XCXXXWYYYY-YYYY / BH

Constant Current Driver

Model: XC50W500-1200*
XC75W900-1800*
XC100W1300-2500*
XC150W1800-3600*
XC200W2400-4800*
XC240W3600-5700*

CE SELV IP67

Model 型号	Input Current	Input Voltage Range	Output Power Range	Rated Output Current	Rated Output Voltage	Typical Efficiency	PF
XC50W500-1200	0.4A	100-277VAC	25-50W	0.5~ 1.2A	32~58V	0.86	0.95
XC75W900-1800	0.6A	100-277VAC	37.5-75W	0.9~ 1.8A	32~58V	0.88	0.95
XC100W1300-2500	0.7A	100-277VAC	50- 100W	1.3~2.5A	32~58V	0.91	0.95
XC150W1800-3600	1.0A	100-277VAC	75- 150W	1.8~3.6A	32~58V	0.91	0.95
XC200W2400-4800	1.4A	100-277VAC	100-200W	2.4~4.8A	32~58V	0.91	0.95
XC240W3600-5700	1.6A	100-277VAC	120-240W	2.4~4.8A	42~58V	0.91	0.95
XC50W500-1200 BH	0.4A	100-277VAC	25-50W	0.5~ 1.2A	32~58V	0.86	0.95
XC75W900-1800 BH	0.6A	100-277VAC	37.5-75W	0.9~ 1.8A	32~58V	0.88	0.95
XC100W1300-2500 BH	0.7A	100-277VAC	50- 100W	1.3~2.5A	32~58V	0.91	0.95
XC150W1800-3600 BH	1.0A	100-277VAC	75- 150W	1.8~3.6A	32~58V	0.91	0.95
XC200W2400-4800 BH	1.4A	100-277VAC	100-200W	2.4~4.8A	32~58V	0.91	0.95
XC240W3600-5700 BH	1.6A	100-277VAC	120-240W	2.4~4.8A	42~58V	0.91	0.95

Remark： Test result @230V, 50Hz, Full Load. The output current of all series is adjustable

***= ，on/off ; *=BH，0-10V**

1. Parameters

Category	Item	Technical Norm
Features	Output Type	Constant current
	IP Grade	IP67
	Dimming Type	BH : 0- 10V
	Dimming Range	BH :0%- 100%
	Insulation Class	Class I
	Installation	Independent
Input	Rated Input Voltage	100-277VAC
	Operating Input Voltage	90-305VAC
	Input Frequency	50/60Hz
	Power Factor 功	≥0.95
	THD	≤10% 230VAC,50-60Hz,100% loading ≤20% 220-240VAC,50-60Hz,80-100% loading
	Input Current	≤0.4A @50W ； ≤0.6A @75W

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		≤0.7A @ 100W ； ≤ 1.0A @ 150W ≤ 1.4A @200W ； ≤ 1.6A @240W
	Input Power	≤59W @50W(180-277V);@25W(100- 150V) ≤89W @75W(180-277V);@37.5W(100- 150V) ≤ 115W @ 100W(180-277V);@50W(100- 150V) ≤ 170W @ 150W(180-277V);@75W(100- 150V) ≤225W @200W(180-277V);@100W(100- 150V) ≤265W @240W(180-277V);@120W(100- 150V)
	Input Under/Over Voltage	No damage of wrong mains voltage: 0V AC to 340V AC,10minutes maximum
	No-load Power Consumption	<1.5W
Output	Ripple Current(< 120 Hz)	±30% @230V full load
	Current Accuracy	±5%
	Line Regulation	±5%
	Load Regulation	±5%
	Start Delay Time	≤0.5S @230Vac
Protection	Short Circuit Protection	Auto Recovery
	Overload Protection	Auto Recovery
	No-load Protection	Auto Recovery
	Insulation voltage	I/P to O/P , 3KVac/1min
	Insulation resistance	>100M ohm @ 500VDC
	Leakage current	I/P to PE < 0.7mA
Environment	Ta/Operation Temperature	-40 …+50℃
	Ts/Storage Temperature	-40 … .+85℃
	Tc/Enclosure Temperature	90 ℃
	Humidity	10%....90%RH
	Atmosphere	86- 108KPa
Wire	Input Wire	3*1.0MM2 Φ7.2± 1mm AC-L ； AC-N PE L400± 10mm (40±4mm/10± 1.5mm)
	Output Wire	2*1.0MM2 Φ6.8± 1mm LED+ ； LED- L:300±8mm (40±4mm/10±1.5mm)
	Dimmer Wire	2*22AWG DIM+ purple；DIM-pink； L: 270±8mm (40±4mm/10± 1.5mm)
Standards	Certification	CE/CCC
	Safety Standards	GB 19510.14-2009; EN61347-2-13:2014 EN61347-1:2008+A1:2011+A2013
	EMC Standards EMC	EN55015:2013+A1:2015
	Performance	EN62384
	Surge	50W/75W@L-N ： 4KV；L/N-PE:6KV 100W/150W/200W/240W@L-N ： 6KV; L/N-PE: 10KV
Others	RoHS	Complied to 2011/65/EU

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	Life Time	50000h Tc=75℃
	Warranty	5years , F.R. <10000ppm

Remark

1. All Parameters, if not specified, are measured at 230VAC/50Hz and 25℃ ambient temperature.
2. LED Driver is a component of the luminaires, Luminaires and wire layout will affect the EMC, please check the EMC with end products again.

2. Connected quantities of different current Breaker

50/75/100/150W：

TYPE	Connected quantities of different current Breaker						Input Voltage	Inrush Current /A	Time
	current（A）	10	13	16	20	25			
	Installation wire diameter	1.5mm²	2.5mm²	2.5mm²	4mm²	4mm²			
TYPE B		9	11	14	17	21	@230VAC	70	400us
TYPE C		14	18	22	27	34			
TYPE D		22	29	35	44	55			

200/240W：

TYPE	Connected quantities of different current Breaker						Input Voltage	Inrush Current /A	Time
	current（A）	10	13	16	20	25			
	Installation wire diameter	1.5mm²	2.5mm²	2.5mm²	4mm²	4mm²			
TYPE B		6	8	10	12	15	@230VAC	100	400us
TYPE C		10	12	15	19	24			
TYPE D		15	20	25	31	38			

3. Dimming function

Reference		Minimum Value	Typical Value	Maximum Value	Notes
1- 10V dimming	Maximum Applied Voltage	0V	10V	12V	
	Dimming Output Range	10%Io		100%Io	
	Suggested Dimming Voltage	0V		10V	
PWM dimming	PWM High Level	9V		10V	
	PWM Low Level	0V		0.3V	
	PWM Frequency Segment	1KHz		2KHz	
	PWM Duty Cycle	0%		99%	
Resistance dimming	Resistance Value	0 KΩ		100 KΩ	
	DIM Line output current		100uA		
	Dimming Output Range	10%Io		100%Io	

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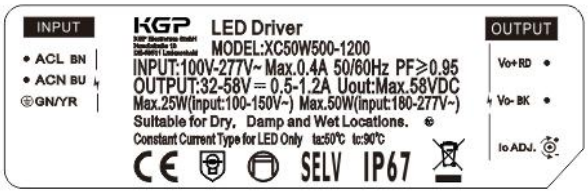
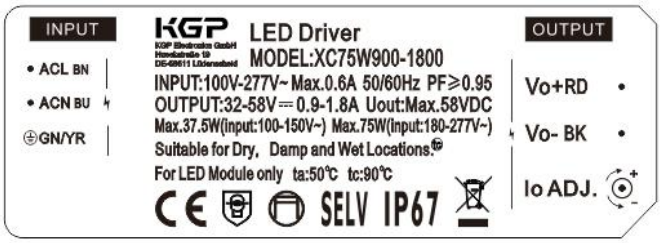
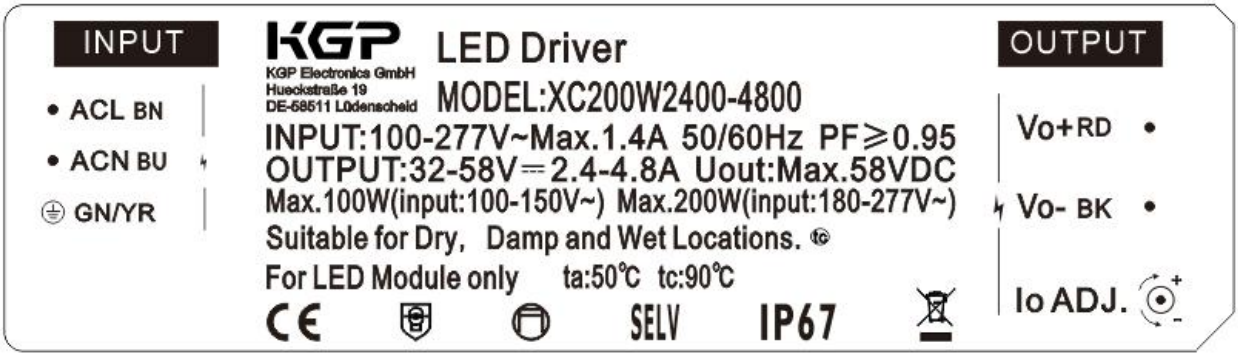
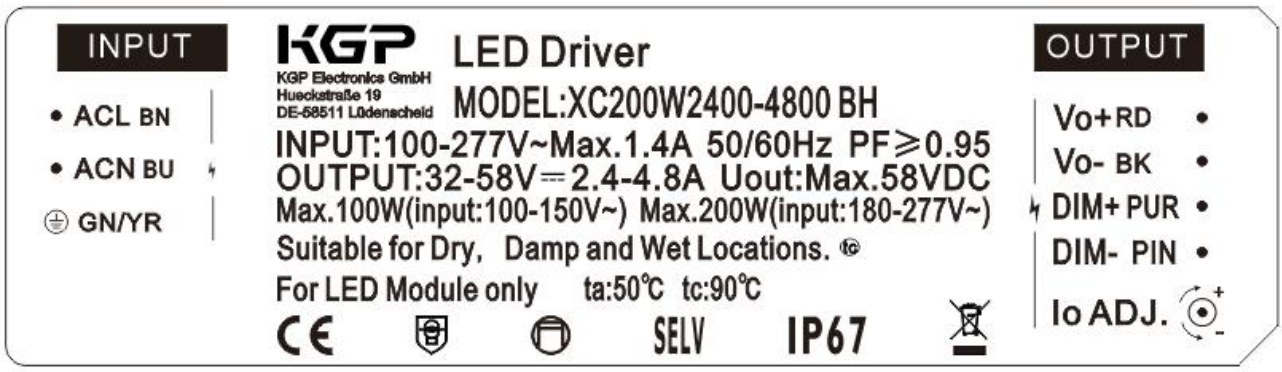
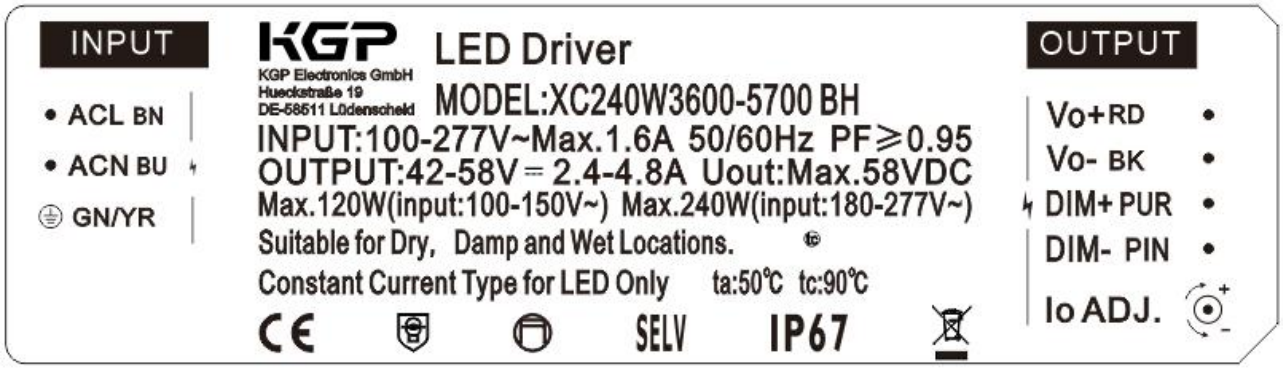
4. Label（on/off）











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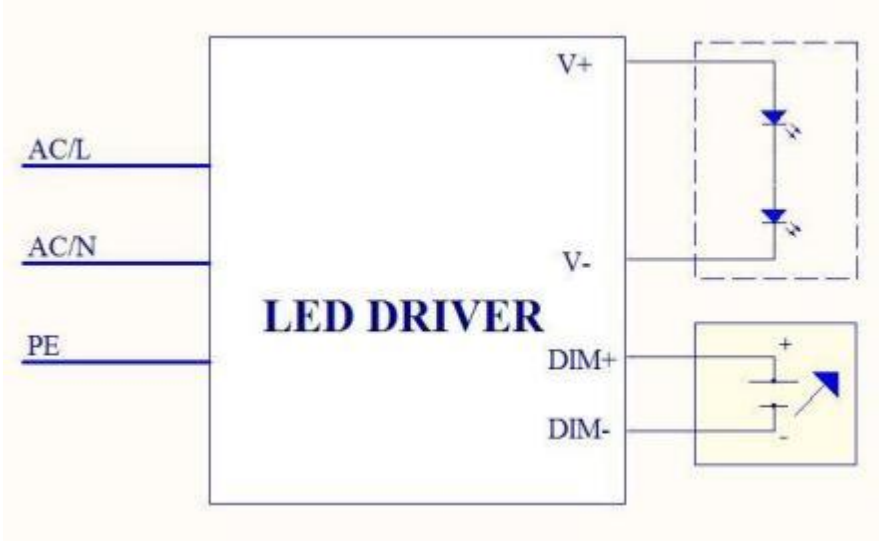
5. Dimming Operation



- Connect 0- 10V Direct Voltage or 10V PWM1KHz signal between DIM+ and DIM- to adjust the output constant current values.
- Don’t connect “DIM-” and “V-” .

Output current values (Typical Values) of 0- 10V Dimming adjustment.0- 10V

Applied Dimming Voltage	0V	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	OPEN
Output Current Percentage	0%	10%	20%	30%	40%	50%	60%	70%	80%	100%	100%	100%

Output current values (Typical Values) of PWM Dimming adjustment. Frequency Range: 1KHz-2KHz.

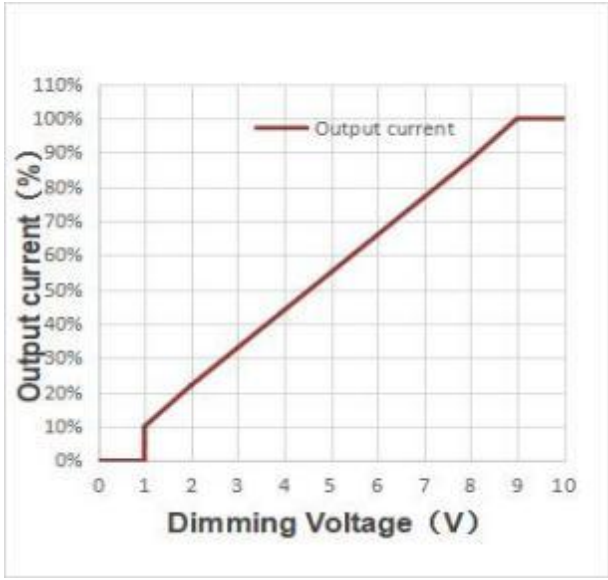
Duty Cycle	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	OPEN
Output Current Percentage	0%	10%	20%	30%	40%	50%	60%	70%	80%	100%	100%	100%

Output current values (Typical Values) of Resistance Dimming adjustment. Resistance Range: 0- 100KΩ .

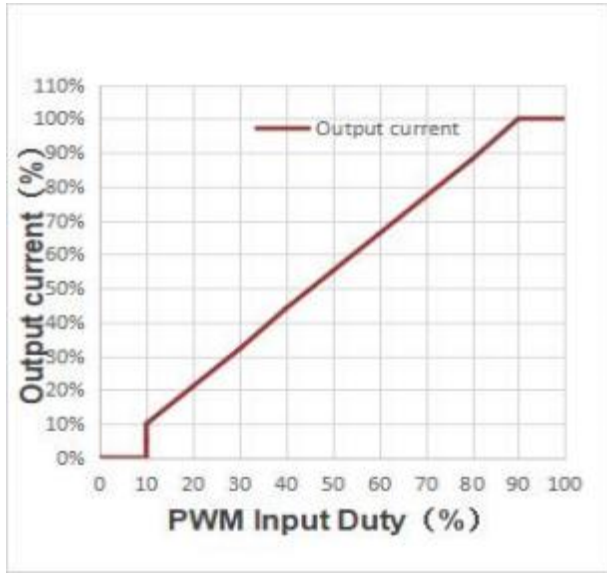
Resistance Value	0KΩ	10KΩ	20KΩ	30KΩ	40KΩ	50KΩ	60KΩ	70KΩ	80KΩ	90KΩ	100KΩ	OPEN
Output Current Percentage	0%	10%	20%	30%	40%	50%	60%	70%	80%	100%	100%	100%

6. Dimming curve

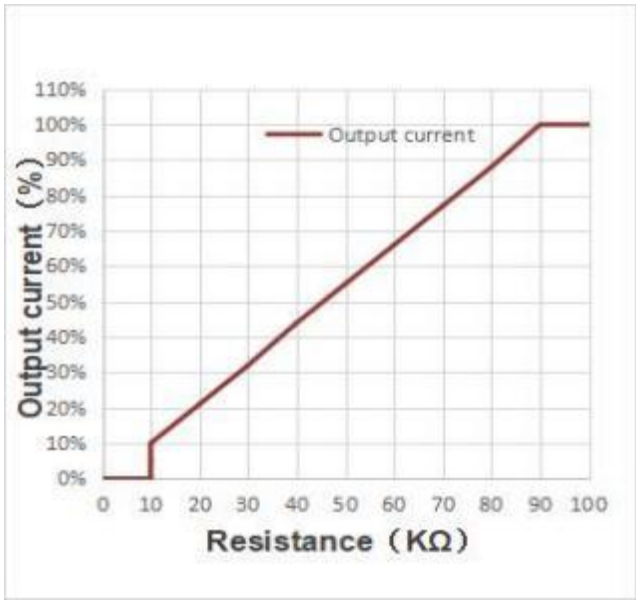
0-10V dimming curve 0-10V



PWM dimming curve PWM

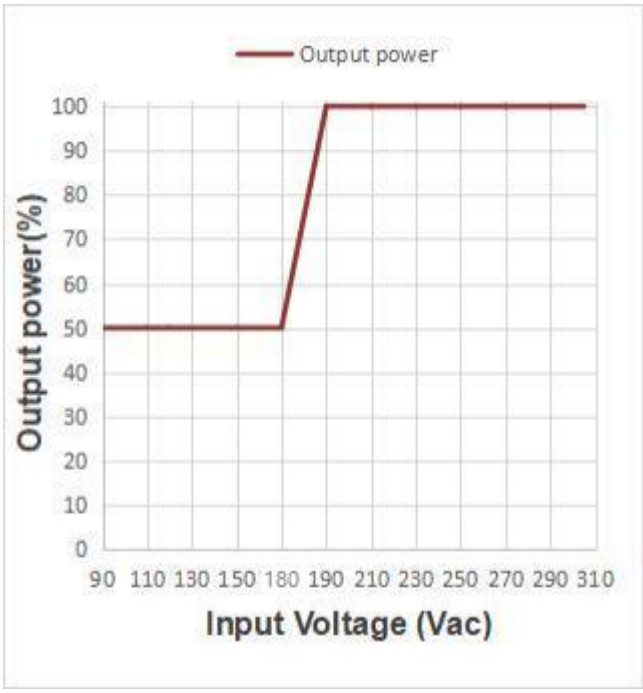


Resistance dimming curve

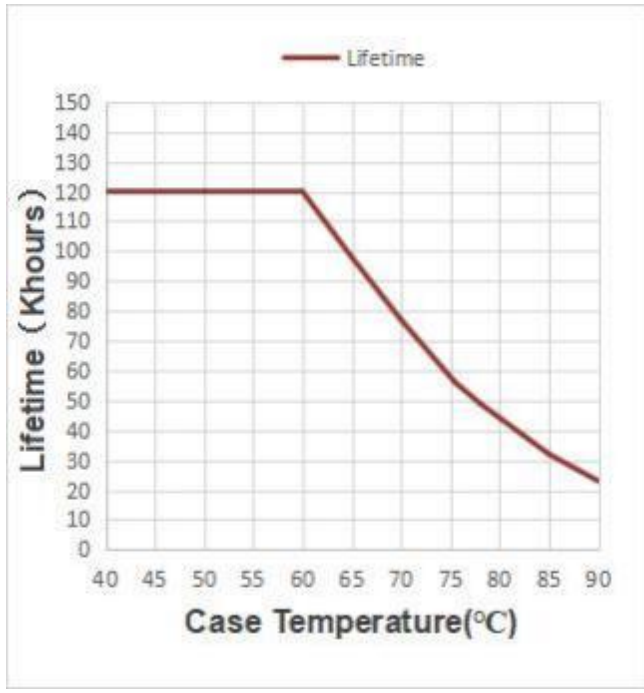


7. Characteristic curve

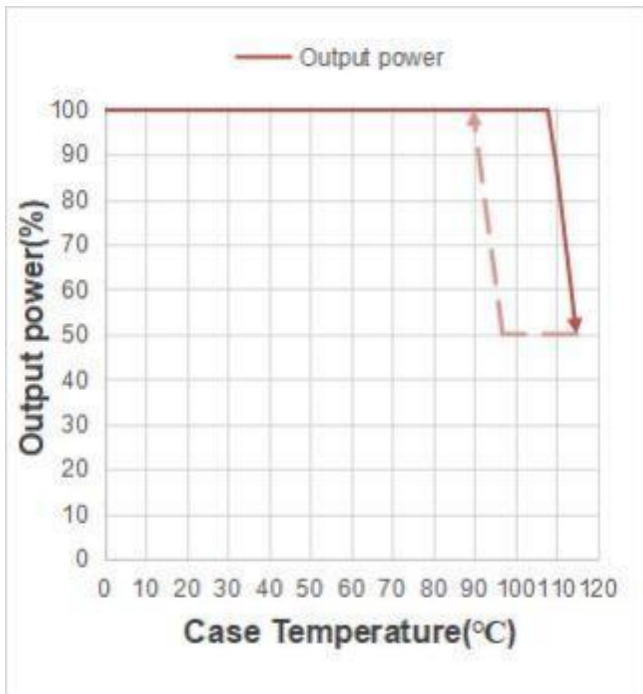
Output power Vs. input voltage (ring temperature 50℃)



Life Vs. shell temperature



Output power Vs. shell temperature



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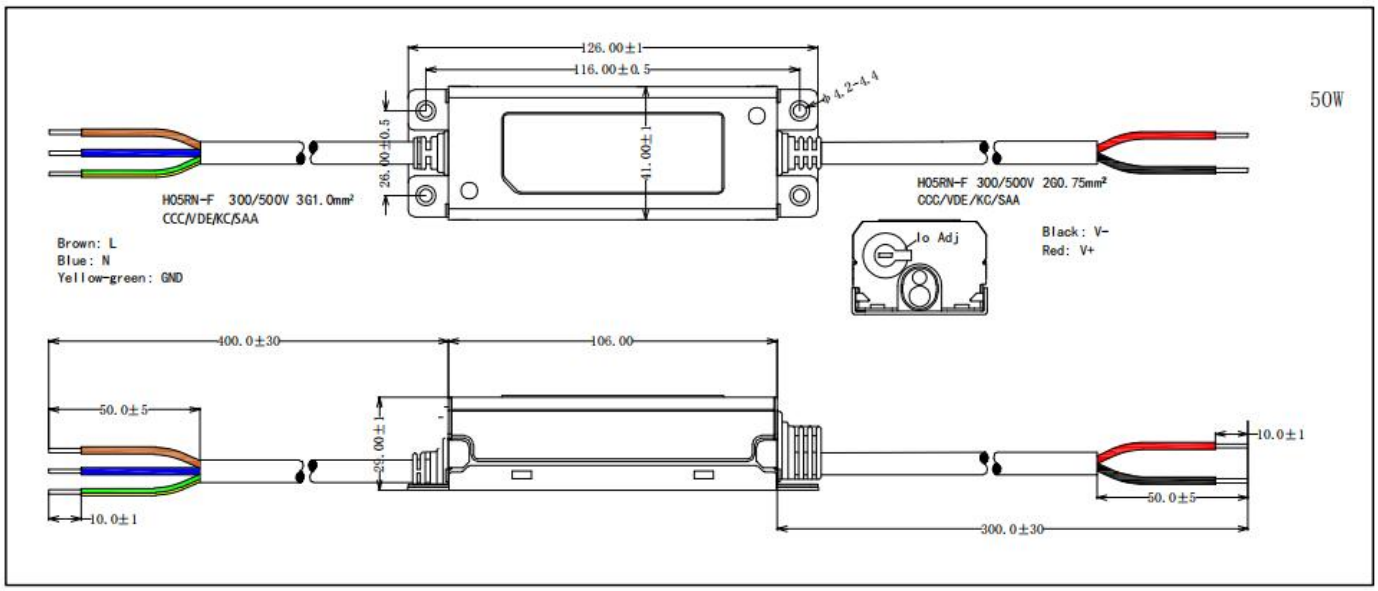
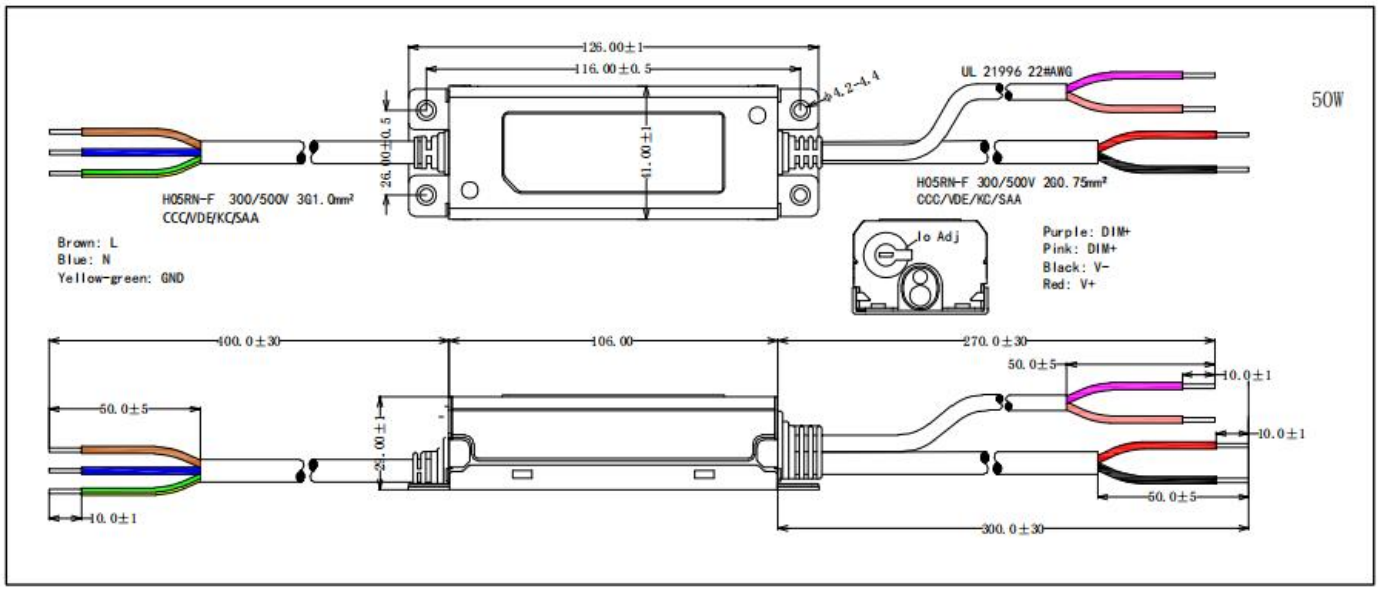
8. Dimension (Unit：mm)

XC50W500-1200:



XC50W500-1200 BH:



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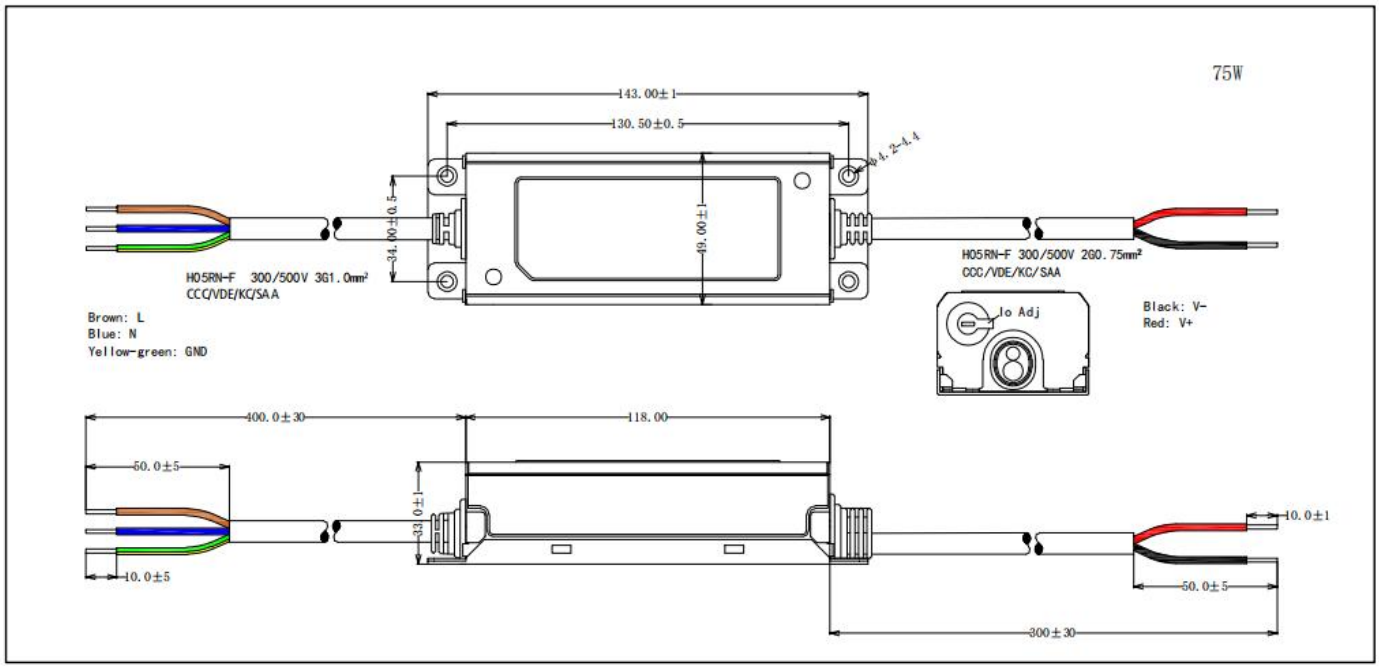
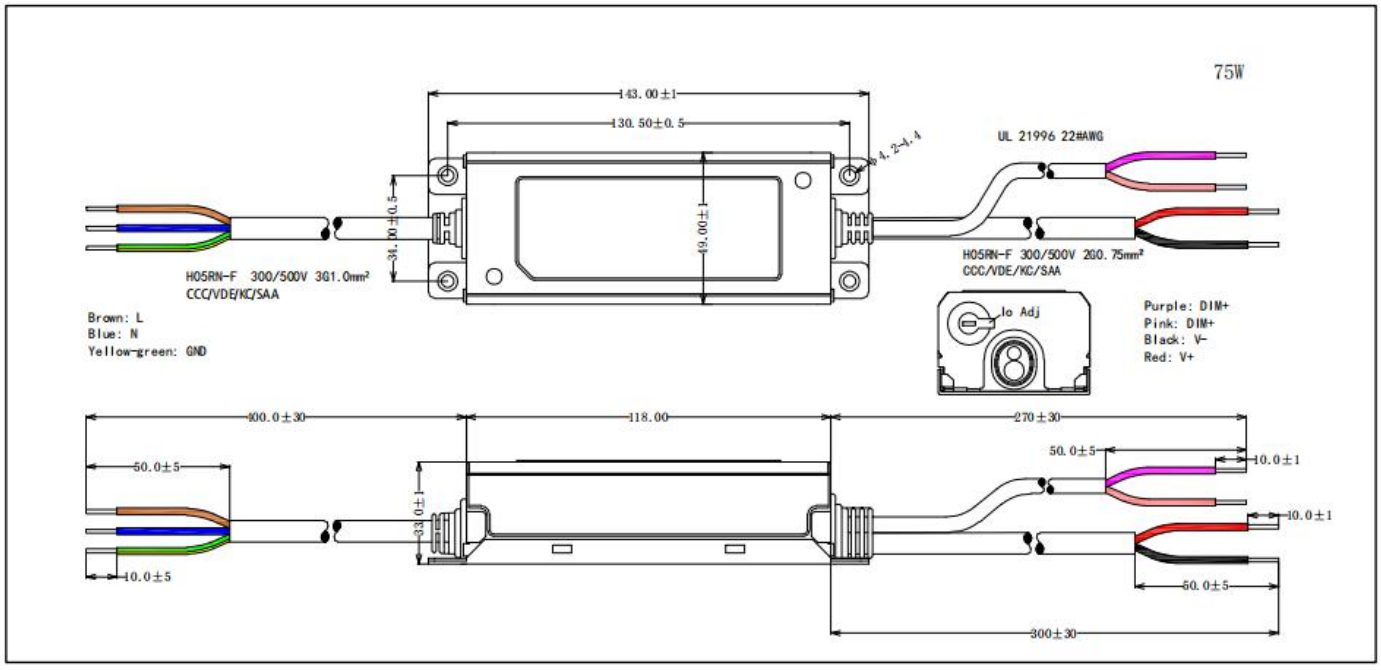
XC75W900-1800 :



XC75W900-1800 BH :



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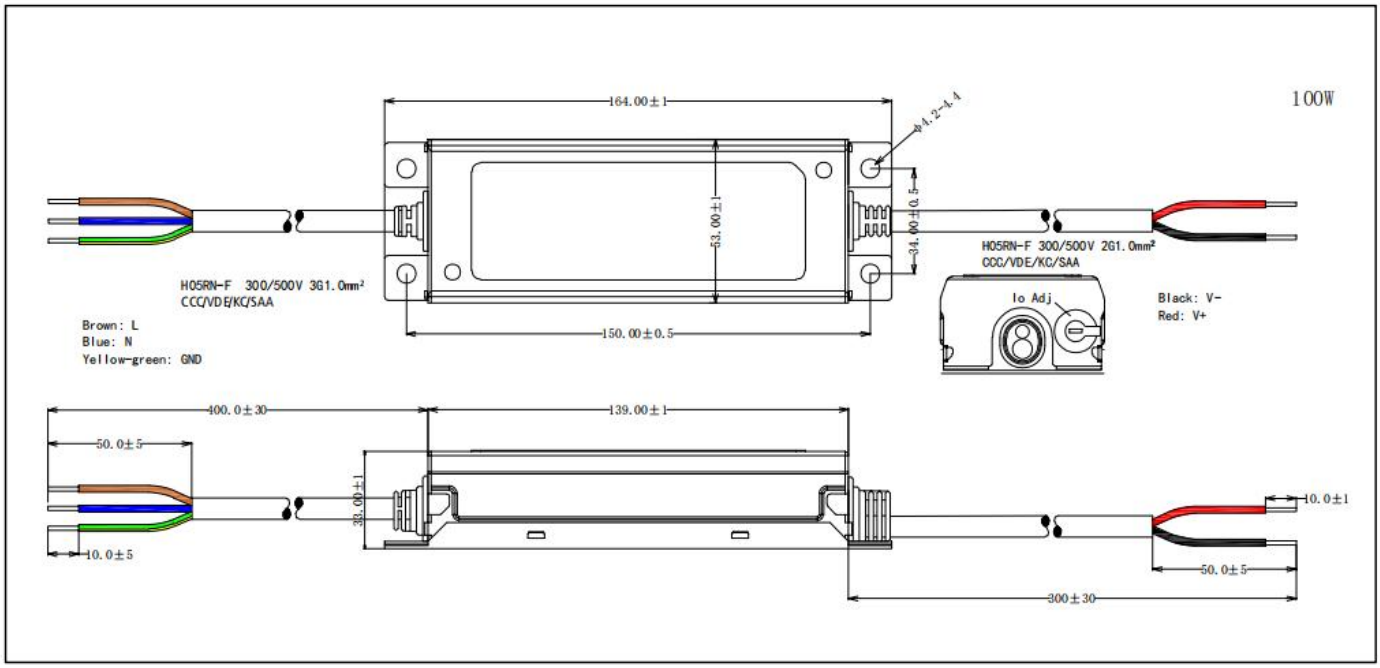
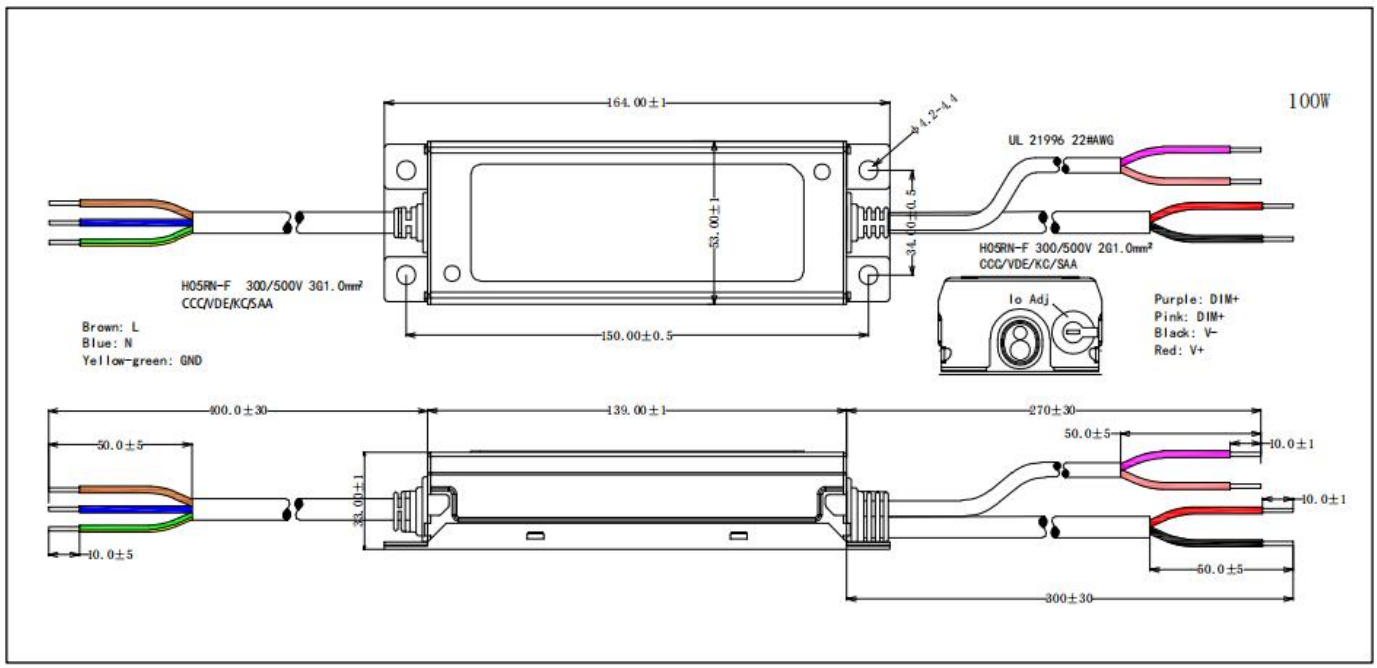
XC100W1300-2500 :



XC100W1300-2500 BH :



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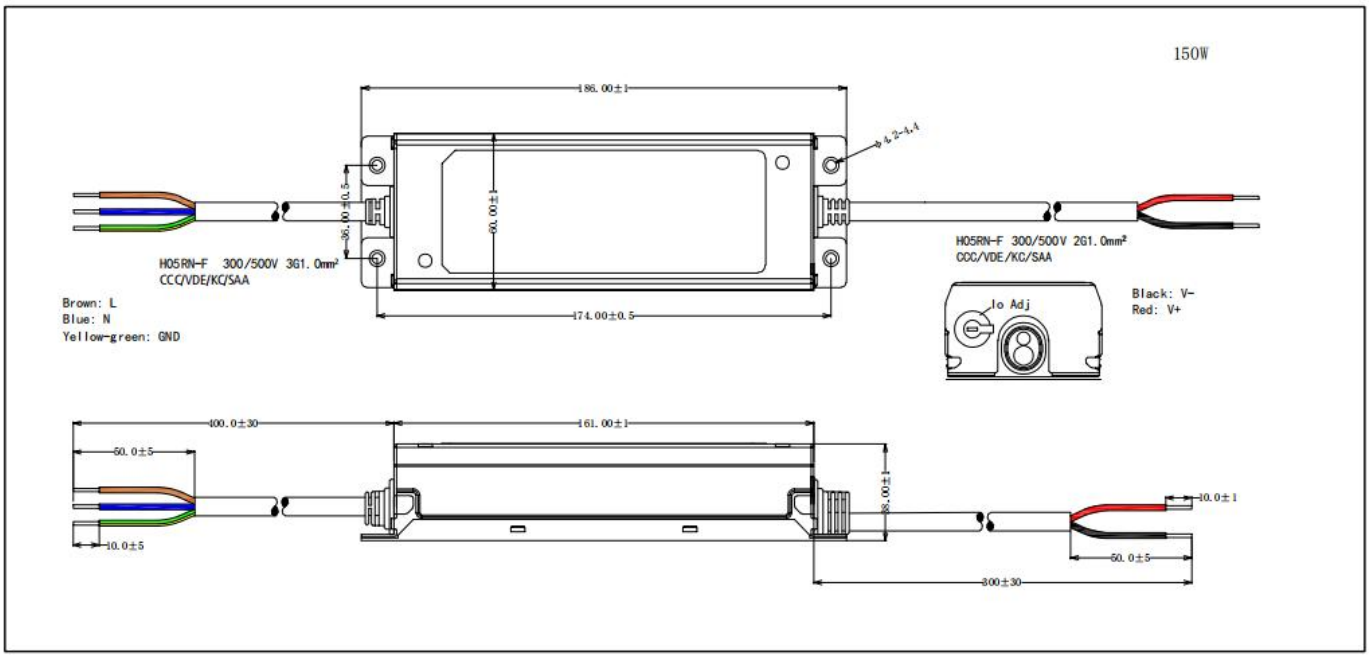
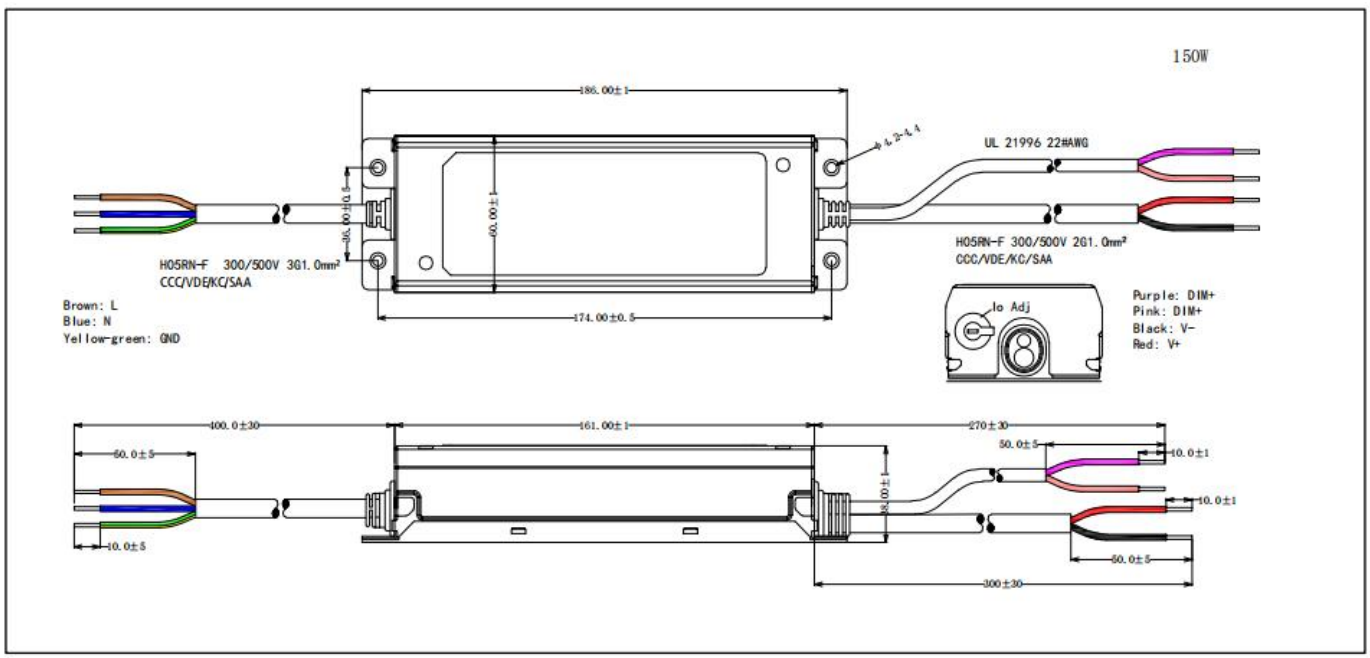
XC150W1800-3600 :



XC150W1800-3600 BH :



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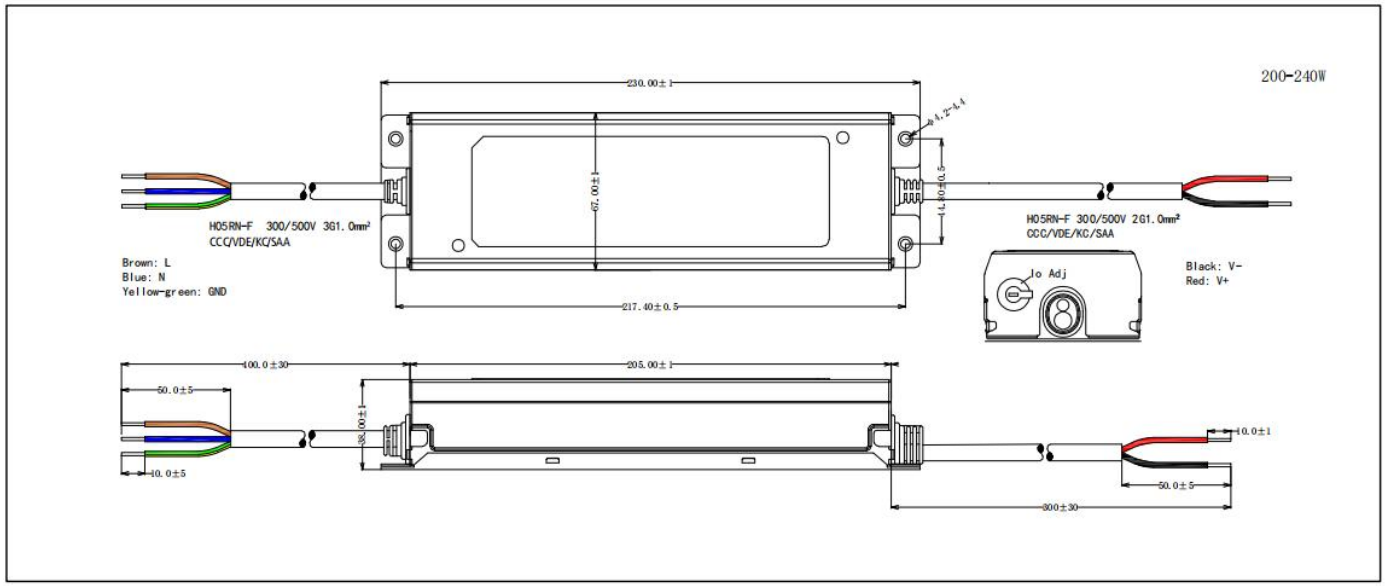
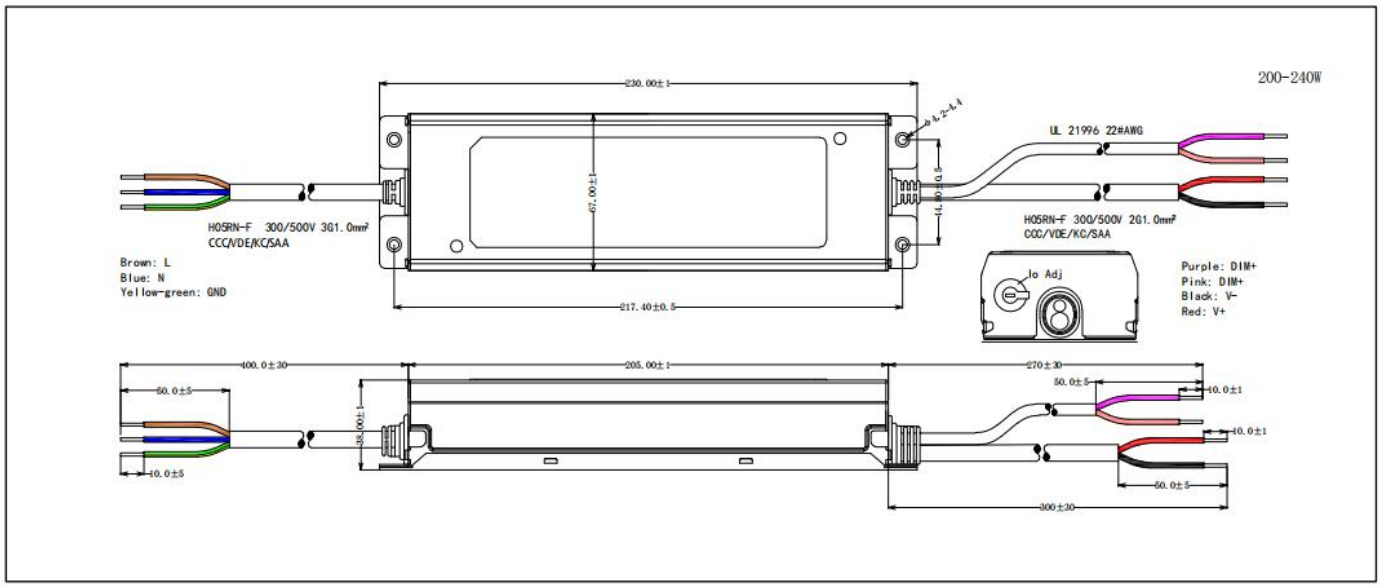
XC200W2400-4800 /XC240W3600-5700 :



XC200W2400-4800 BH /XC240W3600-5700 BH :



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9. Packing information

Model	Carton L*W*H(mm)	Pcs/ Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
XC50W500-1200*	335*300*138mm	32	0. 19	6.08	7.08
XC75W900-1800*	365*235*200mm	30	0.28	8.4	9.5
XC100W1300-2500*	410*270*190mm	30	0.36	10.8	11.9
XC150W1800-3600 *	447*240*200mm	25	0.5	12.5	13.7
XC200W2400-4800 *	410*275*200mm	16	0.85	13.6	14.8
XC240W3600-5700 *	410*275*200mm	16	0.85	13.6	14.8

10. Wiring instructions

• All connections must be kept as short as possible to ensure good EMI behaviour

• Mains leads should be kept apart from LED Driver and other leads (ideally 5 – 10 cm distance)

• Advice the maximum length of output wires is 3 m

• Incorrect wiring can damage LED modules.

• The wiring must be protected against short circuits to earth (sharp edged metals parts, metal cable clips, louver, etc.)

11. REVISION HISTORY

DATE	VER	REMARK
2023-10-24	V1.0	Initial release.

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