

## PRODUCT DATASHEET

### PTi 150/220...240 S

POWERTRONIC INTELLIGENT PTi S | ECG for HID lamps, for installation in luminaires



#### AREAS OF APPLICATION

- Shop lighting
- Health and fitness areas (in luminaires with protection class IP66 or higher)
- Effect and accent lighting

#### PRODUCT FAMILY BENEFITS

- Long reliable life at maximum permitted temperatures
- Compact dimensions and low weight for small luminaire designs
- Excellent thermal behavior for very high limit temperatures  $t_c$  and  $t_a$
- Automatic safety shutdown of lamps in the event of a defect or at end of life (EoL)

#### PRODUCT FAMILY FEATURES

- Energy Efficiency Index EEI: A2
- Supply voltage: 220...240 V
- Line frequency: 50...60 Hz
- RI suppression: to EN 55015/CISPR 15
- Safety: to EN 61347-2-12
- Line harmonics according to EN 61000-3-2
- Immunity according to EN 61547

**TECHNICAL DATA**

Electrical data

|  |                      |
|--|----------------------|
| Lamp wattage                             | 147 W                |
| Line current                             | 0.72 A <sup>1)</sup> |
| Ignition voltage                         | 4.5 kVp              |
| Operating frequency                      | 0.165 kHz            |
| System wattage [AGGR]                    | 160.00 W             |
| ECG efficiency                           | 92 %                 |
| Input voltage AC                         | 198...254 V          |
| Nominal voltage                          | 220...240 V          |
| Mains frequency                          | 50...60 Hz           |
| Power factor λ                           | 0.95 <sup>2)</sup>   |
| Inrush current                           | 70 A <sup>3)</sup>   |
| Max. ECG no. on circuit breaker 10 A (B) | 4 <sup>4)</sup>      |
| Max. ECG no. on circuit breaker 16 A (B) | 7 <sup>4)</sup>      |
| Max. no. of ECGs on 16A MCB with EBN-OS  | 17 <sup>4)</sup>     |
| Protective conductor current             | 0.4 mA               |
| U-OUT (working voltage)                  | 250 V                |
| Max. working voltage between LH and LL   | 250 V                |
| Max. working voltage betw. LL/LH & earth | 250 V                |
| Max. capacitance of wire ECG/lamp        | 120 pF               |

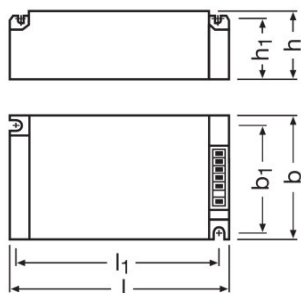
<sup>1)</sup> At 230 V<sub>AC</sub>

<sup>2)</sup> Minimum

<sup>3)</sup>  $t_{width} = 250 \mu s$  (measured at 50 %  $I_{peak}$ )

<sup>4)</sup> Type B

Dimensions & weight



|        |          |
|--------|----------|
| Length | 150.0 mm |
| Width  | 85.0 mm  |
| Height | 31.0 mm  |

|                                      |                           |
|--------------------------------------|---------------------------|
| Mounting hole spacing, length        | 139.0 mm                  |
| Mounting hole spacing, width         | 74.0 mm                   |
| Cable cross-section, input side      | 0.5...2.5 mm <sup>2</sup> |
| Cable cross-section, output side     | 0.5...2.5 mm <sup>2</sup> |
| Wire preparation length, input side  | 10...11 mm                |
| Wire preparation length, output side | 10...11 mm                |
| Product weight                       | 370.00 g                  |

### Colors & materials

|                 |       |
|-----------------|-------|
| Casing material | Metal |
|-----------------|-------|

### Temperatures & operating conditions

|                                      |              |
|--------------------------------------|--------------|
| Ambient temperature range            | -25...+55 °C |
| Maximum temperature at tc test point | 85 °C        |

### Lifespan

|              |                       |
|--------------|-----------------------|
| ECG lifetime | 40000 h <sup>1)</sup> |
|--------------|-----------------------|

<sup>1)</sup> At maximum T<sub>c</sub> / 10% failure rate

### Additional product data

|                  |               |
|------------------|---------------|
| Design / version | Built-in unit |
|------------------|---------------|

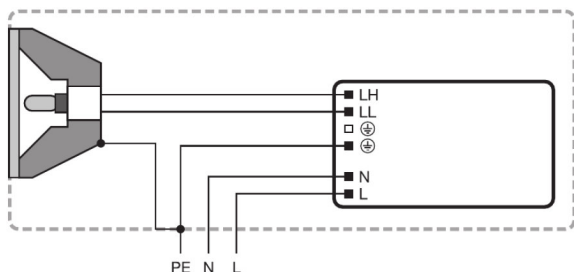
### Capabilities

|  |   |
|--|---|
| Max. cable length to lamp/LED module   | 1.5 m   |
| Overheating protection                 | Power reduction and switch off at T > 85 °C at the tc point |
| ECG reset time                         | > 0.5 s   |
| Dimmable                               | No  |
| Restriction on ignition time           | 20 min  |
| Suitable for fixtures with prot. class | I   |

### Certificates & standards

|                           |  |
|---------------------------|--|
| Approval marks – approval | ENEC 10 / VDE / VDE-EMC / EAC / C-Tick                                       |
| Type of protection        | IP20   |
| EEI – Energy Label        | A2   |
| Standards                 | Acc. to EN 61347-2-12/Acc. to EN 55015/Acc. to EN 61000-3-2/Acc. to EN 61547 |

Wiring Diagram



Wiring diagram






SAFETY ADVICE







- Ballast losses and lamp heat radiation can lead to heat accumulation in a completely closed case. Therefore it is necessary to ensure that the temperature at the measuring point t of the ECG does not exceed the maximum value.

ATTENTION!

For safety reasons disconnect the device before replacing the lamp!  
 Any conductive material must have a minimum distance of 4 mm to the front of the terminal block.  
 Installation by qualified electrician only.  
 Terminals for protective earth not suitable for any through connection.

DOWNLOAD DATA

| File  |  |
|---|--|
|  | Tender documents<br>339884_Tender Document for POWERTRONIC EVG.eng |
|  | Certificates<br>554891_EAC PT family                               |
|  | Certificates<br>VDE ENEC Certificate 40035813                      |
|  | Declarations of conformity<br>VD EMC Certificate 40025469          |
|  | Declarations of conformity<br>EU Declaration of Conformity 3363432 |

|   |  |
|---|--|
|  | Installation/Operation notice<br>334206_Technical guide - POWERTRONIC for HID-lamps (GB) |
|  | Operating instructions<br>590729_EAC - PTi S PT-FIT S                                    |
|  | CAD data 3-dim<br>315662_PTi 100150 S ASSEMBLY 9900047                                   |
|  | CAD data 3-dim<br>315663_PTi 100150 S ASSEMBLY 9900047                                   |
|  | CAD data 3-dim<br>315664_PTi 100150 S ASSEMBLY 9900047                                   |
|  | CAD data PDF<br>315657_PTi 100150 S ASSEMBLY 9900047                                     |

## LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume                |
|---------------|------------------------------|--------------------------------------|--------------|-----------------------|
| 4008321188090 | Unpacked<br>1                | 150 mm x 93 mm x 42 mm               | 370.50 g     | 0.59 dm <sup>3</sup>  |
| 4008321188106 | Shipping carton box<br>20    | 403 mm x 191 mm x 205 mm             | 8011.00 g    | 15.78 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.

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