

### Features

- For LED Indoor Office & Retail Application
- 0-10V / PWM Dimmable
- High Reliability & Long Life 50,000hrs
- Compact Size/ Optimized Performance
- Constant Current Design/ Low Inrush Current/ Low Ripple Current
- Wide Input Range for Worldwide Use (up to 305Vac)
- Low Energy Consumption at Standby
- Type HL LED Driver for use in Class I Division 2 hazardous location luminaires (only G type)
- IP65 Design (only G type)
- Suitable to Dry, Damp Location
- Protections: Short Circuit/ Open Circuit/ Over Voltage/ Over Temperature
- Class 2 Power Unit
- 100% Burn-in Test
- Safety: Meet IEC61347-2-13, UL8750 & EMI EN55015



FSP50-ZZAP(XXX)M   
 Blank Type: IP20 rated  
 G Type: IP65 rated

**IP65**      **Type HL Class 2**

### SPECIFICATION

Model Name	FSP50-ZZAP(070)M <input type="checkbox"/>	FSP50-ZZAP(100)M <input type="checkbox"/>	FSP50-ZZAP(125)M <input type="checkbox"/>	FSP50-ZZAP(140)M <input type="checkbox"/>
Rated Power	50W	45W	50W	45W
Output Voltage	60-70V	30-45V	25-40V	18-32V
Rated Current	700mA	1000mA	1250mA	1400mA
Efficiency (typ.)	90%	89%	89%	88%
Input Voltage/ Frequency	120~277Vac/ 47~63Hz			
Power Factor (typ.)	PF $\geq$ 0.98/120Vac, PF $\geq$ 0.95/230Vac, PF $\geq$ 0.90/277Vac at full load			
Turn On Delay Time,Rise time	$\leq$ 0.5s max / $\leq$ 50ms max.			
Inrush Current (typ.)	10A at 277Vac, 25°C cold start			
Life Time [2]	50,000 hours@ Amb $\leq$ 45°C IP20 Version; Amb $\leq$ 60°C IP65 Version			
Operating Temperature	-20°C~+45°C			-20°C~+40°C
Output Current Accuracy	$\pm$ 5%	$\pm$ 5%	$\pm$ 5%	$\pm$ 5%
Output Ripple Current[3]	$\pm$ 5%	$\pm$ 5%	$\pm$ 5%	$\pm$ 5%
Line Regulation	$\pm$ 0.5%	$\pm$ 0.5%	$\pm$ 0.5%	$\pm$ 0.5%
AC Current (typ.)	$<$ 0.54A			
Leakage Current	$\leq$ 0.25mA/ 240Vac			
Operating Humidity	20~85% RH non-condensing			
Storage Temperature	-40~+85°C			
Storage Humidity	10~95%RH			
Vibration	0.01g <sup>2</sup> /Hz at 5 Hz sloping to 0.02g <sup>2</sup> /Hz at 20 Hz, and maintaining 0.02g <sup>2</sup> /Hz from 20 Hz to 500 Hz at a constant acceleration of 3.13G for 20 minutes per axis for all three axes			
Over Voltage Protection	$<$ 120V	$<$ 60V	$<$ 60V	$<$ 60V
Other Protections	SCP ; Open Circuit Protection ; OTP ; OLP			
Surge Voltage	Differential Mode $\geq$ 1KV ; Common Mode $\geq$ 2KV			
Withstand Voltage (Hipot)	I/P-O/P 3750Vac, I/P-FG 1875Vac			
Isolation Resistance	I/P-O/P I/P-FG: 100M ohm @ 500Vdc / 25°C			
Safety Standards	UL8750, Type HL, LVLE,UL1310 Class 2, CSA-C22.2 No. 250.13, EN61347-1, EN61347-2-13 Approved.			
EMC Standard	Compliant with EN55015 CLASS B, EN61000-3-2 Class C, EN61000-3-3			
Dimension (LxWxH)	162.5 x 42.5 x 32 mm			
Net Weight / Packing	165g ; 36 pcs / box			

#### Notes:

1. Data that didn't mention is tested under 230Vac/ 50Hz full load condition.
2. Data at full load and rated voltage, 230Vac/50Hz input, and 35°C ambient temperature unless otherwise specified.
3. The ripple current must be measured under the condition of AC coupling & 20MHz bandwidth. (Rated input and rated output)

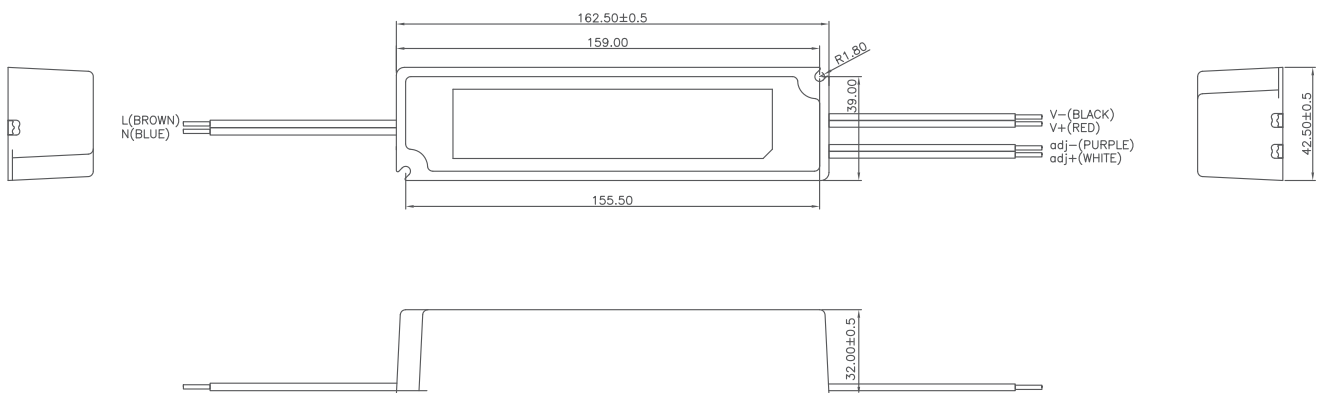


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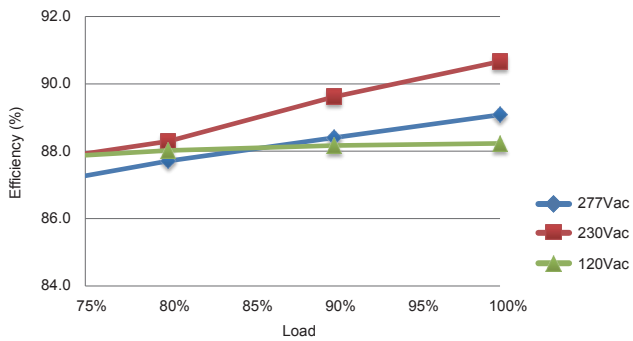
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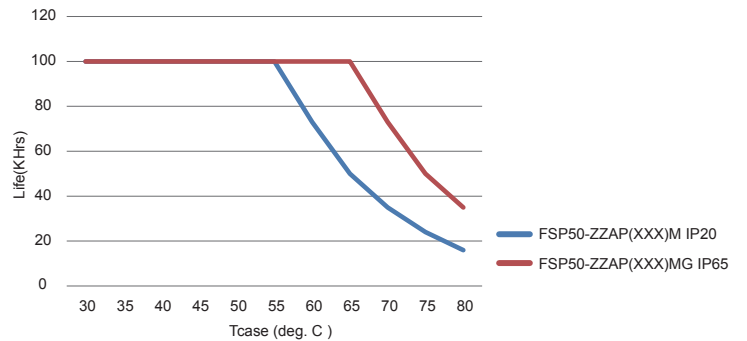
Unit: mm



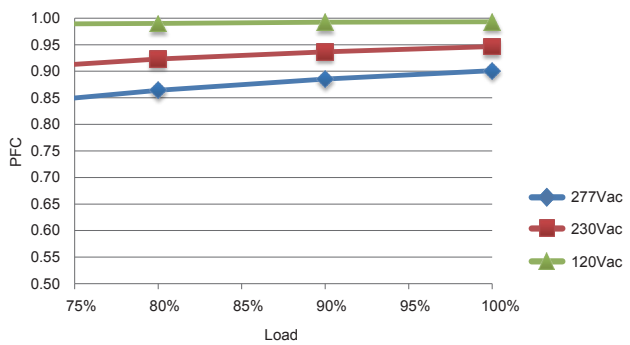
Efficiency



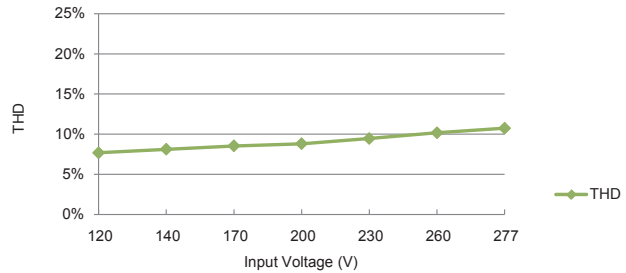
Life Time vs. Tc



PFC vs Loading



THD vs Input Voltage



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