

## L05060 1-10V Dimmable ECOline LED driver 100W / 60V

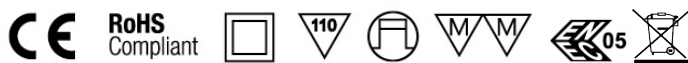
### Features

The L05060 LED Driver is a 100Watt LED driver with an adjustable current setting of 350mA to 2800mA.

- 1-10V / 100KΩ LOG potentiometer dimming input.
- 47KΩ NTC input and a 12Vdc fan output.
- Extremely low Inrush current of 2x I nominal

### Specifications

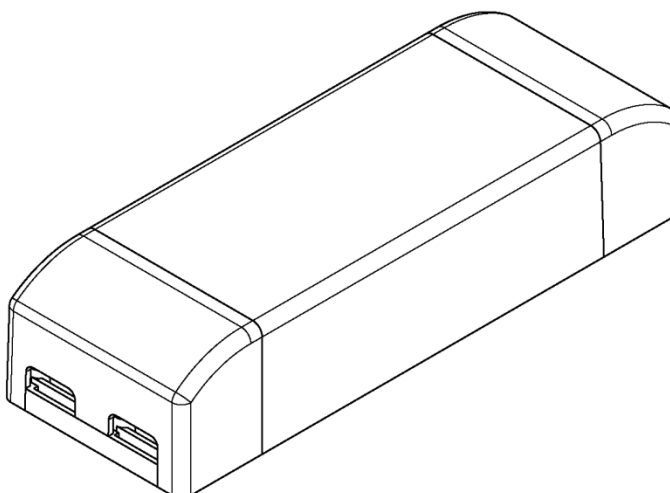
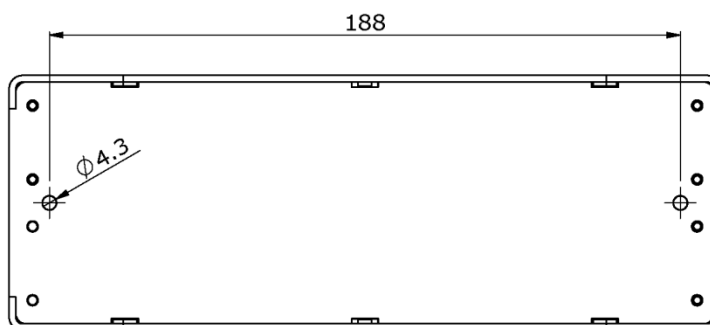
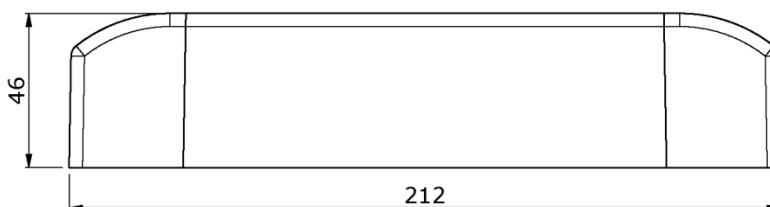
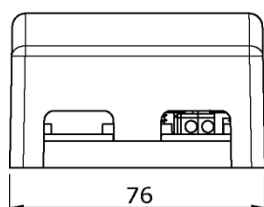
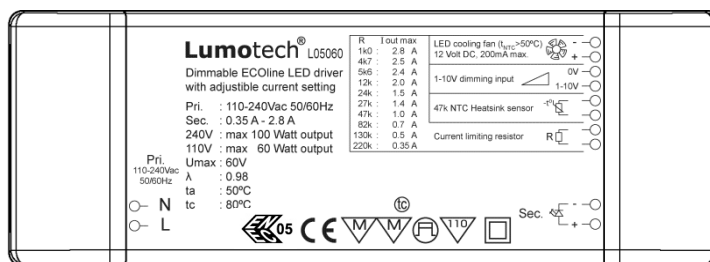
|                                                                    |                                                                                                                       |                                |
|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|--------------------------------|
| <b>System input voltage nominal</b>                                | 110Vac or 240Vac                                                                                                      |                                |
| <b>System input voltage range</b>                                  | 110-240Vac                                                                                                            |                                |
| <b>System input frequency</b>                                      | 50/60 Hz                                                                                                              |                                |
| <b>Maximum Inrush current</b>                                      | 2 x I nominal                                                                                                         |                                |
| <b>System input power</b>                                          | 240Vac: 110VA                                                                                                         | 110Vac: 80VA                   |
| <b>Output current</b>                                              | 350-2800mA<br>Stabilized adjustable current source.                                                                   |                                |
| <b>Output voltage range</b>                                        | 20Vdc min. - 60Vdc max.                                                                                               |                                |
| <b>Driver efficiency</b>                                           | 92%                                                                                                                   |                                |
| <b>Power factor</b>                                                | 0.98 @ 230Vac                                                                                                         | 0.99 @ 115Vac                  |
| <b>Nominal line current</b>                                        | 240V: 450mA                                                                                                           | 115V: 690mA                    |
| <b>Output power</b>                                                | 240V: 100 Watt                                                                                                        | 115V: 60 Watt @ 2A             |
| <b>LED voltage versus current</b>                                  | Input Voltage<br>240V                                                                                                 | Input Voltage<br>110V          |
|                                                                    | 700mA 60V Max.                                                                                                        | 700mA U <sub>f</sub> 60V Max.  |
|                                                                    | 1667mA U <sub>f</sub> 60 Max.                                                                                         | 1000mA U <sub>f</sub> 60V Max. |
|                                                                    | 2800mA U <sub>f</sub> 35V Max.                                                                                        | 2800mA U <sub>f</sub> 21V Max. |
| <b>Dimmer type</b>                                                 | 1-10V or potentiometer (100K log)                                                                                     |                                |
| <b>Open circuit voltage</b>                                        | Max 65Vdc, switching on and off every second. (retry testing if a led is present).                                    |                                |
| <b>Fan voltage/power</b>                                           | 12V/ 2.5W                                                                                                             |                                |
| <b>NTC sensor specification</b>                                    | 47k (example 47K TT4-47KC3H-1-1-500-END , Lumotech part number 072783)                                                |                                |
| <b>Short circuit protection</b>                                    | Yes                                                                                                                   |                                |
| <b>Open circuit protection</b>                                     | Yes                                                                                                                   |                                |
| <b>Overvoltage protection</b>                                      | Yes                                                                                                                   |                                |
| <b>Transformer Thermal protection</b>                              | Yes, against overheating.                                                                                             |                                |
| <b>Load voltage setting time</b>                                   | 1 second                                                                                                              |                                |
| <b>Output current overshoot</b>                                    | No                                                                                                                    |                                |
| <b>Output isolation</b>                                            | Yes, SELV EQ                                                                                                          |                                |
| <b>Ambient temperature range (Ta)</b>                              | -25°C to +50°C                                                                                                        |                                |
| <b>Leads primary</b>                                               | 0.5mm <sup>2</sup> – 1.5 mm <sup>2</sup>                                                                              |                                |
| <b>Leads secondary</b>                                             | LED connection 0.5mm <sup>2</sup> – 1.5 mm <sup>2</sup> / Other connections 0.2 mm <sup>2</sup> – 1.5 mm <sup>2</sup> |                                |
| <b>Lead connection method</b>                                      | Clamp connector                                                                                                       |                                |
| <b>Weight</b>                                                      | 500 gram                                                                                                              |                                |
| <b>Case colour</b>                                                 | Grey                                                                                                                  |                                |
| <b>Maximum case temperature (Tc)</b>                               | ≤ 80° C                                                                                                               |                                |
| <b>Storage temperature range</b>                                   | -20°C to +50° C                                                                                                       |                                |
| <b>Case dimensions</b>                                             | 212 x 76 x 46 mm (L x W x H)                                                                                          |                                |
| <b>Complies with standards</b>                                     | EN61547, EN55015, EN61000-3-2, EN62384, EN61347-2-13, EN61347-1                                                       |                                |
| <b>Min. current at min. dim level when using the Potentiometer</b> | 200 - 300mA                                                                                                           |                                |



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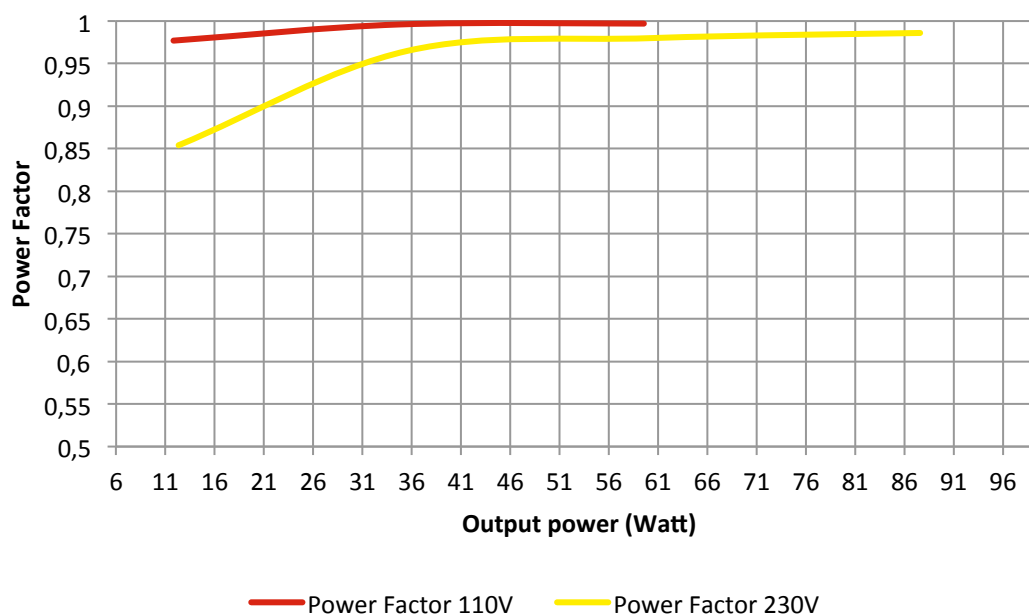
1. When the measured NTC temperature is higher than 55°C, the fan output voltage will be switched ON.
2. When the measured NTC temperature is lower than 50°C, the fan output will be switched OFF.
3. When the measured NTC temperature is higher than 70°C, the led output current will be dimmed linear, until the led output is OFF at 80°C.
4. When you want to use the fan continuously without using a temperature sensor, use an 8k2 Ohm resistor instead of the NTC sensor.

### Technical drawings

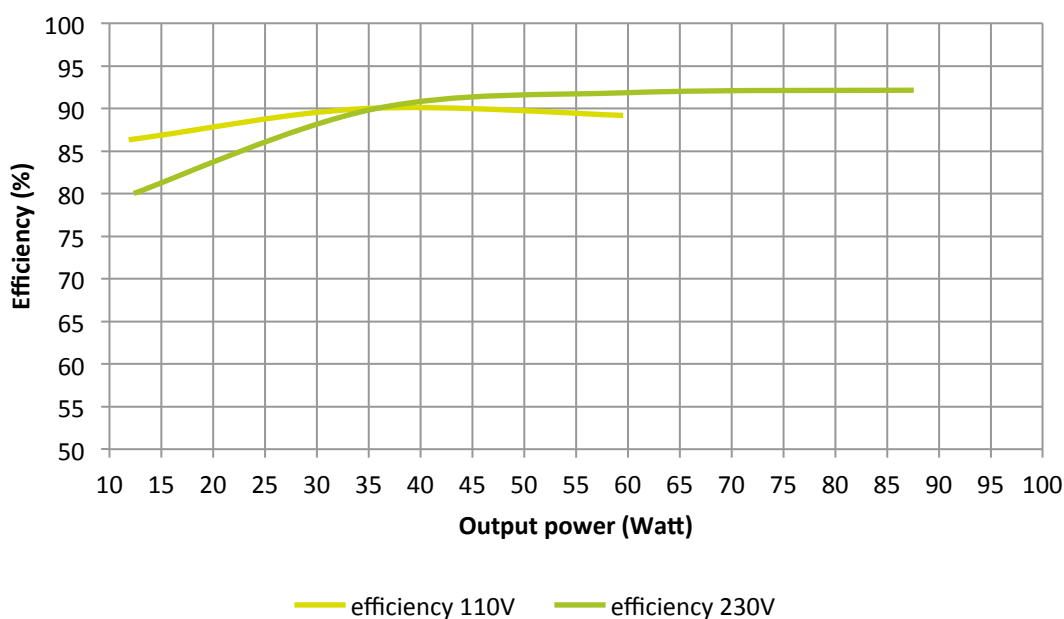


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Powerfactor @ Uout ± 50V

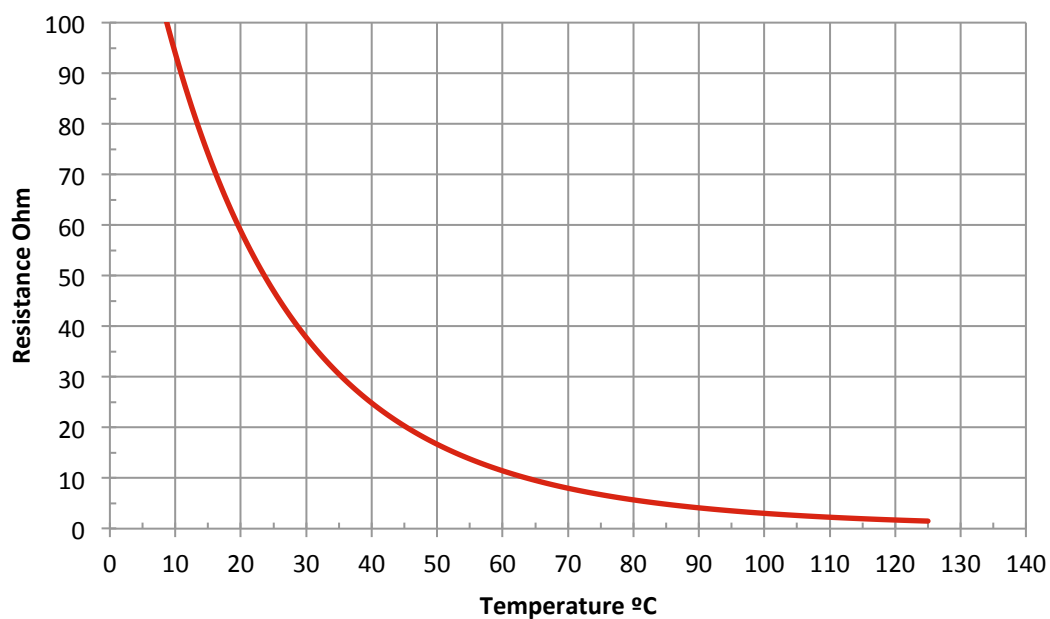


Efficiency @ Uout ± 50V



Efficiency and power factor are measured with a LED voltage of 50V @ 2A

NTC 47K TT4-47KC3H-1-1-500-END



#### Ordering information

| Article                                     | Article number |
|---------------------------------------------|----------------|
| L05060 1-10V dimmable LED Driver 100W / 60V | L05060         |
| NTC sensor 47K TT4-47KC3H-1-1-500-END       | 072783         |

#### Disclaimer

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