

Light is OSRAM

OSRAM

OT SLIM 160/220-240/24

Constant Voltage LED driver

Benefits

Long lasting and high reliability.
Super slim cross section for installation flexibility.
Independent housing design to fit any applications.
Through loop input connection

Applications

Cove lighting, handrail, light boxes
Compact luminaires, tracks.
Suitable for indoor
CLASS II protection



Approvals



Valid only if printed on product. When not printed on product label, they are under evaluation.

L	404 mm	Total length
L1	356 mm	Holes interaxis
B	30 mm	Width
H	21,5 mm	Height

Housing material: plastic, white

* image for information purpose only

Product Features

- Independent (Class II protection)
- SELV, V_{out} : 24,2 V
- t_a range -25...+45°C
- Overload/Over temperature/Short circuit protection, automatic, reversible
- T_c max = 75°C
- Low THD < 5%
- Low ripple < 5%
- Input voltage: 220–240 V_{AC} / 220–240 V_{DC}
- 50'000 h lifetime at T_c max **
- 5 years guarantee*

*10% cumulated failure, ** 24 h = 14 h ON 10 h Standby

Electrical specification

	Item	Value	Unit	Remarks
INPUT	Nominal line voltage	220 – 240	V _{ac}	EMI filter to be applied by installer if V _{DC} is used, to keep CE approval. ⁽¹⁾
		220 – 240	V _{DC}	
	Mains line frequency	0 / 50 / 60	Hz	
	AC voltage range	195.5 – 276	V	Permitted voltage range
	DC voltage range	176 – 250	V	Permitted voltage range
	Nominal current	0.775	A	Full load, 230 V _{ac} , 50 Hz
	Total Harmonic Distortion (THD)	< 5	%	Full load, 230 V _{ac} , 50 Hz, see graphs
	Power factor λ	> 0,95		Full load, 230 V _{ac} , 50 Hz, see graphs
	ECG Efficiency	92	%	Typical, Full load, 230 V _{ac} , 50 Hz, see graphs
	Power loss in no-load condition			Not applicable ⁽²⁾
	Protection class	II		
	Suitable for fixtures with prot. Class	I & II		
	Inrush current	60	A	Full Load, 240 V _{ac} , Cold Start Duration = 600 μs, 50% / 50% I _{pk}
	Max. units per circuit breaker:			
	Max. ECG no. on circuit breaker 25 A (B)	5		
	Max. ECG no. on circuit breaker 16 A (C)	5		
	Max. ECG no. on circuit breaker 25 A (C)	9		
	Max. ECG no. on circuit breaker 32 A (C)	11		
OUTPUT	Nominal voltage	24.2	V	
	Voltage accuracy	± 5	%	@ 220 – 240 V _{ac}
	Open circuit voltage Max.	25	V	
	Voltage range	23.3 - 25	V	
	Voltage ripple	± 5	%	Ripple / average @ 100 Hz; Full load
	Nominal output power	160	W	
	Power range	0 – 160	W	PF (λ), THD and EMI verified between 64-160 W
	Device power loss	13.9	W	Full load, 230 Vac, 50 Hz, Typical
	Leakage current	< 0.7	mA	240 V _{ac}
	Galvanic isolation	SELV		
ENVIRONMENTAL	Ambient temperature range	-25...+45	°C	
	Max. temperature at T _c test point	+75	°C	Measured on T _c point indicated of the prod label, T _a not exceeded
	Storage temperature range	-40...+85	°C	
	Permitted rel. humidity during operation	5 – 85	%	Not condensing
	Surge capability (L vs N)	1	kV	acc to. EN 61547
	Environmental rating	Indoor		
	IP protection class	IP 20		
	Mains switching cycles	> 50000	cycles	@ T _a = 25°C
	Expected ECG lifetime	50000	h	@ T _a = 45°C, T _c = 75°C and 10% failure rate, 14 h ON and 10 h stand-by per day
	Overheating protection	Yes		Auto reversible
	Overload protection	Yes		Auto reversible
	Short-circuit protection	Yes		Auto reversible
	Type of connection	Cables		
	Dimensions	404 x 30 x 21.5	mm	L x W x H
	Holes interaxis	356	mm	
	Weight	250	g	
	Casing material	Plastic		White RAL9010

⁽¹⁾: EMI filter to be installed only on DC operation to keep CE approbation. ENEC is not valid in DC operation

⁽²⁾: Stand-by and secondary switching is not allowed

Protection

Over temperature, Overload, Short-circuit. Auto reversible.

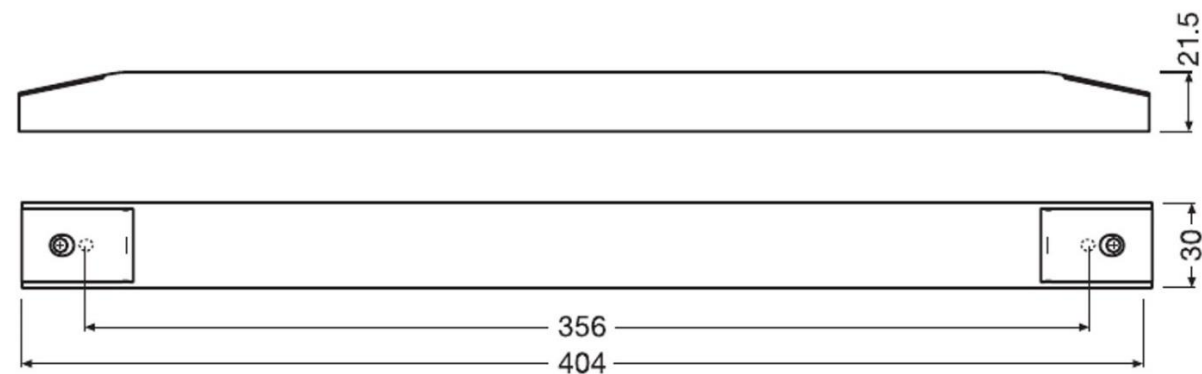


INPUT	Terminal	Screw terminal		Through loop 2L / 2N
	Wire peeling length	5	mm	
	Cable cross section	0.75 - 1.5	mm²	H03VV-F 2x0.75 mm² H05VV-H2/F 2X0.75 mm² H03VV-H2/F 2x0.75 mm² H05VV-F 2x1.5 mm²
		20	AWG	
OUTPUT	Terminal	Screw terminal		2 LED+ / 2 LED-
	Wire peeling length	5	mm	
	Cable cross section	0.75 - 1.5	mm²	H03VV-F 2x0.75 mm² H05VV-H2/F 2X0.75 mm² H03VV-H2/F 2x0.75 mm² H05VV-F 2x1.5 mm²
		20	AWG	

Led wire length

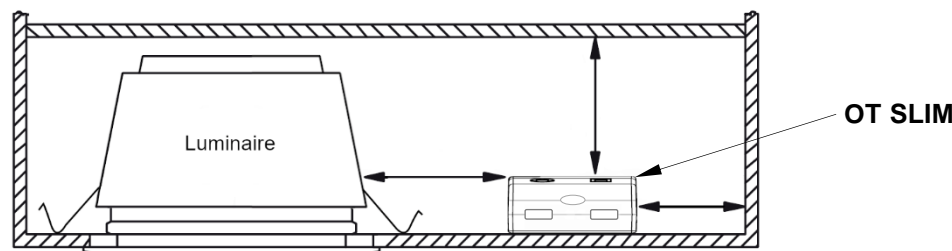
EMI pass verified with wire length of 2 m, from the ECG to the LED module at full load.
Wiring longer than 2 m from ECG to LED module is possible, but site installation conditions may interfere with EMI with these longer cables. EMI is therefore not verified in this condition.
For longer lengths than 2 m, appropriate cable cross section must be carefully selected to reduce voltage drop.

Product drawing

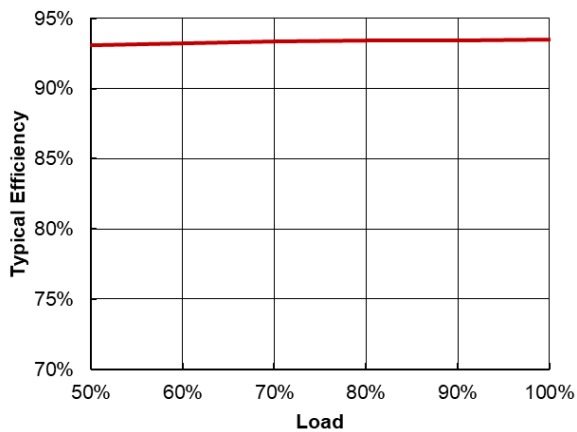


Installation requirements

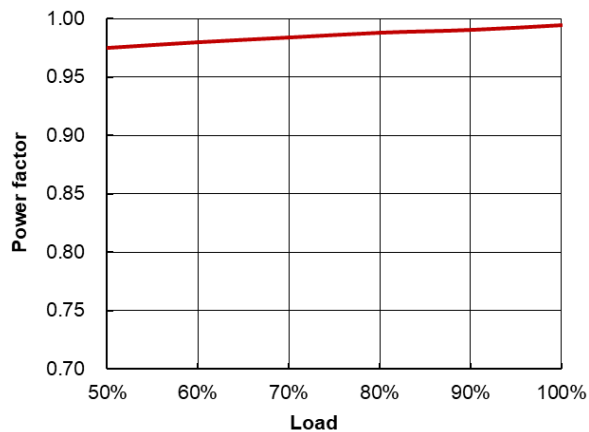
It is suggested to keep the side and top of the driver at sufficient distance from other surfaces or other devices to avoid overheating.



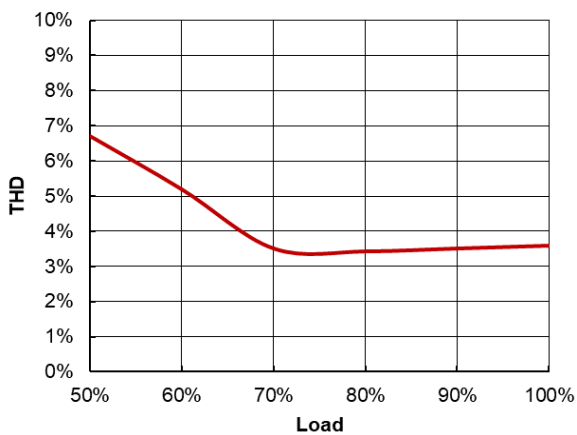
Typical efficiency vs Load (230V/50Hz)



Power Factor vs Load (230V/50Hz)

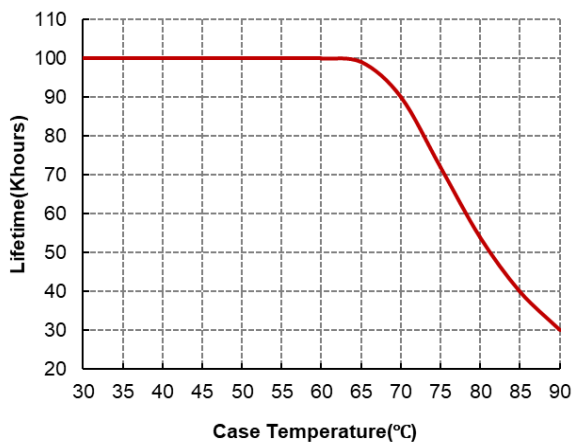


THD vs Load (230V/50Hz)

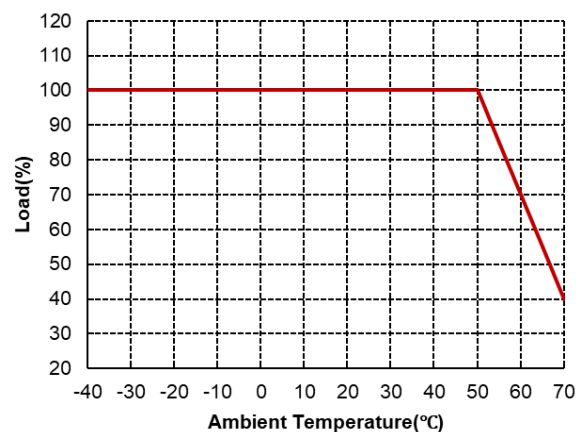


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Lifetime vs temperature tc



Load vs temperature ta



Remarks

- **Output short circuit protection:** auto reversible when fault removed
- **Output overload protection:** auto reversible when fault removed
- **Over temperature protection:** the unit is protected against temporary overheating by shutting the unit down, auto reversible when temperature decreases
- **Dimming compatibility:** the OT SLIM driver is able work with OSRAM dimmer as dimmable solution. For example: OTi DALI DIM, OT DIM, OT RGBW DIM, OT BLE DIM. It is recommended to check the performance of total system in design-in stage.
- **Application:** the driver is intended for supply power to 24 V LED light sources like – but not limited to – OSRAM LINEARlight FLEX® and Tec Flex LED flexible strips, OSRAM BackLED® and BoxLED® 24 V modules, OSRAM LINEARlight® Rigid FINESSE systems.
- **Use of product under V_{DC}:** EMI filter to be applied by installer if V_{DC} is used, to keep CE approval. ENEC approbation is not valid in DC operation
- **No-load conditions:** hot plug-in or secondary switching of LEDs is not permitted. Please take care to switch the driver off via L.
- **Recommendations on how to dispose of it at the end of its life in line with Directive 2012/19/EU:** separate control gear must be disposed of, in accordance with WEEE, at certified waste disposal companies. For this purpose, recycling centres and take-back systems (CRSO) collection points are available in the trade or at private disposal companies that accept separate control gears free of charge. In this way, raw materials are conserved, and materials are recycled.

Standards

EN 61347-1

EN 61347-2-13

EN 55015

EN 61547

EN 61000-3-2

EN 61000-3-3

EN 60598-1

EN 62384

Ordering information

Product name	EAN 10	EAN 40	Pieces / Shipping carton
OT SLIM 160/220-240/24	4062172135894	4062172135900	30

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