



## PCI MINI Q221 Single

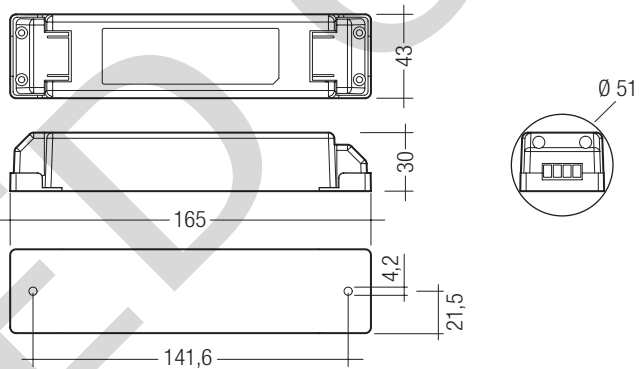
PCI PRO independent

### 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
- Through wiring possible
- Push-in terminals up to 2.5 mm<sup>2</sup>
- 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 pc.
<b>For luminaires with 1 lamp</b>					
PCI 20 MINI Q221	24166388	40 pc(s).	320 pc(s).	1,600 pc(s).	0.138 kg

### Specific technical data

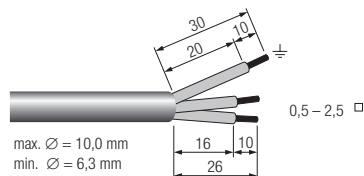
Lamp wattage	Lamp type	Type	Article number	Dimensions L x W x H	Lamp power	Circuit power <sup>①</sup>	EEL	Efficiency	Current at 50 Hz 230 V	λ at 50 Hz 230 V	Max. cable length to lamp	tc point max.	Ambient temperature ta	tc/ta for ≥ 50,000 h
1 x 20 W	Hi	PCI 20 MINI Q221	24166388	165 x 43 x 30 mm	20 W	22.4 W	A2	> 88 %	0.1 A	0.97	1.5 m / 120 pF	70 °C	-20 ... +50 °C	70/50 °C

① At ta = 25 °C.

## Installation instructions

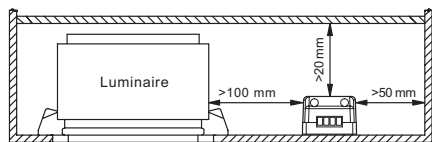
### Wiring type and cross section

Stranded wire or solid wire up to 2.5 mm<sup>2</sup> may be used for wiring. Strip 9–10 mm of insulation from the cables to ensure perfect operation of the terminals. Use one wire for each terminal connector only.



### Fixing conditions

Dry, acidfree, oilfree, fatfree. The maximum ambient temperature has not been exceeded. Is not suitable for fixing in corner. Keep the ballast away from hot parts. It helps increasing the lifetime of the ballast.



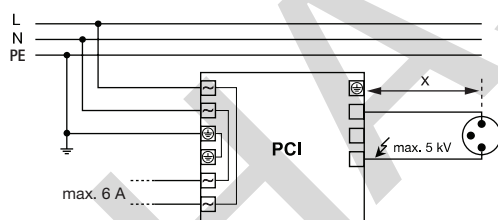
If several ballasts are installed in masts, boxes, etc., measures must be taken to avoid overheating of individual components. To prevent the use of a wrong lamp type we recommend to mark the luminaire with the correct lamp type that fits to the ballast.

### Note on wiring

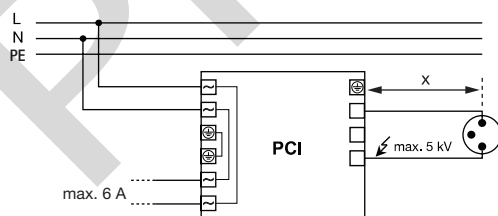
The length of the lamp wires is limited by the value of cable capacitance. The maximum of 120 pF would enable connection of approximately 1.5 metres of lamp wire.

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

The current of the through wiring is limited by 6 A.



Circuit diagram PCI class 1 application



Circuit diagram PCI class 2 application

### Loading of automatic circuit breakers

Automatic circuit breaker type	C10	C13	C16	C20	B10	B13	B16	B20
Installation Ø	1.5 mm <sup>2</sup>	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 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 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 safe operation with PCI can be found on [www.tridonic.com](http://www.tridonic.com) → Technical Data → Lamp matrix → Lamp Matrix for HID

### Overtemperature shutdown

The units shut down at  $\Delta t$  approx.  $\geq +7$  °C compared with tc. A mains reset must be carried out so that the units switch on again.

### Overload strength

320 V<sub>AC</sub> / 1 h  
280 V<sub>AC</sub> / 10 h

### Harmonic distortion in the mains supply

Type	THD at 230V/50Hz
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