## TRIDONIC

## basicDIM Wireless

basicDIM Wireless LED Drivers

## Driver LC 38W 350-1050mA bDW TW C PRE2

premium series Tunable White

## Product description

- Dimmable built-in constant current 2-channel LED driver
- Forms automatically a wireless communication network with up to 250 nodes
- Dimming range 1-100 \%
- Suitable for luminaires of protection class I and protection class II
- Adjustable output current between 350 and $1,050 \mathrm{~mA}$ via I-SELECT 2 plugs
- Max. output power 38 W
- Up to 87 \% efficiency
- Power input in stand-by < 0.4 W
- Nominal lifetime up to $100,000 \mathrm{~h}$
- 5 years guarantee (conditions at www.tridonic.com)


## Housing properties

- Casing: polycarbonate, white
- Type of protection IP20


## Interfaces

- basicDIM Wireless
- Terminal blocks: $45^{\circ}$ push terminals


## Functions

- Adjustable output current in 1-mA-steps (I-SELECT 2)
- Constant light output function (CLO)
- Power-up fading and fade2zero
- Protective features (overtemperature, short-circuit, overload, no-load, reduced surge amplification)
- Intelligent Voltage Guard (overvoltage and undervoltage monitoring)
- Suitable for emergency lighting acc. to EN 50172


## Benefits

- Application-oriented operating window for max. compatibility
- Best energy savings due to low stand-by losses


## Typical applications

- For spot light and downlight in retail and hospitality applications
- Tunable white application


## $\rightarrow$

Standards, page 5

Driver LC 38W 350-1050mA bDW TW C PRE2
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## Ordering data

| Type | Article number | Packaging <br> carton | Packaging <br> pallet | Weight per pc. |
| :--- | :--- | :--- | :--- | :--- |
| LC 38/350-1050/50 bDW TW C PRE2 | $\mathbf{2 8 0 0 2 8 5 8}$ | $10 \mathrm{pc}(\mathrm{s})$. | $960 \mathrm{pc}(\mathrm{s})$. | 0.168 kg |

## basicDIM Wireless

basicDIM Wireless LED Drivers

## Specific technical data

current (3) (6) voltage voltage power (at $230 \mathrm{~V}, 50 \mathrm{~Hz}$, full load) (at $230 \mathrm{~V}, 50 \mathrm{~Hz}$, full load) temperature tc temperature ta max. resistor value ${ }^{\text {(3) }}$

LC 38/350-1050/50 bDW TW C PRE2

| 350 mA | 20 V | 50.0 V | 17.5 W | 21.1 W | 96 mA | $80^{\circ} \mathrm{C}$ | $-25 \ldots+65^{\circ} \mathrm{C}$ | open |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 400 mA | 20 V | 50.0 V | 20.0 W | 23.7 W | 107 mA | $80^{\circ} \mathrm{C}$ | $-25 \ldots+6{ }^{\circ} \mathrm{C}$ | $12.50 \mathrm{k} \Omega$ |
| 450 mA | 20 V | 50.0 V | 22.5 W | 26.4 W | 119 mA | $80^{\circ} \mathrm{C}$ | $-25 \ldots+65^{\circ} \mathrm{C}$ | $11.11 \mathrm{k} \Omega$ |
| 500 mA | 20 V | 50.0 V | 25.0 W | 29.1 W | 130 mA | $80^{\circ} \mathrm{C}$ | $-25 . . .+65^{\circ} \mathrm{C}$ | $10.00 \mathrm{k} \Omega$ |
| 550 mA | 20 V | 50.0 V | 27.5 W | 31.7 W | 141 mA | $80^{\circ} \mathrm{C}$ | $-25 \ldots+6{ }^{\circ} \mathrm{C}$ | $9.09 \mathrm{k} \Omega$ |
| 600 mA | 20 V | 50.0 V | 30.0 W | 34.4 W | 152 mA | $80^{\circ} \mathrm{C}$ | $-25 . . .+65^{\circ} \mathrm{C}$ | $8.33 \mathrm{k} \Omega$ |
| 650 mA | 20 V | 50.0 V | 32.5 W | 37.0 W | 164 mA | $80^{\circ} \mathrm{C}$ | $-25 \ldots+60^{\circ} \mathrm{C}$ | $7.69 \mathrm{k} \Omega$ |
| 700 mA | 20 V | 50.0 V | 35.0 W | 39.9 W | 176 mA | $80^{\circ} \mathrm{C}$ | $-25 . . .+60^{\circ} \mathrm{C}$ | $7.14 \mathrm{k} \Omega$ |
| 750 mA | 20 V | 50.0 V | 37.5 W | 42.5 W | 187 mA | $80^{\circ} \mathrm{C}$ | $-25 \ldots+60^{\circ} \mathrm{C}$ | $6.67 \mathrm{k} \Omega$ |
| 800 mA | 20 V | 47.5 V | 38.0 W | 42.9 W | 189 mA | $80^{\circ} \mathrm{C}$ | $-25 \ldots+60^{\circ} \mathrm{C}$ | $6.25 \mathrm{k} \Omega$ |
| 850 mA | 20 V | 44.7 V | 38.0 W | 43.1 W | 190 mA | $80^{\circ} \mathrm{C}$ | $-25 \ldots+60^{\circ} \mathrm{C}$ | $5.88 \mathrm{k} \Omega$ |
| 900 mA | 20 V | 42.2 V | 38.0 W | 43.3 W | 191 mA | $80^{\circ} \mathrm{C}$ | $-25 \ldots+60^{\circ} \mathrm{C}$ | $5.56 \mathrm{k} \Omega$ |
| 950 mA | 20 V | 40.0 V | 38.0 W | 43.4 W | 191 mA | $80^{\circ} \mathrm{C}$ | $-25 \ldots+55^{\circ} \mathrm{C}$ | $5.26 \mathrm{k} \Omega$ |
| $1,000 \mathrm{~mA}$ | 20 V | 38.0 V | 38.0 W | 43.4 W | 191 mA | $80^{\circ} \mathrm{C}$ | $-25 \ldots+55^{\circ} \mathrm{C}$ | $5.00 \mathrm{k} \Omega$ |
| 1,050 mA | 20 V | 36.2 V | 38.0 W | 43.6 W | 192 mA | $80^{\circ} \mathrm{C}$ | $-25 \ldots+55^{\circ} \mathrm{C}$ | short circuit (0 $\Omega$ ) |

(1) Valid at $100 \%$ dimming level.
${ }^{2}$ (2) Depending on the selected output current.
(3) The table only lists a number of possible operating points but does not cover each single point. The output current can be set within the total value range in $1-\mathrm{mA}$-steps.
(4) Not compatible with I-SELECT (generation 1). Calculated resistor value.
${ }^{(5)}$ Output current is mean value.
© Valid for immediate change of power supply type otherwise the starting time is valid.
${ }^{(8)}$ E.I.R.P.: Equivalent Isotropically Radiated Power.

## Product description

- Ready-for-use resistor to set output current value
- Compatible with LED driver featuring I-SELECT 2 interface; not compatible with I-SELECT (generation 1)
- Resistor is base insulated
- Resistor power 0.25 W
- Current tolerance $\pm 2 \%$ additional to output current tolerance
- Compatible with LED driver series PRE and EXC


## Example of calculation

- $\mathrm{R}[\mathrm{k} \Omega$ ] $=5 \mathrm{~V} / \mathrm{I}$ _out [mA] $\times 1000$
- E96 resistor value used
- Resistor value tolerance $\leq 1 \%$; resistor power $\geq 0.1 \mathrm{~W}$;
base insulation necessary
- When using a resistor value beyond the specified range, the output current will automatically be set to the minimum value (resistor value too big), respectively to the maximum value (resistor value too small)


Ordering data

| Type | Article number | Colour | Marking | Current | Resistor value | Packaging bag | Weight per pc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I-SELECT 2 PLUG 350MA BL | 28001110 | Blue | 0350 mA | 350 mA | $14.30 \mathrm{k} \Omega$ | $10 \mathrm{pc}(\mathrm{s})$. | 0.001 kg |
| I-SELECT 2 PLUG 375MA BL | 28001111 | Blue | 0375 mA | 375 mA | $13.30 \mathrm{k} \Omega$ | $10 \mathrm{pc}(\mathrm{s})$. | . 001 kg |
| I-SELECT 2 PLUG 400MA BL | 28001112 | Blue | 0400 mA | 400 mA | $12.40 \mathrm{k} \Omega$ | $10 \mathrm{pc}(\mathrm{s})$. | 0.001 kg |
| I-SELECT 2 PLUG 425MA BL | 28001251 | Blue | 0425 mA | 425 mA | $11.80 \mathrm{k} \Omega$ | $10 \mathrm{pc}(\mathrm{s})$. | 0.001 kg |
| I-SELECT 2 PLUG 450MA BL | 28001113 | Blue | 0450 mA | 450 mA | $11.00 \mathrm{k} \Omega$ | $\mathrm{pc}(\mathrm{s})$. | 0.001 kg |
| I-SELECT 2 PLUG 475MA BL | 28001252 | Blue | 0475 mA | 475 mA | $10.50 \mathrm{k} \Omega$ | $10 \mathrm{pc}(\mathrm{s})$. | 0.001 kg |
| I-SELECT 2 PLUG 500MA BL | 28001114 | Blue | 0500 mA | 500 mA | $10.00 \mathrm{k} \Omega$ | $10 \mathrm{pc}(\mathrm{s})$. | 0.001 kg |
| I-SELECT 2 PLUG 525MA BL | 28001960 | Blue | 0525 mA | 525 mA | $9.53 \mathrm{k} \Omega$ | $\mathrm{pc}(\mathrm{s})$. | . 001 kg |
| I-SELECT 2 PLUG 550MA BL | 28001115 | Blue | 0550 mA | 550 mA | $9.09 \mathrm{k} \Omega$ | $10 \mathrm{pc}(\mathrm{s})$. | 0.001 kg |
| I-SELECT 2 PLUG 600MA BL | 28001116 | Blue | 0600 mA | 600 mA | $8.25 \mathrm{k} \Omega$ | $10 \mathrm{pc}(\mathrm{s})$. | 0.001 kg |
| I-SELECT 2 PLUG 650MA BL | 28001117 | Blue | 0650 mA | 650 mA | $7.68 \mathrm{k} \Omega$ | $10 \mathrm{pc}(\mathrm{s})$. | 0.001 kg |
| I-SELECT 2 PLUG 700MA BL | 28001118 | Blue | 0700 mA | 700 mA | $7.15 \mathrm{k} \Omega$ | $10 \mathrm{pc}(\mathrm{s})$. | 0.001 kg |
| I-SELECT 2 PLUG 750MA BL | 28001119 | Blue | 0750 mA | 750 mA | $6.65 \mathrm{k} \Omega$ | $10 \mathrm{pc}(\mathrm{s})$. | 0.001 kg |
| I-SELECT 2 PLUG 800MA BL | 28001120 | Blue | 0800 mA | 800 mA | $6.19 \mathrm{k} \Omega$ | $10 \mathrm{pc}(\mathrm{s})$. | 0.001 kg |
| I-SELECT 2 PLUG 850MA BL | 28001121 | Blue | 0850 mA | 850 mA | $5.90 \mathrm{k} \Omega$ | $10 \mathrm{pc}(\mathrm{s})$. | 0.001 kg |
| I-SELECT 2 PLUG 900MA BL | 28001122 | Blue | 0900 mA | 900 mA | $5.62 \mathrm{k} \Omega$ | $10 \mathrm{pc}(\mathrm{s})$. | 0.001 kg |
| I-SELECT 2 PLUG 950MA BL | 28001123 | Blue | 0950 mA | 950 mA | $5.23 \mathrm{k} \Omega$ | $10 \mathrm{pc}(\mathrm{s})$. | 0.001 kg |
| I-SELECT 2 PLUG 1000MA BL | 28001124 | Blue | 1000 mA | 1000 mA | $4.99 \mathrm{k} \Omega$ | $10 \mathrm{pc}(\mathrm{s})$. | 0.001 kg |
| I-SELECT 2 PLUG 1050MA BL | 28001125 | Blue | 1050 mA | 1050 mA | $4.75 \mathrm{k} \Omega$ | $10 \mathrm{pc}(\mathrm{s})$. | 0.001 kg |
| I-SELECT 2 PLUG MAX BL | 28001099 | Blue | MAX | MAX | $0.00 \mathrm{k} \Omega$ | $10 \mathrm{pc}(\mathrm{s})$. | 0.001 kg |

## 1. Standards

EN 55015
EN 61000-3-2
EN 61000-3-3
EN 61347-1
EN 61347-2-13
EN 62384
EN 61547
ETSI EN 300330
ETSI EN 301 489-1
ETSI EN 301 489-3
ETSI EN 300328
ETSI EN 301 489-17
According to EN 50172 for use in central battery systems
According to EN 60598-2-22 suitable for emergency lighting installations

### 1.1 Glow wire test

according to EN 61347-1 with increased temperature of $850^{\circ} \mathrm{C}$ passed

## 2. Thermal details and lifetime

### 2.1 Expected lifetime

| Expected lifetime |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type | Output current | ta | $35^{\circ} \mathrm{C}$ | $40^{\circ} \mathrm{C}$ | $45^{\circ} \mathrm{C}$ | $50^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ | $60^{\circ} \mathrm{C}$ | $65^{\circ} \mathrm{C}$ |
| LC 38/350-1050/50 bDW TW C PRE2 | 350-700 mA | tc | $50^{\circ} \mathrm{C}$ | $55^{\circ} \mathrm{C}$ | $60^{\circ} \mathrm{C}$ | $65^{\circ} \mathrm{C}$ | $70^{\circ} \mathrm{C}$ | $75^{\circ} \mathrm{C}$ | $80^{\circ} \mathrm{C}$ |
|  |  | Lifetime | > 100,000 h | >100,000 h | >100,000 h | 100,000 h | $90,000 \mathrm{~h}$ | 60,000 h | 40,000 h |
|  | 700-950mA | tc | $55^{\circ} \mathrm{C}$ | $60^{\circ} \mathrm{C}$ | $65^{\circ} \mathrm{C}$ | $70^{\circ} \mathrm{C}$ | $75^{\circ} \mathrm{C}$ | $80^{\circ} \mathrm{C}$ | - |
|  |  | Lifetime | > 100,000 h | > 100,000 h | > 100,000 h | 80,000 h | 60,000 h | 40,000 h | - |
|  | $950-1,050 \mathrm{~mA}$ | tc | $60^{\circ} \mathrm{C}$ | $65^{\circ} \mathrm{C}$ | $70^{\circ} \mathrm{C}$ | $75^{\circ} \mathrm{C}$ | $80^{\circ} \mathrm{C}$ | - | - |
|  |  | Lifetime | >100,000 h | >100,000 h | 80,000 h | 60,000 h | 40,000 h | - | - |

The LED driver is designed for a lifetime stated above under reference conditions and with a failure probability of less than $10 \%$.
The relation of tc to ta temperature depends also on the luminaire design.
If the measured tc temperature is approx. 5 K below tc max., ta temperature should be checked and eventually critical components (e.g. ELCAP) measured. Detailed information on request.

## 3. Installation / wiring

### 3.1 Circuit diagram



The used push button has to be insulated

### 3.2 Wiring type and cross section

The wiring can be in stranded wires with ferrules or solid with a cross section of 0.2-1.5 mm².
Strip 8.5-9.5 mm of insulation from the cables to ensure perfect operation of the push-wire terminals.
Use one wire for each terminal connector only.

LED module/LED driver/supply
wire preparation:


### 3.3 Loose wiring

Press down the "push button" and remove the cable from front.


### 3.4 Wiring guidelines

- Run the secondary lines separately from the mains connections and lines fo achieve good EMC performance.
- The max. secondary cable length is 2 m ( 4 m circuit), this applies for LED output as well as for I-SELECT 2.
- For good EMC performance, keep the LED wiring as short as possible
- Secondary switching is not permitted.
- The LED driver has no inverse-polarity protection on the secondary side. Wrong polarity can damage LED modules with no inverse-polarity protection.
- Wrong wiring of the LED driver can lead to malfunction or irreparable damage.
- In case of protection class II applications it is recommended to separate the lamp wires of the different channels. Depending onto the luminaire construction additional actions, such as equipotential connection between driver and LED or a toroidal ferrite at the lamp wires are recommended.
- To avoid the damage of the Driver, the wiring must be protected against short circuits to earth (sharp edged metal parts, metal cable clips, louver, etc.).


### 3.5 Hot plug-in

Hot plug-in is not supported due to residual output voltage of $>0 \mathrm{~V}$.
If a LED load got connected the device has to be restarted before the output will be activated again.
This can be done via mains reset or via interface (basicDIM Wireless).

### 3.6 Earth connection

The earth connection is conducted as protection earth (PE). The LED driver can be earthed via earth terminal. If the LED driver will be earthed, protection earth (PE) has to be used. There is no earth connection required for the functionality of the LED driver.
Earth connection is recommended to improve following behaviour:

- Electromagnetic interferences (EMI)
- LED glowing at stand-by
- Transmission of mains transients to the LED output

In general it is recommended to earth the LED driver if the LED module is mounted on earthed luminaire parts respectively heat sinks and thereby representing a high capacity against earth.

### 3.7 I-SELECT 2 resistors connected via cable

For details see:
http://www.tridonic.com/com/en/download/technical/LCA_PRE_LC_EXC_ProductManual_en.pdf.

### 3.8 Installation note

Max. torque at the clamping screw: 0.5 Nm / M4

## 4. Electrical values

### 4.1 Operating window



——Operating window 100 \%
----------- Operating window dimmed

Make sure that the LED driver is operated within the given window under all operating conditions. Special attention needs to be paid at dimming and DC emergency operation as the forward voltage of the connected LED modules varies with the dimming level, due to the implemented amplitude dimming technology. Coming below the specified minimum output voltage of the LED driver may cause the device to shut-down.
See chapter "6.8 Light level in DC operation" for more information.

### 4.2 Efficiency vs load



### 4.3 Power factor vs load


4.4 THD vs load


100 \% load corresponds to the max. output power (full load) according to the table on page 2.

### 4.5 Maximum loading of automatic circuit breakers in relation to inrush current

| Automatic circuit breaker type | C10 | C13 | C16 | C20 | B10 | B13 | B16 | B20 | Inrush current |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Installation $\varnothing$ | $1.5 \mathrm{~mm}^{2}$ | $1.5 \mathrm{~mm}^{2}$ | $2.5 \mathrm{~mm}^{2}$ | $4 \mathrm{~mm}^{2}$ | $1.5 \mathrm{~mm}^{2}$ | $1.5 \mathrm{~mm}^{2}$ | $2.5 \mathrm{~mm}^{2}$ | $4 \mathrm{~mm}^{2}$ | $\mathrm{I}_{\text {max }}$ | time |
| LC 38/350-1050/50 bDW TW C PRE2 | 16 | 21 | 26 | 33 | 10 | 13 | 16 | 20 | 26 A | 224 ¢s |

These are max. values calculated out of inrush current! Please consider not to exceed the maximum rated continuous current of the circuit breaker. Calculation uses typical values from ABB series S 200 as a reference.
Actual values may differ due to used circuit breaker types and installation environment.
4.6 Harmonic distortion in the mains supply (at $230 \mathrm{~V} / 50 \mathrm{~Hz}$ and full load) in \%

|  | THD | 3. | 5. | 7. | 9. | 11. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LC 38/350-1050/50 bDW TW C PRE2 | $<10$ | $<10$ | $<3$ | $<3$ | $<2$ | $<2$ |

### 4.7 Dimming

Dimming range 1\% to $100 \%$
Digital control with:

- basicDIM Wireless


### 4.8 Dimming characteristics



## 5. Interfaces / communication

### 5.1 Control input (pushBUTTON)

A standard push button can be connected on the input terminals. Maximum cable lenght of the push button is 1 meter. This function have to be activated before using.

The control signal is not SELV. Control cable has to be installed in accordance to the requirements of low voltage installations.
Different functions depending on each module.
Profile change see handbook https://www.tridonic.com/com/en/download/ technical/Documentation_Tridonic_4remote_BT_EN.pdf

## 6. Functions

### 6.1 Adjustable current

The output current of the LED driver can be adjusted in a certain range.

## ।-SELECT 2

By inserting a suitable resistor into the I-SELECT 2 interface, the current value can be adjusted. The relationship between output current and resistor value can be found in the chapter "Accessories I-SELECT 2 Plugs".

Please note that the resistor values for I-SELECT 2 are not compatible with

-I-SELECT (generation 1). Installation of an incorrect resistor may cause irreparable damage to the LED module(s).

Resistors for the main output current values can be ordered from Tridonic (see accessories).

### 6.2 Short-circuit behaviour

In case of a short-circuit at the LED output the LED output is switched off. After restart of the LED driver the output will be activated again. The restart can either be done via mains reset or via software or push button.

### 6.3 No-load operation

The LED driver will not be damaged in no-load operation. The output will be deactivated and is therefore free of voltage. If a LED load is connected the device has to be restarted before the output will be activated again.

### 6.4 Overload protection

If the maximum load is exceeded by a defined internal limit, the LED driver turns off the LED output. After restart of the LED driver the output will be activated again.
The restart can either be done via mains reset or via software or push button.

### 6.5 Overtemperature protection

The LED driver is protected against temporary thermal overheating. If the temperature limit is exceeded the output current of the LED module(s) is reduced. The temperature protection is activated above tc max. The activation temperature differs depending on the LED load. On DC operation this function is deactivated to fulfill emergency requirements.

### 6.6 Constant light output (CLO)

The luminous flux of a LED decreases constantly over the lifetime.
The CLO function ensures that the emitted luminous flux remains stable.
For that purpose the LED current will increase continuously over the LED lifetime.
Via software (utilityAPP) it is possible to select a start value (in percent) and an expected lifetime.
The LED driver adjusts the current afterwards automatically.

### 6.7 Power-up/-down fading

The power-up/-down function offers the opportunity to modify the on/off behavior. The time for fading on or off can be adjusted in a range of 0.2 to 16 seconds. According to this value, the device dims either from $0 \%$ up to the power-on level or from the current set dim level down to $0 \%$. This feature applies while operating via 4remoteBT and when switching the mains voltage on or off. By factory default no fading time is set (=0s).

### 6.8 Light level in DC operation

The LED driver is designed to operate on DC voltage and pulsed DC voltage. For a reliable operation, make sure that also in DC emergency operation the LED driver is run within the specified conditions as stated in chapter " 4.1 operating window".

Light output level in DC operation: programmable 1 - $100 \%$ (EOFi = 0.13).
Programming by utilityAPP.
In DC operation dimming mode can be activated.

The voltage-dependent input current of Driver incl. LED module is depending on the used load.

The voltage-dependent no-load current of Driver (without or defect LED module) is for:
AC: 22 mA (at $230 \mathrm{~V}, 50 \mathrm{~Hz}$ )
DC: 6-10 mA (at $275-186 \mathrm{~V}, 0 \mathrm{~Hz}$ )

### 6.9 Intelligent Voltage Guard

Intelligent Voltage Guard is the name of the electronic monitoring of the mains voltage. It immediately shows if the mains voltage rises above certain thresholds. Measures can then be taken quickly to prevent damage to the LED driver.

- If the mains voltage rises above approx. 280 Vrms (voltage depends on the LED driver type), the LED light starts flashing on and off.
- To avoid a damage of the LED driver the mains supply has to be switched off at this signal.


### 6.10 Software / programming

With appropriate software and an interface different functions can be activated and various parameters can be configured in the LED driver. To do so, the software (utilityAPP) is required.

## 7. Miscellaneous

### 7.1 Insulation and electric strength testing of luminaires

Electronic devices can be damaged by high voltage. This has to be considered during the routine testing of the luminaires in production.

According to IEC 60598-1 Annex Q (informative only!) or ENEC 303-Annex A, each luminaire should be submitted to an insulation test with 500 V dc for 1 second. This test voltage should be connected between the interconnected phase and neutral terminals and the earth terminal.
The insulation resistance must be at least $2 \mathrm{M} \Omega$.
As an alternative, IEC 60598-1 Annex Q describes a test of the electrical strength with 1500 V ac (or $1.414 \times 1500 \mathrm{~V}$ d). To avoid damage to the electronic devices this test must not be conducted.

### 7.2 Conditions of use and storage

| Humidity: | $5 \%$ up to max. $85 \%$, <br> not condensed <br> (max. 56 days $/$ year at $85 \%$ ) |
| :--- | :--- |
| Storage temperature: | $-40^{\circ} \mathrm{C}$ up to max. $+80^{\circ} \mathrm{C}$ |

The devices have to be acclimatised to the specified temperature range (ta) before they can be operated.

The LED driver is declared as inbuilt LED controlgear, meaning it is intended to be used within a luminaire enclosure.
If the product is used outside a luminaire, the installation must provide suitable protection for people and environment (e.g. in illuminated ceilings).

### 7.3 Placement

basicDIM Wireless has an integrated antenna for easy integration. In order to maximize the range in every direction some design guidelines should be taken into consideration when mounting the device.
The antenna is located on the corner of the enclosure. It is on the top side of the internal PCB (Printed Circuit Board).
When the device is mounted on a metal plate (e.g. frame of a luminaire), it may efficiently block the radio frequency signal. In this case, a cut-out underneath the antenna may be needed for the RF signal to exit the structure. The cut-out area should be as large as possible. Also the device should be placed as far away from any vertical metal structures as possible.

The range of the communication signal is depending on the environment e.g. luminaire, construction of the building, furnitures or humans and needs to be tested and approved in the installation.

Antenna location


### 7.4 Network compatibility

This Driver is fully compatible with networks which support up to 250 nodes (Evolution networks). If the Driver is used with different types of basicDIM Wireless devices in an Evolution network, their compatibility has to be checked before. If a device is not compatible with Evolution networks, it can be only used in networks which support up to max. of 127 devices (Classic networks).

### 7.5 Maximum number of switching cycles

All LED driver are tested with 50,000 switching cycles.
The actually achieved number of switching cycles is significantly higher.

### 7.6 Additional information

Additional technical information at www.tridonic.com $\rightarrow$ Technical Data

Lifetime declarations are informative and represent no warranty claim. No warranty if device was opened.

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components
Click to view similar products for LED Power Supplies category:
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Other Similar products are found below :
ESS015W-1000-12 PDA-WIFI PIFC-K250F PITB-K222A ALD-514012PJ134 LB240S24KH LMH020-SPLC-0000-0000001 7953479535 EUG-200S210DT ESS030W-1050-21 ESS030W-0900-32 BPOXL 4-12-035 ESS010W-0350-24 ESM060W-1400-42 PDA080B-1A0G PDA150B-S1A5G SLM140W-1.05-130-ZA ESS015W-0700-18 EUD-150S350DVA LWA320-C420-ARK-B HVG-240-48AB HVG-32036AB HVG-320-54AB ELG-240-C1400AB EUK-150S105DV BXCS-12Z-N2P-B1-A BXPR-WN-01-A BXCS-12D-N2P-01-A BXCS-12W-N2P-01-A HLG-185H-C1400AB 980100001200394 LC 14W 250-350MA FLEXC R ADV2 LC 24W 500-600MA FLEXC R ADV2 LC 36W 850-900MA FLEXC R ADV2 LC 50W 200-350ML 170V FLEXC LP SNC4 LC 25W 200-350ML 70V FLEXC LP SNC4 LC 35W 200-350ML 121V FLEXC LP SNC4 LCBI 10W 350MA PHASE-CUT/1-10V LP LC 13W 300MA FIXC C SNC LC 10W 250MA FIXC SC SNC2 LC 35W 800MA FIXC SR ADV2 LC 38W 900MA FIXC SR ADV2 LC 34W 800MA FIXC SC ADV2 LC 44W 1050MA FIXC SC ADV2 LC 38W 900MA 42V FIXC SRL ADV2 HVG-320-48AB CNB50W-1200-42-CAS CNB30W-0600-42-CAS LCI 100W 1400MA TEC C

