

L05058-24CV2000 Constant Voltage LED Driver 48W, 24Vdc

L1230024V-48E

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.



Constant voltage LED driver with industry leading efficiency built to the highest standards with EN60335 certificate.

Engineered for Performance

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

Engineered for Reliability

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

Engineered for Simplicity

- Low inrush current for easy installation.

Product features

- Constant voltage 24 Vdc
- Max inrush current 1.69 A
- Low output current ripple (< 10 %) at 100 Hz
- Thermal protection: dimming instead of switch off
- Open circuit output voltage protection
- High efficiency across a wide range of loads
- Power factor 0.98
- ENEC certified
- Engineered and Manufactured in Europe
- SELV
- Suitable for household and similar electrical appliances according EN60335

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.



Certificates and standards

- ENEC05, CE
- EN55015 / EN61000-3-2 / EN61347-2-13 / EN61347-1 / EN61547 / EN62384 / EN60335 / SELV

Classifications



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

Specific technical data

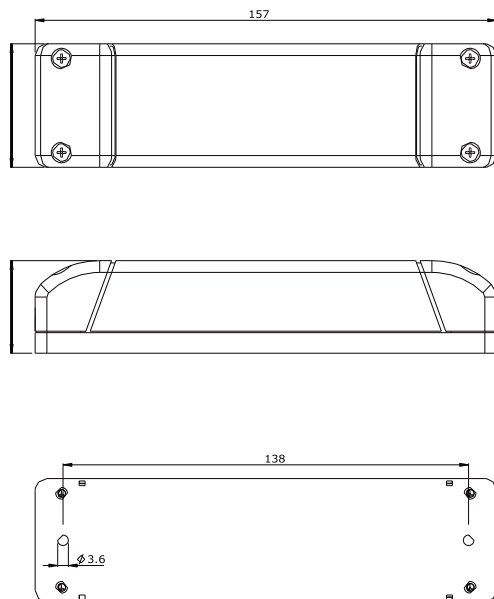
Type	Efficiency at full load	Output current	Output voltage	Open circuit output voltage	Max. output power	Dimming
L05058-24CV2000	89 %	245 -2.220 mA	24 Vdc	26 Vdc	48 W	No

Technical data

Rated supply voltage	220-240 Vac
Input voltage	200-240 Vac / 150-375 Vdc*
Mains frequency	50/60 Hz
Output current tolerance	-
100 Hz ripple current	<10%
Power factor at full load	0.98
Nominal line current at 240Vac	240mA
Startup time	< 500ms
Warm up time to 95% of light output	< 500ms
Output isolation	SELV
Surge protection (diff. / comm.)	3.5 kV / 6 kV
IP classification	IP 20
Circuit lifetime	50,000 hrs at Tc max.
Case dimensions	157 x 42 x 32 mm
Case material	Polyamide 6 (PA6)

* External DC fuse is required

Dimensions



Inrush current

Mains max. peak inrush at full load	0.405A per driver on phase 60° (average starting angle)* 1.691A per driver on phase 90° (worst case starting angle)* 0.532A per driver on phase 60° (average starting angle)** 1.669A per driver on phase 90° (worst case starting angle)**
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** 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 circuitbreakers

Automatic circuit breaker type	C10	C13	C16	C20	B10	B13	B16	B20
L05056-24CV2000	37	48	59	73	37	48	59	73

Thermal specifications

Ambient temperature range (Ta)	-20 to 42°C
Maximum case temperature (Tc)	< 68°C
Storage temperature range	-20 to 50°C

Thermal overload protection

If the maximum output power is exceeded, the LED driver reduces the LED output current. After elimination of the overload the nominal operation is restored automatically.

Over temperature protection

The LED driver is protected against thermal overload. If the temperature limit is exceeded, the output current is reduced.

Secondary switching

The L05058-24CV2000 is designed to switch the LEDs on/off by switching the mains.
The L05058-24CV2000 is not designed to switch the LEDs directly on/off in the secondary powerline.

Output power vs output current

The output power is limited to 52W.
When a load lower than 24Vdc is connected, the output current can reach a maximum of 2.22A

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.

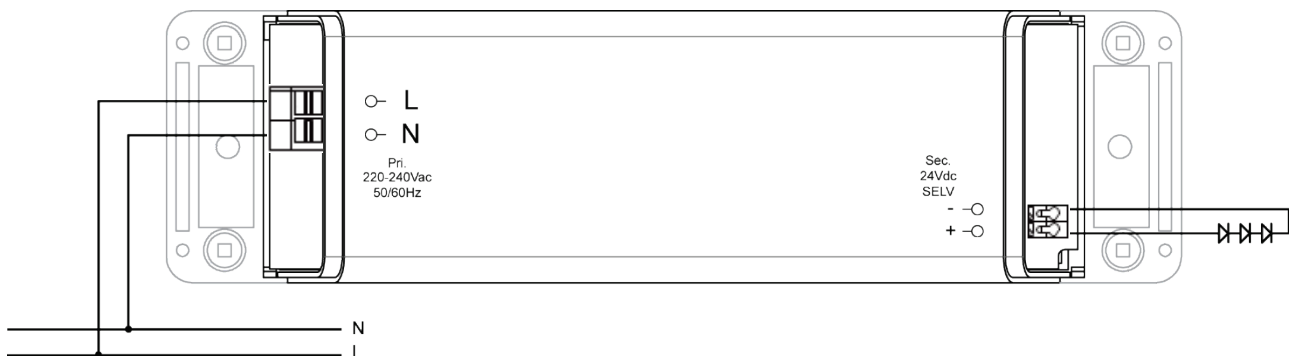
No-load operation

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

LED load

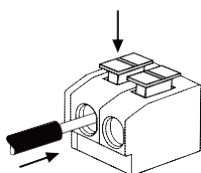
The Fulham LumoSeries constant voltage LED drivers are designed to drive passive LEDs, COBs and LED assemblies.
Proper function is not guaranteed when (LED)loads with active components are used

Wiring diagram



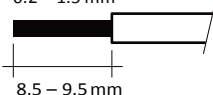
Wiring of device

Primary connection



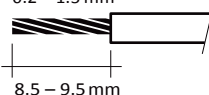
Solid

wire preparation:
0.2 – 1.5 mm²

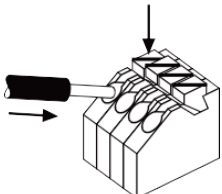


Stranded

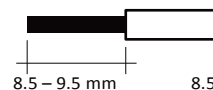
wire preparation:
0.2 – 1.5 mm²



Secondary connection



wire preparation:
0.2 – 1.5 mm²

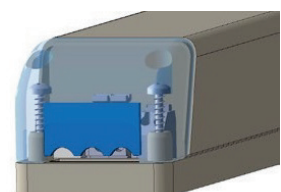


wire preparation:
0.2 – 1.5 mm²



Strain relief

The strain relief insert can be reversed or removed to accommodate wiring of various diameters.



Ordering data

Part	Part number	Alternate part number	EAN code	Packaging carton	Multibox carton	Weight per piece
L05058-24CV2000 Constant Voltage LED Driver 48W, 24Vdc	L05058-24CV2000	L1230024V-48E	8718801703632	50 pieces	150 pieces	227 g

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