

L05050 LED Driver 6.5W, 3-12 Vdc, 680 mA

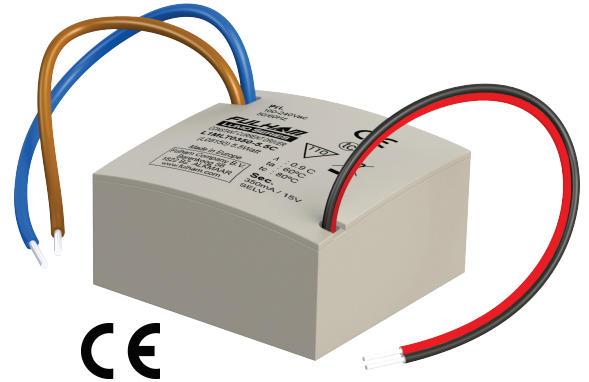
L05150 LED Driver 5.5W, 3-16 Vdc, 350 mA

L1MLT0680-6.5C

L1MLT0350-5.5C

Engineered for Best Fixture Performance

Fulham LumoSeries drivers are all built on core engineering design principles for exceptional standards of performance and reliability in LED systems. Highest-grade critical components together with design features for thermal management ensure excellent reliability. Our low ripple designs create flicker-free lighting and perfectly smooth dimming. Simplicity of specification and installation is a key characteristic of all Fulham LumoSeries drivers. Hence the wide voltage and current ranges and industry leading low inrush current.



Smallest LED driver of its kind for an easy fit in low power LED applications.

Engineered for Performance

- Industry leading efficiency
- Excellent EMC behavior
- Very high power factor
- Hot swapping of LEDs

Engineered for Reliability

- Thermal protection (automatic reset)
- Low inrush current
- Low output current ripple
- Short and open circuit protection, overload and overvoltage protection

Engineered for Simplicity

- High quality low cost product with low inrush current and high efficiency
- Super small form factor to fit in any application

5 year warranty

Fulham LumoSeries takes pride in the quality of its products. We not only develop all products in house, they are also produced to ensure guaranteed reliability and performance. Fulham LumoSeries drivers come with the assurance of a 5 year warranty. After all, with typical LED lifetimes of 50,000 hours, it is critical to have a power supply with equal reliability.



Product features

- Very compact size
- Wide output voltage range 3-18Vdc
- Flying leads
- Power factor > 0.9C
- Max inrush current 2.66A
- Thermal protection
- Open circuit output voltage protection
- Up to 77 % efficiency across a wide range of loads
- Engineered and Manufactured in Europe

Certificates and standards

- CE
- SELV

Classifications



Specific technical data

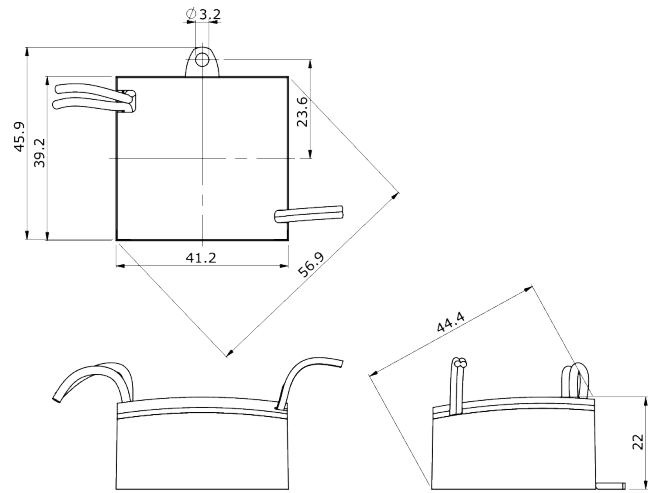
Type	Efficiency at full load	Output current	Output voltage range	Open circuit output voltage	Max. output power	Nominal line current @ 240Vac
L05050	77 %	680 mA	3 - 12 Vdc	13 Vdc	6.5 W	43 mA
L05150	76 %	350 mA	3 – 16 Vdc	17 Vdc	5.5 W	30 mA

Technical data

Rated supply voltage	220-240 Vac
Input voltage	110-240 Vac / 150-375 Vdc*
Mains frequency	50/60 Hz
Output current tolerance	5%
100 Hz ripple current	< 1%
Power factor at full load	> 0.9C
THD	%
Nonvolatile memory	Yes
Startup time	< 500 ms
Warm up time to 95% of light output	< 2 sec
Output isolation	SELV
Surge protection (diff. / comm.)	2 kV / 4 kV
IP classification	IP 20
Circuit lifetime	50,000 hrs at Tc max.
Case dimensions	45.9 x 41.2 x 22 mm
Case material	Polyamide 6 (PA6)

* External DC fuse is required

Dimensions



Inrush current

Mains max. peak inrush at full load	0.631A per driver on phase 60° (average starting angle)*
	2.266A per driver on phase 90° (worst case starting angle)*
	0.707A per driver on phase 60° (average starting angle)**
	2.660A per driver on phase 90° (worst case starting angle)**

** Tested at 240 Vac 1 driver connected, with TTI HA1600A analyzer.

* Tested at 240 Vac 10 drivers parallel connected, with TTI HA1600A analyzer.

Maximum number of drivers on automatic circuit breakers

Automatic circuit breaker type	C10	C13	C16	C20	B10	B13	B16	B20
L05050	277	360	443	554	277	360	443	554
L05150	324	421	518	647	324	421	518	647

Thermal specifications

Ambient temperature range (Ta)	0 to 60°C
Maximum case temperature (Tc)	< 80°C
Storage temperature range	-20 to 50°C

Over temperature protection

The LED driver is protected against thermal overload. If the temperature limit is exceeded, circuit the LED driver switches to protection mode. When the temperature drops within the operating limits, the LED driver will recover automatically.

Active overload protection

If the maximum output power is exceeded, the LED driver reduces the LED output to a current level within the specifications of the driver. This prevents overload at all times.

LED load

Fulham LumoSeries LED drivers are designed to drive passive LEDs, -COB's and -LED assemblies
Proper function is not guaranteed when (LED)loads with active components are used.

Short-circuit protection

In case of a short circuit the LED driver switches to protection mode. After the removal of the short-circuit the LED driver will recover automatically.

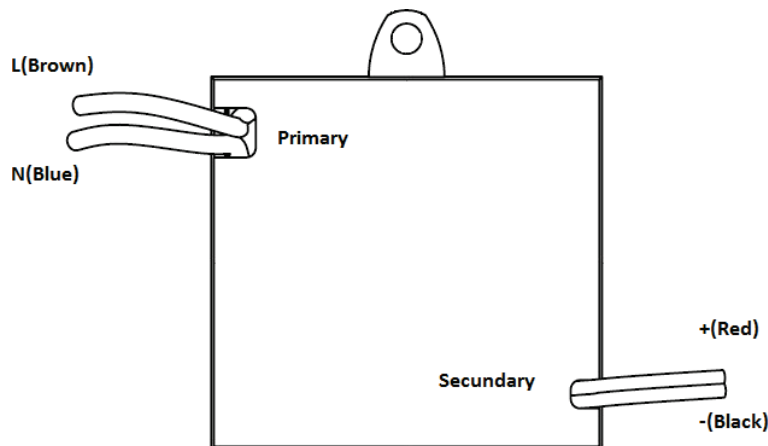
No-load operation

In no-load operation the output voltage will not exceed the specified open circuit output voltage.

Overload protection

If the maximum output power is exceeded, the LED driver switches off automatically. After elimination of the overload the normal operation is restored automatically.

Wiring diagram



Ordering data

Part	Part number	Alternate part number	EAN code	Packaging carton	Multibox carton	Weight per piece
L05050 LED Driver 6.5W 680mA	L05050	L1MLT0680-6.5C	8718801703489	20 pieces	320 pieces	39 g
L05150 LED Driver 5.5W 350mA	L05150	L1MLT0350-5.5C	8718801703502	20 pieces	320 pieces	39 g

Berenkoog 56
NL-1822 BZ Alkmaar
The Netherlands

www.Fulham.com

© 2018, Fulham B.V. All rights reserved. Designs and specifications may change without prior notice. Fulham products are not designed, intended, or authorized for any application in which the failure of the product could cause personal injury.

Formerly Lumotech

Datasheet L05050 / L05150