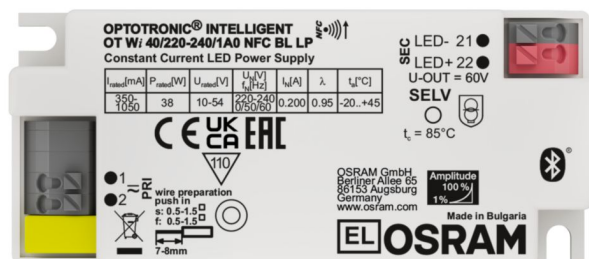# OT WI 40/220-240/1A0 NFC BL LP

OPTOTRONIC Wireless Intelligent – QBM NFC LP | Compact constant current LED driver – Dimmable


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

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

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Fri Aug 30 17:52:30 CST 2024
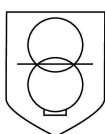
Areas of application

- 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

Technical data

Electrical data

Max. ECG no. on circuit breaker 10 A (B)	35
Max. ECG no. on circuit breaker 16 A (B)	55
Maximum output power	38 W [1]
Nominal output current	350…1050 mA [2]
Nominal output power	38 W
Nominal output voltage	10…54 V [3]
Nominal input voltage	220…240 V
Input voltage AC	198…264 V [4]
Input voltage DC	176…276 V
Efficiency in full-load	88 % [5]
Galvanic isolation primary/secondary	SELV
Inrush current	20 A [6]
Networked standby power	0.22 W [5]
Power factor λ	0.70C…0.99
Mains frequency	0,50,60 Hz
Surge capability (L-N)	1 kV
Surge capability (L/N-Ground)	2 kV
U-OUT (working voltage)	60 V
Current set	NFC
Maximum TX power	+4 dBm
Output current tolerance	±3 %
Output ripple current (100 Hz)	< 3 % [7]
Radio frequency	2.4 GHz
Total harmonic distortion	< 10 % [8]
Wireless protocol	Qualified Bluetooth mesh enabled by Silvair
Wireless range	10 m line of sight
Default output current	700 mA

1) Partial load 7…38 W
2) ±3%
3) Maximum 60 V
4) Permitted voltage range
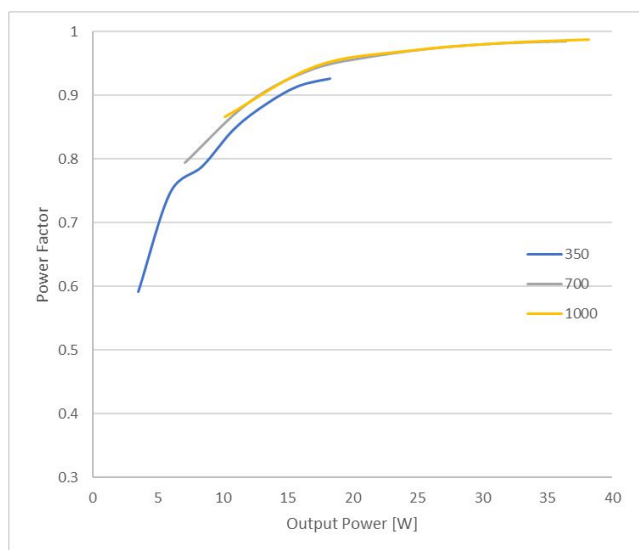5) at 230 V, 50 Hz
6) t_{width} = 25 µs (measured at 50 % I_{peak})
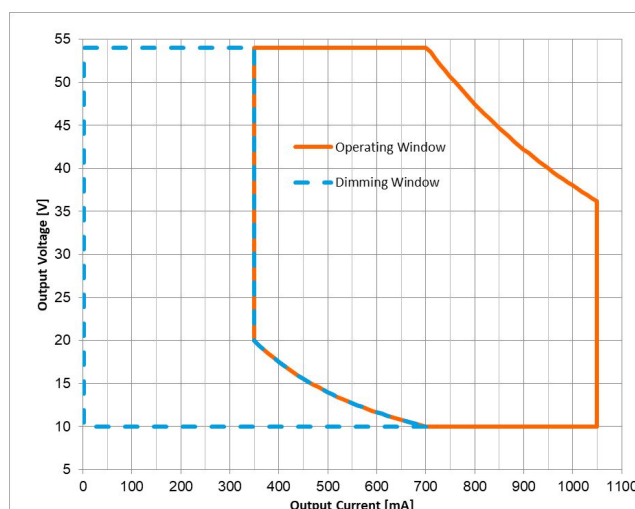7) Ripple average at 100 Hz
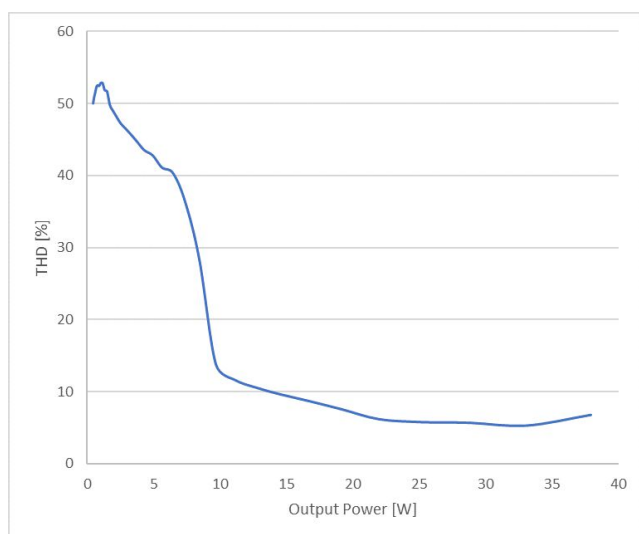8) At full load, 220…240 V, 50 Hz / see graphs

Typical Power Factor v Load

OTI DALI 40 NFC LP Typical Power Factor vs. Load

Operating Window

OTI DALI 40 NFC LP Operating window

Typical THD v Load

OTI DALI 40 NFC LP Typical THD Vs Load

Typical Efficiency v Load 230 V 50 Hz

OTI DALI 40 NFC LP Typical Efficiency vs. Load (230 V / 50 Hz)

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Dimensions & weight
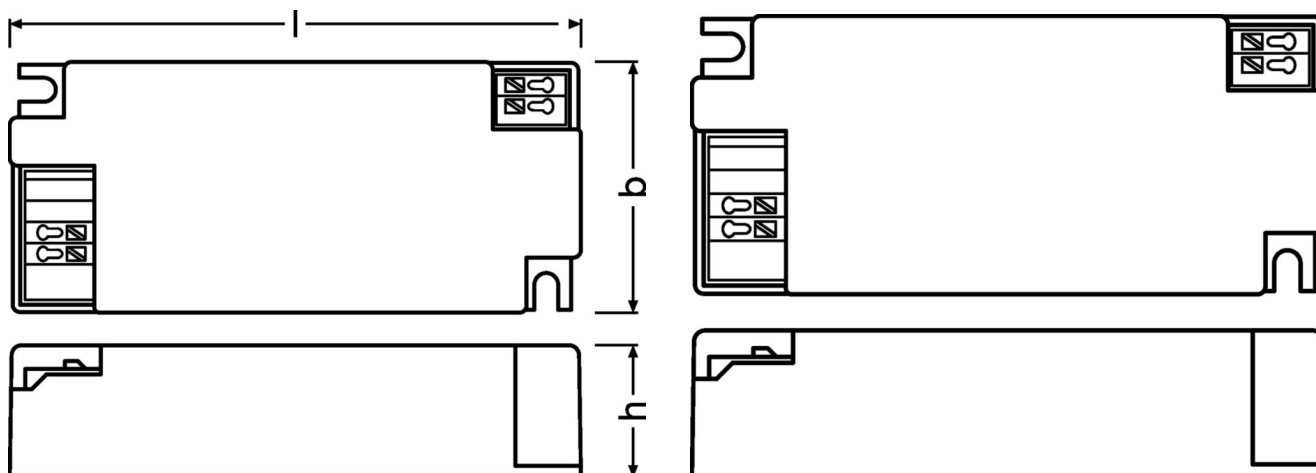
Product weight	100.00 g
Length	97.0 mm
Height	22.0 mm
Width	42.5 mm
Cable cross-section, input side	0.5…1.5 mm² [1]
Cable cross-section, output side	0.5…1.5 mm² [1]
Mounting hole spacing, length	88.0 mm
Mounting hole spacing, width	34.0 mm
Wire preparation length, input side	7…8 mm
Wire preparation length, output side	7…8 mm

1) Solid or flexible leads

Colors & materials

Casing material	Plastic
Product color	White

Temperatures & operating conditions

Ambient temperature range	-20…+45 °C
Max.housing temperature in case of fault	110 °C
Maximum temperature at tc test point	85 °C [1]
Permitted rel. humidity during operation	5…85 % [2]
Temperature range at storage	-40…+85 °C

1) Maximum at the Tc-point
2) Maximum 56 days/year at 85 %

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Lifespan

ECG lifetime	50000 h / 100000 h [1]

1) 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

Encapsulated	No
Predecessor EAN	4062172110167

Capabilities

Max. cable length to lamp/LED module	2.0 m [1]
Number of channels	1
Dimmable	Yes
Dimming interface	Qualified Bluetooth mesh by Silvair
Dimming method	Amplitude Modulation
Dimming range	1…100 %
Overload protection	Automatic reversible
Overheating protection	Automatic reversible
Short-circuit protection	Automatic reversible
Suitable for through-wiring	No
Suitable for emergency lighting	Yes
Suitable for fixtures with prot. class	I / II
Type of connection, input side	Push terminal
Type of connection, output side	Push terminal
Constant lumen function	Programmable
No-load proof	Yes
Programming interface	NFC

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

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Programming

Box programming	Yes

Programmable features

Dim to Dark	Yes
Configuration Lock	Yes
DALI-2 Luminaire Data	No
Driver Guard	Yes
Emergency Mode	Yes
Soft Switch Off	Yes
Tuning Factor	Yes

Certificates & standards

Type of protection	IP20
Standards	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
Approval marks – approval	CE / UKCA / ENEC / EAC / EL

Logistical data

Commodity code	85044095900

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.

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.

Download Data

File		
Certificates	PDF	▶OT ENEC 40038447 270224
CAD data 3-dim	Compressed	▶OT WI NFC CA BL LP CAD3PDF 130722
CAD data 2-dim	Compressed	▶OT WI NFC CA BL LP CAD2PDF 130722
CAD data	Compressed	▶OT WI NFC CA BL LP IGS 130722
CAD data	Compressed	▶OT WI NFC CA BL LP STEP 130722
Mandatory Publications	PDF	▶OT WI NFC LP CE 4388804 080722
Mandatory Publications	PDF	▶OT WI NFC LP UK DoC 4388806 080722
User instruction	PDF	▶OPTOTRONIC LED Power Supply

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Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4062172227858	OT WI 40/220-240/1A0 NFC BL LP	Shipping carton box 20 Pieces	208 x 122 x 107 mm	2.72 dm³	90.00 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 LP	PRH101 -USB	►6977078996938
OT WI 40/220-240/1A0 NFC BL LP	CPR30 -USB	►6977078996945

Disclaimer

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