LC(20W-80W)NS-AUX

Constant Current Driver

Model: LC(20W-80W)NS-AUX

Model	Input Power	Input Current	Output Power Range	Output Voltage	Output Current	PF	Efficiency（typical）	Max. Output Voltage
LC20W200-350NS-AUX	25W	0.11A	5.0-21.0W	24-105V	200mA	0.95	87.0%	350V
			6.0-21.0W	24-84V	250mA		87.0%	
			7.2-21.6W	24-72V	300mA		87.0%	
			8.4-21.0W	24-60V	350mA		86.5%	
LC40W200-350NS-AUX	45W	0.21A	8-40.0W	40-200V	200mA	0.95	92.0%	350V
			10-40.0W	40-160V	250mA		92.0%	
			12-40.5W	40-135V	300mA		92.0%	
			14-40.3W	40-115V	350mA		91.5%	
LC60W200-350NS-AUX	65W	0.29A	8-44.0W	40-220V	200mA	0.95	93.5%	350V
			10-55.0W	40-220V	250mA		93.5%	
			12-60.0W	40-200V	300mA		93.5%	
			14-59.5W	40-170V	350mA		93.5%	
LC80W350-500NS-AUX	87W	0.39A	14-77.0W	40-220V	350mA	0.95	94.0%	350V
			16-80.0W	40-200V	400mA		94.0%	
			18-79.7W	40-177V	450mA		93.5%	
			20-80.0W	40-160V	500mA		93.5%	

*** Test result @230V, 50Hz, Full Load.**

Advantages	Feature	Applicable Luminaires	Applicable Occasions
-Non SELV,Constant Current Driver,Insulation Class I -4 Current Setting Via DIP Switch -Flicker free -IP20	-PWM dimming,with 5V/12V optional auxiliary power supply -High Power Factor, High Efficiency,Low THD,Wide Output Range -Supports EL Function (100% Output with DC Input) -5-Year Warranty	-tri-proof light -Linear light	-Interior Lighting -Commercial Lighting -Decorative Lighting

1. Parameters

Category	Item	Technical Norm
Input	Rated Input Voltage	220-240V
	Range of Input Voltage	198-264VAC or 198-280VDC
	Frequency	0/50-60Hz
	Input Current	≤0.11A(230VAC，full load) @20W
		≤0.21A(230VAC，full load) @40W
		≤0.29A(230VAC，full load) @60W
		≤0.39A(230VAC，full load) @80W
	Input Power	≤25.0W(230VAC，full load) @20W
		≤45.0W(230VAC，full load) @40W
		≤65.0W(230VAC，full load) @60W
		≤87.0W(230VAC，full load) @80W
	Power Factor	≥0.95 (230VAC, full Load)
	THD	≤15%(230VAC, full Load)
	No-load Power Consumption	≤0.5W @230VAC
	Inrush Current	≤15A/200μs (230VAC, full load) @20W
		≤25A/200μs (230VAC, full load) @40W
		≤45A/200μs (230VAC, full load) @60W
		≤60A/200μs (230VAC, full load) @80W
Output	Output Voltage Range	24-105V @20W (refer to the details on the homepage)
		40-200V @40W (refer to the details on the homepage)
		40-220V @60W (refer to the details on the homepage)
		40-220V @80W (refer to the details on the homepage)
	Max. Output Voltage	350VDC Max.
	Output Current	200-350mA @20W (refer to the details on the homepage)
		200-350mA @40W (refer to the details on the homepage)
		200-350mA @60W (refer to the details on the homepage)
		350-500mA @80W (refer to the details on the homepage)
	Max. Output Power	21.6W @20W (refer to the details on the homepage)
		40.5W @40W (refer to the details on the homepage)
		60.0W @60W (refer to the details on the homepage)
		80.5W @80W (refer to the details on the homepage)
	Efficiency	≥86.5% @20W (refer to the details on the homepage)
		≥91.5% @40W (refer to the details on the homepage)
		≥93.5% @60W (refer to the details on the homepage)
		≥93.5% @80W (refer to the details on the homepage)
	Current Ripple(< 120 Hz)	±5%（Imax-Imin）/（Imax+Imin）
	PstLM	≤1
	SVM	≤0.4

	Current Accuracy	±7%
	Line Regulation	±5%
	Load Regulation	±5%
	Started Delay Time	≤0.5S (230VAC，full load)
	Emergency output coefficient	1
Auxiliary Output	Output Voltage	4.2V-5.8V@5V
		11.2-12.8V@12V
	Output Current	100mA Max
	Voltage Ripple(< 120 Hz)	≤100mV
	PWM interface	Frequency range：500-4000Hz
	Dimming range	5%-100%（If no sensor is connected to the port,the output current is 100%.）
Protection	Short Circuit Protection	Auto Recovery
	Overload Protection	Auto Recovery
	No-load Protection	Auto Recovery
	Over-temperature protection	Auto Recovery
	Insulation voltage	O/P to PE , 1.75KVac/1min I/P to PE , 1.75KVac/1min
	Insulation resistance	O/P to PE , I/P to PE , >100M ohm @ 500VDC
	Leakage current	O/P to PE , I/P to PE , <0.7mA
Environment	Ta/Operation Temperature	-20…+65℃ @20W-60W
		-20…+55℃ @80W
	Ts/Storage Temperature	-25....+85℃
	Tc/Enclosure Temperature	90℃
	Humidity	10%....90%RH
	Atmosphere	86-108KPa
Construction	Connection Method	Push-in Terminal
	Installation	Built-in
	PRI Wire preparation	0.5-1.5□
	SEC Wire preparation	0.5-1.5□
	Dimension	165*30*21mm (L*W*H) @20W&40W&60W
		195*30*21mm (L*W*H) @80W
Standards	Certification	CE、ENEC、EL、EAC、UKCA、SAA
	Safety Standards	EN 61347-1:2015/A1:2021 EN 61347-2-13:2014/A1:2017 EN IEC 62384:2020 AS61347.2.13:2018 AS/NZS61347.1:2016 Inc A1 BS EN 61347-1:2015/A1:2021 BS EN 61347-2-13:2014/A1:2017 BS EN 62493:2015 BS EN IEC 62384:2020
	EMC Standards	EN IEC 55015:2019 EN IEC 55015:2019/A11:2020 EN IEC 61000-3-2:2019/A1:2021 EN 61000-3-3:2013/A2:2021 EN IEC 61547:2023
	Performance	EN62384

	Surge	L-N:1KV；L/N-PE:2KV；
Others	RoHS	Complied to 2011/65/EU
	REACH	EU Regulation (EC) No 1907/2006
	Life Time	50000h @Tc=90℃
	Warranty	5years ,F.R. < 10000ppm
	Noise	≤ 20dB @Background noise ≤15dB ,Interval≥20cm

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. Output Current Setting

LC20W200-350NS-AUX

Output Current	Output Voltage	Dial 1	Dial 2
350mA	24-60Vdc	ON	ON
300mA	24-72Vdc	OFF	ON
250mA	24-84Vdc	ON	OFF
200mA	24-105Vdc	OFF	OFF

LC40W200-350NS-AUX

Output Current	Output Voltage	Dial 1	Dial 2
350mA	40-115Vdc	ON	ON
300mA	40-135Vdc	OFF	ON
250mA	40-160Vdc	ON	OFF
200mA	40-200Vdc	OFF	OFF

LC60W200-350NS-AUX

Output Current	Output Voltage	Dial 1	Dial 2
350mA	40-170Vdc	ON	ON
300mA	40-200Vdc	OFF	ON
250mA	40-220Vdc	ON	OFF
200mA	40-220Vdc	OFF	OFF

LC80W350-500NS-AUX

Output Current	Output Voltage	Dial 1	Dial 2
500mA	40-160Vdc	ON	ON
450mA	40-177Vdc	OFF	ON
400mA	40-200Vdc	ON	OFF
350mA	40-220Vdc	OFF	OFF

3. AUX supply Output Voltage Setting

Output Current	Output Voltage	Dial 3
100mA Max.	5V	ON
100mA Max.	12V	OFF

4. Connected quantities of different current Breaker

LC20W200-350NS-AUX

TYPE	Connected quantities of different current Breaker						Input Voltage (V)	Inrush Current (A)	Time (μs)
	current（A）	10	13	16	20	25			
	Installation wire diameter	1.5mm²	2.5mm²	2.5mm²	4mm²	4mm²			
TYPE B		40	52	64	80	100	@230VAC	15	300
TYPE C		64	83	102	128	160			
TYPE D		102	133	164	205	256			

LC40W200-350NS-AUX

TYPE	Connected quantities of different current Breaker						Input Voltage (V)	Inrush Current (A)	Time (μs)
	current（A）	10	13	16	20	25			
	Installation wire diameter	1.5mm²	2.5mm²	2.5mm²	4mm²	4mm²			
TYPE B		24	31	38	48	60	@230VAC	25	200
TYPE C		38	50	61	77	96			
TYPE D		61	80	98	123	154			

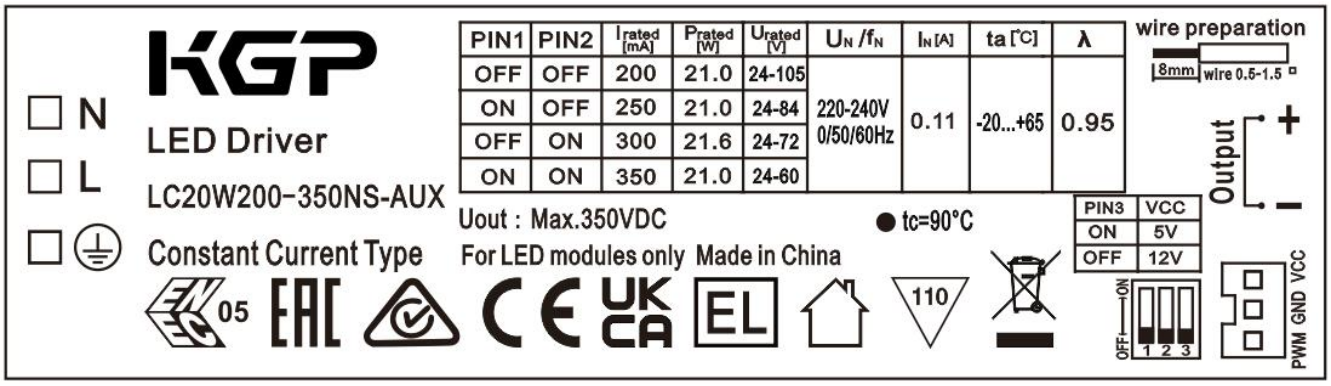
LC60W200-350NS-AUX

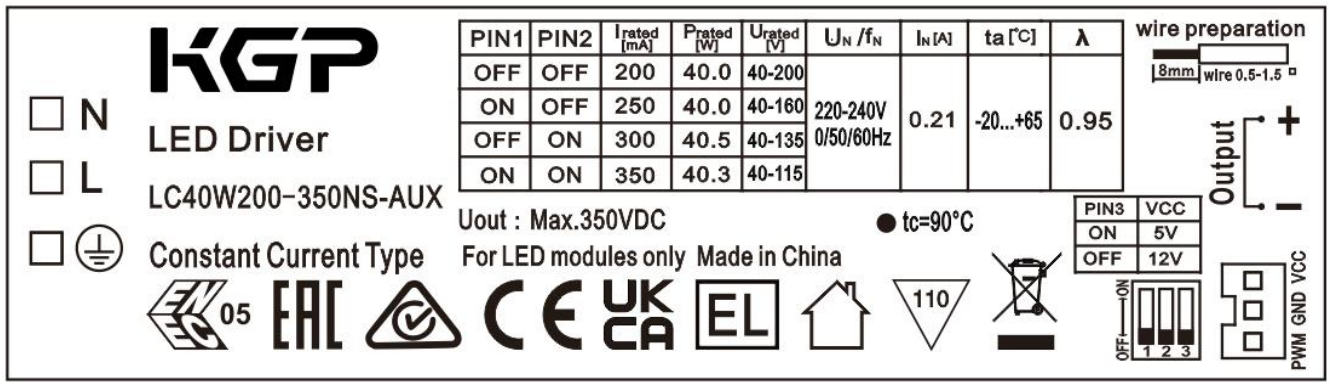
TYPE	Connected quantities of different current Breaker						Input Voltage (V)	Inrush Current (A)	Time (μs)
	current（A）	10	13	16	20	25			
	Installation wire diameter	1.5mm²	2.5mm²	2.5mm²	4mm²	4mm²			
TYPE B		13	17	21	27	33	@230VAC	45	200
TYPE C		21	28	34	43	53			
TYPE D		34	44	55	68	85			

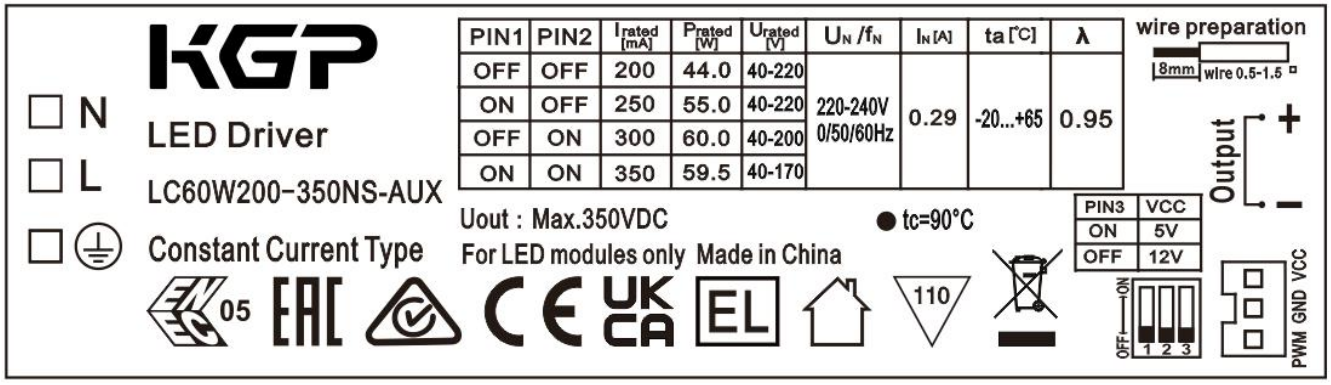
LC80W350-500NS-AUX

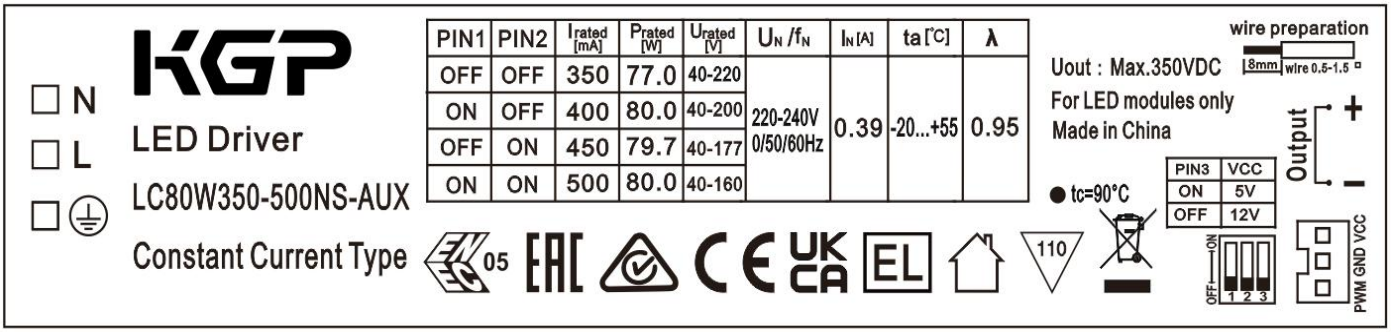
TYPE	Connected quantities of different current Breaker						Input Voltage (V)	Inrush Current (A)	Time (μs)
	current（A）	10	13	16	20	25			
	Installation wire diameter	1.5mm²	2.5mm²	2.5mm²	4mm²	4mm²			
TYPE B		10	13	16	20	25	@230VAC	60	200
TYPE C		16	21	26	32	40			
TYPE D		26	33	41	51	64			

5. Label


N
L
LED Driver
LC20W200-350NS-AUX
Constant Current Type
PIN1 PIN2 Irated [mA] Prated [W] Urated [V] UN /fN IN [A] ta [°C] λ
OFF OFF 200 21.0 24-105
ON OFF 250 21.0 24-84
OFF ON 300 21.6 24-72
ON ON 350 21.0 24-60
220-240V 0/50/60Hz
0.11
-20...+65
0.95
Uout : Max.350VDC
For LED modules only Made in China
tc=90°C
wire preparation
8mm wire 0.5-1.5
Output + −
PIN3 VCC
ON 5V
OFF 12V
ON OFF 1 2 3
PWM GND VCC
110


N
L
LED Driver
LC40W200-350NS-AUX
Constant Current Type
PIN1 PIN2 Irated [mA] Prated [W] Urated [V] UN /fN IN [A] ta [°C] λ
OFF OFF 200 40.0 40-200
ON OFF 250 40.0 40-160
OFF ON 300 40.5 40-135
ON ON 350 40.3 40-115
220-240V 0/50/60Hz
0.21
-20...+65
0.95
Uout : Max.350VDC
For LED modules only Made in China
tc=90°C
wire preparation
8mm wire 0.5-1.5
Output + −
PIN3 VCC
ON 5V
OFF 12V
ON OFF 1 2 3
PWM GND VCC
110

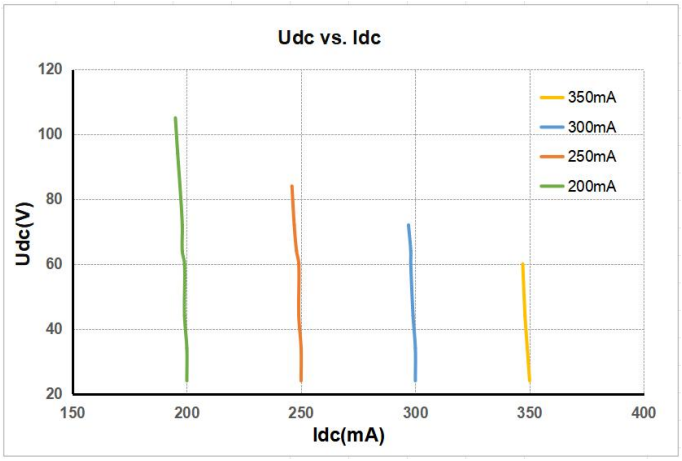

N
L
LED Driver
LC60W200-350NS-AUX
Constant Current Type
PIN1 PIN2 Irated [mA] Prated [W] Urated [V] UN /fN IN [A] ta [°C] λ
OFF OFF 200 44.0 40-220
ON OFF 250 55.0 40-220
OFF ON 300 60.0 40-200
ON ON 350 59.5 40-170
220-240V 0/50/60Hz
0.29
-20...+65
0.95
Uout : Max.350VDC
For LED modules only Made in China
tc=90°C
wire preparation
8mm wire 0.5-1.5
Output + −
PIN3 VCC
ON 5V
OFF 12V
ON OFF 1 2 3
PWM GND VCC
110


N
L
LED Driver
LC80W350-500NS-AUX
Constant Current Type
PIN1 PIN2 Irated [mA] Prated [W] Urated [V] UN /fN IN [A] ta [°C] λ
OFF OFF 350 77.0 40-220
ON OFF 400 80.0 40-200
OFF ON 450 79.7 40-177
ON ON 500 80.0 40-160
220-240V 0/50/60Hz
0.39
-20...+55
0.95
Uout : Max.350VDC
For LED modules only
Made in China
tc=90°C
wire preparation
8mm wire 0.5-1.5
Output + −
PIN3 VCC
ON 5V
OFF 12V
ON OFF 1 2 3
PWM GND VCC
110

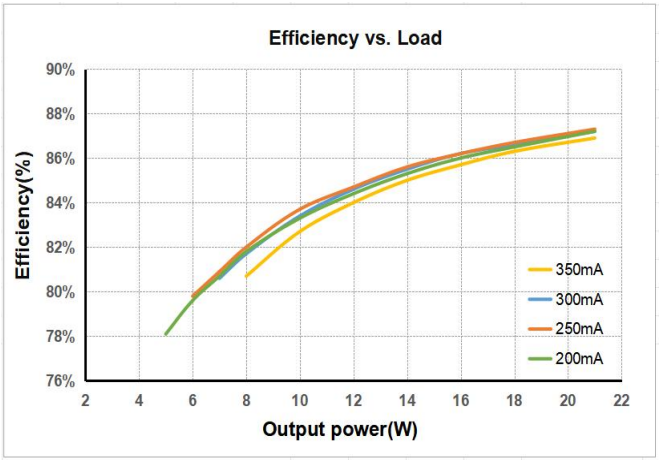
6. Electrical values

LC20W200-350NS--AUX:

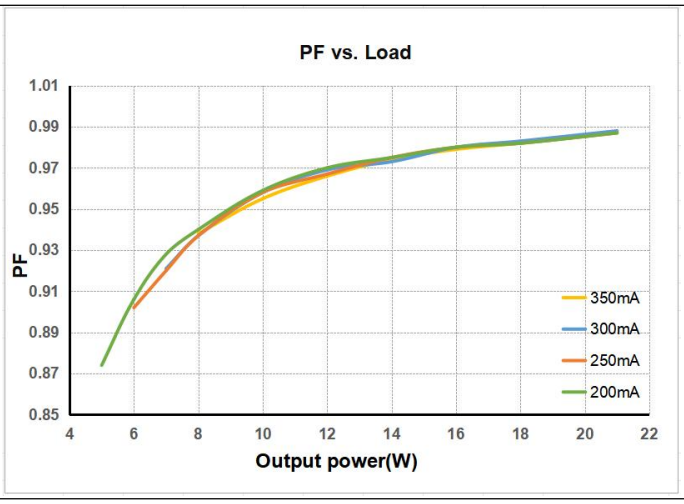
Udc vs. Idc



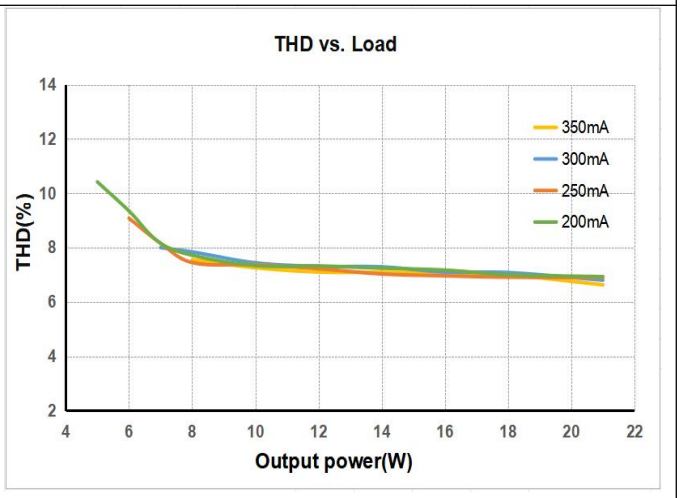
Efficiency vs. Load



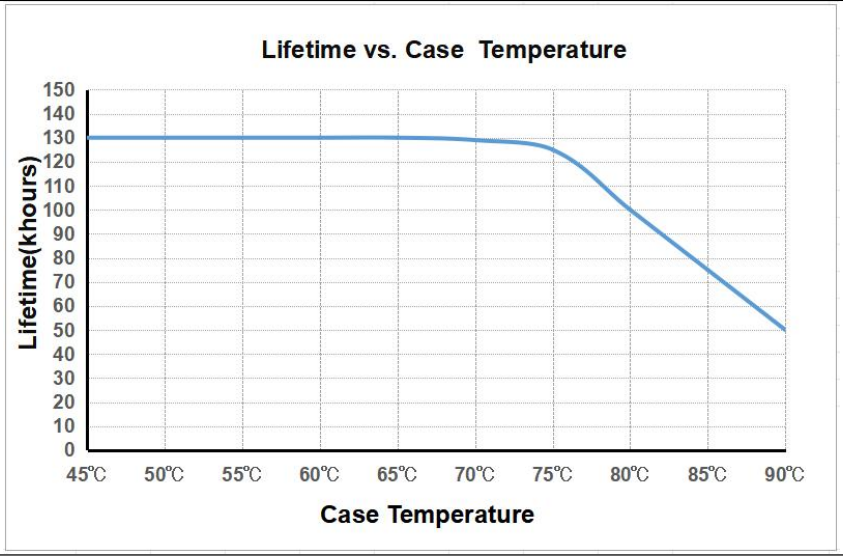
PF vs. Load



THD vs. Load



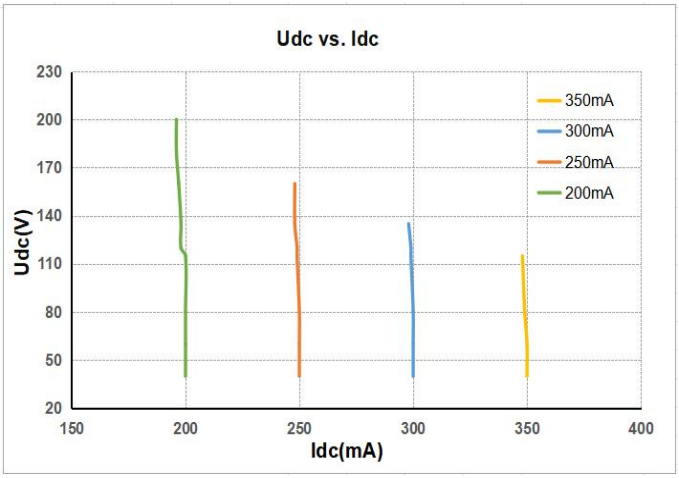
Lifetime vs. Case Temperature



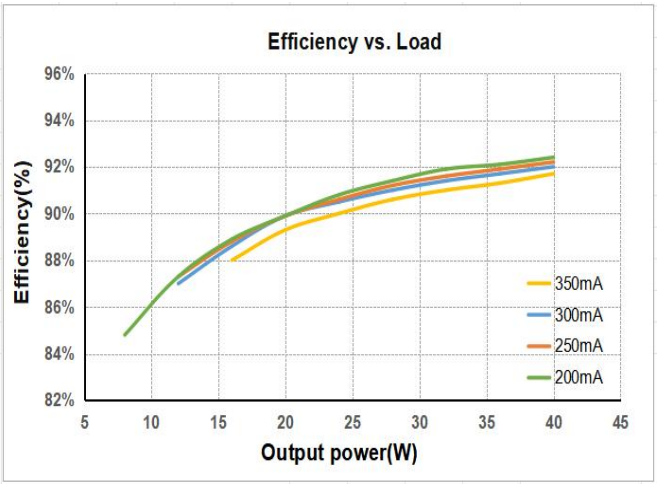
LC(20W-80W)NS-AUX

LC40W200-350NS-AUX:

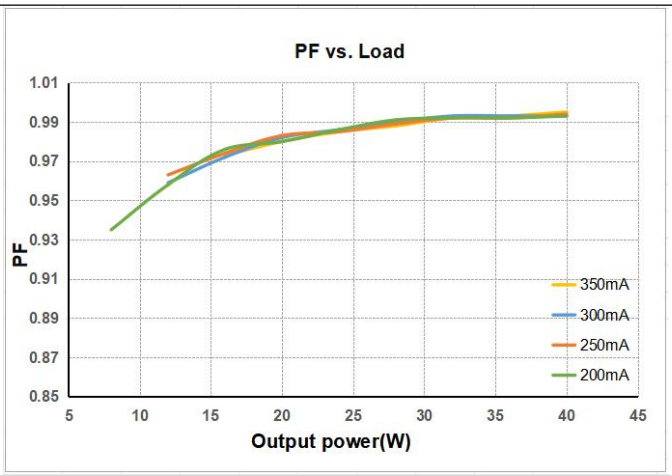
Udc vs. Idc



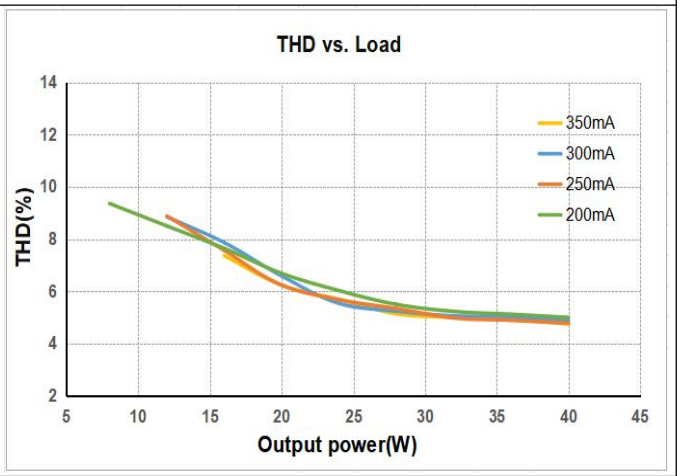
Efficiency vs. Load



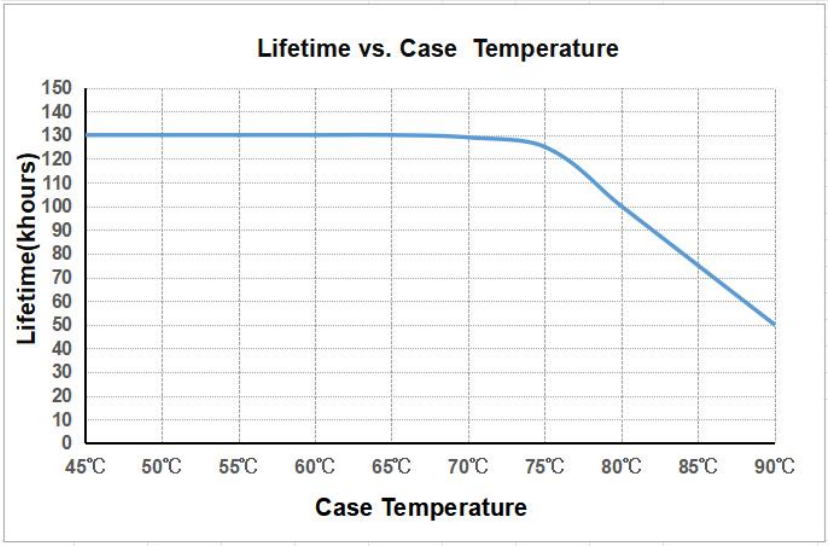
PF vs. Load



THD vs. Load

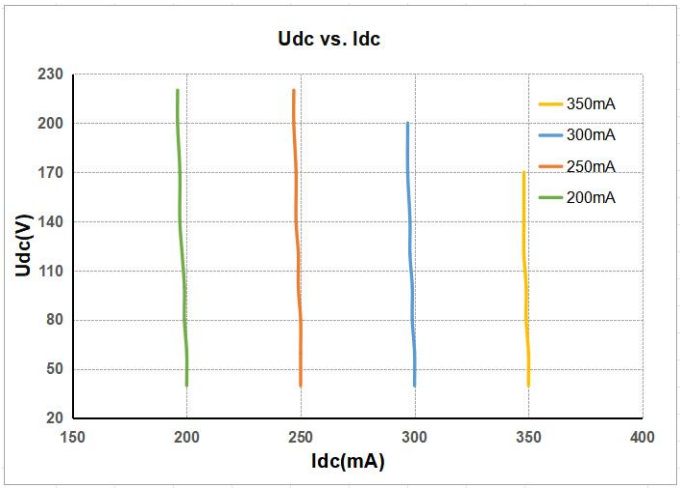


Lifetime vs. Case Temperature

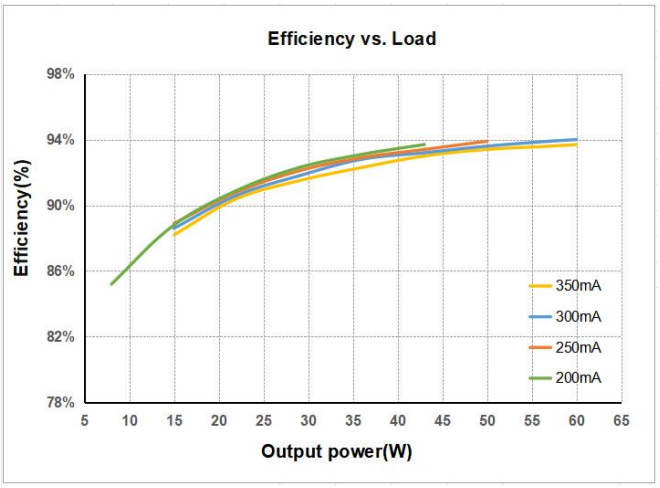


LC60W200-350NS-AUX:

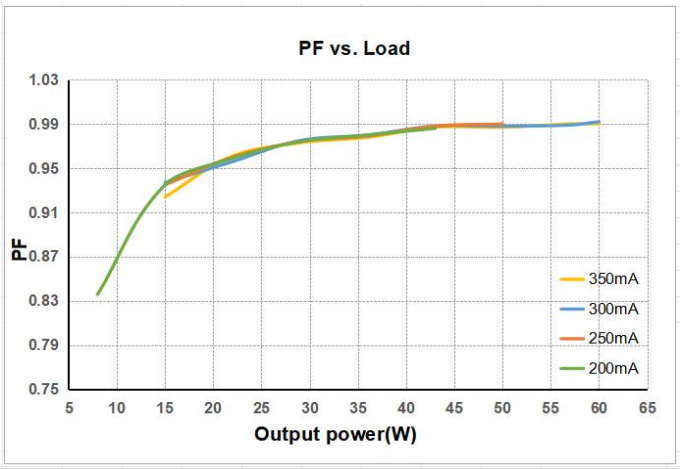
Udc vs. Idc



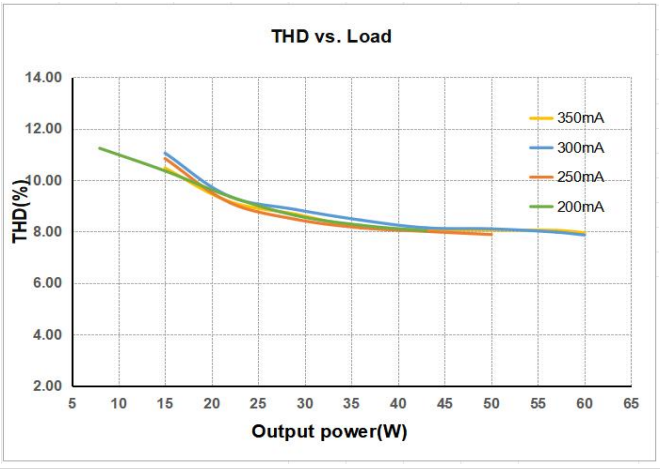
Efficiency vs. Load



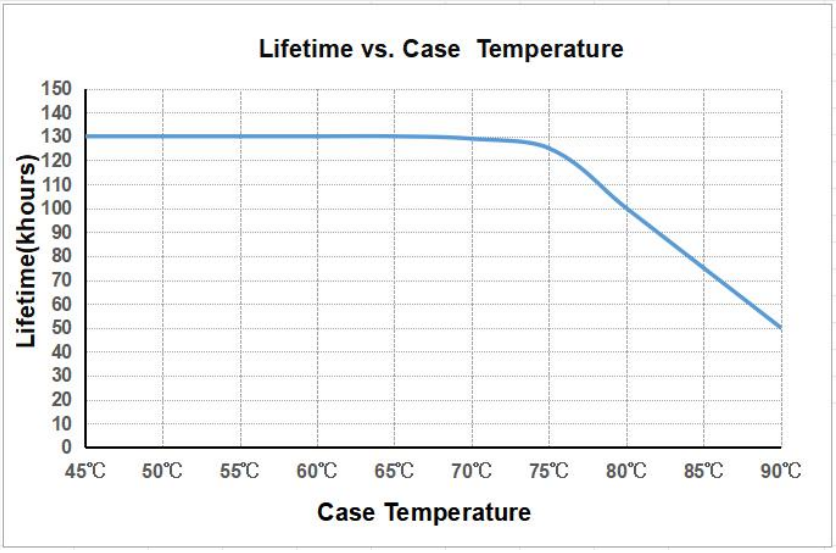
PF vs. Load



THD vs. Load

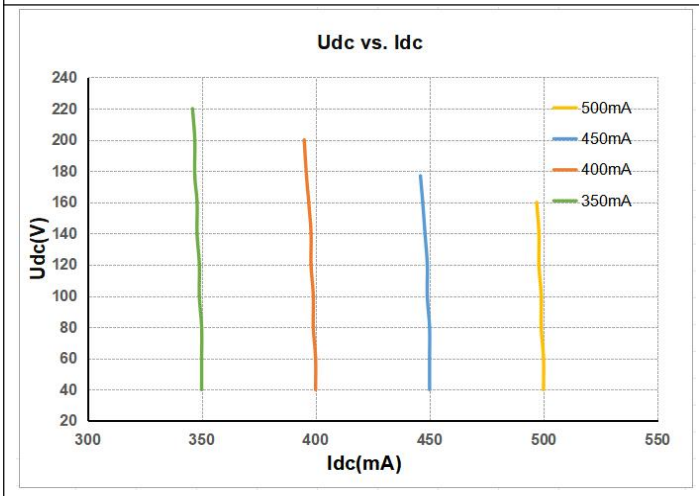


Lifetime vs. Case Temperature

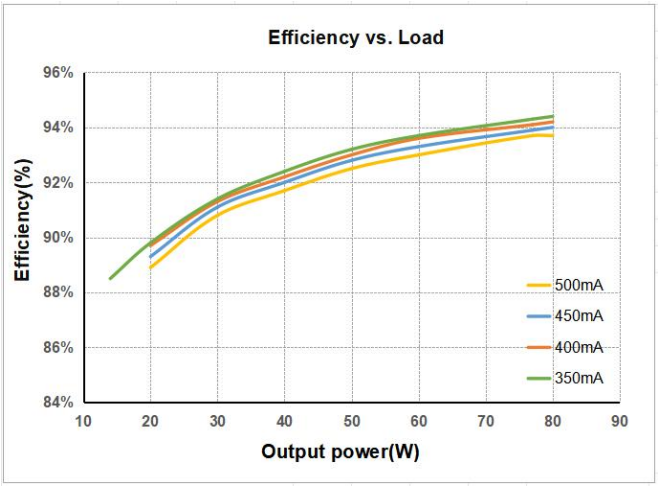


LC80W350-500NS-AUX:

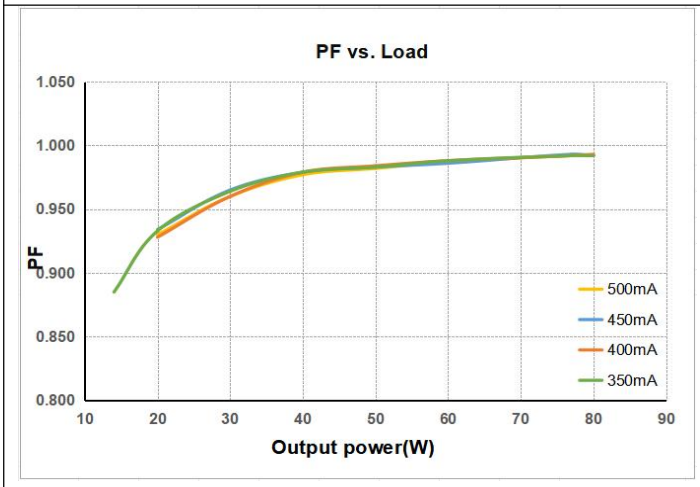
Udc vs. Idc



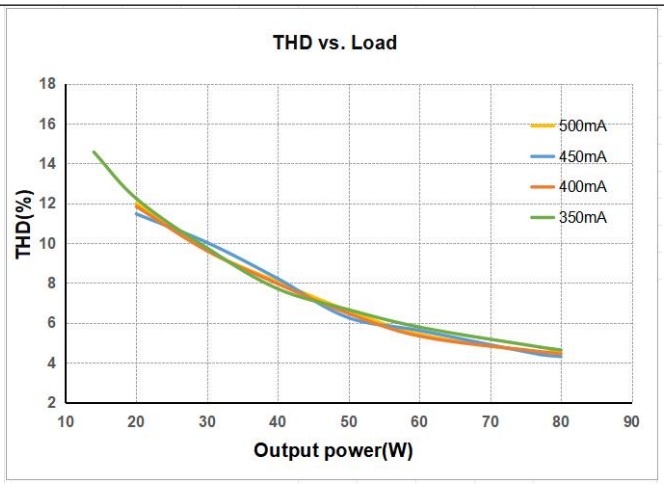
Efficiency vs. Load



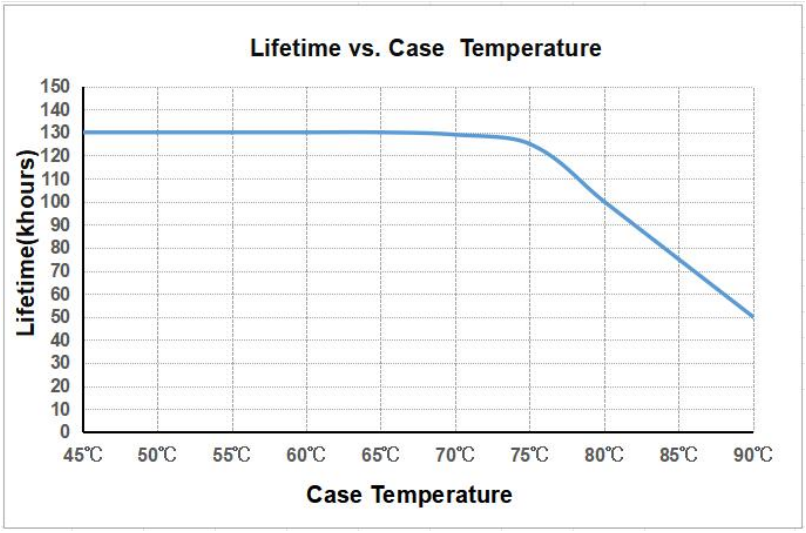
PF vs. Load



THD vs. Load

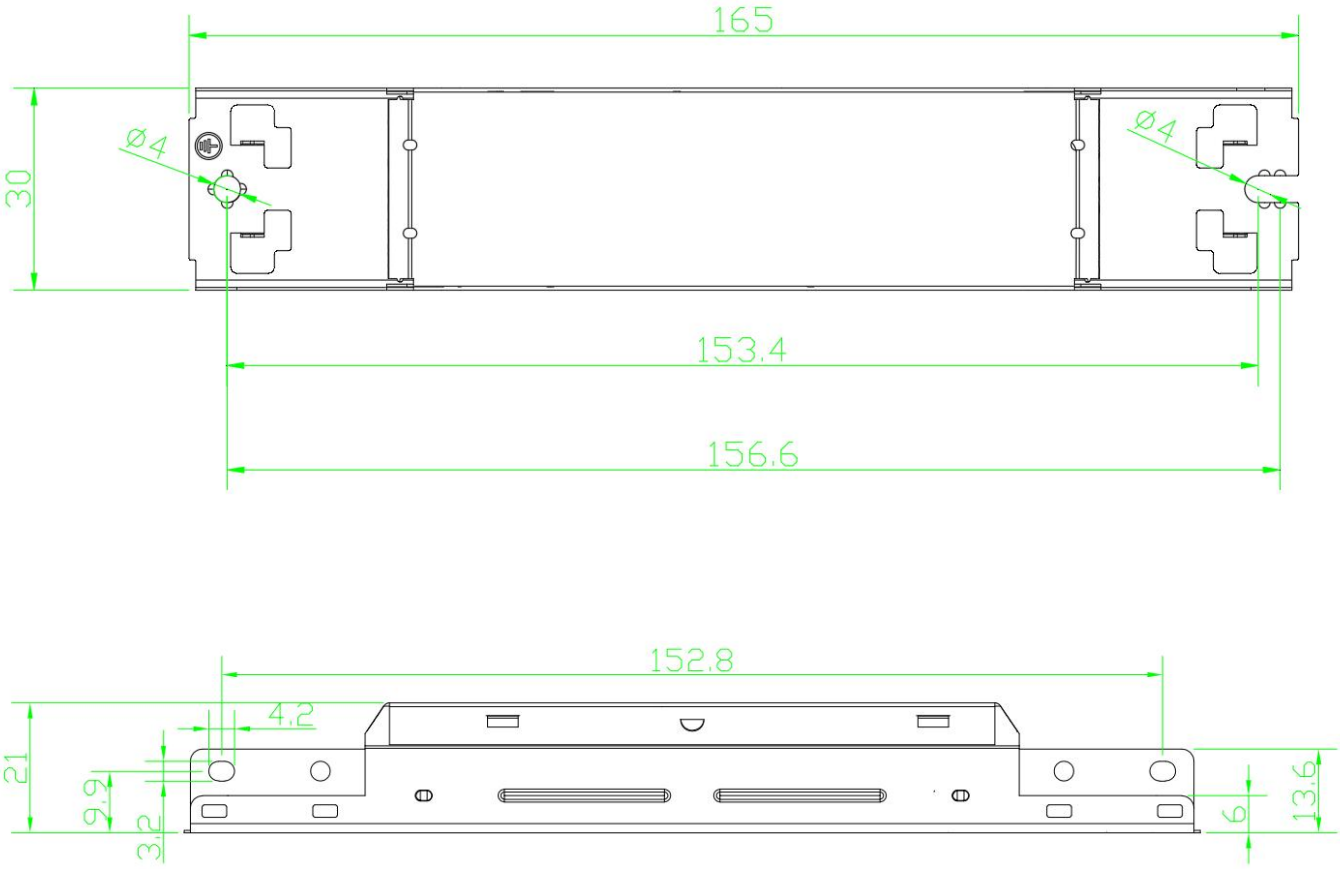


Lifetime vs. Case Temperature



7. Dimension （Unit：mm）

20W&40W&60W



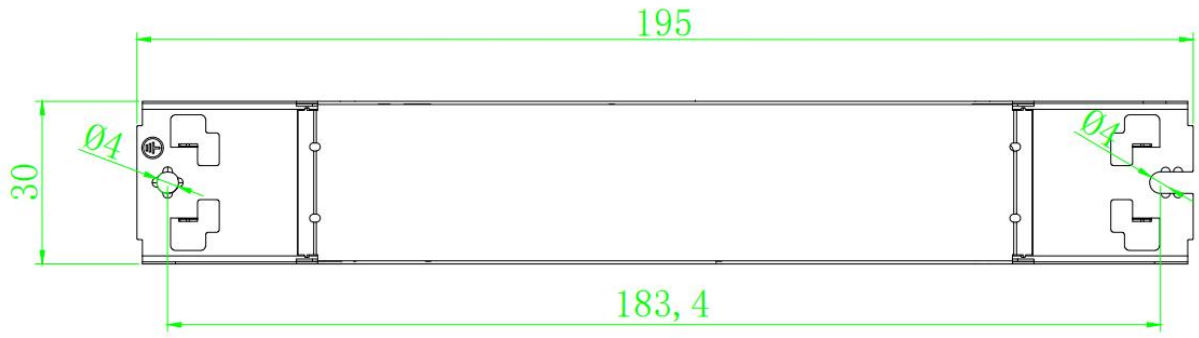
Center-to-Center Distance of Mounting Holes	153.3mm
Locating Hole Diameter	4mm
Housing Length	165mm
Housing Width	30mm
Housing Height	21mm

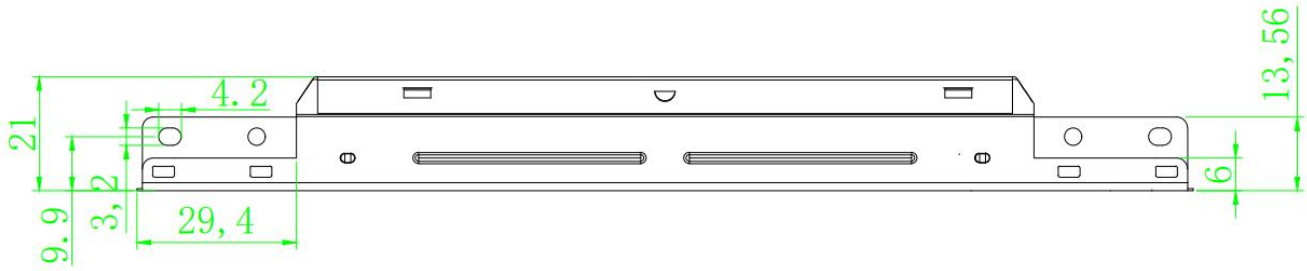
Color&Material

Housing Material	Pre-painted Galvanized Steel Sheet
Housing Color	White

LC(20W-80W)NS-AUX

80W





Center-to-Center Distance of Mounting Holes	183.4mm
Locating Hole Diameter	4mm
Housing Length	195mm
Housing Width	30mm
Housing Height	21mm

Color&Material

Housing Material	Pre-painted Galvanized Steel Sheet
Housing Color	White

8. Packing information

LC20W200-350NS-AUX

Packing way	Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(g)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
Industrial	375*245*220	110	84	9.24	9.69

LC40W200-350NS-AUX

Packing way	Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(g)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
Industrial	375*245*220	110	94	10.34	10.79

LC60W200-350NS-AUX

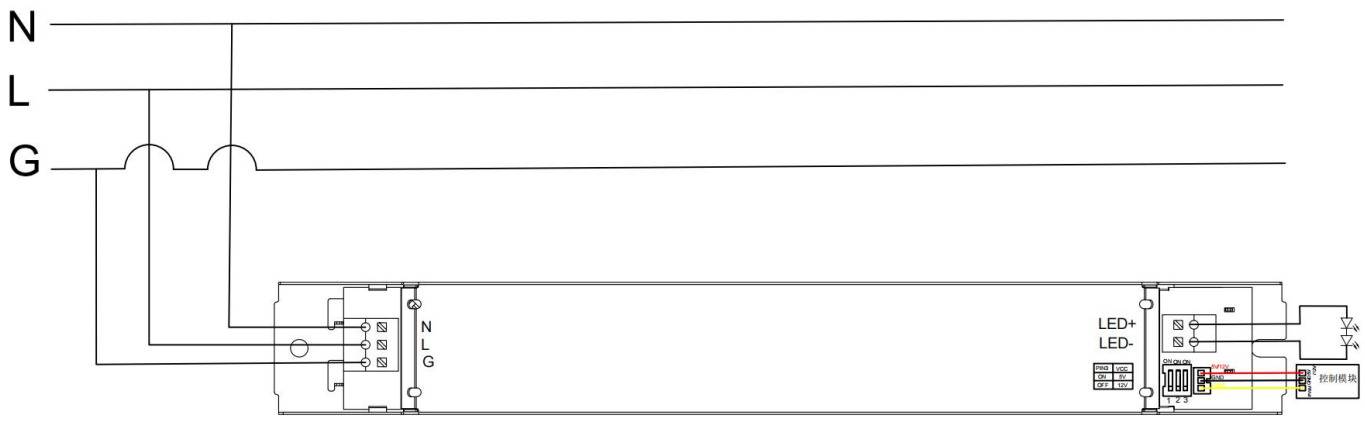
Packing way	Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(g)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
Industrial	375*245*220	110	106	11.66	12.11

LC80W350-500NS-AUX

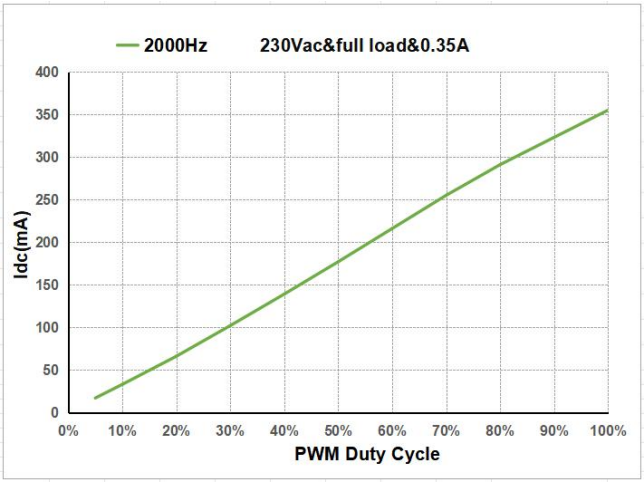
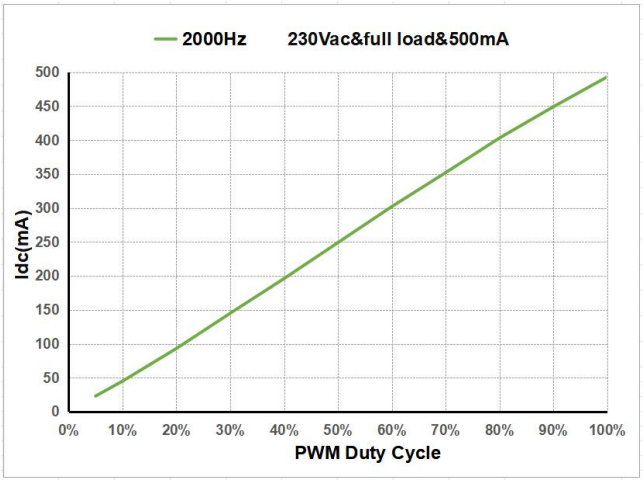
Packing way	Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(g)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
Industrial	375*245*220	85	125	10.63	11.07

9. PWM dimming + auxiliary application (5V/12V PWM)

Wiring Diagram

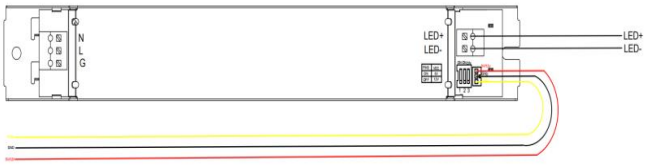


Dimming operation instructions

PWM Dimming operation instructions	20W/40W/60W PWM Dimming Characteristic Curve
-Connect the PWM sensor signal to the PWM port. -Typical PWM max. dimming depth: 5%.Typical hysteris at 5%: ±1% -AUX voltage: Select 5V or 12V by adjusting PIN 3 of the SW2 DIP switch. -PWM compatible input signal freq/voltage range: 500-4000Hz/4.2-12.8V -PWM duty cycle: 0% (off),5% (dimest), 100% (brightest), with the dimming range between 5 and 100%. -If no sensor is connected to the port,the output current is 100%.	 

Recommendations for Dimmer Connection Cable Routing

When routing the sensor cables, stagger the sensor cables and the LED+ and LED- cables. Avoid intertwining them, and shorten the sensor cables (optimally within 20cm). This will help prevent radiation interference between the dimming cables and the output cables. It is recommended that the dimming cables within the lamp be routed as shown in the diagram on the right.



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
- Secondary switching is not permitted（Except for constant voltage）

• 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.)

• The lamp controlgear replies upon the luminaire enclosure for protection against accidental contact with live parts.

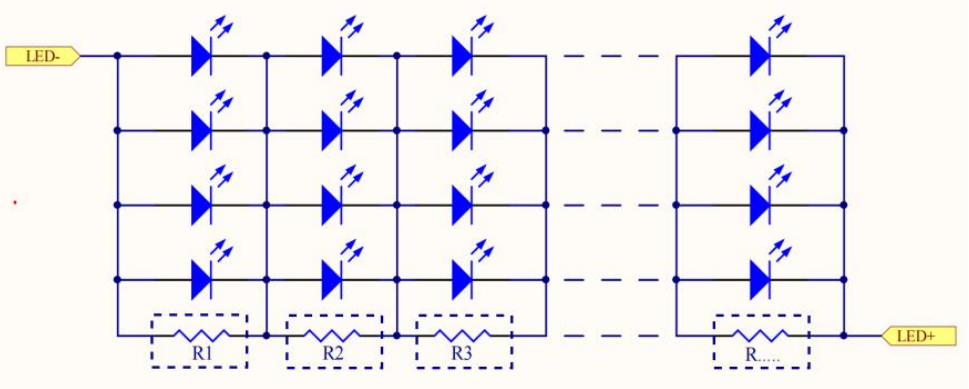
• Hot plug-in is not supported due to residual output voltage of > 0 V up to mains voltage. Danger to life.

• When connecting an LED load, restart the device to activate the LED output.

• This can be done via mains reset or via interface (DALI, DSI, switch DIM).

• When PWM dimming is at 0%, the power supply has no output, but there is parasitic capacitance between the aluminum substrate and the ground wire, causing the lamp to appear dim. To resolve this issue, choose a lamp board with lower parasitic capacitance or add a resistor to the lamp (as shown below).

Parallel connection method of resistors on LED beads



11. Replace LED module

•Mains off

•Remove LED module

•Wait for 30 seconds

•Connect LED module again

•Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs

12. REVISION HISTORY

DATE	REV	REMARK
2025-10-25	V1.0	Initial release.
2025-12-17	V1.1	Update Max. Output Voltage.