

OPTOTRONIC Wireless Intelligent – QBM NFC L (non-isolated)

Linear constant current LED driver – Dimmable



Areas of application

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

Product family benefits

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

Product family features

- Qualified Bluetooth mesh enabled by Silvair
- 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
- Non-isolated drivers

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...240/400 D NFC BL L	220...240 V	0/50/60 Hz	198...264 V	176...276 V	NFC
OT WI 75/220...240/550 D NFC BL L	220...240 V	0/50/60 Hz	198...264 V	176...276 V	NFC
OT WI 100/220...240/750 D NFC BL L	220...240 V	0/50/60 Hz	198...264 V	176...276 V	NFC

Product description	Total harmonic distortion	Power factor λ	Efficiency in full-load	Inrush current	Max. ECG no. on circuit breaker 10 A (B)
OT WI 35/220...240/400 D NFC BL L	8 %	0.47C...0.97	92 %	≤ 21 A	17
OT WI 75/220...240/550 D NFC BL L	≤ 10 %	0.47C...0.98	93 %	≤ 28 A	14
OT WI 100/220...240/750 D NFC BL L	≤ 10 %	0.39C...0.98	94 %	≤ 36 A	13

Product description	Max. ECG no. on circuit breaker 10 A (C)	Max. ECG no. on circuit breaker 16 A (C)	Max. ECG no. on circuit breaker 16 A (B)	Max. ECG no. on circuit breaker 25 A (B)	Surge capability (L/N-Ground)
OT WI 35/220...240/400 D NFC BL L	-	-	28	-	2 kV
OT WI 75/220...240/550 D NFC BL L	-	-	23	-	2 kV
OT WI 100/220...240/750 D NFC BL L	-	-	21	-	2 kV

Product description	Surge capability (L-N)	Nominal output voltage	U-OUT (working voltage)	Nominal output current	Default output current
OT WI 35/220...240/400 D NFC BL L	1 kV	54...240 V	< 250 V	75...400 mA	75 mA
OT WI 75/220...240/550 D NFC BL L	1 kV	54...240 V	< 250 V	125...550 mA	125 mA
OT WI 100/220...240/750 D NFC BL L	1 kV	54...260 V	< 270 V	100...750 mA	100 mA

Product description	Output current tolerance	Output ripple current (100 Hz)	Output PSTLM
OT WI 35/220...240/400 D NFC BL L	± 3 %	< 1 %	<1
OT WI 75/220...240/550 D NFC BL L	± 3 %	< 1 %	<1
OT WI 100/220...240/750 D NFC BL L	± 3 %	< 1 %	<1

Product description	Output SVM	Nominal output power	Maximum output power	Galvanic isolation
OT WI 35/220...240/400 D NFC BL L	<0.4	4...38 W	38 W	Non isolated
OT WI 75/220...240/550 D NFC BL L	<0.4	6.5...75 W	75 W	Non isolated
OT WI 100/220...240/750 D NFC BL L	<0.4	5.4...100 W	100 W	Non isolated

Product description	Networked standby power	Galvanic isolation primary/secondary
OT WI 35/220...240/400 D NFC BL L	<0.30 W ¹⁾	-
OT WI 75/220...240/550 D NFC BL L	<0.30 W ¹⁾	-

Product family datasheet

Product description	Networked standby power	Galvanic isolation primary/secondary
OT WI 100/220...240/750 D NFC BL L	<0.30 W ¹⁾	-

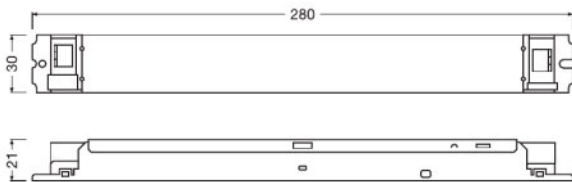
¹⁾ at 230 V, 50 Hz

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...240/400 D NFC BL L	270.0 mm	170.00 g	0.5...1.5 mm ²	0.5...1.5 mm ²	8.0...9.0 mm
OT WI 75/220...240/550 D NFC BL L	270.0 mm	180.00 g	0.5...1.5 mm ²	0.5...1.5 mm ²	8.0...9.0 mm
OT WI 100/220...240/750 D NFC BL L	270.0 mm	212.00 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	Height	Width	Length
OT WI 35/220...240/400 D NFC BL L	8.0...9.0 mm	21.0 mm	30.0 mm	280.0 mm
OT WI 75/220...240/550 D NFC BL L	8.0...9.0 mm	21.0 mm	30.0 mm	280.0 mm
OT WI 100/220...240/750 D NFC BL L	8.0...9.0 mm	21.0 mm	30.0 mm	280.0 mm

Product line drawing



OT WI 35/220...240/400 D NFC BL L, OT WI 75/220...240/550 D NFC BL L, OT WI 100/220...240/750 D NFC BL L

Product family datasheet

Colors & materials

Product description	Casing material
OT WI 35/220...240/400 D NFC BL L	Metal
OT WI 75/220...240/550 D NFC BL L	Metal
OT WI 100/220...240/750 D NFC BL 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...240/400 D NFC BL L	-25...+60 °C	75 °C	110 °C	-40...+85 °C
OT WI 75/220...240/550 D NFC BL L	-25...+50 °C	75 °C	110 °C	-40...+85 °C
OT WI 100/220...240/750 D NFC BL L	-25...+50 °C	75 °C	110 °C	-40...+85 °C

Product description	Permitted rel. humidity during operation
OT WI 35/220...240/400 D NFC BL L	5...85 % ¹⁾
OT WI 75/220...240/550 D NFC BL L	5...85 % ¹⁾
OT WI 100/220...240/750 D NFC BL L	5...85 % ¹⁾

¹⁾ Maximum 56 days/year at 85 %

Lifespan

Product description	ECG lifetime
OT WI 35/220...240/400 D NFC BL L	100000 h
OT WI 75/220...240/550 D NFC BL L	100000 h
OT WI 100/220...240/750 D NFC BL L	100000 h

Additional product data

Product description	Encapsulated
OT WI 35/220...240/400 D NFC BL L	No
OT WI 75/220...240/550 D NFC BL L	No
OT WI 100/220...240/750 D NFC BL L	No

Capabilities

Product description	Programming interface	Dimmable	Dimming interface	Dimming range
OT WI 35/220...240/400 D NFC BL L	NFC	Yes	Qualified Bluetooth mesh	1...100 %
OT WI 75/220...240/550 D NFC BL L	NFC	Yes	Qualified Bluetooth mesh	1...100 %
OT WI 100/220...240/750 D NFC BL L	NFC	Yes	Qualified Bluetooth mesh	1...100 %

Product description	Dimming method	Overheating protection	Overload protection
OT WI 35/220...240/400 D NFC BL L	Amplitude Modulation	Automatic reversible	Automatic reversible

Product family datasheet

Product description	Dimming method	Overheating protection	Overload protection
OT WI 75/220...240/550 D NFC BL L	Amplitude Modulation	Automatic reversible	Automatic reversible
OT WI 100/220...240/750 D NFC BL L	Amplitude Modulation	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...240/400 D NFC BL L	Automatic reversible	Yes	No	2.0 m ¹⁾
OT WI 75/220...240/550 D NFC BL L	Automatic reversible	Yes	No	2.0 m ¹⁾
OT WI 100/220...240/750 D NFC BL 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...240/400 D NFC BL L	I	Yes	Push terminal	Push terminal
OT WI 75/220...240/550 D NFC BL L	I	Yes	Push terminal	Push terminal
OT WI 100/220...240/750 D NFC BL L	I	Yes	Push terminal	Push terminal

Product description	Number of channels
OT WI 35/220...240/400 D NFC BL L	1
OT WI 75/220...240/550 D NFC BL L	1
OT WI 100/220...240/750 D NFC BL L	1

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

Programming

Product description	Programming device	Box programming
OT WI 35/220...240/400 D NFC BL L	FEIG / NFC Programmer	Yes
OT WI 75/220...240/550 D NFC BL L	FEIG / NFC Programmer	Yes
OT WI 100/220...240/750 D NFC BL L	FEIG / NFC Programmer	Yes

Product family datasheet

Certificates & standards

Product description	Approval marks – approval	Standards	Type of protection
OT WI 35/220...240/400 D NFC BL L	CE / VDE-ENEC / RCM / CCC / BIS / EL	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 75/220...240/550 D NFC BL L	CE / VDE-ENEC / RCM / CCC / BIS / EL	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 100/220...240/750 D NFC BL L	CE / VDE-ENEC / RCM / CCC / BIS / EL	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...240/400 D NFC BL L	85044095900
OT WI 75/220...240/550 D NFC BL L	85044095900
OT WI 100/220...240/750 D NFC BL 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...240/400 D NFC BL L	10-10-2023	4062172267373	Lead
OT WI 75/220...240/550 D NFC BL L	10-10-2023	4062172267397	Lead
OT WI 100/220...240/750 D NFC BL L	10-10-2023	4062172267410	Lead

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
OT WI 35/220...240/400 D NFC BL L	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	8026b0f7-14ff-42a7-b1fb-4791ae2aa44b
OT WI 75/220...240/550 D NFC BL L	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	673ff028-5f11-49fb-a557-a19a26aedcc3

Product family datasheet

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
OT WI 100/220...240/750 D NFC BL L	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	be3ac427-cd23-419e-9da9-cf325d8bf34c







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
 Certificates OT ENEC 40038085 010322
 CAD data OT WI D NFC CA BL L IGS 130722
 CAD data OT WI D NFC CA BL L STEP 130722
 CAD Data 2-dim OT WI D NFC CA BL L CAD2PDF 130722
 CAD data 3-dim OT WI D NFC CA BL L 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.

Product family datasheet

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4062172267373	OT WI 35/220...240/400 D NFC BL L	Shipping carton box 20	303 mm x 159 mm x 105 mm	5.06 dm ³	3527.00 g
4062172267397	OT WI 75/220...240/550 D NFC BL L	Shipping carton box 20	303 mm x 159 mm x 105 mm	5.06 dm ³	3727.00 g
4062172267410	OT WI 100/220...240/750 D NFC BL L	Shipping carton box 20	303 mm x 159 mm x 105 mm	5.06 dm ³	4367.00 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.