

OPTOTRONIC Wireless Intelligent – QBM 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 QBM 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 datasheet

Product family features

- Qualified Bluetooth mesh enabled by Silvair
- Works with OSRAM Hubsense
- 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

Product family datasheet

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 BL 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 BL 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 BL 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 BL LPI	87.5 % ³⁾	-	20 A ⁴⁾	82	130
OT WI 25/220...240/700 NFC BL LPI	88 % ³⁾	-	20 A ⁴⁾	50	80
OT WI 40/220...240/1A0 NFC BL 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 BL LPI	2 kV	1 kV	10...54 V ⁵⁾	60 V	150...1050 mA ⁶⁾
OT WI 25/220...240/700 NFC BL LPI	2 kV	1 kV	10...54 V ⁵⁾	60 V	180...700 mA ⁶⁾
OT WI 40/220...240/1A0 NFC BL 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 BL LPI	±3 %	350 mA	< 3 % ⁷⁾
OT WI 25/220...240/700 NFC BL LPI	±3 %	500 mA	< 3 % ⁷⁾
OT WI 40/220...240/1A0 NFC BL 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 BL LPI	<1	<0.4	18 W	18 W ⁸⁾
OT WI 25/220...240/700 NFC BL LPI	<1	<0.4	27 W	27 W ⁹⁾
OT WI 40/220...240/1A0 NFC BL LPI	<1	<0.4	38 W	38 W ¹⁰⁾

Product description	Wireless range	Wireless protocol	Radio frequency
OT WI 15/220...240/1A0 NFC BL LPI	10 m line of sight	Qualified Bluetooth mesh enabled by Silvair	2.4 GHz
OT WI 25/220...240/700 NFC BL LPI	10 m line of sight	Qualified Bluetooth mesh enabled by Silvair	2.4 GHz
OT WI 40/220...240/1A0 NFC BL LPI	10 m line of sight	Qualified Bluetooth mesh enabled by Silvair	2.4 GHz

Product family datasheet

Product description	Current set	Maximum TX power	Galvanic isolation primary/secondary
OT WI 15/220...240/1A0 NFC BL LPI	NFC	+4 dBm	SELV
OT WI 25/220...240/700 NFC BL LPI	NFC	+4 dBm	SELV
OT WI 40/220...240/1A0 NFC BL LPI	NFC	+4 dBm	SELV

Product description	Networked standby power
OT WI 15/220...240/1A0 NFC BL LPI	0.15 W ³⁾
OT WI 25/220...240/700 NFC BL LPI	0.15 W ³⁾
OT WI 40/220...240/1A0 NFC BL LPI	0.15 W ³⁾

1) Permitted voltage range
2) At full load, 220...240 V, 50 Hz / see graphs
3) at 230 V, 50 Hz
4) $t_{width} = 25 \mu s$ (measured at 50 % I_{peak})
5) Maximum 60 V
6) $\pm 3\%$
7) Ripple average at 100 Hz
8) Partial load 3...18 W
9) Partial load 3.6...27 W
10) Partial load 7...38 W

Dimensions & weight

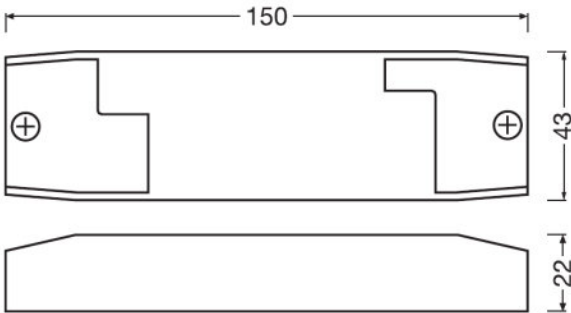
Product description	Mounting hole spacing, length	Product weight	Cable cross- section, input side	Cable cross- section, output side	Wire preparation length, input side
OT WI 15/220...240/1A0 NFC BL LPI	108.0 mm	150.00 g	0.75...1.5 mm ² ¹⁾	0.5...1.5 mm ² ¹⁾	7...8 mm
OT WI 25/220...240/700 NFC BL LPI	108.0 mm	150.00 g	0.75...1.5 mm ² ¹⁾	0.5...1.5 mm ² ¹⁾	7...8 mm
OT WI 40/220...240/1A0 NFC BL LPI	108.0 mm	160.00 g	0.75...1.5 mm ² ¹⁾	0.5...1.5 mm ² ¹⁾	7...8 mm

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

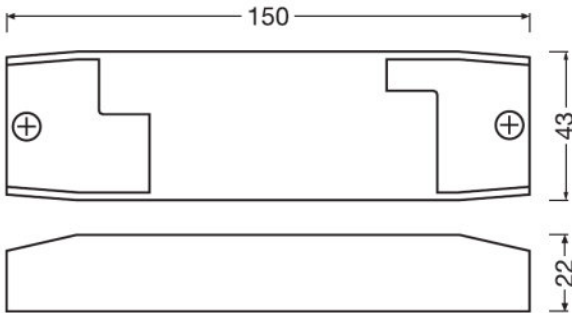
1) Solid or flexible leads

Product family datasheet

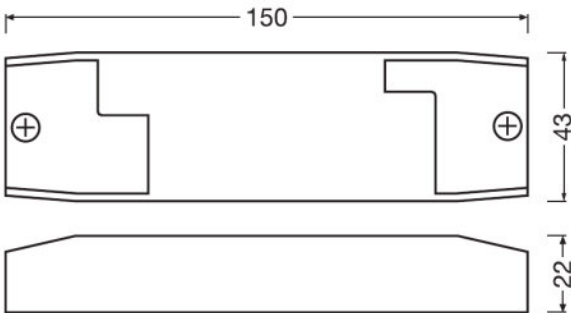
Product line drawing



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



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



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

Product family datasheet

Colors & materials

Product description	Casing material
OT WI 15/220...240/1A0 NFC BL LPI	Plastic
OT WI 25/220...240/700 NFC BL LPI	Plastic
OT WI 40/220...240/1A0 NFC BL 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 BL LPI	-20...+50 °C	80 °C ¹⁾	110 °C	-40...+85 °C
OT WI 25/220...240/700 NFC BL LPI	-20...+50 °C	85 °C ¹⁾	110 °C	-40...+85 °C
OT WI 40/220...240/1A0 NFC BL 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 BL LPI	5...85 % ²⁾
OT WI 25/220...240/700 NFC BL LPI	5...85 % ²⁾
OT WI 40/220...240/1A0 NFC BL 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 BL LPI	50000 / 100000 h ¹⁾
OT WI 25/220...240/700 NFC BL LPI	50000 / 100000 h ²⁾
OT WI 40/220...240/1A0 NFC BL 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	Predecessor EAN
OT WI 15/220...240/1A0 NFC BL LPI	No	4062172115025
OT WI 25/220...240/700 NFC BL LPI	No	4062172115049
OT WI 40/220...240/1A0 NFC BL LPI	No	4062172115063

Product family datasheet

Capabilities

Product description	Dimmable	Dimming interface	Dimming range	Dimming method
OT WI 15/220...240/1A0 NFC BL LPI	Yes	Qualified Bluetooth mesh by Silvair	1...100 %	Amplitude Modulation
OT WI 25/220...240/700 NFC BL LPI	Yes	Qualified Bluetooth mesh by Silvair	1...100 %	Amplitude Modulation
OT WI 40/220...240/1A0 NFC BL LPI	Yes	Qualified Bluetooth mesh by Silvair	1...100 %	Amplitude Modulation

Product description	Overheating protection	Overload protection	Short-circuit protection	No-load proof
OT WI 15/220...240/1A0 NFC BL LPI	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OT WI 25/220...240/700 NFC BL LPI	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OT WI 40/220...240/1A0 NFC BL 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 BL LPI	No	2.0 m ¹⁾	I / II	Push terminal
OT WI 25/220...240/700 NFC BL LPI	No	2.0 m ¹⁾	I / II	Push terminal
OT WI 40/220...240/1A0 NFC BL LPI	No	2.0 m ¹⁾	I / II	Push terminal

Product description	Type of connection, output side	Constant lumen function	Control interface
OT WI 15/220...240/1A0 NFC BL LPI	Push terminal	Programmable	qualified Bluetooth mesh
OT WI 25/220...240/700 NFC BL LPI	Push terminal	Programmable	qualified Bluetooth mesh
OT WI 40/220...240/1A0 NFC BL LPI	Push terminal	Programmable	qualified Bluetooth mesh

Product description	Suitable for through-wiring	Number of channels	Reset
OT WI 15/220...240/1A0 NFC BL LPI	No	1	Manual ²⁾
OT WI 25/220...240/700 NFC BL LPI	No	1	Manual ²⁾
OT WI 40/220...240/1A0 NFC BL LPI	No	1	Manual ²⁾

Product description	Programming interface	Suitable for emergency lighting
OT WI 15/220...240/1A0 NFC BL LPI	NFC	Yes
OT WI 25/220...240/700 NFC BL LPI	NFC	Yes
OT WI 40/220...240/1A0 NFC BL LPI	NFC	Yes

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 BL LPI	Yes	Yes	No
OT WI 25/220...240/700 NFC BL LPI	Yes	Yes	No
OT WI 40/220...240/1A0 NFC BL LPI	Yes	Yes	No
Product description	Programming device		
OT WI 15/220...240/1A0 NFC BL LPI	NFC		
OT WI 25/220...240/700 NFC BL LPI	NFC		
OT WI 40/220...240/1A0 NFC BL LPI	NFC		

Programmable features

Product description	OEM Key	Dim to Dark	Soft Switch Off
OT WI 15/220...240/1A0 NFC BL LPI	No	Yes	Yes
OT WI 25/220...240/700 NFC BL LPI	No	Yes	Yes
OT WI 40/220...240/1A0 NFC BL LPI	No	Yes	Yes
Product description	Configuration Lock	Emergency Mode	Driver Guard
OT WI 15/220...240/1A0 NFC BL LPI	Yes	Yes	Yes
OT WI 25/220...240/700 NFC BL LPI	Yes	Yes	Yes
OT WI 40/220...240/1A0 NFC BL LPI	Yes	Yes	Yes
Product description	Lamp Operating Time	Constant Lumen	
OT WI 15/220...240/1A0 NFC BL LPI	Yes	Yes	
OT WI 25/220...240/700 NFC BL LPI	Yes	Yes	
OT WI 40/220...240/1A0 NFC BL LPI	Yes	Yes	

Certificates & standards

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

Logistical data

Product description	Commodity code
OT WI 15/220...240/1A0 NFC BL LPI	85044095900
OT WI 25/220...240/700 NFC BL LPI	85044095900
OT WI 40/220...240/1A0 NFC BL 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 BL LPI	10-10-2023	4062172227872	Lead
OT WI 25/220...240/700 NFC BL LPI	10-10-2023	4062172227919	Lead
OT WI 40/220...240/1A0 NFC BL LPI	10-10-2023	4062172227933	Lead

Product family datasheet

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
OT WI 15/220...240/1A0 NFC BL LPI	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	396db574-2c83-4e46-b64b-69487086560a
OT WI 25/220...240/700 NFC BL LPI	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	ed692da0-57be-4cfb-80c7-38f3cf587e49
OT WI 40/220...240/1A0 NFC BL LPI	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	f3f93b7f-f60e-4fe9-b189-e9d26288fa03

Application advice

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

Additional product information

- By integrating the device into a casing the wireless range could be affected, in particular by metal surfaces. Therefore, the wireless range needs to be verified after integration.
- The device can be put into operation using the OSRAM HubSense Commissioning Tool version 1.30.1 (<https://platform.hubsense.eu>), subject to prior acceptance of the Terms of Use and the Privacy Policy.
- OSRAM may terminate or suspend the use of the HubSense Commissioning Tool at any time and for any or no reason in its sole discretion, even if access and use is continued to be allowed to others.
- The device complies with Bluetooth mesh Standard v1.0. It can also be used in 3rd party Bluetooth mesh network, that complies with this standard and that supports the mesh models of this device, and with certain 3rd party commissioning tools, that support the mesh models of this device. In order to ensure correct interoperability a verification with the 3rd party network components and the 3rd party commissioning tool is necessary in advance. Please contact OSRAM (support@hubsense.eu) to receive the actual list of supported models for this device.
- OSRAM shall have no liability for any 3rd party commissioning tool and does not make any representations, express or implied, about the availability and/or performance of such commissioning tool.
- OSRAM shall have no liability for and does not make any representations, express or implied, about the connectivity of OSRAM QBM products with any other products.
- Reset to factory setting: (1) Power off device and disconnect from mains, apply short circuit between LED+ and LED-, (2) connect device to mains and power on for at least 2 seconds, (3) power off device, disconnect from mains and remove short circuit. Reset completed.

Sales and Technical Support

Sales and Technical Support www.osram.com

Download Data

File

Product family datasheet

	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

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
4062172227872	OT WI 15/220...240/1A0 NFC BL LPI	Shipping carton box 20	314 mm x 122 mm x 107 mm	4.10 dm ³	3121.00 g
4062172227919	OT WI 25/220...240/700 NFC BL LPI	Shipping carton box 20	314 mm x 122 mm x 107 mm	4.10 dm ³	3121.00 g
4062172227933	OT WI 40/220...240/1A0 NFC BL 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.