OPTOTRONIC Wireless Intelligent – Casambi NFC LP

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

- 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

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 LP	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 LP	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 LP	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 LP	87.5 % [3)]	-	20 A [4)]	82	130
OT WI 25/220…240/700 NFC CA LP	88 % [3)]	-	20 A [4)]	50	80
OT WI 40/220…240/1A0 NFC CA LP		-	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 LP	2 kV	1 kV	10…54 V [5)]	60 V	150…1050 mA [6)]
OT WI 25/220…240/700 NFC CA LP	2 kV	1 kV	10…54 V [5)]	60 V	180…700 mA [6)]
OT WI 40/220…240/1A0 NFC CA LP	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 LP	±3 %	350 mA	< 3 % [7)]
OT WI 25/220…240/700 NFC CA LP	±3 %	500 mA	< 3 % [7)]
OT WI 40/220…240/1A0 NFC CA LP	±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 LP	≤1	≤0.4	18 W	18 W [8)]
OT WI 25/220…240/700 NFC CA LP	≤1	≤0.4	27 W	27 W [10)]
OT WI 40/220…240/1A0 NFC CA LP	≤1	≤0.4	38 W	38 W [11)]

Product description	Networked standby power	Galvanic isolation primary/secondary	Maximum TX power
OT WI 15/220…240/1A0 NFC CA LP	0.15 W [3)]	SELV	8 dBm [9)]
OT WI 25/220…240/700 NFC CA LP	0.15 W [3)]	SELV	8 dBm [9)]
OT WI 40/220…240/1A0 NFC CA LP	0.15 W [3)]	SELV	8 dBm [9)]

Product description	Radio frequency	Wireless protocol	Wireless range
OT WI 15/220…240/1A0 NFC CA LP	2.4 GHz	Casambi Evolution	10 m line of sight
OT WI 25/220…240/700 NFC CA LP	2.4 GHz	Casambi Evolution	10 m line of sight

Product description	Radio frequency	Wireless protocol	Wireless range
OT WI 40/220...240/1A0 NFC CA LP	2.4 GHz	Casambi Evolution	10 m line of sight

Product description	Current set
OT WI 15/220...240/1A0 NFC CA LP	NFC
OT WI 25/220...240/700 NFC CA LP	NFC
OT WI 40/220...240/1A0 NFC CA LP	NFC

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

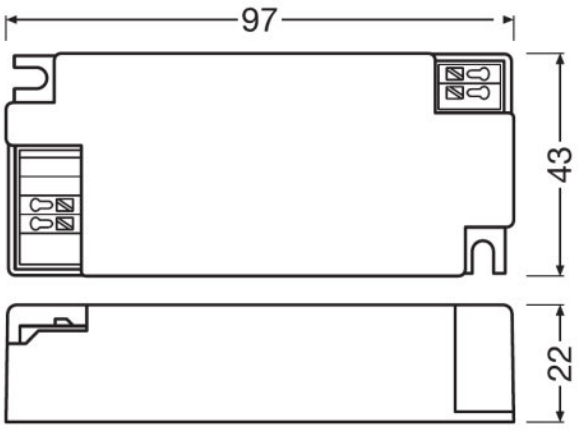
Dimensions & weight

Product description	Mounting hole spacing, length	Mounting hole spacing, width	Product weight	Cable cross-section, input side	Cable cross-section, output side
OT WI 15/220...240/1A0 NFC CA LP	88.0 mm	34.0 mm	120.00 g	0.5...1.5 mm² 1)	0.5...1.5 mm² 1)
OT WI 25/220...240/700 NFC CA LP	88.0 mm	34.0 mm	120.00 g	0.5...1.5 mm² 1)	0.5...1.5 mm² 1)
OT WI 40/220...240/1A0 NFC CA LP	88.0 mm	34.0 mm	130.00 g	0.5...1.5 mm² 1)	0.5...1.5 mm² 1)

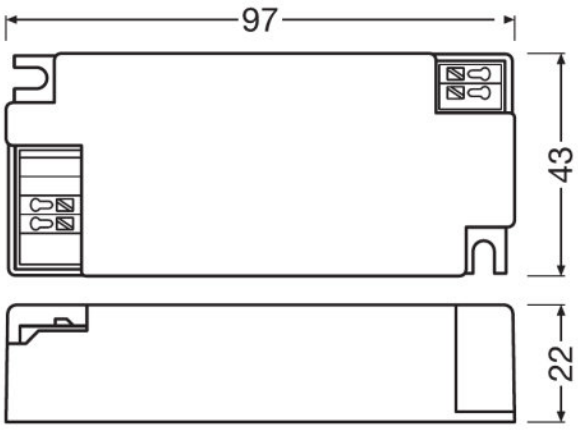
Product description	Wire preparation length, input side	Wire preparation length, output side	Length	Width	Height
OT WI 15/220...240/1A0 NFC CA LP	7...8 mm	7...8 mm	97.0 mm	42.5 mm	22.0 mm
OT WI 25/220...240/700 NFC CA LP	7...8 mm	7...8 mm	97.0 mm	42.5 mm	22.0 mm
OT WI 40/220...240/1A0 NFC CA LP	7...8 mm	7...8 mm	97.0 mm	42.5 mm	22.0 mm

1) Solid or flexible leads

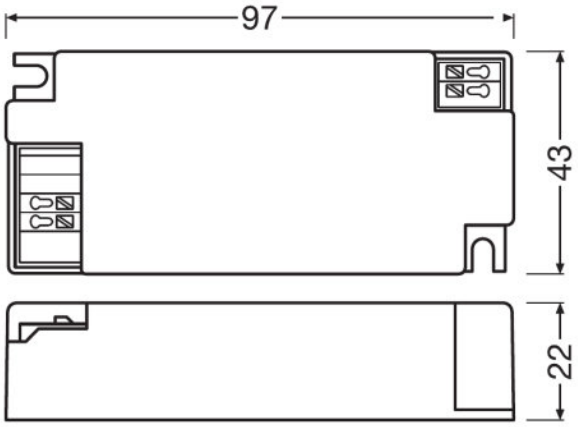
Product line drawing



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



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



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

Colors & materials

Product description	Casing material
OT WI 15/220...240/1A0 NFC CA LP	Plastic
OT WI 25/220...240/700 NFC CA LP	Plastic
OT WI 40/220...240/1A0 NFC CA LP	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 LP	-20...+50 °C	80 °C [1)]	110 °C	-40...+85 °C
OT WI 25/220...240/700 NFC CA LP	-20...+50 °C	85 °C [1)]	110 °C	-40...+85 °C
OT WI 40/220...240/1A0 NFC CA LP	-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 LP	5...85 % [2)]
OT WI 25/220...240/700 NFC CA LP	5...85 % [2)]
OT WI 40/220...240/1A0 NFC CA LP	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 LP	50000 / 100000 h [1)]
OT WI 25/220...240/700 NFC CA LP	50000 / 100000 h [2)]
OT WI 40/220...240/1A0 NFC CA LP	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 LP	No
OT WI 25/220...240/700 NFC CA LP	No
OT WI 40/220...240/1A0 NFC CA LP	No

Capabilities

Product description	Dimmable	Dimming interface	Dimming range	Dimming method
OT WI 15/220…240/1A0 NFC CA LP	Yes	Bluetooth CASAMBI	1…100 %	Amplitude Modulation
OT WI 25/220…240/700 NFC CA LP	Yes	Bluetooth CASAMBI	1…100 %	Amplitude Modulation
OT WI 40/220…240/1A0 NFC CA LP	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 LP	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OT WI 25/220…240/700 NFC CA LP	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OT WI 40/220…240/1A0 NFC CA LP	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 LP	No	2.0 m [1]	I / II	Push terminal
OT WI 25/220…240/700 NFC CA LP	No	2.0 m [1]	I / II	Push terminal
OT WI 40/220…240/1A0 NFC CA LP	No	2.0 m [1]	I / II	Push terminal

Product description	Type of connection, output side	Programming interface	Reset
OT WI 15/220…240/1A0 NFC CA LP	Push terminal	NFC	Manual [2]
OT WI 25/220…240/700 NFC CA LP	Push terminal	NFC	Manual [2]
OT WI 40/220…240/1A0 NFC CA LP	Push terminal	NFC	Manual [2]

Product description	Number of channels	Suitable for emergency lighting	Constant lumen function	Control interface
OT WI 15/220…240/1A0 NFC CA LP	1	Yes	Programmable	Casambi
OT WI 25/220…240/700 NFC CA LP	1	Yes	Programmable	Casambi
OT WI 40/220…240/1A0 NFC CA LP	1	Yes	Programmable	Casambi

[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 LP	Yes	Yes	No
OT WI 25/220…240/700 NFC CA LP	Yes	Yes	No
OT WI 40/220…240/1A0 NFC CA LP	Yes	Yes	No

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

Programmable features

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

Product description	Emergency Mode	Configuration Lock	Soft Switch Off
OT WI 15/220…240/1A0 NFC CA LP	Yes	Yes	Yes
OT WI 25/220…240/700 NFC CA LP	Yes	Yes	Yes
OT WI 40/220…240/1A0 NFC CA LP	Yes	Yes	Yes

Product description	Dim to Dark	OEM Key
OT WI 15/220…240/1A0 NFC CA LP	Yes	No
OT WI 25/220…240/700 NFC CA LP	Yes	No
OT WI 40/220…240/1A0 NFC CA LP	Yes	No

Certificates & standards

Product description	Approval marks – approval	Standards	Protection class	Type of protection
OT WI 15/220…240/1A0 NFC CA LP	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 LP	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 LP	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

Logistical data

Product description	Commodity code
OT WI 15/220...240/1A0 NFC CA LP	85044095900
OT WI 25/220...240/700 NFC CA LP	85044095900
OT WI 40/220...240/1A0 NFC CA LP	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 LP	11-10-2023	4062172227971	Lead
OT WI 25/220...240/700 NFC CA LP	11-10-2023	4062172227995	Lead
OT WI 40/220...240/1A0 NFC CA LP	11-10-2023	4062172228015	Lead

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
OT WI 15/220...240/1A0 NFC CA LP	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	8e47e10f-d216-4583-b3ee-baa704354588
OT WI 25/220...240/700 NFC CA LP	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	73292d02-6436-4706-87d6-43c5e7ceb7fb
OT WI 40/220...240/1A0 NFC CA LP	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	55c508f3-f216-4633-871a-665116cbae23

Application advice

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

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 LP IGS 130722
	CAD data OT WI NFC CA BL LP STEP 130722
	CAD Data 2-dim OT WI NFC CA BL LP CAD2PDF 130722
	CAD data 3-dim OT WI NFC CA BL LP CAD3PDF 130722

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
4062172227971	OT WI 15/220...240/1A0 NFC CA LP	Shipping carton box 20	208 mm x 122 mm x 107 mm	2.72 dm^3	2490.00 g
4062172227995	OT WI 25/220...240/700 NFC CA LP	Shipping carton box 20	208 mm x 122 mm x 107 mm	2.72 dm^3	2490.00 g
4062172228015	OT WI 40/220...240/1A0 NFC CA LP	Shipping carton box 20	208 mm x 122 mm x 107 mm	2.72 dm^3	2690.00 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.