

Light is OSRAM

OSRAM

## Product data sheet: OT FIT 35/220-240/700 CS L G2

Constant Current LED Power Supply SELV

500mA - 600mA - 650mA- 700mA

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

### Benefits:

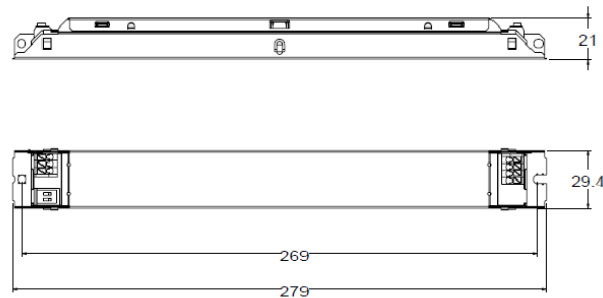
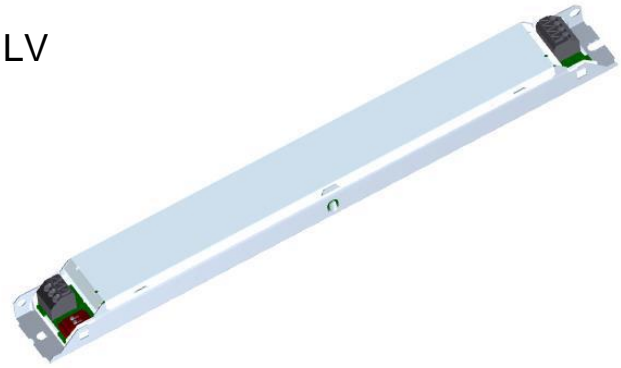
Flexibility with 1 driver with 4 output currents  
High quality of light with very low ripple  
Small, slim white metal housing 30x21mm  
Long lasting and high reliability

### Applications

Linear and area lighting  
Office – industrial – shop

### Approval marks and Symbols

CE, VDE-ENEC, VDE-EMC, RCM, ,   
In preparation, if not already printed on product label



### Product Features

- Output currents: 500/600/650/700 mA
- Output voltage: 25V<sub>DC</sub> – 51V<sub>DC</sub>
- Output power: 13.5 W – 35.7 W
- Typ. Efficiency: 86%
- Suitable for emergency lighting
- Low ripple, Low THD
- Overload & -temperature protection
- 100`000 h lifetime at t<sub>c</sub> = 65°C
- T<sub>c</sub> max = 80°C
- Wide t<sub>a</sub> range -25...+50°C

## Electrical Specifications

	Item	Value	Unit	Remarks
Input	Nominal Voltage	220 - 240	V <sub>AC</sub>	
	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 <sub>AC</sub>	1 h
	Nominal current	190	mA	230V, Refer to table 1 for details
	Total Harmonic Distortion (THD)	< 10	%	Full load, 230 V, 50 Hz / see graphs
	Power factor	0.98		Full load, 230 V, 50 Hz / see graphs
	Efficiency	86	%	Full load, 230 V, 50 Hz / typical/ see graphs
	Stand-by power	NA	W	
	Power losses	5.8	W	At 230 V Input power 41.5 W max. refer to table 1 for details
	Protection class	I		Suitable for class I and II luminaires
	Inrush current	< 16	A	Th = 100 μs typical (measured at 50% I <sub>peak</sub> )
Max. units per circuit breaker	B16: 34 B10: 21		Grid impedance 1000mOhm	
Leakage current	< 0.5	mA	Through PE, output floating	
Output	Nominal voltage range	27 – 51	V <sub>DC</sub>	Refer to table 1 for details
	Maximum voltage	60	V <sub>dc</sub>	Open Circuit
	Nominal current range	500/600/650/700	mA	
	Current accuracy	+/- 7.5	%	
	Current ripple	< 5	%	Ripple / average @ 100 Hz
	Nominal power range	13.5 – 35.7	W	Partial Load. Refer to table 1 for details
	Maximum power	35.7	W	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	5...85	%	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

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

#### 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 (l x b x h): 280 x 30 x 21 mm  
 Weight: 171g

#### Wire preparation:

Push in  
 s: 0.5-1.5  
 f: 0.75-1.5



7-8 mm



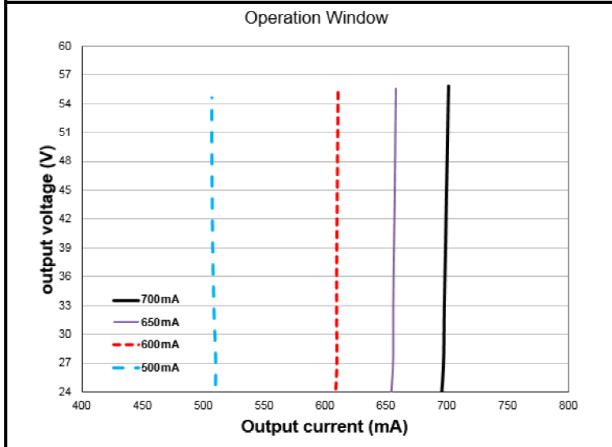
Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs.

DIPswitches provide basic insulation only.

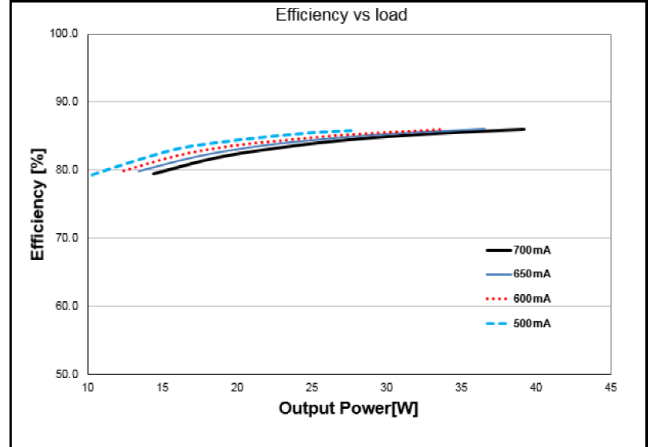
Therefore changes in the position of the DIPswitches should be realized only in state of zero potential.

DIPswitches must be installed touch protected inside the luminaire.

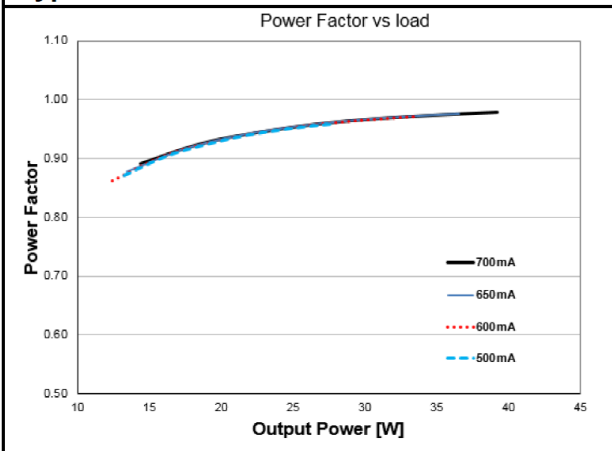
### Typical Operating window



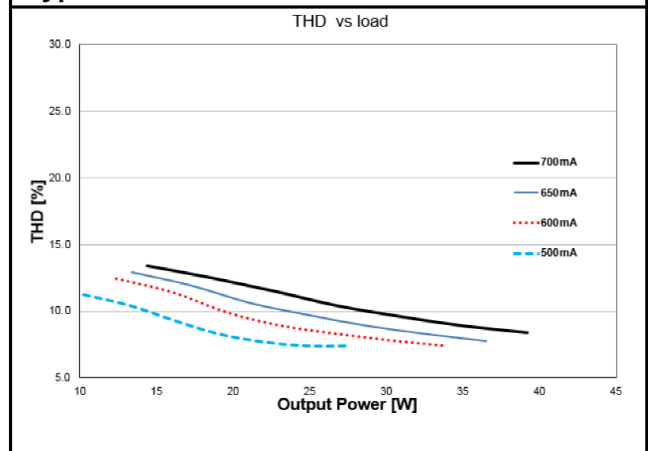
### Typical Efficiency over load



### Typical Power factor over load



### Typical THD over load



**Table 1 - Rated output power and current sets**

<b>I<sub>out</sub> (mA)</b>	<b>500</b>	<b>600</b>	<b>650</b>	<b>700</b>
<b>U min [V]</b>	27	27	27	27
<b>U max [V]</b>	51	51	51	51
<b>P min [W]</b>	13.5	16.2	17.6	18.9
<b>P max [W]</b>	25.5	30.6	33.2	35.7
<b>T<sub>a</sub> [°C]</b>	50	50	50	50
<b>T<sub>c</sub> [°C]</b>	80	80	80	80
<b>Line Current, nominal@230V mA</b>	140	165	180	190
<b>Max Power Loss@230V [W]</b>	4.3	5.1	5.5	5.8
<b>Input Power @230V [W]</b>	29.8	35.7	38.7	41.5

<b>Pin1</b>	<b>Pin2</b>	<b>Current</b>
ON	ON	700
ON	OFF	650
OFF	ON	600
OFF	OFF	500

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  $t_c > 80^\circ\text{C}$
- **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 35/220-240/700 CS L G2	4052899522534	4052899522541	20

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