

POWERTRONIC INTELLIGENT PTi I

ECG for HID lamps, with cable clamp



Areas of application

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

Product family benefits

- Extended terminal section enables mains looping
- Screw-down cable clamps for reliable strain relief
- Long reliable life at maximum permitted temperatures
- 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 I	39 W	39 W	0.19 A ¹⁾	4.5 kVp	0.200...0.240 kHz
PTi 70/220...240 I	73 W	73 W	0.36 A ¹⁾	4.5 kVp	0.200...0.240 kHz
PTi 150/220...240 I	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 I	43.00 W	91 %	198...264 V	220...240 V	50...60 Hz
PTi 70/220...240 I	79.00 W	92 %	198...264 V	220...240 V	50...60 Hz
PTi 150/220...240 I	160.00 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
PTi 35/220...240 I	0.95 ²⁾	30 A ³⁾	15 ⁴⁾	26 ⁴⁾	65 ⁴⁾
PTi 70/220...240 I	0.95 ²⁾	45 A ⁵⁾	7 ⁴⁾	13 ⁴⁾	32 ⁴⁾
PTi 150/220...240 I	0.95 ²⁾	70 A ⁵⁾	4 ⁴⁾	7 ⁴⁾	17 ⁴⁾

Product description	Maximum current for mains looping	U-OUT (working voltage)	Max. working voltage between LH and LL	Max. working voltage betw. LL/LH & earth	Max. capacitance of wire ECG/lamp
PTi 35/220...240 I	16 A	250 V	250 V	250 V	120 pF
PTi 70/220...240 I	16 A	250 V	250 V	250 V	120 pF
PTi 150/220...240 I		250 V	250 V	250 V	120 pF

¹⁾ At 230 V_{AC}

²⁾ Minimum

³⁾ $t_{width} = 150 \mu s$ (measured at 50 % I_{peak})

⁴⁾ Type B

⁵⁾ $t_{width} = 250 \mu s$ (measured at 50 % I_{peak})

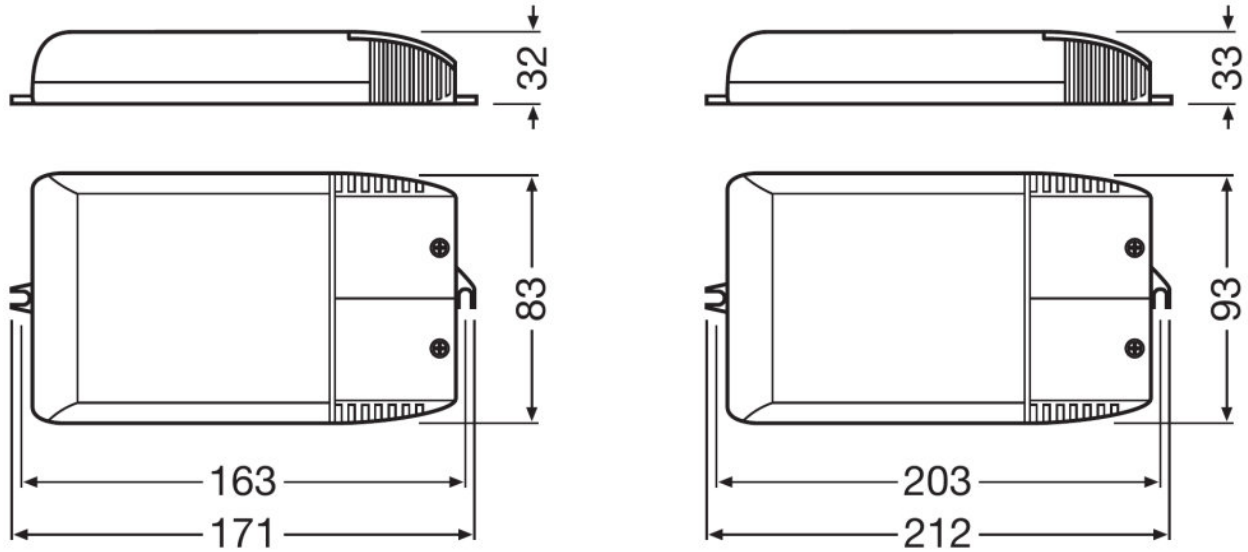
Dimensions & weight

Product description	Length	Width	Height	Mounting hole spacing, length	Cable cross-section, input side	Cable cross-section, output side
PTi 35/220...240 I	171.0 mm	83.0 mm	32.0 mm	163.0 mm	0.75...2.5 mm ²	0.75...2.5 mm ²
PTi 70/220...240 I	171.0 mm	83.0 mm	32.0 mm	163.0 mm	0.75...2.5 mm ²	0.75...2.5 mm ²
PTi 150/220...240 I	212.0 mm	93.0 mm	33.0 mm	203.0 mm	0.75...2.5 mm ²	0.75...2.5 mm ²

Product family datasheet

Product description	Wire preparation length, input side	Wire preparation length, output side	Product weight
PTi 35/220...240 I	10...11 mm	10...11 mm	285.00 g
PTi 70/220...240 I	10...11 mm	10...11 mm	290.00 g
PTi 150/220...240 I	10...11 mm	10...11 mm	420.00 g

Product line drawing



PTi 35/220...240 I, PTi 70/220...240 I

PTi 150/220...240 I

Colors & materials

Product description	Casing material
PTi 35/220...240 I	Plastic
PTi 70/220...240 I	Plastic
PTi 150/220...240 I	Plastic

Temperatures & operating conditions

Product description	Ambient temperature range	Maximum temperature at tc test point
PTi 35/220...240 I	-25...+65 °C	80 °C
PTi 70/220...240 I	-25...+50 °C	80 °C
PTi 150/220...240 I	-25...+50 °C	75 °C

Product family datasheet

Lifespan

Product description	ECG lifetime
PTi 35/220...240 I	50000 h ¹⁾
PTi 70/220...240 I	50000 h ¹⁾
PTi 150/220...240 I	40000 h ¹⁾

¹⁾ At maximum T_c / 10% failure rate

Additional product data

Product description	Design / version
PTi 35/220...240 I	With cable clamp
PTi 70/220...240 I	With cable clamp
PTi 150/220...240 I	With cable clamp

Capabilities

Product description	Max. cable length to lamp/LED module	Overheating protection	Overvoltage protection at 275...300 V	Overvoltage protection at 300...320 V
PTi 35/220...240 I	1.5 m	Power reduction and switch off at T > 80 °C at the tc point	48 h ¹⁾	2 h ¹⁾
PTi 70/220...240 I	1.5 m	Power reduction and switch off at T > 80 °C at the tc point	48 h ¹⁾	2 h ¹⁾
PTi 150/220...240 I	1.5 m	Power reduction and switch off at T > 75 °C at the tc point		

Product description	Overvoltage protection at 320...350 V	ECG reset time	Cable/wire types, input side	Cable/wire types, output side	Dimmable
PTi 35/220...240 I	5 min ²⁾	> 0.5 s	NYM-J 3x1.5 / NYM-J 3x2.5 / H05VV-F 3x1.5 / NHXMH-J 3x1.5 mm ²	SIHF-J 3x1.5 / SIHF-J 3x2.5 / SIHSI 3x1.0 mm ²	No
PTi 70/220...240 I	5 min ²⁾	> 0.5 s	NYM-J 3x1.5 / NYM-J 3x2.5 / H05VV-F 3x1.5 / NHXMH-J 3x1.5 mm ²	SIHF-J 3x1.5 / SIHF-J 3x2.5 / SIHSI 3x1.0 mm ²	No

Product family datasheet

Product description	Overvoltage protection at 320...350 V	ECG reset time	Cable/wire types, input side	Cable/wire types, output side	Dimmable
PTi 150/220...240 I		> 0.5 s	NYM-J 3x1.5 / NYM-J 3x2.5 / H05VV-F 3x1.5 / NHXMH-J 3x1.5 mm ²	SIHF-J 3x1.5 / SIHF-J 3x2.5 / SIHSI 3x1.0 mm ²	No

Product description	Restriction on ignition time	Suitable for fixtures with prot. class
PTi 35/220...240 I	20 min	I
PTi 70/220...240 I	20 min	I
PTi 150/220...240 I	20 min	I

1) Control gear switches off after 40 s

2) Control gear switches off or does not start

Certificates & standards

Product description	Approval marks – approval	Type of protection	EEL – Energy Label	Standards
PTi 35/220...240 I	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/Acc. to EN 62493
PTi 70/220...240 I	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/Acc. to EN 62493
PTi 150/220...240 I	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/Acc. to EN 61347-2-12/Acc. to EN 62493

Logistical data

Product description	Commodity code
PTi 35/220...240 I	850410809000
PTi 70/220...240 I	850410809000
PTi 150/220...240 I	850410809000

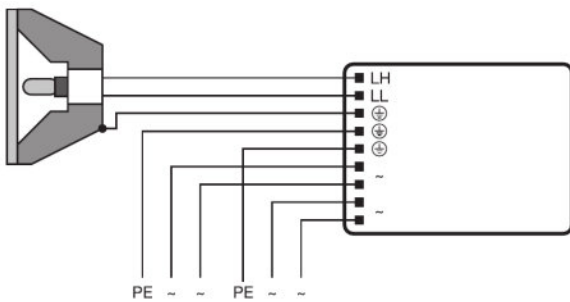
Product family datasheet

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

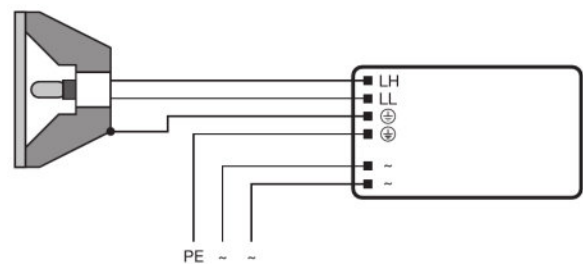
Product description	Date of Declaration	Primary Article Identifier	Candidate List Substance 1
PTi 35/220...240 I	26-05-2023	4008321099488	Lead
PTi 70/220...240 I	26-05-2023	4008321099501	Lead
PTi 150/220...240 I	26-05-2023	4008321915535	Lead

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
PTi 35/220...240 I	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	709dfad4-4aaf-4d2c-8838-d47cc26623dd
PTi 70/220...240 I	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	d9514500-917e-4f5e-b435-5489dcdc9702
PTi 150/220...240 I	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	8ab6db02-47b2-4112-8211-db4ec755751b

Wiring Diagram



PTi 35/220...240 I, PTi 70/220...240 I



PTi 150/220...240 I

Product family 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!

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 I	4008321099488	OSRPTI35I	-	4030180	-
PTi 35/220...240 I	4008321099488	OSRPTI35I	-	4030180	-
PTi 70/220...240 I	4008321099501	OSRPTI70I	-	4030184	-
PTi 70/220...240 I	4008321099501	OSRPTI70I	-	4030184	-

Download Data

File
 User instruction POWERTRONIC PTi I PT FIT I
 Product Datasheet 321405_ATI PTi 35220-240 I (G+GB)
 Tender documents 339884_Tender Document for POWERTRONIC EVG.eng
 Certificates 554891_EAC PT family

Product family datasheet

	Certificates PTO PTi ENEC 40035813 020623
	Declarations of conformity Powertronic UK DoC 4278196 150222
	Declarations of conformity Powertronic CE 3363432 150222
	Declarations of conformity Pti Pto PT-FIT EMC 280722
	Operating instructions 590731_EAC - PTi I PT-FIT I
	CAD data 3-dim 313448_155x83x32 9900003
	CAD data 3-dim 313472_155x83x32 9900003
	CAD data 3-dim 313492_155x83x32 9900003
	CAD data PDF 313385_155x83x32 9900003
	Addon Technical Information 323171_ATi PTi 70220-240 I
	CAD data 3-dim 315659_PTi 100150 I 9900048
	CAD data 3-dim 315660_PTi 100150 I 9900048
	CAD data 3-dim 315661_PTi 100150 I 9900048
	CAD data PDF 315656_PTi 100150 I 9900048

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
4008321099488	PTi 35/220...240 I	Shipping carton box 20	437 mm x 100 mm x 365 mm	15.95 dm ³	6230.00 g

Product family datasheet

Logistical Data

4008321099501	PTi 70/220...240 I	Shipping carton box 20	436 mm x 110 mm x 374 mm	17.94 dm ³	6207.00 g
4008321915535	PTi 150/220...240 I	Shipping carton box 20	488 mm x 100 mm x 453 mm	22.11 dm ³	9440.00 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.