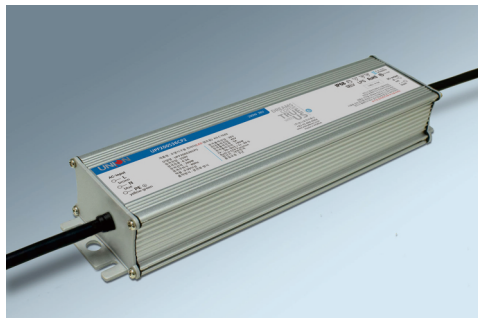| S.M.P.S	LED Converter	Water Proof Converter

F200CP2 Series

200W single output with c.c circuit
and PFC function

- **Constant current design**
- **Built-in PFC function**
- **Protections : Over load/ Over current /Short circuit/Over temperature**
- **IP68 design for outdoor installations**
- **Suitable for LED lighting and street lighting applications**
- **Safety standards : K61347-2-1,K61347-2-13,**
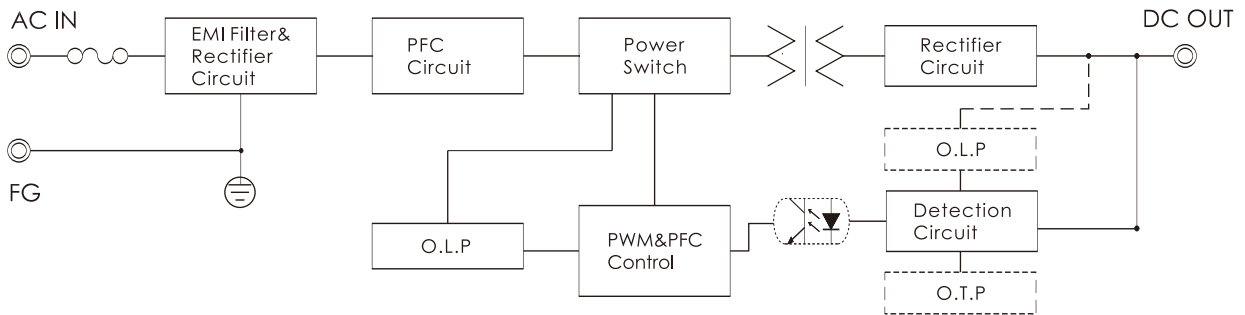- **EMC standards : K00015,K61547**
- **Metal case**

IP68   F M M SELV Pfc KC KS

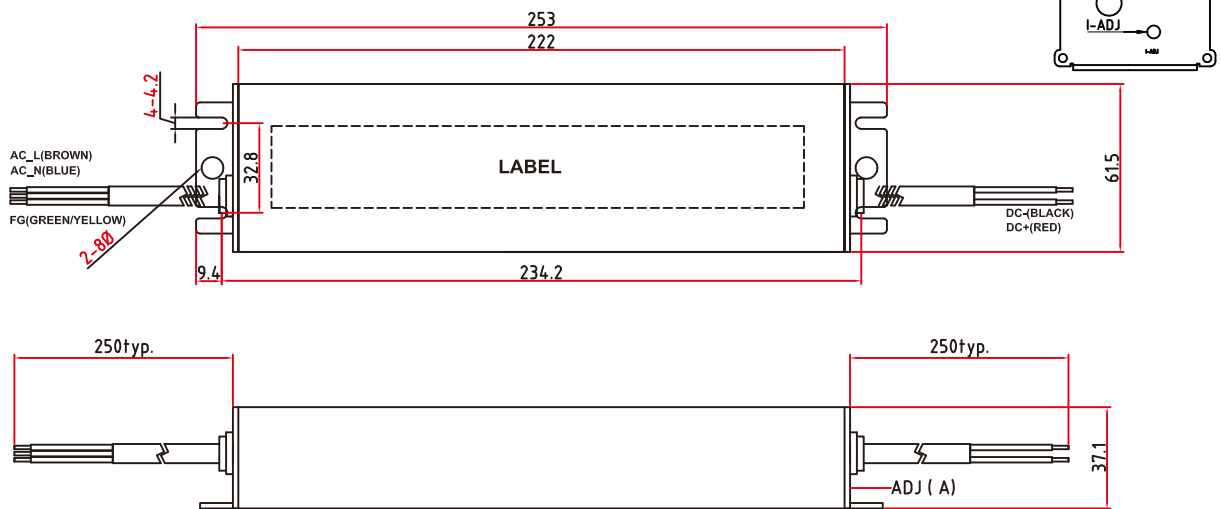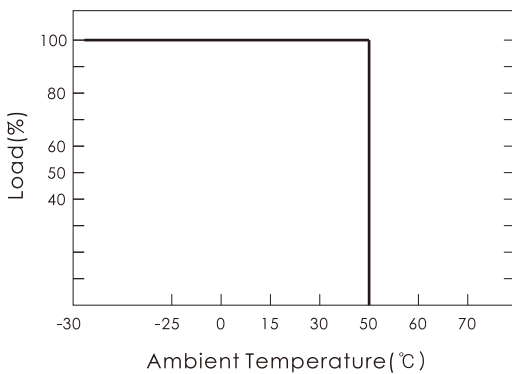|	ITEM	UPF200S36CP2	UPF200S48CP2
INPUT	VOLTAGE RANGE	AC180~264V	
	FREQUENCY RANGE	47~63Hz	
	POWER FACTOR	PF>0.95 at over 75% of rated power	
	EFFICIENCY(typ.)	92%	92%
	AC CURRENT(typ.)	0.9A/220VAC(typ)	
	INRUSH CURRENT(typ.)	50A/220VAC	
	LEAKAGE CURRENT	<2.5mA / 220VAC	
OUTPUT	RATED CURRENT	5A	3.8A
	CONSTANT CURRENT REGION	26-36V	36-48V
	RATED POWER	180W	
	CURRENT ADJ. RANGE	4~6A	3~4.8A
	CURRENT ACCURACY	±5%	
	RIPPLE&NOISE(max.) Note2	150mVp-p	
	SETUP,RISE TIME(max.)	3000ms,100ms/220VAC at full load	
PROTEC-TION	OVER CURRENT Note3	Over 95~108% of rating	
	SHORT CIRCUIT	Hiccup mode ; recovers automatically after fault condition is removed	
	OVER TEMPERATURE	90±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: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.	-30~+50℃(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	253*61.5*37.1mm(L*W*H)/0.9Kg	
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 pare-wire terminated with 0.1 uF & 47uF parallel capacitor. 3. Refer to "DRIVING METHODS of LED MODULE" 4. Turn on the AC switch after connecting the driver and the LED load	

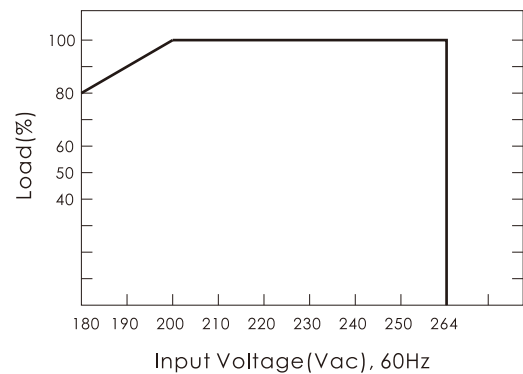# S.M.P.S   LED Converter   Water Proof Converter

■ BLOCK DIAGRAM

AC IN

FG

EMI Filter& Rectifier Circuit → PFC Circuit → Power Switch → Rectifier Circuit → DC OUT

O.L.P

O.L.P → PWM&PFC Control → Detection Circuit

O.T.P

DC OUTPUT

I-ADJ

■ DIMENSIONS(unit:mm)

253
222
4-4.2

AC_L(BROWN)
AC_N(BLUE)

32.8

LABEL

61.5

FG(GREEN/YELLOW)
2-8Ø

DC-(BLACK)
DC+(RED)

9.4
234.2

250typ.
250typ.

37.1

ADJ (A)

■ DERATING CURVE

Load(%) vs Ambient Temperature(℃)

100, 80, 60, 50, 40

-30, -25, 0, 15, 30, 50, 60, 70

■ STATIC CHARACTERISTICS

Load(%) vs Input Voltage(Vac), 60Hz

100, 80, 60, 50, 40

180 190 200 210 220 230 240 250 264

■ DRIVING METHODS of LED MODULE

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

Vo(%) vs Io(%)

100
70 (min.)

C.C area

50, 100
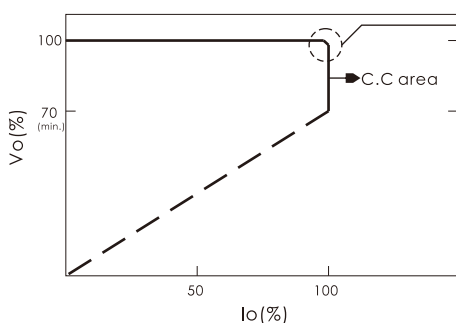
In the constant current region, the highest voltage at the output of the driver depends on the configuration of the systems.