

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 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



FSP100-SZAE(070) G

V Type: IP67 rated with 1-10V Dimming Function

Blank Type: IP67 rated and without Dimming Function

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

IP67       **SELV** **TL** **HL** Type Type

SPECIFICATION

Model Name	FSP100-SZAE(070)VG	FSP100-SZAE(105)VG	FSP100-SZAE(140)VG	FSP100-SZAE(210)VG	FSP100-SZAE(250)VG	FSP100-SZAE(280)VG	FSP100-SZAE(315)VG	
Output	Rated Power	100W	100W	100W	100W	100W	100W	
	Output Voltage	106-142V	63-96V	48-72V	32-48V	26-40V	21-32V	
	Rated Current	700mA	1050mA	1400mA	2100mA	2500mA	3150mA	
	CURRENT ADJ. RANGE	350 ~ 700mA	525 ~ 1050mA	700 ~ 1400mA	1050 ~ 2100mA	1250 ~ 2500mA	1400 ~ 2800mA	1575 ~ 3150mA
	Can be adjusted by internal potentiometer for R Type only							
	Output Current Accuracy	±5%	±5%	±5%	±5%	±5%	±5%	±5%
	Output Ripple Current[2]	±5%	±5%	±5%	±5%	±5%	±5%	±5%
	Line Regulation	±0.5%	±0.5%	±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 ≥ 0.91/277Vac at full load						
	Efficiency (max.)	91.5%	91%	90%	90%	90%	90%	90%
	Total Harmonic Distortion[4]	THD <20%						
	AC Current (typ.)	≤ 1.25A /120Vac ; ≤ 0.8A /230Vac ; ≤ 0.8A /277Vac						
	Inrush Current (typ.)	60A at 230Vac, 25°C cold start						
	Leakage Current	≤ 0.25mA/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, 10~95%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	<200V	<160V	<100V	<63V	<50V	<50V	<50V
	Protection Type: Shut down and latch off, re-power on to recover							
	Short Circuit Protection	Shut down and latch off, re-power on to recover						
Over Temperature Protection	Shut down and latch off, re-power on to recover							
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: 4KV; Common Mode: 6KV						
	Withstand Voltage (Hipot)	I/P-O/P 3750Vac, I/P-CASE 3000Vac, O/P-CASE 3000Vac						
	Isolation Resistance	I/P-CASE ,O/P-CASE: 100M ohm @ 500Vdc/ 25°C						
Type TL	81/55°C	85/57°C	85/59°C	80/60°C	88/58°C	88/62°C	86/57°C	
Others	Life Time [5]	50,000 hours at Tcase of ≤ 75°C						
	MTBF	≥ 200,000 hours, MIL-HDBK-217F(25°C)						
	Dimension (LxWxH)	194 x 60.5 x 38 mm						
	Net Weight / Packing	840g ; 20 pcs / box						

Notes:

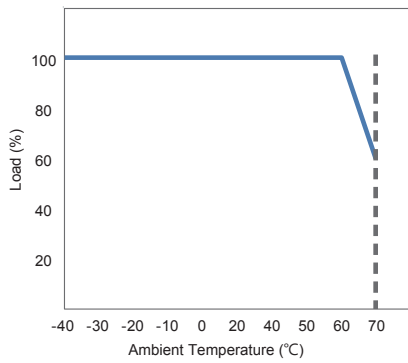
1. All data NOT specially mentioned are measured at 230Vac/ 50Hz input, full load and 25°C of ambient temperature.
2. The ripple current must be measured under the condition of AC coupling & 20MHz bandwidth. (Rated input and rated output)
3. Derating may be needed under low input voltages. Please check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



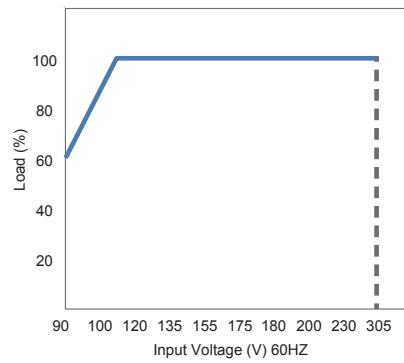
FSP TECHNOLOGY INC.

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

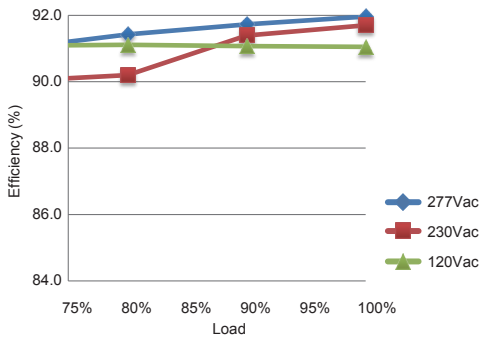
Derating Curve



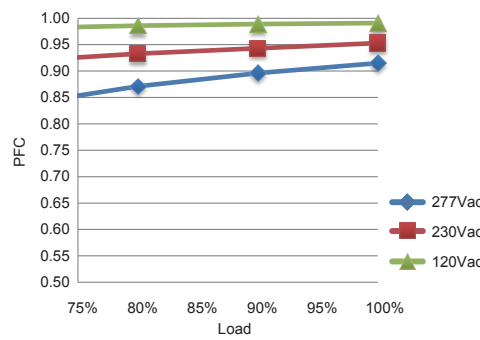
Static Curve



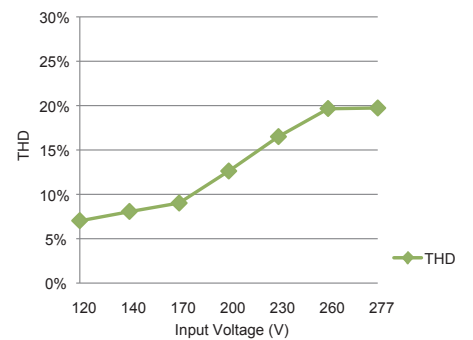
Efficiency



PFC vs Loading

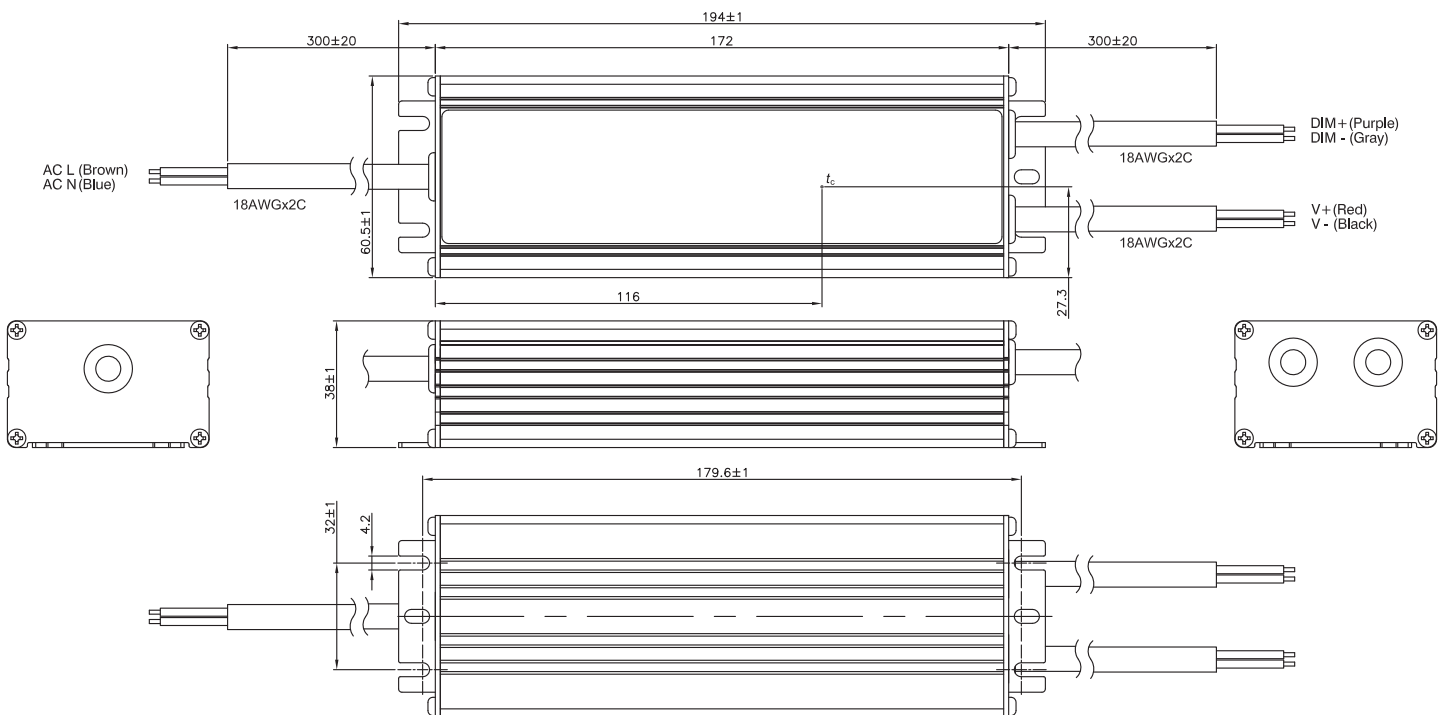


THD vs Input Voltage



V Type: (FSP100-SZAE(XXX)VG)

Unit: mm

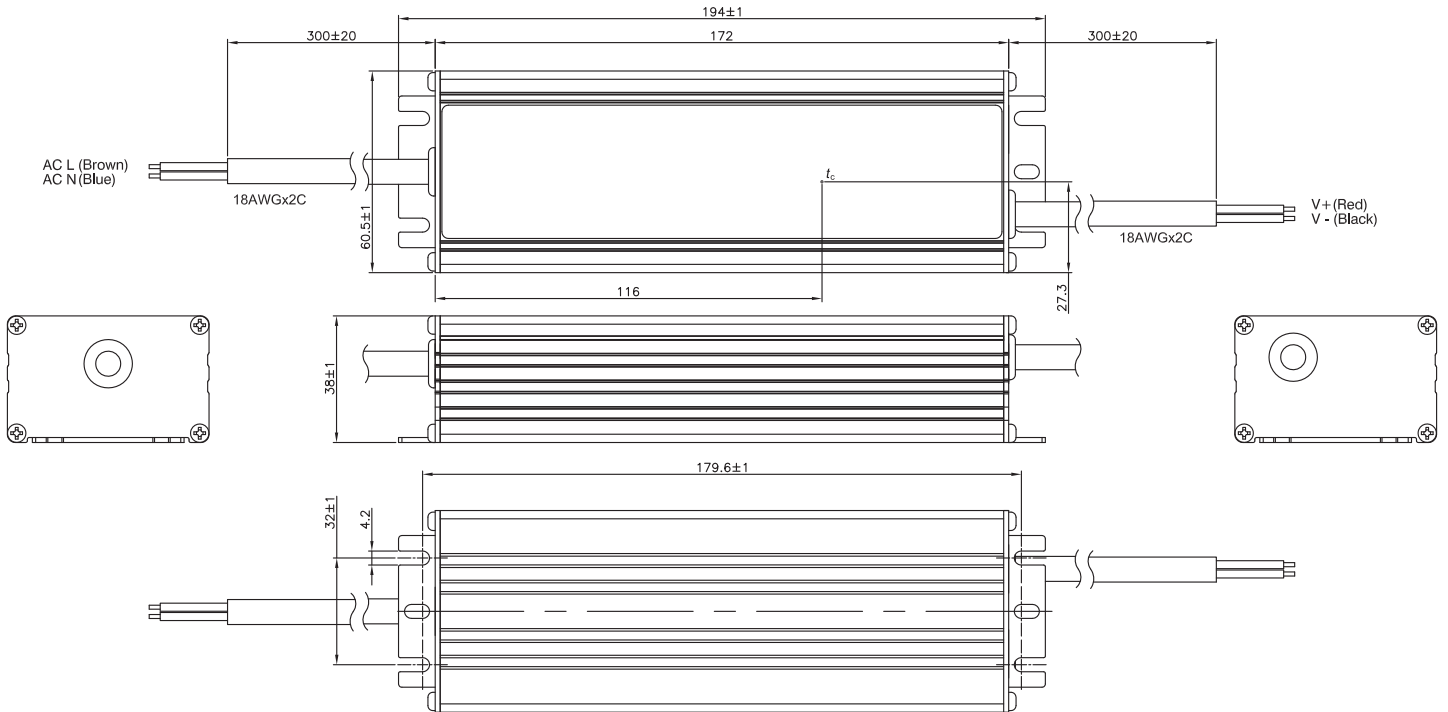


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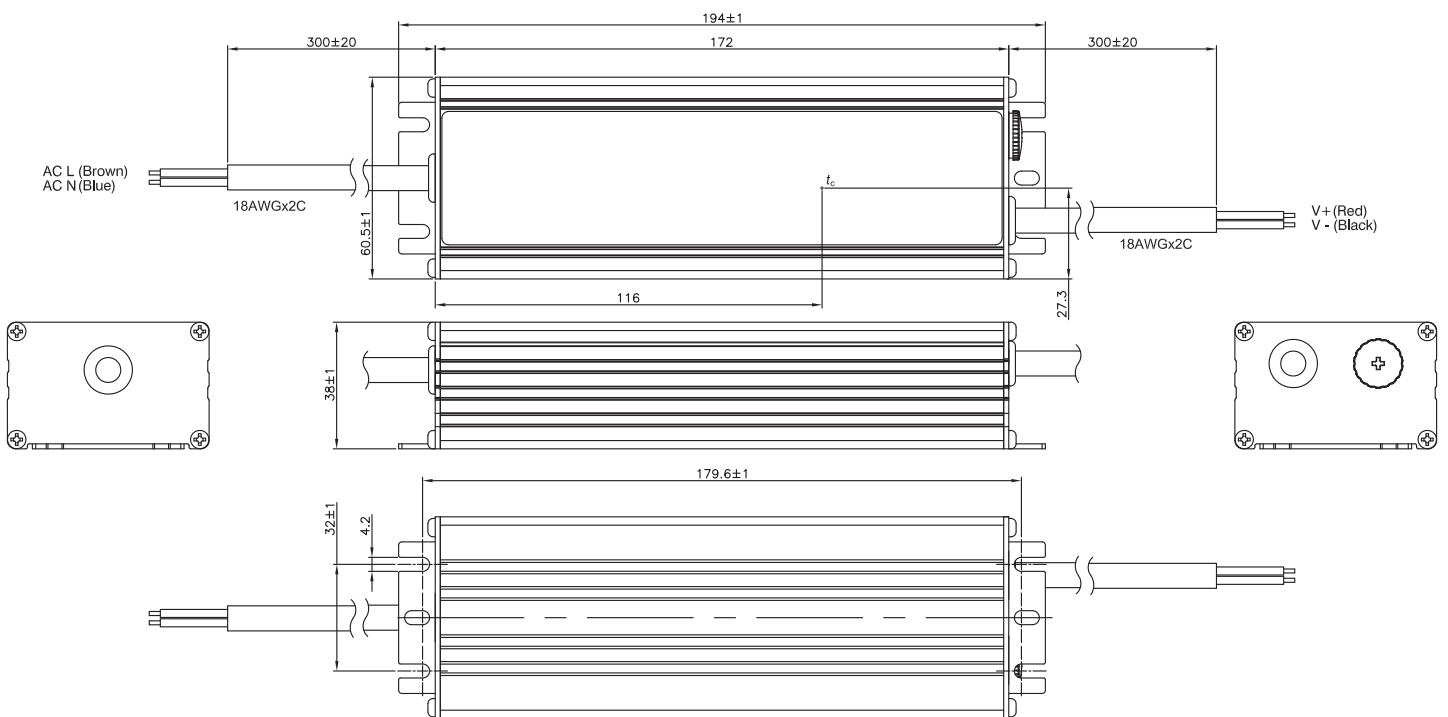
Blank Type: (FSP100-SZAE(XXX)G)

Unit: mm



R Type: (FSP100-SZAE(XXX)RG)

Unit: mm



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