

Product data sheet: OT FIT 25/220-240/700 LT2 S

SELV Constant current LED driver

Wide operating area up to 700mA

The reliable component when LEDset flexibility, small dimensions and low ripple are requested.

Benefits

- Wide operating range: 300 – 700 mA
- Low ripple
- Adjustable current via LEDset
- Long lasting and high reliability

Built-in and independent mounting (with opt. kit)

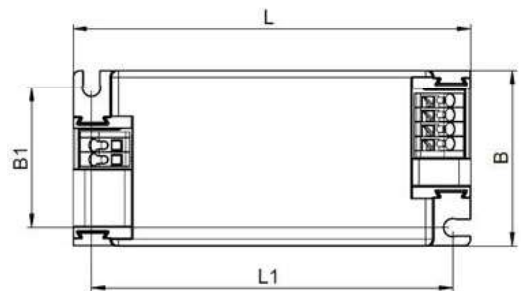
Approvals (Under preparation if not shown on label)



SELV

Applications

- Downlight and spot.
- Office – industrial – shop



L	97 mm
L1	88 mm
B	43 mm
B1	34 mm
H	29.5 mm

Housing material: plastic, white.

Product Features

- Output current range 300 – 700 mA
- Low ripple < 1%
- Small and standard dimensions
- SELV, U_{out}: 15 – 50 V_{DC}
- Output power up to 26.5 W
- Mains voltage 220 – 240 V
- Overload protection
- Over temperature protection
- 80'000 h lifetime at t_c = 65°C
- T_c max = 75°C
- Wide t_a range -20 - +50°C
- 5 years guarantee

Electrical Specifications

	Item	Value	Unit	Remarks
Input	Nominal voltage	220 – 240	V	
	Nominal frequency	50 / 60	Hz	
	AC voltage range	198 – 264	V	
	DC voltage range	N.A.		
	Maximum voltage	280	Vac	2 h maximum, unit might not operate in this abnormal condition
	Nominal current	0.14	A	
	Total Harmonic Distortion (THD)	< 15	%	Full load
	Power factor	> 0.95		Full load
	Efficiency	typical 86.5	%	Full load
	Power losses	4.5	W	Maximum, full load
	No-load power	tbd	W	
	Protection class	II		Suitable for class I and II luminaires
Inrush current	13	A pk		
Max. units per circuit breaker	B16: 30 B10: 20 B25: 42			
Output	Nominal voltage range	15 – 50	V	
	Maximum voltage	60	V	No load protection,
	Nominal current range	300-700	mA	
	Current accuracy	+/- 5	%	+/- 5% through the LEDset interface.
	Current ripple	< 1	%	Ripple / average @ 100 Hz; Full load
	Nominal power range	8 – 26.5	W	
	Maximum power	26.5	W	LED output
Galvanic isolation Primary/ secondary	SELV 3.75	kV	Output to earth - Touch current < 0.7 mA	
Dimming	Dimming control	No		
	Dimming range	N.A.		
	Dimming technique	N.A.		
	Frequency	N.A.		
Galvanic isolation	N.A.			
Environment	Ambient temperature range t_a	-20 ... +50	°C	
	Maximum case temperature t_c	75	°C	Measured on t_c point indicated of the product label, t_a not exceeded
	Max. case temp. in fault condition	110	°C	
	Storage temperature range	-40 ... +85	°C	
	Relative humidity	5 ... 85	%	Not condensing
	Surge transient protection	1 / 2	kV	L/N acc to. EN 61547
	Environmental rating	Indoor		
	IP rating	IP 20		
	Mains switching cycles	> 100'000		
Expected lifetime	50'000 80'000	h	$t_c = 75^\circ\text{C}$, 0.2% / 1'000 h failure rate $t_c = 65^\circ\text{C}$, 0.1% / 1'000 h failure rate	

Protections

Overtemperature, Overload, No load, Short-circuit, Input overvoltage, Output overvoltage, Output undervoltage

See remarks on page 4.

Wiring Diagram

Input

Gray 1 - Mains
Gray 2 - Mains

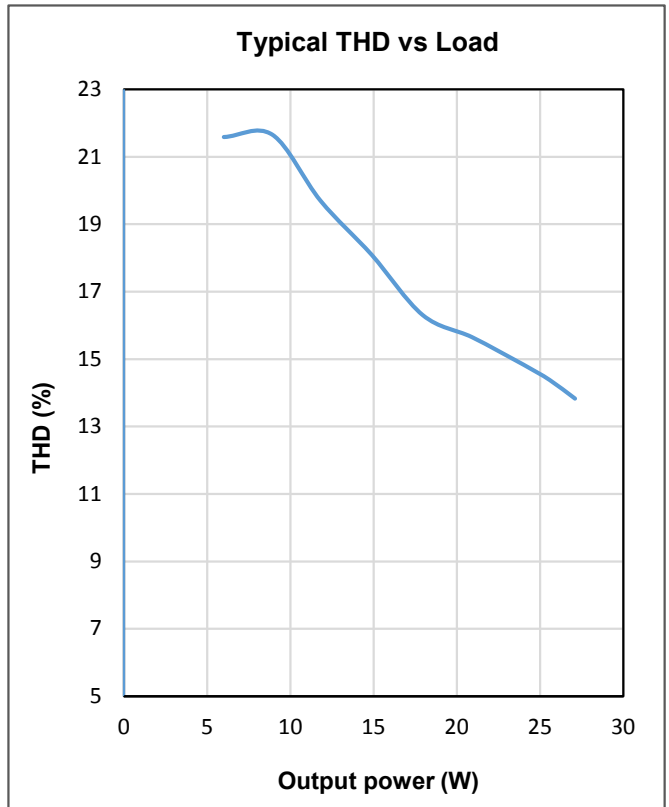
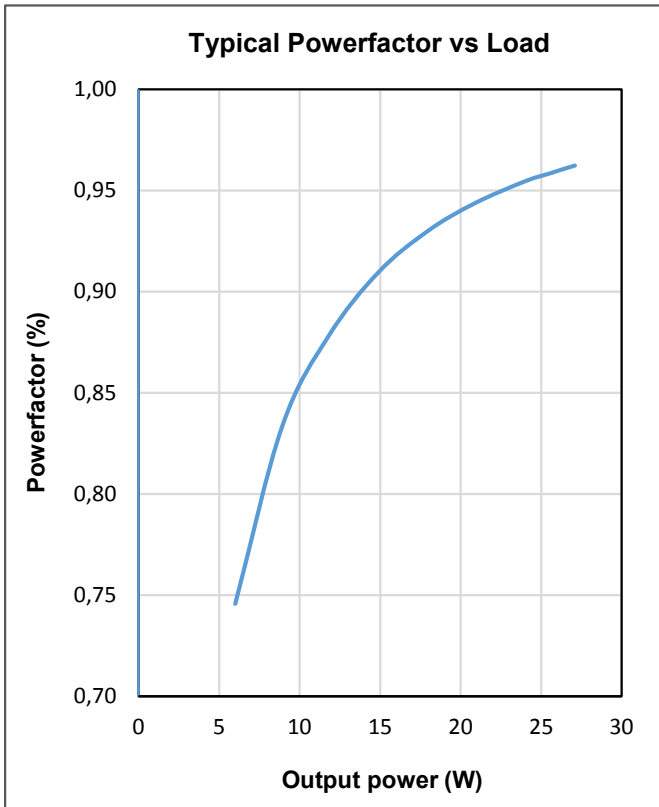
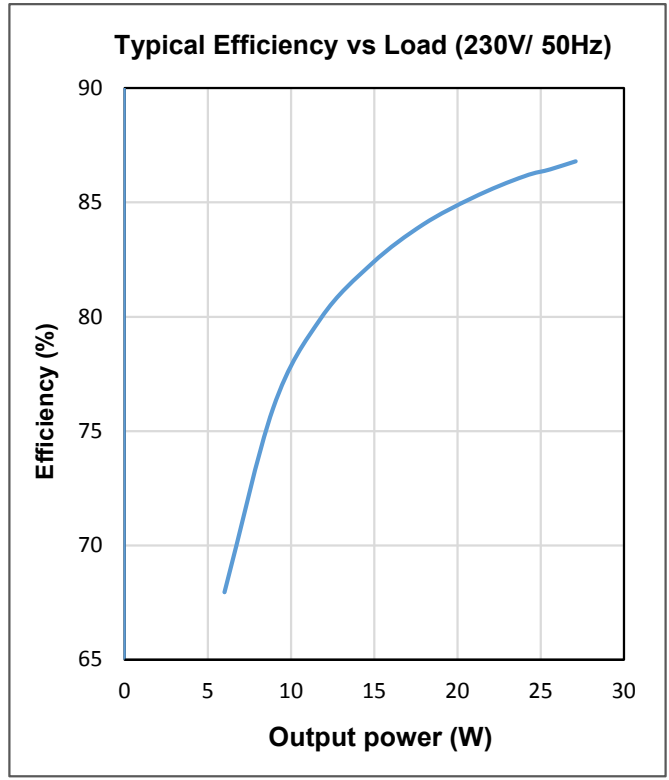
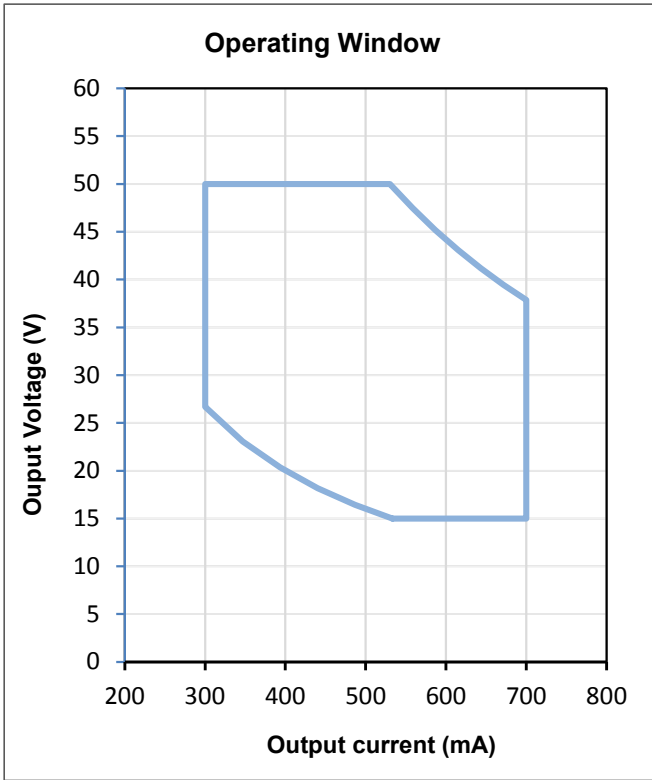


Output

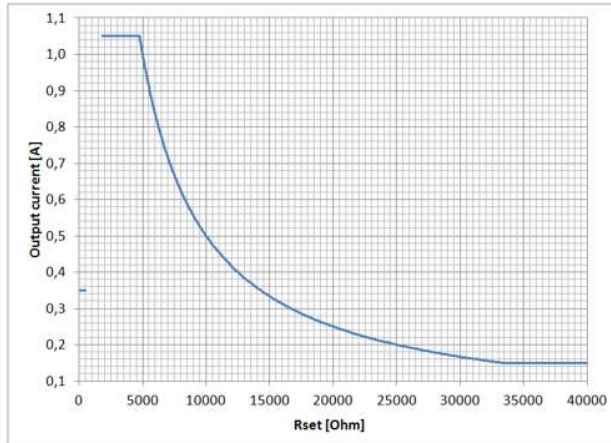
Black 21 - LED-
aux
White 22 -
LEDset
Black 23 - LED -
Red 24 - LED +

Load wires length: 2m max.

- Wires cross section: massive leads 0,5-1,5 mm² / flexible leads 0,5 – 1,5 mm²
- Wire peeling length: 8-9 mm



Typical Iout vs Rset



Rset formula and standard Iout values

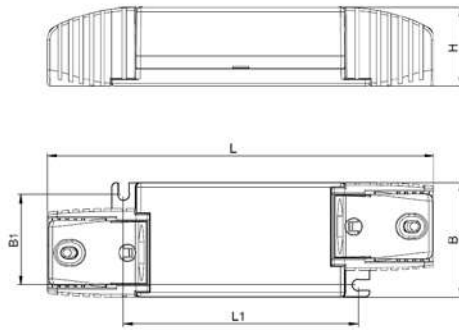
$$I_{OUT [A]} = \frac{5V}{R_{set [Q]}} \times 1000$$

Iout [mA] nominal	Iout [mA] actual	Rset [kOhm] E48 series
300	300	16.5
400	350	12.7
500	500	10
700	700	7.15

Remarks

- **Input over voltage protection:** mains up to 280 Vac, for 2 hours maximum, will not destroy both the unit and the load; shut down of load might occur in this condition.
- **Output short circuit / under voltage protection:** no destruction of unit
- **Output overload protection:** the unit automatically reduces the output current to keep the output power below 18W.
- **Output over voltage protection:** the unit reducing the current to maximum power; if Urated still exceeds 56V unit goes into blinking mode
- **No load operation:** repetitive start trials, safe for unit. Do not put a switch between load and unit.
- **Over temperature protection:** the unit is protected against temporary overheating by automatic reduction of the output current when $t_c > xx \text{ }^\circ\text{C}$. The protection is self-restoring.
- **Touch current:** lower than 0.7 mA, according to EN 60598-1 ann. G and EN 61347-1 ann. A

An optional cable clamp is available. This cable clamp can be snapped onto the ECG and thus converts it into an ECG suitable for independent installation.



L	145mm
L1	88mm
B	43mm
B1	34mm
1	29.5mm

Standards

EN 61347-1
 EN 61347-2-13
 EN 55015
 EN 61547
 EN 61000-3-2
 EN 62384

Ordering information

Product name	Type	EAN10	EAN40	NAED	Pieces / box
OT FIT 25/220-240/700 LT2 S		4052899957008	4052899957077		20
OT Cable Clamp D-Style		4052899077904	4052899077911		40

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