

- IP67 Design For LED Outdoor & Industrial Application
- Wide Input Range for Worldwide use (up to 305Vac)
- With 12V/100mA Auxiliary Output
- Programming Function: AMC/CLO/NTC-Configuration/Auto-dimming/AST/EOL
- High Surge Protection: 6kV/6kV(IEC61000-4-5)
- Multiple dimming function ( PWM signal or resistance)/ DALI)
- Built-in PFC Function: up to PF 0.99
- Dim-to-Off with Standby Power<0.5w
- High Reliability & Long Life up to 100,000hrs
- 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



FSP200-FZAE1(XXX)DGX  
Type: IP67 rated with 3 in 1 Dimming Function  
Type: IP67 rated with DALI Function  
Type: Aux 12V/100mA; Type: Aux:24V/50mA

**IP67**        Type **HL Class P**

### SPECIFICATION

Model Name	FSP200-FZAE1(105)DG	FSP200-FZAE1(210)DG	
Output	Rated Power	200W	200W
	Output Voltage	100-285V	50-143V
	Rated Current	700mA~1050mA	1400mA~2100mA
	Auxiliary DC Output	12V/100mA	12V/100mA
	Output Current Accuracy	±5%	±5%
	Line Regulation	±1.0%	±1.0%
	Ripple Current	10%	10%
	Turn On Delay Time,Rise time	≤2s max ;≤300ms max	≤2s max ;≤300ms max
Input	Input Voltage/ Frequency[3]	108~305Vac/ 47~63Hz (Please refer to Static Curve)	108~305Vac/ 47~63Hz (Please refer to Static Curve)
	Power Factor (typ.)	>0.9@ 120-277 Vac / 70-100% output load	>0.9@ 120-277 Vac / 70-100% output load
	Efficiency (max.)	92.0%	91.5%
	Total Harmonic Distortion[4]	<20%@ 120-277 Vac / 70-100% output load	<20%@ 120-277 Vac / 70-100% output load
	AC Current (typ.)	≤1.9A /120Vac ; ≤1A /230Vac ; ≤0.9A /277Vac	≤1.9A /120Vac ; ≤1A /230Vac ; ≤0.9A /277Vac
	Inrush Current (typ.)	Cold start up 230Vac / 50Hz at full load ≤60A	Cold start up 230Vac / 50Hz at full load ≤60A
	Leakage Current	≤0.75mA/277Vac	≤0.75mA/277Vac
Environment	Operating Temperature	-40~+70°C,(Please refer to static cure)	-40~+70°C,(Please refer to static cure)
	Operating Humidity	20~85% RH non-condensin	20~85% RH non-condensin
	Storage Temperature, Humidity	-40°C~+85°C,10~95%RH	-40°C~+85°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	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	<320V Protection Type: Shut down and Auot Recover	<160V Protection Type: Shut down and Auot Recover
	Short Circuit Protection	Protection Type: Shut down and Auot Recover	Protection Type: Shut down and Auot Recover
	Over Temperature Protection	Protection Type: Shut down and no damage	Protection Type: Shut down and no damage.
Safety & EMC	Safety Standards	Design Refer to EN61347-1, EN61347-2-13, UL8750	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	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	Differential Mode: 6KV; Common Mode: 6KV
	Withstand Voltage (Hipot)	I/P-O/P 3000Vac, I/P-CASE 1500Vac	I/P-O/P 3000Vac, I/P-CASE 1500Vac
	Isolation Resistance	I/P-O/P: 100M ohm @ 500Vdc/ 25°C	I/P-O/P: 100M ohm @ 500Vdc/ 25°C
Others	Life Time [5]	50,000 hours at Tcase of ≤ 75°C (230Vac)	50,000 hours at Tcase of ≤ 75°C (230Vac)
	MTBF	250,000 hours, MIL-HDBK-217F(25°C@80%Load,230Vac)	250,000 hours, MIL-HDBK-217F(25°C@80%Load,230Vac)
	Dimension (LxWxH)	250*68*38.8	250*68*38.8
	Stand by power	0.5W	0.5W

#### Notes:

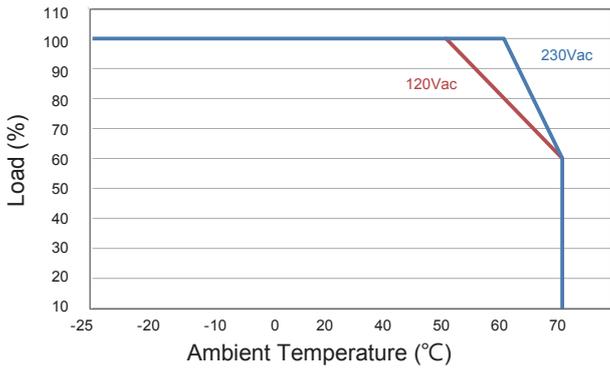
1. All data NOT specially mentioned are measured at 230Vac/ 50Hz input, full load and 25°C of ambient temperature
2. The ripple current must be measured under the condition of AC coupling & 20MHz bandwidth. (Rated input and rated output)
3. Derating may be needed under low input voltages. Please check the static characteristics for more details
4. Measured at rated output voltage.
5. Measured at 230Vac/50Hz input, 80% 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.



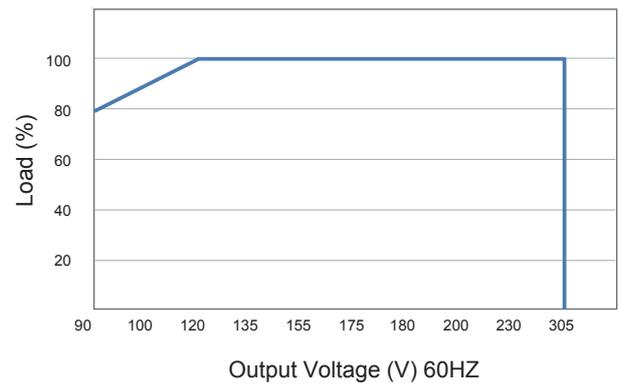
### FSP TECHNOLOGY INC.

www.fsp-group.com / sales@fsp-group.com.tw  
 NO.22, Jianguo E. Rd., Taoyuan City, Taiwan, R.O.C.  
 TEL : +886-3-375-9888 / FAX : +886-3-375-6966

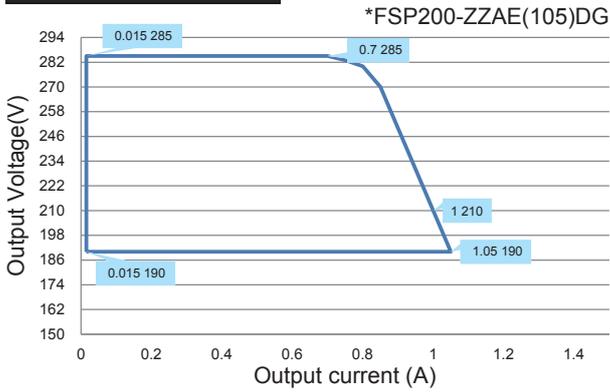
### Derating Curve



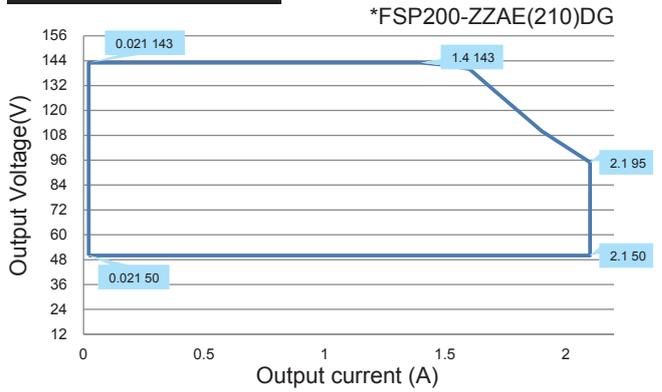
### Static Curve



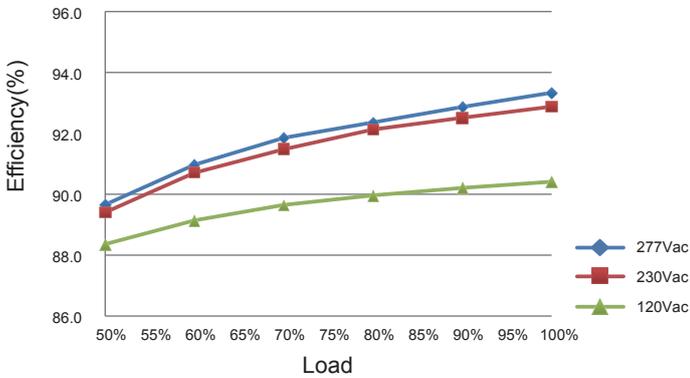
### I-V Operating Area



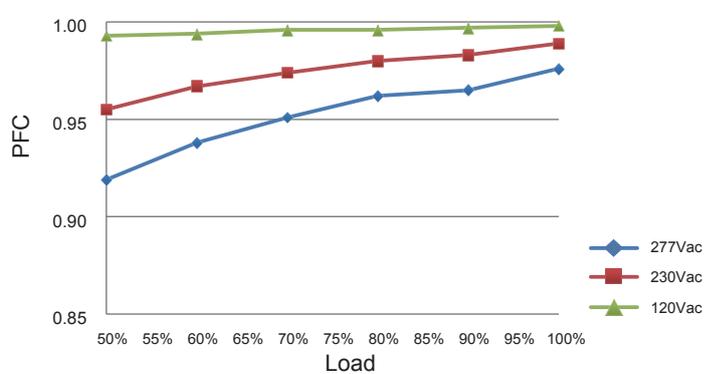
### I-V Operating Area



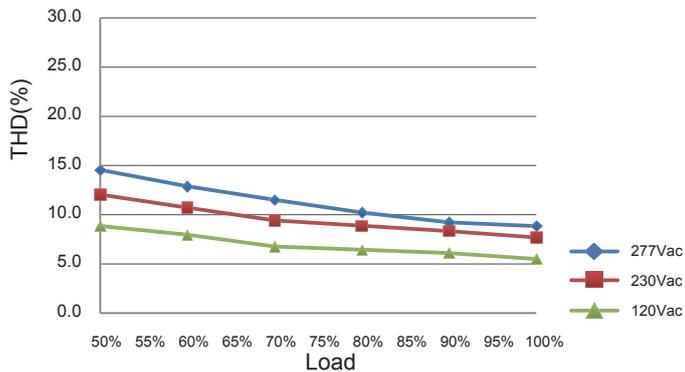
### Efficiency



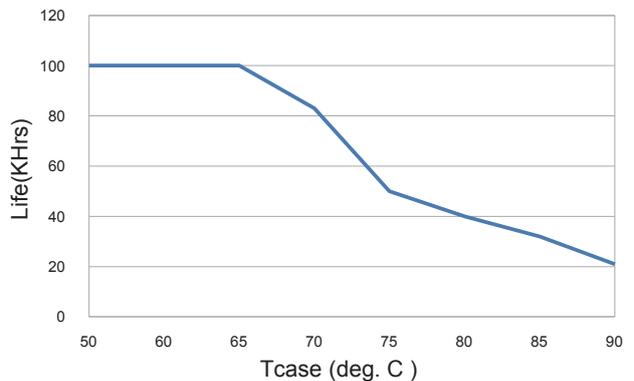
### PFC vs Load



### THD vs Load

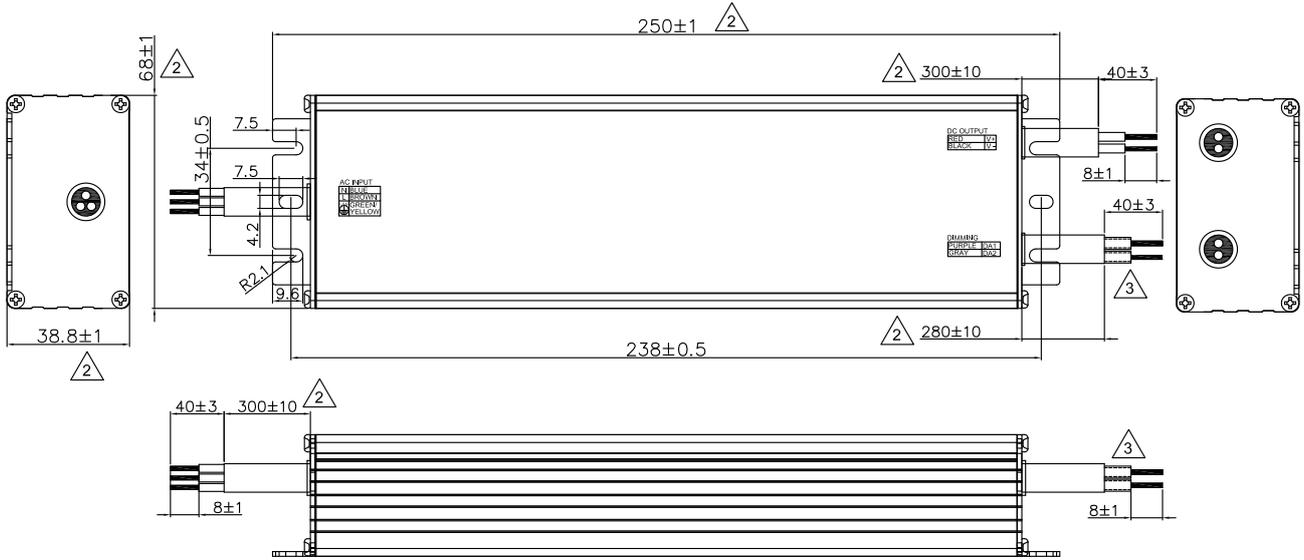


### Life Time



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