LC(20W-150W)NS

Constant Current Driver

Model: LC(20W-150W)NS

Model	Input Power	Input Current	Output Power Range	Output Voltage	Output Current	PF	Efficiency（typical）	No load Voltage
LC20W200-350NS	25W	0.11A	5.0-21.0W	24-105V	200mA	0.95	89.0%	250V
			6.0-21.0W	24-84V	250mA		88.5%	
			7.2-21.6W	24-72V	300mA		88.0%	
			8.4-21.0W	24-60V	350mA		87.5%	
LC40W200-350NS	45W	0.21A	8-40.0W	40-200V	200mA	0.95	93.5%	250V
			10-40.0W	40-160V	250mA		93.0%	
			12-40.5W	40-135V	300mA		92.5%	
			14-40.3W	40-115V	350mA		92.0%	
LC60W200-350NS	65W	0.29A	8-44.0W	40-220V	200mA	0.95	93.0%	250V
			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	87W	0.39A	14-80.5W	40-230V	350mA	0.95	94.0%	250V
			16-80.0W	40-200V	400mA		93.5%	
			18-79.7W	40-177V	450mA		93.0%	
			20-80.0W	40-160V	500mA		93.0%	
LC100W350-500NS	110W	0.49A	14-77W	40-220V	350mA	0.95	93.5%	250V
			16-88W		400mA		94.0%	
			18-99W		450mA		94.5%	
			20-100W	40-200V	500mA		94.0%	
LC150W550-700NS	162W	0.73A	22-121.0W	40-220V	550mA	0.95	94.5%	250V
			24-132.0W		600mA		94.5%	
			26-143.0W		650mA		94.5%	
			28-149.8W	40-214V	700mA		95.0%	

*** 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 -Bipolar Flicker-Free -IP20	-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

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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
		≤0.49A(230VAC，full load) @100W
		≤0.73A(230VAC，full load) @150W
	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
		≤110.0W(230VAC，full load) @100W
		≤162.0W(230VAC，full load) @150W
	Power Factor	≥0.95 (230VAC, full Load)
	THD	≤15%(230VAC, full Load)
	No-load Power Consumption	≤0.5W @230VAC
	Inrush Current	≤15A/300μs (230VAC，full load) @20W
		≤20A/300μs (230VAC，full load) @40W
		≤28A/300μs (230VAC，full load) @60W
		≤45A/300μs (230VAC，full load) @80W
		≤50A/300μs (230VAC，full load) @100W
		≤55A/300μs (230VAC，full load) @150W
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)
		40-230V @80W (refer to the details on the homepage)
		40-220V @100W (refer to the details on the homepage)
		40-220V @150W (refer to the details on the homepage)
	No Load Voltage	250VDC Max.
Output	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)
		350-500mA @100W (refer to the details on the homepage)
		550-700mA @150W (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)
		100W @100W (refer to the details on the homepage)
		149.8W @150W (refer to the details on the homepage)
	Efficiency	≥87.0% @20W (refer to the details on the homepage)
		≥91.5% @40W (refer to the details on the homepage)
		≥92.5% @60W (refer to the details on the homepage)
		≥92.5% @80W (refer to the details on the homepage)
		≥93.5% @100W (refer to the details on the homepage)
		≥94.0% @150W (refer to the details on the homepage)
	Current Ripple(< 120 Hz)	±5%（Imax-Imin）/（Imax+Imin）
	PstLM	≤1
	SVM	≤0.4
	Current Accuracy	±5%
	Line Regulation	±5%
	Load Regulation	±5%
	Started Delay Time	≤0.5S (230VAC，full load)
	Emergency output coefficient	1
Protection	Short Circuit Protection	Auto Recovery
	Overload Protection	Auto Recovery
	No-load Protection	/
	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	I/P to O/P <0.7mA
Environment	Ta/Operation Temperature	-20…+65℃ @20W-60W
		-20…+55℃ @80W-150W
	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
		230*30*21mm (L*W*H) @100W&150W
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.
3.Do not install upside down.

2. Output Current Setting

LC20W200-350NS

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

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

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

Output Current	Output Voltage	Dial 1	Dial 2
500mA	40-160Vdc	ON	ON

450mA	40-177Vdc	OFF	ON
400mA	40-200Vdc	ON	OFF
350mA	40-230Vdc	OFF	OFF

LC100W350-500NS

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

LC150W550-700NS

Output Current	Output Voltage	Dial 1	Dial 2
700mA	40-214Vdc	ON	ON
650mA	40-220Vdc	OFF	ON
600mA	40-220Vdc	ON	OFF
550mA	40-220Vdc	OFF	OFF

3. Connected quantities of different current Breaker

LC20W200-350NS

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

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		30	39	48	60	75	@230VAC	20	300
TYPE C		48	62	77	96	120			
TYPE D		77	100	123	154	192			

LC60W200-350NS

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		21	28	34	43	54	@230VAC	28	300
TYPE C		34	45	55	69	86			
TYPE D		55	71	88	110	137			

LC80W350-500NS

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	300
TYPE C		21	28	34	43	53			
TYPE D		34	44	55	68	85			

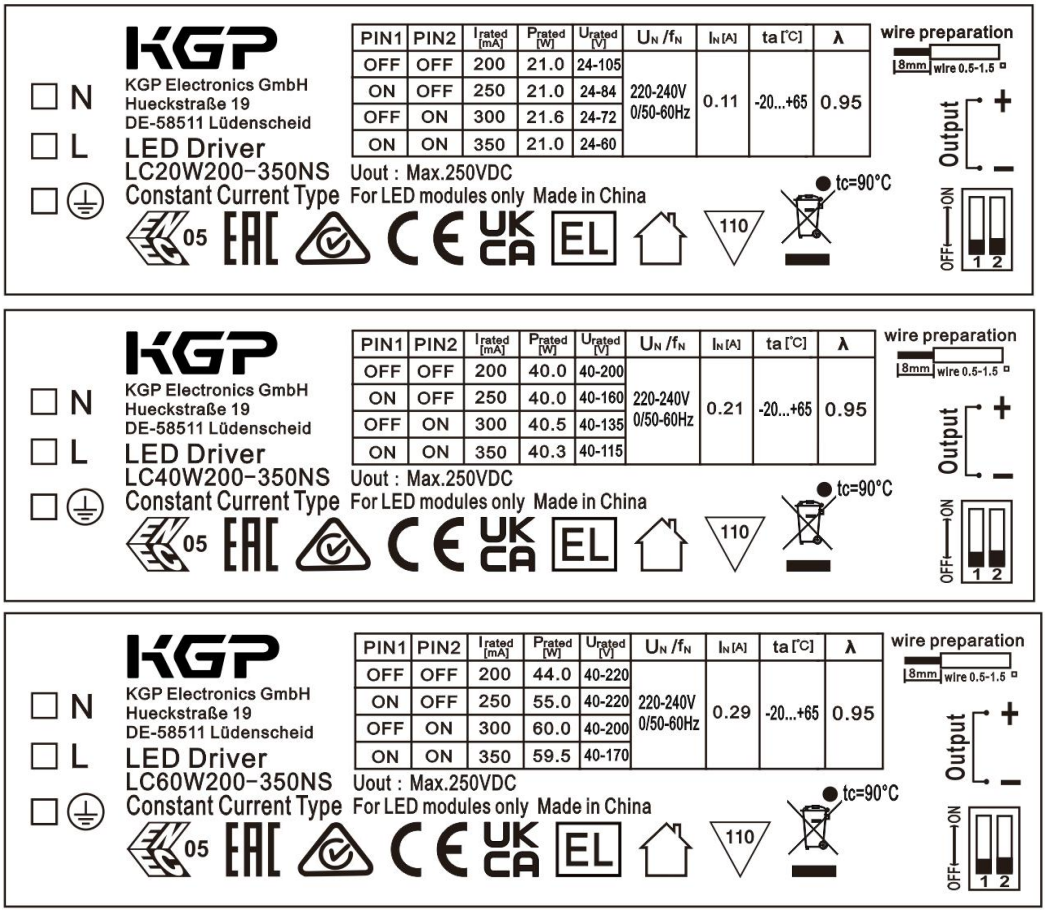
LC100W350-500NS

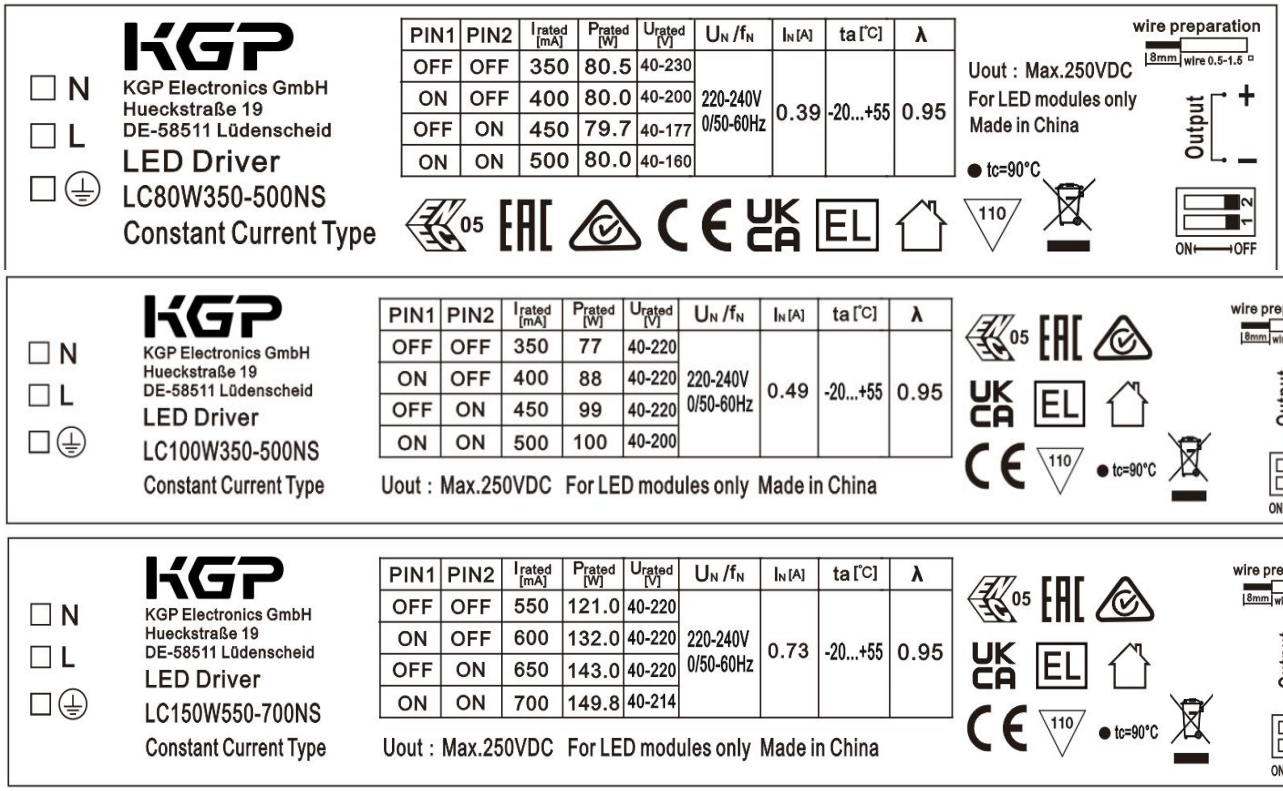
TYPE	Connected quantities of different current Breaker					Input Voltage (V)	Inrush Current (A)	Time (μs)
	current（A）	10	13	16	20	25			
	Installation wire diameter	1.5mm²	2.5mm²	2.5mm²	4mm²	4mm²			
TYPE B		12	16	19	24	30	@230VAC	50	300
TYPE C		19	25	31	38	48			
TYPE D		31	40	49	61	77			

LC150W550-700NS

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		11	14	17	22	27	@230VAC	55	300
TYPE C		17	23	28	35	44			
TYPE D		28	36	45	56	70			

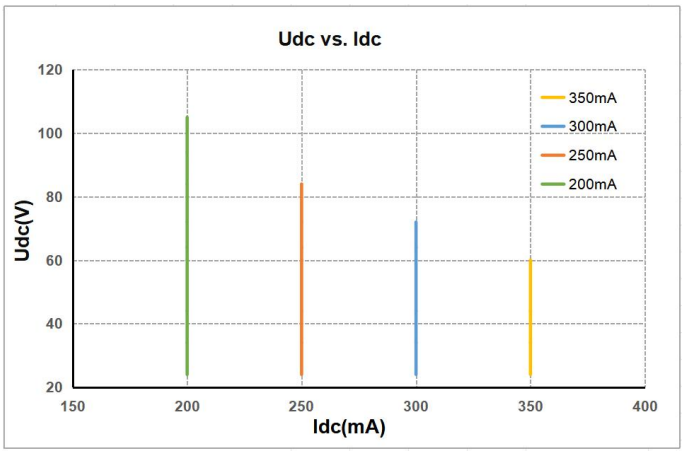
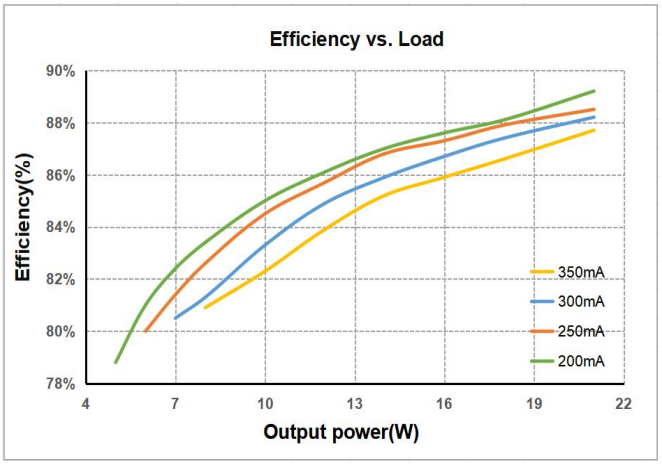
4. Label

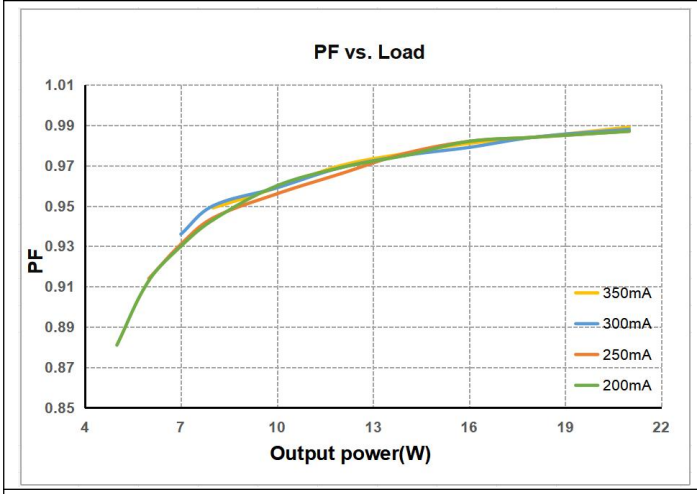


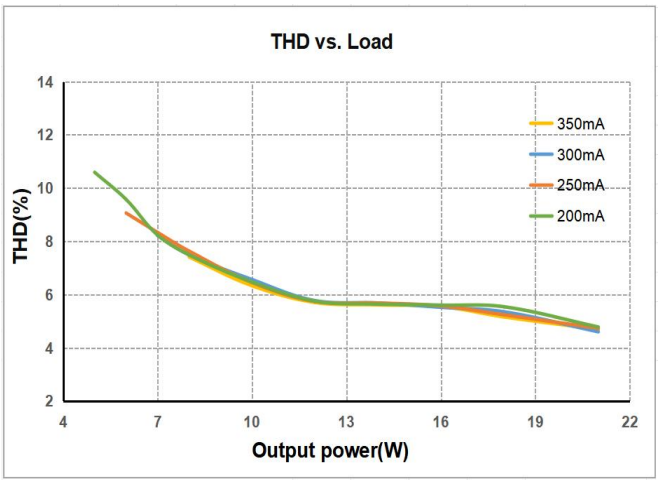


5. Electrical values

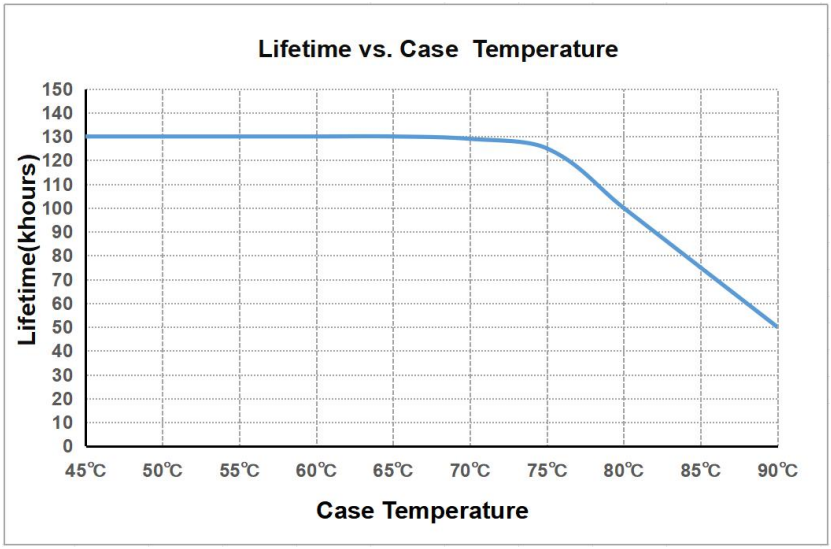
LC20W200-350NS:

Udc vs. Idc	Efficiency vs. Load
	
PF vs. Load	THD vs. Load



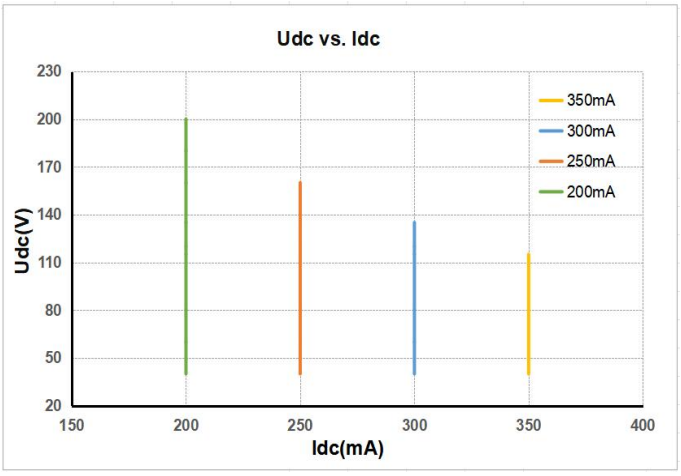


Lifetime vs. Case Temperature



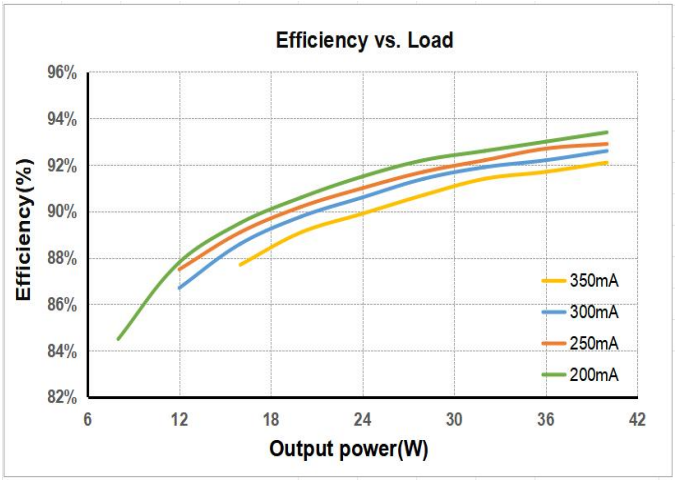
LC40W200-350NS:

Udc vs. Idc



PF vs. Load

Efficiency vs. Load



THD vs. Load

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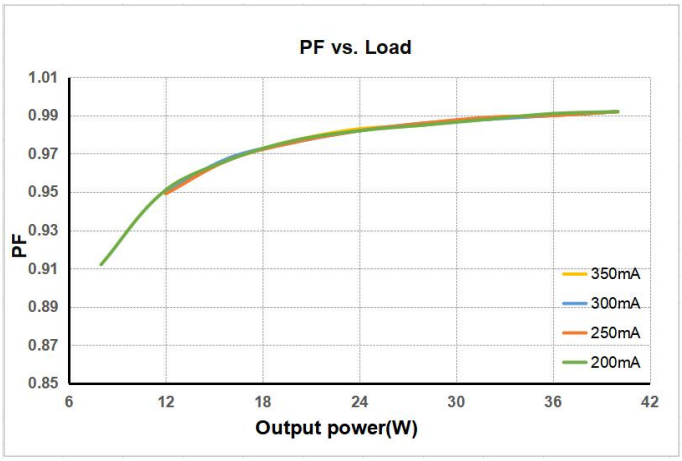
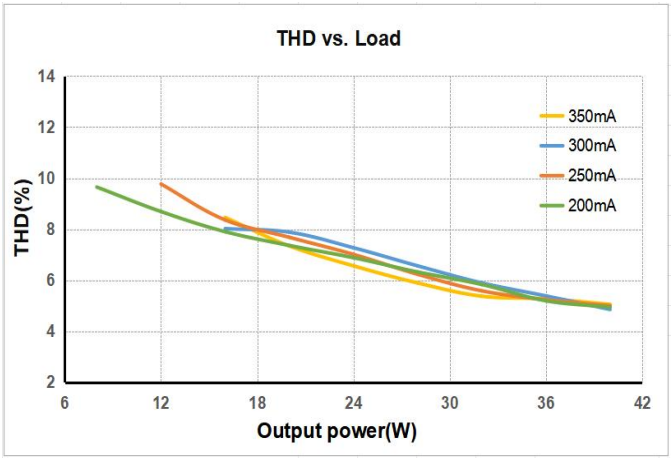
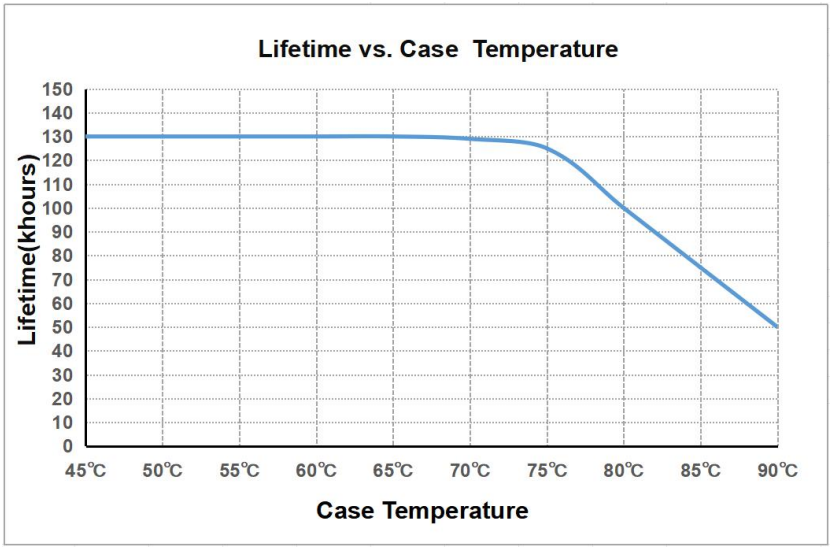
LC(20W-150W)NS

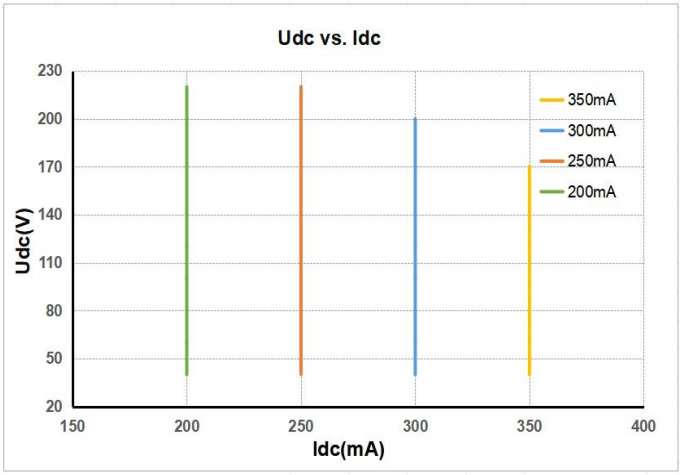
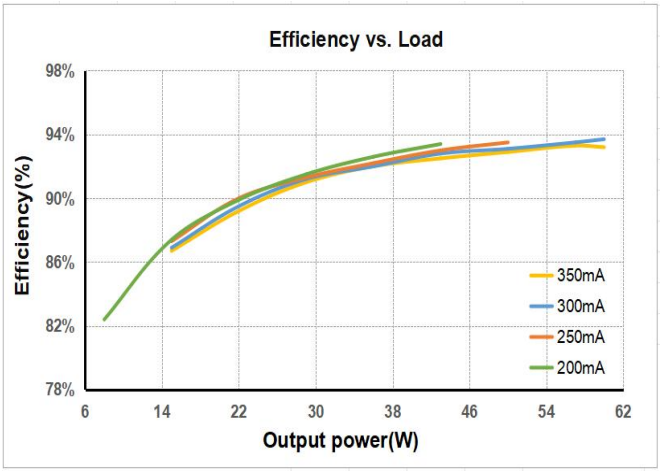




Lifetime vs. Case Temperature



LC60W200-350NS:

Udc vs. Idc	Efficiency vs. Load
	
PF vs. Load	THD vs. Load

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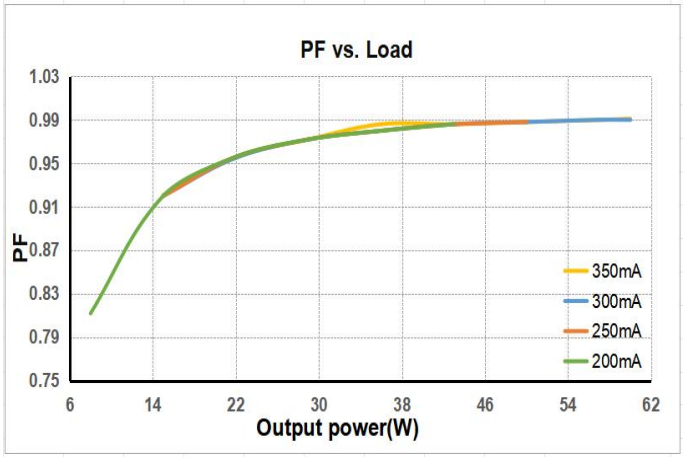
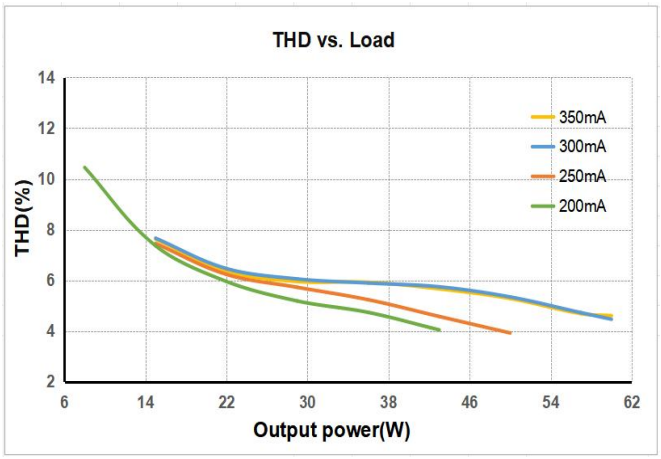
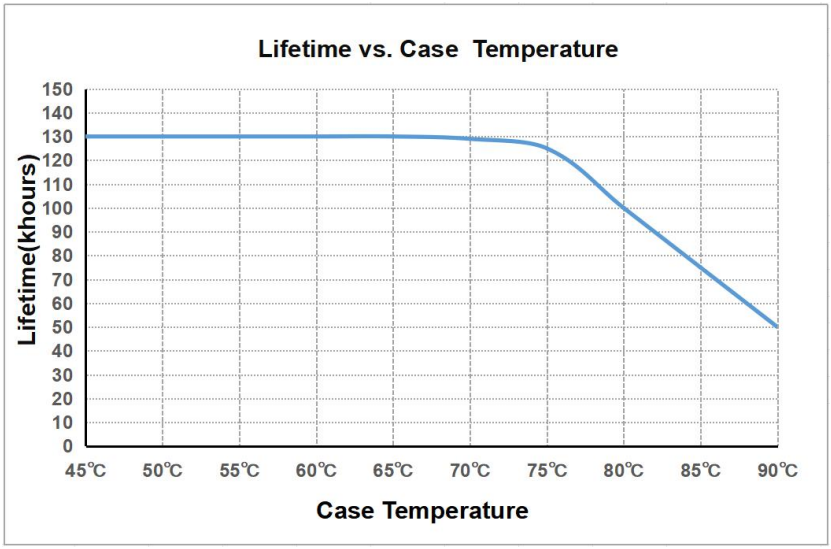


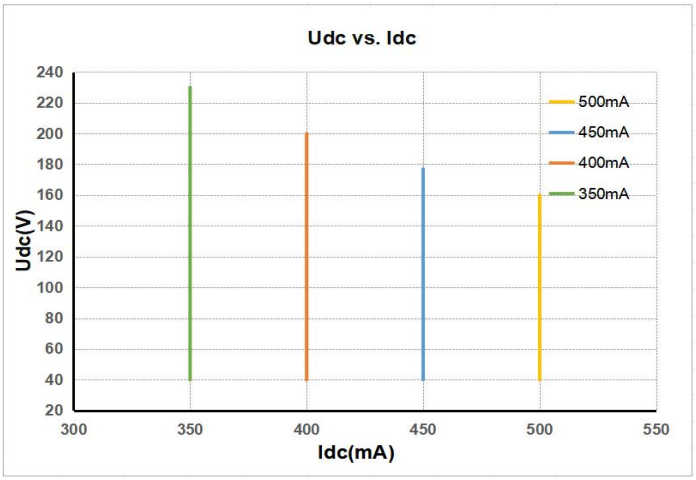


Lifetime vs. Case Temperature



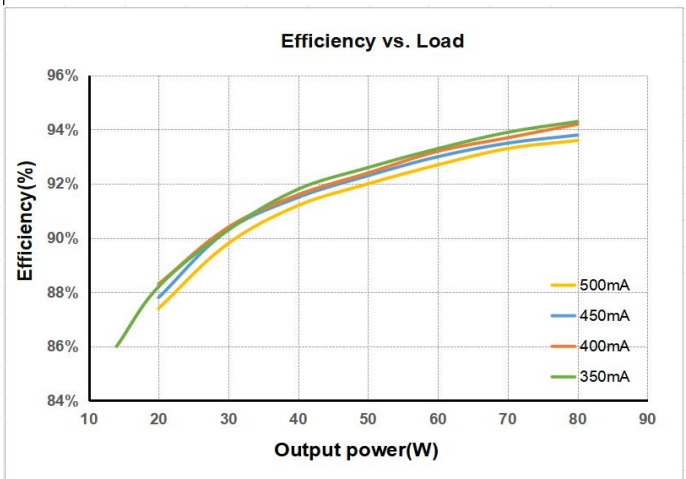
LC80W350-500NS:

Udc vs. Idc

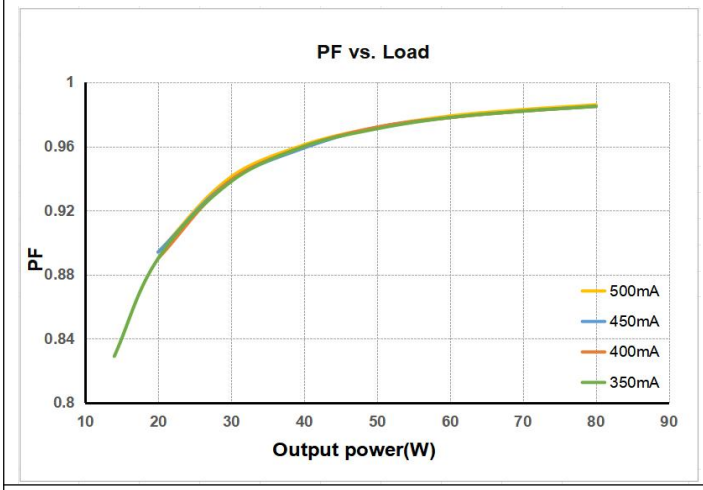


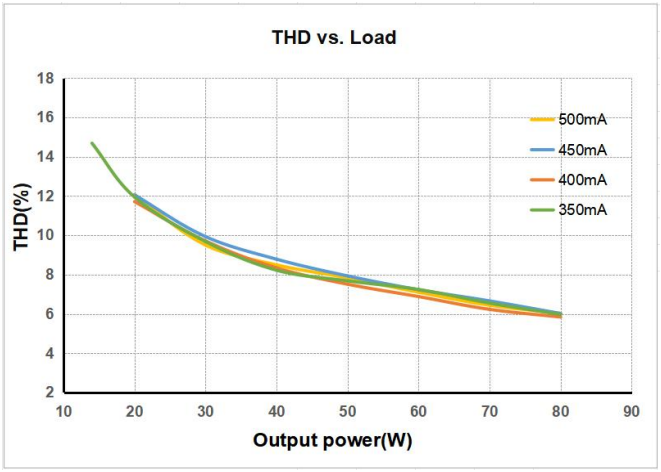
PF vs. Load

Efficiency vs. Load

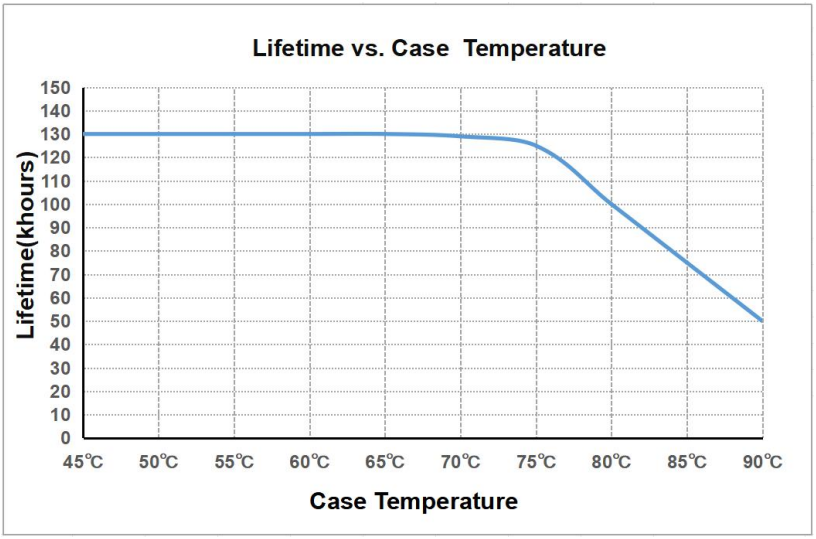


THD vs. Load



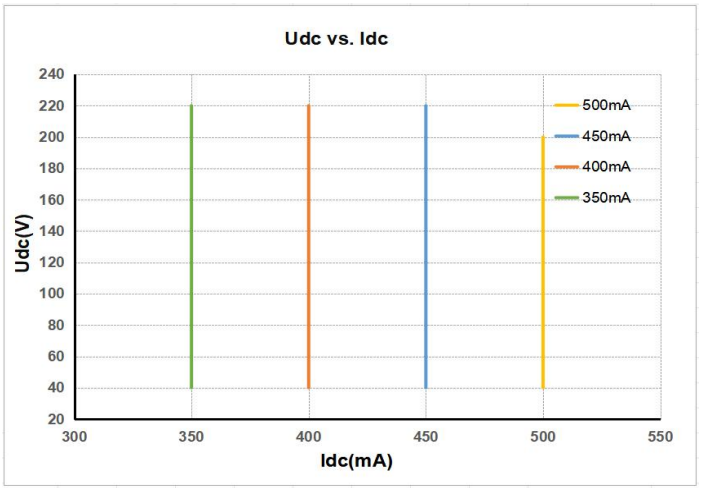


Lifetime vs. Case Temperature



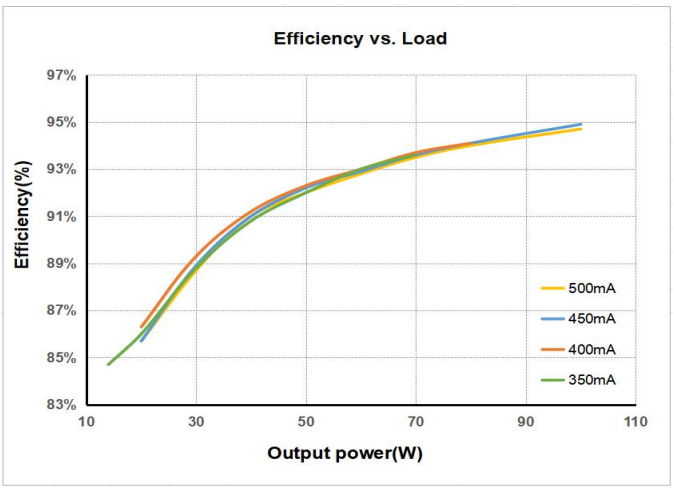
LC100W350-500NS:

Udc vs. Idc



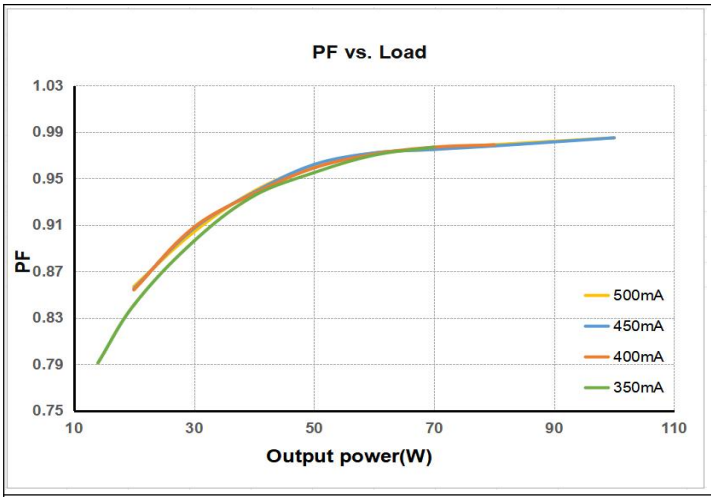
PF vs. Load

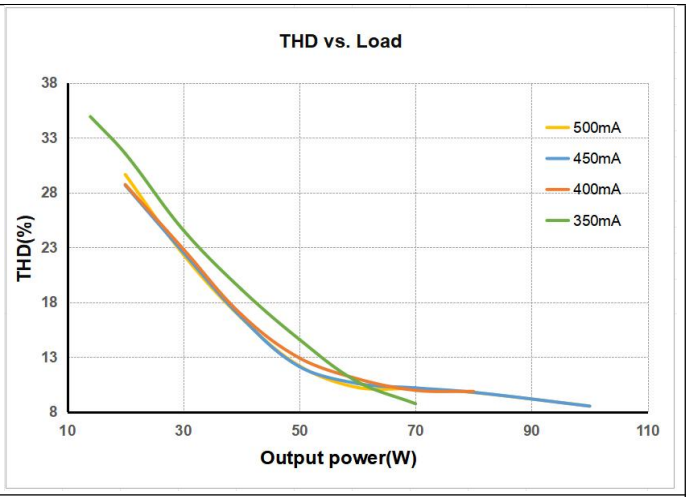
Efficiency vs. Load



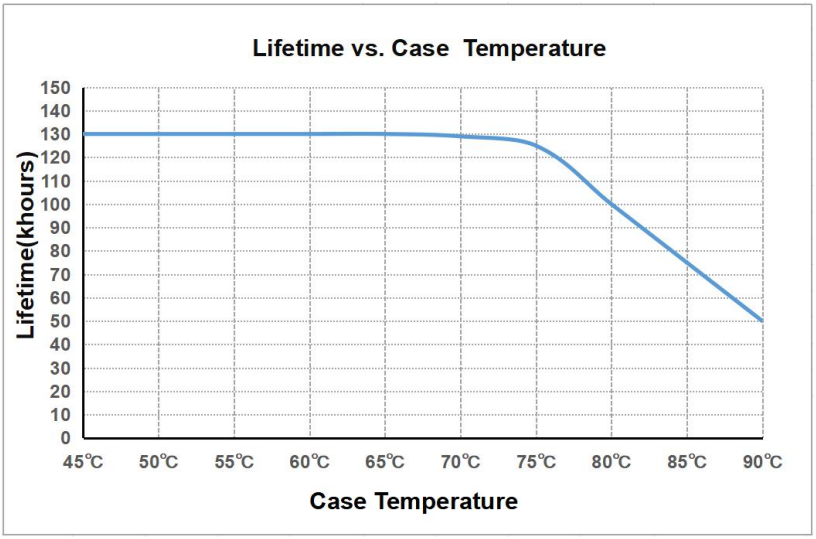
THD vs. Load

LC(20W-150W)NS



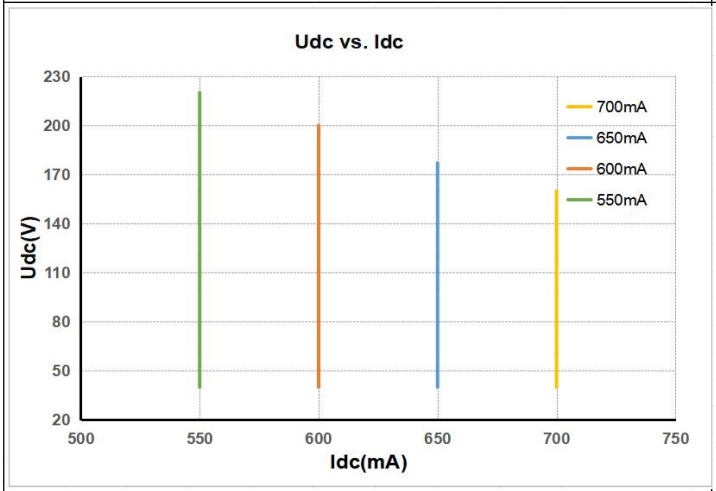


Lifetime vs. Case Temperature



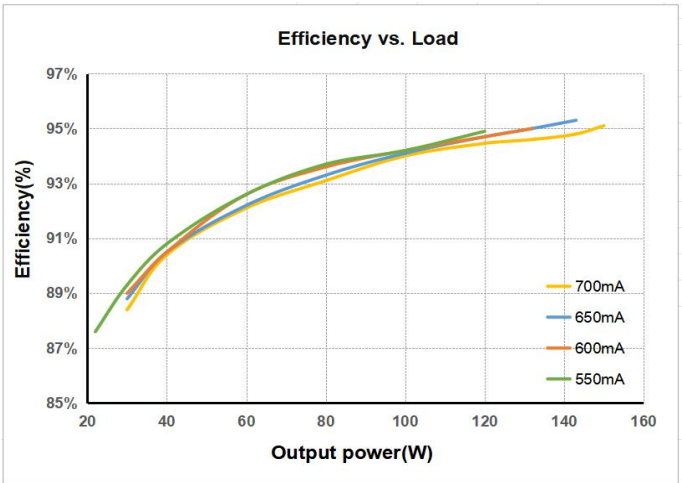
LC150W550-700NS:

Udc vs. Idc



PF vs. Load

Efficiency vs. Load



THD vs. Load

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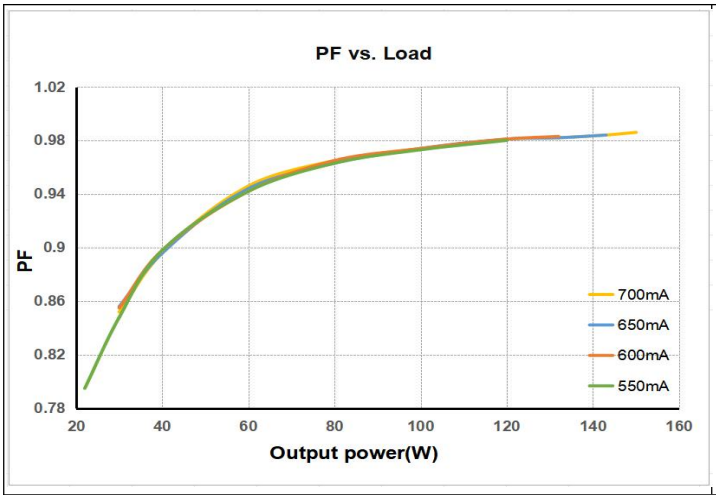
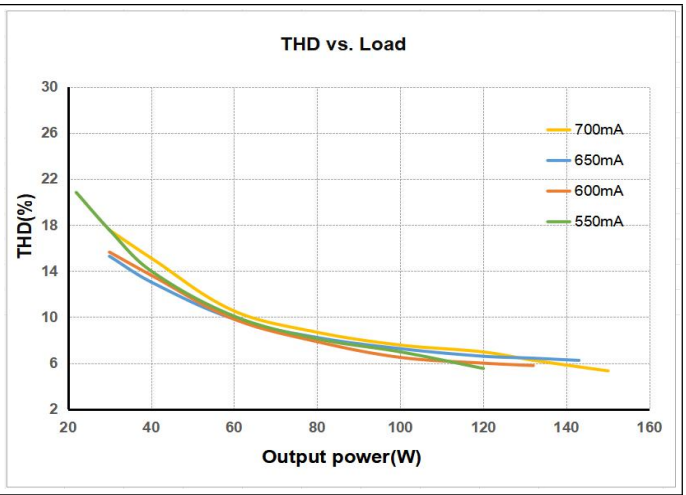
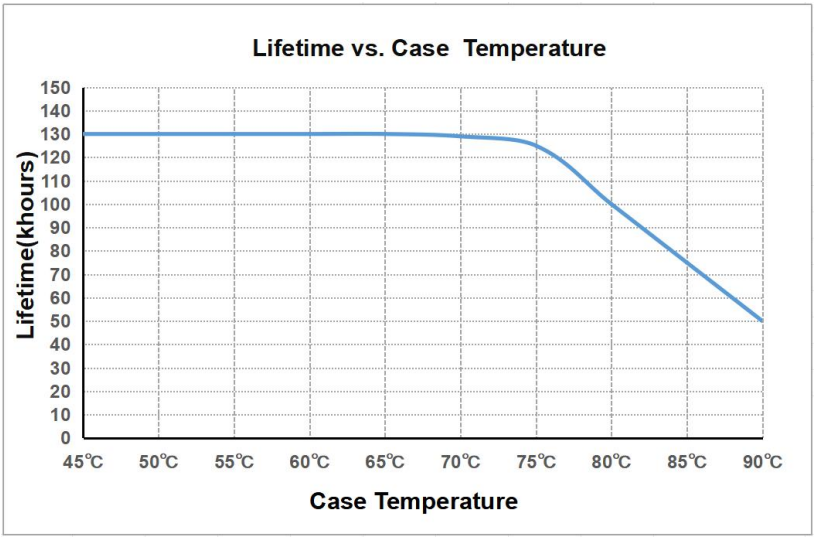


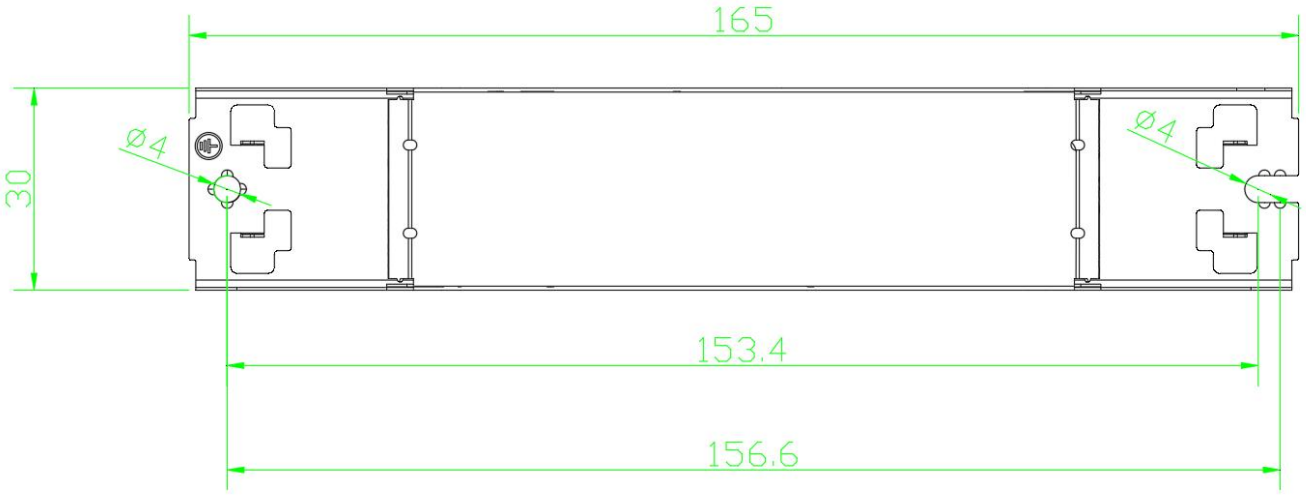


Lifetime vs. Case Temperature

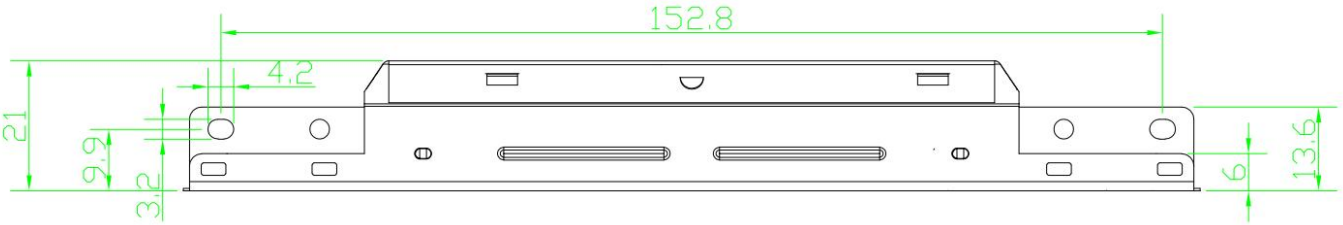


6. Dimension （Unit：mm）

20W&40W&60W



LC(20W-150W)NS

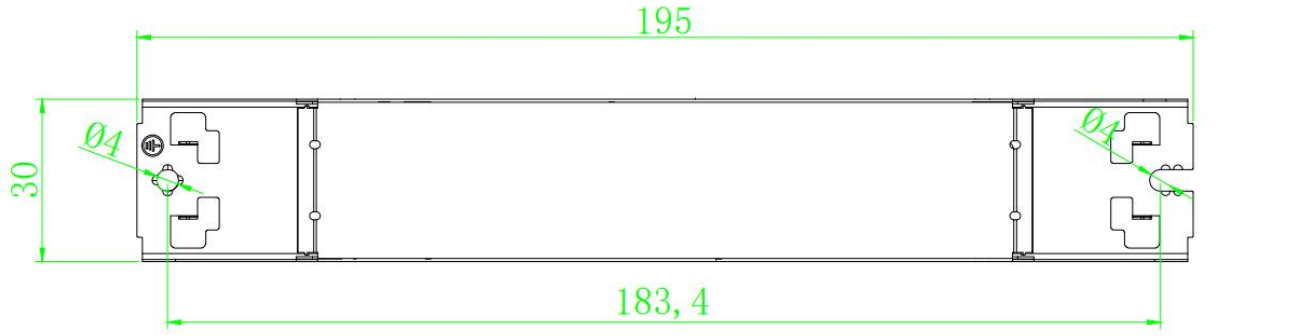


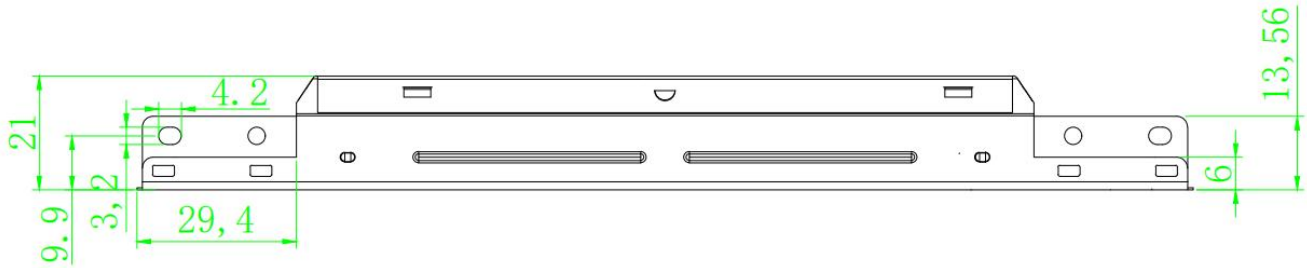
Center-to-Center Distance of Mounting Holes	153.3mm
Locating Hole Diameter	4mm
Housing Length	165mm
Housing Width	30mm
Housing Height	21mm

Color&Material

Housing Material	Pre-painted Galvanized Steel Sheet
Housing Color	White

80W





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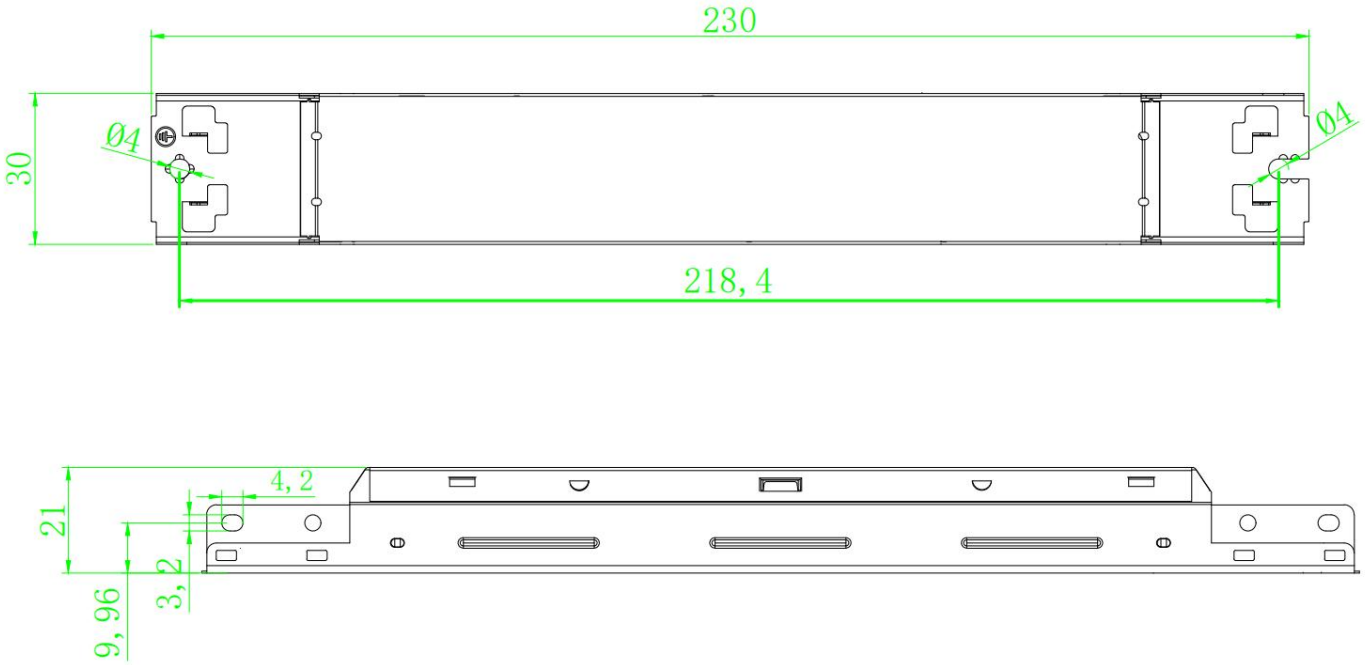
Center-to-Center Distance of Mounting Holes	183.4mm
Locating Hole Diameter	4mm
Housing Length	195mm
Housing Width	30mm
Housing Height	21mm

Color&Material

Housing Material	Pre-painted Galvanized Steel Sheet
Housing Color	White

100W&150W

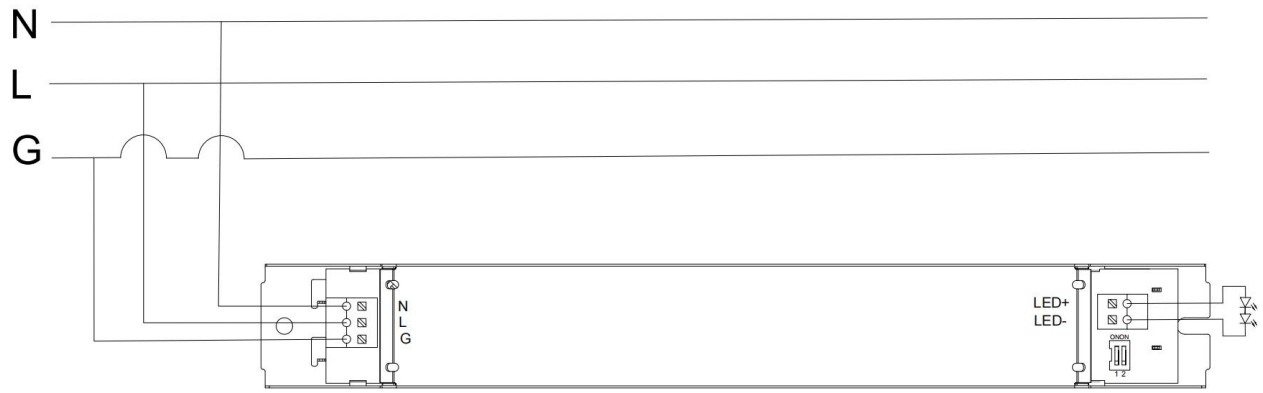


Center-to-Center Distance of Mounting Holes	218.4mm
Locating Hole Diameter	4mm
Housing Length	230mm
Housing Width	30mm
Housing Height	21mm

Color&Material

Housing Material	Pre-painted Galvanized Steel Sheet
Housing Color	White

7. Wiring Diagram



8. Packing information

LC20W200-350NS

Packing way	Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
Industrial	375*245*220	110	0.079	8.69	9.88

LC40W200-350NS

Packing way	Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
Industrial	375*245*220	110	0.086	9.46	10.95

LC60W200-350NS

Packing way	Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
Industrial	375*245*220	110	0.099	10.89	11.81

LC80W350-500NS

Packing way	Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
Industrial	375*245*220	85	0.127	10.80	11.5

LC100W350-500NS

Packing way	Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
Industrial	390*260*175	55	0.153	8.42	8.87

LC150W550-700NS

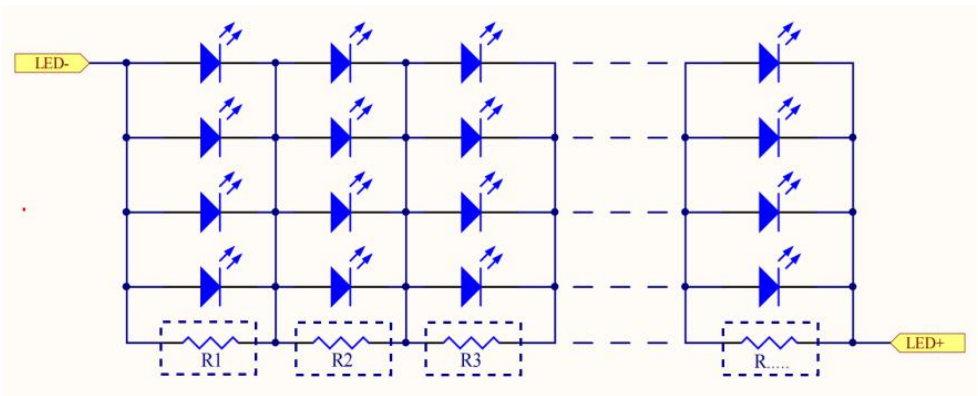
Packing way	Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
Industrial	390*260*175	55	0.161	8.86	9.31

9. 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).
- Due to the parasitic capacitor between the LED light source and the aluminum substrate, a momentary faint glow may occur when AC power is initially applied to the luminaire, provided the aluminum substrate is grounded (i.e., the entire luminaire is grounded).

This phenomenon is normal for non-isolated LED driver.
To solve this effect, either an aluminum substrate with lower parasitic capacitor may be selected, or resistors can be connected in parallel with the LED beads (as shown in the picture below).

Parallel connection method of resistors on LED beads



10. 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

11. REVISION HISTORY

DATE	REV	REMARK
2025-10-25	V1.0	Initial release.