inventronics

Product data sheet: OT FIT 100/220-240/700 D NFC HV L

Constant current LED driver incl. NFC Interface - non isolated

Wide operating area up to 700mA

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: 200 – 700mA 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, The Inpreparation, if not already printed on the label

*for more information please refer to Tuner4TRONIC[™]

Product Features

- Output current range 200 700mA
- Overload protection
- Very low ripple ≤1%
- Very high efficiency up to 95%
- Output power up to 100W
- Mains voltage 220 240V
- Suitable for emergency lighting



Housing material: metal, white painted

- Fast NFC programming (current)
- Overtemperature protection
- CLO integrated
- 100'000 h lifetime at $t_c = 70^{\circ}C$
- t_c max = 80 °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	0.5	А	Full load
	Total Harmonic Distortion (THD)	~ 8	%	Full load
	Power factor	> 0.97		Full load, 220 – 240 V, 50 Hz / see graphs
	Efficiency	Up to 95	%	Full load, 220 – 240 V, 50 Hz / see graphs
	Starting time	≤ 0.5	S	
	Power losses	5.5	W	Maximum, full load
	Protection class	1		PE can be connected either to terminal or housing
	Inrush current	37.6	A pk	th = 201 µs
	Max. units per circuit breaker	B16: 17		
	Brotactive conductor current	<u>Б10.10</u>	m۸	Through DE
	Nominal voltage range	64 - 300	V	
	Maximum voltage	< 340	Vdc	w/ Open Circuit
	Nominal current range	200 - 700	mA	
		200 - 700	%	$\leq 100 - 700 \text{ m}$ $\pm 3\% \cdot 200 < 100 \text{ m}$ $\pm 5\%$
		+/- J	0/	100 Hz low frog ripple is pogligible
5			70	
٦ ا	FSI SVM	≤ 0.4		
5	Nominal newer range	≥ 0.4 29 100	10/	At full load
0		20 - 100	VV \\/	
		100	vv	
	Emergency output factor (EL)	100	%	ta = -25+55°C: EOF ₁ =1
				$t_{2} = \pm 55 \pm 80^{\circ}$ C EOF = 0.45
	Galvanic isolation	no		
	Ambient temperature range t	-25 +55	°C	
ENVIRONMENT	Maximum case temperature t	80		Measured on tangint indicated of the product label
	Maximum case temperature t _c	110	0 •C	
	Storage temperature range	-25 +85		
	Relative humidity	5 85	%	Not condensing
	Surge transient protection	1 2	kV	I /N LLN/PE acc to EN 61547 Clause 5.7
	Environmental rating	Indoor		
	IP rating	IP 20		
	Mains switching cycles	> 100'000		
		50'000	1.	tc = 80°C 0 2% / 1'000 h failure rate 24h ON
	Expected lifetime	100'000	h	$t_c = 70^{\circ}C$, 0.1% / 1'000 h failure rate, 24h ON

Wiring Diagram

Terminal: Max. cable length - system: Geometry (I x b x h): Weight: Push in terminals 2 m 280x30x21 216g







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 105W.
 - 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 > 80°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 6134 EN 6134 EN 6238 0

7-1 7-2-13	Product name	EAN10	EAN40	Pieces / box
4	OT FIT 100/220-240/700 D NFC HV L	4062172382298	4062172382304	20

EN 61000-3-2

EN 61000-3-3

EN 61547

EN 55015

- 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 85748 Garching, Germany Phone +49 89 6213-0 www.inventronicsglobal.com

inventronics

Version: PRELIMINARY - November 2023

