

PTi 150/220...240 S

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



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

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)

Areas of application

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

Product datasheet

Technical data

Electrical data

| | |
|--|----------------------|
| Lamp wattage | 147 W |
| Maximum output power | 147 W |
| Line current | 0.72 A ¹⁾ |
| Ignition voltage | 4.5 kVp |
| Operating frequency | 0.165 kHz |
| System wattage | 160.00 W |
| Efficiency in full-load | 92 % |
| Input voltage AC | 198...254 V |
| Nominal voltage | 220...240 V |
| Mains frequency | 50...60 Hz |
| Power factor λ | 0.95 ²⁾ |
| Inrush current | 70 A ³⁾ |
| Max. ECG no. on circuit breaker 10 A (B) | 4 ⁴⁾ |
| Max. ECG no. on circuit breaker 16 A (B) | 7 ⁴⁾ |
| Max. no. of ECGs on 16A MCB with EBN-OS | 17 ⁴⁾ |
| 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 |

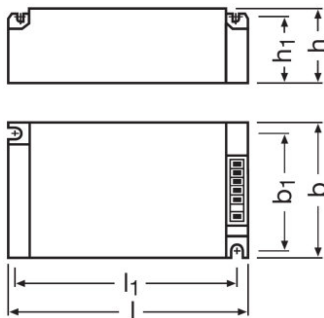
1) At 230 V_{AC}

2) Minimum

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

4) Type B

Dimensions & weight



| | |
|--------|----------|
| Length | 150.0 mm |
|--------|----------|

Product datasheet

| | |
|--------------------------------------|---------------------------|
| 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 ² |
| Cable cross-section, output side | 0.5...2.5 mm ² |
| 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 ¹⁾ |
|--------------|-----------------------|

¹⁾ At maximum T_c / 10% failure rate

Additional product data

| | |
|----------------------------------|---------------|
| Design / version | Built-in unit |
| Suitable for lamp power (1 lamp) | 150 W |

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 |
| Intended for no-load operation | No |

Certificates & standards

| | |
|---------------------------|--|
| Approval marks – approval | ENEC 10 / VDE / VDE-EMC / EAC / C-Tick |
| Type of protection | IP20 |
| EEI – Energy Label | A2 |

Product datasheet

| | |
|------------------|--|
| Standards | Acc. to EN 61347-2-12/Acc. to EN 55015/Acc. to EN 61000-3-2/Acc. to EN 61547 |
|------------------|--|

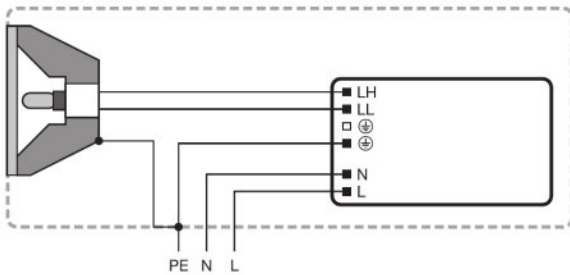
Logistical data

| | |
|-----------------------|-------------|
| Commodity code | 85041080900 |
|-----------------------|-------------|

Environmental information

| Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH) | |
|--|--|
| Date of Declaration | 26-05-2023 |
| Primary Article Identifier | 4008321188090 |
| Candidate List Substance 1 | Lead |
| CAS No. of substance 1 | 7439-92-1 |
| Safe Use Instruction | The identification of the Candidate List substance is sufficient to allow safe use of the article. |
| Declaration No. in SCIP database | 94ca8af6-0f97-42b5-adf8-02db34b3d045 |

Wiring Diagram



342165_Setup for ECG Installation

Product datasheet

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.

Additional product information

- In order to achieve good radio interference suppression:1. Keep the cable between ECG and lamp as short as possible.2. The single lamp wires must be routed as close as possible to each other.

Download Data

| File | |
|---|--|
|  | User instruction POWERTRONIC PTi S PT FIT S |
|  | Tender documents 339884_Tender Document for POWERTRONIC EVG.eng |
|  | Certificates 554891_EAC PT family |
|  | Certificates PTO PTi ENEC 40035813 020623 |
|  | Declarations of conformity Powertronic UK DoC 4278196 150222 |
|  | Declarations of conformity PT_FIT PTi PTo CE 3363432 020823 |
|  | Declarations of conformity Pti Pto PT-FIT EMC 280722 |
|  | Operating instructions 590729_EAC - PTi S PT-FIT S |
|  | CAD data 3-dim 315662_PTi 100150 S ASSEMBLY 9900047 |
|  | CAD data 3-dim 315663_PTi 100150 S ASSEMBLY 9900047 |
|  | CAD data 3-dim 315664_PTi 100150 S ASSEMBLY 9900047 |
|  | CAD data PDF 315657_PTi 100150 S ASSEMBLY 9900047 |

Product datasheet

Ecodesign regulation information:

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.

Logistical Data

| Product code | Product description | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Volume | Gross weight |
|---------------|---------------------|------------------------------|--------------------------------------|-----------------------|--------------|
| 4008321188090 | PTi 150/220...240 S | Shipping carton box 20 | 403 mm x 205 mm x 191 mm | 15.78 dm ³ | 8011.00 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.

Disclaimer

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

PTi 150/220...240 S

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

| Product name | Lamp group |
|---------------------|--------------|
| PTi 150/220...240 S | HCI-E/P 150W |
| | HCI-TS 150W |
| | HQI-R 150W |
| | HQI-T 150W |
| | HQI-TS 150W |