# **TRIDONIC**



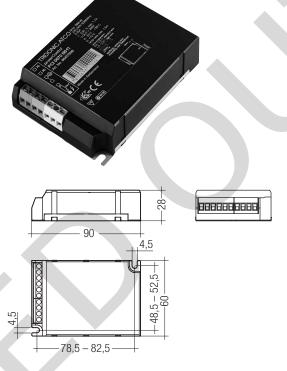


## PCI B011 Single

PCI PRO built-in

### **Product description**

- · For metal halide lamps
- Also for mobile luminaires with connectors
- Pulse packets for increased ignition energy (pulseCONTROL technology)
- · With patented circuit elements
- · Flicker-free light
- · Colour stability thanks to constant power
- · Guaranteed long life
- · No acoustic resonance
- Safety shutdown if a lamp is faulty or missing
- Greatly reduced reignition time
- Hardly any EMC interference in the ignition phase
- Automatic shutdown on overheating
- Lower section of casing made of steel
- Upper section of casing made of Makrolon, VO material, black
- Screw terminals:  $\leq 1.5 \text{ mm}^2$  for stranded wire,
  - $\leq 2.5 \text{ mm}^2 \text{ for solid wire}$



## Ordering data

Туре	Article number	Packaging, carton	Packaging, pallet	Weight per pc.	
For luminaires with 1 lamp					
PCI 0035 B011	86457897	15 pc(s).	600 pc(s).	0.159 kg	
	-				

## Technical data

Mains voltage range	220 – 240 V
AC voltage range	198 – 254 V
DC voltage range	153 – 320 V
Mains frequency	0 / 50 / 60 Hz
Max. ignition voltage	5 kVp
Operating frequency	145 Hz
Type of protection	IP20



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## Specific technical data

Lamp wattage	Lamp type	Туре	Article number	Dimensions L x W x H	Lamp power	Circuit power <sup>①</sup>	EEI	Efficiency		λ at 50 Hz 230 V	Max. cable length to lamp	tc point max.	Ambient temperature ta	tc/ta for ≥ 50,000 h
For lumin	aires wit	h 1 lamp												
1 x 35 W	HI	PCI 0035	<b>B011</b> 86457897	90 x 60 x 28 mm	39 W	44.5 W	A2	> 87 %	0.2 A	0.97	1.5 m / 120 pF	75 °C	-25 +50 °C	75/50 °C

① At ta = 25 °C.

#### Standards

EN 55015 (radio interference) EN 61000-3-2 (mains harmonics) EN 61347-2-12

EN 61547 (interference immunity)

#### Installation instructions

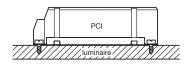
#### Wiring type and cross section

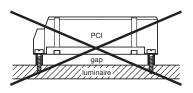
Stranded wire with end ferrule with a cross section of 1.5 mm<sup>2</sup> or solid wire up to 2.5 mm<sup>2</sup> may be used for wiring. Strip 6 mm of insulation from the cables to ensure perfect operation of the screw terminals.

## wire preparation: $0.5 - 2.5 \text{ mm}^{-1}$ 6 mm

#### Mounting recommendation

To ensure optimum heat removal the ECG should be mounted on a metal plate (luminaire body) No insulators between the ECG and the the cooling surface (air, adhesive tape, etc.). Finally important remains the temperature measurement.





If several ballasts are installed in masts, boxes, etc., measures must be taken to avoid overheating of individual components.

## Ballast lumen factor EN 60929 8.1

	AC/DC-BLF
Туре	bei U = 198-254 V, 25 °C
PCI 0035 B011	1.00

## Radio interference

- . Do not cross mains and lamp cables.
- Do not lay mains cables together with lamp cables (ideally they should be 5-10 cm apart).
- · Do not lead mains cables too closely along the electronic ballast.
- Twist lamp cables.
- Increase the distance between lamp cables and earthed metal surfaces.
- . Keep the mains cable in the luminaire short.
- Parallel runs (x) of mains and lamp cables must be kept as short as possible.

#### Important advise

When a lamp is changed (at the end of its life), if a lamp is missing or after overtemperature shutdown the mains voltage of the ECG must be disconnected.

Warning - starting voltage up to max. 5 kV! Not suitable for use with lamps with integral ignitors.

## Note on wiring

The length of the lamp wires is limited by the value of cable capacitance. The maximum of 120 pF would enable connection of approximately 1.5 metres of lamp wire.

In class 1 luminaires it is necessary to earth the ballast and the luminaire via the earth terminal, in class 2 luminaires not.

To avoid the damage of the control gear, the wiring must be protected against short circuits to earth (sharp edged metal parts, metal cable clips, louver, etc.).

## Safety switch off

#### End of life of the lamps

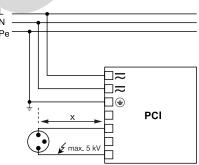
At the end of their useful life, lamps often cycle on/ off. The PCI ballast recognises this condition and switches off the lamp, after three complete on/ off cycles and whilst the supply has been unswitched. Complete lamp switch off enables easy identification of a defective lamp in the application. After a change of the faulty lamp and an interruption of the mains supply (mains reset) the ballast will strike the lamp. When there is no lamp in circuit or a defective lamp is connected to the ballast, the ballast will switch off after apr. 25 minutes (3.5 minutes of ignition time).

#### Overtemperature shutdown

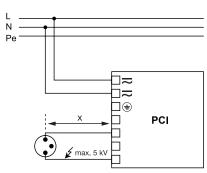
The units shut down at  $\Delta t$  approx. +10 °C compared with tc/ta. A mains reset must be carried out so that the units switch on again.

#### Overload strength

320 Vac / 1 h



Circuit diagram PCI class 1 application



Circuit diagram PCI class 2 application

Harmonic distortion in the mains supply

Туре	THD	3	5	7	9	11
PCI 0035 B011	7.2	3.9	3.8	2.4	3.0	1.7

## Loading of automatic circuit breakers

Automatic circuit breaker type	C10	C13	C16	C20	B10	B13	B16	B20
Installation Ø	$1.5\mathrm{mm}^2$	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>
PCI 0035 B011	30	40	50	60	15	20	25	30