

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

Product family datasheet

Technical data

Electrical data

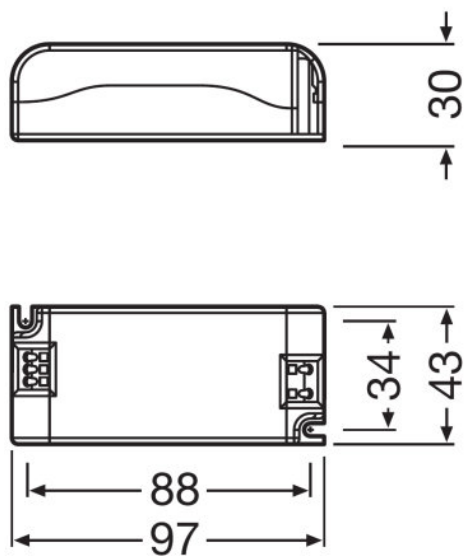
Product description	Lamp wattage	Maximum output power	Line current	Ignition voltage	Operating frequency	
PTi 35/220...240 S MINI	39 W	39 W	0.19 A ¹⁾	3.0 kVp	0.100...0.120 kHz	
PTi 150/220...240 S	147 W	147 W	0.72 A ¹⁾	4.5 kVp	0.165 kHz	
Product description	System wattage	Efficiency in full-load	Input voltage AC	Nominal voltage	Mains frequency	
PTi 35/220...240 S MINI	43.00 W	90 %	198...264 V	220...240 V	50...60 Hz	
PTi 150/220...240 S	16000 W	92 %	198...254 V	220...240 V	50...60 Hz	
Product description	Power factor λ	Inrush current	Max. ECG no. on circuit breaker 10 A (B)	Max. ECG no. on circuit breaker 16 A (B)	Max. no. of ECGs on 16A MCB with EBN-OS	U-OUT (working voltage)
PTi 35/220...240 S MINI	0.95 ²⁾	20 A ³⁾	17 ⁴⁾	28 ⁴⁾	70 ⁴⁾	250 V
PTi 150/220...240 S	0.95 ²⁾	70 A ⁵⁾	4 ⁴⁾	7 ⁴⁾	17 ⁴⁾	250 V
Product description	Max. working voltage between LH and LL	Max. working voltage betw. LL/LH & earth	Max. capacitance of wire ECG/lamp			
PTi 35/220...240 S MINI	250 V	250 V	40 pF			
PTi 150/220...240 S	250 V	250 V	120 pF			

1) At 230 V_{AC}
2) Minimum
3) t_{width} = 170 µs (measured at 50 % I_{peak})
4) Type B
5) t_{width} = 250 µs (measured at 50 % I_{peak})

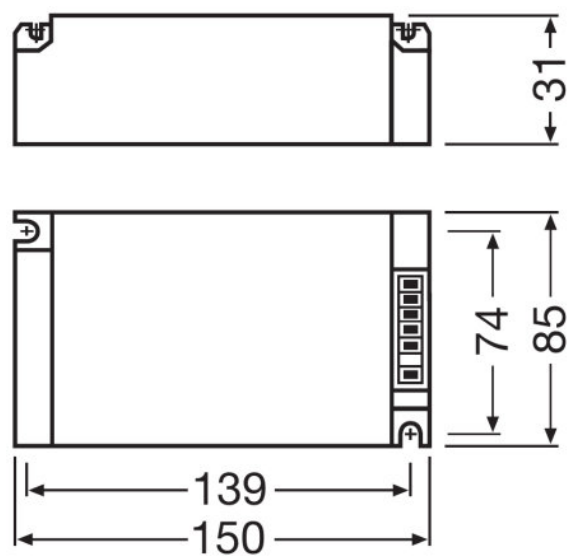
Dimensions & weight

Product description	Length	Width	Height	Mounting hole spacing, length	Mounting hole spacing, width	Cable cross-section, input side
PTi 35/220...240 S MINI	97.0 mm	43.0 mm	30.0 mm	88.0 mm	34.0 mm	0.5...1.5 mm ²
PTi 150/220...240 S	1500 mm	850 mm	310 mm	139.0 mm	74.0 mm	0.5...2.5 mm ²
Product description	Cable cross-section, output side	Wire preparation length, input side	Wire preparation length, output side	Product weight		
PTi 35/220...240 S MINI	0.5...1.5 mm ²	8.5...9.5 mm	8.5...9.5 mm	105.00 g		
PTi 150/220...240 S	0.5...2.5 mm ²	10...11 mm	10...11 mm	37000 g		

Product line drawing



PTi 35/220...240 S MINI



PTi 150/220...240 S

Colors & materials

Product description	Casing material
PTi 35/220...240 S MINI	Plastic
PTi 150/220...240 S	Metal

Temperatures & operating conditions

Product description	Ambient temperature range	Maximum temperature at tc test point
PTi 35/220...240 S MINI	-25...+50 °C	80 °C
PTi 150/220...240 S	-25...+55 °C	85 °C

Lifespan

Product description	ECG lifetime
PTi 35/220...240 S MINI	50000 h ¹⁾
PTi 150/220...240 S	40000 h ¹⁾

¹⁾ At maximum T_c / 10% failure rate

Product family datasheet

Additional product data

Product description	Design / version
PTi 35/220...240 S MINI	Built-in unit
PTi 150/220...240 S	Built-in unit

Capabilities

Product description	Max. cable length to lamp/LED module	Overheating protection	ECG reset time	Dimmable	Restriction on ignition time
PTi 35/220...240 S MINI	0.5 m	Power reduction and switch off at T > 80 °C at the tc point	> 0.5 s	No	20 min
PTi 150/220...240 S	1.5 m	Power reduction and switch off at T > 85 °C at the tc point	> 0.5 s	No	20 min

Product description	Suitable for fixtures with prot. class
PTi 35/220...240 S MINI	I / II
PTi 150/220...240 S	I

Certificates & standards

Product description	Approval marks – approval	Type of protection	EEI – Energy Label	Standards
PTi 35/220...240 S MINI	ENEC 10 / VDE / VDE-EMC / EAC / C-Tick	IP20	A2	Acc. to EN 61347-2-12/Acc. to EN 55015/Acc. to EN 61000-3-2/Acc. to EN 61547
PTi 150/220...240 S	ENEC 10 / VDE / VDE-EMC / EAC / C-Tick	IP20	A2	Acc. to EN 61347-2-12/Acc. to EN 55015/Acc. to EN 61000-3-2/Acc. to EN 61547

Logistical data

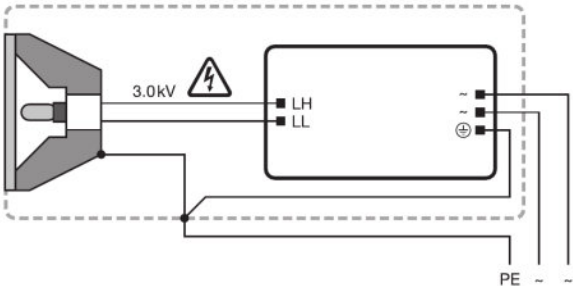
Product description	Commodity code
PTi 35/220...240 S MINI	85041080900
PTi 150/220...240 S	85041080900

Environmental information
Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)

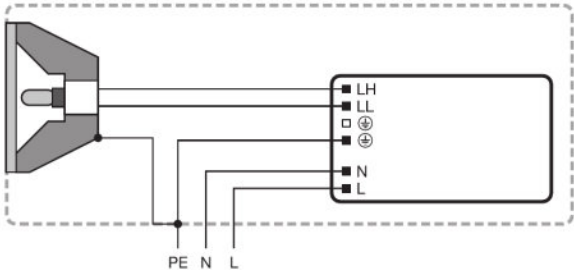
Product description	Date of Declaration	Primary Article Identifier	Candidate List Substance 1
PTi 35/220...240 S MINI	19-05-2023	4008321955906	Lead
PTi 150/220...240 S	26-05-2023	4008321188090	Lead

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
PTi 35/220...240 S MINI	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	bcd731d9-6096-4f94-95cc-8d9340b26161
PTi 150/220...240 S	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	94ca8af6-0f97-42b5-adf8-02db34b3d045

Wiring Diagram



PTi 35/220...240 S MINI



PTi 150/220...240 S

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.

Product family datasheet

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.

Application advice

For more detailed application information and graphics please see product datasheet.

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.

Sales and Technical Support

Sales and Technical Support www.osram.com

Country specific information

Product description	Product code	METEL code	SEG-No.	STK number	UK Org
PTi 35/220...240 S MINI	4008321955906	OSRPTI35SM	-	4030087	-
PTi 35/220...240 S MINI	4008321955906	OSRPTI35SM	-	4030087	-
PTi 150/220...240 S	4008321188090	OSRPTI150S	-	4030190	-
PTi 150/220...240 S	4008321188090	OSRPTI150S	-	4030190	-

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

Product family datasheet

	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
	Declarations of conformity Powertronic UK DoC 4278196 150222
	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

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
4008321955906	PTi 35/220...240 S MINI	Shipping carton box 20	228 mm x 208 mm x 78 mm	3.70 dm ³	2303.00 g
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.