



Constant Current Driver

Model: LC150W500-700NS



Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency (typical)	Output Voltage	No load Voltage
LC150W500-700NS	500mA	0.77A	160W	90-150W	0.95	95%	180-300V	360V
	700mA			89.6-149.8W			128-214V	

* 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	≤0.77A (230VAC, full load)
	Input Power	≤160W (230VAC, full load)
	Power Factor	≥0.95 (230VAC, full load)
	THD	≤15% (230VAC, full load)
	No-load Power Consumption	≤0.5W @230VAC
	Inrush Current	≤55A/300μs (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	128-300VDC
	No Load Voltage	360VDC Max.
	Output Current	500mA-700mA
	Max. Output Power	150W
	Efficiency	≥95% (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°C
	Ts/Storage Temperature	-40....+85°C
	Tc/Enclosure Temperature	85°C
	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: <ol style="list-style-type: none"> All Parameters, if not specified, are measured at 230VAC/50Hz and 25°C ambient temperature. LED Driver is a component of the luminaires, Luminaires and wire layout will affect the EMC, please check the EMC with end products again. Do not install upside down. 		







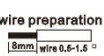
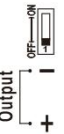
2. Output Current Setting

Output Current	PIN1
500mA	-
700mA	ON

3. Connected quantities of different current Breaker

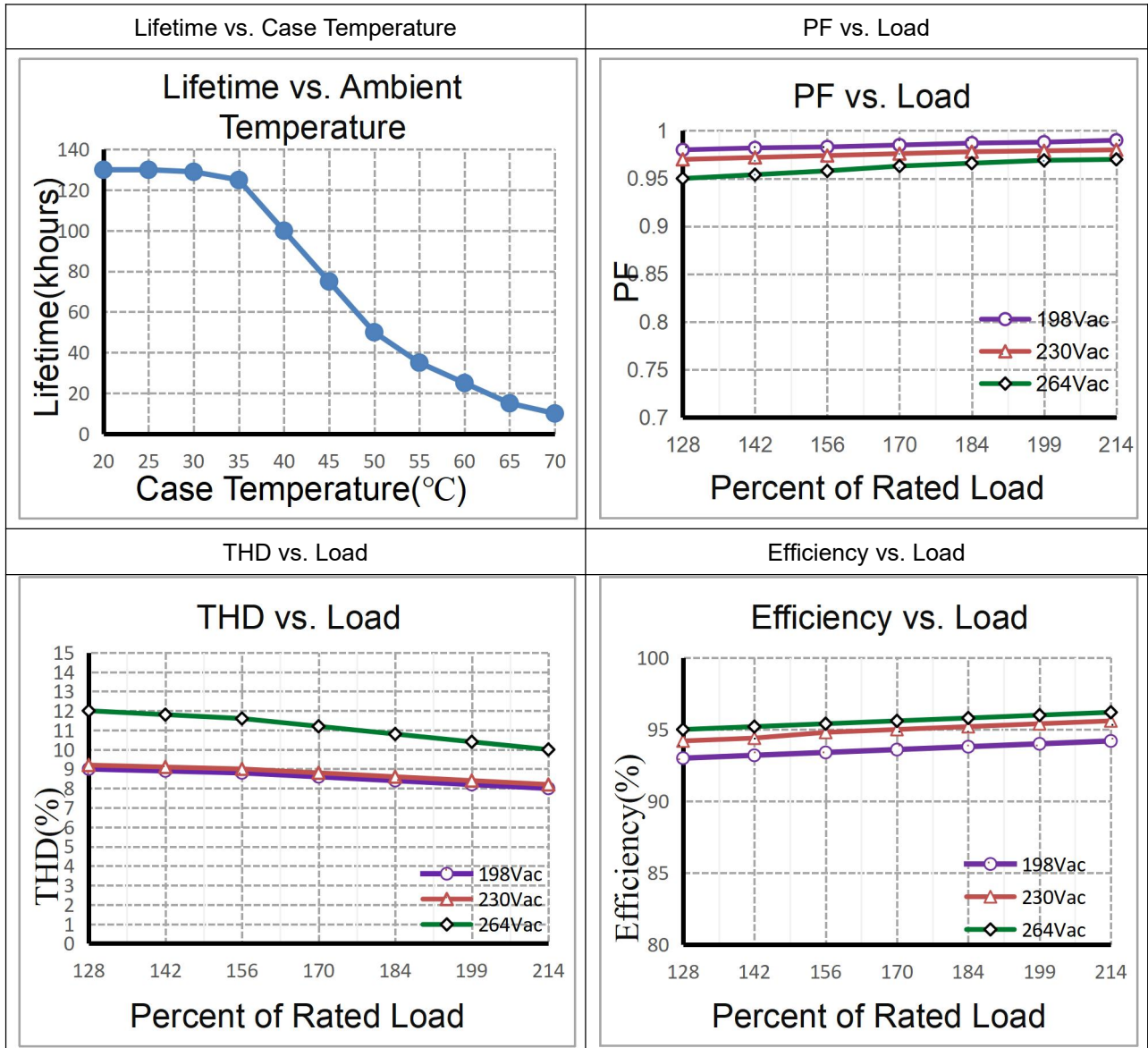
TYPE	Connected quantities of different current Breaker						Input Voltage	Inrush Current	Time
	current (A)	10	13	16	20	25			
	Installation wire diameter	1.5mm ²	2.5mm ²	2.5mm ²	4mm ²	4mm ²			
TYPE B	11	14	17	22	27	@230VAC	55	300µs	
TYPE C	17	23	28	35	44				
TYPE D	28	36	45	56	70				

4. Label

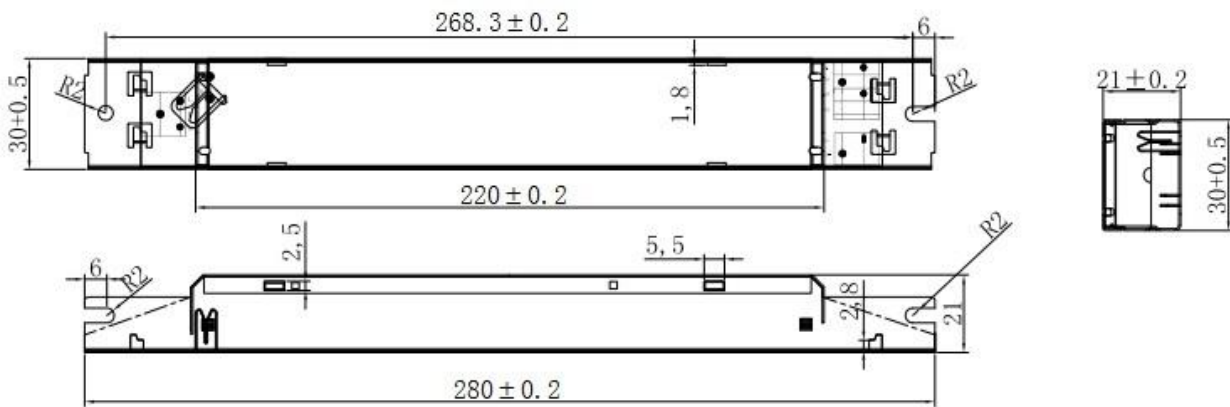
<input type="checkbox"/>  <input type="checkbox"/> N <input type="checkbox"/> L	KGP KGP Electronics GmbH Hueckstraße 19 DE-58511 Lüdenscheid LED Driver LC150W500-700NS Constant Current Type	<table border="1"> <thead> <tr> <th>PIN1</th> <th>I_{rated} [mA]</th> <th>P_{rated} [W]</th> <th>U_{rated} [V]</th> <th>U_N / f_N</th> <th>I_N [A]</th> <th>t_c [°C]</th> <th>t_a [°C]</th> <th>λ</th> </tr> </thead> <tbody> <tr> <td>OFF</td> <td>500</td> <td>150</td> <td>180-300</td> <td>220-240VAC</td> <td>0.77</td> <td>85</td> <td>-20...+50</td> <td>0.95</td> </tr> <tr> <td>ON</td> <td>700</td> <td>149.8</td> <td>128-214</td> <td>50/60Hz</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	PIN1	I _{rated} [mA]	P _{rated} [W]	U _{rated} [V]	U _N / f _N	I _N [A]	t _c [°C]	t _a [°C]	λ	OFF	500	150	180-300	220-240VAC	0.77	85	-20...+50	0.95	ON	700	149.8	128-214	50/60Hz					     	
PIN1	I _{rated} [mA]	P _{rated} [W]	U _{rated} [V]	U _N / f _N	I _N [A]	t _c [°C]	t _a [°C]	λ																							
OFF	500	150	180-300	220-240VAC	0.77	85	-20...+50	0.95																							
ON	700	149.8	128-214	50/60Hz																											

U_{out}: Max. 360VDC For LED modules only Made in China

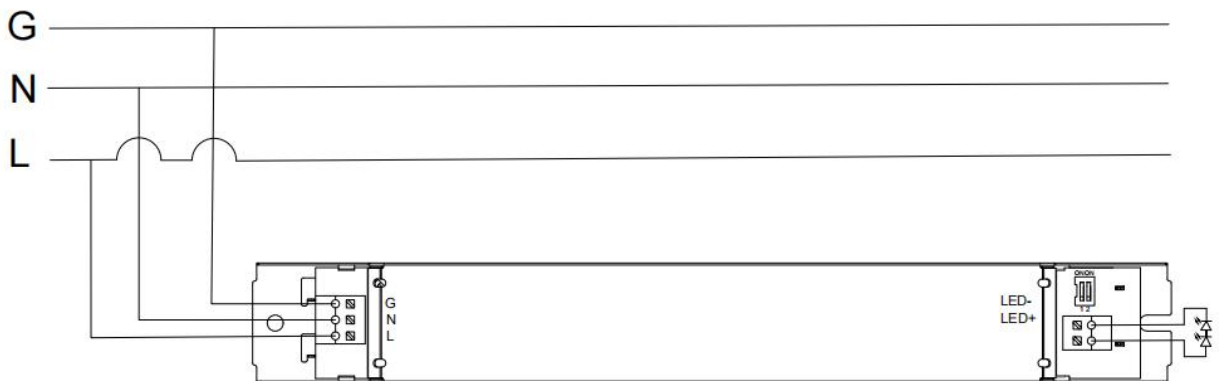
5. Lifetimecurve



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.
- 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.