

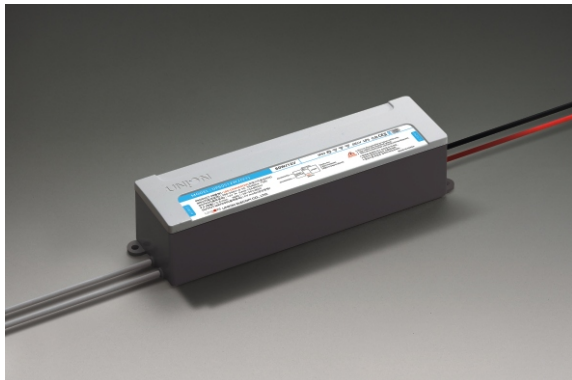
S.M.P.S

LED Converter

Water Proof Converter

## 60W2(V1) Series

60W single output  
with constant voltage circuit



- **Constant voltage design(C.V. mode)**
- **AC Input voltage 200-240V**
- **Protections:**  
Overload/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**
- **Plastic case**
- **Safety standards :**  
EN61347-1,EN61347-2-13/K61347-1, K61347-2-13
- **EMC standards :**  
K00015,K61547,K61000-4-2, 3,4,5,6,11/  
design refer to EN61204-3,EN61000-3-2,3
- **3years warranty**

IP68     SELV LPS CB CE 

ITEM		UP60S12W2(V1)	UP60S24W2(V1)
INPUT	VOLTAGE RANGE	AC200~240V	
	FREQUENCY RANGE	47~63Hz	
	EFFICIENCY(typ.)	83%	85%
	AC CURRENT(typ.)	0.48A/220VAC	
	INRUSH CURRENT(typ.)	COLD START 50A/220VAC	
OUTPUT	DC VOLTAGE	12V	24V
	RATED CURRENT	5A(3.75A@50°C)	2.5A(1.87A@50°C)
	RATED POWER	60W	60W
	RIPPLE&NOISE(max.) Note2	170mVp-p	290mVp-p
	VOLTAGE ADJ. RANGE	±5%	±5%
	VOLTAGE TOLERANCE Note3	±3%	±3%
	LINE REGULATION Note4	±1%	±1%
	LOAD REGULATION Note5	±2%	±2%
	SETUP,RISE TIME(max.)	3000ms,100ms/220VAC at full load	
	HOLD UP TIME(typ.)	30ms/220VAC 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	95±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~+50℃ (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	170.5*42.5*38mm(L*W*H)	
	PACKING	0.35Kg	

### NOTE

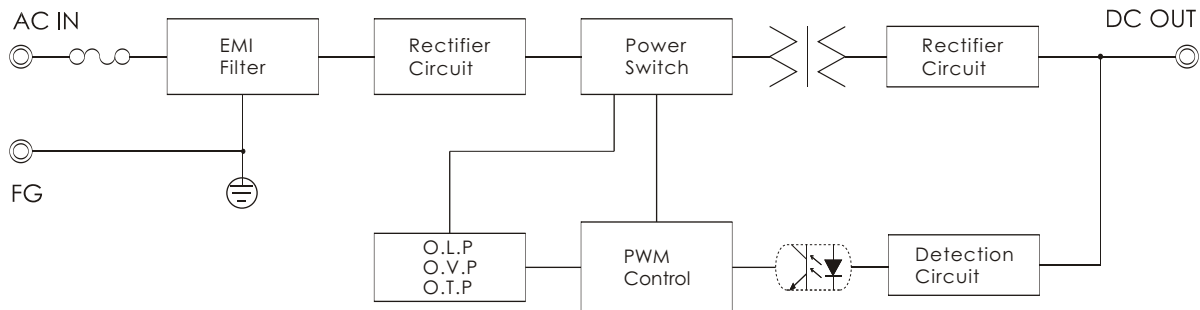
1. All parameters not specially mentioned are measured at 220Vac input, rated load and 25℃ of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with 0.1 uF & 47uF parallel capacitor.
3. Tolerance : includes set up tolerance, line regulation 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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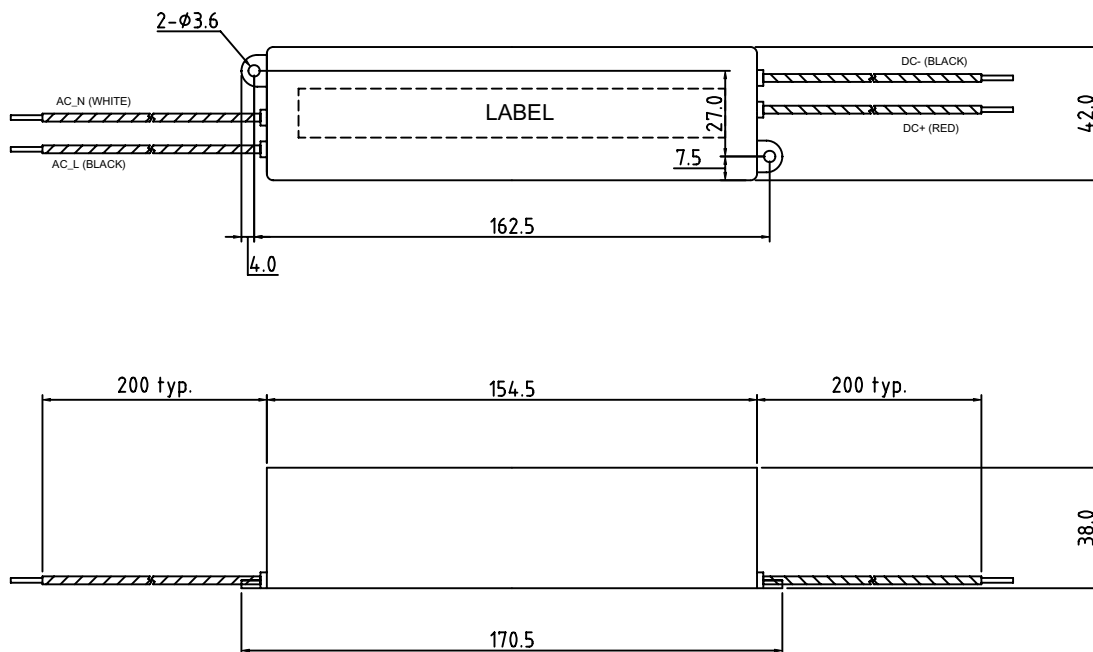
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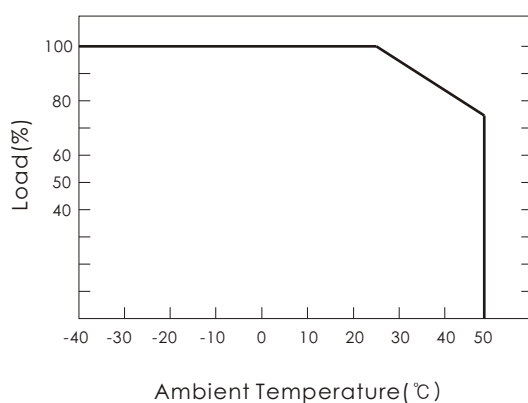
## BLOCK DIAGRAM



## DIMENSIONS (unit:mm)



## DERATING CURVE



## STATIC CHARACTERISTICS

