

Features

- For LED Outdoor & Industrial Application
- 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: 4kV/6kV(IEC61000-4-5)
- 1-10V / PWM Dimming Function
- High Reliability & Long Life 50,000hrs
- Constant Current Design/ Low Ripple Current
- Isolation Class II Design, No F.G.
- Type HL LED Driver for use in Class I Division 2 hazardous location luminaires
- All-Round Protections: Short Circuit / Over Power / Over Voltage / Over Temperature
- Safety: Meet IEC61347-2-13, UL8750 & EMI EN55015
- Pulse level $\leq 5\%$



SAE-120-700□

D Type: IP67 rated with 1-10V, PWM Dimming Function

Blank Type: IP67 rated and without Dimming Function

R Type: IP65 rated and output current can be adjusted through internal potentiometer

IP67       us  Type Type  

SPECIFICATION

Model Name	SAE-120-700-D	SAE-120-1400-D	SAE-120-2100-D	SAE-120-2800-D	SAE-120-3150-D	
Output	Rated Power	120W	120W	120W	120W	
	Output Voltage	90-172V	45-86V	30-57V	25-43V	25-38V
	Rated Current	700mA	1400mA	2100mA	2800mA	3150mA
	CURRENT ADJ. RANGE	350 ~ 700mA 700 ~ 1400mA 1050 ~ 2100mA 1400 ~ 2800mA 1575 ~ 3150mA				
		Can be adjusted by internal potentiometer for R Type only				
	Output Current Accuracy	±5%	±5%	±5%	±5%	±5%
	Output Ripple Current[2]	±5%	±5%	±5%	±5%	±5%
Line Regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
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 ≥ 0.99/120Vac, PF ≥ 0.95/230Vac, PF ≥ 0.92/277Vac at full load				
	Efficiency (max.)	91.5%	91%	90%	91%	91%
	Total Harmonic Distortion[4]	THD <20%				
	AC Current (typ.)	≤ 1.4A /120Vac ; ≤ 0.8A /230Vac ; ≤ 0.8A /277Vac				
	Inrush Current (typ.)	60A at 230Vac, 25°C cold start				
Environment	Leakage Current	≤ 0.75mA/277Vac				
	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, 10~95%RH				
Protection	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				
	Over Voltage Protection	<250V	<100V	<80V	<63V	<63V
	Short Circuit Protection	Recovery Type: Recovers automatically after fault condition is removed				
	Over Temperature Protection	Recovery Type: Recovers automatically after fault condition is removed				
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: 4KV; Common Mode: 6KV				
	Withstand Voltage (Hipot)	I/P-O/P 3750Vac, I/P-CASE 3000Vac, O/P-CASE 3000Vac				
Others	Isolation Resistance	I/P-CASE ,O/P-CASE: 100M ohm @ 500Vdc/ 25°C				
	Life Time [5]	50,000 hours at Tcase of ≤ 75°C				
	MTBF	200,000 hours, MIL-HDBK-217F(25°C)				
	Dimension (LxWxH)	211 x 60.5 x 38 mm				
Net Weight / Packing	840 g; 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. Measured at 230Vac/50Hz input, rated load.
5. The input voltage information on the label should be marked ±10% less than the original input voltage, to conform with safety regulations.
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 luminaire manufacturers must re-qualify EMC Directive on the complete installation again.
7. FSP120-FZAE(140)VG Safety Pending.



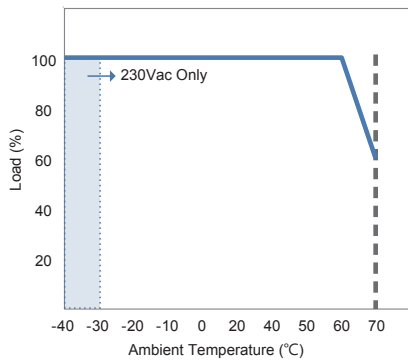
FSP TECHNOLOGY INC. (Russia Office)

www.fsp-power.ru / rusupport@fsp-power.ru

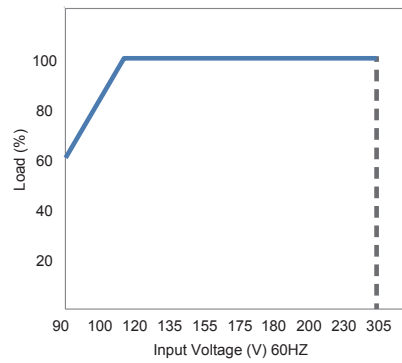
119571 Moscow, Akademika Anokhina str. 5/3 office 69

TEL/ FAX : +7(499)730 44 10

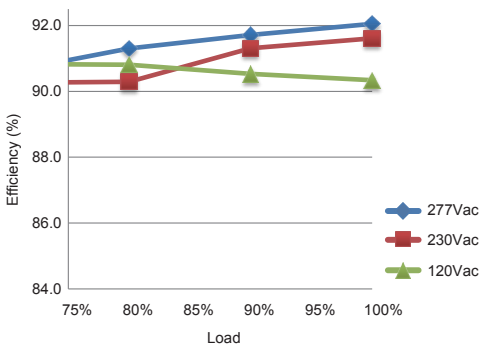
Derating Curve



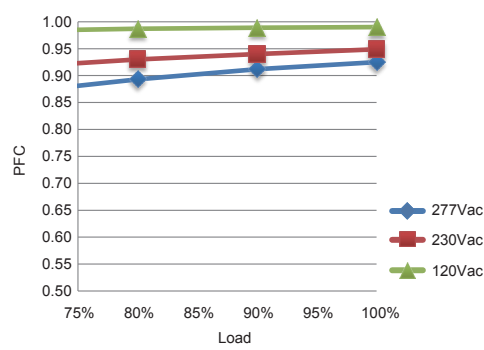
Static Curve



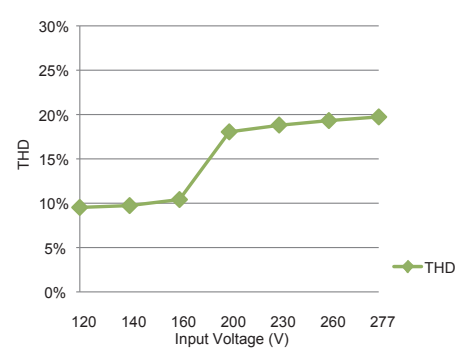
Efficiency



PFC vs Loading

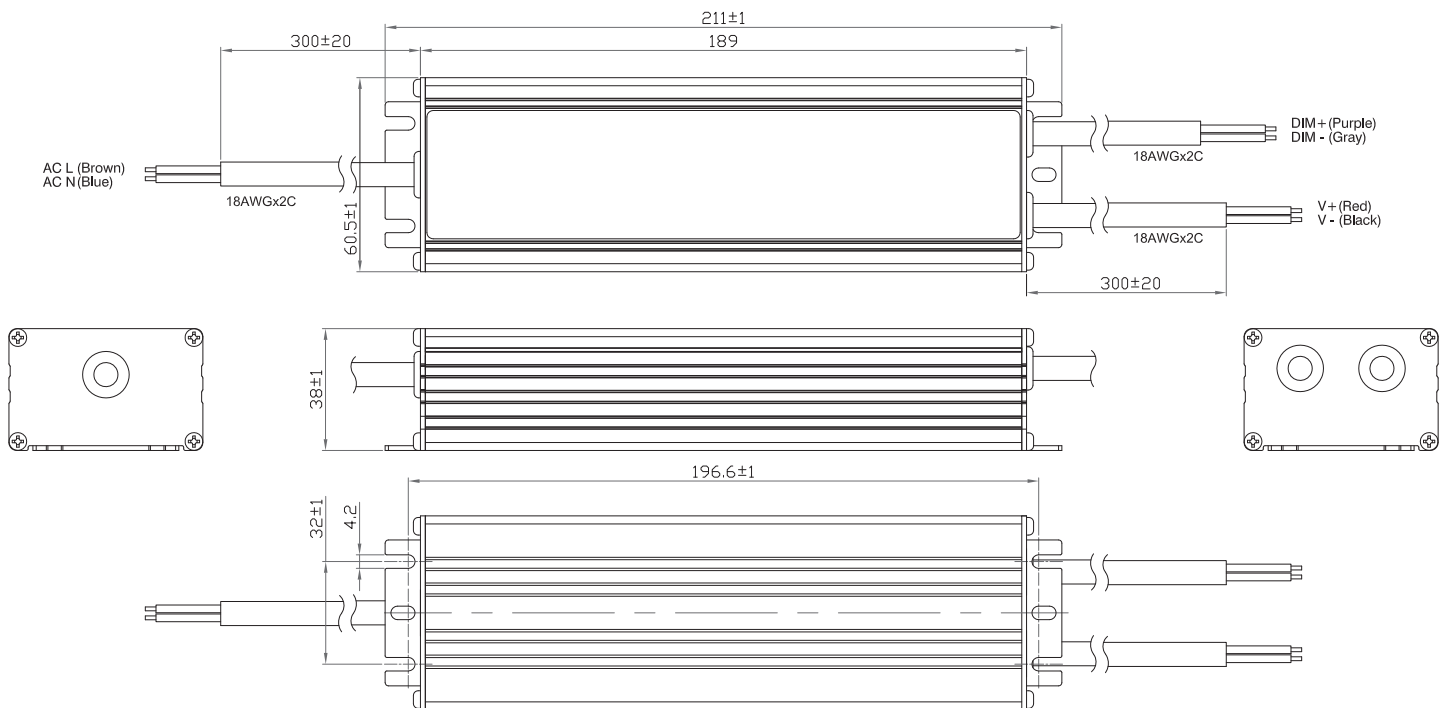


THD vs Input Voltage



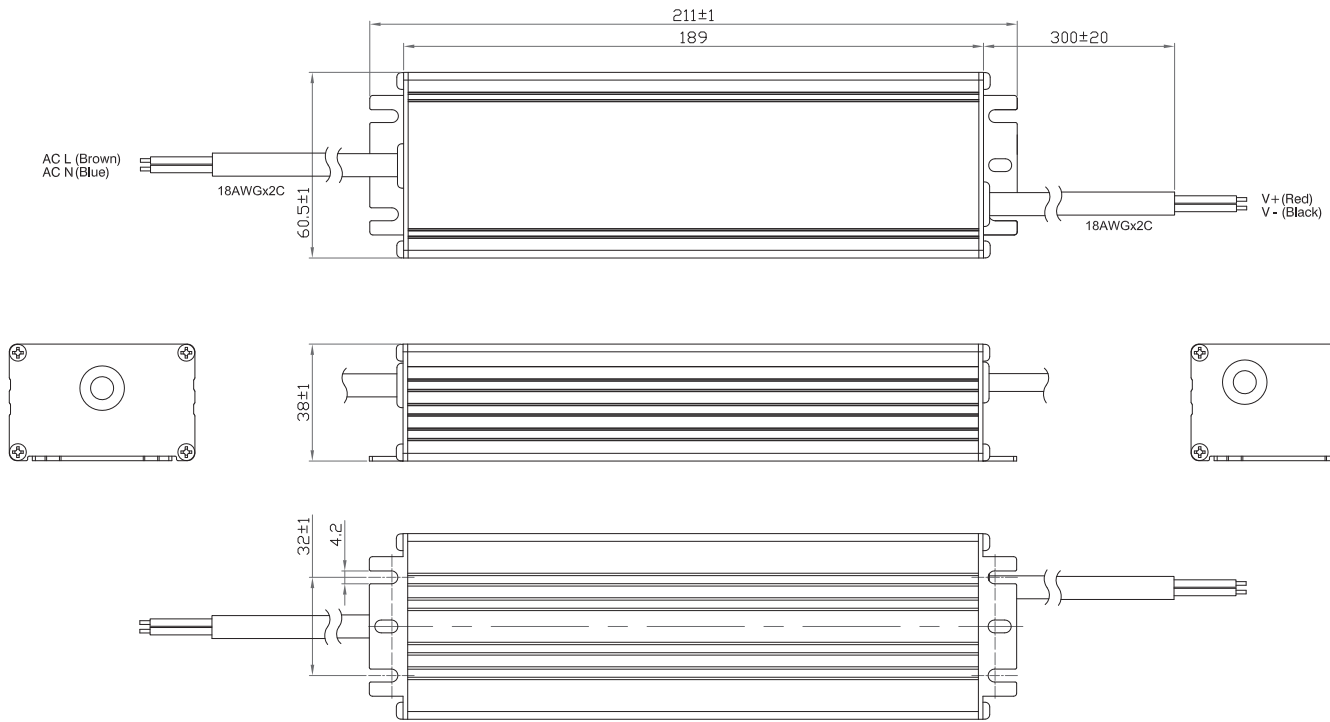
D Type(Dimming):SAE-120-XXX-D

Unit: mm



Blank Type(Non-dimming): SAE-120-XXX

Unit: mm



R Type(with VR): SAE-120-XXX-R

