

### Features

VENTO LED Drivers are high efficiency off-line LED drivers that include an auxiliary 5V output for powering active cooling devices. The features, size and performance of these products make them the ideal turn key solution for high power LED lighting applications with active cooling.

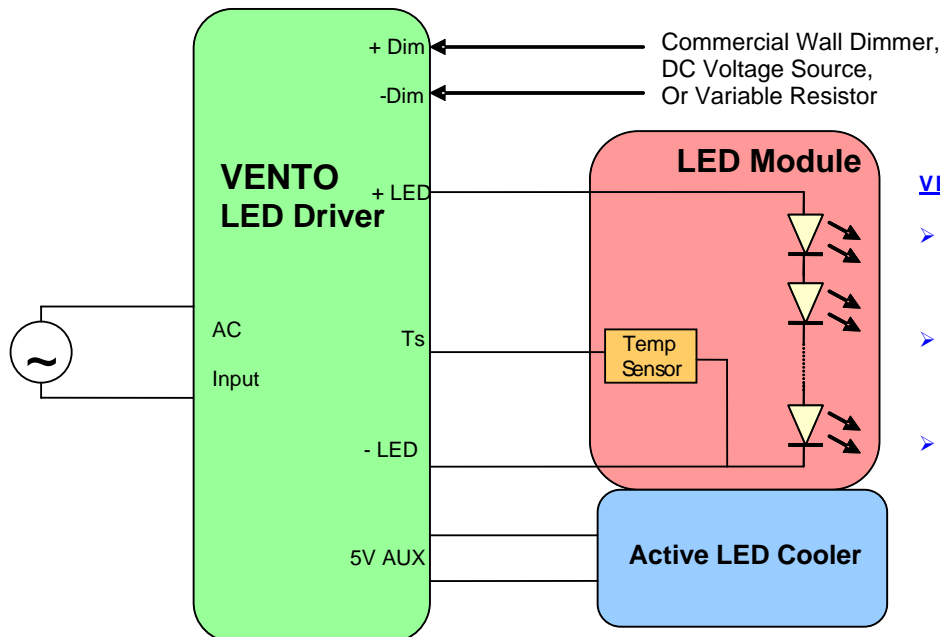
- Wide Range Input: 120, 240, or 277 VAC
- Constant Current Output for Powering LEDs Directly
- High Efficiency
- Dimmable with (0-10VDC) Input
- Temperature Protection for LEDs
- Convection Cooled
- 5V, 3W Auxiliary output
- Long Life
- Wide Temperature Range
- CFL Down light ballast style packaging
- ROHS Compliant



VENTO is designed for directly powering LEDs in commercial lighting applications.

A host of integrated **control features:**

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



#### VENTO'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.
- A 5V Aux output powers active cooling devices



## Input and Output Specification

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

Output Voltage: See Model Table for details

Efficiency: 90% typical \*

Output Current: See Model Table for details

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

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

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

Input Power Factor: > 0.90 \*

Output Over-voltage, Over-Current and Short-Circuit Protection (hiccup), and over-temperature protection w/ Auto recovery

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

\* @ Vin Nominal and > 80% load for models > 20W and > 90% for models < 20W

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

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

Model number		I <sub>out</sub> Max	P <sub>out</sub> max	V <sub>out</sub> (min)	V <sub>out</sub> (max)	V <sub>out</sub> No Load max
Package	Dash #	mA	watts	vdc	vdc	vdc
RCLV035	-16	700	42.95	40.0	56.0	60.0
RCLV035	-6A	1240	28.75	14.5	20.1	24.2
RCLV035	-05	1750	34.35	12.5	17.5	21.0

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

[www.roallivingenergy.com](http://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  
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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.

**Auxiliary Output:** A single 5V auxiliary output provides power for active LED cooling.

Vout: 4.75 to 5.25 VDC

Output Ripple: 150 mVpk-pk

Pout: 3.75W max

Protected against overload and over voltage

### Mechanical Details

Packaging Options:

Encapsulated with steel enclosure – can be mounted external to the fixture

I/O Connections:

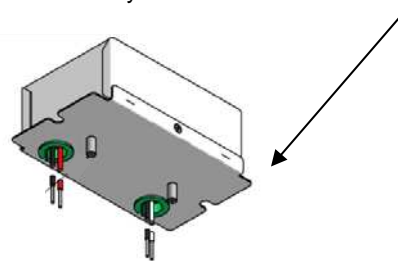
Flying leads, 18AWG on power leads, 20 AWG on control leads, 152mm long, 105C Rated, Stranded, Stripped by approximately 9.5mm and tinned

Mounting Details:

Universal Mounting with industry standard studs or flange mounting

Ingress Protection:

IP20 Rated



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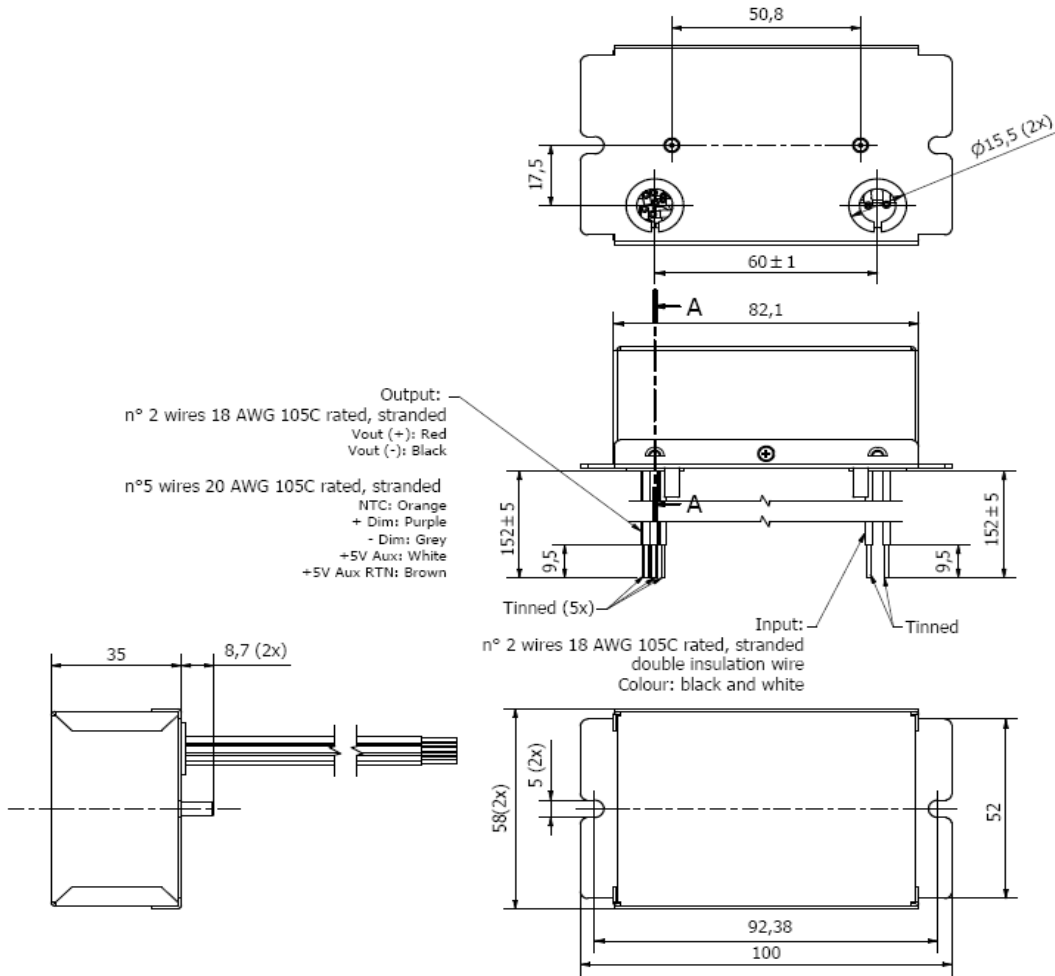
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Max Dimensions: 82mm x 58mm x 35mm  
3.23" x 2.28" x 1.38"

Volume: 167 cm<sup>3</sup>, 10.2 in<sup>3</sup>  
Mass: 312 grams, 11 oz



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Operating Temperature:	-30 to +90°C 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, UL8750 recognized Class 2 Output. Approved for damp locations

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