

# PRODUCT DATASHEET PTo 50/220...240 3DIM

POWERTRONIC® OUTDOOR PTo | ECG for HID lamps, for outdoor lighting



#### Areas of application

- Suitable for luminaires of protection classes I and II
- Suitable for outdoor applications in luminaires with IP > 54

#### **Product benefits**

- Energy savings up to 30 % (compared to CCG operation) thanks to 3DIM (except PTo 35)
- High surge protection: up to 3 kV (L-N) / 4 kV (L/N-PE)
- Automatic safety shutdown of lamps in the event of a defect or at end of life (EoL)
- Excellent thermal behavior for very high limit temperatures t  $_{\text{C}}$  and  $_{\text{a}}$

#### **Product features**

- 3DIM functionality (StepDIM/AstroDIM/DALI)
- Energy Efficiency Index EEI: A2
- Lightning protection: up to 10 kV
- Supply voltage: 220...240 V
- Line frequency: 50...60 Hz

- Line harmonics according to EN 61000-3-2
- Immunity according to EN 61547
- RI suppression: to EN 55015
- Safety: to EN 61347-2-12
- Luminous flux factor 1 compared with CCG operation
- Not suitable for DC operation

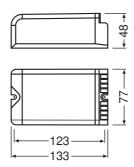
# **TECHNICAL DATA**

# Electrical data

Nominal wattage	55.00 W
Nominal voltage	220240 V
Nominal output voltage	250 V
Input voltage AC	198264 V
U-OUT (working voltage)	250 V
Type of current	AC
Inrush current	35 A
Mains frequency	50/60 Hz
Power factor $\lambda$	0.95 1)
ECG efficiency	91 % <sup>2)</sup>
Max. ECG no. on circuit breaker 10 A (B)	7 3)
Max. ECG no. on circuit breaker 16 A (B)	13 <sup>3)</sup>
Surge capability (L/N-Ground)	4 kV
Surge capability (L-N)	3 kV
Operating frequency	0.165 kHz
Power loss in stand-by mode	< 0.5 W

<sup>1)</sup> Minimum

# **Dimensions & Weight**



Length	133.00 mm
Mounting hole spacing, length	123,0 mm

<sup>2)</sup> Approximately

<sup>3)</sup> Type B

Width	77.00 mm
Height	48.00 mm
Cable cross-section, input side	0,52,5 mm <sup>2</sup>
Cable cross-section, output side	0,52,5 mm <sup>2</sup>
Wire preparation length, input side	1011 mm
Wire preparation length, output side	1011 mm
Product weight	730.00 g

# Colors & materials

Product color	Black
Casing material	Plastic
Body material	Plastic

# Temperatures & operating conditions

Ambient temperature range	-25+55 °C
Maximum temperature at tc test point	75 °C
Max.housing temperature in case of fault	110 °C
Permitted rel. humidity during operation	585 % 1)

<sup>1)</sup> Maximum 56 days/year at 85 %

# Lifespan

ECG lifetime	60000 h <sup>1)</sup>

<sup>1)</sup> At maximum  $T_c$  / 8% failure rate

## Additional product data

Encapsulated Yes <sup>1)</sup>
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<sup>1)</sup> PCB fully encapsulated + dust proof plastic housing

# **Capabilities**

Dimmable	Yes	
Dimming interface	DALI / StepDIM / AstroDIM	
Dimming range	60100 %	
Overheating protection	Power reduction and switch off at T > 75 °C at the tc point	
Max. cable length to lamp/LED module	1,5 m	
Suitable for fixtures with prot. class	1/11	
Suitable for emergency lighting	No	

## Certificates & Standards

Approval marks – approval	ENEC 10 / VDE / VDE-EMC / EAC / C-Tick	
Standards	Acc. to EN 61347-2-12 / Acc. to EN 55015 / Acc. to EN 61000-3-2 / Acc. to EN 61547 / Acc. to EN 62386-101 / Acc. to EN 62386-102 / Acc. to EN 62386-103	
Protection class	l .	
Type of protection	IP20	
Energy efficiency class	A2	
EEI – Energy Label	A2	

## **LOGISTICAL DATA**

Temperature range at storage	-40+85 °C

## 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!

## **ADDITIONAL PRODUCT INFORMATION**

- An external relay connected in front of the SD port is necessary in StepDIM installations. The relay needs to be selected in a way that it is not switched or hold by the occurring leakage currents in the installation.

#### **DOWNLOAD DATA**

	Documents and certificates
PDF	User instruction
PDF	Declarations Of Conformity CE
PDF	Certificates

## **LOGISTICAL DATA**

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4008321956347	Unpacked 1	132 mm x 49 mm x 76 mm	730.00 g	0.49 dm <sup>3</sup>

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4008321956354	Shipping box 20	483 mm x 285 mm x 167 mm	15571.00 g	22.99 dm³

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.