



Constant Current Driver

Model: LC40W250-400S



Model	Output Current	Input Current	Input Power	Output Power Range	PF	Efficiency (*Typical)	Output Voltage	No load Voltage
LC40W250-400S	250mA	0.24A	46.6W	12.5-40.0W	0.95	90%	50-160V	200V
	300mA	0.24A	47.2W	15.0-40.5W			50-135V	
	350mA	0.24A	46.9W	17.5-40.25W			50-115V	
	400mA	0.24A	46.6W	20.0-40.0W			50-100V	

* 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	≤0.24A(230VAC, full load)
	Input Power	≤46.6W(230VAC, full load)
	Power Factor	≥0.95(230VAC, full load)
	THD	≤20%(230VAC, full load)
	No-load Power Consumption	≤0.5W @230VAC
	Inrush Current	≤40A/400us (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	50-100VDC@400mA
		50-115VDC@350mA
		50-135VDC@300mA
		50-160VDC@250mA
	No Load Voltage	200VDC Max.
	Output Current	250-400mA
	Max. Output Power	40.5W
	Efficiency	≥90% (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
	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℃
	Ts/Storage Temperature	-25....+85℃
	Tc/Enclosure Temperature	85℃
	Humidity	10%....90%RH
	Atmospheric pressure	86-108KPa
Construction	Connection Method	Push-in Terminal
	Installation	Built-in
	PRI Wire preparation	0.75-1.5 [□]
	SEC Wire preparation	0.5-1.5 [□]
	Dimension	152.6x27.8x 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	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:

- All Parameters, if not specified, are measured at 230VAC/50Hz and 25℃ 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	Dial 1	Dial 2
400mA	ON	ON
350mA	OFF	ON
300mA	ON	OFF
250mA	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 ²	2.5mm ²	2.5mm ²	4mm ²	4mm ²			
TYPE B	15	20	24	30	38		@230VAC	40	400
TYPE C	24	31	38	48	60				
TYPE D	38	50	61	77	96				

4. Label

☐
☐ L
☐ N

OFF → ON

KGP
 KGP Electronics GmbH
 Hueckstraße 19
 DE-58511 Lüdenscheid
 LED Power Supply
LC40W250-400S
 Constant Current Type

PIN1	PIN2	I _{rated} [mA]	P _{rated} [W]	U _{rated} [V]	U _N / f _N	I _N [A]	t _c [°C]	t _a [°C]	λ
OFF	OFF	250	40	50-160	220-240VAC 50/60Hz	0.21	85	-20...+50	0.95
ON	OFF	300	40.5	50-135					
OFF	ON	350	40.2	50-115					
ON	ON	400	40	50-100					

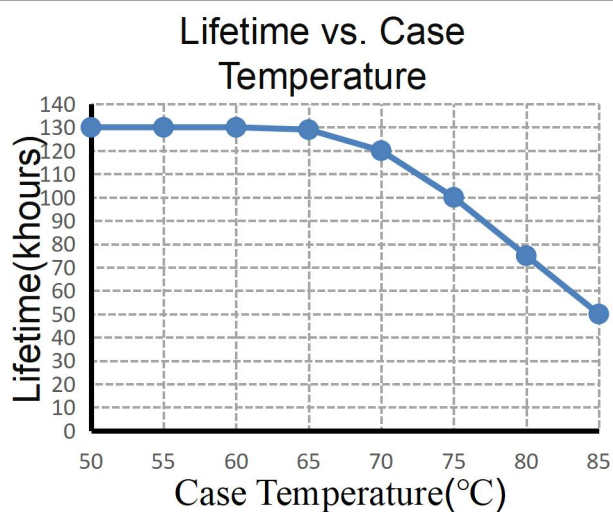
U_{out}: Max. 200VDC For LED modules only

8mm PRI 0.75-1.5 SEC 0.5-1.5

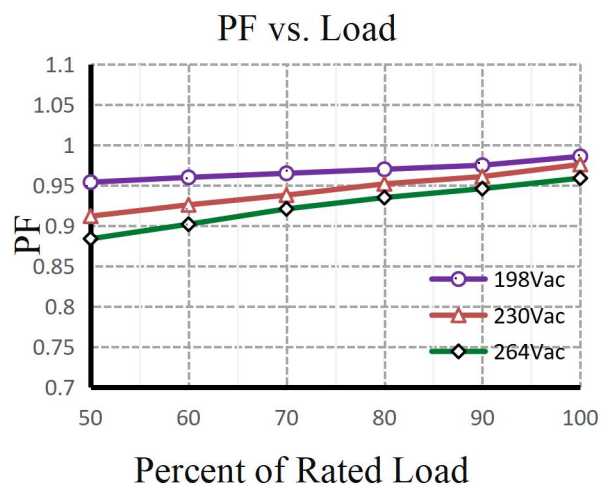
SEC

5. Electrical values

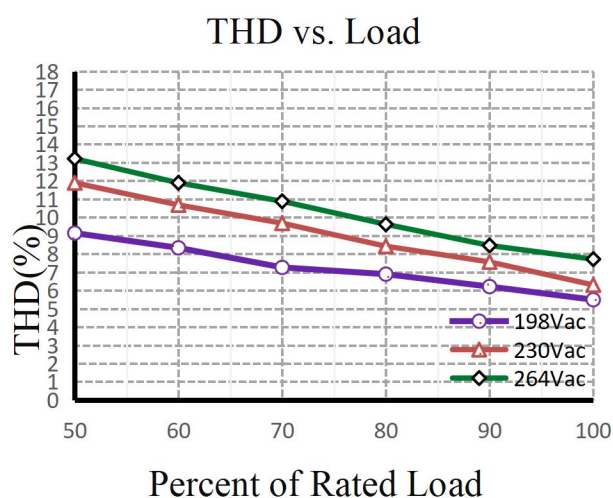
Lifetime vs. Case Temperature



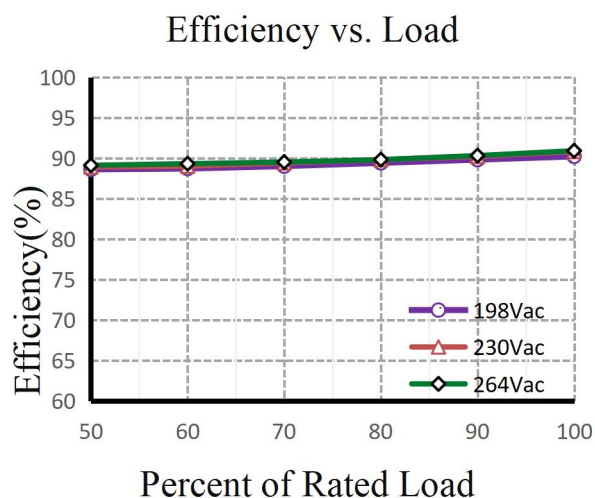
PF vs. Load



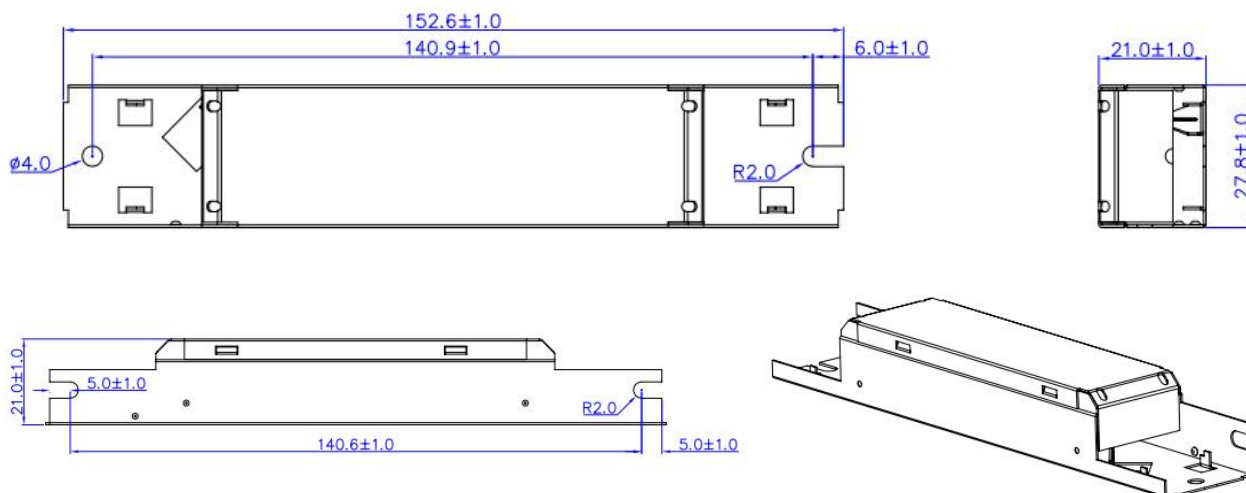
THD vs. Load



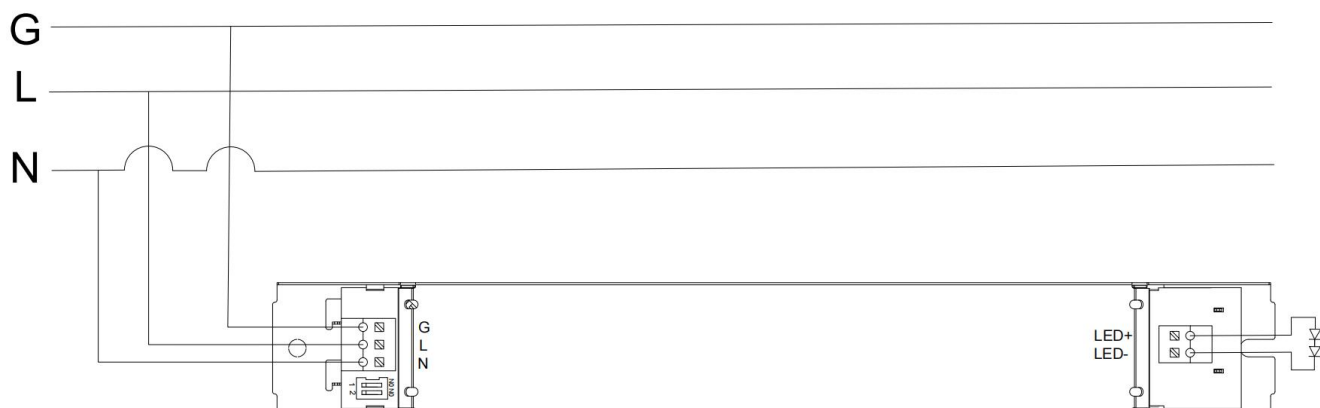
Efficiency vs. Load



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*245*200	110	0.1018	11.20	11.65

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
2024-12-07	V1.0	Initial release.