

PTi 70/220...240 S

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



Areas of application

- Shop lighting
- Health and fitness areas
- 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



Technical data

Electrical data

Lamp wattage	73 W
Line current	0.36 A ¹⁾
Ignition voltage	4.5 kVp
Operating frequency	0.200...0.240 kHz
System wattage	79 W
ECG efficiency	92 %
Input voltage	220...240 V
Voltage range	198...264 V
Mains frequency	50...60 Hz
Power factor λ	0.95 ²⁾
Inrush current	45 A ³⁾
Max. no. of ECGs on circuit breaker 10 A	7 ⁴⁾
Max. no. of ECGs on circuit breaker 16 A	13 ⁴⁾
Max. no. of ECGs on 16A MCB with EBN-OS	32 ⁴⁾
Protective conductor current	0.25 mA
U-OUT	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}

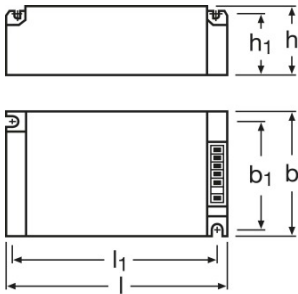
²⁾ Minimum

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

⁴⁾ Type B

Dimensions & weight

Product datasheet



Product line drawing

Length	110.0 mm
Width	75.0 mm
Height	30.0 mm
Mounting hole spacing, length	99.0 mm
Mounting hole spacing, width	64.0 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	255.00 g

Colors & materials

Casing material	Metal
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Temperatures

Ambient temperature range	-25...+55 °C
Maximum temperature at tc test point	85 °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
System guarantee level	3c

Product datasheet

Capabilities

Maximum wiring length ECG/lamp	1.5 m
Overheating protection	Power reduction and switch off at $T > 85$ °C at the tc point
Overvoltage protection at 275...300 V	48 h ¹⁾
Overvoltage protection at 300...320 V	2 h ¹⁾
Overvoltage protection at 320...350 V	5 min ²⁾
ECG reset time	> 0.5 s
Dimmable	No
Restriction on ignition time	20 min
Suitable for fixtures with prot. class	I

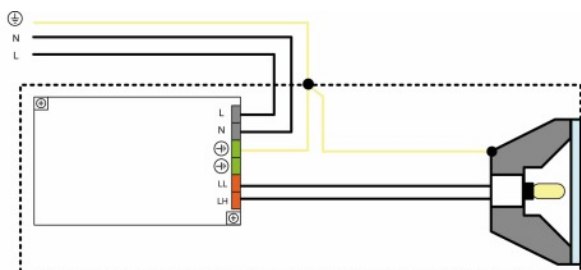
¹⁾ Control gear switches off after 40 s

²⁾ Control gear switches off or does not start

Certificates & standards

Approval marks – approval	ENEC 10 / VDE / VDE-EMC / GOST / C-Tick
Type of protection	IP20
EEL – 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

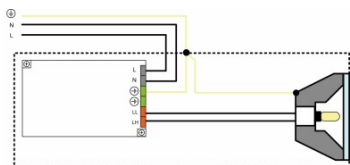
Thermal characteristics

- 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.

Product datasheet



Wiring diagram

Download Data

File	
	Addon Technical Information ADDON TECHNICAL INFORMATION POWERTRONIC PTi 70 S (GB)
	Product Datasheet POWERTRONIC PTi Product flyer
	Tender Documents Tender Document for POWERTRONIC EVG.eng
	Certificates EMC-Marks approval
	Declarations of conformity Declaration of conformity PTi 35, PTi 70
	Declarations of conformity VDE Declaration
	Declarations of conformity EC-Declartion of Conformity
	Declarations of conformity VDE Declaration of conformity
	Declarations of conformity PTi - PTo - PTg VDE-ENEC-Cert
	Installation/Operation notice Technical guide - POWERTRONIC for HID-lamps (GB)
	CAD data 3-dim 110x75x30 9900004
	CAD data 3-dim 110x75x30 9900004
	CAD data 3-dim 110x75x30 9900004
	CAD data PDF 110x75x30 9900004

Product datasheet

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (height x width x length)	Volume	Gross weight
4008321049629	PTi 70/220...240 S	Shipping carton box 20	194 mm x 136 mm x 412 mm	10.87 dm ³	5169.89 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.

Product datasheet

Lamp-ECG combination (System)

Product name	Lamp group
PTi 70 S	HCI-E/P 70W
	HCI-PAR30 70W
	HCI-T 70W
	HCI-TC 70W
	HCI-TS 70W
	HCI-TX/P 70W
	HQI-E 70W
	HQI-TS 70W
