

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

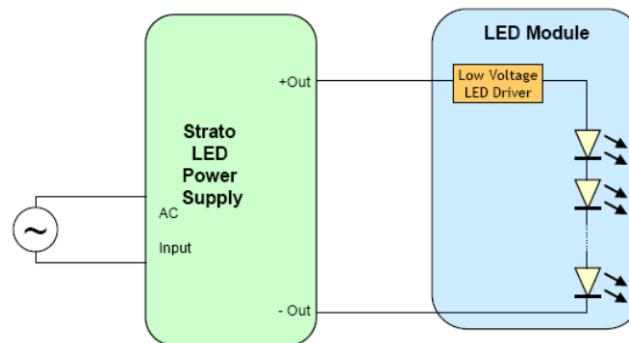
- Wide Input Range: 120/220-240/277V_{AC}
- Constant Voltage Output; 12,24,48V
- High Efficiency up to 91%
- Compact Design
- Convection Cooled
- Wide Operating Temperature Range
- Long Life
- RoHS Compliant



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 W	Vout V _{DC}	Iout Max mA
RSLP070-12	48	12	4000
RSLP070-24	72	24	3000
RSLP070-48	72	48	1500

Table 1: Absolute Maximum Driver Ratings


INPUT AND OUTPUT SPECIFICATION

Specification	Test Conditions / Notes	Min	Nom	Max	Units
AC Input Voltage	120/220-240/277V _{AC} Device starts and operates at 90V _{AC} at all load conditions	90	120/220-240/277	305	V _{AC}
Input Frequency		47	50/60	63	Hz
Input Current	120V _{AC} Rated Load	-	-	0.65	A
	230V _{AC} Rated Load	-	-	0.34	
	277V _{AC} Rated Load	-	-	0.30	
Power Factor	120V _{AC}	0.9	-	-	
	230V _{AC} with output Load between 80% and 100%	0.9	-	-	
	277V _{AC} and rated output current	0.9	-	-	
Inrush Current	120V _{AC} Half Value time: 150μs	-	-	13.4	A _{pk}
	230V _{AC} Half Value time: 200μs	-	-	27.9	
	277V _{AC} Half Value time: 150μs	-	-	31.0	
Efficiency	120V _{AC} Rated Load	88	-	90	%
	230V _{AC} Rated Load	89	-	91	
	277V _{AC} Rated Load	89	-	91	
Harmonic Current	Complies with EN-61000-3-2, Class C load >25W				


OUTPUT SPECIFICATIONS

Specification	Test Conditions / Notes	Min	Nom	Max	Units
Output Power Rating	check Model Coding and Output Ratings section	48	-	72	W
Output Voltage	RSLP070-12	-	12	-	V
	RSLP070-24	-	24	-	
	RSLP070-48	-	48	-	
Output Current	RSLP070-12			4000	mA
	RSLP070-24			3000	
	RSLP070-48			1500	
Ripple Voltage	All models measured (V _{out_Pk-pk} /RMS)	-	-	10	%
Output Regulation		-	-	±4	% _{load}
Start-up time		-	-	500	ms


PROTECTION FEATURES

Specification	Test Conditions / Notes	Min	Nom	Max	Units
Output Over Voltage	Hiccup, auto Recovery	110	-	130	%V _{MAX}
Output Short-Circuit	Hiccup, auto Recovery	-	-	-	-
Over-Temperature Tc	Hiccup, auto Recovery if the PSU exceeds the rated Tc temperature		90		°C
No Load	RSLP070-12			12.48	V
	RSLP070-24			24.96	
	RSLP070-48			49.92	
Isolation Primary-to-Secondary	Reinforced/double Insulation meets IEC/EN61347-2-13 Class II				

MECHANICAL DETAILS

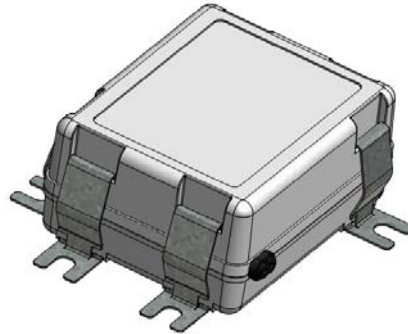
- Packaging Options: Partially Encapsulated with ABS plastic body enclosure
- I/O Connections: Flying leads, 18AWG on power leads, 152mm long, 105°C Rated, Stranded, Stripped by approximately 9.5mm and tinned
- Mounting Details: Universal Mounting Clips, and 6 mounting locations per package allow installer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

OUTLINE DRAWINGS

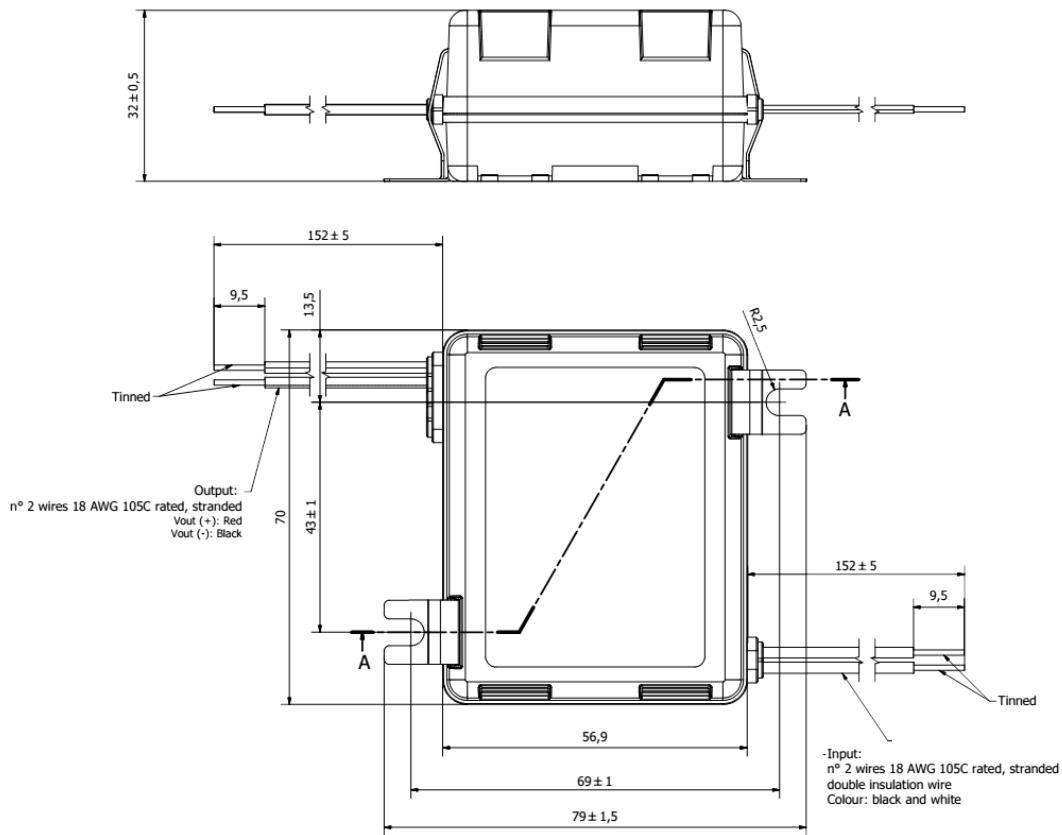
Package: RSLP070

Dimensions: 70 x 57 x 32mm
2.76 x 2.24 x 1.26in

Volume: 128cm³, 7.54in³
Mass: 170g, 6 Oz.



Universal Mount
A Patent Pending Design




ENVIRONMENTAL SPECIFICATIONS

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







ELECTROMAGNETIC COMPATIBILITY (EMC) – EMISSIONS

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


ELECTROMAGNETIC COMPATIBILITY (EMC) – IMMUNITY

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

 **SAFETY AGENCY APPROVALS**

Certification Body	Safety Standards
	UL Recognized ANSI / UL8750, 1 st Ed., CSA C22.2 No.250-13, 7 th 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 info@efore.com
	IECEE 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

Specifications appearing in EFORE’s catalogues and brochures as well as any oral statements are not binding. All descriptions, drawings and other particulars (including dimensions, materials and performance data) given by EFORE are as accurate as possible but, being given for general information, and are not binding on EFORE. EFORE makes thus no representation or warranty as to the accuracy of such material. We assume no liability other than as agreed in the terms of the individual contracts and we reserve the right to make technical modifications in the course of our product development. Our product information solely describes our goods and services and is in no way to be construed or interpreted as a quality or condition guarantee. The aforesaid shall not relieve the customer of its obligation to verify the suitability of our Products for the use or application intended by the purchaser. Customers are responsible for their products and applications. EFORE assumes no liability from the use of its products outside of specifications. No license is granted to any intellectual property rights by this document.