# inventronics

## Product data sheet: OT FIT 100/220-240/700 D LT2 IND L

Constant current LED driver w NFC – non isolated Wide operating area up to 700mA

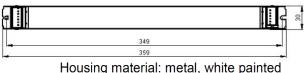
## Made for Industry applications

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



Wide operating range: 200 – 700 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





#### Applications

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

#### Approval marks & Symbols

CE, ENEC, VDE-EMC, RMC, CCC, <sup>10</sup>, EL In preparation, if not already printed on product label

#### **Product Features**

- 100W output current range 200 700 mA
- 100'000 h lifetime at  $t_c = 75^{\circ}C$
- Very high efficiency up to 95.5%
- 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 =  $85^{\circ}C$
- Very low ripple  $\leq 1\%$
- LEDSet2 & NFC
- 4kV surge protection
- CLO integrated
- 10 years guarantee w PL Lin & CLO

# **Electrical Specifications**

	ltem	Value	Unit	Remarks
	Nominal voltage	220 – 240	V	itemarks
INPUT	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	VAC	2 h maximum, unit might not operate in this abnormal condition
	Nominal current	0.47	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 95.5	%	Full load, 220 – 240 V, 50 Hz / see graphs
	Starting time	≤ 0.6	S	
	Power loss	9	W	Maximum full load
	Protection class	1		PE can be connected either to terminal or housing
	Inrush current	4	A pk	T <sub>h</sub> = 1300 µs
	Max. units per circuit breaker	B16: 36; B10: 21		
	PE current	< 0.5	mA	Through PE
ουτρυτ	Nominal voltage range	64 - 300	V	
	Maximum voltage	< 340	V <sub>DC</sub>	w/ no load
	Nominal current range	200 - 700	mA	Default output current: 200mA
	Nominal current range	200 - 700		LEDset open: 200mA / LEDset short: 200mA
	Current accuracy	+/- 3	%	With LEDset: +/- 5%
	Current ripple	< 1	%	LF ripple <1%, HF ripple <4%
	Nominal power range	28 – 100	W	
	Maximum power	100	W	
			%	ta = -40+50°C: EOF <sub>1</sub> =1
	Emergency Output Factor (EL)	15		$ta = -40+50$ C. $EOF_1 = 1$ $ta = +50+80$ °C: $EOF_1 = 0.45$
	Galvanic isolation			Non-isolated $EOF_1 = 0.45$
		no -40+70	°C	Non-isolated
ENVIRONMENT	Ambient temperature range ta	85	°C	Measured on t <sub>c</sub> point indicated of the product label.
	Maximum case temperature t <sub>c</sub> Max. case temp. in fault condition	110	 ℃	
			°C	
	Storage temperature range	-25+85		Not see door 's s
	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 <sub>c</sub> = 85°C, 0.2% / 1`000 h failure rate, 24h ON
		100´000		t <sub>c</sub> = 75°C, 0.2% / 1`000 h failure rate, 24h ON

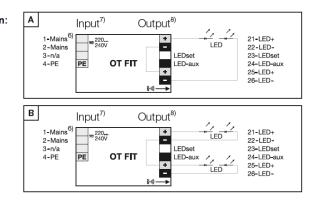
## Wiring Diagram

Terminal: Max. cable length - system: Geometry (I x b x h):

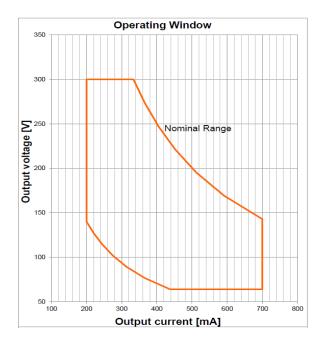
Push in terminals 2 m 360 x 30 x 21 mm

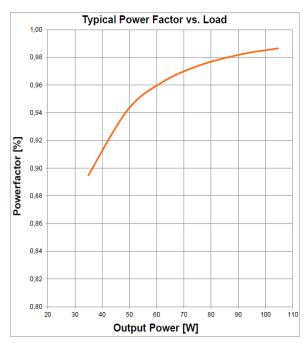
Wire preparation: Push in s:0.5-1.5 f:0.75-1.5

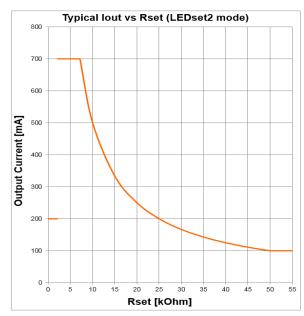
7-8 mm

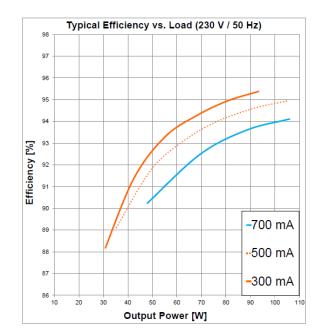


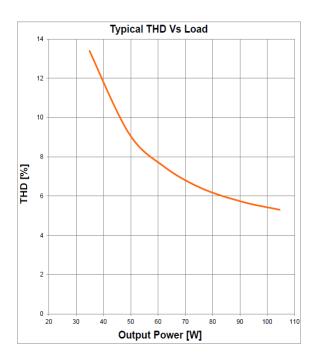
5.) Mains - 6.) Input - 7.) Output











Version: FINAL

#### 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.

#### Standards

IEC 61347-1

IEC 61347-2-13

IEC 62384

IEC 61000-3-2

IEC 61000-3-3

IEC 61547

 
 Product name
 EAN10
 Pieces / EAN40

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