

## PRODUCT DATASHEET

### OTe 18/220...240/500 PC

OPTOTRONIC® Phase-cut OTE | Compact constant current LED drivers



#### Areas of application

- Optional cable clamp E-style for independent mounting
- Suitable for indoor installations
- Suitable for indoor SELV installations

#### Product benefits

- Compact housing for mounting in very tight spaces
- Compatible with the most common leading-edge and trailing-edge phase dimmers

#### Product features

- Dimmable via leading edge/trailing edge
- Type of protection: IP20

## TECHNICAL DATA

### Electrical data

|                                          |                           |
|------------------------------------------|---------------------------|
| Nominal wattage                          | 18.00 W                   |
| Nominal output power                     | 18 W <sup>1)</sup>        |
| Nominal voltage                          | 220...240 V               |
| Nominal output voltage                   | 18...36 V <sup>2)</sup>   |
| Input voltage AC                         | 198...264 V <sup>3)</sup> |
| U-OUT (working voltage)                  | 60 V                      |
| Nominal output current                   | 500 mA <sup>4)</sup>      |
| Inrush current                           | 5 A <sup>5)</sup>         |
| Output current tolerance                 | ±10 %                     |
| Output ripple current (100 Hz)           | < 35 % <sup>6)</sup>      |
| Mains frequency                          | 50/60 Hz                  |
| Total harmonic distortion                | 15 %                      |
| Power factor $\lambda$                   | 0.95 <sup>7)</sup>        |
| ECG efficiency                           | 86 % <sup>8)</sup>        |
| Device power loss                        | 3,0 W <sup>9)</sup>       |
| Max. ECG no. on circuit breaker 10 A (B) | 53                        |
| Max. ECG no. on circuit breaker 16 A (B) | 84                        |
| Max. ECG no. on circuit breaker 25 A (B) | -                         |
| Surge capability (L/N-Ground)            | 1 kV                      |
| Surge capability (L-N)                   | 1 kV                      |
| Galvanic isolation                       | SELV                      |
| Flickering metric (Pst LM)               | ≤1                        |

1) Partial load 9...18 W

2) Maximum < 48 V

3) Permitted voltage range

4) ±10%

5)  $t_{\text{width}} = 100 \mu\text{s}$  (measured at 50 %  $i_{\text{peak}}$ )

6) Typical

7) Full load at 230 V/Minimum load at 230 V

8) At full load and 230 V

9) Maximum

### Photometrical data

|                                 |      |
|---------------------------------|------|
| Flickering metric (Pst LM)      | ≤1   |
| Stroboscope effect metric (SVM) | ≤0.6 |

### Dimensions & Weight

|                                      |                               |
|--------------------------------------|-------------------------------|
| Length                               | 95.00 mm                      |
| Width                                | 53.00 mm                      |
| Height                               | 30.00 mm                      |
| Cable cross-section, input side      | 0.75...1.5 mm <sup>2</sup> 1) |
| Cable cross-section, output side     | 0.5...1.5 mm <sup>2</sup> 1)  |
| Wire preparation length, input side  | 8.0...9.0 mm                  |
| Wire preparation length, output side | 8.0...9.0 mm                  |
| Product weight                       | 93.00 g                       |

1) Flexible / Solid leads

### Colors & materials

|                 |         |
|-----------------|---------|
| Casing material | Plastic |
| Body material   | Plastic |

### Temperatures & operating conditions

|                                          |              |
|------------------------------------------|--------------|
| Ambient temperature range                | -20...+55 °C |
| Maximum temperature at tc test point     | 75 °C 1)     |
| Max.housing temperature in case of fault | 110 °C       |
| Permitted rel. humidity during operation | 5...85 % 2)  |

1) Maximum at the T<sub>c</sub>-point

2) Maximum 56 days/year at 85 %

### Lifespan

|              |            |
|--------------|------------|
| ECG lifetime | 50000 h 1) |
|--------------|------------|

1) At T<sub>case</sub> = 70°C at T<sub>c</sub> point / 10% failure rate

### Additional product data

|              |    |
|--------------|----|
| Encapsulated | No |
|--------------|----|

### Capabilities

|                                      |                      |
|--------------------------------------|----------------------|
| Dimmable                             | Yes                  |
| Dimming interface                    | Phase Cut 1)         |
| Dimming range                        | 10...100 %           |
| Overheating protection               | Automatic reversible |
| Overload protection                  | Automatic reversible |
| No-load proof                        | Yes                  |
| Short-circuit protection             | Automatic reversible |
| Max. cable length to lamp/LED module | 2,0 m                |

|                                        |               |
|----------------------------------------|---------------|
| Suitable for fixtures with prot. class | I / II        |
| Type of connection, output side        | Push terminal |

1) Leading edge / Trailing edge

### Certificates & Standards

|                           |                                                                                                                                                             |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Approval marks – approval | CE / ENEC 10 / VDE / CB                                                                                                                                     |
| Standards                 | Acc. to IEC 61347 / Acc. to IEC 61347-2-13 / Acc. to IEC 62384 /<br>Acc. to CISPR 15 / Acc. to IEC 61000-3-2 / Acc. to IEC 61000-3-3 /<br>Acc. to IEC 61547 |
| Protection class          | II                                                                                                                                                          |
| Type of protection        | IP20                                                                                                                                                        |

### LOGISTICAL DATA

|                              |             |
|------------------------------|-------------|
| Temperature range at storage | -25...75 °C |
|------------------------------|-------------|

### Accessories Optional

| Product image                                                                       | Product name           | EAN           |
|-------------------------------------------------------------------------------------|------------------------|---------------|
|  | OT CABLE CLAMP E-STYLE | 4052899167896 |

### DOWNLOAD DATA

|                                                                                    | Documents and certificates             | Document name                                               |
|------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------------------|
|  | User instruction / safety instructions | 544631_OT PC dimmer list                                    |
|  | User instruction / safety instructions | 501495_OTe 18/220-240/500 PC                                |
|  | Declarations of conformity             | EU Declaration of Conformity 3365230                        |
|  | Certificates                           | VDE EMC Certificate 40038482                                |
|  | Certificates                           | 503096_CB report OTe 25 700 PC - OTe 18 350 PC - OTe 18 500 |
|  | Certificates                           | VDE ENEC Certificate 40038447                               |

### LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume               |
|---------------|------------------------------|--------------------------------------|--------------|----------------------|
| 4052899105362 | Unpacked<br>1                |                                      | 110.00 g     |                      |
| 4052899105379 | Shipping box<br>20           | 284 mm x 207 mm x 100 mm             | 2478.00 g    | 5.88 dm <sup>3</sup> |

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.