

PTi 20/220...240 S

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



Areas of application

- Shop lighting
- Health and fitness areas (in dry, corrosion-protected place)
- Effect and accent lighting

Product 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 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 datasheet

Technical data

Electrical data

Lamp wattage	20 W
Line current	0.11 A ¹⁾
Ignition voltage	3.0 kVp
Operating frequency	0.100...0.120 kHz
System wattage	23.00 W
ECG efficiency	87 %
Input voltage AC	220...240 V
Input voltage range AC	198...264 V
Mains frequency	50...60 Hz
Power factor λ	0.95 ²⁾
Inrush current	12 A ³⁾
Max. no. of ECGs on circuit breaker 10 A	22 ⁴⁾
Max. no. of ECGs on circuit breaker 16 A	33 ⁴⁾
Max. no. of ECGs on 16A MCB with EBN-OS	82 ⁴⁾
Protective conductor current	0.2 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	40 pF

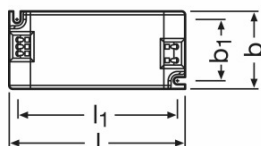
1) At 230 V_{AC}

2) Minimum

3) $t_{width} = 210 \mu s$ (measured at 50 % I_{peak})

4) Type B

Dimensions & weight



Length	97.0 mm
Width	43.0 mm

Product datasheet

Height	30.0 mm
Mounting hole spacing, length	88.0 mm
Mounting hole spacing, width	34.0 mm
Cable cross-section, input side	0.5...1.5 mm ²
Cable cross-section, output side	0.5...1.5 mm ²
Wire preparation length, input side	8.5...9.5 mm
Wire preparation length, output side	8.5...9.5 mm
Product weight	105.00 g

Colors & materials

Casing material	Plastic
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Temperatures

Ambient temperature range	-25...+60 °C
Maximum temperature at tc test point	80 °C

Lifespan

ECG lifetime	50000 h ¹⁾
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¹⁾ At maximum T_c / 10 % failure rate

Additional product data

Design / version	Built-in unit
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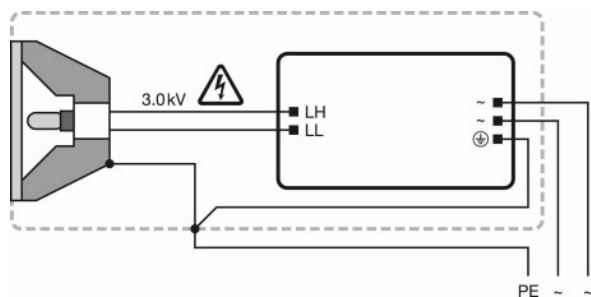
Capabilities

Max. cable length to lamp/LED module	0.5 m
Overheating protection	Switch off at T > 80 °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 / II

Certificates & standards

Approval marks – approval	ENEC 10 / VDE / VDE-EMC / GOST / 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




Thermal characteristics

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_c 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 Tender Document for POWERTRONIC EVG.eng
 Certificates EMC-Marks approval
 Certificates PTi - PTo - PTg VDE-ENEC-Cert

Product datasheet

	Declarations of conformity Declaration of conformity PTi 20
	Declarations of conformity VDE Declaration of conformity
	Installation/Operation notice Technical guide - POWERTRONIC for HID-lamps (GB)
	CAD data 3-dim PTm 20 S 9900046
	CAD data 3-dim PTm 20 S 9900046
	CAD data 3-dim PTm 20 S 9900046
	CAD data PDF PTm 20 S 9900046

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4008321353290	PTi 20/220...240 S	Shipping carton box 20	228 mm x 78 mm x 208 mm	3.70 dm ³	2106.00 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.