

S.M.P.S

LED Converter

Water Proof Converter

F100CQ2 Series

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



- Constant current design(12V:Constant voltage)
- Built-in PFC function
- Protections:Over current /Over voltage /Short circuit
- 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 lighting applications
- Safety standards : K61347-2-1,K61347-2-13, EN61347-1,EN61347-2-13
- EMC standards : K00015,K61547,K61000-3-2,3,EN55015
- Metal case

UPF100S48CQ2D

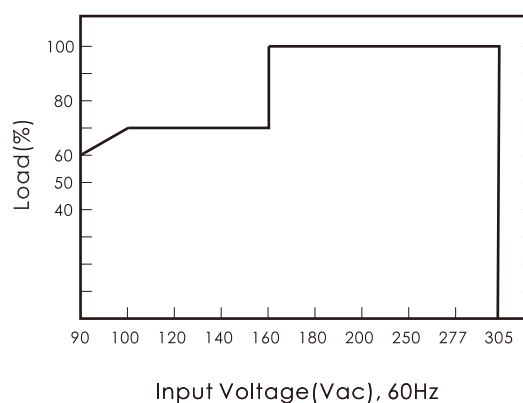
Blank : IP68 rated. Cable for I/O connection.

Output voltage and current level can be adjusted through internal potentiometer

D(option) : IP68 rated. Constant current level adjustable through output cable with 10V PWM signal or 0-10Vdc or resistance

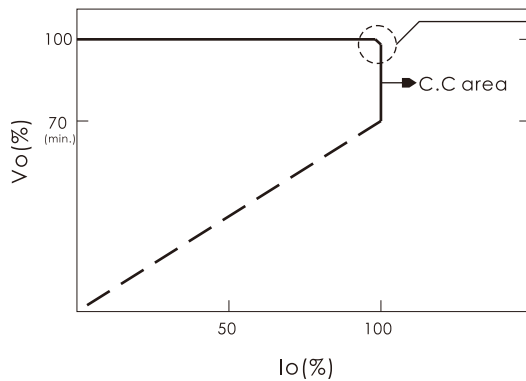
IP68    SELV LPS    

ITEM		UPF100S12CQ2	UPF100S36CQ2□	UPF100S48CQ2□
INPUT	VOLTAGE RANGE	AC90~305V(refer to static characteristics)		
	FREQUENCY RANGE	47~63Hz		
	POWER FACTOR	PF>0.95 at over 60% of rated power		
	EFFICIENCY(typ.)	86%	89%	90%
	AC CURRENT(typ.)	0.5A/230VAC(typ)		
	INRUSH CURRENT(typ.)	40A/230VAC		
	LEAKAGE CURRENT	<2.5mA / 230VAC		
OUTPUT	RATED CURRENT	8.4A	2.8A	2.1A
	CONSTANT CURRENT REGION	—	18-36V	24-48V
	RATED POWER	70W at 100-160VAC , 100W at 160-305VAC		
	CURRENT ADJ. RANGE	—	1.5~2.8A	1.2~2.1A
	CURRENT ACCURACY	±5%		
	RIPPLE&NOISE(max.) Note2	150mVp-p		
	SETUP,RISE TIME(max.)	3000ms,100ms/230VAC at full load		
PROTEC-TION	HOLD UP TIME(typ.)	50ms/230VAC at full load		
	OVER CURRENT Note3	12V : Over 110% of rating ; recovers automatically after fault condition is removed 24,36,48V : 95~108%		
	SHORT CIRCUIT	Hiccup mode ; recovers automatically after fault condition is removed		
ISOLA-TION	OVER VOLTAGE	110~140% of rating		
	WITHSTAND VOLTAGE	I/P-O/P:AC3.75KV, I/P-F.G:AC2KV, O/P-F.G:AC1.5KV		
ENVIRON-MENT	ISOLATION RESISTANCE	I/P-O/P, I/P-F.G, O/P-F.G:DC500V 100Mohms(At room temp. & humid.)		
	WORKING TEMP.&HUMID.	-40~+70℃(Refer to "DERATING CURVE),20~95%RH		
	STORAGE TEMP.&HUMID.	-40~+80℃,10~95%RH		
OTHERS	VIBRATION	10~500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes		
	DIMENSION/WEIGHT	202*61.5*37.1mm(L*W*H)/0.71Kg		
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 pare-wire terminated with 0.1 uF & 47uF parallel capacitor. 3. Refer to "DRIVING METHODS of LED MODULE"		



DRIVING METHODS of LED MODULE

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

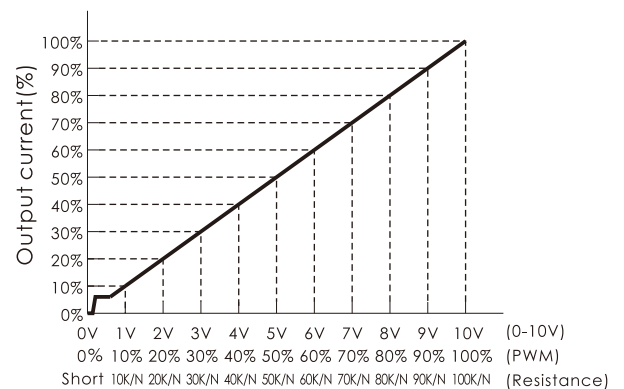


In the constant current region, the highest voltage at the output of the driver depends on the configuration of the systems.

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 0-10Vdc or resistance between DIM+ and DIM-.
- Please do not connect 'DIM-' to 'V-'

DIMMING CURVE



- 10V PWM signal for output current adjustment(typ.):
frequency range:100Hz~3KHz

Duty Value	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	Open
Percent of Rated Current	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95~108%

- 0-10V dimming function for output current adjustment(typ.)

Dimming Value	0V	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	Open
Percent of Rated Current	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95~108%

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

Resistance Value	Single driver	Short	10KΩ	20KΩ	30KΩ	40KΩ	50KΩ	60KΩ	70KΩ	80KΩ	90KΩ	100KΩ	Open
	Multiple driver (N=driver quantity for synchronized dimming operation)	Short	10KΩ /N	20KΩ /N	30KΩ /N	40KΩ /N	50KΩ /N	60KΩ /N	70KΩ /N	80KΩ /N	90KΩ /N	100KΩ /N	---
Percent of Rated Current		0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	95~108%