

**L05033-48700** LED Driver 33W, 30-48Vdc, 700mA

**L12300700-33E**

## Engineered for Best Fixture Performance

Fulham LumoSeries LED drivers are designed to efficiently power and control LED solutions for general lighting applications. System reliability is enhanced by features that protect the connected LED module, e.g. hot wiring, reduced ripple current and thermal derating. In the coming years LEDs will continue to increase in efficiency, creating new challenges for OEMs. With Fulham LumoSeries LED drivers, flexibility in luminaire design is assured.



**Solid fixed current driver with small form factor and high voltage output ideally suited for COB arrays.**

## Engineered for Performance

- Industry leading efficiency
- Excellent EMC behavior
- Very high power factor

## Engineered for Reliability

- Thermal protection (automatic current limiter)
- Short and open circuit protection, overload and overvoltage protection

## Engineered for Simplicity

- High quality low cost product with low inrush current and high efficiency

## 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

- Wide output voltage range 30-48 Vdc
- Fixed 700 mA output
- Max inrush current 0.537 A
- Low output current ripple (<30%) at 100 Hz
- Thermal protection: dimming instead of switch off
- Open circuit output voltage protection
- Up to 90 % efficiency across a wide range of loads
- Power factor 0.97
- ENEC certified
- Engineered and Manufactured in Europe
- SELV

## Certificates and standards

- ENEC05, CE
- EN55015 / EN61000-3-2 / EN61347-2-13 / EN61347-1 / EN61547 / EN62384 / SELV

## Classifications



\* Class II, enhanced insulation, when used with strain relieve.  
\*\* Class II, reinforced insulation, when built in without strain relieve.

## Specific technical data

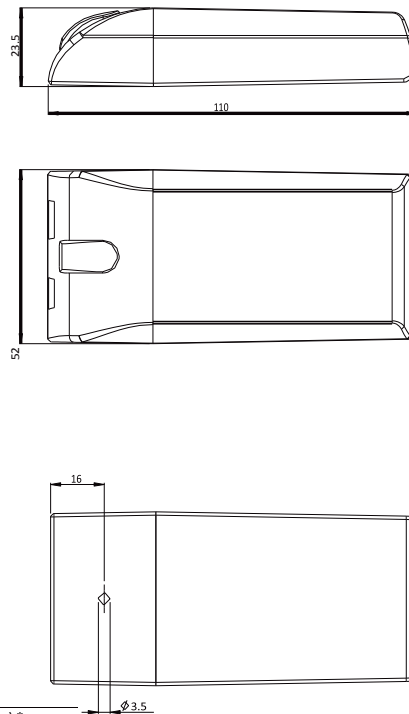
Type	Efficiency at full load	Output current	Output voltage range	Open circuit output voltage	Max. output power	Dimming
L05033-48700	90 %	700 mA	30 - 48 Vdc	64 Vdc	33 W	No

## Technical data

Rated supply voltage	220-240 Vac
Input voltage	220-240 Vac / 150-250 Vdc*
Mains frequency	50/60 Hz
Output current tolerance	5 %
100 Hz ripple current at full load	< 30 %
Power factor at full load	0.97
Nominal line current at 240 Vac	160 mA
Startup time	< 200ms
Warm up time to 95% of light output	< 200ms
Output isolation	SELV
Surge protection (diff. / comm.)	2 kV / 6 kV
IP classification	IP 20
Circuit lifetime	50,000 hrs at Tc max.
Case dimensions	110 x 52 x 23,5 mm
Case material	Polyamide 6 (PA6)

\* External DC fuse required

## Dimensions



## Inrush current

Mains max. peak inrush at full load	0.366A per driver on phase 60° (average starting angle) *
	0.369A per driver on phase 90° (worst case starting angle) *
	0.483A per driver on phase 60° (average starting angle) **
	0.537A 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
L05033-48700	53	69	85	107	53	69	85	107

## Thermal specifications

Ambient temperature range (Ta)	-20 to 45°C
Maximum case temperature (Tc)	< 84°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, the output current is reduced.

### 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.

### Mounting/ Cooling

Above an output power of 20W, the driver needs to be mounted on a heat conductive surface of at least 200cm<sup>2</sup>. Always test if the surface is sufficient enough before installing the driver.

### 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.

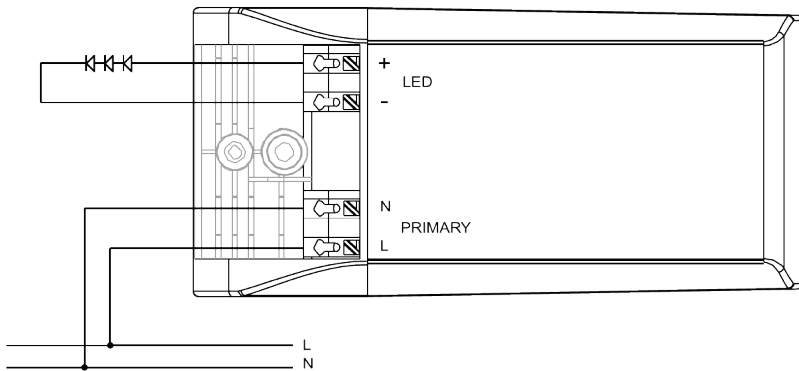
### No-load operation

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

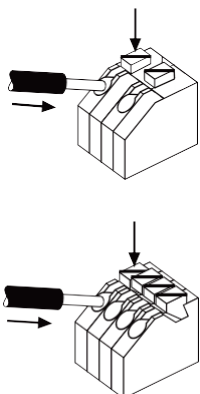
### Hot Swapping

This driver does not support hot swapping of the LEDs

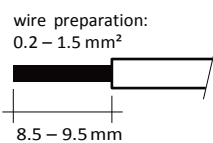
## Wiring diagram



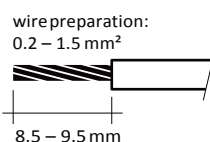
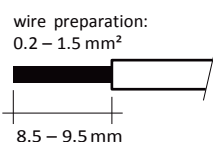
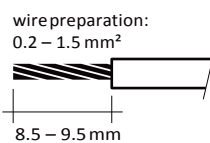
## Wiring of device



### Solid

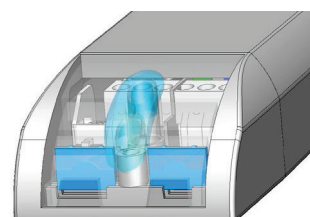


### Stranded



## Strain relief

The strain relief inserts can be removed to accommodate wiring of larger diameters.



## Ordering data

Part	Part number	Alternate part number	EAN code	Packaging carton	Multibox carton	Weight per piece
L05033-48700 LED Driver 33W, 700mA	L05033-48700	L12300700-33E	8718801703601	20 pieces	240 pieces	120 g

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