Lumotech

20W

L05011i LED Driver 20W, 3-33 Vdc, 350 / 700 / 1050 mA

Engineered for Best Fixture Performance

Lumotech 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 Lumotech drivers. Hence the wide voltage and current ranges and industry leading low inrush current.

A versatile driver in a compact form factor that delivers best-in-class efficacy and flicker-free dimming

Engineered for Performance

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

Engineered for Reliability

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

Engineered for Simplicity.

- Future-proof flexibility – industry leading voltage and current range enabling seamless support of LED generations and minimizing supply chain complexity

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.

Product features

- Wide output voltage range 3 - 33 Vdc
- Three current settings 350, 700 or 1050 mA
- Three fixed voltage settings 10 Vdc, 12 Vdc, 24 Vdc
- 1-10V dimming and pulse dimming
- Max inrush current 1.25 A
- Low output current ripple (<1 %) at 100 Hz
- High efficiency up to 85 % across a wide range of loads
- Power factor 0.9
- SELV
- ENEC certified
- Engineered and Manufactured in Europe

Certificates and standards

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

Classifications

1-10V PULSE CE KEMA KEUR 05 110 IP20

THE POWER INSIDE.

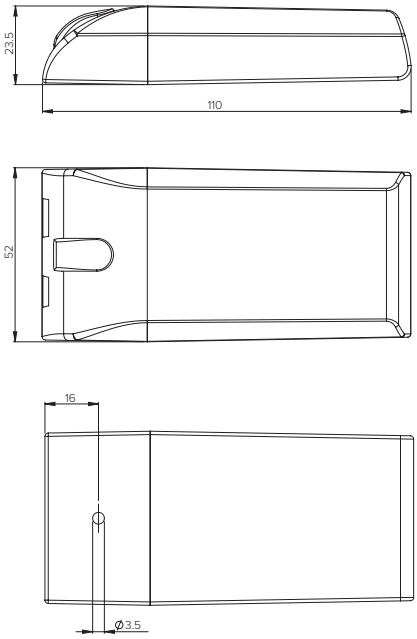
Specific technical data

Type	Efficiency at full load	Output current	Constant voltage output	Output voltage range	Open circuit output voltage	Max. output power	Dimming
L05011i	85 %	350 / 700 / 1050 mA	10 V / 12 V / 24 V	3 - 33 Vdc	33 Vdc	20 W	1 - 10 V, potentiometer 100 log b, pulse (SELV)

Technical data

Rated supply voltage	220-240 Vac
Input voltage	110-240 Vac
Mains frequency	50/60 Hz
Output current tolerance	5 %
100 Hz ripple current at full load	<1 %
Power factor at full load	0.9
Standby power	250 mW
Nominal line current at 240 Vac	110 mA
Dimming method	PWM 230 Hz
Minimum dim level	10 mA
Non volatile memory	no
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	110 x 52 x 23.5 mm

Dimensions



Inrush current

Mains max. peak inrush at full load	1.25 A*

* Tested at 240 Vac, on phase 60° with TTI HA1600A analyzer.

Maximum number of drivers on automatic circuit breakers

Automatic circuit breaker type	C10	C13	C16	C20	B10	B13	B16	B20
L05011i	53	68	84	105	40	49	60	75

Thermal specifications

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

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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.

Overtemperature protection

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

Active overcurrent protection

Active overcurrent protection to allow hotswapping of LEDs higher than 3 Watt.

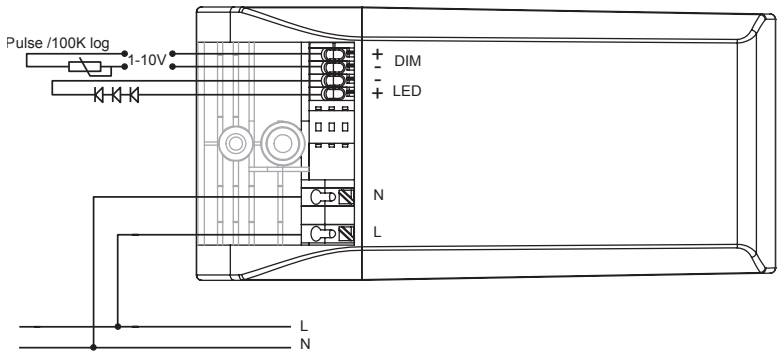
Short-circuit protection

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.

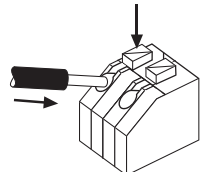
No-load operation

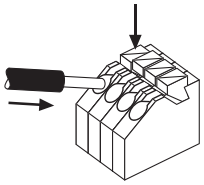
In no-load operation the output voltage will not exceed the specified open circuit output voltage.

Wiring diagram



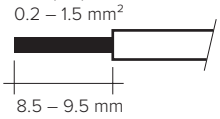
Wiring of device



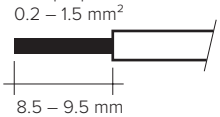


Solid

wire preparation:
0.2 – 1.5 mm²

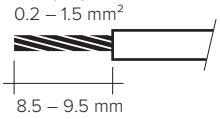


wire preparation:
0.2 – 1.5 mm²

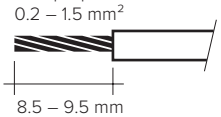


Stranded

wire preparation:
0.2 – 1.5 mm²

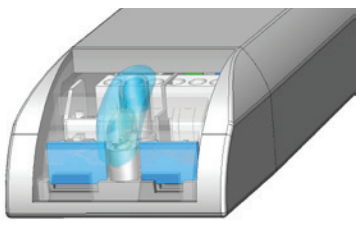


wire preparation:
0.2 – 1.5 mm²



Strain relief

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



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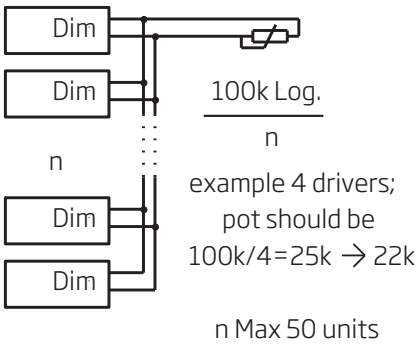
Dimming

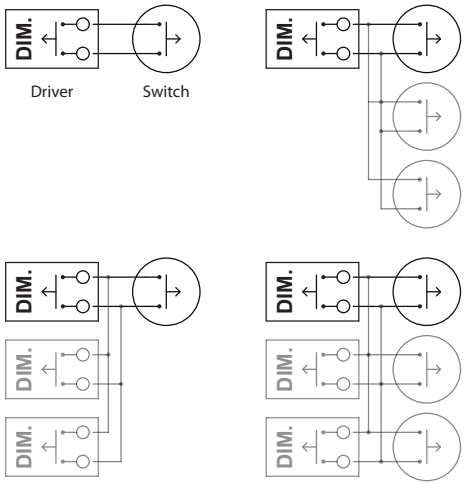
1-10 V dimming

In case of multiple drivers on one dimmer make sure that the wires are connected according to polarity.



Pulse dimming

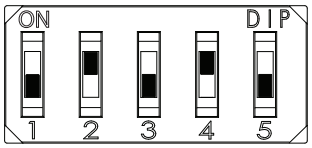
In case of multiple drivers on one dimmer make sure that the wires are connected according to polarity.



Dipswitch settings

The constant current or constant voltage setting can be adjusted by using the dipswitch terminal on the driver. In these tables all the supported currents and voltages are listed down. The output power of this driver changes according to the selected constant voltage setting selected.

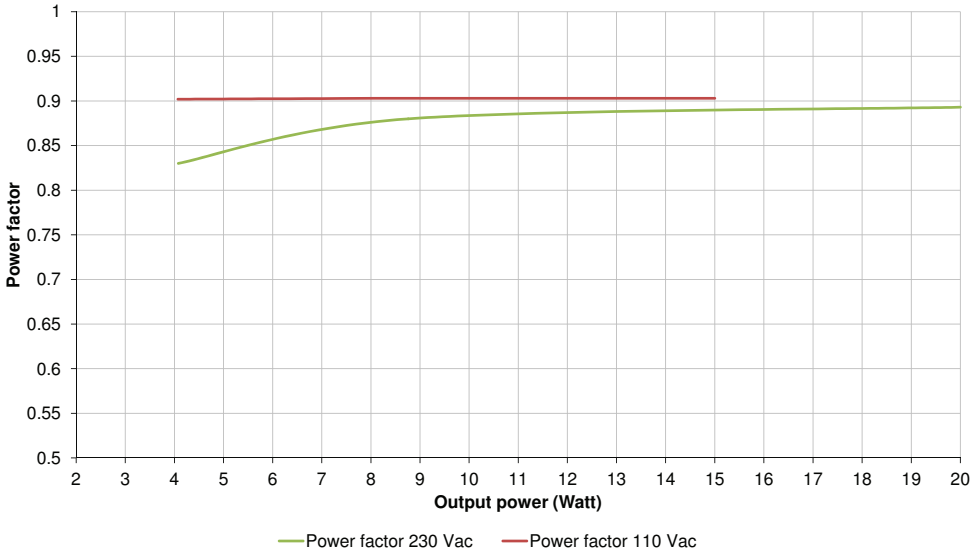
When the switch lever is in the up position (ON), it is seen as a '1'. When the switch lever is in the down position (Off), it is seen as a '0'.
The example on the right demonstrates a setting for the L05011i.



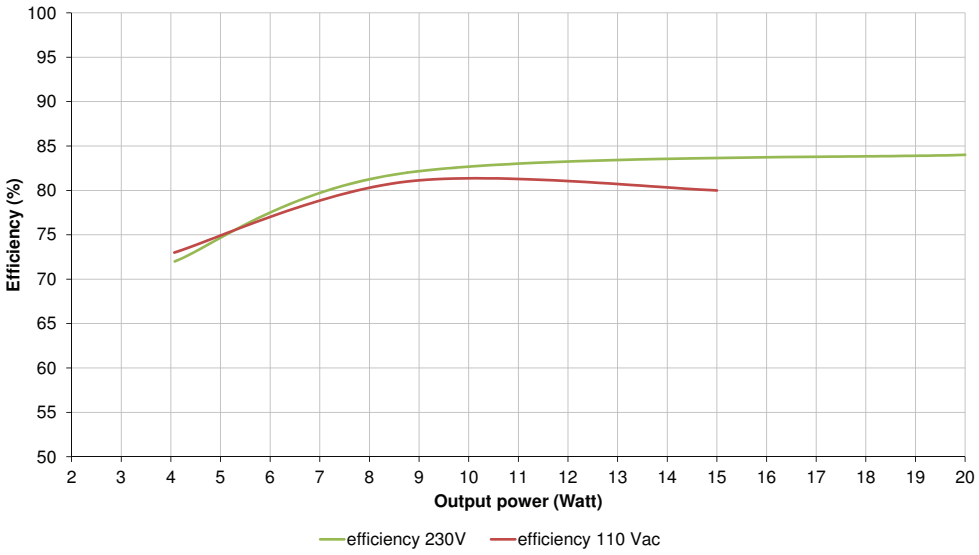
12 V setting

Setting	1	2	3	4	5
24 V (20 W)	0	1	1	0	0
12 V (12 W)	0	1	0	1	0
10 V (10 W)	0	1	0	0	1
1050 mA	0	1	0	0	0
700 mA	1	0	0	0	0
350 mA	0	0	0	0	0

Power factor L05011i



Efficiency L05011i



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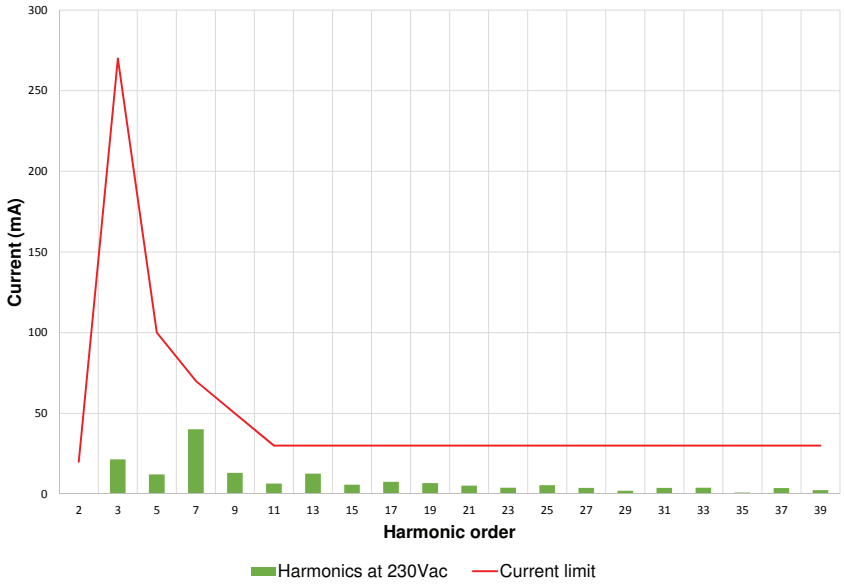
Harmonics L05011i (limit according to IEC 61000-3-2 table 2)



Ordering data

Part	Part number	Packaging carton	Multibox carton	Weight per piece
L05011i LED Driver 20W, 3-33 Vdc, 350, 700, 1050mA	L05011i	20 pieces	240 pieces	105 g

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