



PCI MINI Q211 Single

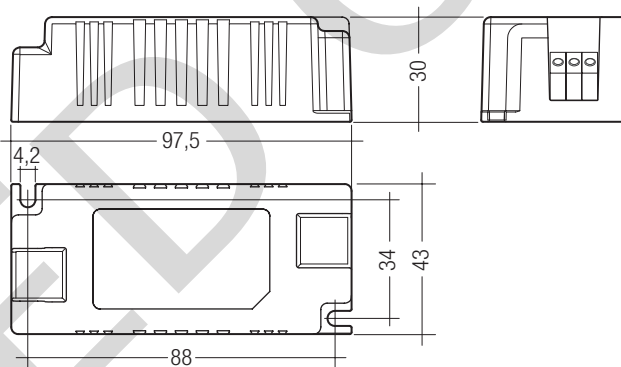
PCI PRO built-in

Product description

- For metal halide lamps
- Also for mobile luminaires with connectors
- Flicker-free light
- Colour stability thanks to constant power
- No acoustic resonance
- Safety shutdown if a lamp is faulty or missing
- Automatic shutdown on overheating
- Push-in terminals up to 1.5 mm²
- Casing: polycarbonate V0, black

Technical data

Mains voltage range	220 – 240 V
AC voltage range	198 – 254 V
Mains frequency	50 / 60 Hz
Max. ignition voltage	5 kVp
Operating frequency	104 Hz
Type of protection	IP20



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Ordering data

Type	Article number	Packaging, carton	Packaging, pallet	Packaging, pallet 1 (shipping quantity)	Weight per pcs.
For luminaires with 1 lamp					
PCI 20 MINI Q211	24166386	40 pc./pcs.	560 pc./pcs.	2,800 pc./pcs.	0.105 kg

Specific technical data

Lamp wattage	Lamp type	Type	Article number	Dimensions L x W x H	Lamp power	Circuit power [Ⓞ]	EI	Efficiency	Current at 50 Hz 230 V	λ at 50 Hz 230 V	Max. cable length to lamp	tc point max.	Ambient temperature ta	tc/ta for ≥ 50,000 h
1 x 20 W	HI	PCI 20 MINI Q211	24166386	97.5 x 43 x 30 mm	20 W	22.4 W	A2	> 88 %	0.1 A	0.97	1.5 m / 120 pF	70 °C	-20 ... +50 °C	70/50 °C

[Ⓞ] At ta = 25 °C.

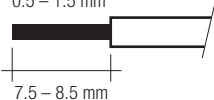
Installation instructions

Wiring type and cross section

Stranded wire or solid wire up to 2.5 mm² may be used for wiring. Strip 7.5–8.5 mm of insulation from the cables to ensure perfect operation of the push-in terminals.

Use one wire for each terminal connector only.

wire preparation:
0.5 – 1.5 mm²

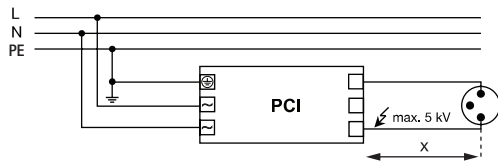


Note on wiring

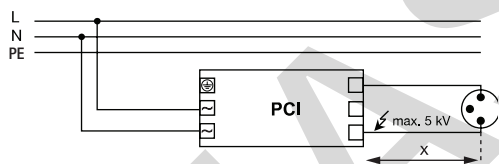
The length of the lamp wires is limited by the value of cable capacitance. The maximum of 120 pF would enable connection of approximately 1.5 m of lamp wire.

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.).

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



Circuit diagram PCI class 1 application



Circuit diagram PCI class 2 application

Mounting recommendation

Optimum heat transport can help improving the lifetime. Whenever possible keep the ballast away from hot parts.

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

Loading of automatic circuit breakers

Automatic circuit breaker type	C10	C13	C16	C20	B10	B13	B16	B20
Installation Ø	1.5 mm ²	1.5 mm ²	1.5 mm ²	2.5 mm ²	1.5 mm ²	1.5 mm ²	1.5 mm ²	2.5 mm ²
PCI 20 MINI Q221	26	36	48	60	13	18	24	30

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 over-temperature 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.

A list of released lamps for the save operation with PCI can be found on www.tridonic.com → Techn. Data → Lamp matrix → Lamp Matrix for HID

Overtemperature shutdown

The units shut down at Δt approx. $\geq +7^\circ\text{C}$ compared with t_c . A mains reset must be carried out so that the units switch on again.

Overload strength

320 V_{AC} / 1 h

280 V_{AC} / 10 h

Harmonic distortion in the mains supply

Type	THD at 230 V/50 Hz
PCI 20 MINI Q221	< 10 %

Ballast lumen factor EN 60929 8.1

Type	AC/DC-BLF at U = 198–254 V, 25 °C
PCI 20 MINI Q221	1.00

Standards

- EN 55015 (radio interference)
- EN 61000-3-2 (mains harmonics)
- EN 61347-2-12
- EN 61547 (interference immunity)
- EN 61167
- C-tick EMC

Glow-wire test according to EN 60598-1

850 °C passed