

Light is OSRAM

OSRAM

Product datasheet: OT FIT 75/220-240/1A6 CS**Constant Current LED Power Supply**

1200mA - 1350mA - 1500mA- 1650mA

OPTOTRONIC® LED Power Supply
with high reliability in extra small & compact housing.
Equips with 4 selectable currents fits
in light fixtures for shop and office lighting applications

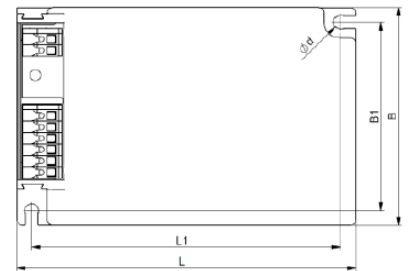
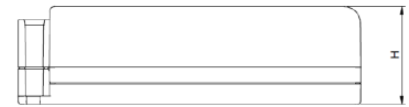
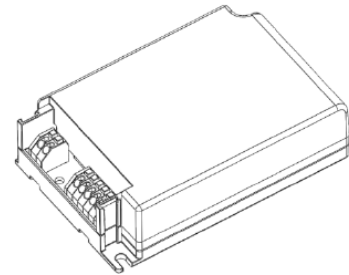
Benefits

High flexibility, 1 driver with 4 output currents;
High quality light with very low output current ripple;
High efficiency and reliability
Extra small housing for flexible luminaire design;
Safety ensured by OSRAM (SELV)

Applications

Suitable for Downlights, Spotlights and other indoor luminaires
Suitable for luminaires of protection class I and II

Approval marks (under preparation if not on label)



L	103 mm
L1	94 mm
B	67 mm
B1	58 mm
H	29.5 mm

Product Features

- Output currents: 1200/1350/1500/1650mA
- Output voltage: 27V_{DC} – 57V_{DC}
- Output power: 32.5W – 77W
- Suitable for class I and II luminaires
- Fixed Output (no dimming)
- Low output current ripple < 5%
- Low THD < 10% @ full load
- High efficiency up to 91%
- SELV
- Up to 50'000 hours lifetime

Electrical Specifications

	Item	Value	Unit	Remarks
INPUT	Nominal voltage	220 – 240	V _{AC}	
	Nominal frequency	50 - 60	Hz	
	AC voltage range	198 – 264	V _{AC}	Permitted voltage range
	DC voltage range	NA	V	
	Maximum voltage	275	V	2hrs
	Nominal current	370	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	91	%	Full load, 230 V, 50 Hz, typical / see graphs
	No-load power	< 2	W	230V, typical
	Stand-by power	NA	W	
	Power loss	8.6	W	At 230V, Input power 85.5W max. Refer to Table 1 for details
	Protection class	II		Suitable for class I and class II luminaires
	Inrush current	<40	A	t _{width} = 200 µs typical (measured at 50% I _{peak})
	Max. units per circuit breaker	B16: 16; B10: 10 C16: 26; C10: 16		
OUTPUT	Leakage current	< 0.7	mA	Output floating
	Nominal voltage range	27 – 57 27 – 42	V _{DC}	@ output current 1200/1350 mA @ output current 1500/1650 mA
	Maximum voltage	70	V _{DC}	Open circuit
	Nominal current range	1200/1350/1500/1650	mA	
	Current accuracy	+/- 7.5	%	
	Current ripple	< 5	%	Ripple / average @ 100 Hz
	Nominal power range	32.5 – 77	W	Partial Load. Refer to Table 1 for details
	Maximum power	77	W	T _a ≤ 45°C, Refer to Table 1 for details
DIMMING	Galvanic isolation	SELV		3.75 kVrms. Output to mains - Touch current < 0.7 mA
	Dimming control	No		Not dimmable
	Dimming range	NA	%	
	Dimming technique	NA		
	Frequency	NA	Hz	
	Galvanic isolation	NA		
ENVIRONMENT	Ambient temperature range t _a	-20 ...+50 -20 ...+45	°C	@ output current 1200/1350/1500 mA @ output current 1650 mA
	Maximum case temperature t _c	80	°C	Measured on t _c point indicated of the product label.
	Max. case temp. in fault condition	110	°C	
	Storage temperature range	-20 ...+80	°C	Cool down before operating
	Relative humidity	5 ... 85	%	Not condensing
	Surge transient protection	1 2	kV	L/N LN/PE acc. IEC 61000-3-2 (ANSI C62.41 Cat.A ...)
	Environmental rating	Indoor		
	IP rating	IP 20		
	Mains switching cycles	> 100'000		
	Expected lifetime	35'000 50'000	hrs	t _c =80 °C, max. 10% failure rate t _c =70 °C, max. 10% failure rate

Protections

Over temperature

Automatic, reversible

Overload

Automatic, reversible

No load

Yes. Limitation of Output voltage < 70V

Short-circuit

Automatic, reversible

Input overvoltage

Maximum allowed input voltage 275V AC

Output overvoltage

Yes. Limitation of Output voltage < 70V

Wiring Diagram

Terminal: Push in terminals
 Max. cable length - system: 2 m
 Geometry (l x b x h): 103 x 67 x 29.5 mm
 Weight: 170 g

Wire preparation:

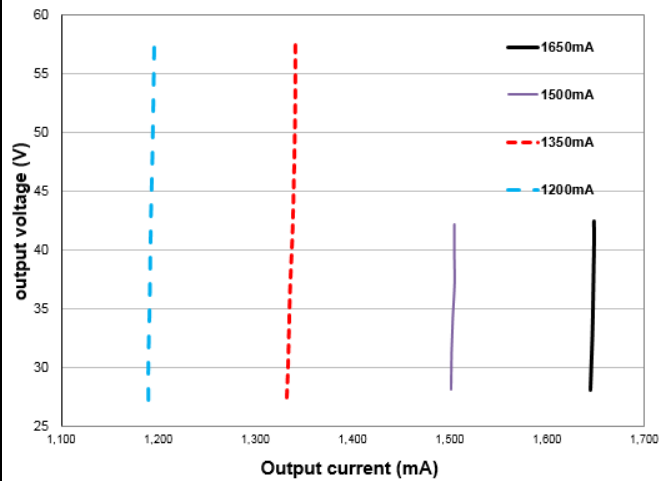
Push in
 s:0.5-1.5
 f:0.75-1.5

 7-8 mm

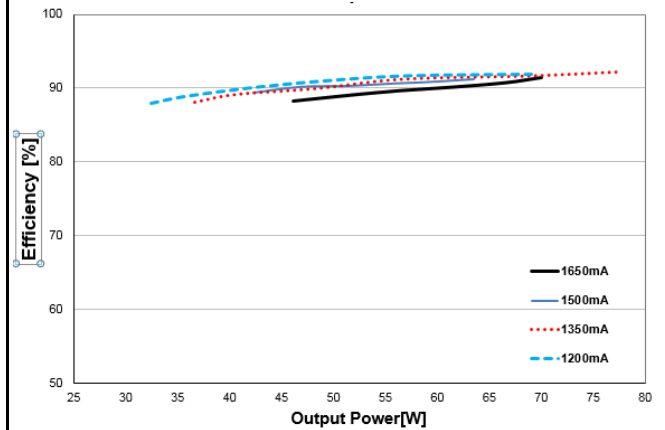
For built-in S: 0.5-1.5, for independent S: 0.75-1.5

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

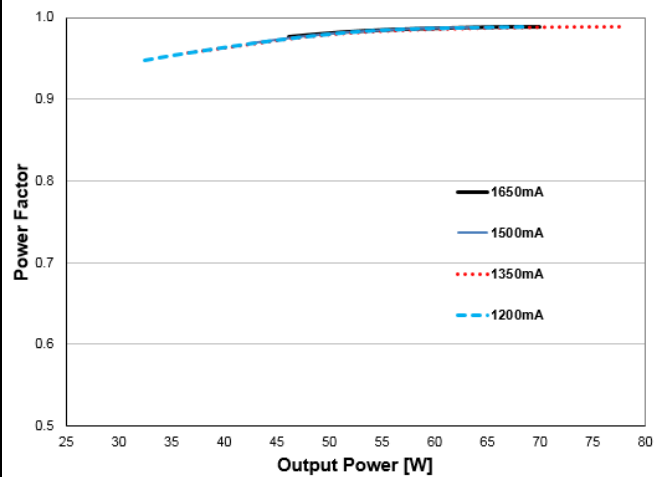
Typical Operating window



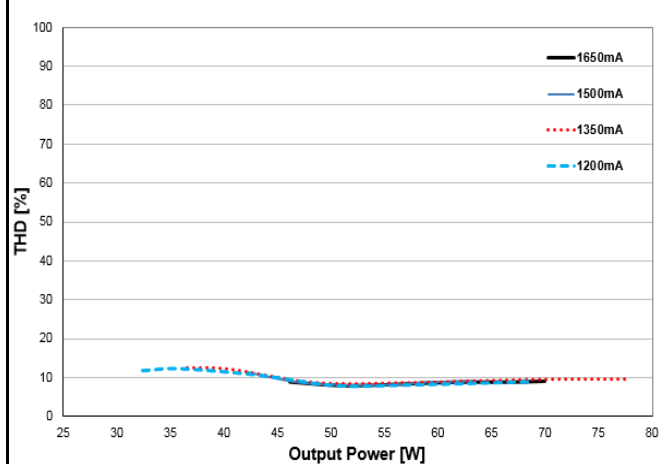
Typical Efficiency over load



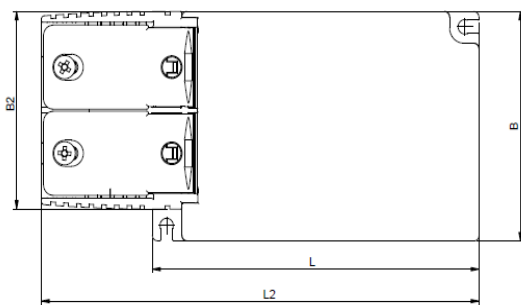
Typical Power factor over load



Typical THD over load



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	103mm
L2	138mm
B	67mm
B2	57,7mm
H	29,5 mm

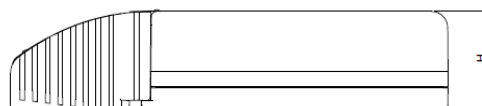


Table 1 - Rated output power and current sets				
I _{out} (mA)	1200	1350	1500	1650
U _{min} [V]	27	27	27	27
U _{max} [V]	57	57	42	42
P _{min} [W]	32.5	36.5	40.5	44.5
P _{max} [W]	68.4	76.95	63	69.3
T _a [°C]	50	50	50	45
T _c [°C]	80	80	80	80
Line Current, nominal@230V mA	330	370	310	340
Max Power Loss@230V [W]	7.6	8.6	7.0	7.7
Input Power @230V [W]	76	85.5	70	77

Pin1	Pin2	Current
OFF	OFF	1200
OFF	ON	1350
ON	OFF	1500
ON	ON	1650

Current selection by DIP-switch

Standards

Safety: IEC 61347-1, IEC 61347-2-13

Performance: IEC 62384

Radio interference: CISPR 15

Harmonic content: IEC 61000-3-2

Immunity: IEC 61000-3-3

IEC 61547

Product name	EAN10	EAN40	Pieces / box
OT FIT 75/220-240/1A6 CS	4052899999565	4052899999572	20
OT CABLE CLAMP B-STYLE	4052899077881	4052899077898	20
OT CABLE CLAMP B-STYLE TL	4052899948051	4052899268227	20

OSRAM GmbH

Head Office:

Marcel-Breuer-Strasse 6

80807 Munich, Germany

Phone +49 89 6213-0

www.osram.com

OSRAM