2
RSLD035	-16	700	39.2	40.0	56.0	60.0
RSLD035	-15	700	36.8	37.5	52.5	60.0
RSLD035	-14	700	34.3	35.0	49.0	59.5
RSLD035	-13	700	31.9	32.5	45.5	54.6
RSLD035	-12	700	29.4	30.0	42.0	50.0
RSLD035	-11	700	27	27.5	38.5	46.2
RSLD035	-10	700	24.5	25.0	35.0	42.0
RSLD035	-09	1000	31.5	22.5	31.5	37.8
RSLD035	-9A	700	22.1	22.5	31.5	37.8
RSLD035	-08	1150	32.2	20.0	28.0	33.6
RSLD035	-07	1400	34.3	17.5	24.5	29.4
*RSLD035	-7A	720	17.6	17.5	24.5	29.4
RSLD035	-6A	1240	25	14.5	20.1	24.2
RSLD035	-06	1400	29.4	15.0	21.0	25.0
RSLD035	-05	1750	30.6	12.5	17.5	21.0
RSLD035	-04	1750	24.5	10.0	14.0	16.0
*RSLD035	-4A	1300	18.2	10.0	14.0	16.0
*RSLD035	-03	1750	18.4	7.5	10.5	12.6

\* Certain models have lower output set points for compatibility with specific LED modules and arrays. As a result, these units will exhibit lower efficiency and lower power factor than specified herein.

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.

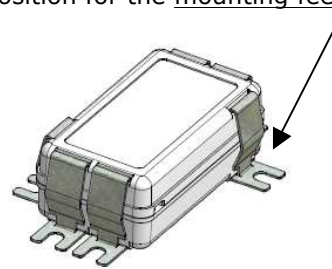
**Dim:** A dimming input can be used to adjust the output setting via a standard commercial wall dimmer, an external control voltage source (1 to 10VDC), or a variable resistor when using the recommended number of LEDs. The input permits 100% to 80% trimming and 100% to 10% dimming. This permits active 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.

**Ts:** 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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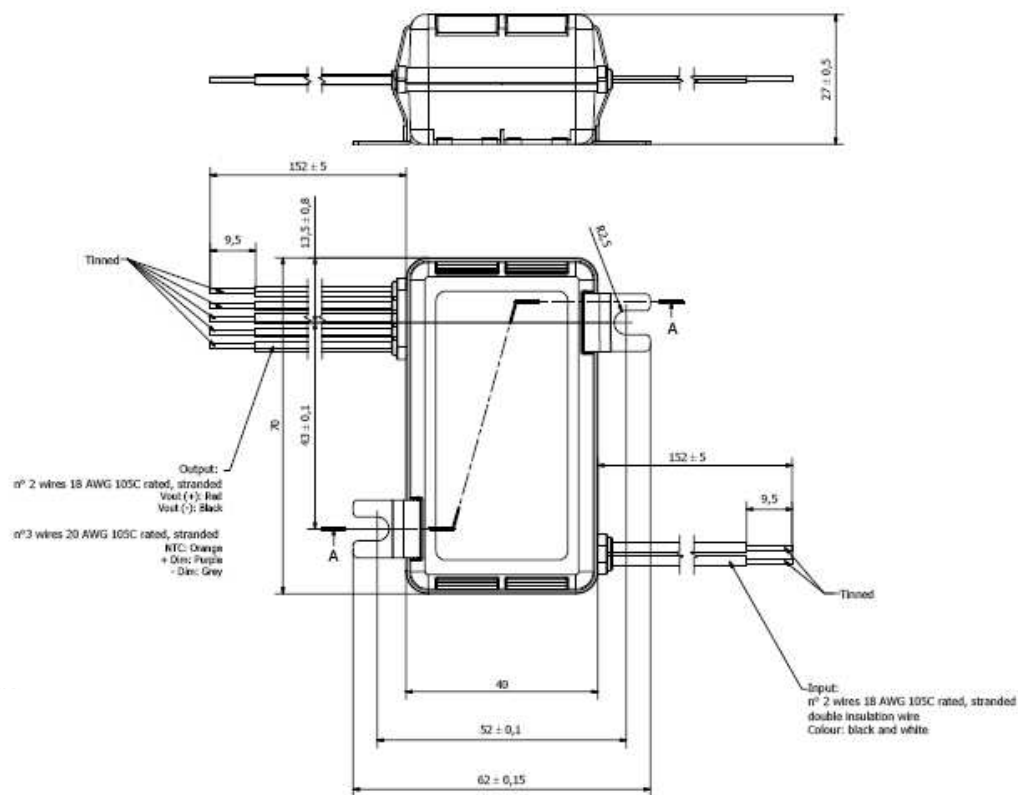
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### Outline Drawings

#### Package: RSLD035

Max Dimensions: 70mm x 40mm x 27mm,  
2.76" x 1.57" x 1.06"  
Volume : 75.6 cm<sup>3</sup>, 4.59 in<sup>3</sup>  
Mass : 142 grams, 5 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 Class 2 Output. 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 Vout < 25VDC are SELV equivalent per EN61347-2-13.
2. All models are considered "Isolated Control Gear" per EN61347-2-13

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