

S.M.P.S

LED Converter

Water Proof Converter

F100-C7 Series

100W single output with c.c circuit
and PFC function



- **Constant current design**
- **Built-in PFC function**
- **Protections:** Over current / Over voltage / Short circuit / Over temperature
- **IP68 design for outdoor installations**
- **100% full load burn-in test**
- **3 in 1 dimming function(option:D type)**
- **Suitable for LED lighting and street & tunnel lighting applications**
- **Safety standards :** K61347-2,1,K61347-2-13
- **EMC standards :** K00015,K61547
- **Metal case**

UPF100S120-C7□

Blank : IP68 rated. Cable for I/O connection.

Output current level can be adjusted through internal potentiometer

D(option) : IP68 rated. Constant current level adjustable through output cable with 10V PWM signal or 1-10Vdc or resistance

IP68        

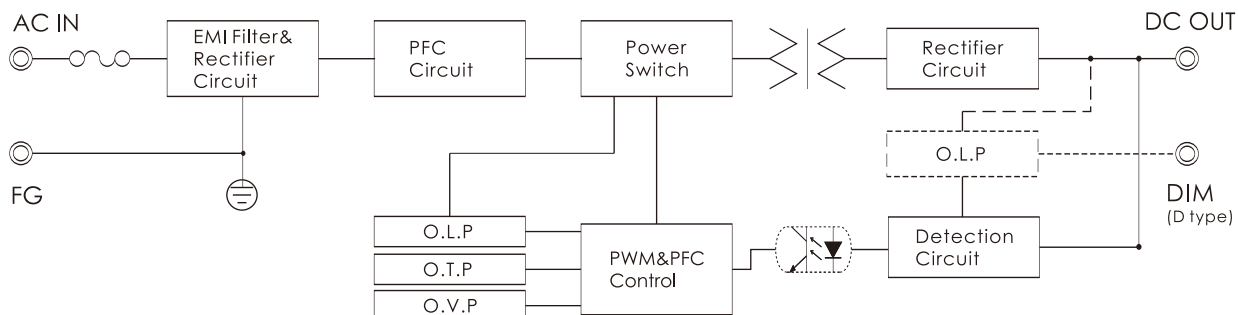
ITEM		UPF100S120-C7□
INPUT	VOLTAGE RANGE	AC180~305V
	FREQUENCY RANGE	47~63Hz
	POWER FACTOR	PF>0.95 at over 60% of rated power
	EFFICIENCY(typ.)	90%
	AC CURRENT(typ.)	0.5A/230VAC(typ)
	INRUSH CURRENT(typ.)	COLD START 50A/230VAC
	LEAKAGE CURRENT	<2.5mA / 230VAC
OUTPUT	RATED CURRENT	700mA
	CONSTANT CURRENT REGION	84-140V
	RATED POWER	100W
	CURRENT ADJ. RANGE	420~700mA
	CURRENT ACCURACY	±5%
	SETUP,RISE TIME(max.)	3000ms,100ms/230VAC at full load
	HOLD UP TIME(typ.)	50ms/230VAC at full load
PROTEC-TION	OVER CURRENT Note2	Over 95~108% of rating ; recovers automatically after fault condition is removed
	SHORT CIRCUIT	Hiccup mode ; recovers automatically after fault condition is removed
	OVER VOLTAGE	110~140% of rating
	OVER TEMPERATURE	85±10℃ (temp. Sensor) ; recovers automatically after fault condition is removed
ISOLA-TION	WITHSTAND VOLTAGE	I/P-O/P:AC3.75KV, I/P-F.G:AC2KV, O/P-F.G:AC1.5KV
	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~+80℃,10~95%RH
	VIBRATION	10~500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes
OTHERS	DIMENSION/WEIGHT	198.6*61.5*36.8mm(L*W*H)/0.76Kg(Non-bracket size)
NOTE	1. All parameters not specially mentioned are measured at 230vac input, rated load and 25℃ of ambient temperature. 2. Refer to "DRIVING METHODS of LED MODULE"	

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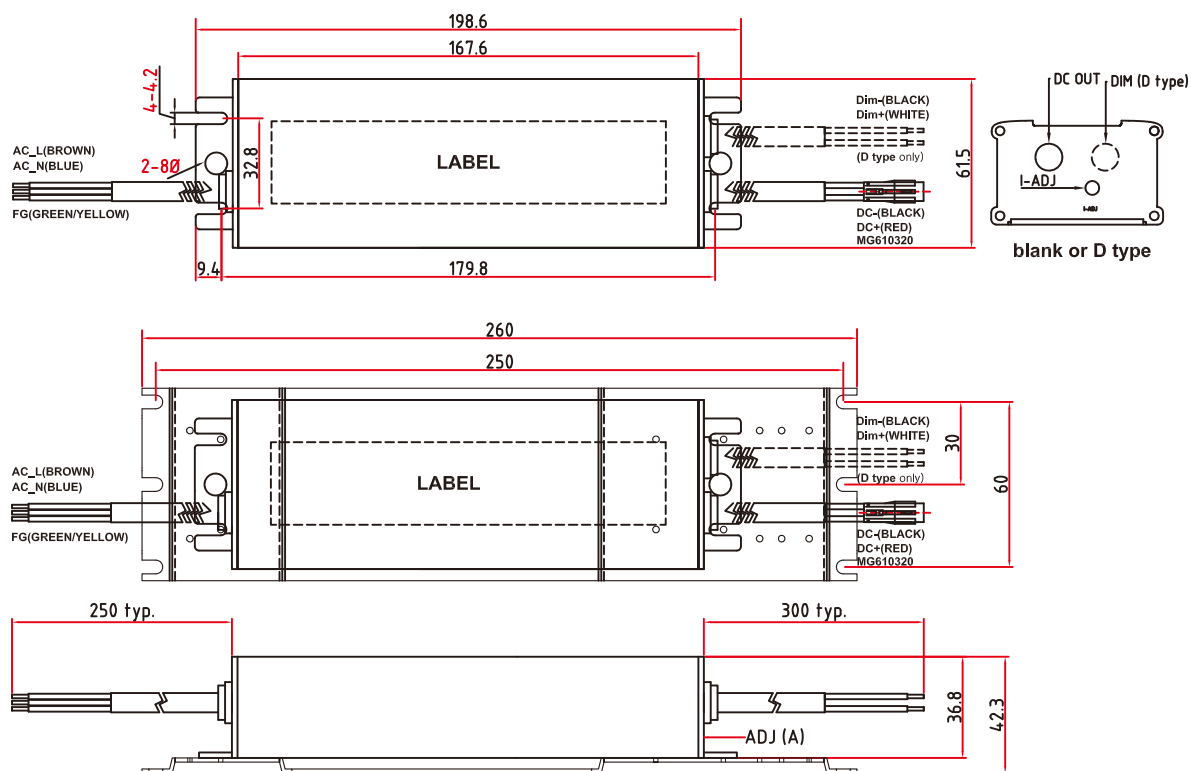
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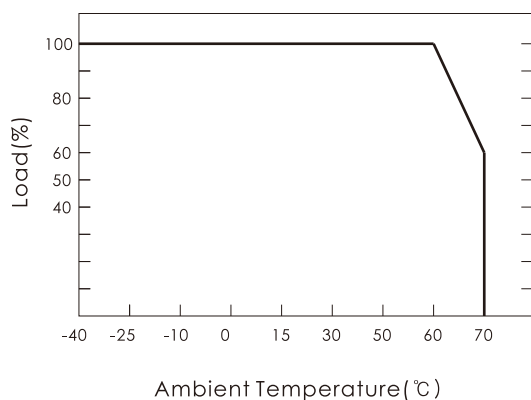
BLOCK DIAGRAM



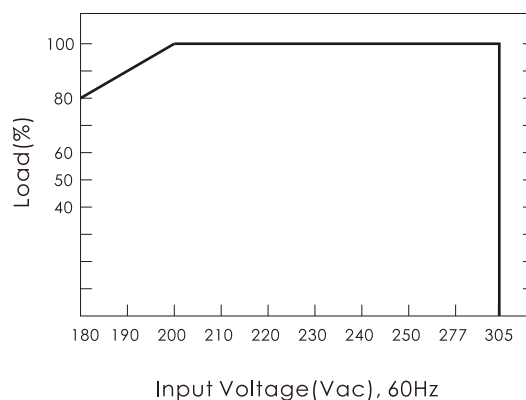
DIMENSIONS(unit:mm)



DERATING CURVE

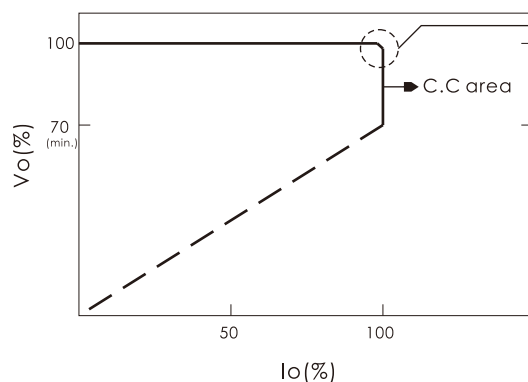


STATIC CHARACTERISTICS



DRIVING METHODS of LED MODULE

- This series works in constant current mode to directly drive the LEDs



In the constant current region, the highest voltage at the output of the driver depends on the configuration of the systems.

DIMMING OPERATION(option:D type)

- Built-in 3 in 1 dimming function.
Output constant current level can be adjusted through output cable by connecting 10V PWM signal or 1-10Vdc or resistance between DIM+ and DIM-.
- Please do not connect 'DIM-' to 'V-'
- 10V PWM signal for output current adjustment(typ.):
frequency range:100Hz~3KHz

Duty Value	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	Open
Percent of Rated Current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95~108%

- 1-10V dimming function for output current adjustment(typ.)

Dimming Value	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	Open
Percent of Rated Current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95~108%

- Reference resistance value for output current adjustment(typ.)

Resistance Value	Single driver	10K Ω	20K Ω	30K Ω	40K Ω	50K Ω	60K Ω	70K Ω	80K Ω	90K Ω	100K Ω	Open
	Multiple driver (N=driver quantity for synchronized dimming operation)	10K Ω /N	20K Ω /N	30K Ω /N	40K Ω /N	50K Ω /N	60K Ω /N	70K Ω /N	80K Ω /N	90K Ω /N	100K Ω /N	---
Percent of Rated Current		10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95~108%