OT FIT 30/220-240/12 P

Constant Voltage LED driver

Benefits

Long lasting and high reliability.
Slim cross section for installation flexibility.
Independent housing design to fit any applications.
Compatible with BackLED and BoxLED 12 V LED modules
Compatible with Inventronics dimmers for dimming operations

Applications

Channel letters, light boxes
Backlit areas, stretch ceilings.
Suitable for outdoor.

Housing material: aluminium, white

* image for information purpose only

L	190 mm	Total length
L1	178x20 mm	Holes interaxis
B	40 mm	Width
H	20.5 mm	Height

Approvals

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

Product Features

- Independent (Class I protection)
- SELV, U_{out} = 13 V
- t_a range -25…+55°C
- Over temperature/Short circuit protection, automatic, reversible
- T_c max = 80°C
- THD < 15%
- Low ripple < 5%
- Input voltage: 200–240 V_{AC}
- 50’000 h lifetime at T_c max *
- 5 years guarantee**

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

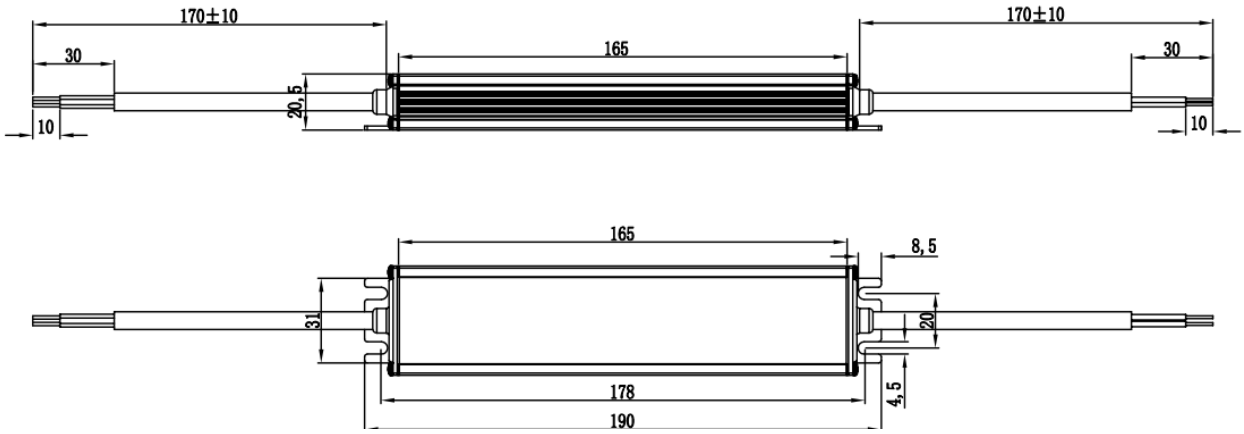
Electrical specification

	Item	Value	Unit	Remarks
INPUT	Nominal line voltage	200 – 240	V_{ac}	
	Mains line frequency	50 / 60	Hz	
	AC voltage range	180 - 264	V	Permitted voltage range
	Nominal current	0.22	A	Full load, 230 V_{ac}, 50 Hz
	Total Harmonic Distortion (THD)	< 15	%	Full load, 230 V_{ac}, 50 Hz, see graphs
	Power factor λ	0.80C – 0.95		40…100% load, 200-240 V_{ac}, 50/60 Hz, see graphs
	Efficiency in full load	≥ 84	%	Typical, Full load, 230 V_{ac}, 50 Hz, see graphs
	Device power loss	5.7	W	Full load, 230 Vac, 50 Hz, input power 35.7W Typ
	Protection class	I		
	Suitable for fixtures with prot. Class	I		
	Inrush current	< 25	A	Full Load, 230 V_{ac}, Cold Start Duration = 272 µs, 50% / 50% I_{pk}
	Max. units per circuit breaker:			
	Max. ECG no. on circuit breaker 10 A (B)	22		
	Max. ECG no. on circuit breaker 16 A (B)	35		
	Max. ECG no. on circuit breaker 25 A (B)	55		
	Max. ECG no. on circuit breaker 10 A (C)	36		
	Max. ECG no. on circuit breaker 16 A (C)	58		
	Max. ECG no. on circuit breaker 25 A (C)	91		
OUTPUT	Nominal voltage	12	V	
	Voltage accuracy	± 5	%	@ 200 – 240 V_{ac}
	Open circuit voltage Max.	13	V	
	Voltage range	11.4 … 12.6	V	
	Voltage ripple	± 5	%	Ripple / average @ 100 Hz; Full load
	Nominal output power	30	W	
	Power range	12 – 30	W	
	PST	≤ 1		Full load @230Vac
	SVM	≤ 0.4		Full load @230Vac
	Leakage current	<0.7	mA	240 V_{ac}, 50 Hz
	Galvanic isolation	SELV		
ENVIRONMENTAL	Ambient temperature range	-25…+55	°C	
	Max. temperature at T_c test point	+80	°C	Measured on T_c point, T_a not exceeded
	Storage temperature range	-35…+80	°C	With 95% relative humidity
	Permitted rel. humidity during operation	10 – 95	%	Not condensing
	Surge capability (L vs N) / (L-N vs PE)	6 / 6	kV	acc to. EN 61547
	Environmental rating	Outdoor		
	IP protection class	IP 67		
	Mains switching cycles	> 100000	cycles	@ T_a = 25°C
	Expected ECG lifetime	50000	h	@ T_c max and 10% failure rate
	No-load operation consumption	< 0.5	W	
	Overheating protection	Yes		Auto reversible, with derating
	Overload protection	Yes		Auto reversible
	Short-circuit protection	Yes		Auto reversible
	Type of connection:	Cables		
	Input cable length	180	mm	3 x 1.0 mm²: brown, blue, green/yellow
	Output cable length	180	mm	2 x 1.0 mm²: red, black
	Max permissible load wire length	< 3	m	
	Dimensions	190 x 40 x 20.5	mm	
	Holes interaxis	178 x 20	mm	
	Weight	310	g	± 5%
	Casing material	Aluminium		White

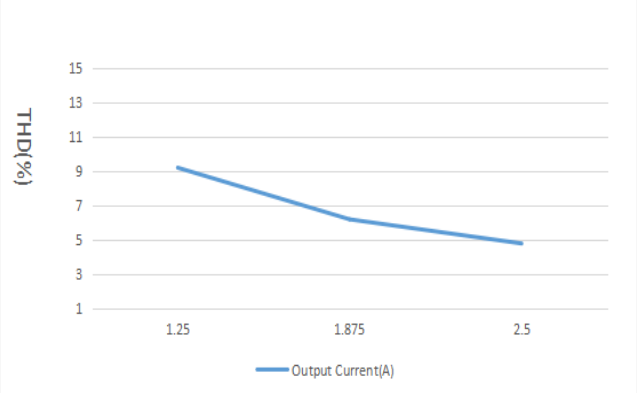
Protection

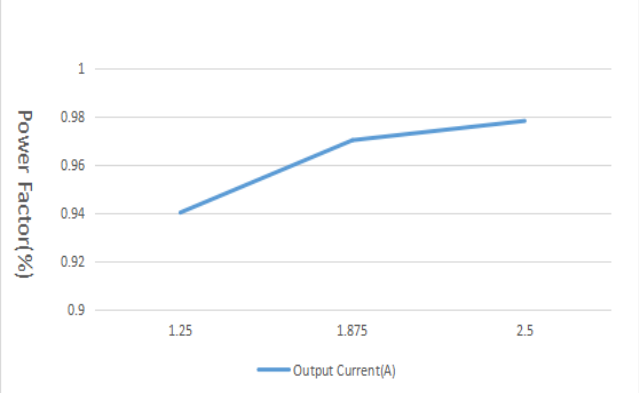
Over temperature, Over voltage, Overload, Short-circuit. Auto reversible.

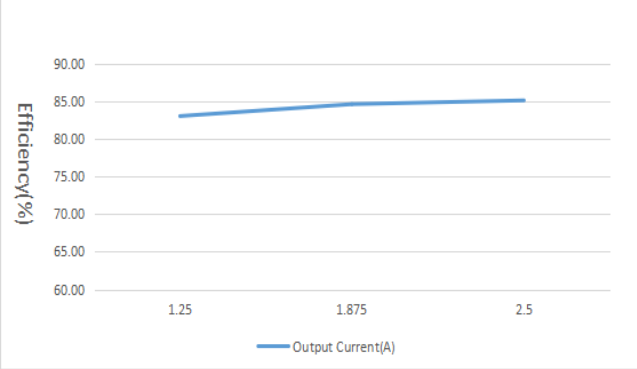
Product drawing

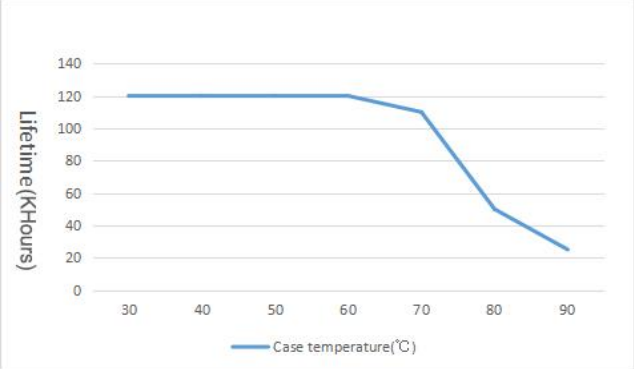


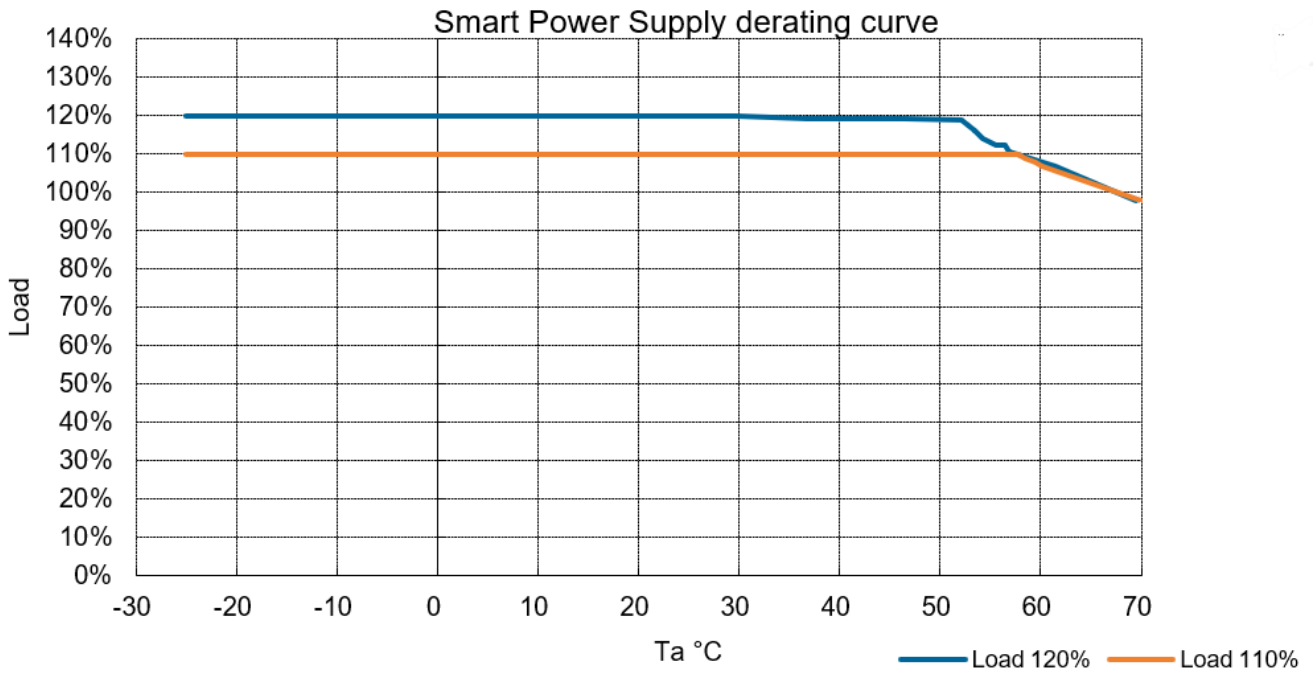
Electrical characteristics @ 230 V_{ac}











Remarks

- **Output short circuit protection**: auto reversible when fault removed.
- **Output overload protection:** auto reversible when fault removed. Extra load must be removed to avoid damages to the power supply.
- **Over temperature protection:** the unit is protected against temporary overheating by power derating, auto reversible when temperature decreases.
- **Dimming compatibility:** the OT FIT driver is able work with Inventronics dimmers as dimmable solution. For example: IT D0P 480/12-48V/4C NFC L C RGBW. It is recommended to check the performance of total system in design-in stage.
- **Application:** the driver is intended for supply power to 12 V LED light sources like – but not limited to – BackLED and BoxLED 12 V LED modules.
- **No-load conditions:** hot plug-in or secondary switching of LEDs is permitted. Please take care to switch the driver off via L.
- Intended for use with LED modules only.
- The external flexible cable or cord of this driver cannot be replaced. If the cable is damaged, the driver shall be destroyed.
- **Ecodesign regulation information:**
  Intended for use with LED modules. The forward voltage of the LED light source shall be within the defined operating window of the control gear in all operating conditions including dimming if applicable. Separate control gear and light sources must be disposed of at certified disposal companies in accordance with Directive 2012/19/EU (WEEE) in the EU and with Waste Electrical and Electronic Equipment (WEEE) Regulations 2013 in the UK. For this purpose, collection points for recycling centres and take-back systems (CRSO) are available from retailers or private disposal companies, which accept separate control gear and light sources free of charge. In this way, raw materials are conserved and materials are recycled.

Standards

EN 61347-1
EN 61347-2-13
EN IEC 55015
EN IEC 61000-3-2
EN 61000-3-3
EN 61000-4-2,3,4,5,6,11
EN IEC 62384
EN IEC 61547

Ordering information

Product name	EAN 10	EAN 40	Pieces / Shipping carton
OT FIT 30/220-240/12 P	6977770438675	6977770438682	50

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