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

F80CQHD-EX Series

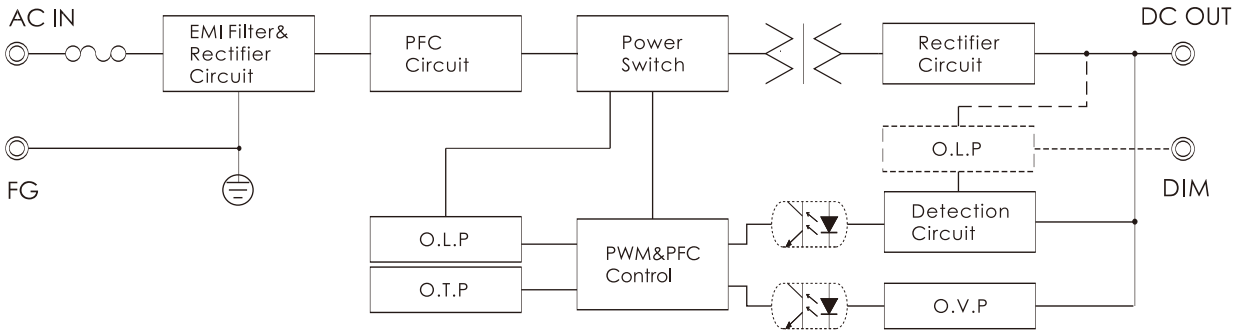
75W single output with c.c circuit
and PFC function

- 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
- Suitable for LED lighting and street lighting applications
- Safety standards : EN61347-1,EN61347-2-13,J61347-1 61347-2-13 ,K61347-2-1,K61347-2-13
- EMC standards : EN55015,EN61000-3-2,3,EN61000-4-2,3,4,5,6,11 J55015,K00015,K61547,K61000-4-2,3,4,5,6,11
- Metal case

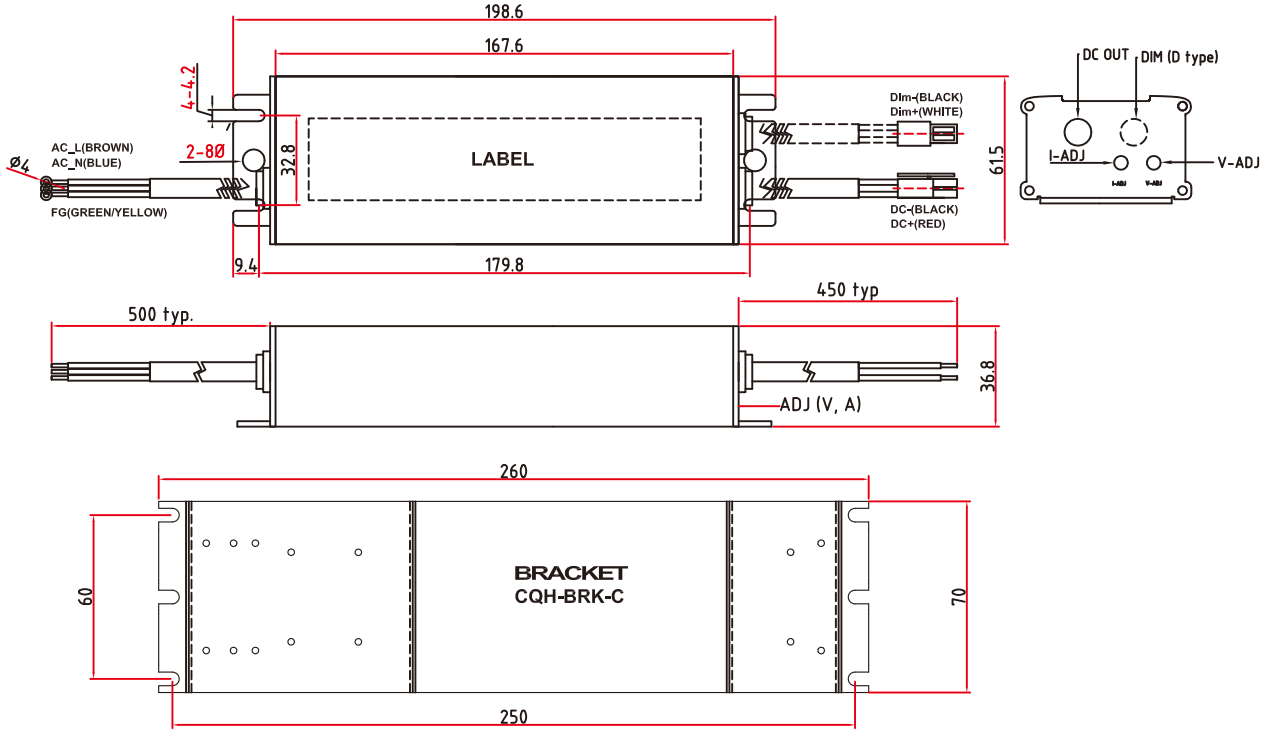
IP68 SELV CB CE

ITEM		UPF80S36CQHD-EX
INPUT	VOLTAGE RANGE	AC90~305V
	FREQUENCY RANGE	47~63Hz
	POWER FACTOR	PF>0.95 at over 60% of rated power
	EFFICIENCY(typ.)	88%
	AC CURRENT(typ.)	0.9A/115VAC (typ) 0.5A/230VAC(typ)
	INRUSH CURRENT(typ.)	COLD START 40A/230VAC
	LEAKAGE CURRENT	<2.5mA / 230VAC
OUTPUT	RATED CURRENT	2.1A
	CONSTANT CURRENT REGION	21.6-36V
	RATED POWER	75W
	VOLTAGE ADJ. RANGE	33~40V
	CURRENT ADJ. RANGE	1.2~2.3A
	CURRENT ACCURACY	±5%
	RIPPLE&NOISE(max.) Note2	150mVp-p
	SETUP,RISE TIME(max.)	3000ms,100ms/115VAC at full load 3000ms,100ms/230VAC at full load
	HOLD UP TIME(typ.)	50ms/115VAC at full load 50ms/230VAC at full load
PROTEC -TION	OVER CURRENT Note3	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	115~140% of rating
	OVER TEMPERATURE	105±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
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"	

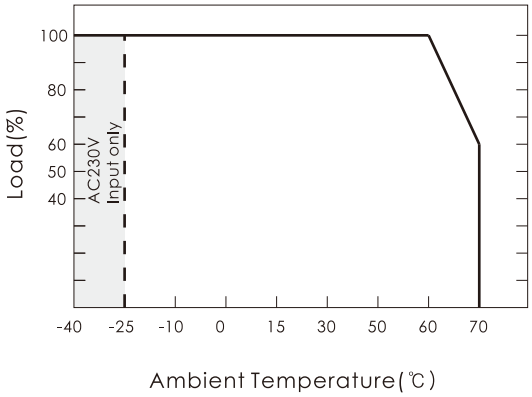
■ BLOCK DIAGRAM



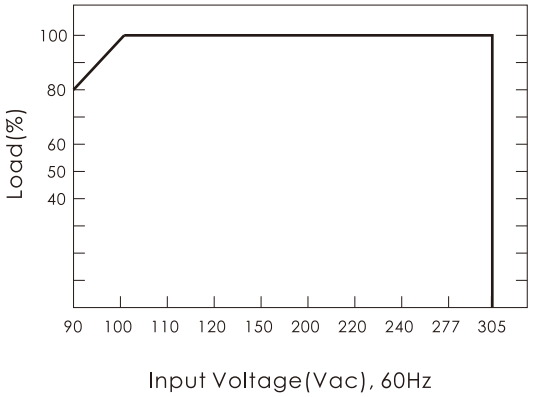
■ DIMENSIONS(unit:mm)



■ DERATING CURVE

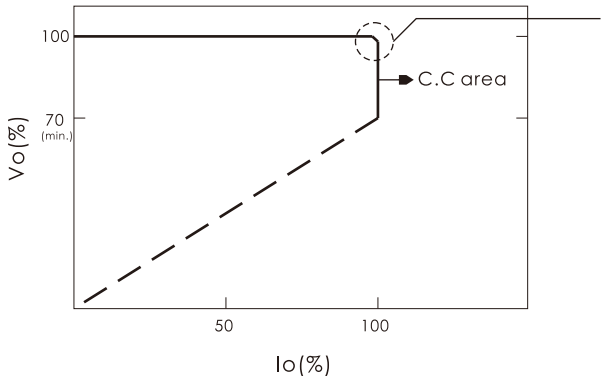


■ STATIC CHARACTERISTICS



■ 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

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