



Constant Current Driver

Model: LC90W350-700NS



Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency (typical)	Output Voltage	No load Voltage
LC90W350-700NS	350mA	0.48A	97W	59.85-89.95W	0.95	95%	171-257V	300V
	500mA			60-90W		94%	120-180V	
	550mA			59.95-90.2W		94%	109-164V	
	700mA			59.5-90.3W		94%	85-129V	

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

1. Parameters

Category	Item	Technical Norm
Features	Output Type	Constant Current
	Output Features	Non-isolation
	IP Grade	IP20
	Insulation Class	Class I
Input	Rated Input Voltage	220-240VAC
	Range of Input Voltage	198-264VAC or 180-280VDC
	Frequency	0/50/60Hz
	Input Current	≤0.48A (230VAC, full load)
	Input Power	≤97W (230VAC, full load)
	Power Factor	≥0.95 (230VAC, full load)
	THD	≤15% (230VAC, full load)
	No-load Power Consumption	≤0.5W @230VAC
	Inrush Current	≤45A/16us (230VAC, full load)
	Input Over Voltage protection	When input voltage over 330-390VAC, output will be cut off, and can withstand 2 hrs. That is auto recovery, when input voltage come back normal input voltage range.
Output	Output Voltage Range	85-257VDC
	No Load Voltage	300VDC Max.
	Output Current	350mA-700mA
	Max. Output Power	90.3W
	Efficiency	≥94% (230VAC, full load)
	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)
Protection	Short Circuit Protection	Auto Recovery
	Overload Protection	Auto Recovery
	Insulation voltage	O/P to PE , 1.5KVac/1min I/P to PE , 1.5KVac/1min
	Insulation resistance	>100M ohm @ 500VDC
	Leakage current	I/P to O/P <0.7mA
Environment	Ta/Operation Temperature	-20....+50℃
	Ts/Storage Temperature	-25....+85℃
	Tc/Enclosure Temperature	85℃
	Humidity	10%....90%RH
	Atmospheric pressure	86-108KPa
Construction	Connection Method	Push-in Terminal
	Installation	Build-in
	PRI Wire preparation	0.75-1.5 [□]
	SEC Wire preparation	0.5-1.5 [□]
	Dimension	280*30*21mm (L*W*H)
Standards	Certification	CE、EAC
	Safety Standards	EN 61347-1:2015/A1:2021 EN 61347-2-13:2014/A1:2017 EN IEC 62384:2020 EN 62493:2015/A1:2022
	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 @Ta/ Tc
	Warranty	5years ,F.R. < 10000ppm
	Noise	≤ 24dB @Background noise ≤18dB ,Interval≥15cm

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.



LC90W350-700NS

2. Output Current Setting

Output Current	Dial 1	Dial 1
350mA	-	-
500mA	ON	-
550mA	-	ON
700mA	ON	ON

3. Connected quantities of different current Breaker

TYPE	Connected quantities of different current Breaker						Input Voltage	Inrush Current	Time
	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	180us
TYPE C	16	21	26	32	40				
TYPE D	26	33	41	51	64				

4. Label

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KGP

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LED Driver
LC90W350-700NS
Constant Current Type

PIN1	PIN2	I _{rated} [mA]	P _{rated} [mW]	U _{range} [V]	U _N / f _N	I _N [A]	t _c [°C]	t _a [°C]	λ
OFF	OFF	350	89.95	171-257	220-240VAC 50/60Hz	0.48	85	-20...+60	0.95
ON	OFF	500	90	120-180					
OFF	ON	550	90.2	109-184					
ON	ON	700	90.3	85-128					

CE

EAC

etc

house icon

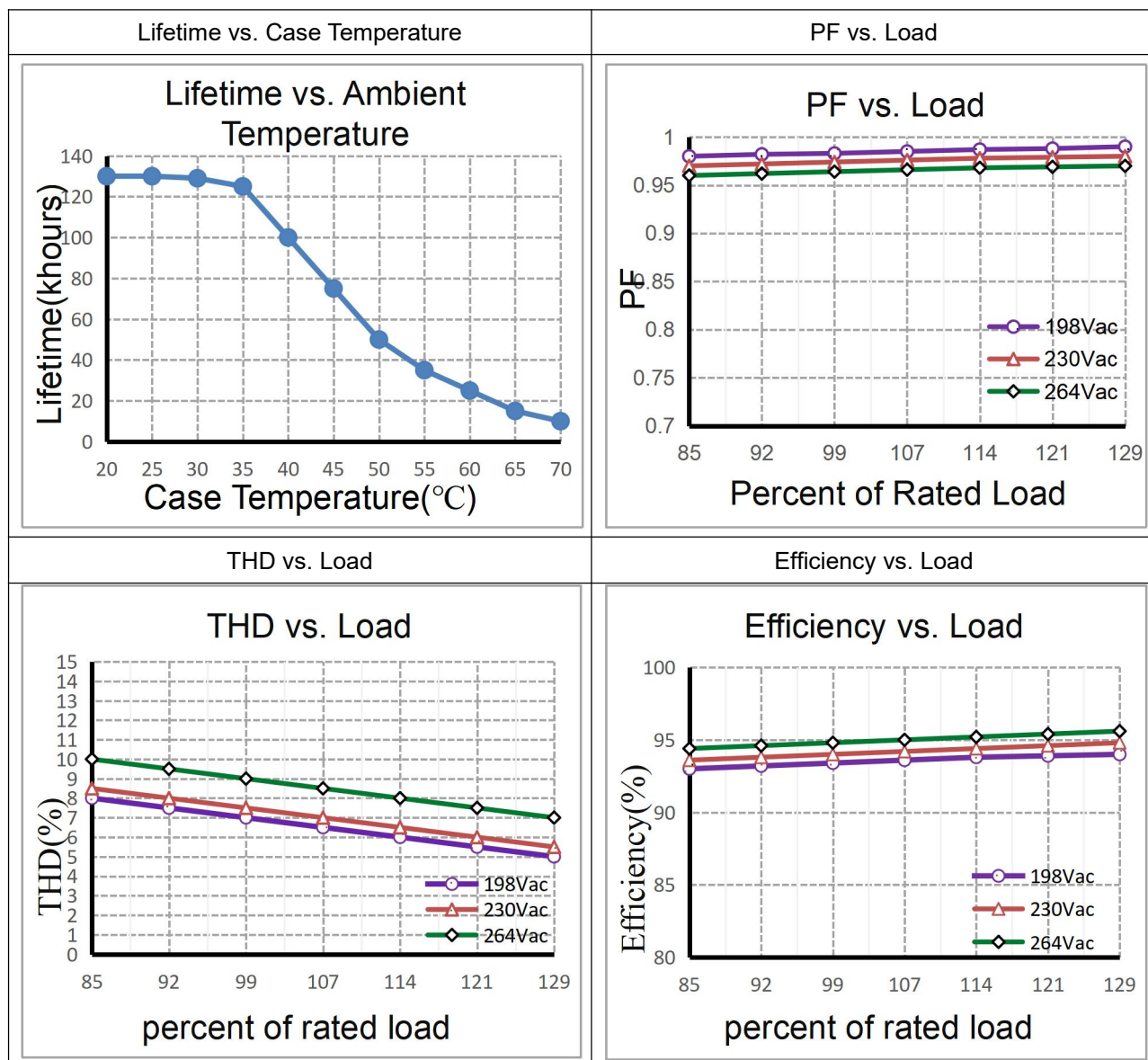
no flame icon

wire preparation
1mm max.18-12 *
0.5mm 18-12 *

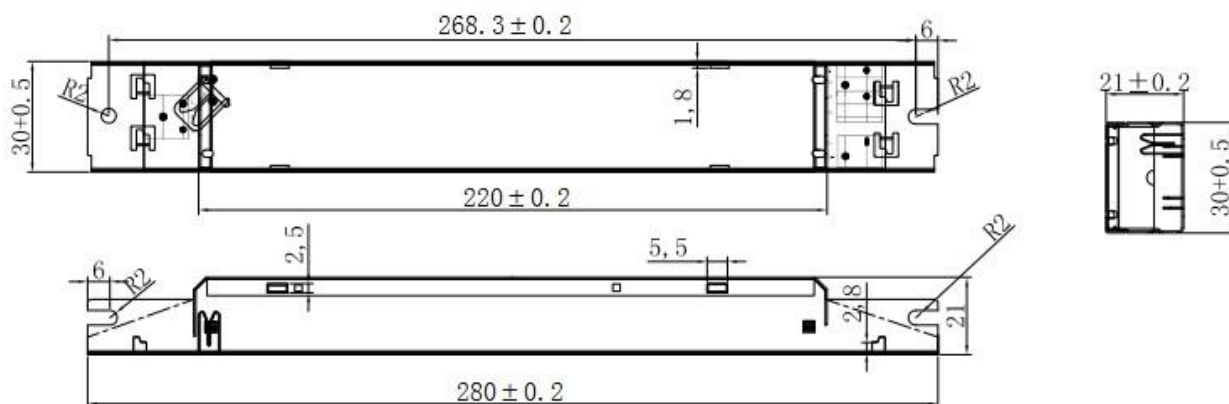
OUTPUT
+
-
GND

U_{out}:Max.300VDC For LED modules only Made in China

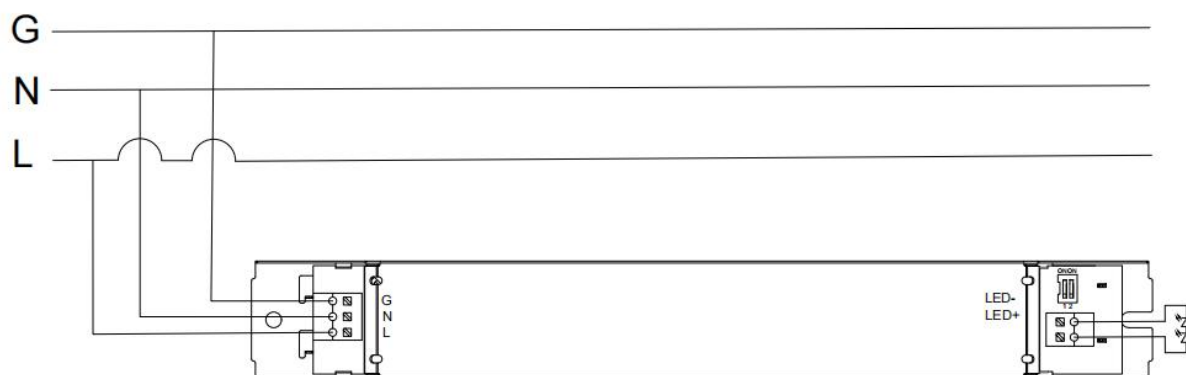
5. Lifetimecurve



6. Dimension (Unit: mm)



7. Wiring Diagram



8. Packing information

Packing way	Carton L*W*H(mm)	Pcs/ Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight/ Carton(kg)
Industrial	345*310*138MM	50PCS	0.208	10.4	10.85

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.)
- 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.



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

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	VER	REMARK
2024-11-27	V1.0	Initial release.