

### 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
- Pulse level  $\leq 5\%$



SAE-100-700□

D 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         

### SPECIFICATION

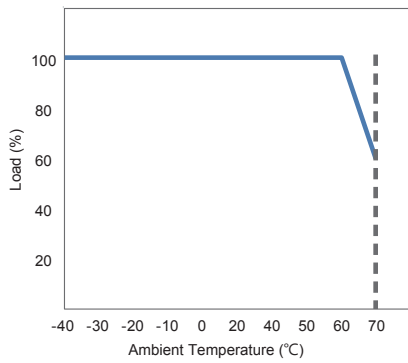
Model Name	SAE-100-700-D	SAE-100-1050-D	SAE-100-1400-D	SAE-100-2100-D	SAE-100-2500-D	SAE-100-2800-D	SAE-100-3150-D	
Output	Rated Power	100W	100W	100W	100W	100W	100W	
	Output Voltage	106-142V	63-96V	48-72V	32-48V	26-40V	21-32V	
	Rated Current	700mA	1050mA	1400mA	2100mA	2500mA	2800mA	
	CURRENT ADJ. RANGE	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	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$
	Output Ripple Current[2]	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$
	Line Regulation	$\pm 0.5\%$	$\pm 0.5\%$	$\pm 0.5\%$	$\pm 0.5\%$	$\pm 0.5\%$	$\pm 0.5\%$	$\pm 0.5\%$
Turn On Delay Time,Rise time	$\leq 1s$ max ; $\leq 300ms$ max							
Input	Input Voltage/ Frequency[3]	90~305Vac/ 47~63Hz (Please refer to Static Curve)						
	Power Factor (typ.)	$PF \geq 0.99/120Vac$ , $PF \geq 0.95/230Vac$ , $PF \geq 0.91/277Vac$ at full load						
	Efficiency (max.)	91.5%	91%	90%	90%	90%	90%	90%
	Total Harmonic Distortion[4]	THD <20%						
	AC Current (typ.)	$\leq 1.25A /120Vac$ ; $\leq 0.8A /230Vac$ ; $\leq 0.8A /277Vac$						
	Inrush Current (typ.)	60A at 230Vac, 25°C cold start						
	Leakage Current	$\leq 0.25mA/277Vac$						
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 <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	<150V	<105V	<80V	<55V	<48V	<45V	<36V
		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, 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 ( $\geq 60\%$ 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						
Others	Life Time [5]	50,000 hours at Tcase of $\leq 75^\circ C$						
	MTBF	200,000 hours, MIL-HDBK-217F(25°C)						
	Dimension (LxWxH)	195 x 60.5 x 38 mm						
	Net Weight / Packing	840g ; 20 pcs / box						

### Notes:

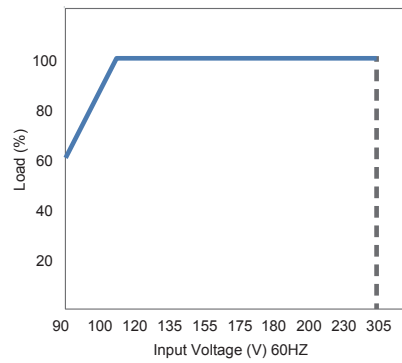
1. All data NOT specially mentioned are measured at 230Vac/ 50Hz input, full load and 25°C of ambient temperature.
2. The ripple current must be measured under the condition of AC coupling & 20MHz bandwidth. (Rated input and rated output)
3. Derating may be needed under low input voltages. Please check the static characteristics for more details.
4. Measured at rated output voltage. Measured at 230Vac/50Hz input, rated load.
5. The input voltage information on the label should be marked  $\pm 10\%$  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.



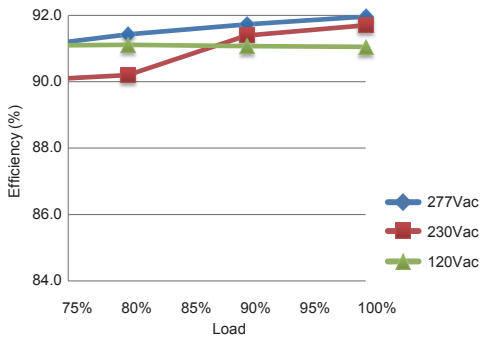
**Derating Curve**



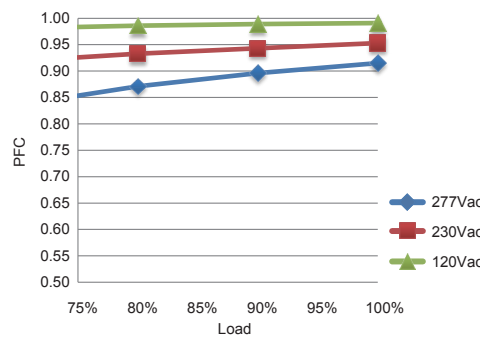
**Static Curve**



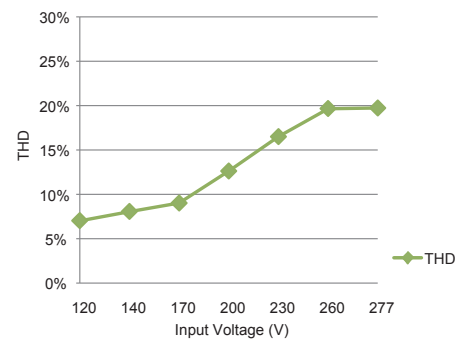
**Efficiency**



**PFC vs Loading**

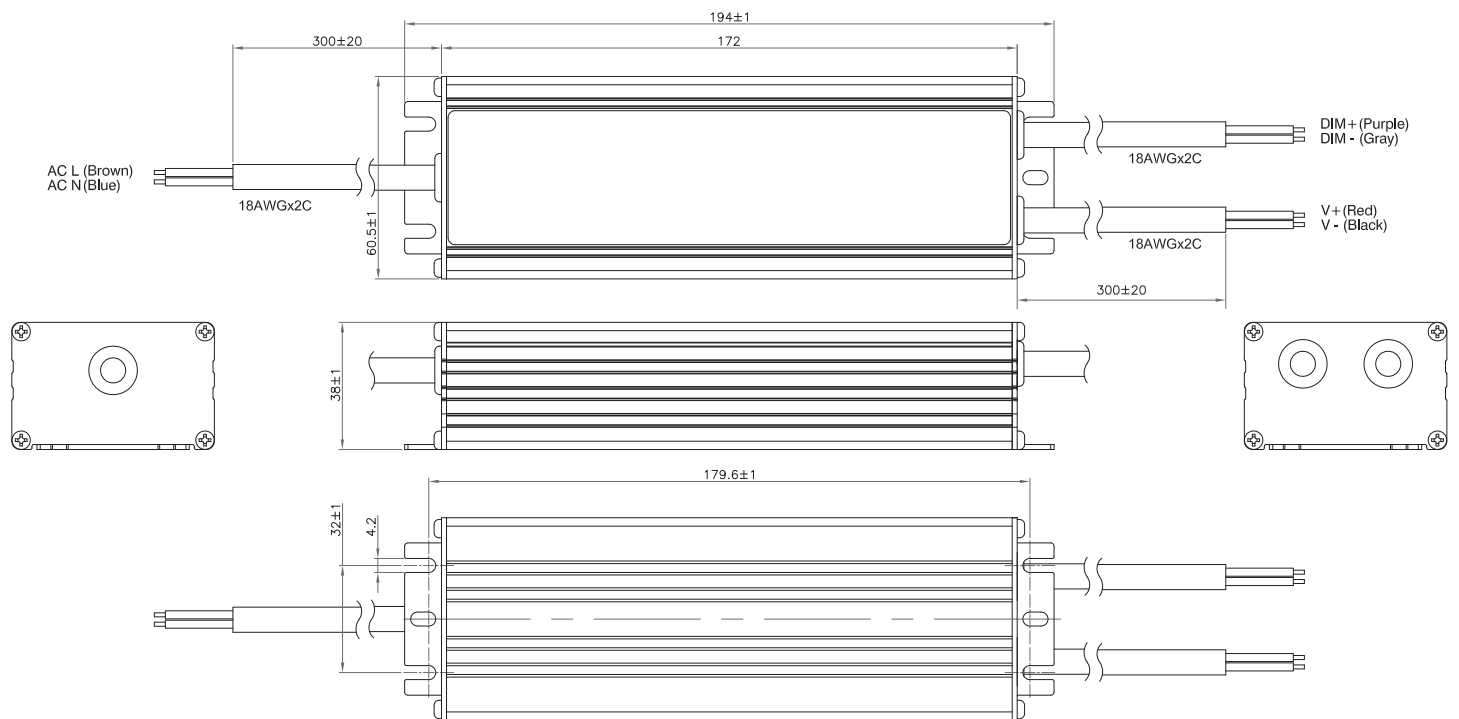


**THD vs Input Voltage**



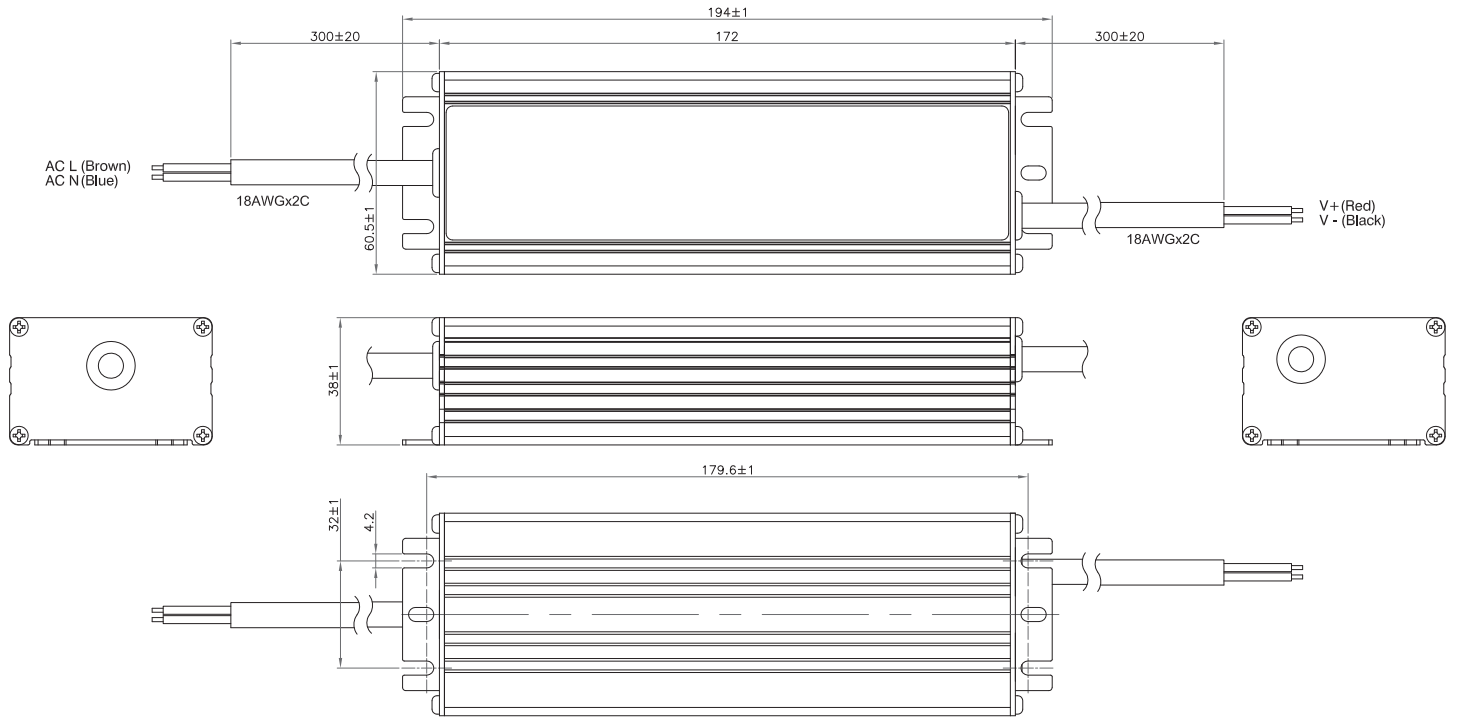
**D Type(Dimming):SAE-100-XXX-D**

Unit: mm



**Blank Type(Non-dimming): SAE-100-XXX**

Unit: mm



**R Type(with VR): SAE-100-XXX-R**

