# **Light is OSRAM**



# Product data sheet: OT FIT 75/220-240/1400 CS L G2

Constant Current LED Power Supply SELV

1100mA - 1200mA - 1300mA- 1400mA

OPTOTRONIC® LED Power Supply is the reliable Choice for linear and area fixtures for office – Industrial – shop lighting



Flexibility with 1 driver with 4 output currents High quality of light with very low ripple Small, slim white metal housing 30x21mm Long lasting and high reliability

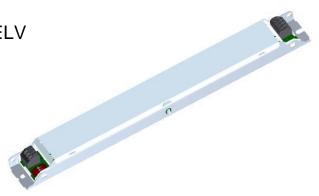
## **Applications**

Linear and area lighting
Office – industrial – shop

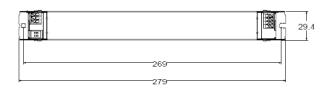
## **Approval marks and Symbols**

CE, VDE-ENEC, VDE-EMC, RCM,  $^{\overline{110}}$ ,  $\overline{\mathbb{EL}}$ 

In preparation, if not already printed on product label







### **Product Features**

Output currents: 1100/1200/1300/1400 mA — Low ripple, Low THD

Output voltage: 27V<sub>DC</sub> – 51V<sub>DC</sub> – Overload & -temperature protection

Output power: 29.7 W - 75.6 W -  $100\,000 \text{ h}$  lifetime at  $t_c = 65\,^{\circ}\text{C}$ 

Typ. Efficiency: up to 87% - T<sub>c</sub> max = 80°C

Suitable for emergency lighting
 Wide t<sub>a</sub> range -25...+50°C

## **Electrical Specifications**

	Item	Value	Unit	Remarks
	Nominal Voltage	220 - 240	$V_{AC}$	
	Nominal frequency	0/ 50 / 60	Hz	
	AC voltage range	198 – 264	V	AC or RAC
	DC voltage range	176 - 276	V	DC
	Maximum voltage	300	$V_{AC}$	1 h
	Nominal current	365	mA	230V, Refer to table 1 for details
Input	Total Harmonic Distortion (THD)	< 10	%	Full load, 230 V, 50 Hz / see graphs
g	Power factor	0.98		Full load, 230 V, 50 Hz / see graphs
<u>u</u>	Efficiency	87	%	Full load, 230 V, 50 Hz / typical/ see graphs
	Stand-by power	NA	W	
	Power losses	11	W	At 230 V Input power 82.4 W max. refer to table 1 for details
	Protection class	1		Suitable for class I and II luminaires
	Inrush current	40	Α	Th = 200 µs typical (measured at 50% lpeak)
	Max. units per circuit breaker	B16: 13 B10: 8		Grid impedance 1000mOhm
	Leakage current	< 0.5	mA	Through PE, output floating
,	Nominal voltage range	27 – 51	$V_{DC}$	Refer to table 1 for details
	Maximum voltage	60	Vdc	Open Circuit
	Nominal current range	1100/1200/1300/1400	mA	
Output	Current accurancy	+/- 7.5	%	
Ŧ	Current ripple	< 5	%	Ripple / average @ 100 Hz
ō	Nominal power range	29.7 – 71.4	W	Partial Load. Refer to table 1 for details
	Maximum power	71.4	W	Ta = 50°C, refer to Table 1 for details
	Galvanic isolation	SELV		Output to mains – touch current < 0.5 mA
Environment	Ambient temperature range t <sub>a</sub>	-25+50	°C	Refer to table 1 for details
	Maximum case temperature t <sub>c</sub>	80	°C	Measured on t <sub>c</sub> point indicated of the product label
	Max. case temp. in fault condition	110	°C	
	Storage temperature range	-25+80	°C	Cool down before operating
	Relative humidity	585	%	Not condensing
	Surge transient protection	1/2	kV	L/N /LN/PE acc to IEC 61547
	Environmental rating	Indoor		
	IP rating	IP 20		
	Mains switching cycles	> 100'000		
	Expected lifetime	50`000	hrs	t <sub>c</sub> = 80°C, 10% failure rate

#### **Protections**

Over temperature

Automatic, reversible

Overload

Non-reversible, mains switchover is needed to re-power the load

No load

Yes, switches off

Short-circuit

Automatic, reversible

Input overvoltage

Maximum allowed input voltage 300V AC/ 1hr

Output overvoltage

Yes, limitation of Output voltage < 60V

Output under voltage

NA

**LED load protection** 

NA

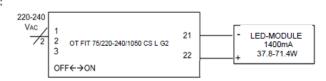
## Wiring Diagram

Terminal: Push in terminals Max. cable length - system:  $2 \, m$ 

Geometry (I x b x h):

280 x 30 x 21 mm tbd Weight:

Wire preparation: Push in s:0.5-1.5 f:0.75-1.5 7-8 mm

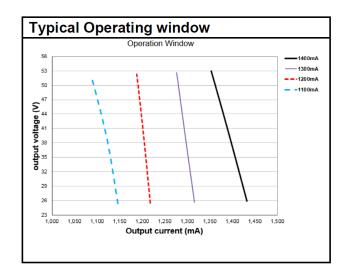


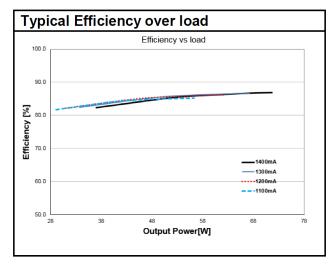
Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.

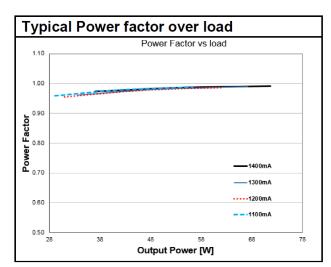
DIPswitches provide basic insulation only.

Therefore changes in the position of the DIPswitches should be realized only in state of zero potential.

DIPswitches must be installed touch protected inside the luminaire.







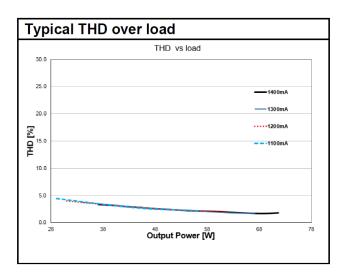


Table 1 - Rated output power and current sets					
lout (mA)	1100	1200	1300	1400	
U min [V]	27	27	27	27	
U max [V]	51	51	51	51	
P min [W]	29.7	32.4	35.1	37.8	
P max [W]	56.1	61.2	66.3	71.4	
Ta [°C ]	50	50	50	50	
Tc [°C]	80	80	80	80	
Line Current, nominal@230V mA	295	325	355	365	
Max Power Loss@230V [W]	9.5	9.8	10.3	11.0	
Input Power @230V [W]	65.6	71.0	76.6	82.4	

Pin1	Pin2	Current
ON	ON	1400
ON	OFF	1300
OFF	ON	1200
OFF	OFF	1100

Current selection by DIP-switch

#### Remarks

- Input over voltage protection: mains up to 300 Vac, for one hour maximum, will not destroy both the unit and the load; shut down
  of load might occur in this condition.
- Dipswitch: don't change the current by Dipswitch during driver operation.
- Output short circuit / undervoltage protection: shut down of load might happens if V\_out is out of operating range
- Output overload protection: the unit is intrinsically protected against over loading because the output voltage is limited.
- Output over voltage protection: shut down of load happens if V\_out exceeds 60V
- No load operation: the unit automatically switches off. Mains switchover is needed to re-power the load.
- Over temperature protection: the unit is protected against temporary overheating by automatic reduction of the output current when tc > 80°C
- Switchover time: lower than 0.5 s, both AC and DC mains.
- Output power hold time: > 4 ms, in case of mains dips.
- Emergency lighting: this LED power supply is suitable for emergency lighting fixtures acc. to EN 60598-2-22; according to IEC 61347-2-13 Annex J.
- Emergency Escape Lighting: this LED power supply is suitable for emergency escape lighting systems acc. to EN 50172

#### **Standards**

IEC 61347-1 IEC 61347-2-13 IEC 62384 IEC 61000-3-2 IEC 61000-3-3 IEC 61547

Product name	EAN10	EAN40	Pieces / box
OT FIT 75/220-240/1400 CS L G2	4052899522572	4052899522589	20

OSRAM GmbH

Head Office:

Marcel-Breuer-Strasse 6 80807 Munich, Germany Phone +49 89 6213-0 www.osram.com

