

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



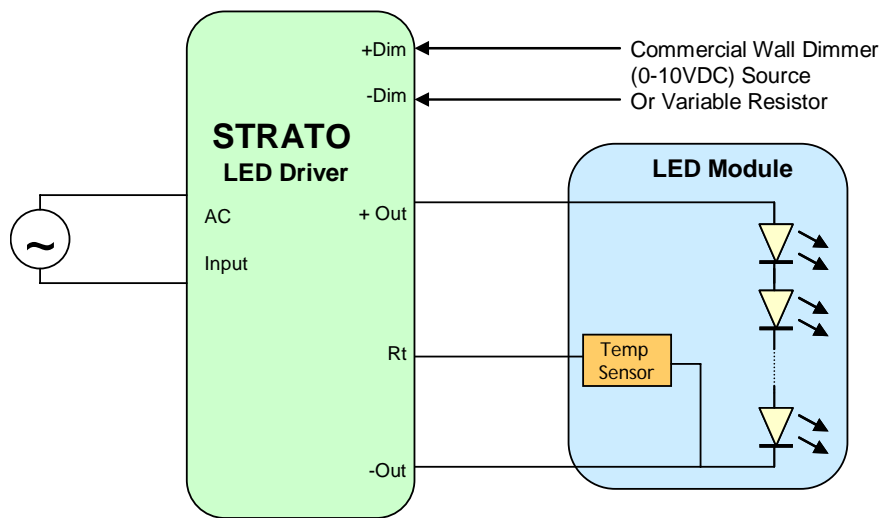
Applications and Benefits

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.

Eu and RoW

ROAL Electronics S.p.A
Via Jesina 56/A
60022 – Castelfidardo (AN) - Italy
Tel:+39 071 721461
Fax:+ 39 071 72146 480

Subject to Change without Notice

www.roallivingenergy.com

North America

ROAL Electronics, USA, Inc.
701 Main St. Suite 405
Stroudsburg, PA 18360
Phone: + 1 570 421 5750
Fax: +1 570 421 5687

DS3_Strato70 CC Plastic_Rev09- Page. 2/5

Controls

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

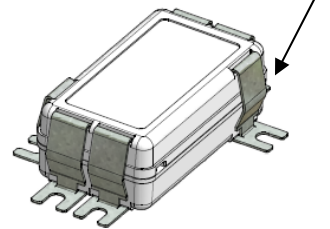
Dim: A dimming input can be used to adjust the output setting via a standard commercial wall dimmer, an external control voltage source (1 to 10VDC), or a variable resistor when using the recommended number of LEDs. The input permits 100% to 80% trimming and 100% to 10% dimming. This permits active control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



Eu and RoW

ROAL Electronics S.p.A
Via Jesina 56/A
60022 – Castelfidardo (AN) - Italy
Tel:+39 071 721461
Fax:+ 39 071 72146 480

Subject to Change without Notice

www.roallivingenergy.com

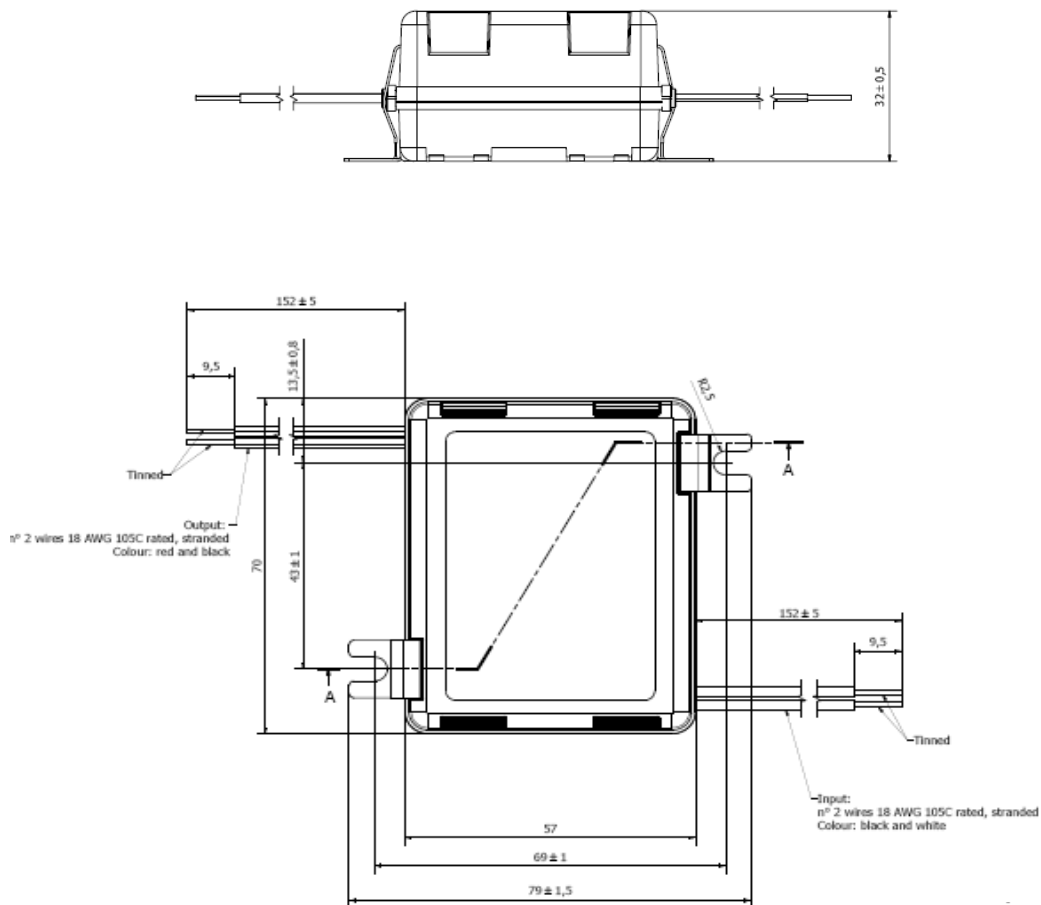
North America

ROAL Electronics, USA, Inc.
701 Main St. Suite 405
Stroudsburg, PA 18360
Phone: + 1 570 421 5750
Fax: +1 570 421 5687

Outline Drawings

Package: RSLD070

Max Dimensions: 70mm x 57mm x 32mm,
2.76" x 2.24" x 1.26"
Volume : 128 cm³, 7.54
Mass : 170 grams, 6.0 Oz.



Eu and RoW

ROAL Electronics S.p.A
Via Jesina 56/A
60022 – Castelfidardo (AN) - Italy
Tel: +39 071 721461
Fax: +39 071 72146 480

Subject to Change without Notice

www.roallivingenergy.com

North America

ROAL Electronics, USA, Inc.
701 Main St. Suite 405
Stroudsburg, PA 18360
Phone: +1 570 421 5750
Fax: +1 570 421 5687
DS3_Strato70 CC Plastic_Rev09- Page. 4/5

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

Roal Electronics, S.p.A. may change product specifications and accordingly the information presented in this document. Customers are responsible for their products and applications using Roal Electronics, S.p.A. products. Roal Electronics, S.p.A. assumes no liability from the use of its products outside of specifications. No license is granted to any intellectual property rights by this document. ROAL ELECTRONICS, S.P.A. DISCLAIMS ALL REPRESENTATIONS AND WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Eu and RoW

ROAL Electronics S.p.A
Via Jesina 56/A
60022 – Castelfidardo (AN) - Italy
Tel:+39 071 721461
Fax:+ 39 071 72146 480

Subject to Change without Notice

www.roallivingenergy.com

North America

ROAL Electronics, USA, Inc.
701 Main St. Suite 405
Stroudsburg, PA 18360
Phone: + 1 570 421 5750
Fax: +1 570 421 5687

DS3_Strato70 CC Plastic_Rev09- Page. 5/5