

MAIN FEATURES

- Input Range: 220-240 V_{AC}
- Constant Current Output 700 mA
- Active Power Factor Correction
- Trailing Edge (Reverse Phase) Dimmable
- Compact Encapsulated Assembly
- Wide Operating Temperature Range up to 90 °C Tc
- ENEC Approved, CE Mark
- Independent SELV Control gear
- RoHS Compliant
- Compliance with Regulation (EU) 2019/2020 (Ecodesign)



DESCRIPTION

The SLIM 30W LED driver is designed to generate one constant current output from an AC input and work with industry standard lighting controls in Trailing Edge dimming applications. This series is not allowed to work in standby mode and is not intended for no-load operation.

APPLICATIONS AND BENEFITS

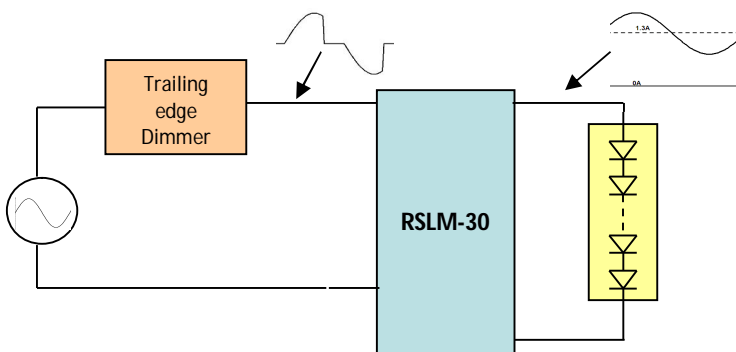
The SLIM 30W is designed for powering LED luminaries. The modules operate with:

- Standard Light Switches
- Electronic Low Voltage Dimmers (Reverse Phase – trailing edge)

The SLIM 30W is ideal for installations requiring dimmable outputs such as:

- General Indoor Lighting
- Commercial Lighting
- Residential Lighting

The following diagram depicts a typical installation utilizing the RSLM-30A:



- Dimming range down to 10 % output current
- Output current does not terminate during off time of dimmer
- Multiple Drivers / LED Assemblies may be connected to a single dimmer

Output Control: Output Dims without any flicker.

Conduction Angle / output: 180 degrees/ 100 % max
30 degrees / 10 % min

Refer to the following list for tested interfaces: WUYUN (W13-G162), HYTRONIK (HD1260)

MODEL CODING AND OUTPUT RATINGS

Model number	I _{OUT} max	P _{OUT} max	V _{OUT} (min)	V _{OUT} (max)	V _{OUT} (No Load)
	mA	W	V_{DC}	V_{DC}	V_{DC}
RSLM-30A	700	29.4	15	42	48

Table 1: Absolute Maximum Driver Ratings

INPUT AND OUTPUT SPECIFICATION

Specification	Test Conditions / Notes	Min	Nom	Max	Units
AC Input Voltage		211	220-240	264	V _{AC}
Input Frequency		47	50/60	63	Hz
Input Current	230 V _{AC} Rated Load	-	-	0.15	A
Power Factor	230 V _{AC} Rated Load	0.9	-	-	
THD	230 V _{AC}	-	-	20	%
Inrush Current (peak)	230 V _{AC} Half Value time: 100 μs	-	-	17	A
Efficiency	230 V _{AC} Rated Load	-	86	-	%
Harmonic Current	Complies with EN-61000-3-2, Class C load >25 W				


OUTPUT SPECIFICATIONS

Specification	Test Conditions / Notes	Min	Nom	Max	Units
Output Power Rating		-	-	29.4	W
Output Voltage		15	-	42	V
Output Current		-	700	-	mA
Ripple Current	All models measured (I _{OUT-pk-pk} /RMS)	-	-	40	%
Output Regulation		-	-	±7	%I _{OUT}
Start-up time	With no dimmer connected	-	-	500	ms

PROTECTION FEATURES

Specification	Test Conditions / Notes	Min	Nom	Max	Units
Output Over Voltage		110	-	130	%V _{MAX}
Output Short-Circuit	Hiccup, auto Recovery	-	-	-	-
Over-Temperature T _c	Auto Recovery if the PSU exceeds the rated T _c temperature		90		°C
No Load	Check No Load Voltage in Table 1			48	V
Isolation Primary-to-Secondary	Reinforced/double Insulation meets IEC/EN61347-2-13 Class II				

MECHANICAL DETAILS

Packaging material:	Plastic body enclosure Polycarbonate (PC), UL94 V-0, Temperature index 120 °C
Color:	Sabic -LEXAN 945 White
I/O Connections(*):	2-pin Push in connectors, Φ 0.4 \div 0.75 mm; strip wire to 8-9 mm Input: L (brown), N (blue) Output: V+ (red), V- (black)
Mounting Details:	2 Fixing holes for screws
Ingress Protection:	IP20 Rated
Independent SELV Control-gear when caps are mounted	

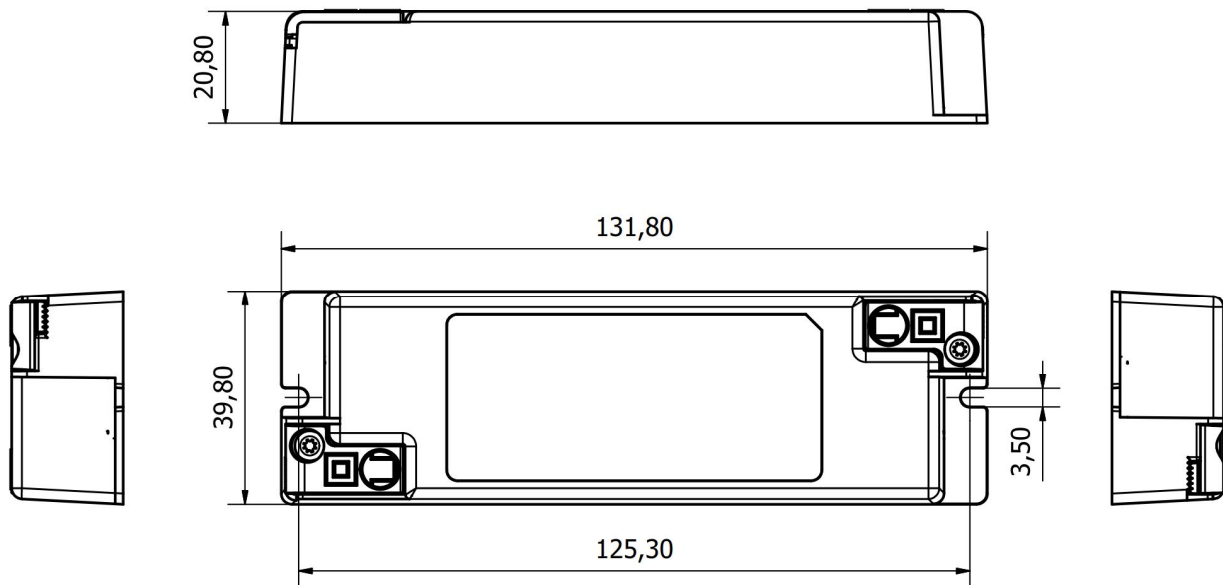


(*) For European application (ENEC), connect live parts with harmonized cables, according to the standard H03VVH02-F, H05VVH2-F or equivalent harmonized standards.

OUTLINE DRAWINGS

Package: RSLM-30

Weight:	127 g (0.28 lb)
Dimensions:	131,8 x 39,8 x 20,8 mm (5.19 x 1.57 x 0.82 in)



ENVIRONMENTAL SPECIFICATIONS

Specification	Test Conditions / Notes	Min	Nom	Max	Units
Top Case Temperature Range	Top case temperature without derating	-20	-	90	°C
Ambient Temperature Range	As long as Tc temperature is within the limits	-20	-	50	°C
Storage Temperature		-40	-	70	°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, 50 °C Ambient, MIL.HDBK-217E	-	70k	-	Hours
Useful Life	Nominal V _{AC} , 40 °C Ambient Rated Load	-	40k	-	Hours






ELECTROMAGNETIC COMPATIBILITY (EMC) – EMISSIONS

Phenomenon	Conditions / Notes	Standard	Performance Class
Conducted Emission	Test at 230V _{AC}	EN55015	-
Radiated Emission	Test at 230V _{AC}	EN55015	-
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	

SAFETY AGENCY APPROVALS

Certification Body	Safety Standards
	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@enedopower.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
	Reinforced/double Insulation meets IEC/EN61347-2-13 Class II
	Independent SELV Control gear when caps are mounted

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