



**Constant Current Driver**

**Model: LC24W450-600S**



Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency (*Typical)	Output Voltage	No load Voltage
LC24W450-600S	450mA	0.13A	28.0W	9.45-23.0W	0.95	85%	21-51V	65V
	500mA	0.14A	29.0W	10.5-24.0W		86%	21-48V	
	550mA	0.13A	28.0W	11.6-23.0W		85%	21-42V	
	600mA	0.14A	29.0W	12.6-24.0W		86%	21-40V	

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

### 1. Parameters

Category	Item	Technical Norm
Features	Output Type	Constant Current
	Output Features	Isolation
	IP Grade	IP20
	Insulation Class	Class I
Input	Rated Input Voltage	220-240V
	Range of Input Voltage	198-264VAC or 198-280VDC
	Frequency	50-60Hz
	Input Current	≤0.14A(230VAC, full load)
	Input Power	≤29.0W(230VAC, full load)
	Power Factor	≥0.95(230VAC, full load)
	THD	≤20%(230VAC, full load)
	No-load Power Consumption	≤0.5W @230VAC
Output	Output Voltage Range	21-40V@600mA
		21-42V@550mA
		21-48V@500mA
		21-51V@450mA
	No Load Voltage	65VDC Max.
	Output Current	450-600mA
	Max. Output Power	24W
	Efficiency	≥85% (230VAC, full load)
	Current Ripple	±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
	No-load Protection	/
	Insulation voltage	3750V 5mA 60S between P-S
	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	Built-in
	PRI Wire preparation	0.75-1.5 <sup>□</sup>
	SEC Wire preparation	0.5-1.5 <sup>□</sup>
	Dimension	128x27.8x 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 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	EN62384:2020
	Surge	L-N:1KV; L/N-PE:2KV;
	Others	RoHS
	REACH	EU Regulation (EC) No 1907/2006
	Life Time	50000h @Ta/ Tc
	Warranty	5years , F.R. < 10000ppm
	Noise	≤ 24dB @Background noise ≤18dB ,Interval≥15cm
<p>Remark:</p> <p>1.All Parameters, if not specified, are measured at 230VAC/50Hz and 25°C ambient temperature.</p> <p>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.</p>		

### 2. Output Current Setting

Output Current	Dial 1	Dial 2
600mA	ON	ON
550mA	OFF	ON
500mA	ON	OFF
450mA	OFF	OFF

### 3. Connected quantities of different current Breaker

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	1.5mm <sup>2</sup>	2.5mm <sup>2</sup>	2.5mm <sup>2</sup>	4mm <sup>2</sup>	4mm <sup>2</sup>			
TYPE B		33	43	53	67	83	@230VAC	18	200
TYPE C		53	69	85	107	133			
TYPE D		85	111	137	171	213			

### 4. Label

**KGP**  
KGP Electronics GmbH  
 Hueckstraße 19  
 DE-58511 Lüdenscheid

PIN1	PIN2	I <sub>rated</sub> [mA]	P <sub>rated</sub> [W]	U <sub>rated</sub> [V]	U <sub>N</sub> /f <sub>N</sub>	I <sub>N</sub> [A]	t <sub>a</sub> [°C]	λ
OFF	OFF	450	23	21-51	220-240VAC 50/60Hz	0.14	-20...50	0.95
ON	OFF	500	24	21-48		0.14		0.95
OFF	ON	550	23.1	21-42		0.14		0.95
ON	ON	600	24	21-40		0.14		0.95

•t<sub>c</sub>:85°C

Constant Current Type U<sub>out</sub>:Max. 65VDC For LED modules only

OFF → ON

CE

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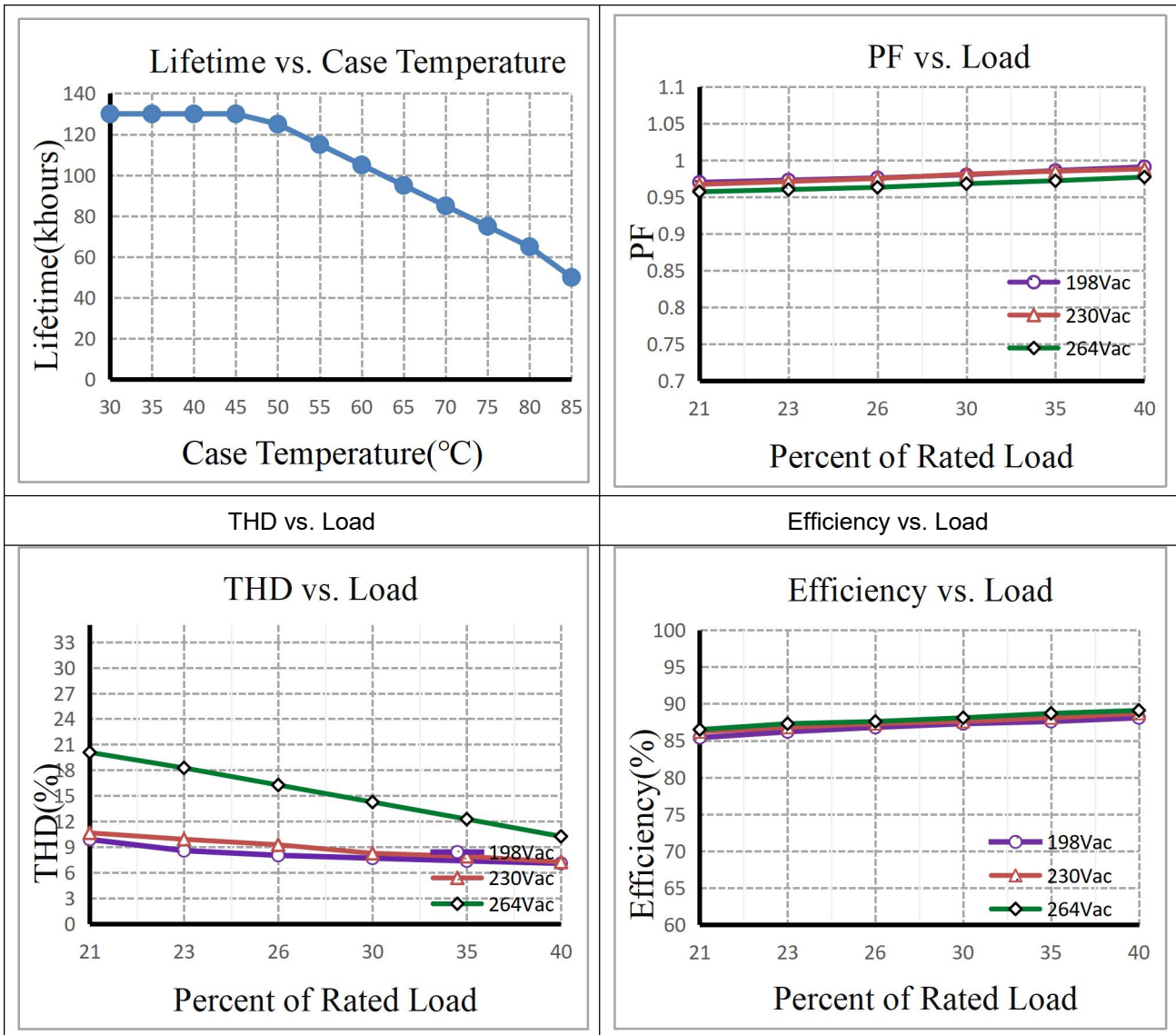
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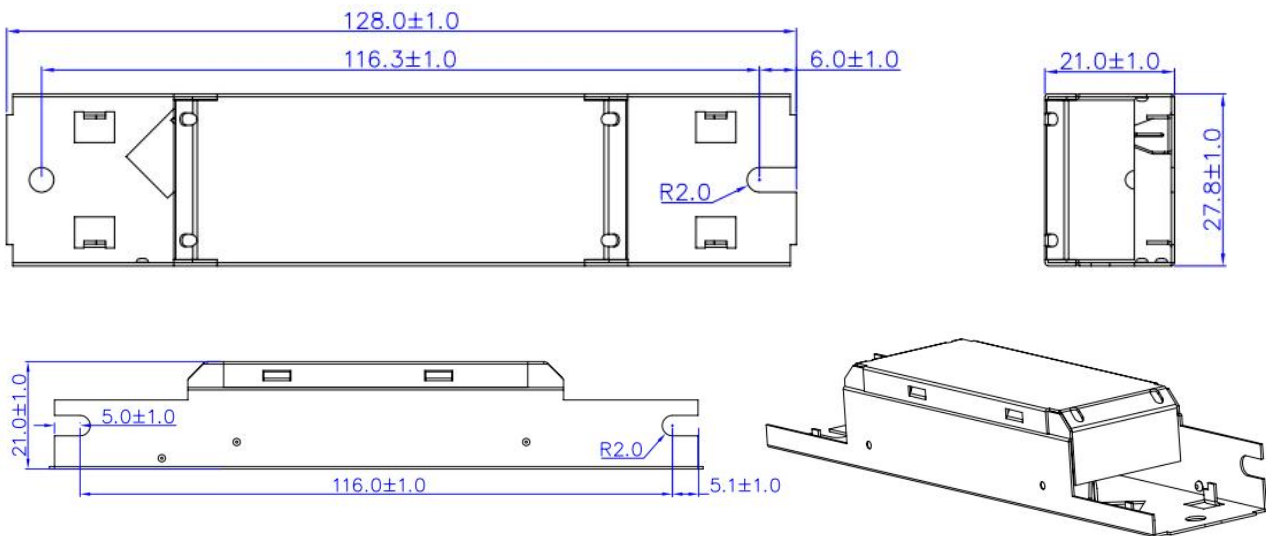
wire preparation

### 5. Electrical values

Lifetime vs. Case Temperature	PF vs. Load
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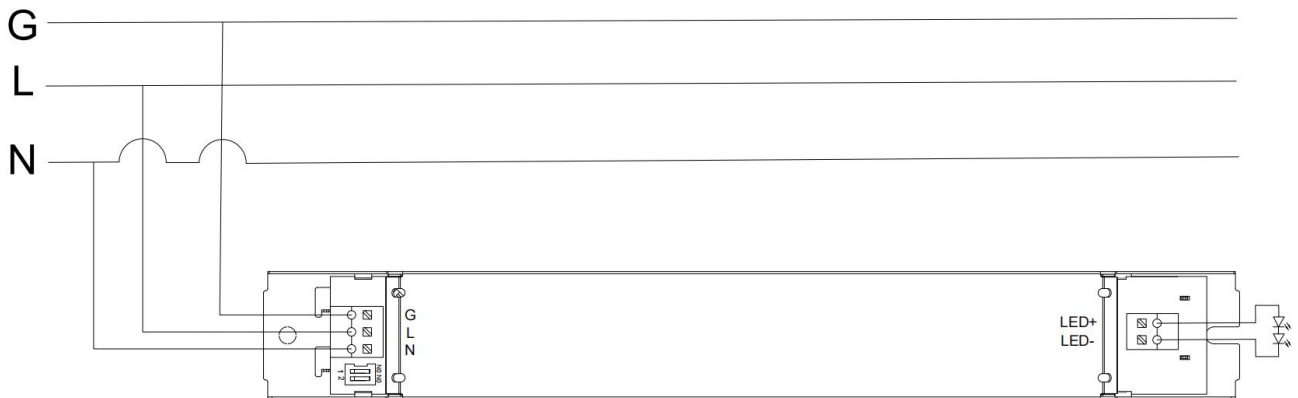
### 6. Dimension (Unit: mm)



### 7. Packing information

Packing way	Carton L*W*H(mm)	Pcs/Carton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
Industrial	280*275*197	125	0.0762	9.525	9.57

### 8. Wiring Diagram



### 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 relies upon the luminaire enclosure for protection against accidental contact with live parts.

**10. REVISION HISTORY**

<b>DATE</b>	<b>VER</b>	<b>REMARK</b>
2024-11-12	V1.0	Initial release.