OPTOTRONIC Wireless Intelligent – Casambi NFC LP I

Compact constant current LED driver – Dimmable



Areas of application

- Suitable for downlights, spotlights and LED panels
- Suitable for use in luminaires with flexible current setting
- Installation in emergency lighting systems according to IEC 61347-2-13, appendix J
- Suitable for indoor SELV installations
- Suitable for luminaires of protection classes I and II

Product family benefits

- Small housing for flexible luminaire designs
- Versatile CASAMBI window driver due to flexible output characteristic
- Easy and fast output current setting via NFC
- Very high efficiency
- High-quality dimming of 1...100 % by amplitude dimming

Product family features

- Driver with integrated CASAMBI lighting control system
- Supply voltage: 220...240 V
- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Line voltage: 198...264 V
- Lifetime: up to 100,000 h
- Type of protection: IP20
- Integrated cable clamp for luminaire and independent installation

© 2024, Inventronics GmbH. All rights reserved. Inventronics is a licensee of the OSRAM brand. OSRAM is a trademark of ams OSRAM.

Technical data

Electrical data

Product description	Nominal input voltage	Mains frequency	Input voltage AC	Input voltage DC	Total harmonic distortion	Power factor λ
OT WI 15/220...240/1A0 NFC CA LPI	220...240 V	0,50,60 Hz	198...264 V [1)]	176...276 V	< 10 % [2)]	0.33C...0.98
OT WI 25/220...240/700 NFC CA LPI	220...240 V	0,50,60 Hz	198...264 V [1)]	176...276 V	< 10 % [2)]	0.49C...0.99
OT WI 40/220...240/1A0 NFC CA LPI	220...240 V	0,50,60 Hz	198...264 V [1)]	176...276 V	< 10 % [2)]	0.70C...0.99

Product description	Efficiency in full-load	Device power loss	Inrush current	Max. ECG no. on circuit breaker 10 A (B)	Max. ECG no. on circuit breaker 16 A (B)
OT WI 15/220...240/1A0 NFC CA LPI	87.5 % [3)]	-	20 A [4)]	82	130
OT WI 25/220...240/700 NFC CA LPI	88 % [3)]	-	20 A [4)]	50	80
OT WI 40/220...240/1A0 NFC CA LPI		-	20 A [4)]	35	55

Product description	Surge capability (L/N-Ground)	Surge capability (L-N)	Nominal output voltage	U-OUT (working voltage)	Nominal output current
OT WI 15/220...240/1A0 NFC CA LPI	2 kV	1 kV	10...54 V [5)]	60 V	150...1050 mA [6)]
OT WI 25/220...240/700 NFC CA LPI	2 kV	1 kV	10...54 V [5)]	60 V	180...700 mA [6)]
OT WI 40/220...240/1A0 NFC CA LPI	2 kV	1 kV	10...54 V [5)]	60 V	350...1050 mA [6)]

Product description	Output current tolerance	Default output current	Output ripple current (100 Hz)
OT WI 15/220...240/1A0 NFC CA LPI	±3 %	350 mA	< 3 % [7)]
OT WI 25/220...240/700 NFC CA LPI	±3 %	500 mA	< 3 % [7)]
OT WI 40/220...240/1A0 NFC CA LPI	±3 %	700 mA	< 3 % [7)]

Product description	Output PSTLM	Output SVM	Nominal output power	Maximum output power
OT WI 15/220...240/1A0 NFC CA LPI	<1	<0.4	18 W	18 W [8)]
OT WI 25/220...240/700 NFC CA LPI	<1	<0.4	27 W	27 W [10)]
OT WI 40/220...240/1A0 NFC CA LPI	<1	<0.4	38 W	38 W [11)]

Product description	Wireless range	Wireless protocol	Galvanic isolation primary/secondary
OT WI 15/220...240/1A0 NFC CA LPI	10 m line of sight	Casambi Evolution	SELV
OT WI 25/220...240/700 NFC CA LPI	10 m line of sight	Casambi Evolution	SELV
OT WI 40/220...240/1A0 NFC CA LPI	10 m line of sight	Casambi Evolution	SELV

Product description	Networked standby power	Radio frequency	Current set
OT WI 15/220...240/1A0 NFC CA LPI	0.15 W [3)]	2.4 GHz	NFC
OT WI 25/220...240/700 NFC CA LPI	0.15 W [3)]	2.4 GHz	NFC

© 2024, Inventronics GmbH. All rights reserved. Inventronics is a licensee of the OSRAM brand. OSRAM is a trademark of ams OSRAM.

Product description	Networked standby power	Radio frequency	Current set
OT WI 40/220...240/1A0 NFC CA LPI	0.15 W [3]	2.4 GHz	NFC

Product description	Maximum TX power
OT WI 15/220...240/1A0 NFC CA LPI	8 dBm [9]
OT WI 25/220...240/700 NFC CA LPI	8 dBm [9]
OT WI 40/220...240/1A0 NFC CA LPI	8 dBm [9]

[1] Permitted voltage range

[2] At full load, 220...240 V, 50 Hz / see graphs

[3] at 230 V, 50 Hz

[4] t_{width} = 25 µs (measured at 50 % I_{peak})

[5] Maximum 60 V

[6] ±3%

[7] Ripple average at 100 Hz

[8] Partial load 3...18 W

[9] 2.512 mW

[10] Partial load 3.6...27 W

[11] Partial load 7...38 W

Dimensions & weight

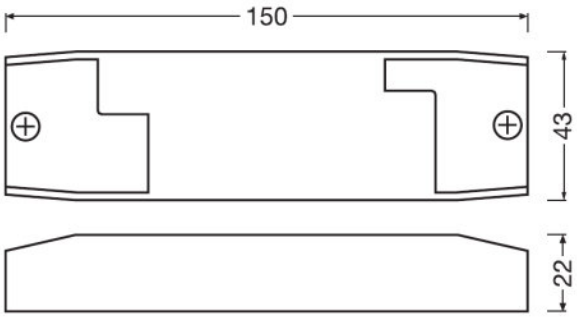
Product description	Mounting hole spacing, length	Product weight	Cable cross-section, input side	Cable cross-section, output side	Wire preparation length, input side
OT WI 15/220...240/1A0 NFC CA LPI	108.0 mm	150.00 g	0.75...1.5 mm² [1]	0.5...1.5 mm² [1]	7...8 mm
OT WI 25/220...240/700 NFC CA LPI	108.0 mm	150.00 g	0.75...1.5 mm² [1]	0.5...1.5 mm² [1]	7...8 mm
OT WI 40/220...240/1A0 NFC CA LPI	108.0 mm	160.00 g	0.75...1.5 mm² [1]	0.5...1.5 mm² [1]	7...8 mm

Product description	Wire preparation length, output side	Height	Width	Length
OT WI 15/220...240/1A0 NFC CA LPI	7...8 mm	22.0 mm	42.5 mm	150.0 mm
OT WI 25/220...240/700 NFC CA LPI	7...8 mm	22.0 mm	42.5 mm	150.0 mm
OT WI 40/220...240/1A0 NFC CA LPI	7...8 mm	22.0 mm	42.5 mm	150.0 mm

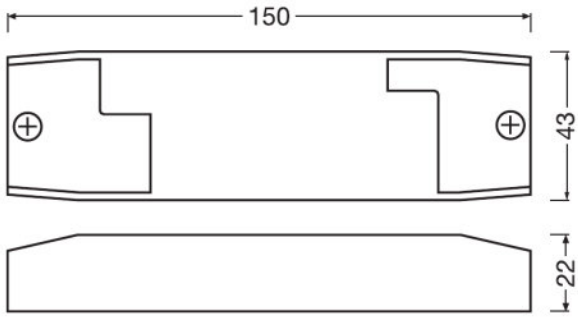
[1] Solid or flexible leads

© 2024, Inventronics GmbH. All rights reserved. Inventronics is a licensee of the OSRAM brand. OSRAM is a trademark of ams OSRAM.

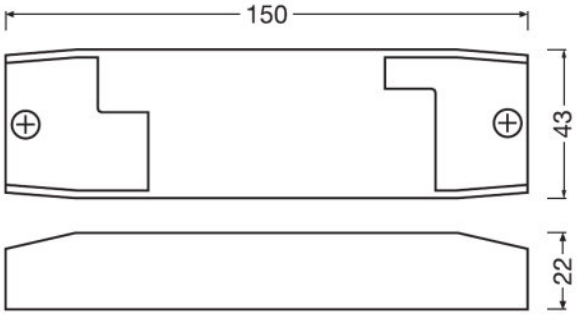
Product line drawing



OT WI 15/220...240/1A0 NFC CA LPI



OT WI 25/220...240/700 NFC CA LPI



OT WI 40/220...240/1A0 NFC CA LPI

© 2024, Inventronics GmbH. All rights reserved. Inventronics is a licensee of the OSRAM brand. OSRAM is a trademark of ams OSRAM.

Colors & materials

Product description	Casing material
OT WI 15/220...240/1A0 NFC CA LPI	Plastic
OT WI 25/220...240/700 NFC CA LPI	Plastic
OT WI 40/220...240/1A0 NFC CA LPI	Plastic

Temperatures & operating conditions

Product description	Ambient temperature range	Maximum temperature at tc test point	Max.housing temperature in case of fault	Temperature range at storage
OT WI 15/220...240/1A0 NFC CA LPI	-20...+50 °C	80 °C [1)]	110 °C	-40...+85 °C
OT WI 25/220...240/700 NFC CA LPI	-20...+50 °C	85 °C [1)]	110 °C	-40...+85 °C
OT WI 40/220...240/1A0 NFC CA LPI	-20...+45 °C	85 °C [1)]	110 °C	-40...+85 °C

Product description	Permitted rel. humidity during operation
OT WI 15/220...240/1A0 NFC CA LPI	5...85 % [2)]
OT WI 25/220...240/700 NFC CA LPI	5...85 % [2)]
OT WI 40/220...240/1A0 NFC CA LPI	5...85 % [2)]

[1)] Maximum at the Tc-point

[2)] Maximum 56 days/year at 85 %

Lifespan

Product description	ECG lifetime
OT WI 15/220...240/1A0 NFC CA LPI	50000 / 100000 h [1)]
OT WI 25/220...240/700 NFC CA LPI	50000 / 100000 h [2)]
OT WI 40/220...240/1A0 NFC CA LPI	50000 / 100000 h [2)]

[1)] T_c = 80°C, 0.2% / 1,000 h failure rate / T_c = 70°C, 0.1% / 1,000 h failure rate

[2)] T_c = 85°C, 0.2% / 1,000 h failure rate / T_c = 75°C, 0.1% / 1,000 h failure rate

Additional product data

Product description	Encapsulated
OT WI 15/220...240/1A0 NFC CA LPI	No
OT WI 25/220...240/700 NFC CA LPI	No
OT WI 40/220...240/1A0 NFC CA LPI	No

© 2024, Inventronics GmbH. All rights reserved. Inventronics is a licensee of the OSRAM brand. OSRAM is a trademark of ams OSRAM.

Capabilities

Product description	Dimmable	Dimming interface	Dimming range	Dimming method
OT WI 15/220…240/1A0 NFC CA LPI	Yes	Bluetooth CASAMBI	1…100 %	Amplitude Modulation
OT WI 25/220…240/700 NFC CA LPI	Yes	Bluetooth CASAMBI	1…100 %	Amplitude Modulation
OT WI 40/220…240/1A0 NFC CA LPI	Yes	Bluetooth CASAMBI	1…100 %	Amplitude Modulation

Product description	Overheating protection	Overload protection	Short-circuit protection	No-load proof
OT WI 15/220…240/1A0 NFC CA LPI	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OT WI 25/220…240/700 NFC CA LPI	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OT WI 40/220…240/1A0 NFC CA LPI	Automatic reversible	Automatic reversible	Automatic reversible	Yes

Product description	Intended for no-load operation	Max. cable length to lamp/LED module	Suitable for fixtures with prot. class	Type of connection, input side
OT WI 15/220…240/1A0 NFC CA LPI	No	2.0 m [1]	I / II	Push terminal
OT WI 25/220…240/700 NFC CA LPI	No	2.0 m [1]	I / II	Push terminal
OT WI 40/220…240/1A0 NFC CA LPI	No	2.0 m [1]	I / II	Push terminal

Product description	Type of connection, output side	Reset	Constant lumen function	Suitable for emergency lighting
OT WI 15/220…240/1A0 NFC CA LPI	Push terminal	Manual [2]	Programmable	Yes
OT WI 25/220…240/700 NFC CA LPI	Push terminal	Manual [2]	Programmable	Yes
OT WI 40/220…240/1A0 NFC CA LPI	Push terminal	Manual [2]	Programmable	Yes

Product description	Number of channels	Control interface	Programming interface
OT WI 15/220…240/1A0 NFC CA LPI	1	Casambi	NFC
OT WI 25/220…240/700 NFC CA LPI	1	Casambi	NFC
OT WI 40/220…240/1A0 NFC CA LPI	1	Casambi	NFC

[1] Output wires must be routed as close as possible to each other

[2] see additional product information

Programming

Product description	Box programming	Tuner4TRONIC	Tuner4TRONIC Field App
OT WI 15/220…240/1A0 NFC CA LPI	Yes	Yes	No
OT WI 25/220…240/700 NFC CA LPI	Yes	Yes	No
OT WI 40/220…240/1A0 NFC CA LPI	Yes	Yes	No

Product description	Programming device
OT WI 15/220…240/1A0 NFC CA LPI	NFC
OT WI 25/220…240/700 NFC CA LPI	NFC
OT WI 40/220…240/1A0 NFC CA LPI	NFC

© 2024, Inventronics GmbH. All rights reserved. Inventronics is a licensee of the OSRAM brand. OSRAM is a trademark of ams OSRAM.

Programmable features

Product description	Driver Guard	Lamp Operating Time	Constant Lumen
OT WI 15/220…240/1A0 NFC CA LPI	Yes	Yes	Yes
OT WI 25/220…240/700 NFC CA LPI	Yes	Yes	Yes
OT WI 40/220…240/1A0 NFC CA LPI	Yes	Yes	Yes

Product description	Configuration Lock	Emergency Mode	OEM Key
OT WI 15/220…240/1A0 NFC CA LPI	Yes	Yes	No
OT WI 25/220…240/700 NFC CA LPI	Yes	Yes	No
OT WI 40/220…240/1A0 NFC CA LPI	Yes	Yes	No

Product description	Dim to Dark	Soft Switch Off
OT WI 15/220…240/1A0 NFC CA LPI	Yes	Yes
OT WI 25/220…240/700 NFC CA LPI	Yes	Yes
OT WI 40/220…240/1A0 NFC CA LPI	Yes	Yes

Certificates & standards

Product description	Approval marks – approval	Standards	Protection class	Type of protection
OT WI 15/220…240/1A0 NFC CA LPI	CE / UKCA / ENEC / EAC / EL	Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 55015/Acc. to EN 61547/Acc. to EN 61000-3-2/Acc. to EN 62384/Acc. to EN 62479/Acc. to ETSI EN 300 328/Acc. to ETSI EN 301 489-17/Acc. to ETSI EN 301 489 - 1	II	IP20
OT WI 25/220…240/700 NFC CA LPI	CE / UKCA / ENEC / EAC / EL	Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 55015/Acc. to EN 61547/Acc. to EN 61000-3-2/Acc. to EN 62384/Acc. to EN 62479/Acc. to ETSI EN 300 328/Acc. to ETSI EN 301 489-17/Acc. to ETSI EN 301 489 - 1	II	IP20
OT WI 40/220…240/1A0 NFC CA LPI	CE / UKCA / ENEC / EAC / EL	Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 55015/Acc. to EN 61547/Acc. to EN 61000-3-2/Acc. to EN 62384/Acc. to EN 62479/Acc. to ETSI EN 300 328/Acc. to ETSI EN 301 489-17/Acc. to ETSI EN 301 489 - 1	II	IP20

© 2024, Inventronics GmbH. All rights reserved. Inventronics is a licensee of the OSRAM brand. OSRAM is a trademark of ams OSRAM.

Logistical data

Product description	Commodity code
OT WI 15/220...240/1A0 NFC CA LPI	85044095900
OT WI 25/220...240/700 NFC CA LPI	85044095900
OT WI 40/220...240/1A0 NFC CA LPI	85044095900

Environmental information
Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh)

Product description	Date of Declaration	Primary Article Identifier	Candidate List Substance 1
OT WI 15/220...240/1A0 NFC CA LPI	11-10-2023	4062172228039	Lead
OT WI 25/220...240/700 NFC CA LPI	11-10-2023	4062172228053	Lead
OT WI 40/220...240/1A0 NFC CA LPI	11-10-2023	4062172228077	Lead

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
OT WI 15/220...240/1A0 NFC CA LPI	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	1c676673-b348-496c-8f41-1279f66f2401
OT WI 25/220...240/700 NFC CA LPI	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	d22811f9-f4ab-4909-8dbd-433a1cb4f53d
OT WI 40/220...240/1A0 NFC CA LPI	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	65e29d90-393b-479f-82e6-16143c938244

Application advice

For more detailed application information and graphics please see product datasheet.

© 2024, Inventronics GmbH. All rights reserved. Inventronics is a licensee of the OSRAM brand. OSRAM is a trademark of ams OSRAM.

Additional product information

- Download Casambi app from App store or Google play. For the correct functioning of the Casambi app refer to the Casambi website: http://www.casambi.com.
- The Casambi App is provided to you by Casambi. OSRAM shall have no liability for the Casambi app and does not make any representations, express or implied, about the availability and/or performance of the Casambi app.
- The Casambi cloud services are provided to you by Casambi. OSRAM shall have no liability for the Casambi cloud services and does not make any representations, express or implied, about the availability and/or performance of the Casambi cloud services.
- OSRAM shall have no liability for and does not make any representations, express or implied, about the connectivity of Casambi ready products of OSRAM with any other Casambi ready products.
- There are two places in the app where you can unpair a Casambi enabled device from a network.1. Go to the ‘Luminaires’ tab and tap ‘edit’. Unpair a luminaire by tapping the ("X") that will appear in the corner of the relevant luminaire icon. You can also double-tap a luminaire icon to open the "luminaire properties" screen, and then scroll down and tap ‘Unpair device’.2. Go to the "Nearby devices" screen found under the ‘More’ tab. Tap on the device you wish to unpair and select ‘Unpair device’. This will unpair the luminaire if you have modification (administrator) rights to the network.If you don’t have the modification rights to the network that the device is paired to then you need to have access to the devices power switch to be able to unpair. Tap on the device you wish to unpair and select ‘Unpair device’ and the app will open the 'Unpair’ screen. Tap on the ‘Start’ button and an orange "Time bar" will appear and start to move across the screen. During the time it takes the bar to move across the screen, flick the power switch off and back on again. This should unpair the device. If unpairing succeeds then there is a message that luminaire has been unpaired. If it does not succeed then try again but switch the power off and on again more slowly (This may be needed for devices that use an additional power supply; such as a CBU-PWM4). If unpairing continues to be unsuccessful then it is probably the case that the power switch is not correct for the device you are trying to unpair.

Sales and Technical Support

Sales and Technical Support www.osram.com

Download Data

	File
	User instruction OPTOTRONIC LED Power Supply
	Certificates OT ENEC 40038447 260623
	CAD data OT WI NFC CA BL LPI IGS 130722
	CAD data OT WI NFC CA BL LPI STEP 130722
	CAD Data 2-dim OT WI NFC CA BL LPI CAD2PDF 130722
	CAD data 3-dim OT WI NFC CA BL LPI CAD3PDF 130722

© 2024, Inventronics GmbH. All rights reserved. Inventronics is a licensee of the OSRAM brand. OSRAM is a trademark of ams OSRAM.

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.

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4062172228039	OT WI 15/220...240/1A0 NFC CA LPI	Shipping carton box 20	314 mm x 122 mm x 107 mm	4.10 dm^3	3121.00 g
4062172228053	OT WI 25/220...240/700 NFC CA LPI	Shipping carton box 20	314 mm x 122 mm x 107 mm	4.10 dm^3	3121.00 g
4062172228077	OT WI 40/220...240/1A0 NFC CA LPI	Shipping carton box 20	314 mm x 122 mm x 107 mm	4.10 dm^3	3321.00 g

— The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

Disclaimer

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.

© 2024, Inventronics GmbH. All rights reserved. Inventronics is a licensee of the OSRAM brand. OSRAM is a trademark of ams OSRAM.