60W High Efficiency Driver

Features

- For LED Outdoor & Industrial Application
- Wide Input Range for Worldwide use (up to 305Vac)
- Built-in PFC Function: up to PF 0.99
- IP65 Design for Outdoor Installation
- Suitable to Dry, Damp, Wet Location
- High Reliability & Long Life 50,000hrs
- Constant Current Design/ Low Ripple Current
- Class I power unit
- All-Round Protections: Short Circuit / Over Voltage / Over Temperature Protection
- Safety: Meet IEC61347-2-13, UL8750 & EMI EN55015

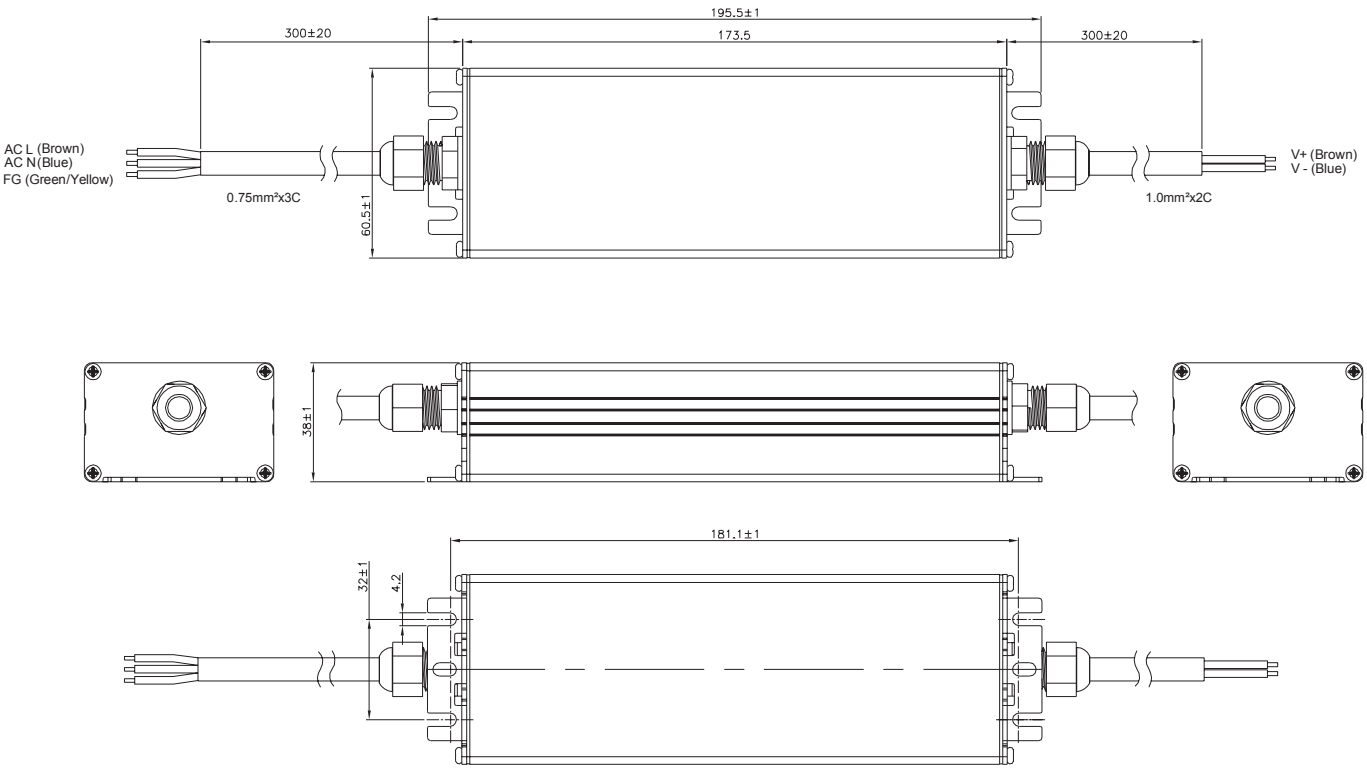
IP65

SPECIFICATIONS

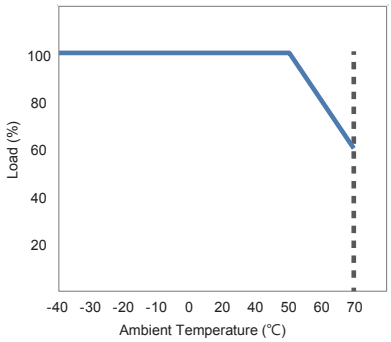
Model Name		FSP060OUCS054M	FSP060OUCS048M	FSP060OUCS040M	FSP060OUCS012M
Output	Rated Power	60W	60W	60W	60W
	Output Voltage	36-54V	36-48V	30-40V	11.4-12.6V
	Rated Current	1100mA	1250mA	1400mA	5000mA
	Output Current Accuracy	±5%	±5%	±5%	±5%
	Output Ripple Current[2]	±5%	±5%	±5%	±5%
	Line Regulation	±1%	±1%	±1%	±1%
	Turn On Delay Time,Rise time	≤1s max ; ≤100ms max.			
Input	Input Voltage/ Frequency[3]	108~305Vac/ 47~63Hz (Please refer to Static Curve)			
	Power Factor (typ.)	PF≧0.98/120Vac, PF≧0.94/240Vac, PF≧0.91/277Vac at full load			
	Efficiency (max.)	89%	89%	89%	86%
	Total Harmonic Distortion[4]	THD <20% (Output Loading ≧50% at 120Vac/230Vac, Output Loading ≧75% at 277Vac)			
	AC Current (typ.)	≦0.46A /120Vac ; ≦0.28A /230Vac ; ≦0.22A /277Vac			
	Inrush Current (typ.)	60A at 230Vac, 25°C cold start			
	Leakage Current	≤0.75mA/230Vac			
Environment	Operating Temperature	-40°C ~ +70°C (Please Refer to "Derating Curve") (-40°C cold start)			
	Operating Humidity	10~95% RH non-condensing			
	Storage Temperature, Humidity	-40°C~+85°C, 10~95%RH			
	Vibration	0.02g²/Hz at 5 Hz sloping to 0.04g²/Hz at 20 Hz, and maintaining 0.04g²/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	<75V	<63V	<63V	<25V
		Protection Type: Recovers automatically after fault condition is removed			
	Short Circuit Protection	Recovers automatically after fault condition is removed			
	Over Temperature Protection	Shut down and latch off O/P voltage, re-power on to recover			
Safety & EMC	Safety Standards	UL8750, 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: 2KV; Common Mode: 4KV			
	Withstand Voltage (Hipot)	I/P-O/P 3750Vac, I/P-FG 1800Vac, O/P-FG 500Vac			
	Isolation Resistance	I/P-O/P, I/P-FG: 100M 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)	195 x 60.5 x 38mm			
	Net Weight / Packing	580g; 20 pcs / box			

Notes:
1. All data NOT specially mentioned are measured at 230Vac/ 50Hz input, full load and 25℃ 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.

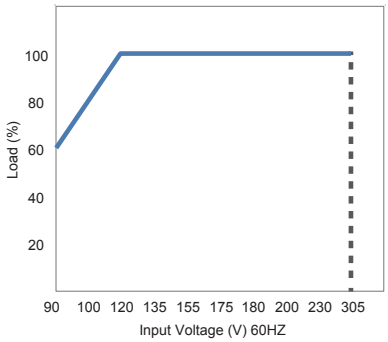
Unit: mm



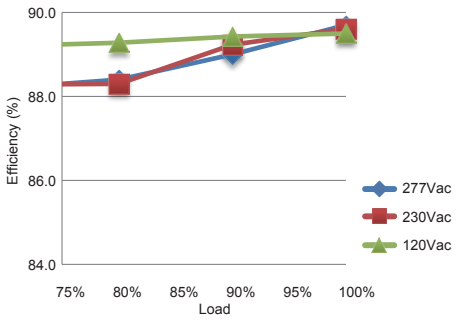
Derating Curve



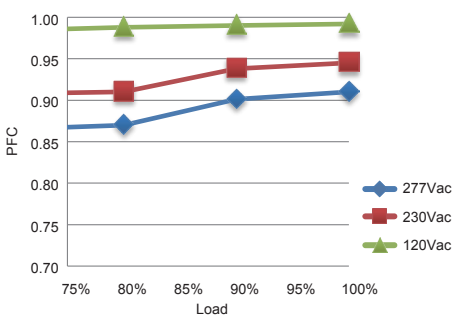
Static Curve



Efficiency



PFC vs Loading



THD vs Input Voltage