

OPTOTRONIC Wireless Intelligent – Casambi NFC L (SELV)

Linear constant current LED driver – Dimmable



Areas of application

- Linear lighting for office, education, hospitality and retail
- Installation in emergency lighting systems according to IEC 61347-2-13, appendix J
- Suitable for indoor SELV installations
- Suitable for luminaires of protection class I

Product family benefits

- Versatile Casambi window driver up to 80 W and 750 mA
- Fully programmable via software (NFC)
- Very high efficiency
- High-quality dimming of 1...100 %
- Higher quality of light thanks to < 1% output ripple current
- Fulfill safety requirement due to overload, overtemperature, Hot Plug protection

Product family features

- CRP Casambi Ready Product
- Supply voltage: 220...240 V
- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Lifetime: up to 100,000 h
- Type of protection: IP20
- SELV driver

Product family datasheet

Technical data

Electrical data

Product description	Nominal input voltage	Mains frequency	Input voltage AC	Input voltage DC	Current set
OT WI 35/220...240/1A0 NFC CA L	220...240 V	0/50/60 Hz	198...264 V	176...276 V	NFC / Programmable
OT WI 50/220...240/1A4 NFC CA L	220...240 V	0/50/60 Hz	198...264 V	176...276 V	NFC / Programmable
OT WI 80/220...240/2A1 NFC CA L	220...240 V	0/50/60 Hz	198...264 V	176...276 V	NFC / Programmable

Product description	Total harmonic distortion	Power factor λ	Efficiency in full-load	Device power loss	Inrush current
OT WI 35/220...240/1A0 NFC CA L	< 10 %	0.61C...0.98	89 %	3.0 W	\leq 18 A
OT WI 50/220...240/1A4 NFC CA L	< 10 %	0.72C...0.98	90 %	5.0 W	\leq 21 A
OT WI 80/220...240/2A1 NFC CA L	< 10 %	0.83C...0.99	90 %	8.0 W	\leq 30 A

Product description	Max. ECG no. on circuit breaker 10 A (C)	Max. ECG no. on circuit breaker 10 A (B)	Max. ECG no. on circuit breaker 16 A (B)	Max. ECG no. on circuit breaker 16 A (C)	Max. ECG no. on circuit breaker 25 A (B)
OT WI 35/220...240/1A0 NFC CA L	-	20	31	-	-
OT WI 50/220...240/1A4 NFC CA L	-	12	20	-	-
OT WI 80/220...240/2A1 NFC CA L	-	8	13	-	-

Product description	Surge capability (L/N-Ground)	Surge capability (L-N)	Nominal output voltage	U-OUT (working voltage)	Nominal output current
OT WI 35/220...240/1A0 NFC CA L	2 kV	1 kV	20...54 V	< 60 V	200...1050 mA
OT WI 50/220...240/1A4 NFC CA L	2 kV	1 kV	20...54 V	< 60 V	400...1400 mA
OT WI 80/220...240/2A1 NFC CA L	2 kV	1 kV	20...54 V	< 60 V	600...2100 mA

Product description	Default output current	Output current tolerance	Output ripple current (100 Hz)
OT WI 35/220...240/1A0 NFC CA L	200 mA	\pm 3 %	< 3 %
OT WI 50/220...240/1A4 NFC CA L	400 mA	\pm 3 %	< 3 %
OT WI 80/220...240/2A1 NFC CA L	600 mA	\pm 3 %	< 3 %

Product description	Output PSTLM	Output SVM	Nominal output power	Maximum output power
OT WI 35/220...240/1A0 NFC CA L	\leq 1	\leq 0.4	4...37 W	37 W
OT WI 50/220...240/1A4 NFC CA L	\leq 1	\leq 0.4	15...54 W	50 W
OT WI 80/220...240/2A1 NFC CA L	\leq 1	\leq 0.4	32...80 W	80 W

Product description	Galvanic isolation	Wireless range	Galvanic isolation primary/secondary	Protective conductor current
OT WI 35/220...240/1A0 NFC CA L	SELV	up to 10m	SELV	<0.5 mA
OT WI 50/220...240/1A4 NFC CA L	SELV	up to 10m	SELV	<0.5 mA

Product family datasheet

Product description	Galvanic isolation	Wireless range	Galvanic isolation primary/secondary	Protective conductor current
OT WI 80/220...240/2A1 NFC CA L	SELV	up to 10m	SELV	<0.5 mA

Product description	Power loss in stand-by mode	Networked standby power	Wireless protocol
OT WI 35/220...240/1A0 NFC CA L	<0.2 W	<0.20 W ¹⁾	Casambi Evolution
OT WI 50/220...240/1A4 NFC CA L	<0.2 W	<0.20 W ¹⁾	Casambi Evolution
OT WI 80/220...240/2A1 NFC CA L	<0.2 W	<0.20 W ¹⁾	Casambi Evolution

¹⁾ at 230 V, 50 Hz

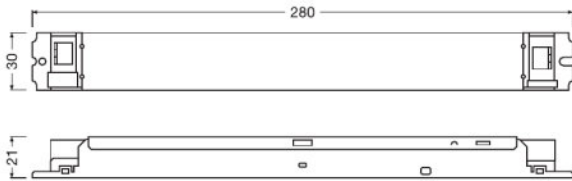
Dimensions & weight

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 35/220...240/1A0 NFC CA L	270.0 mm	220.00 g	0.5...1.5 mm ²	0.5...1.5 mm ²	8.0...9.0 mm
OT WI 50/220...240/1A4 NFC CA L	270.0 mm	220.00 g	0.5...1.5 mm ²	0.5...1.5 mm ²	8.0...9.0 mm
OT WI 80/220...240/2A1 NFC CA L	350.0 mm	280.00 g	0.5...1.5 mm ²	0.5...1.5 mm ²	8.0...9.0 mm

Product description	Wire preparation length, output side	Mounting hole spacing, width	Length	Width	Height
OT WI 35/220...240/1A0 NFC CA L	8.0...9.0 mm	-	280.0 mm	30.0 mm	21.0 mm
OT WI 50/220...240/1A4 NFC CA L	8.0...9.0 mm	-	280.0 mm	30.0 mm	21.0 mm
OT WI 80/220...240/2A1 NFC CA L	8.0...9.0 mm	-	360.0 mm	30.0 mm	21.0 mm

Product family datasheet

Product line drawing



OT WI 35/220...240/1A0 NFC CA L, OT WI 50/220...240/1A4 NFC CA L, OT WI 80/220...240/2A1 NFC CA L

Colors & materials

Product description	Casing material
OT WI 35/220...240/1A0 NFC CA L	Metal
OT WI 50/220...240/1A4 NFC CA L	Metal
OT WI 80/220...240/2A1 NFC CA L	Metal

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 35/220...240/1A0 NFC CA L	-25...+60 °C	75 °C	110 °C	-40...+85 °C
OT WI 50/220...240/1A4 NFC CA L	-25...+50 °C	75 °C	110 °C	-40...+85 °C
OT WI 80/220...240/2A1 NFC CA L	-25...+50 °C	80 °C	110 °C	-40...+85 °C

Product description	Permitted rel. humidity during operation
OT WI 35/220...240/1A0 NFC CA L	5...85 % ¹⁾
OT WI 50/220...240/1A4 NFC CA L	5...85 % ¹⁾
OT WI 80/220...240/2A1 NFC CA L	5...85 % ¹⁾

¹⁾ Maximum 56 days/year at 85 %

Product family datasheet

Lifespan

Product description	ECG lifetime
OT WI 35/220...240/1A0 NFC CA L	100000 / 50000 h
OT WI 50/220...240/1A4 NFC CA L	100000 / 50000 h
OT WI 80/220...240/2A1 NFC CA L	100000 / 50000 h

Additional product data

Product description	Encapsulated
OT WI 35/220...240/1A0 NFC CA L	No
OT WI 50/220...240/1A4 NFC CA L	No
OT WI 80/220...240/2A1 NFC CA L	No

Capabilities

Product description	Programming interface	Dimmable	Dimming interface	Dimming range
OT WI 35/220...240/1A0 NFC CA L	NFC	Yes	Casambi	1...100 %
OT WI 50/220...240/1A4 NFC CA L	NFC	Yes	Casambi	1...100 %
OT WI 80/220...240/2A1 NFC CA L	NFC	Yes	Casambi	1...100 %

Product description	Dimming method	Overheating protection	Overload protection
OT WI 35/220...240/1A0 NFC CA L	Full analogue dimming	Automatic reversible	Automatic reversible
OT WI 50/220...240/1A4 NFC CA L	Full analogue dimming	Automatic reversible	Automatic reversible
OT WI 80/220...240/2A1 NFC CA L	Full analogue dimming	Automatic reversible	Automatic reversible

Product description	Short-circuit protection	No-load proof	Intended for no-load operation	Max. cable length to lamp/LED module
OT WI 35/220...240/1A0 NFC CA L	Automatic reversible	Yes	No	2.0 m ¹⁾
OT WI 50/220...240/1A4 NFC CA L	Automatic reversible	Yes	No	2.0 m ¹⁾
OT WI 80/220...240/2A1 NFC CA L	Automatic reversible	Yes	No	2.0 m ¹⁾

Product description	Suitable for fixtures with prot. class	Suitable for emergency lighting	Type of connection, input side	Type of connection, output side
OT WI 35/220...240/1A0 NFC CA L	I	Yes	Push terminal	Push terminal
OT WI 50/220...240/1A4 NFC CA L	I	Yes	Push terminal	Push terminal
OT WI 80/220...240/2A1 NFC CA L	I	Yes	Push terminal	Push terminal

Product description	Constant lumen function	DALI-2 Energy Data	Number of channels
OT WI 35/220...240/1A0 NFC CA L	Yes	No	1
OT WI 50/220...240/1A4 NFC CA L	Yes	No	1
OT WI 80/220...240/2A1 NFC CA L	Yes	No	1

Product description	DALI-2 Diagnostic Data	Suitable for through-wiring
OT WI 35/220...240/1A0 NFC CA L	No	No

Product family datasheet

Product description	DALI-2 Diagnostic Data	Suitable for through-wiring
OT WI 50/220...240/1A4 NFC CA L	No	No
OT WI 80/220...240/2A1 NFC CA L	No	No

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

Programming

Product description	Programming device	Box programming
OT WI 35/220...240/1A0 NFC CA L	DALI magic / NFC Scanner	Yes
OT WI 50/220...240/1A4 NFC CA L	DALI magic / NFC Scanner	Yes
OT WI 80/220...240/2A1 NFC CA L	DALI magic / NFC Scanner	Yes

Programmable features

Product description	Soft Switch Off	Configuration Lock	Emergency Mode
OT WI 35/220...240/1A0 NFC CA L	Yes	Yes	Yes
OT WI 50/220...240/1A4 NFC CA L	Yes	Yes	Yes
OT WI 80/220...240/2A1 NFC CA L	Yes	Yes	Yes

Product description	OEM Key	Dim to Dark	Driver Guard
OT WI 35/220...240/1A0 NFC CA L	Yes	Yes	Yes
OT WI 50/220...240/1A4 NFC CA L	Yes	Yes	Yes
OT WI 80/220...240/2A1 NFC CA L	Yes	Yes	Yes

Product description	Constant Lumen	DALI-2 Luminaire Data
OT WI 35/220...240/1A0 NFC CA L	Yes	No
OT WI 50/220...240/1A4 NFC CA L	Yes	No
OT WI 80/220...240/2A1 NFC CA L	Yes	No

Product family datasheet

Certificates & standards

Product description	Approval marks – approval	Standards	Type of protection
OT WI 35/220...240/1A0 NFC CA L	BIS / CCC / CE / EL / RCM / ENEC	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547	IP20
OT WI 50/220...240/1A4 NFC CA L	BIS / CCC / CE / EL / RCM / ENEC	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547	IP20
OT WI 80/220...240/2A1 NFC CA L	BIS / CCC / CE / EL / RCM / ENEC	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547	IP20

Logistical data

Product description	Commodity code
OT WI 35/220...240/1A0 NFC CA L	85044095900
OT WI 50/220...240/1A4 NFC CA L	85044095900
OT WI 80/220...240/2A1 NFC CA L	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 35/220...240/1A0 NFC CA L	11-10-2023	4062172311182	Lead
OT WI 50/220...240/1A4 NFC CA L	11-10-2023	4062172311229	Lead
OT WI 80/220...240/2A1 NFC CA L	11-10-2023	4062172311267	Lead

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
OT WI 35/220...240/1A0 NFC CA L	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	73e1ff53-5ae8-4913-8810-ca6f175b8f9d
OT WI 50/220...240/1A4 NFC CA L	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	2253e4b0-ad30-4260-9b44-e53953ff6e39

Product family datasheet

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
OT WI 80/220...240/2A1 NFC CA L	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	09949571-9efe-4dc7-9a7e-7e12c9d30ea8










Application advice

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

Sales and Technical Support

Sales and Technical Support www.osram.com

Download Data

File
 User instruction OPTOTRONIC LED Power Supply
 CAD data OT WI 35 50 NFC CA BL L IGS 140722
 CAD data OT WI 35 50 NFC CA BL L STEP 140722
 CAD data 3-dim OT WI 35 50 NFC CA BL L CAD3PDF 140722
 CAD data PDF OT WI 35 50 NFC CA BL L CAD2PDF 140722
 CAD data OT WI 80 NFC CA BL L STEP 140722
 CAD data OT WI 80 NFC CA BL L IGS 140722
 CAD Data 2-dim OT WI 80 NFC CA BL L CAD2PDF 140722
 CAD data 3-dim OT WI 80 NFC CA BL L CAD3PDF 140722

Product family datasheet

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
4062172311182	OT WI 35/220...240/1A0 NFC CA L	Shipping carton box 20	303 mm x 159 mm x 105 mm	5.06 dm ³	4527.00 g
4062172311229	OT WI 50/220...240/1A4 NFC CA L	Shipping carton box 20	303 mm x 159 mm x 105 mm	5.06 dm ³	4527.00 g
4062172311267	OT WI 80/220...240/2A1 NFC CA L	Shipping carton box 20	385 mm x 160 mm x 100 mm	6.16 dm ³	5774.00 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.