

S.M.P.S

LED Converter

Water Proof Converter

60W2(V1)M

Metal case, 60W single output with constant voltage circuit



- **Constant voltage design(C.V. mode)**
- **AC Input voltage 160-277V**
- **Protections:**
Over load/Over voltage /Short circuit /Over temperature
- **IP68 design for outdoor installations**
- **100% full load burn-in test**
- **Suitable for LED lighting and moving sign applications**
- **Metal case**
- **Safety standards : EN61347-1, EN61347-2-13 /K61347-1, K61347-2-13**
- **EMC standards : EN55022, EN61204-3, EN61000-3-2,3/K00015, K61547**
- **3years warranty**

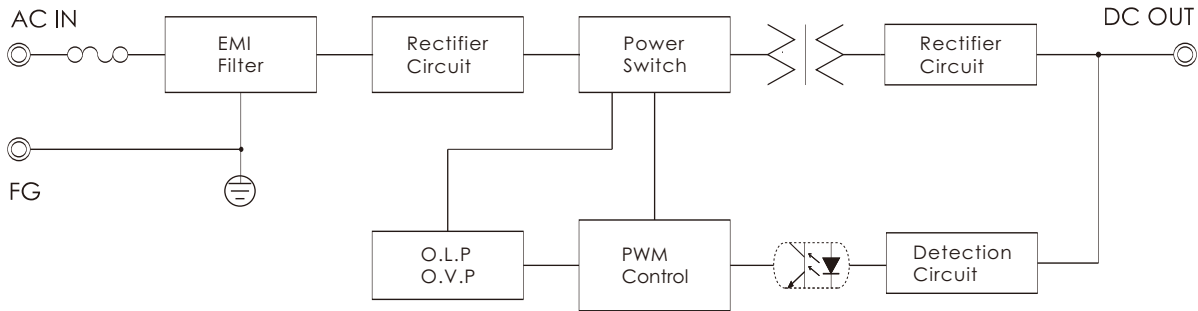
IP68 SELV LPS CE

ITEM		UP60S12W2(V1)M	UP60S24W2(V1)M
INPUT	VOLTAGE RANGE	AC160~277V	
	FREQUENCY RANGE	47~63Hz	
	EFFICIENCY(typ.)	84%	86%
	AC CURRENT(typ.)	0.5A/230VAC	
	INRUSH CURRENT(typ.)	COLD START 40A/230VAC	
OUTPUT	DC VOLTAGE	12V	24V
	RATED CURRENT	5A	2.5A
	RATED POWER	60W	60W
	RIPPLE&NOISE(max.) Note2	220mVp-p	340mVp-p
	VOLTAGE ADJ. RANGE	±5%	
	VOLTAGE TOLERANCE Note3	±3%	
	LINE REGULATION Note4	±1%	
	LOAD REGULATION Note5	±2%	
	SETUP,RISE TIME(max.)	3000ms,100ms/230VAC at full load	
HOLD UP TIME(typ.)	25ms/230VAC at full load		
PROTEC-TION	SHORT CIRCUIT	Hiccup mode ; recovers automatically after fault condition is removed	
	OVERLOAD	Over 110% of rating ; recovers automatically after fault condition is removed	
	OVER VOLTAGE	115~140% of rating	
	OVER TEMPERATURE	85±10℃ (temp. Sensor) ; recovers automatically after fault condition is removed	
ISOLA-TION	WITHSTAND VOLTAGE	I/P-O/P:AC3KV, I/P-F.G:AC1.5KV, O/P-F.G:AC0.5KV	
	ISOLATION RESISTANCE	I/P-O/P, I/P-F.G, O/P-F.G:DC500V 100Mohms(At room temp. & humid.)	
ENVIRON-MENT	WORKING TEMP.&HUMID.	-40~+70℃ (Refer to "DERATING CURVE"), 20~95%RH	
	STORAGE TEMP.&HUMID.	-40~+75℃, 10~95%RH	
	VIBRATION	10~500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes	
OTHERS	DIMENSION/WEIGHT	171*48.1*36.8mm(L*W*H)/0.4Kg	

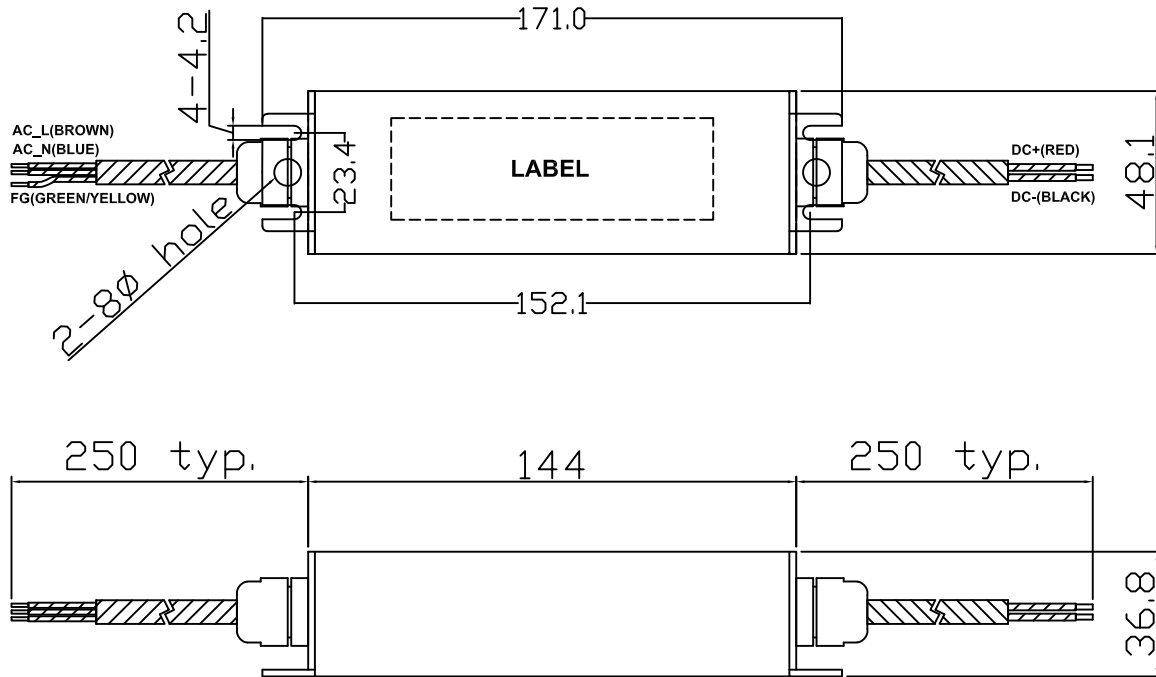
- NOTE**
1. All parameters not specially mentioned are measured at 230Vac input, rated load and 25℃ of ambient temperature.
 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with 0.1 uF & 47uF parallel capacitor.
 3. Tolerance : includes set up tolerance, line regulation and load regulation.
 4. Line regulation is measured from low line to high line at rated load.
 5. Load regulation is measured from low 0% to 100% rated load.

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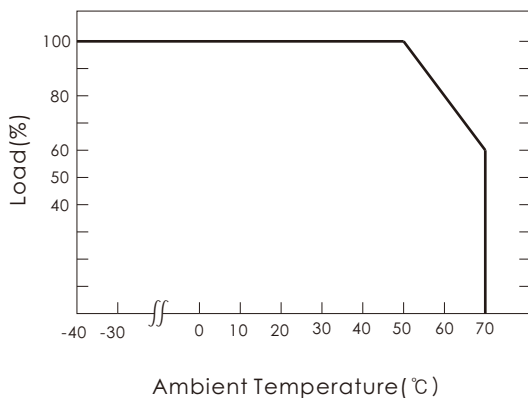
■ BLOCK DIAGRAM



■ DIMENSIONS(unit:mm)



■ DERATING CURVE



■ STATIC CHARACTERISTICS

