inventronics

Product data sheet: OT FIT 150/220-240/1A0 D NFC HV L

Constant current LED driver incl. NFC Interface – non isolated

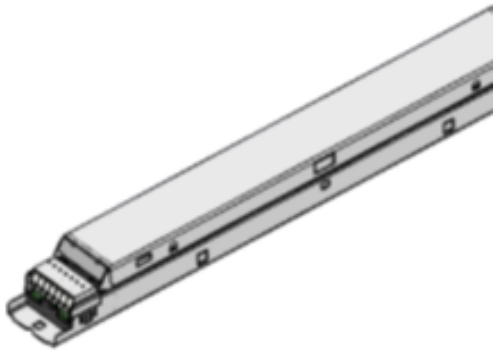
Wide operating area up to 1000mA

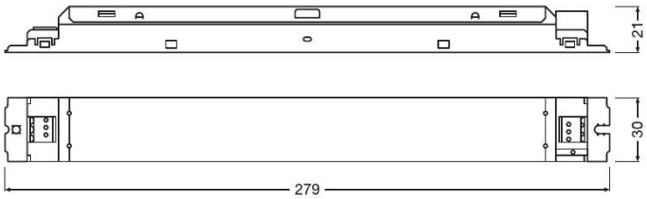
Flexible, reliable solution for energy saving lighting:
Combining a high operating area with a maximum of efficiency and lifetime in small dimensions
Flexible and future-proof current setting via NFC*

Benefits
Wide operating range: 250 – 1000mA
Adjustable current via NFC
CLO integrated for maximizing energy savings
5 years guarantee
Small, slim white metal housing 30 x 21 mm
Suitable for emergency lighting units

Applications
Linear and area lighting
Office – industrial – retail

Applications
CE, ENEC, CCC, RCM, ,EL
In preparation, if not already printed on the label





Housing material: metal, white painted

*for more information please refer to Tuner4TRONIC™

Product Features

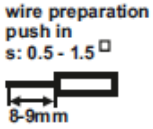
- Output current range 250 – 1000mA
- Overload protection
- Very low ripple ≤1%
- Very high efficiency up to 96%
- Output power up to 150W
- Mains voltage 220 – 240V
- Suitable for emergency lighting
- Fast NFC programming (current)
- Overtemperature protection
- CLO integrated
- 100’000 h lifetime at t_c = 75°C
- t_c max = 85 °C
- Wide t_a range -25 – +55 °C
- 5 years guarantee

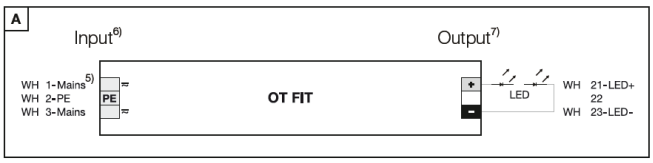
Electrical Specifications

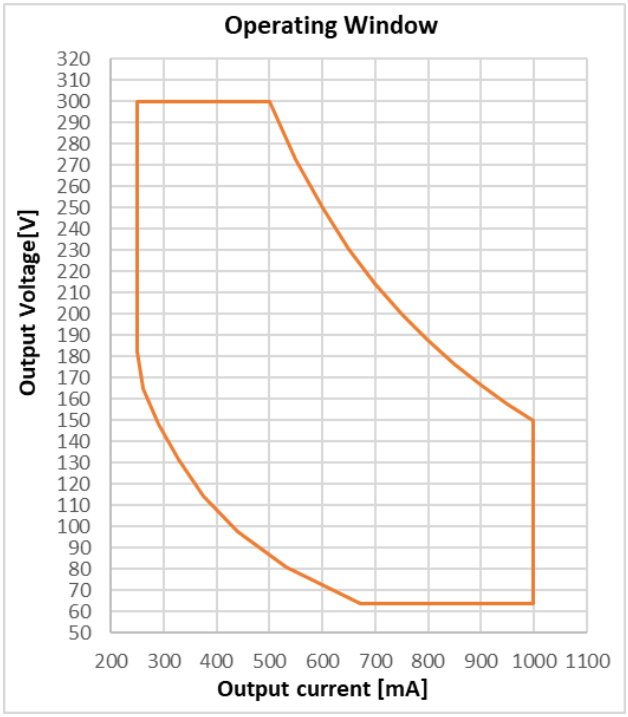
	Item	Value	Unit	Remarks
INPUT	Nominal voltage	220 – 240	V	
	Nominal frequency	0 / 50 / 60	Hz	
	AC voltage range	198 – 264	V	
	DC voltage range	176 – 276	V	DC or pulsating DC
	Maximum voltage	350	Vac	2 h maximum, unit might not operate in this abnormal condition
	Nominal current	0.75	A	Full load
	Total Harmonic Distortion (THD)	~ 8	%	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	≤ 0.5	s	
	Power losses	6.5	W	Maximum, full load
	Protection class	I		PE can be connected either to terminal or housing
	Inrush current	44.6	A pk	th = 214 µs
	Max. units per circuit breaker	B16: 13 B10: 8		
	Protective conductor current	< 0.5	mA	Through PE
OUTPUT	Nominal voltage range	64 – 300	V	
	Maximum voltage	< 340	Vdc	w/ Open Circuit
	Nominal current range	250 – 1000	mA	
	Current accuracy	+/- 3	%	⩽500…1000mA ±3%; 250…＜500mA ±5%
	Current ripple	< 1	%	100 Hz., low freq. ripple is negligible
	PsT	≤ 1		At full load
	SVM	≤ 0.4		At full load
	Nominal power range	43 – 150	W	
	Maximum power	150	W	
	Emergency output factor (EL)	100	%	ta = -25…+55°C: EOF_l =1 ta = +55…+80°C: EOF_l =0.45
	Galvanic isolation	no		Non-isolated
ENVIRONMENT	Ambient temperature range t_a	-25 …+55	°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	1 | 2	kV	L/N | LN/PE acc to. EN 61547 Clause 5.7
	Environmental rating	Indoor		
	IP rating	IP 20		
	Mains switching cycles	> 100'000		
	Expected lifetime	50'000 100'000	h	t_c = 85°C, 0.2% / 1'000 h failure rate, 24h ON t_c = 75°C, 0.1% / 1'000 h failure rate, 24h ON

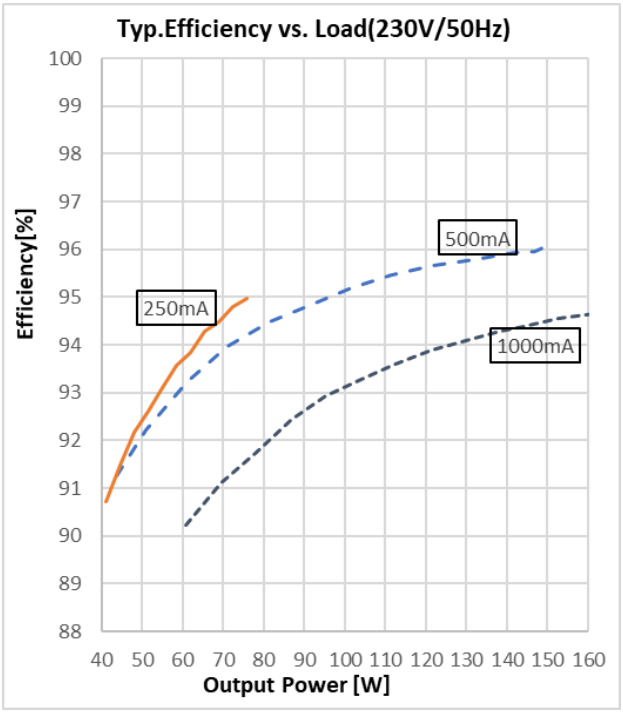
Wiring Diagram

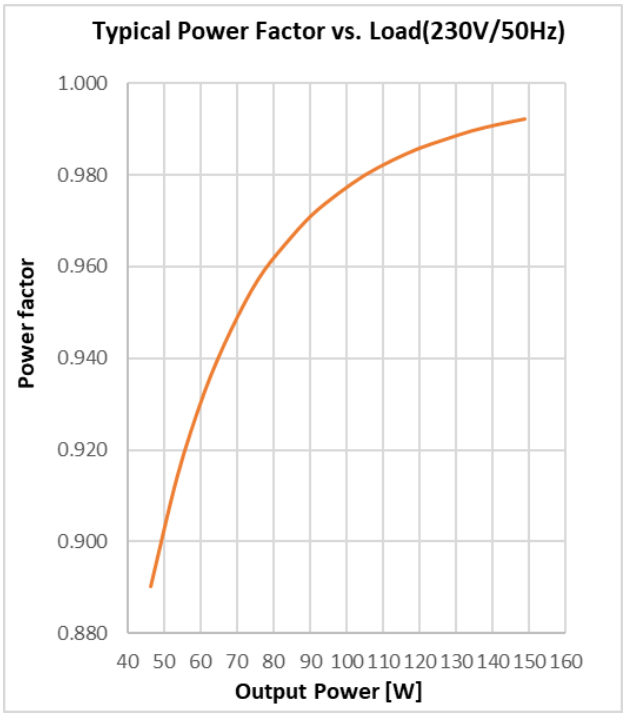
Terminal:	Push in terminals
Max. cable length - system:	2 m
Geometry (l x b x h):	280x30x21
Weight:	225 g

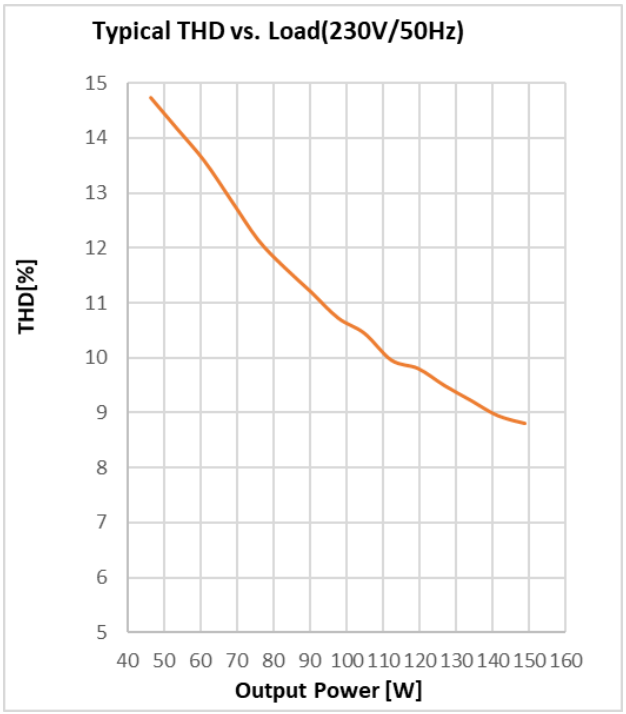





Operating Window
Output Voltage [V]
320
310
300
290
280
270
260
250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
200 300 400 500 600 700 800 900 1000 1100
Output current [mA]


Typ.Efficiency vs. Load(230V/50Hz)
Efficiency[%]
100
99
98
97
96
95
94
93
92
91
90
89
88
250mA
500mA
1000mA
40 50 60 70 80 90 100 110 120 130 140 150 160
Output Power [W]


Typical Power Factor vs. Load(230V/50Hz)
Power factor
1.000
0.980
0.960
0.940
0.920
0.900
0.880
40 50 60 70 80 90 100 110 120 130 140 150 160
Output Power [W]


Typical THD vs. Load(230V/50Hz)
THD[%]
15
14
13
12
11
10
9
8
7
6
5
40 50 60 70 80 90 100 110 120 130 140 150 160
Output Power [W]

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 1kV between L-N (symmetric surge) and 2 kV 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:** unit automatically reduces the output current to keep the output power below 160W.
- **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:** Hot plug-in or secondary switching of LEDs is not permitted and may cause a very high current to the LEDs. 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 EN 61347-2-13 Annex J.

Standards

EN 61347-1

EN 61347-2-13

EN 62384

EN 61000-3-2

EN 61000-3-3

EN 61547

EN 55015

Product name	EAN10	EAN40	**Pieces / box**
OT FIT 150/220-240/1A0 D NFC HV L	4062172382311	4062172382328	20

1. The lamp controlgear relies upon the luminaire enclosure for protection against accidental contact with live parts.
2. **Ecodesign regulation information:**

Intended for use with LED modules. The forward voltage of the LED light source shall be within the defined operating window of the control gear in all operating conditions including dimming if applicable.
Separate control gear and light sources must be disposed of at certified disposal companies in accordance with Directive 2012/19/EU (WEEE) in the EU and with Waste Electrical and Electronic Equipment (WEEE) Regulations 2013 in the UK. For this purpose, collection points for recycling centres and take-back systems (CRSO) are available from retailers or private disposal companies, which accept separate control gear and light sources free of charge. In this way, raw materials are conserved and materials are recycled.

Inventronics GmbH

Parkring 31-33
85478 Garching, Germany
Phone +49 89 6213-0
www.inventronicsglobal.com