

LEDlight 12 W Mains dimmable series L05021 / L05021-40250 / L05021-40300

Lumotech technology

Lumotech 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 Lumotech LED drivers, flexibility in luminaire design is assured thanks to adjustable current outputs.



Benefits

- Designed with system reliability in mind:
 - Low inrush current
 - Short and open circuit protection, overload and over voltage protection
 - Thermal protection (automatic current limiter)
 - Support for hot-swapping of LEDs >6W
 - Excellent EMC behavior
- Future-proof flexibility - industry leading voltage and current range enabling seamless support of LED generations and minimizing supply chain complexity

Product features

- Designed for maximum compatibility with trailing edge dimmers (refer to website for list of compatible dimmers)
- Supports output currents of 180 mA, 200 mA, 250 mA, 300 mA, 350 mA and 700 mA
- Very compact size
- Wide output voltage range 3 - 32 Vdc or 20 - 40 Vdc
- Power factor 0.9
- SELV
- ENEC certified
- Engineered and Manufactured in Europe

5 year warranty

Lumotech takes pride in the quality of its products. We not only develop all products in house, they are also produced in our own manufacturing plants to ensure guaranteed reliability and performance. Lumotech 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 (L05021-40250 / L05021-40300 are pending), CE
- EN55015 / EN61000-3-2 / EN61347-2-13 / EN61347-1 / EN61547 / EN62384 / SELV

Classifications



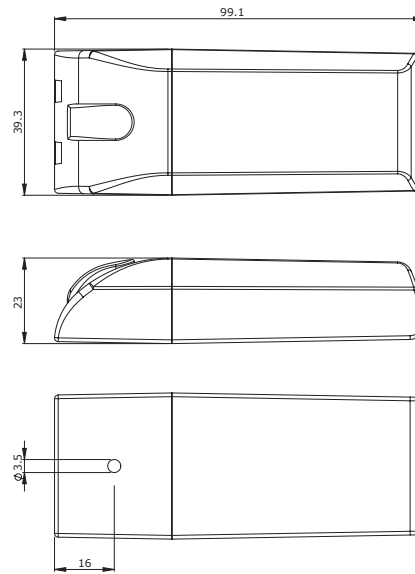
Specific technical data

Type	Efficiency at full load	Output current	Output voltage range	Open circuit voltage output	Max. output power	Dimming
L05021	70 %	350 or 750 mA	3 - 32 Vdc	32 Vdc	12 W	Mains, trailing edge
L05021-40250	79 %	200 or 250 mA	20 - 40 Vdc	50 Vdc	12 W	Mains, trailing edge
L05021-40300	80 %	180 or 300 mA	20 - 40 Vdc	50 Vdc	12 W	Mains, trailing edge

Technical data

Rated supply voltage	230 - 240 Vac
Input voltage	230 - 240 Vac
Mains frequency	50 / 60 Hz
Output current tolerance	5 %
Power factor at full load	0.9
Nominal line current at 240 Vac	70 mA / 65 mA / 68 mA
Dimming method	trailing edge
Minimum dim level	subject to dimmer used
Output voltage setting time	1 second
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	99 x 39 x 23 mm

Dimensions



Inrush current

Mains max. peak inrush at full load	0.7 A*	* Tested at 240 Vac, on phase 60° with TTI HA1600A analyzer.
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Maximum number of drivers on automatic circuit breakers (excluding dimmer loading)

Automatic circuit breaker type	C10	C13	C16	C20	B10	B13	B16	B20
L05021	53	68	84	105	40	49	60	75

Thermal specifications

Ambient temperature range (Ta)	-20 to 45°C
Maximum case temperature (Tc)	< 85°C
Storage temperature range	-20 to 50°C

Ordering data

Part	Part number	Packaging carton	Multibox carton	Weight per piece
LEDlight 12W MINIDIM 350/700 mA	L05021	20 pieces	240 pieces	80 g
LEDlight 12W MINIDIM 200/250mA	L05021-40250	20 pieces	240 pieces	80 g
LEDlight 12W MINIDIM 180/300mA	L05021-40300	20 pieces	240 pieces	80 g

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.

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.

Overtemperature protection

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

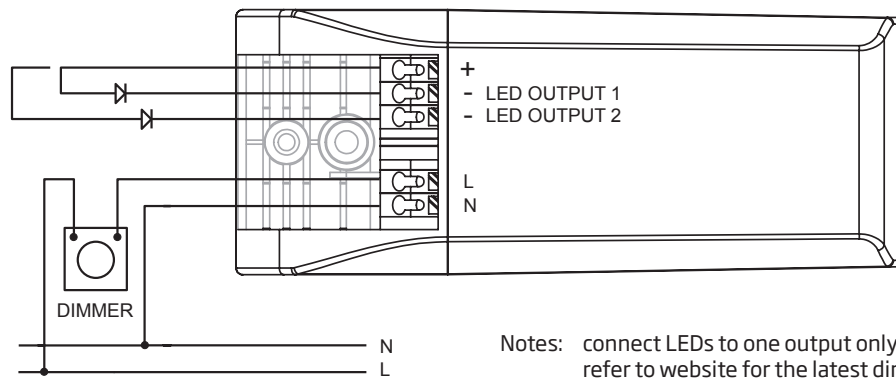
No-load operation

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

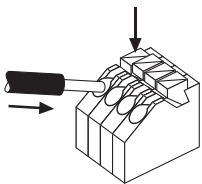
Overcurrent protection

Overcurrent protection to allow hotswapping of LEDs higher than 6 Watt.

Wiring diagram

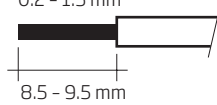


Wiring of device



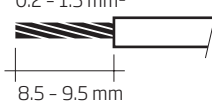
Solid

wire preparation:
0.2 - 1.5 mm²



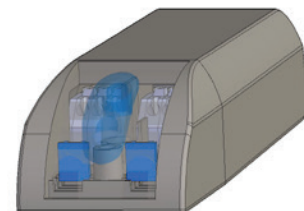
Stranded

wire preparation:
0.2 - 1.5 mm²



Strain relief

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



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