

### DESCRIPTION

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



### KEY FEATURES

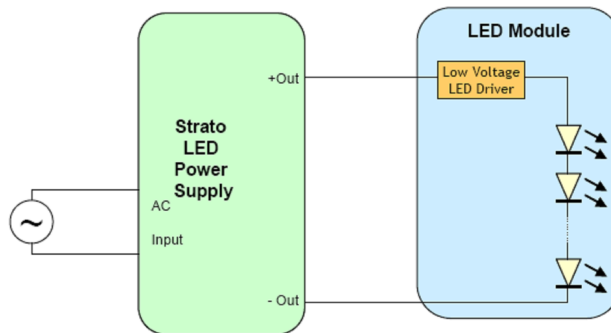
- Wide Input Range: 120/220-240/277V<sub>AC</sub>
- Constant Voltage Output: 12, 24, 48V
- High Efficiency up to 89%
- Compact Design
- Convection Cooled
- Wide Operating Temperature Range
- Long Life
- RoHS Compliant



### APPLICATIONS AND BENEFITS

STRATO power supplies are designed for powering low voltage LED modules in residential and commercial 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.



### MODEL CODING AND OUTPUT RATINGS

Model number	Pout max	Vout	Iout Max
	W	V <sub>DC</sub>	mA
RSLP035-12	21	12	1750
RSLP035-24	36	24	1500
RSLP035-48	36	48	750

Table 1: Absolute Maximum Driver Ratings


**INPUT AND OUTPUT SPECIFICATION**

Specification	Test Conditions / Notes	Min	Nom	Max	Units
<b>AC Input Voltage</b>	120/220-240/277V <sub>AC</sub> Device starts and operates at 90V <sub>AC</sub> at all load conditions	90	120/220-240/277	305	V <sub>AC</sub>
<b>Input Frequency</b>		47	50/60	63	Hz
<b>Input Current</b>	120V <sub>AC</sub> Rated Load	-	-	0.50	A
	230V <sub>AC</sub> Rated Load	-	-	0.26	
	277V <sub>AC</sub> Rated Load	-	-	0.22	
<b>Power Factor</b>	120V <sub>AC</sub>	0.9	-	-	
	230V <sub>AC</sub> with output Load between 80% and 100%	0.9	-	-	
	277V <sub>AC</sub> and rated output current	0.9	-	-	
<b>Inrush Current</b>	120V <sub>AC</sub> Half Value time: 100μs	-	-	11.0	Apk
	230V <sub>AC</sub> Half Value time: 100μs	-	-	25.5	
	277V <sub>AC</sub> Half Value time: 100μs	-	-	28.0	
<b>Efficiency</b>	120V <sub>AC</sub> Rated Load	84	-	87	%
	230V <sub>AC</sub> Rated Load	84	-	89	
	277V <sub>AC</sub> Rated Load	84	-	88	
<b>Harmonic Current</b>	Complies with EN-61000-3-2, Class C load >25W				


**OUTPUT SPECIFICATIONS**

Specification	Test Conditions / Notes	Min	Nom	Max	Units
<b>Output Power Rating</b>	check Model Coding and Output Ratings section	21	-	36	W
<b>Output Voltage</b>	RSLP035-12	-	12	-	V
	RSLP035-24	-	24	-	
	RSLP035-48	-	48	-	
<b>Output Current</b>	RSLP035-12			1750	mA
	RSLP035-24			1500	
	RSLP035-48			750	
<b>Ripple Voltage</b>	All models measured (V <sub>out</sub> _Pk-pk/RMS)	-	-	10	%
<b>Output Regulation</b>		-	-	±4	%I <sub>out</sub>
<b>Start-up time</b>		-	-	500	ms


**PROTECTION FEATURES**

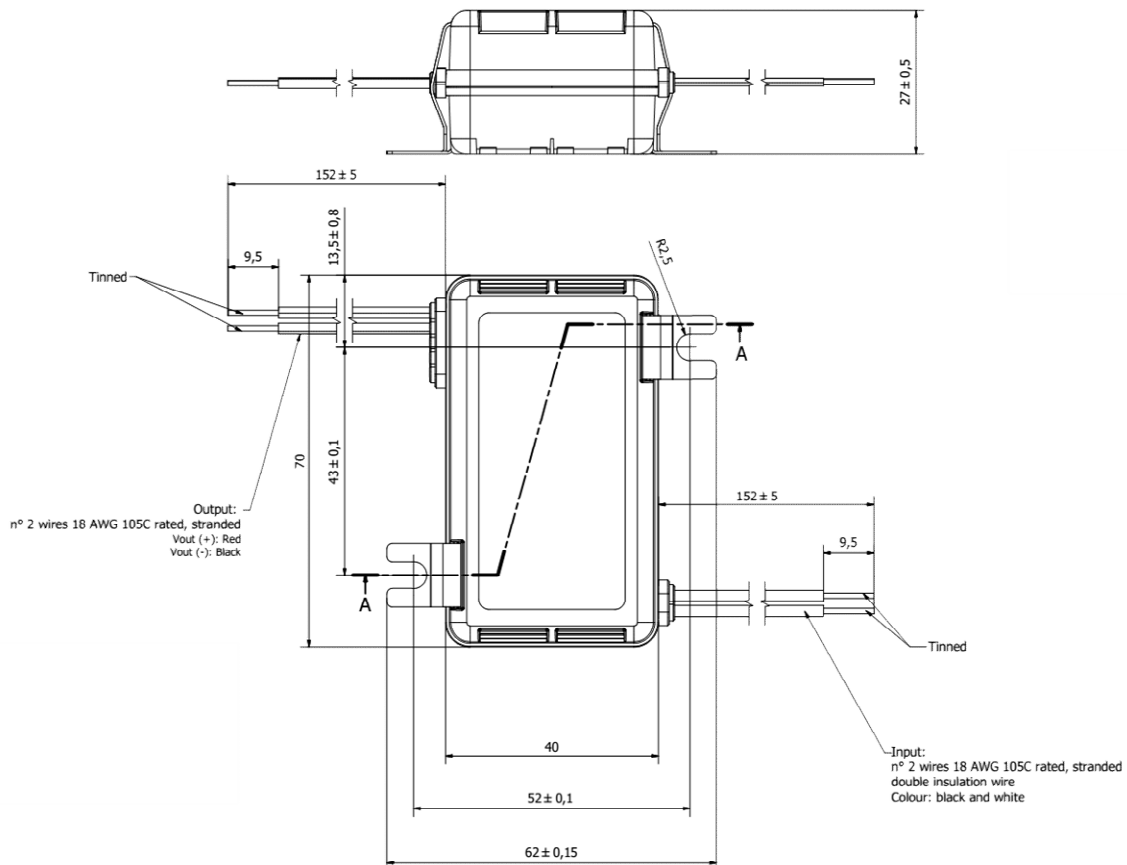
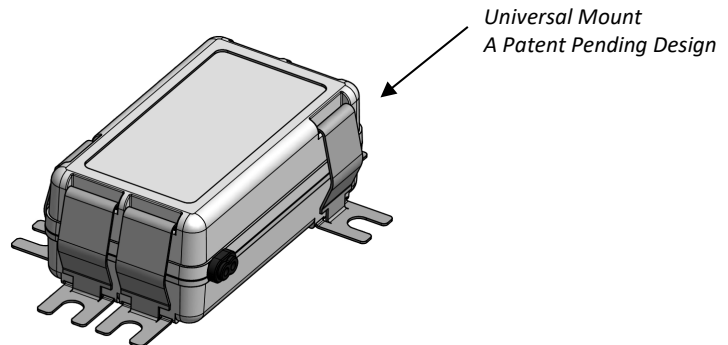
Specification	Test Conditions / Notes	Min	Nom	Max	Units
<b>Output Over Voltage</b>	Hiccup, auto Recovery	110	-	130	%V <sub>MAX</sub>
<b>Output Short-Circuit</b>	Hiccup, auto Recovery	-	-	-	-
<b>Over-Temperature T<sub>c</sub></b>	Hiccup, auto Recovery if the PSU exceeds the rated T <sub>c</sub> temperature	-	90	-	°C
<b>No Load</b>	RSLP035-12			12.48	V
	RSLP035-24			24.96	
	RSLP035-48			49.92	
<b>Isolation Primary-to-Secondary</b>	Reinforced/double Insulation meets IEC/EN61347-2-13 Class II				

**MECHANICAL DETAILS**

- Packaging Options:** Partially Encapsulated with ABS plastic body enclosure
- I/O Connections:** Flying leads, 18AWG on power leads, 152mm long, 105°C Rated, Stranded, Stripped by approximately 9.5mm and tinned. Double insulation input wires.
- Ingress Protection:** IP20, UL damp rated
- Mounting Details:** Universal Mounting Clips, and 6 mounting locations per package allow installer to choose the most suitable position for the mounting feet.

**OUTLINE DRAWINGS**

- Package:** RSLP035
- Dimensions:** 70 x 40 x 27mm  
2.76 x 1.57 x 1.06in
- Volume:** 75.6cm<sup>3</sup>, 4.59in<sup>3</sup>
- Mass:** 142g, 5 oz.




**ENVIRONMENTAL SPECIFICATIONS**

Specification	Test Conditions / Notes	Min	Nom	Max	Units
<b>Top Case Temperature Range</b>	Top case temperature without derating	-30	-	90	°C
<b>Ambient Temperature Range</b>	As long as Tc temperature is within the limits	-30	-	60	°C
<b>Storage Temperature</b>		-40	-	85	°C
<b>Operating Relative Humidity</b>	Non-condensing	5	-	95	%
<b>Surface Temperature</b>	Exposed surfaces temperature under all operating conditions	-	-	90	°C
<b>Cooling</b>	Convection cooled				
<b>Shock EN 60068-2-27</b>	Operating: Half sine, 30 g, 18 ms, 3 axes, 6x each (3 positive and 3 negative). Non-Operating: Half sine, 50 g, 11 ms, 3 axes, 6x each (3 positive and 3 negative).				
<b>Vibration EN 60068-2-64</b>	Operating: 5 – 500Hz, 1gRMS (0.02 g <sup>2</sup> /Hz), 3 axes, 30 min. Non-Operating: 5 – 500Hz, 2.46gRMS (0.0122 g <sup>2</sup> /Hz), 3 axes, 30 min.				
<b>Vibration EN 60068-2-6</b>	Operating Sine, 10 – 500Hz, 1g, 3 axes, 1 oct/min., 60 min.				
<b>MTBF</b>	Typical Load, 70°C Tc, MIL.HDBK-217E	-	250k	-	Hours
<b>Useful Life</b>	Nominal V <sub>AC</sub> , 70°C Tc Nominal Load	-	50k	-	Hours







**ELECTROMAGNETIC COMPATIBILITY (EMC) – EMISSIONS**

Phenomenon	Conditions / Notes	Standard	Performance Class
<b>Conducted Emission</b>	Test at 120Vac	FCC Part 15	Class B
	Test at 230V <sub>AC</sub>	EN55015	-
	Test at 277V <sub>AC</sub>	FCC Part 15	Class A
<b>Radiated Emission</b>	Test at 120Vac	FCC CFR47-part15	Class B
	Test at 230V <sub>AC</sub>	EN55015	-
	Test at 277V <sub>AC</sub>	FCC CFR47- part 15	Class A
<b>Harmonic Current Emissions</b>		EN61000-3-2	Class C
<b>Voltage Changes, Fluctuation and Flicker</b>		EN61000-3-3	


**ELECTROMAGNETIC COMPATIBILITY (EMC) – IMMUNITY**

Phenomenon	Conditions / Notes	Standard	Note
<b>Equipment for general lighting purposes -EMC Immunity Req.</b>		EN 61547	
<b>ESD (Electrostatic Discharge)</b>		EN 61000-4-2	
<b>Radiated Radio-Frequency electromagnetic field</b>		EN 61000-4-3	
<b>Electric Fast Transient / Burst</b>	Level ±1.0kV L-L	EN 61000-4-4	
<b>Surge</b>	Level ±1.0kV L-L	EN 61000-4-5	
<b>Conducted disturbances induced by Radio-Frequency fields</b>		EN 61000-4-6	
<b>Voltage Dips, short interruptions and Voltage Variations</b>		EN 61000-4-11	
<b>Non-repetitive damped oscillatory transient, Ring wave</b>	2.5kV	ANSI C.62.41	Category A


**SAFETY AGENCY APPROVALS**

Certification Body	Safety Standards
	UL Recognized ANSI / UL8750, 1 <sup>st</sup> Ed., CSA C22.2 No.250-13, 7 <sup>th</sup> Ed. UL and CSA approval (cURus) as Class 2 output. LED Driver suitable for dry and damp location
	IEC/EN 62384 Electronic control gear for LED modules – Performance Requirements. IEC/EN, 61347-1, IEC/EN 61347-2-13 Electronic control gear for LED Modules – Safety.
	To obtain the “CE Declaration of Conformity” please contact <a href="mailto:info@efore.com">info@efore.com</a>
	IEC/EN CB Certified, IEC/EN, 61347-1, IEC/EN 61347-2-13 electronic control gear for LED Modules. All models are isolated control gears, SELV equivalent, with internal reinforced insulation as per IEC/EN 61347-2-13. Drivers to be incorporated in the luminaire.
	Reinforced/double Insulation meets IEC/EN61347-2-13 Class II

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