

Features

- For LED Outdoor & Industrial Application
- Wide Input Range for Worldwide use (up to 305Vac)
- Built-in PFC Function: up to PF 0.98
- IP67 Design for Outdoor Installation
- Suitable to Dry, Damp, Wet Location
- High Surge Protection: 6kV/6kV(IEC61000-4-5)
- 3 in 1 dimming: 1-10V/PWM/Resistance
- High Reliability & Long Life 50,000hrs
- Constant Current Design/ Low Ripple Current
- All-Round Protections: Short Circuit/ Over Voltage/ Over Temperature
- Safety: Meet IEC61347-2-13, UL8750 & EMI EN55015






Type HL


 us (CE/ UL Pending)

FSP320-SZAE(XXX)M/G
 M Type: IP67 rated with 1-10V, PWM Dimming Function
 R Type: IP65 rated and output current can be adjusted through internal potentiometer

SPECIFICATION

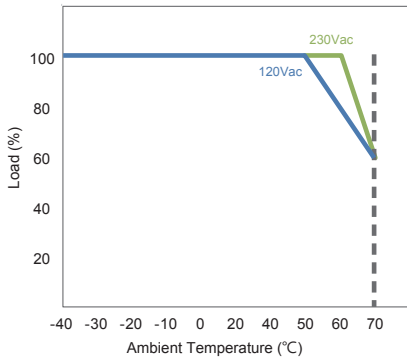
Model Name	FSP320-SZAE(140)MG	FSP320-SZAE(210)MG	FSP320-SZAE(280)MG	
Output	Rated Power	320.6W	319.2W	319.2W
	Output Voltage	114-229V	76-152V	57-114V
	Rated Current	1.4A	2.1A	2.8A
	Output Current Accuracy	±5%	±5%	±5%
	Output Ripple Current (typ.)[2]	±5%	±5%	±5%
	Line Regulation	±1%	±1%	±1%
	Turn On Delay Time ; Rise time	≤1s max ; ≤300ms max		
Input	Input Voltage/ Frequency[3]	90~305Vac/ 47~63Hz (Please refer to Static Curve)		
	Power Factor (typ.)	PF ≥ 0.98/120Vac, PF ≥ 0.95/230Vac, PF ≥ 0.92/277Vac at full load		
	Efficiency (max.)	94%	94%	94%
	Total Harmonic Distortion[4]	THD <20% (Output Loading ≥ 50% at 120-277Vac)		
	AC Current (typ.)	≤ 3.5A /120Vac ; ≤ 1.65A /230Vac ; ≤ 1.45A /277Vac		
	Inrush Current (typ.)	≤ 80A at 230Vac, 25°C cold start		
	Leakage Current	≤ 2.5mA/277Vac		
Environment	Operating Temperature	-40°C ~ +70°C (Please Refer to "Derating Curve")		
	Operating Humidity	10~95% RH non-condensing		
	Storage Temperature, Humidity	-40°C~+85°C, 5%~95%RH		
	Vibration	0.02g ² /Hz at 5 Hz sloping to 0.04g ² /Hz at 20 Hz, and maintaining 0.04g ² /Hz from 20 Hz to 500 Hz at a constant acceleration of 4.43G for 30 minutes per axis for all three axes		
Protection	Over Voltage Protection	<400V	<200V	<200V
	Protection Type: Recovers automatically after fault condition is removed			
	Short Circuit Protection	Recovers automatically after fault condition is removed		
	Over Temperature Protection	Recovers automatically after fault condition is removed		
Safety & EMC	Safety Standards	Design Refer to EN61347-1, EN61347-2-13, UL8750		
	EMC Standard	Compliant with EN55015/CISPR22 CLASS B, Compliant with EN61000-3-2 Class C (≥80% load), EN61000-3-3		
	Surge Protection	Differential Mode: 6KV; Common Mode: 6KV		
	Withstand Voltage (Hipot)	I/P-O/P 3600Vac, I/P-FG 1500Vac, O/P-FG 1500Vac		
	Isolation Resistance	I/P-O/P: 100M ohm @ 500Vdc/ 25°C		
Others	Life Time [5]	50,000 hours at Tcase of ≤ 80°C		
	MTBF	200,000 hours, MIL-HDBK-217F(25°C)		
	Dimension (LxWxH)	260 x 84 x 42.5 mm		
	Net Weight / Packing	1650g; 10 pcs/ box		

Notes:

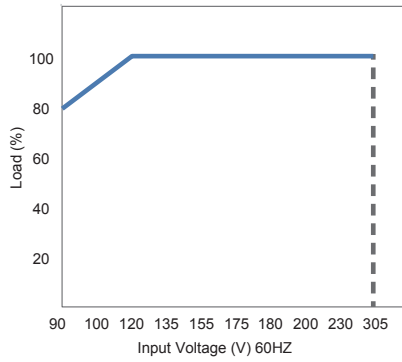
1. All data NOT specially mentioned are measured at 230Vac/ 50Hz input, full load and 25°C of ambient temperature.
2. The ripple current must be measured under the condition of AC coupling & 20MHz bandwidth. (Rated input and rated output)
3. Derating may be needed under low input voltages. Please check the static characteristics for more details.
4. Measured at rated output voltage.
5. Measured at 230Vac/50Hz input, rated load.
6. Length of set up time is measured at first cold start. Turning ON/OFF the may lead to increase of the set up time driver.
7. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.



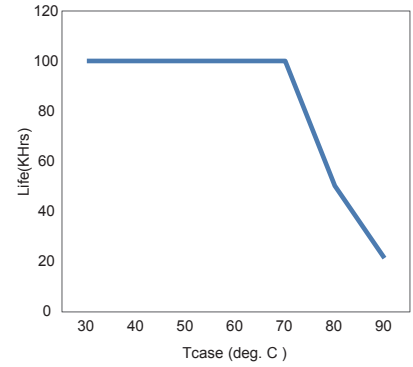
Derating Curve



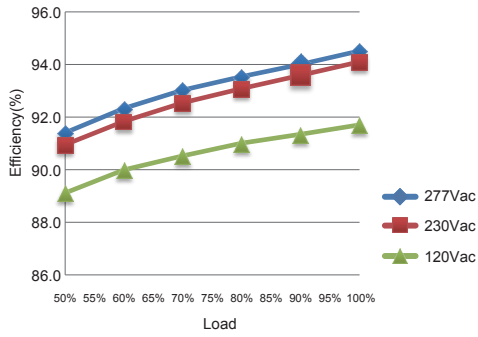
Static Curve



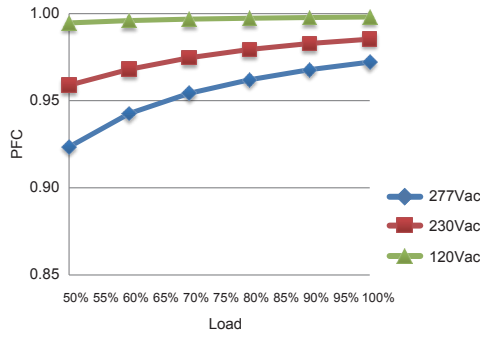
Life Time



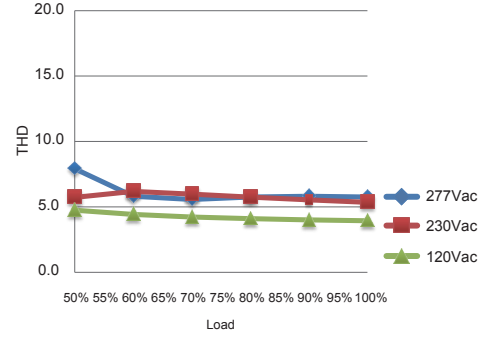
Efficiency



PFC vs Loading

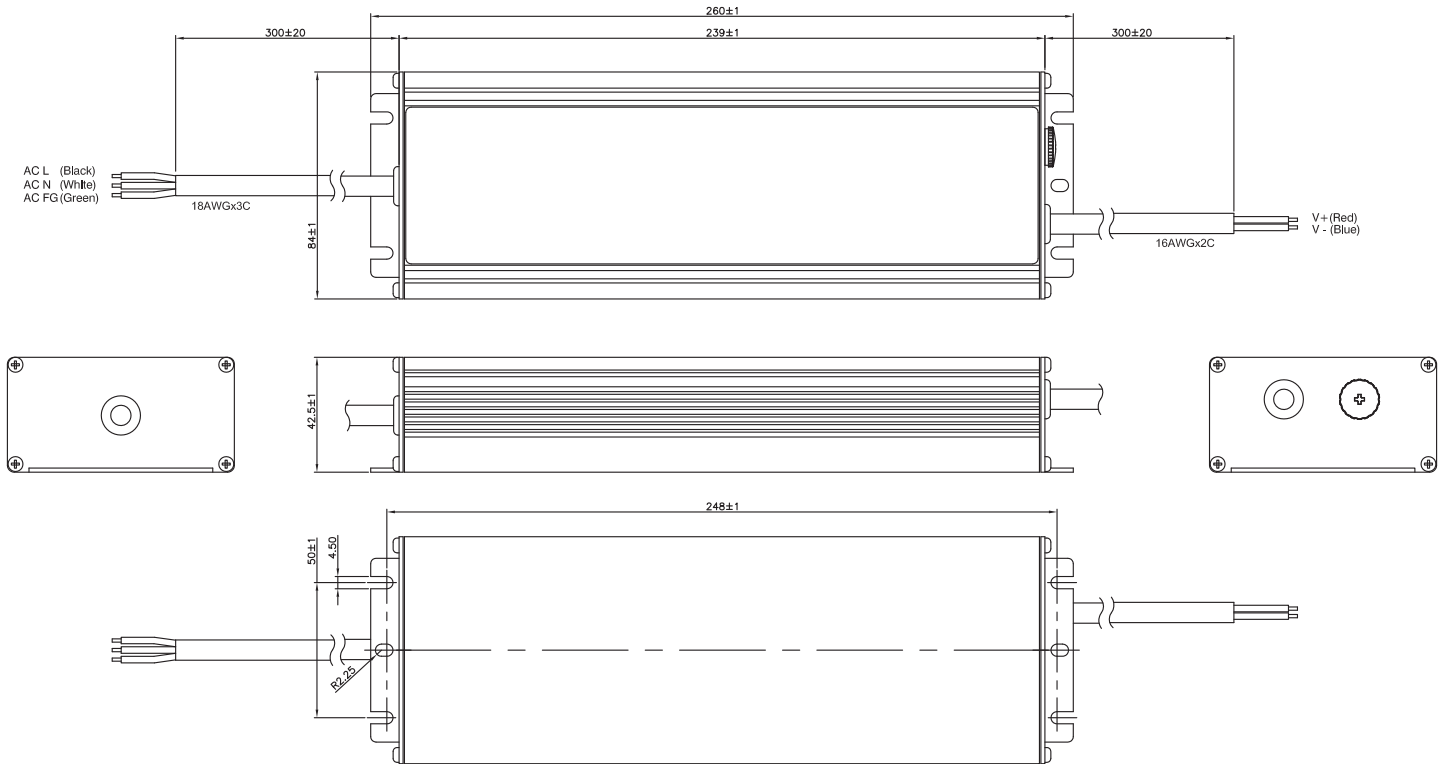


THD vs loading



RG Type: FSP320-SZAE(XXX)RG

Unit: mm

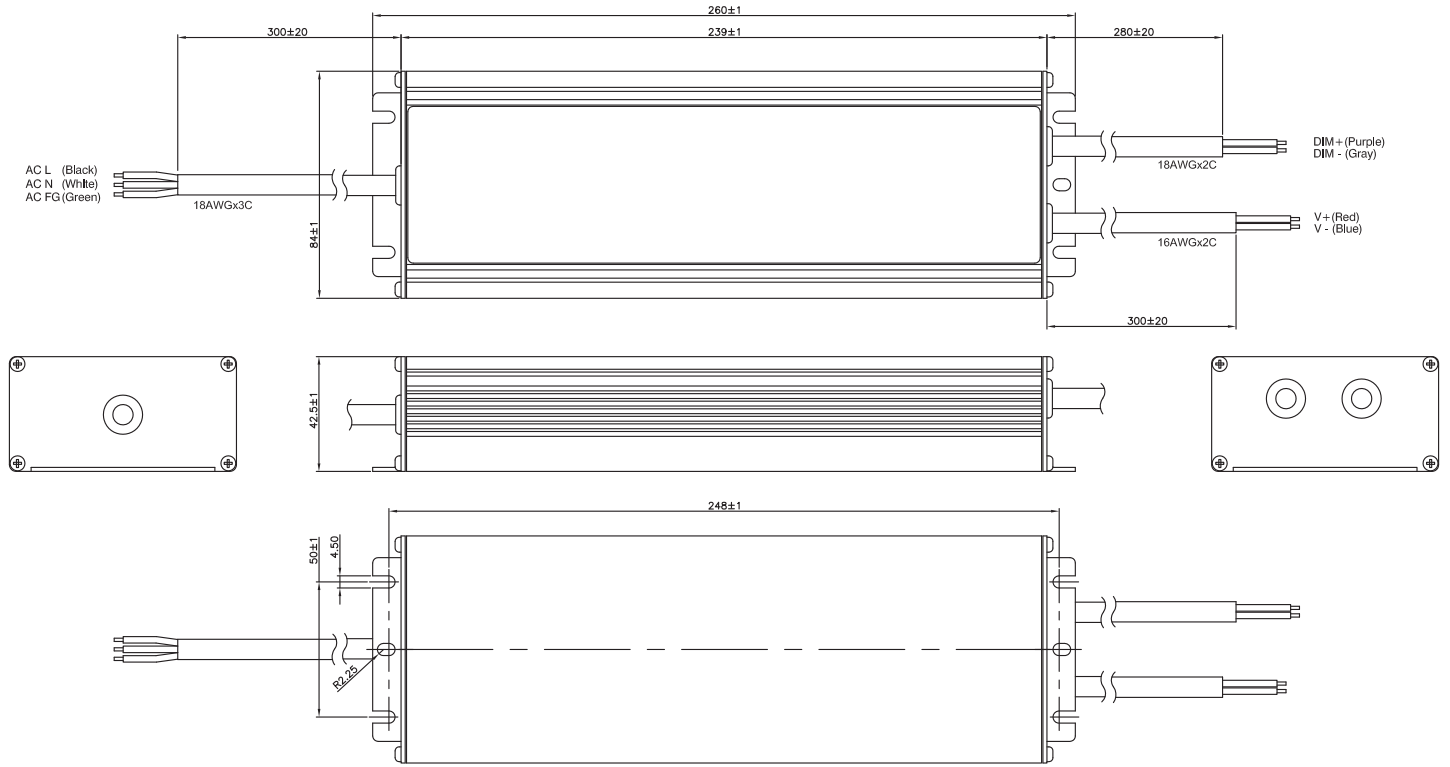


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