OPTOTRONIC Wireless Intelligent – QBM NFC Track

Compact constant current LED driver – Dimmable

Areas of application

- Track lights
- Shops and hospitality: retail, hotels, restaurants

Product family benefits

- High quality of light thanks to low output ripple current
- Short housing for minimum distance between spotlights
- Versatile QBM window driver due to flexible output characteristic
- Easy and fast output current setting via NFC
- High-quality dimming of 1...100 % by amplitude dimming
- SELV system

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

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 40/220...240/1A0 NFC BL T-B	220...240 V	0/50/60 Hz	198...264 V [1]	176...276 V	< 10 % [2]	0.30C...0.95 [3]
OT WI 40/220...240/1A0 NFC BL T-W	220...240 V	0/50/60 Hz	198...264 V [1]	176...276 V	< 10 % [2]	0.30C...0.95 [3]
OT WI 40/220...240/1A0 NFC BL T-G	220...240 V	0/50/60 Hz	198...264 V [1]	176...276 V	< 10 % [2]	0.30C...0.95 [3]

Product description	Efficiency in full-load	Inrush current	Max. ECG no. on circuit breaker 10 A (B)	Max. ECG no. on circuit breaker 16 A (B)
OT WI 40/220...240/1A0 NFC BL T-B	86 % [4]	36 A [5]	47	76
OT WI 40/220...240/1A0 NFC BL T-W	86 % [4]	36 A [5]	47	76
OT WI 40/220...240/1A0 NFC BL T-G	86 % [4]	36 A [5]	47	76

Product description	Surge capability (L/N-Ground)	Surge capability (L-N)	Nominal output voltage	U-OUT (working voltage)	Nominal output current
OT WI 40/220...240/1A0 NFC BL T-B	2 kV	1 kV	18...42 V [6]	60 V	150...1050 mA [7]
OT WI 40/220...240/1A0 NFC BL T-W	2 kV	1 kV	18...42 V [6]	60 V	150...1050 mA [7]
OT WI 40/220...240/1A0 NFC BL T-G	2 kV	1 kV	18...42 V [6]	60 V	150...1050 mA [7]

Product description	Output current tolerance	Output ripple current (100 Hz)	Output PSTLM
OT WI 40/220...240/1A0 NFC BL T-B	±5 %	< 5 % [8]	≤1
OT WI 40/220...240/1A0 NFC BL T-W	±5 %	< 5 % [8]	≤1
OT WI 40/220...240/1A0 NFC BL T-G	±5 %	< 5 % [8]	≤1

Product description	Output SVM	Nominal output power	Maximum output power	Galvanic isolation primary/secondary
OT WI 40/220...240/1A0 NFC BL T-B	≤0.4	2.7...40 W	40 W [9]	SELV
OT WI 40/220...240/1A0 NFC BL T-W	≤0.4	2.7...40 W	40 W [9]	SELV
OT WI 40/220...240/1A0 NFC BL T-G	≤0.4	2.7...40 W	40 W [9]	SELV

Product description	Networked standby power	Default output current	Wireless range
OT WI 40/220...240/1A0 NFC BL T-B	≤0.30 W [4]	500 mA	10 m line of sight
OT WI 40/220...240/1A0 NFC BL T-W	≤0.30 W [4]	500 mA	10 m line of sight
OT WI 40/220...240/1A0 NFC BL T-G	≤0.30 W [4]	500 mA	10 m line of sight

Product description	Wireless protocol	Radio frequency	Current set
OT WI 40/220...240/1A0 NFC BL T-B	Qualified Bluetooth mesh	2.4 GHz	NFC

Product description	Wireless protocol	Radio frequency	Current set
OT WI 40/220...240/1A0 NFC BL T-W	Qualified Bluetooth mesh	2.4 GHz	NFC
OT WI 40/220...240/1A0 NFC BL T-G	Qualified Bluetooth mesh	2.4 GHz	NFC

Product description	Maximum TX power
OT WI 40/220...240/1A0 NFC BL T-B	+4 dBm
OT WI 40/220...240/1A0 NFC BL T-W	+4 dBm
OT WI 40/220...240/1A0 NFC BL T-G	+4 dBm

1) Permitted voltage range

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

3) Full load at 230 V/50 Hz

4) at 230 V, 50 Hz

5) t_{width} = 7 µs (measured at 50 % I_{peak})

6) Maximum 60 V

7) ±5%

8) <3% for 350-1050mA

9) Partial load 2.7...40 W

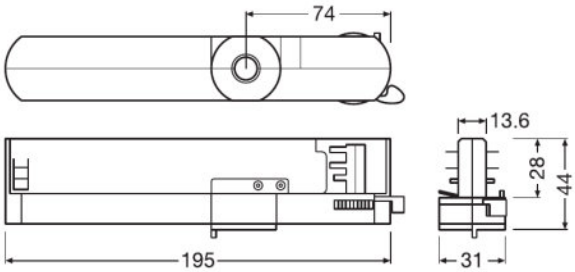
Dimensions & weight

Product description	Product weight	Cable cross-section, output side	Wire preparation length, output side	Height	Width
OT WI 40/220...240/1A0 NFC BL T-B	145.00 g	0.75...1.5 mm² 1)	8.0...9.0 mm	44.0 mm	31.0 mm
OT WI 40/220...240/1A0 NFC BL T-W	145.00 g	0.75...1.5 mm² 1)	8.0...9.0 mm	44.0 mm	31.0 mm
OT WI 40/220...240/1A0 NFC BL T-G	148.00 g	0.75...1.5 mm² 1)	8.0...9.0 mm	49.9 mm	31.0 mm

Product description	Length
OT WI 40/220...240/1A0 NFC BL T-B	195.0 mm
OT WI 40/220...240/1A0 NFC BL T-W	195.0 mm
OT WI 40/220...240/1A0 NFC BL T-G	195.0 mm

1) Solid or flexible leads

Product line drawing



OT WI 40/220...240/1A0 NFC BL T-B, OT WI 40/220...240/1A0 NFC BL T-W, OT WI 40/220...240/1A0 NFC BL T-G

Colors & materials

Product description	Casing material	Product color
OT WI 40/220...240/1A0 NFC BL T-B	Plastic	BLACK RAL 9011
OT WI 40/220...240/1A0 NFC BL T-W	Plastic	WHITE RAL 9010
OT WI 40/220...240/1A0 NFC BL T-G	Plastic	GREY RAL 7040

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 40/220...240/1A0 NFC BL T-B	-20...+35 °C	90 °C [1)]	110 °C	-40...+85 °C
OT WI 40/220...240/1A0 NFC BL T-W	-20...+35 °C	90 °C [1)]	110 °C	-40...+85 °C
OT WI 40/220...240/1A0 NFC BL T-G	-20...+35 °C	90 °C [1)]	110 °C	-40...+85 °C

Product description	Permitted rel. humidity during operation
OT WI 40/220...240/1A0 NFC BL T-B	5...85 % [2)]
OT WI 40/220...240/1A0 NFC BL T-W	5...85 % [2)]
OT WI 40/220...240/1A0 NFC BL T-G	5...85 % [2)]

[1)] Measured on tc point indicated of the product label.

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

Lifespan

Product description	ECG lifetime
OT WI 40/220...240/1A0 NFC BL T-B	50000 / 100000 h [1)]
OT WI 40/220...240/1A0 NFC BL T-W	50000 / 100000 h [1)]
OT WI 40/220...240/1A0 NFC BL T-G	50000 / 100000 h [1)]

[1)] T_c = 90°C - 0.2% / 1,000 h failure rate / Tc = 80°C, 0.1% / 1,000 h failure rate

Additional product data

Product description	Encapsulated	Compatible track systems
OT WI 40/220...240/1A0 NFC BL T-B	No	Nuco / EUTRAC / GLOBAL / STAFF / NORLUX / Powergear [1)]
OT WI 40/220...240/1A0 NFC BL T-W	No	Nuco / EUTRAC / GLOBAL / STAFF / NORLUX / Powergear [1)]
OT WI 40/220...240/1A0 NFC BL T-G	No	Nuco / EUTRAC / GLOBAL / STAFF / NORLUX / Powergear [1)]

[1)] The compatibility may become invalid when the critical track dimension is modified by the brand owner in case of engineering change or optimization in the future

Capabilities

Product description	Dimmable	Dimming interface	Dimming range	Dimming method
OT WI 40/220...240/1A0 NFC BL T-B	Yes	Qualified Bluetooth mesh by Silvair	1...100 %	Amplitude Modulation
OT WI 40/220...240/1A0 NFC BL T-W	Yes	Qualified Bluetooth mesh by Silvair	1...100 %	Amplitude Modulation
OT WI 40/220...240/1A0 NFC BL T-G	Yes	Qualified Bluetooth mesh by Silvair	1...100 %	Amplitude Modulation

Product description	Overheating protection	Overload protection	Short-circuit protection	No-load proof
OT WI 40/220...240/1A0 NFC BL T-B	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OT WI 40/220...240/1A0 NFC BL T-W	Automatic reversible	Automatic reversible	Automatic reversible	Yes
OT WI 40/220...240/1A0 NFC BL T-G	Automatic reversible	Automatic reversible	Automatic reversible	Yes

Product description	Intended for no-load operation	Max. cable length to lamp/LED module	Type of connection, input side	Type of connection, output side
OT WI 40/220...240/1A0 NFC BL T-B	No	2.0 m [1]	-	Push terminal
OT WI 40/220...240/1A0 NFC BL T-W	No	2.0 m [1]	-	Push terminal
OT WI 40/220...240/1A0 NFC BL T-G	No	2.0 m [1]	-	Push terminal

Product description	Number of channels	Suitable for through-wiring	Control interface
OT WI 40/220...240/1A0 NFC BL T-B	1	No	qualified Bluetooth mesh
OT WI 40/220...240/1A0 NFC BL T-W	1	No	qualified Bluetooth mesh
OT WI 40/220...240/1A0 NFC BL T-G	1	No	qualified Bluetooth mesh

Product description	Reset	Programming interface	Constant lumen function
OT WI 40/220...240/1A0 NFC BL T-B	Manual [2]	NFC	Programmable
OT WI 40/220...240/1A0 NFC BL T-W	Manual [2]	NFC	Programmable
OT WI 40/220...240/1A0 NFC BL T-G	Manual [2]	NFC	Programmable

[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 40/220...240/1A0 NFC BL T-B	Yes	Yes	Yes
OT WI 40/220...240/1A0 NFC BL T-W	Yes	Yes	Yes
OT WI 40/220...240/1A0 NFC BL T-G	Yes	Yes	Yes

Product description	Programming device
OT WI 40/220...240/1A0 NFC BL T-B	NFC
OT WI 40/220...240/1A0 NFC BL T-W	NFC
OT WI 40/220...240/1A0 NFC BL T-G	NFC

Programmable features

Product description	OEM Key	Dim to Dark	Soft Switch Off
OT WI 40/220...240/1A0 NFC BL T-B	No	Yes	Yes
OT WI 40/220...240/1A0 NFC BL T-W	No	Yes	Yes
OT WI 40/220...240/1A0 NFC BL T-G	No	Yes	Yes

Product description	Configuration Lock	Emergency Mode	Driver Guard
OT WI 40/220...240/1A0 NFC BL T-B	Yes	No	Yes
OT WI 40/220...240/1A0 NFC BL T-W	Yes	No	Yes
OT WI 40/220...240/1A0 NFC BL T-G	Yes	No	Yes

Product description	Lamp Operating Time	Constant Lumen
OT WI 40/220...240/1A0 NFC BL T-B	Yes	Yes
OT WI 40/220...240/1A0 NFC BL T-W	Yes	Yes

Product description	Lamp Operating Time	Constant Lumen
OT WI 40/220...240/1A0 NFC BL T-G	Yes	Yes

Certificates & standards

Product description	Approval marks – approval	Standards	Protection class	Type of protection
OT WI 40/220...240/1A0 NFC BL T-B	CE / UKCA / CQC / RCM	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to IEC 62386/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547/Acc. to CISPR 15/Acc. to ETSI EN 300 328/Acc. to ETSI EN 300 330/Acc. to ETSI EN 301 489 - 1/Acc. to ETSI EN 301 489-3/Acc. to ETSI EN 301 489-17/Acc. to EN 62479	II	IP20
OT WI 40/220...240/1A0 NFC BL T-W	CE / UKCA / CQC / RCM	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to IEC 62386/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547/Acc. to CISPR 15/Acc. to ETSI EN 300 328/Acc. to ETSI EN 300 330/Acc. to ETSI EN 301 489 - 1/Acc. to ETSI EN 301 489-3/Acc. to ETSI EN 301 489-17/Acc. to EN 62479	II	IP20
OT WI 40/220...240/1A0 NFC BL T-G	CE / UKCA / CQC / RCM	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to IEC 62386/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547/Acc. to CISPR 15/Acc. to ETSI EN 300 328/Acc. to ETSI EN 300 330/Acc. to ETSI EN 301 489 - 1/Acc. to ETSI EN 301 489-3/Acc. to ETSI EN 301 489-17/Acc. to EN 62479	II	IP20

Logistical data

Product description	Commodity code
OT WI 40/220...240/1A0 NFC BL T-B	85044095900
OT WI 40/220...240/1A0 NFC BL T-W	85044095900
OT WI 40/220...240/1A0 NFC BL T-G	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 40/220...240/1A0 NFC BL T-B	10-10-2023	4062172310574	Lead
OT WI 40/220...240/1A0 NFC BL T-W	10-10-2023	4062172310598	Lead
OT WI 40/220...240/1A0 NFC BL T-G	10-10-2023	4062172350129	Lead

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
OT WI 40/220...240/1A0 NFC BL T-B	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	2a649c54-7e3d-479b-b35b-31838cc3d086
OT WI 40/220...240/1A0 NFC BL T-W	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	9809ac3f-aa8a-422c-b156-d42598ad9b7f
OT WI 40/220...240/1A0 NFC BL T-G	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	d96eaee8-5a59-44da-b0d0-02f50c8bd21c

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
	CAD data 3-dim OT WI 40 220 240 1A0 NFC CAD 3D 20221208

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
4062172310574	OT WI 40/220...240/1A0 NFC BL T-B	Shipping carton box 20	256 mm x 225 mm x 234 mm	13.48 dm³	3328.00 g
4062172310598	OT WI 40/220...240/1A0 NFC BL T-W	Shipping carton box 20	256 mm x 225 mm x 234 mm	13.48 dm³	3328.00 g
4062172350129	OT WI 40/220...240/1A0 NFC BL T-G	Shipping carton box 20	256 mm x 225 mm x 234 mm	13.48 dm³	3388.00 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.

Accessories Optional

Product description	Accessory name	Accessory code
OT WI 40/220...240/1A0 NFC BL T-B	Track Joint	4062172228183
OT WI 40/220...240/1A0 NFC BL T-B	BLACK RING	4062172138567
OT WI 40/220...240/1A0 NFC BL T-W	Track Joint	4062172228183
OT WI 40/220...240/1A0 NFC BL T-W	WHITE RING	4062172138550
OT WI 40/220...240/1A0 NFC BL T-G	Track Joint	4062172228183
OT WI 40/220...240/1A0 NFC BL T-G	GREY RING	4062172138543

Disclaimer

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