LC40W250-400S

**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<br>EN 61347-2-13:2014/A1:2017<br>EN IEC 62384:2020<br>AS61347.2.13:2018<br>AS/NZS61347.1:2016 Inc A1<br>BS EN 61347-1:2015/A1:2021<br>BS EN 61347-2-13:2014/A1:2017<br>BS EN 62493:2015<br>BS EN IEC 62384:2020 |
| | EMC Standards | EN IEC 55015:2019<br>EN IEC 55015:2019/A11:2020<br>EN IEC 61000-3-2:2019/A1:2021<br>EN 61000-3-3:2013/A2:2021<br>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:

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.

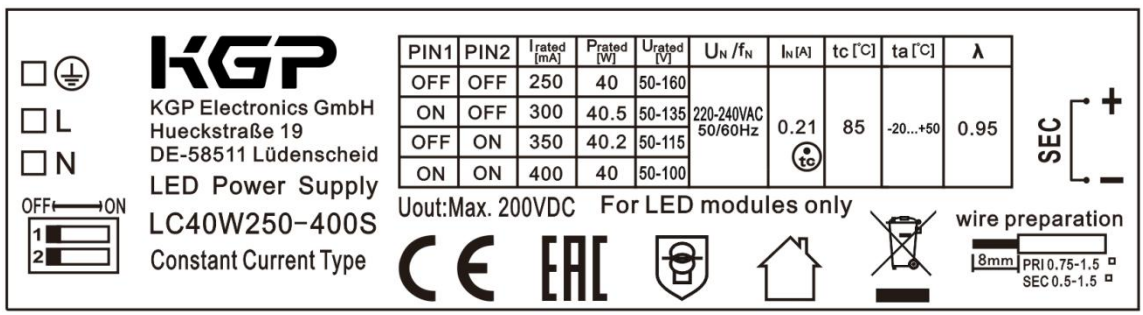
## 2. Output Current Setting

| 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

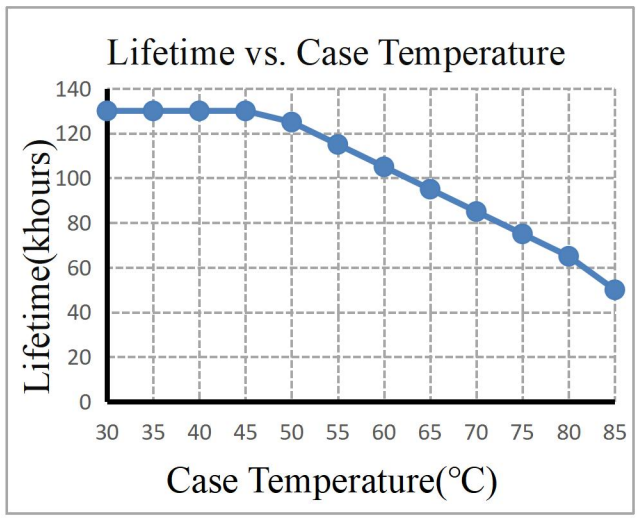
| TYPE | Connected quantities of different current Breaker | | | | | | Input Voltage (V) | Inrush Current (A) | Time (μs) |
|---|---|---|---|---|---|---|---|---|---|
| | current（A） | 10 | 13 | 16 | 20 | 25 | | | |
| | Installation wire diameter | 1.5mm² | 2.5mm² | 2.5mm² | 4mm² | 4mm² | | | |
| TYPE 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

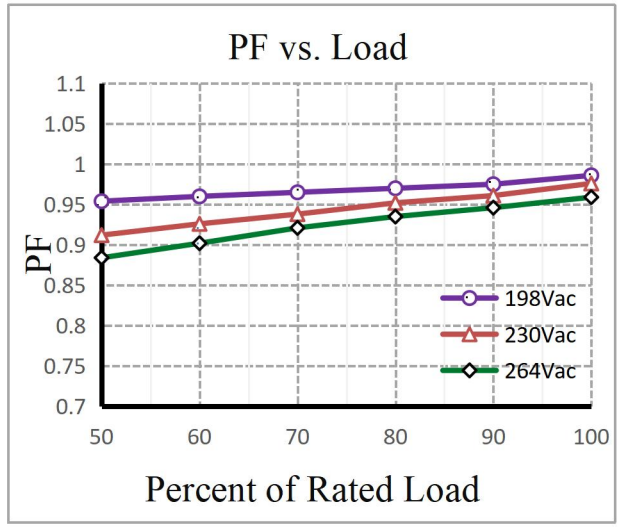


## 5. Electrical values

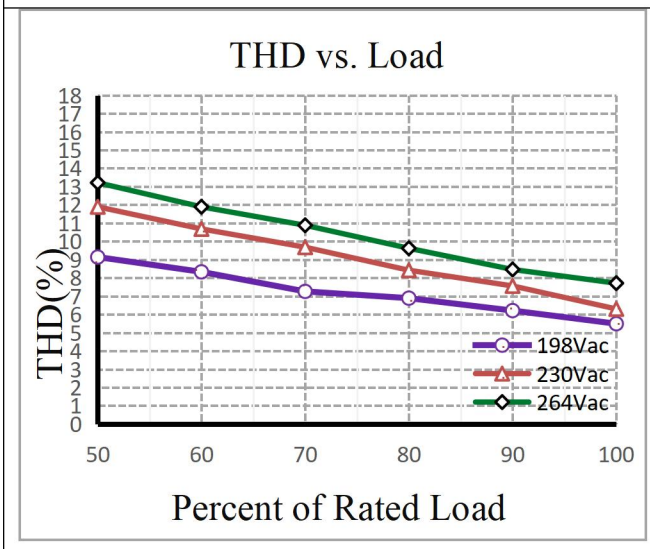
Lifetime vs. Case Temperature



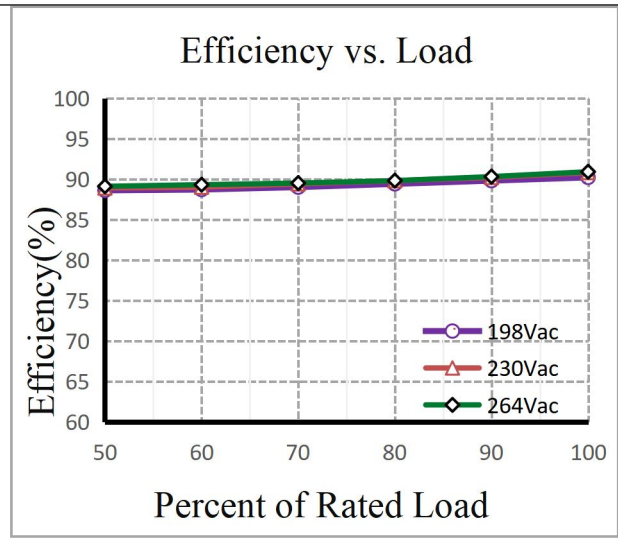

PF vs. Load



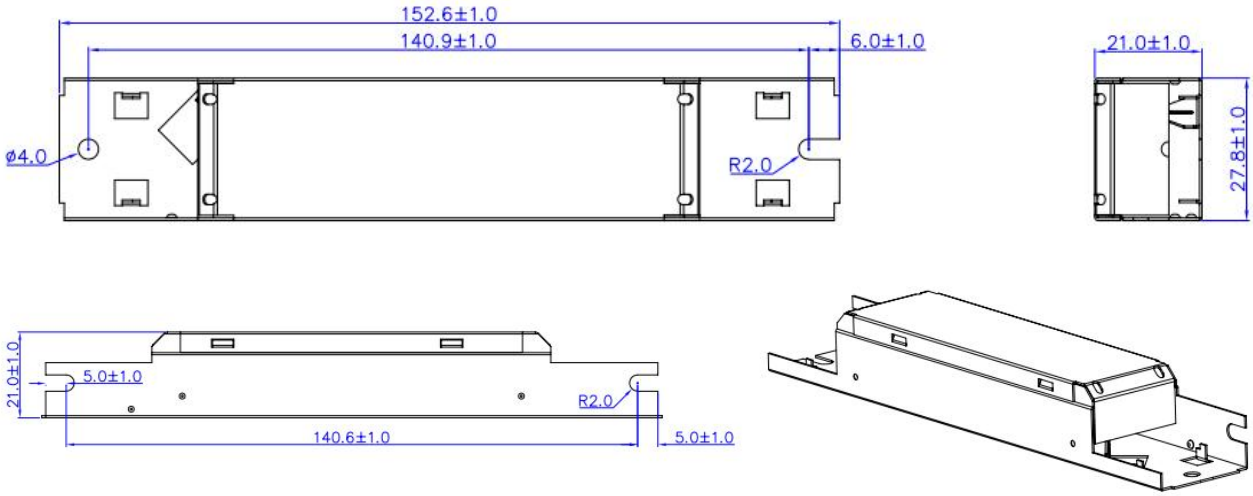

THD vs. Load



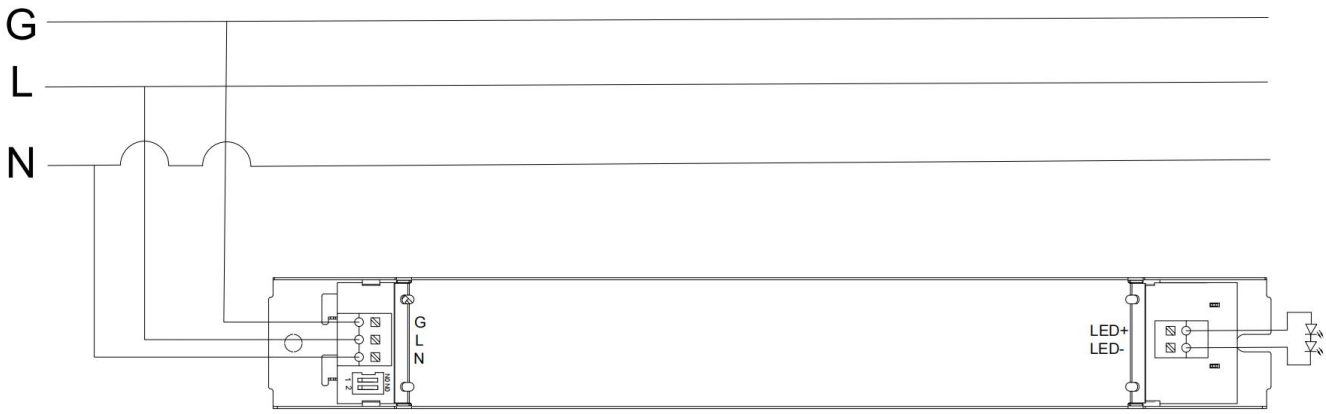

Efficiency vs. Load



## 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. |
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