



**Constant Current Driver**

**Model: LC65W250-500S**



Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency (typical)	Output Voltage	No load Voltage
LC65W250-500S	250mA	0.35A	75W	17.5-65W	0.95	90%	70-260V	320V
	300mA			21-65.1W			70-217V	
	350mA			24.5-65.1W			70-186V	
	400mA			28-65.2W			70-163V	
	450mA			31.5-64.8W			70-144V	
	500mA			35-65W			70-130V	

**\* 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	220-240VAC
	Range of Input Voltage	198-264VAC
	Frequency	50-60Hz
	Input Current	≤0.35A (230VAC, full load)
	Input Power	≤75W (230VAC, full load)
	Power Factor	≥0.95 (230VAC, full load)
	THD	≤15% (230VAC, full load)
	No-load Power Consumption	≤0.5W @230VAC
	Inrush Current	≤35A/400μs (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	70-130VDC@500mA
		70-144VDC@450mA
		70-163VDC@400mA
		70-186VDC@350mA
		70-217VDC@300mA
		70-260VDC@250mA

	No Load Voltage	320VDC Max.
	Output Current	250mA-500mA
	Max. Output Power	65.2W
	Efficiency	≥90% (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	3000V 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	-25....+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	0.5-1.5 <sup>□</sup> mm
	SEC Wire preparation	0.5-1.5 <sup>□</sup> mm
	Dimension	L195*W30*H21mm (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 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 61547:2009
	Performance	EN62384:2020
	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=50°C
	Warranty	5years ,F.R. < 10000ppm

Noise	≤ 20dB @Background noise ≤15dB ,Interval≥20cm
<b>Remark:</b> 1. All Parameters, if not specified, are measured at 230VAC/50Hz and 25°C 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

Output Current	PIN1	PIN2	PIN3
250mA	OFF	OFF	OFF
300mA	ON	OFF	OFF
350mA	OFF	ON	OFF
400mA	ON	ON	OFF
450mA	OFF	ON	ON
500mA	ON	ON	ON

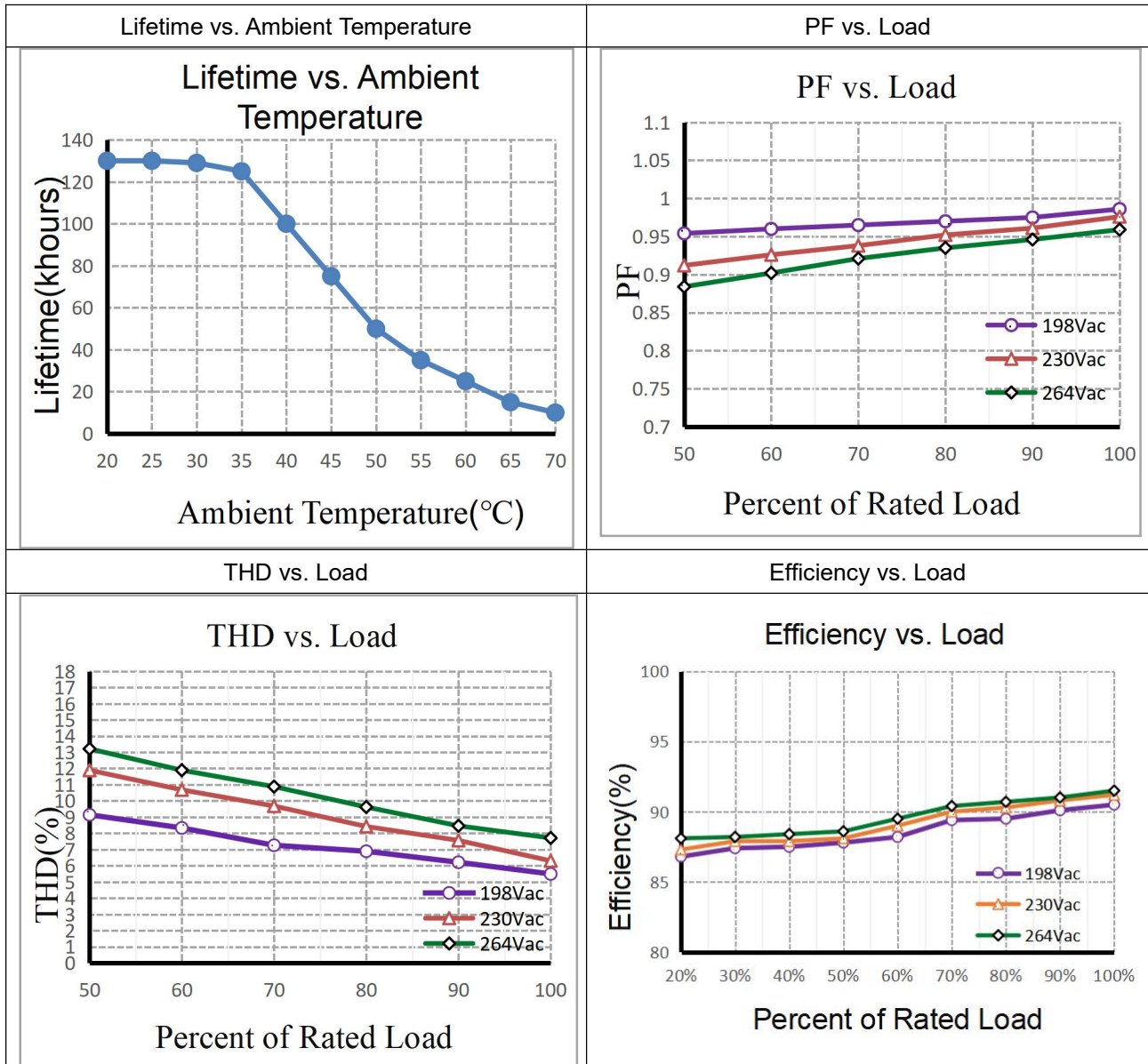
### 3. Connected quantities of different current Breaker

TYPE	Connected quantities of different current Breaker						Input Voltage	Inrush Current	Time
	current (A)	10	13	16	20	25			
	Installation wire diameter	1.5mm <sup>2</sup>	2.5mm <sup>2</sup>	2.5mm <sup>2</sup>	4mm <sup>2</sup>	4mm <sup>2</sup>			
TYPE B		17	22	27	34	43	@230VAC	35	400μs
TYPE C		27	36	44	55	69			
TYPE D		44	57	70	88	110			

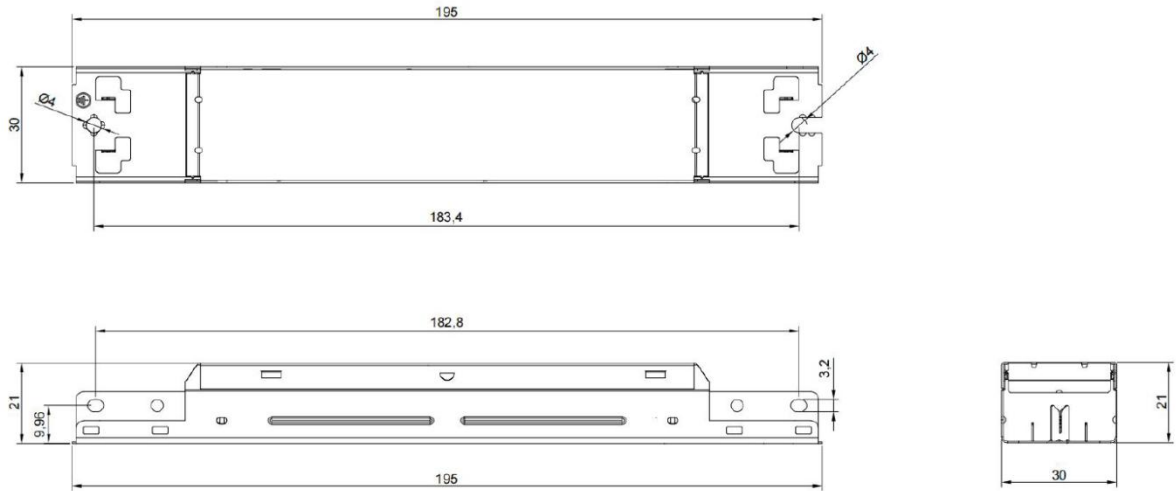
### 4. Label

<input type="checkbox"/> N <input type="checkbox"/> L <input type="checkbox"/> OFF → ON 	<b>KGP</b> KGP Electronics GmbH Hueckstraße 19 DE-58511 Lüdenscheid <b>LED Driver</b> <b>LC65W250-500S</b> <b>Constant Current Type</b>	<table border="1"> <thead> <tr> <th>PIN1</th> <th>PIN2</th> <th>PIN3</th> <th>I<sub>rated</sub> [mA]</th> <th>P<sub>rated</sub> [W]</th> <th>U<sub>rated</sub> [V]</th> </tr> </thead> <tbody> <tr> <td>OFF</td> <td>OFF</td> <td>OFF</td> <td>250</td> <td>65</td> <td>70-280</td> </tr> <tr> <td>ON</td> <td>OFF</td> <td>OFF</td> <td>300</td> <td>65.1</td> <td>70-217</td> </tr> <tr> <td>OFF</td> <td>ON</td> <td>OFF</td> <td>350</td> <td>65.1</td> <td>70-186</td> </tr> <tr> <td>ON</td> <td>ON</td> <td>OFF</td> <td>400</td> <td>65.2</td> <td>70-163</td> </tr> <tr> <td>OFF</td> <td>ON</td> <td>ON</td> <td>450</td> <td>64.8</td> <td>70-144</td> </tr> <tr> <td>ON</td> <td>ON</td> <td>ON</td> <td>500</td> <td>65</td> <td>70-130</td> </tr> </tbody> </table>	PIN1	PIN2	PIN3	I <sub>rated</sub> [mA]	P <sub>rated</sub> [W]	U <sub>rated</sub> [V]	OFF	OFF	OFF	250	65	70-280	ON	OFF	OFF	300	65.1	70-217	OFF	ON	OFF	350	65.1	70-186	ON	ON	OFF	400	65.2	70-163	OFF	ON	ON	450	64.8	70-144	ON	ON	ON	500	65	70-130	<table border="1"> <thead> <tr> <th>U<sub>N</sub>/f<sub>N</sub></th> <th>I<sub>N</sub> [A]</th> <th>ta [°C]</th> <th>λ</th> </tr> </thead> <tbody> <tr> <td>220-240VAC 50/60Hz</td> <td>0.35</td> <td>-20...+50</td> <td>0.95</td> </tr> </tbody> </table>	U <sub>N</sub> /f <sub>N</sub>	I <sub>N</sub> [A]	ta [°C]	λ	220-240VAC 50/60Hz	0.35	-20...+50	0.95	●tc=85°C wire preparation 1.8mm wire 0.5-1.5   Output [ + - ]
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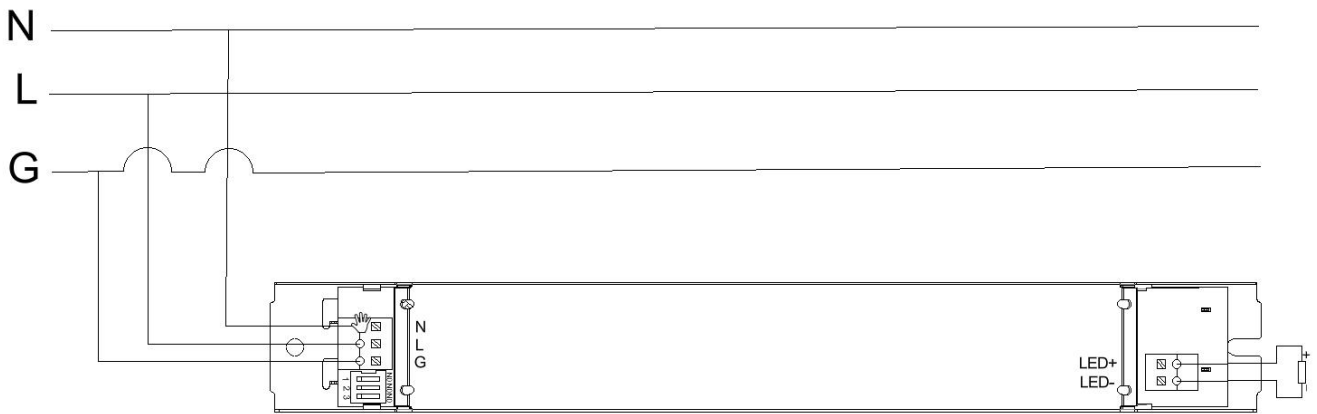
### 5. Lifetime curve



### 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	375*248*220	85	0.131	11.14	12.72

### 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
2025-5-8	V1.0	Initial release.