

- Wide Input Range for Worldwide use (up to 305Vac)
- Built-in PFC Function: up to PF 0.99
- IP67 Design for Outdoor Installation
- Suitable to Dry, Damp, Wet Location
- High Surge Protection: 6kV/6kV(IEC61000-4-5)
- High Reliability & Long Life 50,000hrs
- Type HL LED Driver for use in Class I Division 2 Hazardous Location Luminaires
- All-Round Protections: Short Circuit/ Over Voltage/ Over Temperature
- Safety: Meet IEC61347-2-13, UL8750 & EMI EN55015




**IP67**






**SELV HL Class P**

FSP200-FZAE1(XXX)  **RG**  
 R Type: IP67 rated with Io & Vo fix  
 M Type: IP67 rated with 1-10V, PWM Dimming Function

### SPECIFICATION

Model Name	FSP200-FZAE1(370)RG54	FSP200-FZAE1(420)RG48	FSP200-FZAE1(560)RG36	FSP200-FZAE1(830)RG24	
Output	Rated Power	200W	200W	200W	200W
	Output Voltage	54V	48V	36V	24V
	Rated Current	0~3.7A	0~4.17A	0~5.55A	0~8.3A
	Output Voltage Accuracy	±5%	±5%	±5%	±5%
	Output Ripple & Noise (typ.) <sup>[2]</sup>	540mVp-p	480mVp-p	360mVp-p	240mVp-p
	Load Regulation	±5%	±5%	±5%	±5%
	Line Regulation	±5%	±5%	±5%	±5%
	Turn On Delay Time,Rise	≤1s max ;≤300ms max			
Input	timelInput Voltage/ Frequency <sup>[3]</sup>	90~305Vac/ 47~63Hz (Please refer to Stactic Curve)			
	Power Factor (typ.)	PF ≥ 0.99/120Vac, PF ≥ 0.96/230Vac, PF ≥ 0.95/277Vac at full load			
	Efficiency (max.)	93.5%	93.5%	93.5%	93%
	Total Harmonic Distortion <sup>[4]</sup>	THD <20% (Output Loading ≥50% at 120Vac, Output Loading ≥50% at 230Vac, Output Loading ≥75% at 277Vac)			
	AC Current (typ.)	≤2.1A /120Vac ; ≤1.15A /230Vac ; ≤0.95A /277Vac			
	Inrush Current (typ.)	≤60A at 230Vac, 25°C cold start			
	Leakage Current	≤0.75mA/277Vac			
Environment	Operating Temperature	-40°C ~ +70°C (Please Refer to "Derating Curve")			
	Operating Humidity	20~95% RH non-condensing			
	Storage Temperature, Humidity	-40°C~+80°C, 10%~95%RH			
	Vibration	0.02g <sup>2</sup> /Hz at 5 Hz sloping to 0.04g <sup>2</sup> /Hz at 20 Hz, and maintaining 0.04g <sup>2</sup> /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	<80V Protection Type: Recovers automatically after fault condition is removed			
	Over Current Protection	<150%	<63V	<63V	<35V
	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	UL8750, Type HL, CSA-C22.2 No. 250.13, EN61347-1, EN61347-2-13 Approved.			
	EMC Standard	Compliant with EN55015/CISPR22 CLASS B, Compliant with EN61000-3-2 Class C (≥60% load), EN61000-3-3			
	Surge Protection	Differential Mode: 6KV; Common Mode: 6KV			
	Withstand Voltage (Hipot)	I/P-O/P 3000Vac, I/P-FG 1500Vac, O/P-FG 500Vac			
	Isolation Resistance	I/P-CASE, O/P-CASE: 25M ohm @ 500Vdc/ 25°C			
Others	Life Time [5]	50,000 hours at Tcase of ≤ 75°C			
	MTBF	200,000 hours, MIL-HDBK-217F(25°C)			
	Dimension (LxWxH)	228 x 68 x 38.8 mm			
	Net Weight / Packing	1100g; 10 pcs/ box			

#### Notes:

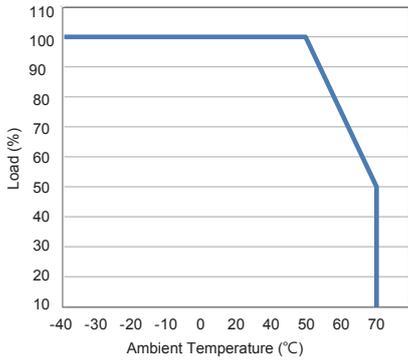
1. All data NOT specially mentioned are measured at 230Vac/ 50Hz input, full load and 25°C of ambient temperature
2. The ripple current must be measured under the condition of AC coupling & 20MHz bandwidth. (Rated input and rated output)
3. Derating may be needed under low input voltages. Please check the static characteristics for more details
4. Measured at rated output voltage
5. Measured at 230Vac/50Hz input, rated load.
6. 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.



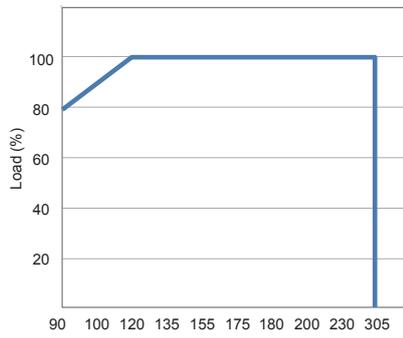
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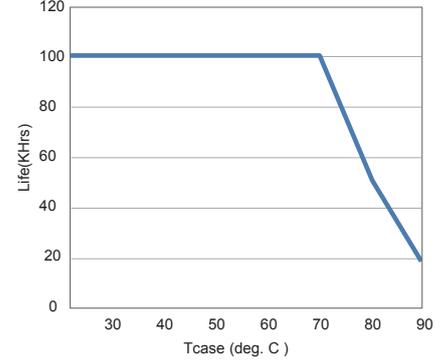
**Derating Curve**



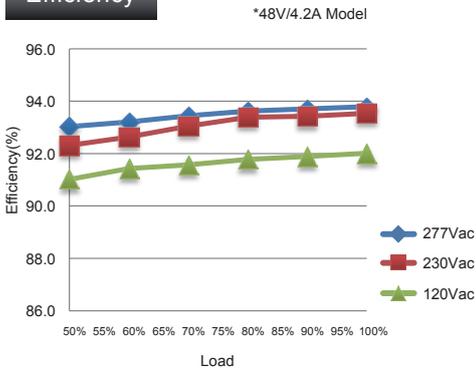
**Static Curve**



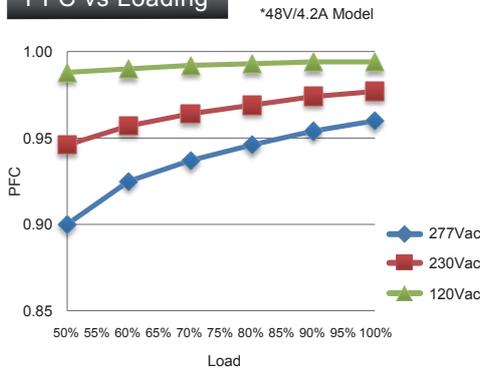
**Life Time**



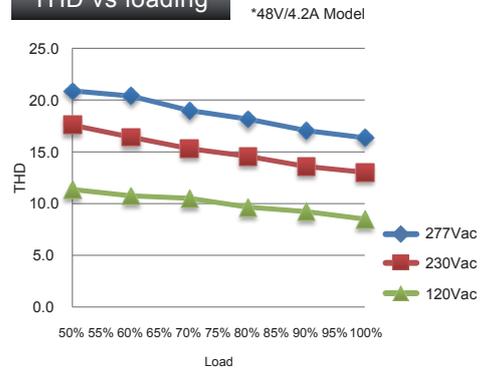
**Efficiency**



**PFC vs Loading**

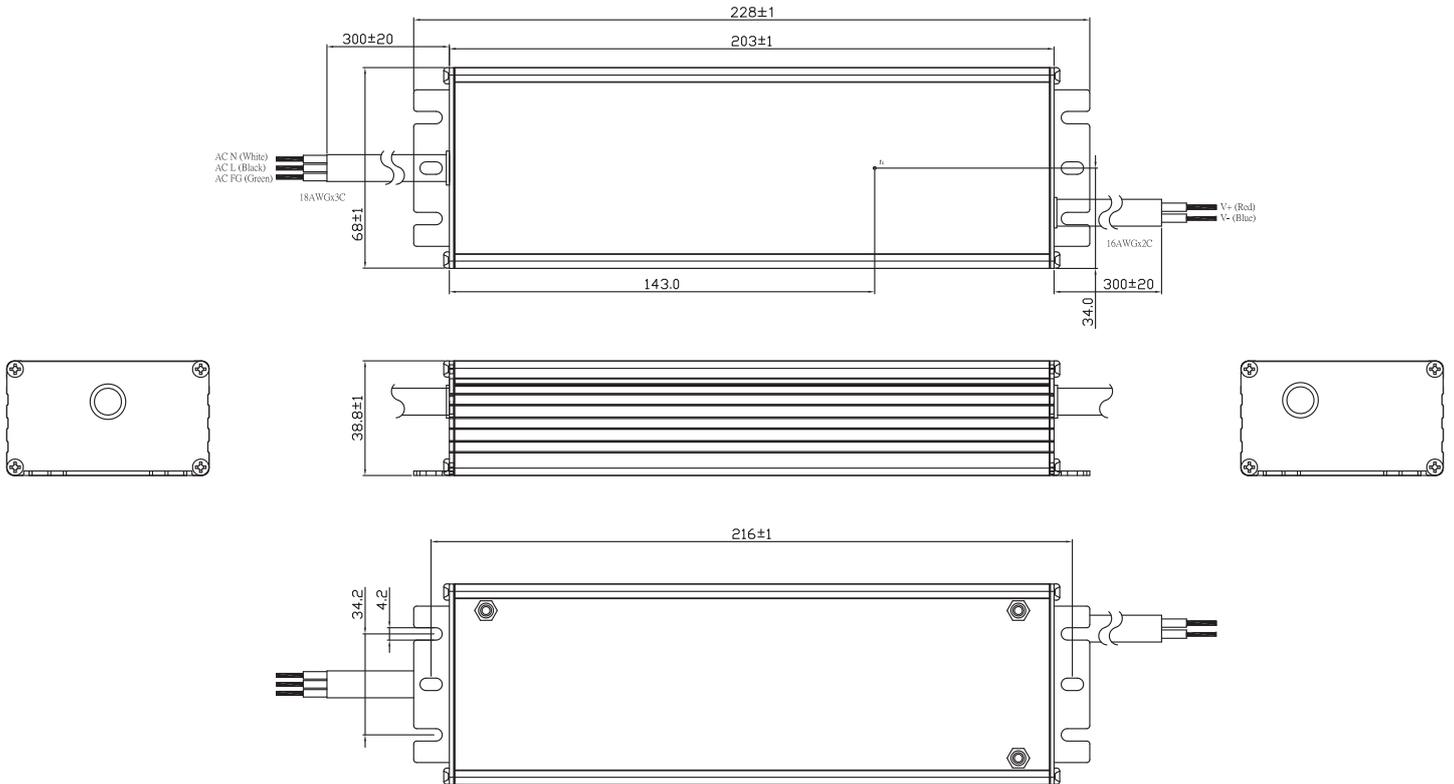


**THD vs loading**



**G Type: FSP200-FZAE1(XXX)RG**

Unit: mm

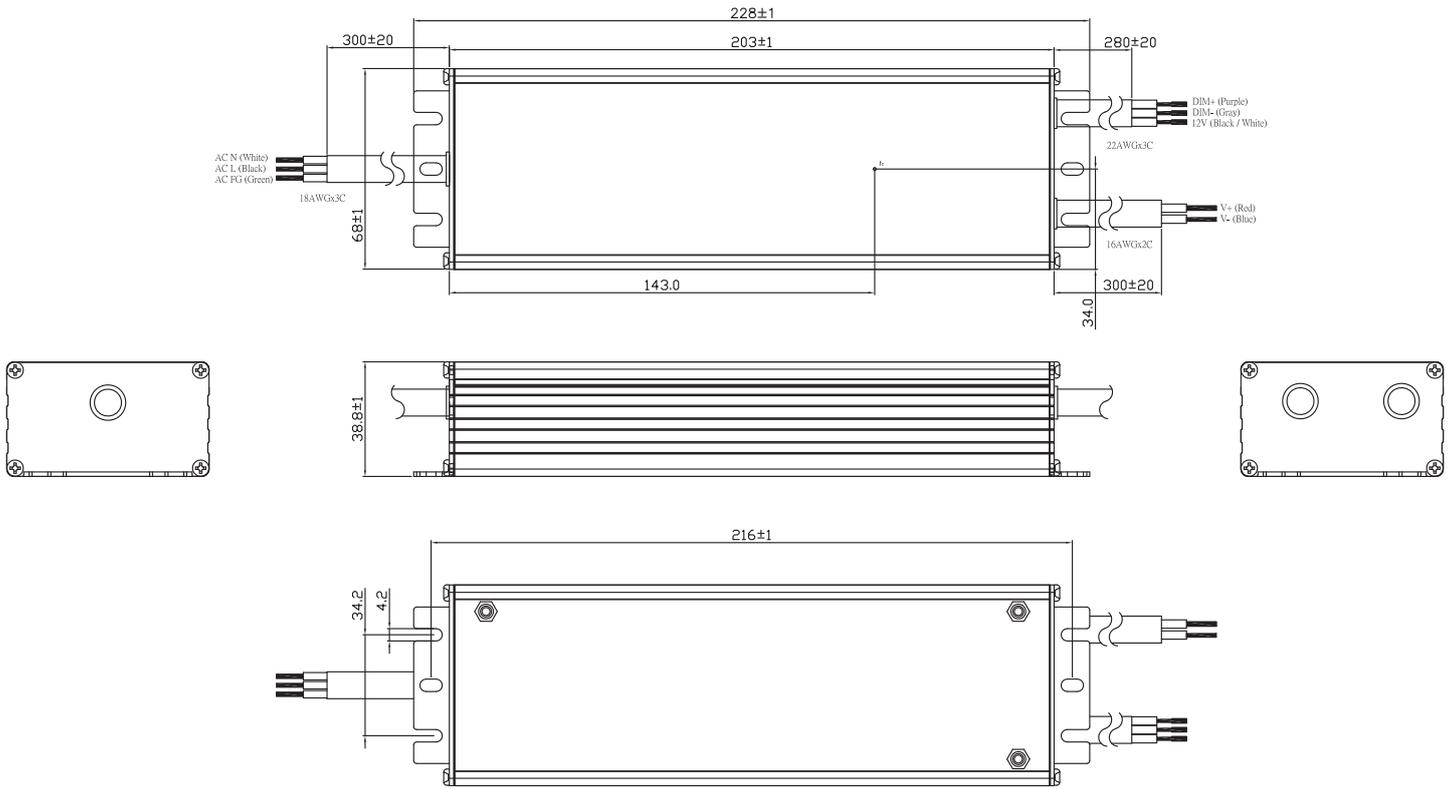


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**MG Type: FSP200-FZAE1(XXX)MG**

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