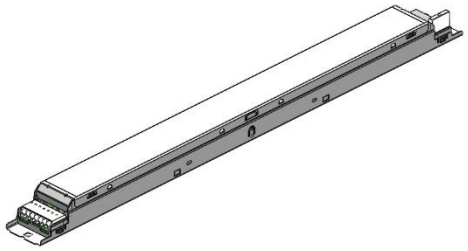
Product data sheet: OT FIT 150/220-240/700 D LT2 IND L

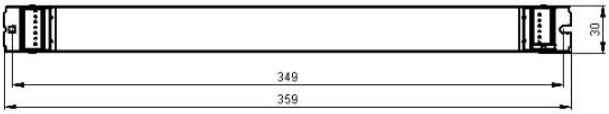
Constant current LED driver w NFC – non isolated
Wide operating area up to 1000mA

Made for Industry applications
Very high robustness, reliability, operating area
& energy saving potential thanks to high efficiency and
CLO integrated.
8 year components guarantte, 10 year system guarantee
with PrevaLED Linear G4 and CLO enabled.
Flexible and future proof current setting via NFC.



Benefits

Wide operating range: 250 – 1000 mA , 64 – 300 V
Wide ambient temperature range: -40…+70 °C
Current Set via LEDSet2 or NFC / CLO & EL via NFC
In-rush current limiter integrated
Extremely long lasting & highly reliable (Industry application)
4kV surge capability (symmetric and asymmetric)
Suitable for emergency lighting units



Housing material: metal, white painted

Applications
Linear and Highbay industrial lighting
Trunking systems – Battens – Light Lines – Waterproof - Highbay

Approval marks & Symbols
CE, ENEC, VDE-EMC, RMC, CCC, 110 **,** EL In preparation, if not already printed on product label

Product Features

- 150W output current range 250 – 1000 mA
- 100’000 h lifetime at t_c = 75°C
- Very high efficiency up to 96%
- In-rush current limiter integrated
- Suitable for emergency lighting
- 200’000 switching cycles
- 8 years guarantee @ tc -10°C
- Very wide ta range -40…+70 °C
- tc max = 85°C
- Very low ripple ≤ 1%
- LEDSet2 & NFC
- 4kV surge protection
- CLO integrated
- 10 years guarantee w PL Lin & CLO

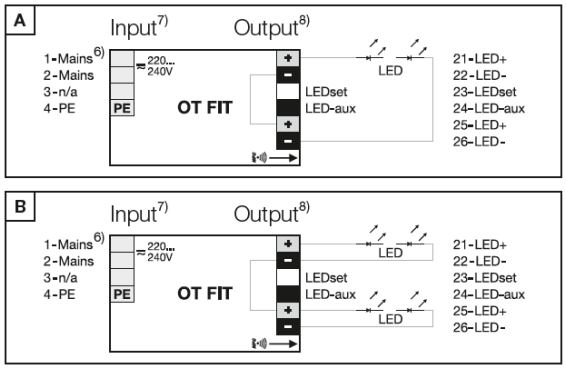
Electrical Specifications

	Item	Value	Unit	Remarks
INPUT	Nominal voltage	220 – 240	V	
	Nominal frequency	0 / 50 / 60	Hz	
	AC voltage range	198 – 264	V	AC or RAC
	DC voltage range	176 – 276	V	DC
	Maximum voltage	350	V_{AC}	2 h maximum, unit might not operate in this abnormal condition
	Nominal current	0.68	A	
	Total Harmonic Distortion (THD)	7	%	Typical value, full load
	Power factor	> 0.98		Full load, 220 – 240 V, 50 Hz / see graphs
	Efficiency	Up to 96	%	Full load, 220 – 240 V, 50 Hz / see graphs
	Starting time	≤ 0.6	s	
	Power loss	11	W	Maximum full load
	Protection class	I		PE can be connected either to terminal or housing
	Inrush current	5	A pk	T_h = 1700 µs
	Max. units per circuit breaker	B16: 32; B10: 18		
	PE current	< 0.5	mA	Through PE
OUTPUT	Nominal voltage range	64 – 300	V	
	Maximum voltage	< 340	V_{DC}	w/ no load
	Nominal current range	250 – 1000	mA	Default output current: 250mA LEDset open: 250 mA; LEDset short: 250 mA
	Current accuracy	+/- 3	%	With LEDset: +/- 5%
	Current ripple	< 1	%	LF ripple <1%, HF ripple <4%
	Nominal power range	43 – 150	W	
	Maximum power	150	W	
	Emergency Output Factor (EL)	15	%	ta = -40…+50°C: EOF_l =1 ta = +50…+80°C: EOF_l =0.45
	Galvanic isolation	no		Non-isolated
ENVIRONMENT	Ambient temperature range t_a	-40 …+70	°C	
	Maximum case temperature t_c	85	°C	Measured on t_c point indicated of the product label.
	Max. case temp. in fault condition	110	°C	
	Storage temperature range	-25 …+85	°C	
	Relative humidity	5 ... 85	%	Not condensing
	Surge transient protection	4 | 4	kV	L/N | LN/PE acc. To. EN 61547 Clause 5.7
	Environmental rating	Indoor		
	IP rating	IP 20		
	Mains switching cycles	> 200'000		
	Expected lifetime	50'000	hrs	t_c = 85°C, 0.2% / 1`000 h failure rate, 24h ON
		100´000		t_c = 75°C, 0.2% / 1`000 h failure rate, 24h ON

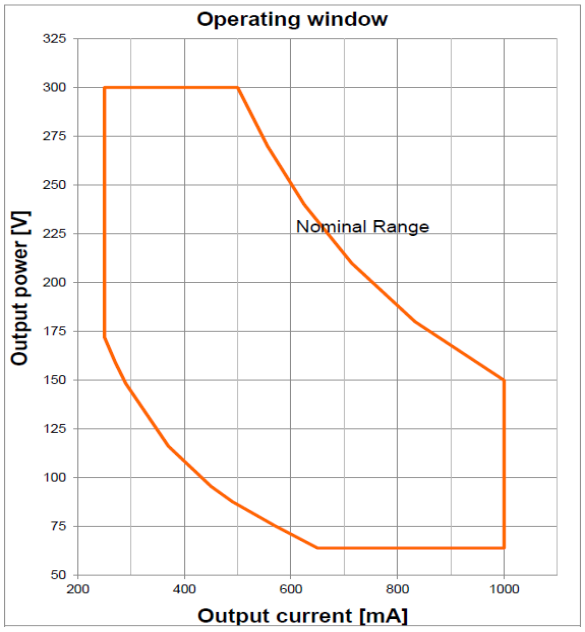
Wiring Diagram

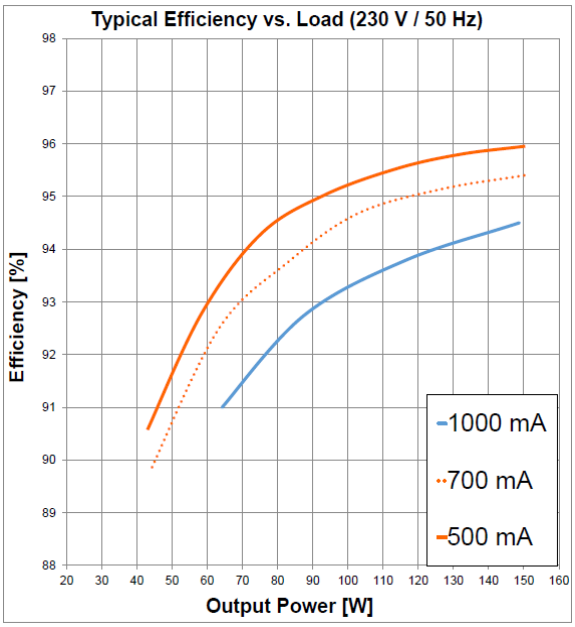
Terminal:	Push in terminals
Max. cable length - system:	2 m
Geometry (l x b x h):	360 x 30 x 21 mm

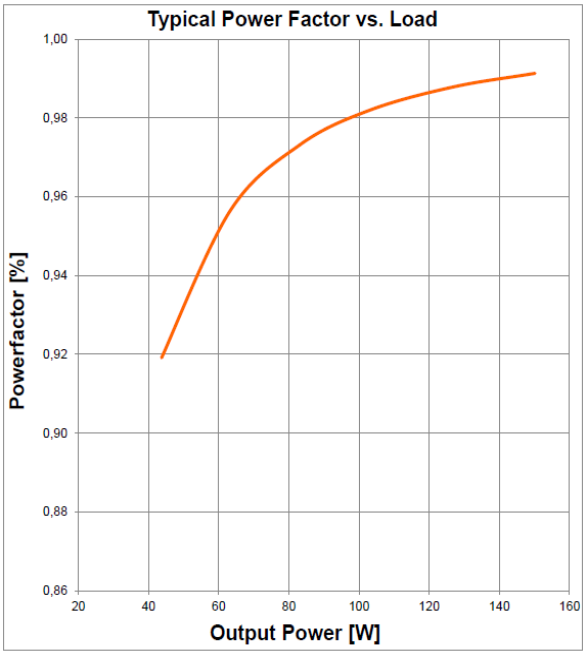
Wire preparation:
Push in
s:0.5-1.5
f:0.75-1.5
7-8 mm

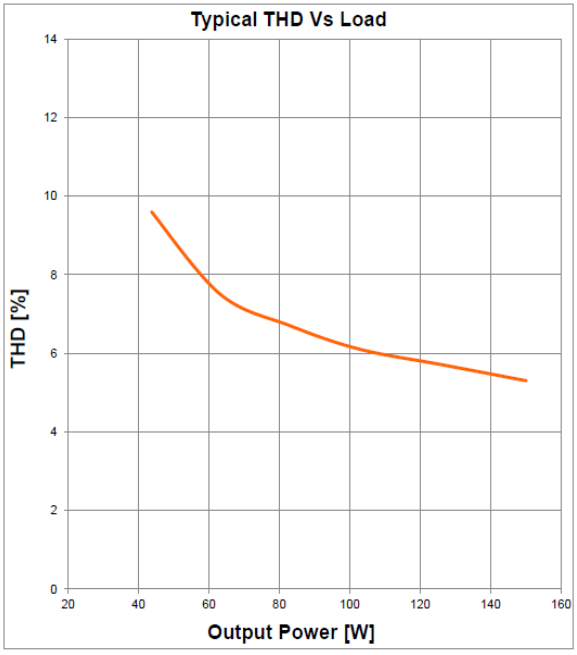


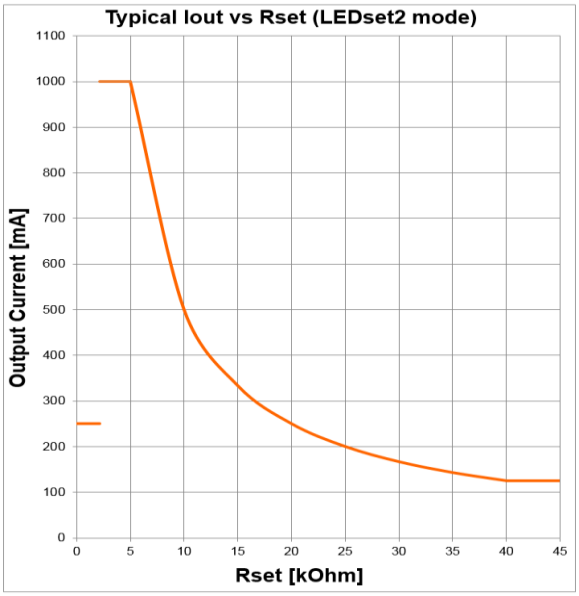
5.) Mains – 6.) Input – 7.) Output


Operating window
Output power [V]
Output current [mA]
Nominal Range
325
300
275
250
225
200
175
150
125
100
75
50
200
400
600
800
1000


Typical Efficiency vs. Load (230 V / 50 Hz)
Efficiency [%]
Output Power [W]
1000 mA
700 mA
500 mA
98
97
96
95
94
93
92
91
90
89
88
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160


Typical Power Factor vs. Load
Powerfactor [%]
Output Power [W]
1,00
0,98
0,96
0,94
0,92
0,90
0,88
0,86
20
40
60
80
100
120
140
160


Typical THD Vs Load
THD [%]
Output Power [W]
14
12
10
8
6
4
2
0
20
40
60
80
100
120
140
160


Typical Iout vs Rset (LEDset2 mode)
Output Current [mA]
Rset [kOhm]
1100
1000
900
800
700
600
500
400
300
200
100
0
0
5
10
15
20
25
30
35
40
45

Remarks

- **Input overvoltage protection:** mains up to 350 Vac, for two hours maximum, will not destroy both the unit and the load; shut down of the load might occur in this condition.
- **Input surge protection:** the unit is protected against surge up to 4kV between L-N (symmetric surge) and L/N-PE (asymmetric surge). During an asymmetric surge, the voltage between the LED outputs and PE is equal or lower than the applied surge voltage.
- **Output short circuit / undervoltage protection**: shut down of the load happens if Vout is out of the operating range.
- **Output overload protection:** the unit automatically reduces the output current to keep the output power below 100W.
- **Output over voltage protection:** shut down of the load might happen if Vout exceeds 300V
  - **Step 1:** output current reduction to decrease Vout**;**
  - **Step 2:** shut down of the load at longer or extreme overvoltage.
- **No load operation:** the unit automatically switches off, the maximum output voltage is <340V.
- **Overtemperature protection:** the unit is protected against temporary overheating by automatic reduction of the output current when tc > 85°C**.**
- **Switchover time:** lower than 0.5 s, from AC to DC mains and viceversa.
- **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.

1A0

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 150/220-240/1A0 D LT2 NFC IND L	4052899990142	4052899990159	20

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