

# PRODUCT DATASHEET

## DR ZIGBEE NF P 45W 220-240V 1A2

LED DRIVER ZIGBEE DIRECT PERFORMANCE | Compact constant LED driver with Zigbee dimming interface



PERFORMANCE  
CLASS

### Areas of application

- Luminaires of protection class I and II
- Indoor SELV installations
- Suitable for LED T5 FC EXTERNAL P
- Emergency lighting systems (DC capable)
- Cove lighting
- Offices
- Education
- Storage areas
- Retail

### Product benefits

- Zigbee 3.0 and Zigbee Direct via Bluetooth Low Energy (BLE)
- Flexible NFC current settings on device in 1 mA steps
- Consumption and diagnostic data via Zigbee
- Low flickering enables high light quality as well as good visual comfort
- High-quality dimming of 1...100 %
- Toolless installation

### Product features

- Available with an output current range: from 200...750 mA (30 W)
- Available with an output current range: from 600...1,200 mA (45 W)
- Type of installation: independent and built-in
- Suitable for emergency lighting fixtures acc. to EN 60598-2-2 with via NFC adjustable emergency output factor (EOF)
- Quick and easy current setting via NFC
- Very long lifetime: up to 100,000 h
- Supply voltage: 220...240 V
- Operated with Safety extra-low voltage (SELV): < 60 V

## TECHNICAL DATA

### Electrical data

|                                          |                             |
|------------------------------------------|-----------------------------|
| Nominal output power                     | 45 W                        |
| Nominal voltage                          | 220...240 V                 |
| Nominal output voltage                   | 10...52 V                   |
| Input voltage AC                         | 198...264 V <sup>1)</sup>   |
| Input voltage DC                         | 178...280 V                 |
| U-OUT (working voltage)                  | 10...52 V                   |
| Type of current                          | DC                          |
| Nominal current                          | 260 mA                      |
| Nominal output current                   | 600...1200 mA <sup>2)</sup> |
| Inrush current                           | 5.24 A                      |
| Output current tolerance                 | +/- 3 %                     |
| Output ripple current (120 Hz)           | +/- 3.0 %                   |
| Mains frequency                          | 0/50/60 Hz                  |
| Total harmonic distortion                | < 7 % <sup>3)</sup>         |
| Power factor $\lambda$                   | $\geq 0.97$ <sup>3)</sup>   |
| ECG efficiency                           | $\geq 90$ %                 |
| Device power loss                        | < 5 W                       |
| Max. ECG no. on circuit breaker 10 A (B) | 34                          |
| Max. ECG no. on circuit breaker 16 A (B) | 55                          |
| Max. ECG no. on circuit breaker 25 A (B) | 87                          |
| Max. ECG no. on circuit breaker 32 A (B) | 111                         |
| Max. ECG no. on circuit breaker 10 A (C) | 34                          |
| Max. ECG no. on circuit breaker 16 A (C) | 55                          |
| Max. ECG no. on circuit breaker 25 A (C) | 87                          |
| Max. ECG no. on circuit breaker 32 A (C) | 111                         |
| Surge capability (L/N-Ground)            | 2 kV                        |
| Surge capability (L-N)                   | 1 kV                        |
| Galvanic isolation                       | SELV                        |
| Operating frequency                      | 0/50/60 Hz                  |
| Power loss in stand-by mode              | $\leq 0.3$ W                |

<sup>1)</sup> Permitted voltage range

<sup>2)</sup> Tunable at 1 mA steps, +/- 3 % at full load

<sup>3)</sup> Full load at 230 V/50 Hz

### Dimensions & Weight



|                                      |                           |
|--------------------------------------|---------------------------|
| Length                               | 118.20 mm                 |
| Mounting hole spacing, length        | 109 mm                    |
| Width                                | 45.00 mm                  |
| Height                               | 25.00 mm                  |
| Cable cross-section, input side      | 0.5...1.5 mm <sup>2</sup> |
| Cable cross-section, output side     | 0.5...1.5 mm <sup>2</sup> |
| Prewired                             | No                        |
| Wire preparation length, input side  | 6...7 mm                  |
| Wire preparation length, output side | 6...7 mm                  |
| Product weight                       | 186.3 g                   |

Colors & materials

|                 |         |
|-----------------|---------|
| Product color   | White   |
| Casing material | Plastic |
| Body material   | Plastic |

Temperatures & operating conditions

|                                          |              |
|------------------------------------------|--------------|
| Ambient temperature range                | -20...+50 °C |
| Maximum temperature at tc test point     | 85 °C        |
| Max.housing temperature in case of fault | <110 °C      |
| Temperature range in operation           | -20...+50 °C |
| Permitted rel. humidity during operation | 5...85 %     |

Lifespan

|                            |                        |
|----------------------------|------------------------|
| ECG lifetime               | 100000 h <sup>1)</sup> |
| Number of switching cycles | 50000                  |

1) At Tc max. - 10°C

Additional product data

|              |     |
|--------------|-----|
| Encapsulated | Yes |
|--------------|-----|

Capabilities

|                   |                          |
|-------------------|--------------------------|
| Dimmable          | Yes                      |
| Dimming interface | Zigbee 3.0 <sup>1)</sup> |
| Dimming range     | 1...100 %                |

|                                        |               |
|----------------------------------------|---------------|
| Overheating protection                 | Yes           |
| Overload protection                    | Yes           |
| No-load proof                          | Yes           |
| Short-circuit protection               | Yes           |
| Max. cable length to lamp/LED module   | 0,8 m         |
| Suitable for fixtures with prot. class | II            |
| Suitable for emergency lighting        | Yes           |
| Type of connection, output side        | Push terminal |

1) Zigbee Direct via Bluetooth Low Energy (BLE)

### Certificates & Standards

|                           |                                                                                                                               |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Approval marks – approval | CE / UKCA / EAC / ENEC / EL                                                                                                   |
| Standards                 | Acc. to EN 61347-1 / Acc. to EN 61347-2-13 / Acc. to EN 55015 /<br>Acc. to EN 61547 / Acc. to EN 61000-3-2 / Acc. to EN 62384 |
| Protection class          | II                                                                                                                            |
| Type of protection        | IP20                                                                                                                          |

### LOGISTICAL DATA

|                              |              |
|------------------------------|--------------|
| Temperature range at storage | -40...+85 °C |
|------------------------------|--------------|

### EQUIPMENT / ACCESSORIES

- Cable clamps included for trade types

### Safety advice

- All electrical connections must be made by a qualified person.
- Caution, risk of electric shock.
- Disconnect mains before installation.
- Do not open enclosure-housing.

### DOWNLOAD DATA

| Documents and certificates                                                         |                                        | Document name                      |
|------------------------------------------------------------------------------------|----------------------------------------|------------------------------------|
|  | User instruction / safety instructions | DR ZB NF P                         |
|  | Legal information                      | Informationstext 18 Abs 4 ElektroG |
|  | Legal information                      | Safety insert G11226371 24         |
|  | Legal information                      | Legal Insert G11245230 LN T        |

| Documents and certificates                                                       |                                 | Document name                             |
|----------------------------------------------------------------------------------|---------------------------------|-------------------------------------------|
|  | Declarations of conformity      | LED DRIVER ZIGBEE                         |
|  | Declarations of conformity UKCA | LED DRIVER ZIGBEE                         |
|  | EU Data Act                     | Field Assistant - NFC Program Application |

LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume    |
|---------------|------------------------------|--------------------------------------|--------------|-----------|
| 4099854668678 | Folding box<br>1             | 187 mm x 54 mm x 34 mm               | 201.00 g     | 0.34 dm³  |
| 4099854668685 | Shipping box<br>20           | 282 mm x 205 mm x 177 mm             | 4326.00 g    | 10.23 dm³ |

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.