Light is OSRAM

OT FIT 300/220-240/12 P

L	266 mm
L1	251 mm
B	83 mm
H	39,5 mm

Benefits

Small housing design for target application.
Versatile scope of application due to output power range of up to 300 W.
Robust and durable design for outdoor application

Applications

Signage lighting, channel letter lighting, backlighting, etc...
Suitable for indoor and outdoor SELV installations.

Approvals

In preparation, if not already printed on product label

Product Features

- Suitable for Class I/II luminaire
- SELV, Uout: 12,5 V
- Wide t_a range -40°C … +70°C
- Driver with output power range of up to 300 W
- High efficiency up to 91 %
- Smart Power Supply
- THD<5% at full load
- High IP protection (IP66 / IP67)
- High surge protection: up to 6 kV (L-N) / 6 kV (L/N-PE)
- Mains voltage: 220 – 240 V_{AC}
- Overload protection
- Over temperature protection
- Short circuit protection

  50’000 h lifetime at t_c 80°C.
- 5 years guarantee*

*10% cumulated failure

Electrical specification

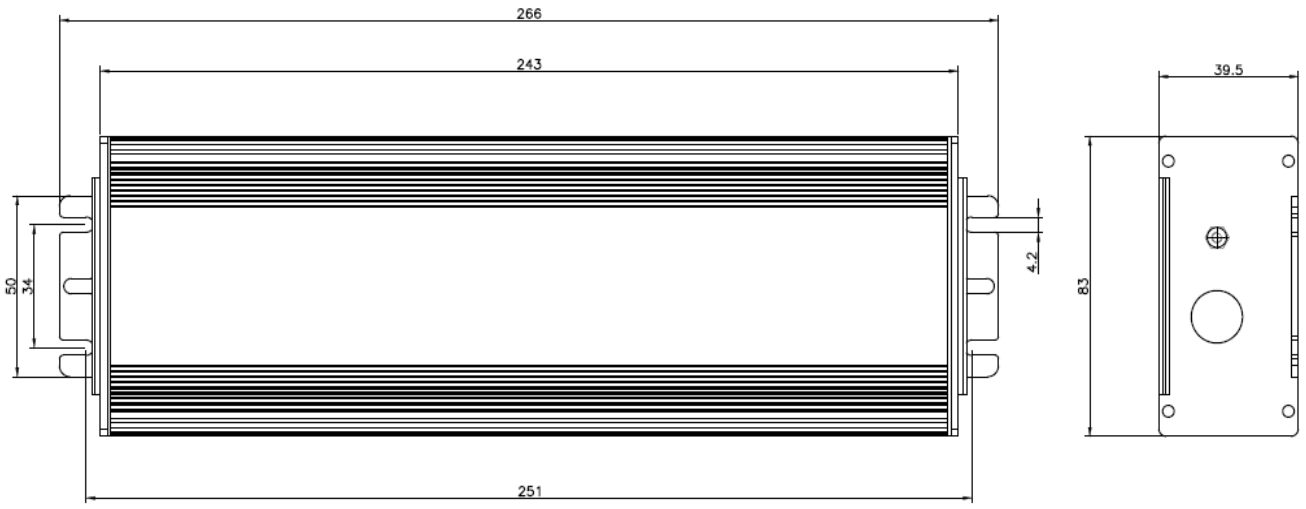
	Item	Value	Unit	Remarks
Input	Nominal voltage	220 - 240	V	
	Mains frequency	50 / 60	Hz	
	Input voltage AC	198 - 264	V	
	Nominal current	1.8	A	Full load, 230 V_{AC}, 50 Hz / 60 Hz
	Total Harmonic Distortion (THD)	< 5	%	Full load, 230 V_{AC}, 50 Hz / 60 Hz
	Power factor λ	0,95		Typical, Full load, 230 V_{AC}, 50 Hz / 60 Hz,
	ECG Efficiency	91	%	Typical, Full load, 230 V_{AC}, 50 Hz,
	Power loss in no load condition			Not applicable
	Protection class	I		
	Suitable for fixtures with prot. Class	I / II		
	Inrush current	70	A	At Full Load, 240 VAC, Cold Start Duration = 800 µs - 50% Ipk
	Max. ECG no. on circuit breaker 10 A (B)	2		
	Max. ECG no. on circuit breaker 16 A (B)	4		
	Max. ECG no. on circuit breaker 25 A (B)	6		
	Max. ECG no. on circuit breaker 10 A (C)	4		
	Max. ECG no. on circuit breaker 16 A (C)	7		
	Max. ECG no. on circuit breaker 25 A (C)	10		
Output	Nominal output voltage	12,5	V	
	Voltage accuracy	+/- 3	%	
	Voltage ripple	< 3	%	Vpk-pk at 100 Hz; Full load
	Nominal output power	300	W	
	Device power loss	28	W	
	Maximum power	300	W	
	Capacitive load	20	µF/A	Linear modules allowed
	Galvanic isolation	SELV		
	U-OUT (working voltage)	13	V	
Environmental	Ambient temperature range	-40…+50	°C	Full load, t_c not exceeded
		+50…+70		Load derating, t_c not exceeded, Refer to derating curve
	Max. temperature at tc test point	90	°C	Measured on t_c point indicated of the product label, t_a not exceeded
	Storage temperature range	-40…+85	°C	
	Permitted rel. humidity during operation	5 … 85	%	Not condensing
	Surge capability (L/N)	6	kV	L/N acc to EN 61547
	Surge capability (L-N/PE)	6	kV	L-N/PE acc to EN 61547
	Environmental rating	Outdoor		
	IP protection class	IP 66 / IP 67		
	Mains switching cycles	> 100'000	cycles	At t_a = 25°C
	Expected ECG lifetime	50'000	h	t_c = 80°C - 0,2% / 1'000 h failure rate
	No-load proof	Yes		
	Overheating protection	Yes		Auto recovery
	Overload protection	Yes		Auto recovery
	Short-circuit protection	Yes		Auto recovery
Dimension	Height	39,5	mm	
	Length	266	mm	Includes mounting hangers
	Width	83	mm	
	Casing material	Metal		
	Mounting hole spacing, length	251	mm	
	Net weight	1510	g	

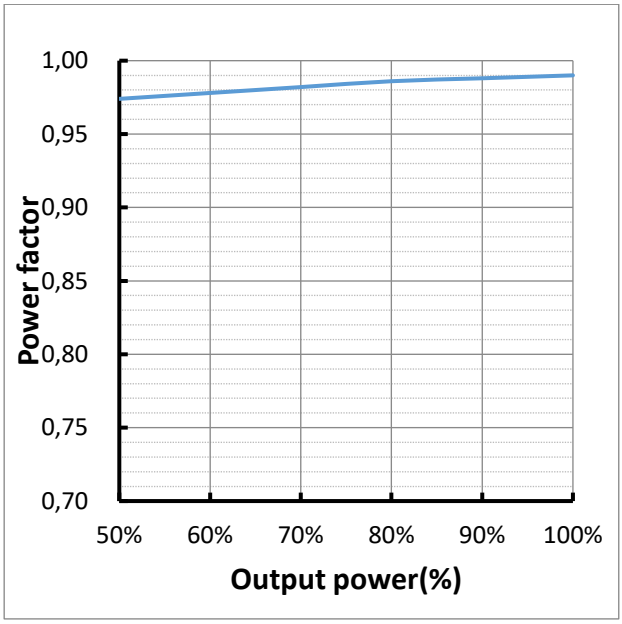
Input	Colour L and N	Blue / Brown/ Yellow and Green		
	Cable cross selection	1,0	mm^2	H05RN-F/3x1.0 mm^2
	Wire preparation length	60	mm	
	Wire peeling length	10	mm	
	Lead length	300	mm	
Output	Colour + and -	Red / Black		
	Cable cross selection	2,5	mm^2	H07RN-F/2x2.5 mm^2
	Wire preparation length	60	mm	
	Wire peeling length	10	mm	
	Lead length	300	mm	

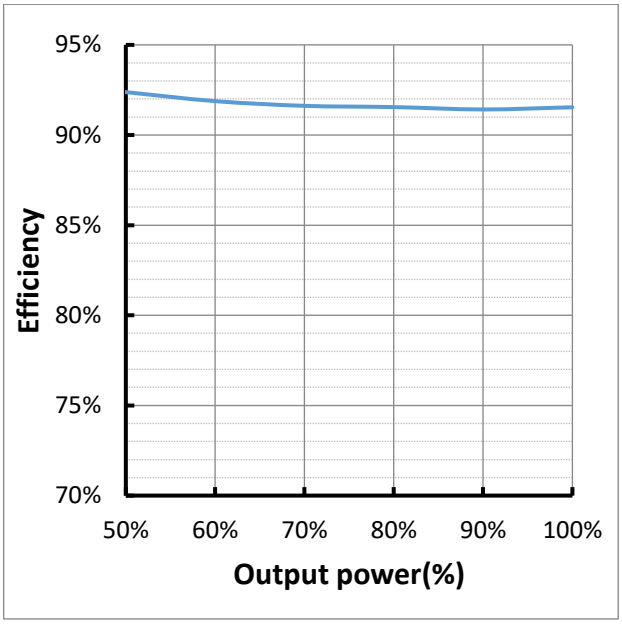
Protection

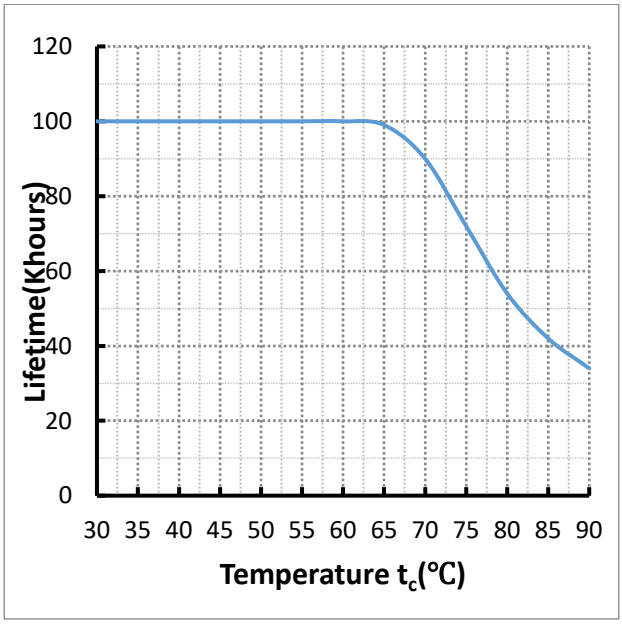
Over temperature, Overload, Short-circuit, open-circuit, Reversible.

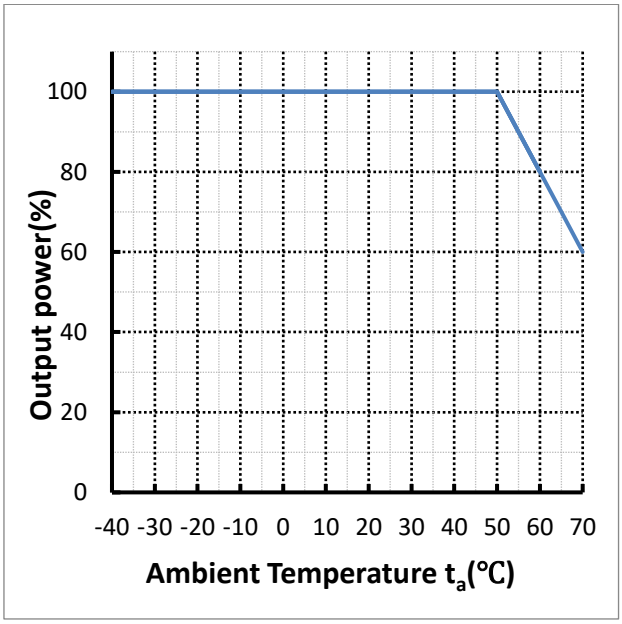
Dimension:

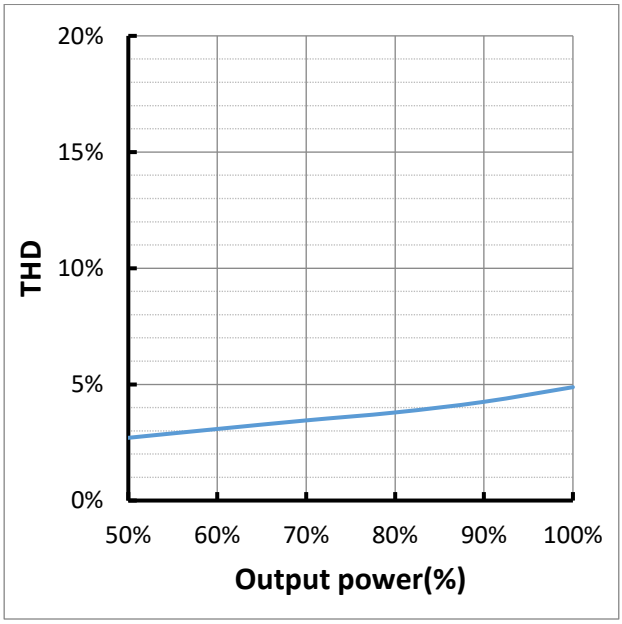



1,00
0,95
0,90
0,85
0,80
0,75
0,70
Power factor
50% 60% 70% 80% 90% 100%
Output power(%)


95%
90%
85%
80%
75%
70%
Efficiency
50% 60% 70% 80% 90% 100%
Output power(%)

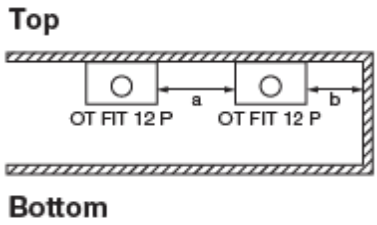

120
100
80
60
40
20
0
Lifetime(Khours)
30 35 40 45 50 55 60 65 70 75 80 85 90
Temperature t_c(℃)


100
80
60
40
20
0
Output power(%)
-40 -30 -20 -10 0 10 20 30 40 50 60 70
Ambient Temperature t_a(℃)


20%
15%
10%
5%
0%
THD
50% 60% 70% 80% 90% 100%
Output power(%)

Remarks

- **Output short circuit protection:** auto reversible when fault removed.
- **Output overload protection:** auto reversible when fault removed.
- **Over temperature protection:** the unit is protected against temporary overheating by shutting the unit down, auto reversible when temperature decreases. Temperature on t_c point must not exceed t_c max. Derating for LED load is necessary if t_a is higher than 50°C.
- **No load operation:** please take care to switch off the driver via L. Hot plug-in or secondary switching of LEDs is not permitted.
- **Waterproof:** the driver is designed for outdoor installation with IP66 / IP67 protection grade. Input and output cables must be connected by means of a sealed cable clamp.
- **LED wire length:** 10 m EMI verified. Max cable length of 10 m recommended.
  EMI may be interfered by on site installation condition with longer cable. For longer cable (> 10 m), cable with larger cross section area is needed to cover voltage drop.
- **Exit cables**: the supplied, internally wired cables cannot be replaced; if the cord is damaged, the LED driver must be replaced.
- Keep enough distance from the ceiling corner or other drivers to avoid overheat. The driver must not be covered by flammable materials. At critical conditions showed by below picture (Full load, t_a = 50˚C, driver on the corner of ceiling), refer to below distance. At normal installation, distance can be shorter but temperature at t_c point must be within t_c max.



a: ≥15cm; b: ≥ 15cm

- For detailed application notes, please refer to user instructions.

Standards

EN 61347-1

EN 61347-2-13

EN 55015

EN 61547

EN 61000-3-2

EN 61000-3-3

EN 60598-1

EN 62384

Ordering information

Product name	EAN 10	EAN 40	Pieces / Box
OT FIT 300/220-240/12 P	4062172133548	4062172133555	10

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