

PC TC PRO 1/2x9 – 70 W

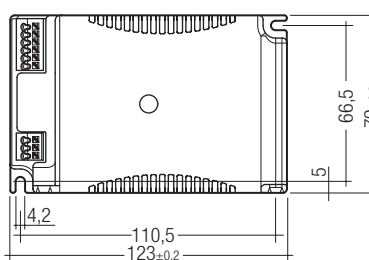
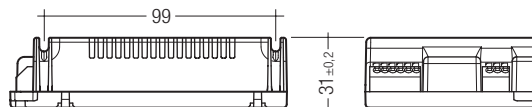
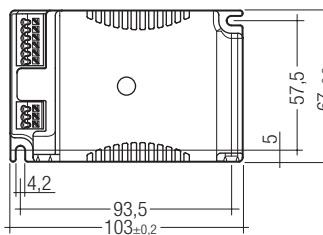
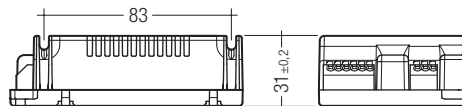
PC PRO compact

Product description

- CELMA Energy Efficiency Index A2 BAT / A2
- Nominal life-time up to 100,000 h (at ta 50 °C with a failure rate max. 0.2 % per 1,000 h)
- Large temperature range (for values see table)
- Devices can operate either 1 or 2 lamps
- Intelligent Voltage Guard (overvoltage indication and undervoltage shutdown)
- Constant luminous flux irrespective of fluctuations in mains voltage
- For luminaires of protection class I and protection class II
- Automatic start after replacement of defective lamps
- Safety shutdown of defective lamps and at end of lamp life (EOL 2)
- For emergency lighting systems as per EN 50172
- For luminaires with M and MM as per EN 60598, VDE 0710 and VDE 0711
- Temperature protection as per EN 61347-2-3 C5e

Technical data

| | |
|------------------------|--|
| Mains voltage range | 220 – 240 V |
| AC voltage range | 198 – 264 V |
| DC voltage range | 176 – 280 V (Lamp start \geq 198 V DC) |
| Mains frequency | 0 / 50 / 60 Hz |
| Overvoltage protection | 320 V AC, 1 h |
| Defined warm start | \leq 1.6 s |
| Operating frequency | \geq 40 kHz |
| Type of protection | IP20 |



Standards, page 3

Wiring diagrams and installation examples, page 8

Ordering data

| Type | Article number | Packaging carton | Packaging pallet | Weight per pc. |
|---|----------------|------------------|------------------|----------------|
| For luminaires with 1 lamp | | | | |
| PC 1x57/70 TC PRO | 22176409 | 10 pc(s). | 500 pc(s). | 0.170 kg |
| For luminaires with 1 or 2 lamps | | | | |
| PC 1/2x9–13 TC PRO | 22176405 | 15 pc(s). | 750 pc(s). | 0.130 kg |
| PC 1/2x11–17 TC PRO | 22176406 | 15 pc(s). | 750 pc(s). | 0.129 kg |
| PC 1/2x18 TC PRO | 22176407 | 15 pc(s). | 750 pc(s). | 0.130 kg |
| PC 1/2x26–42 TC PRO | 22176408 | 15 pc(s). | 750 pc(s). | 0.130 kg |
| For luminaires with 2 lamps | | | | |
| PC 2x26–42 TC PRO | 22176410 | 10 pc(s). | 500 pc(s). | 0.168 kg |

Standards

EN 55015
EN 60929
EN 61000-3-2
EN 61347-2-3
EN 61347-2-4
EN 61547
according to EN 50172

Lamp starting characteristics

Warm start
Starting time ≤ 1.6 s with AC and DC operation
Cathode heating will be reduced after preheat time

AC operation

Mains voltage:
220–240 V 50/60 Hz
198–264 V 50/60 Hz including safety tolerance (± 10 %)
202–254 V 50/60 Hz including performance tolerance (+6 % / -8 %)

DC operation

Mains voltage:
220–240 V 0 Hz
198–280 V 0 Hz certain lamp start
176–280 V 0 Hz operating range
Light output level in DC operation: 100 %

Emergency lighting

Use in emergency lighting installations according to EN 50172 or for emergency luminaires according to EN 61347-2-3 appendix J.

Instant start after mains interruption < 0.5 s
EBLF = 1.00

Mains current for defective or missing lamps at DC operation < 10 mA.

Intelligent Voltage Guard

Intelligent Voltage Guard is the name of an electronic monitor from Tridonic. This innovative feature of the PC PRO family of control gear from Tridonic immediately shows if the mains voltage rises above or falls below certain thresholds. Measures can then be taken quickly to prevent damage to the control gear.

- If the mains voltage rises above ≥ 306 V the lamps flash.
- This signal "demands" disconnection of the power supply to the lighting system.
- If the mains voltage falls below 150 V the control gear automatically disconnects the lamp circuit (light off) to protect the control gear from being irreparably damaged.

Smart Heating

PC PRO with smart heating ignition technology optimises lamp start and ensures no energy is wasted. After the lamp has struck the filament heating is reduced automatically to a defined minimum value. This reduction in filament heating, saves energy, yet maintains the proper operating conditions for the lamp. The lamp is always operated within specification.

Mains current in DC operation

| Type | Lamp type | Wattage | Mains current at | |
|---------------------|-----------|---------|--------------------|--------------------|
| | | | $U_n = 220 V_{DC}$ | $U_n = 240 V_{DC}$ |
| PC 1x57/70 TC PRO | TC-TEL | 1x57 W | 272 mA | 250 mA |
| | TC-TEL | 1x70 W | 334 mA | 306 mA |
| | TC-DEL | 1x10 W | 55 mA | 51 mA |
| | TC-DEL | 2x10 W | 99 mA | 91 mA |
| | TC-DEL | 1x13 W | 73 mA | 67 mA |
| PC 1/2x9–13 TC PRO | TC-DEL | 2x13 W | 139 mA | 127 mA |
| | TC-SEL | 1x9 W | 50 mA | 46 mA |
| | TC-SEL | 2x9 W | 90 mA | 82 mA |
| | TC-SEL | 1x11 W | 68 mA | 62 mA |
| | TC-SEL | 2x11 W | 129 mA | 118 mA |
| | TC-TEL | 1x13 W | 70 mA | 64 mA |
| | TC-TEL | 2x13 W | 130 mA | 119 mA |
| | TC-TEL HE | 1x11 W | 66 mA | 61 mA |
| | TC-TEL HE | 2x11 W | 127 mA | 116 mA |
| | TC-TEL HE | 1x14 W | 80 mA | 74 mA |
| PC 1/2x11–17 TC PRO | TC-TEL HE | 2x14 W | 157 mA | 144 mA |
| | TC-TEL HE | 1x17 W | 94 mA | 86 mA |
| | TC-TEL HE | 2x17 W | 186 mA | 171 mA |
| | TC-DEL | 1x18 W | 90 mA | 82 mA |
| | TC-DEL | 2x18 W | 170 mA | 156 mA |
| PC 1/2x18 TC PRO | TC-TEL | 1x18 W | 90 mA | 83 mA |
| | TC-TEL | 2x18 W | 174 mA | 159 mA |
| | T5c | 1x22 W | 117 mA | 107 mA |
| PC 1/2x26–42 TC PRO | T5c | 2x22 W | 225 mA | 206 mA |
| | T5c | 1x40 W | 189 mA | 173 mA |
| | TC-DEL | 1x26 W | 125 mA | 114 mA |
| | TC-DEL | 2x26 W | 242 mA | 222 mA |
| | TC-F | 1x18 W | 77 mA | 71 mA |
| | TC-F | 2x18 W | 142 mA | 130 mA |
| | TC-F | 1x24 W | 106 mA | 97 mA |
| | TC-F | 2x24 W | 211 mA | 193 mA |
| | TC-L | 1x18 W | 83 mA | 76 mA |
| | TC-L | 2x18 W | 155 mA | 142 mA |
| | TC-L | 1x24 W | 114 mA | 104 mA |
| | TC-L | 2x24 W | 223 mA | 204 mA |
| | TC-TEL | 1x26 W | 125 mA | 115 mA |
| | TC-TEL | 2x26 W | 243 mA | 223 mA |
| | TC-TEL | 1x32 W | 157 mA | 144 mA |
| PC 2x26–42 TC PRO | TC-TEL | 1x42 W | 198 mA | 181 mA |
| | T5c | 2x22 W | 237 mA | 218 mA |
| | T5c | 22+40 W | 309 mA | 283 mA |
| | T5c | 2x40 W | 370 mA | 339 mA |
| | TC-DEL | 2x26 W | 263 mA | 241 mA |
| | TC-F | 2x18 W | 151 mA | 138 mA |
| | TC-F | 2x24 W | 216 mA | 198 mA |
| | TC-L | 2x18 W | 161 mA | 148 mA |
| | TC-L | 2x24 W | 239 mA | 219 mA |
| | TC-TEL | 2x26 W | 259 mA | 237 mA |
| TC-TEL | 2x32 W | 329 mA | 302 mA | |
| TC-TEL | 2x42 W | 417 mA | 382 mA | |

Harmonic distortion in the mains supply

| Type | Lamp type | Wattage | THD at 230V/50Hz |
|----------------------------|-----------|---------|---------------------|
| PC 1x57/70 TC PRO | TC-TEL | 1x57W | < 10% |
| | TC-TEL | 1x70W | < 10% |
| | TC-DEL | 1x10W | < 17% |
| | TC-DEL | 2x10W | < 12% |
| PC 1/2x9–13 TC PRO | TC-DEL | 1x13W | < 15% |
| | TC-DEL | 2x13W | < 10% |
| | TC-SEL | 1x9W | < 17% |
| | TC-SEL | 2x9W | < 12% |
| | TC-SEL | 1x11W | < 12% |
| | TC-SEL | 2x11W | < 10% |
| | TC-TEL | 1x13W | < 15% |
| PC 1/2x11–17 TC PRO | TC-TEL | 2x13W | < 10% |
| | TC-TEL HE | 1x11W | < 15% |
| | TC-TEL HE | 2x11W | < 10% |
| | TC-TEL HE | 1x14W | < 12% |
| | TC-TEL HE | 2x14W | < 10% |
| | TC-TEL HE | 1x17W | < 12% |
| PC 1/2x18 TC PRO | TC-TEL HE | 2x17W | < 10% |
| | TC-DEL | 1x18W | < 15% |
| | TC-DEL | 2x18W | < 10% |
| | TC-TEL | 1x18W | < 15% |
| PC 1/2x26–42 TC PRO | TC-TEL | 2x18W | < 10% |
| | T5c | 1x22W | < 12% |
| | T5c | 2x22W | < 10% |
| | T5c | 1x40W | < 10% |
| | TC-DEL | 1x26W | < 12% |
| | TC-DEL | 2x26W | < 10% |
| | TC-F | 1x18W | < 17% |
| | TC-F | 2x18W | < 10% |
| | TC-F | 1x24W | < 12% |
| | TC-F | 2x24W | < 10% |
| PC 1/2x26–42 TC PRO | TC-L | 1x18W | < 17% |
| | TC-L | 2x18W | < 10% |
| | TC-L | 1x24W | < 12% |
| | TC-L | 2x24W | < 10% |
| | TC-TEL | 1x26W | < 12% |
| | TC-TEL | 2x26W | < 10% |
| | TC-TEL | 1x32W | < 10% |
| | TC-TEL | 1x42W | < 10% |
| | T5c | 2x22W | < 12% |
| | T5c | 22+40W | < 10% |
| PC 2x26–42 TC PRO | T5c | 2x40W | < 10% |
| | TC-DEL | 2x26W | < 12% |
| | TC-F | 2x18W | < 15% |
| | TC-F | 2x24W | < 12% |
| | TC-L | 2x18W | < 15% |
| | TC-L | 2x24W | < 12% |
| | TC-TEL | 2x26W | < 12% |
| | TC-TEL | 2x32W | < 10% |
| | TC-TEL | 2x42W | < 10% |

Output voltage

| Type | Lamp type | Wattage | U _{out} |
|----------------------------|-----------|---------|------------------|
| PC 1x57/70 TC PRO | TC-TEL | 1x57W | 400V |
| | TC-TEL | 1x70W | 400V |
| | TC-DEL | 1x10W | 300V |
| | TC-DEL | 2x10W | 300V |
| PC 1/2x9–13 TC PRO | TC-DEL | 1x13W | 300V |
| | TC-DEL | 2x13W | 300V |
| | TC-SEL | 1x9W | 300V |
| | TC-SEL | 2x9W | 300V |
| | TC-SEL | 1x11W | 300V |
| | TC-SEL | 2x11W | 300V |
| | TC-TEL | 1x13W | 300V |
| PC 1/2x11–17 TC PRO | TC-TEL | 2x13W | 300V |
| | TC-TEL HE | 1x11W | 400V |
| | TC-TEL HE | 2x11W | 400V |
| | TC-TEL HE | 1x14W | 400V |
| | TC-TEL HE | 2x14W | 400V |
| | TC-TEL HE | 1x17W | 400V |
| PC 1/2x18 TC PRO | TC-TEL HE | 2x17W | 400V |
| | TC-DEL | 1x18W | 250V |
| | TC-DEL | 2x18W | 250V |
| | TC-TEL | 1x18W | 250V |
| PC 1/2x26–42 TC PRO | TC-TEL | 2x18W | 250V |
| | T5c | 1x22W | 300V |
| | T5c | 2x22W | 300V |
| | T5c | 1x40W | 300V |
| | TC-DEL | 1x26W | 300V |
| | TC-DEL | 2x26W | 300V |
| | TC-F | 1x18W | 300V |
| | TC-F | 2x18W | 300V |
| | TC-F | 1x24W | 300V |
| | TC-F | 2x24W | 300V |
| PC 1/2x26–42 TC PRO | TC-L | 1x18W | 300V |
| | TC-L | 2x18W | 300V |
| | TC-L | 1x24W | 300V |
| | TC-L | 2x24W | 300V |
| | TC-TEL | 1x26W | 300V |
| | TC-TEL | 2x26W | 300V |
| | TC-TEL | 1x32W | 300V |
| | TC-TEL | 1x42W | 300V |
| | T5c | 2x22W | 300V |
| | T5c | 22+40W | 300V |
| PC 2x26–42 TC PRO | T5c | 2x40W | 300V |
| | TC-DEL | 2x26W | 300V |
| | TC-F | 2x18W | 300V |
| | TC-F | 2x24W | 300V |
| | TC-L | 2x18W | 300V |
| | TC-L | 2x24W | 300V |
| | TC-TEL | 2x26W | 300V |
| | TC-TEL | 2x32W | 300V |
| | TC-TEL | 2x42W | 300V |

Ballast lumen factor (EN 60929 8.1)

| Type | Lamp type | Wattage | AC/DC-BLF at U = 198–254V, 25 °C |
|---------------------|-----------|---------|-------------------------------------|
| PC 1x57/70 TC PRO | TC-TEL | 1x57W | 1.00 |
| | TC-TEL | 1x70W | 0.98 |
| | TC-DEL | 1x10W | 0.98 |
| | TC-DEL | 2x10W | 1.02 |
| | TC-DEL | 1x13W | 1.05 |
| PC 1/2x9–13 TC PRO | TC-DEL | 2x13W | 1.09 |
| | TC-SEL | 1x9W | 1.02 |
| | TC-SEL | 2x9W | 1.05 |
| | TC-SEL | 1x11W | 1.10 |
| | TC-SEL | 2x11W | 1.10 |
| | TC-TEL | 1x13W | 1.05 |
| PC 1/2x11–17 TC PRO | TC-TEL HE | 2x13W | 1.08 |
| | TC-TEL HE | 1x11W | 1.01 |
| | TC-TEL HE | 2x11W | 1.03 |
| | TC-TEL HE | 1x14W | 1.01 |
| | TC-TEL HE | 2x14W | 1.04 |
| PC 1/2x18 TC PRO | TC-TEL HE | 1x17W | 1.01 |
| | TC-TEL HE | 2x17W | 1.03 |
| | TC-DEL | 1x18W | 1.03 |
| | TC-DEL | 2x18W | 1.06 |
| | TC-TEL | 1x18W | 1.02 |
| PC 1/2x26–42 TC PRO | TC-TEL | 2x18W | 1.04 |
| | T5c | 1x22W | 1.00 |
| | T5c | 2x22W | 1.03 |
| | T5c | 1x40W | 1.01 |
| | TC-DEL | 1x26W | 1.02 |
| | TC-DEL | 2x26W | 1.08 |
| | TC-F | 1x18W | 0.94 |
| | TC-F | 2x18W | 0.98 |
| | TC-F | 1x24W | 1.01 |
| | TC-F | 2x24W | 1.05 |
| PC 2x26–42 TC PRO | TC-L | 1x18W | 0.94 |
| | TC-L | 2x18W | 1.01 |
| | TC-L | 1x24W | 1.01 |
| | TC-L | 2x24W | 1.06 |
| | TC-TEL | 1x26W | 1.00 |
| | TC-TEL | 2x26W | 1.04 |
| | TC-TEL | 1x32W | 0.98 |
| | TC-TEL | 1x42W | 0.99 |
| | T5c | 2x22W | 1.04 |
| | T5c | 22+40W | 1.07 |
| PC 2x26–42 TC PRO | T5c | 2x40W | 1.00 |
| | TC-DEL | 2x26W | 1.08 |
| | TC-F | 2x18W | 0.99 |
| | TC-F | 2x24W | 1.06 |
| | TC-L | 2x18W | 0.98 |
| | TC-L | 2x24W | 1.08 |
| | TC-TEL | 2x26W | 1.08 |
| PC 2x26–42 TC PRO | TC-TEL | 2x32W | 1.01 |
| | TC-TEL | 2x42W | 1.01 |

PC PRO with xitec processor

The very latest in lighting management design technology. The lamp friendly warm start is delivering maximum lamp life and enables many frequency applications. Smallest power loss and new freedom in the lamp design thanks to convincing thermal management.

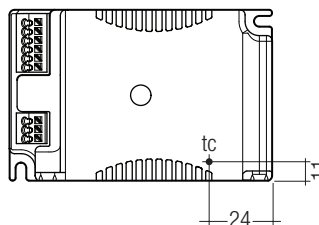
Energy class: CELMA EEI = A2 BAT / A2¹⁾

Maximum energy efficiency:

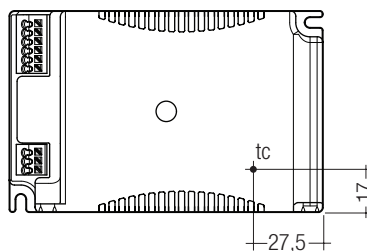
Right from the early stages in the development of xitec technology the focus has always been on achieving maximum energy efficiency. In conjunction with Smart Heating Technology, PC TC PRO is rated in the best possible efficiency class of A2 BAT that CELMA provides for ballasts with a constant luminous flux.

¹⁾ according to the EU directives on ecodesign requirements (EC) No. 245/2009 and (EC) No. 347/2010

Temperature range



PC TC PRO, L = 103 mm



PC TC PRO, L = 123 mm

The ballast life duration is related to the ambient temperature t_a . The relation of t_c to t_a temperature depends also on the luminaire design. If the measured t_c temperature is approx. 5 K below t_c max. or higher, t_a temperature should be checked and eventually critical components (e.g. ELCAP) measured. Detailed information on request.

PC TC PRO is designed for an average life-time of 100,000 (at t_a for ≥ 50.000 h) hours under reference conditions and with a failure probability of less than 10 %. This corresponds to an average failure rate of 0.2 % for every 1,000 hours of operation.

Humidity: 5 % up to max. 85 %, not condensed (max. 56 days/year at 85 %)

Storage temperature: -40 °C up to max. +80 °C

The devices have to be within the specified temperature range (t_a) before they can be operated.

Expected life-time

| Type | Lamp type | Lamp power | | ta = 40 °C | ta = 50 °C | ta = 55 °C | ta = 60 °C | ta = 65 °C | ta = 70 °C | ta = 75 °C | | | |
|------------------------|---|--|------------------|---------------------|----------------------------|------------|------------|------------|------------|------------|---------|---------|---------|
| PC 1x57/70 TC PRO | TC-TEL | 1x57 W | tc | 50 °C | 60 °C | 65 °C | 70 °C | 75 °C | x | x | | | |
| | | | Life-time | > 100,000h | 90,000h | 70,000h | 50,000h | 35,000h | x | x | | | |
| | TC-TEL | 1x70 W | tc | 50 °C | 60 °C | 65 °C | 70 °C | 75 °C | x | x | | | |
| | | | Life-time | > 100,000h | 65,000h | 50,000h | 35,000h | 25,000h | x | x | | | |
| PC 1/2x9–13 TC PRO | TC-SEL TC-DEL | 1x9 W 1x10 W | TC-SEL | 45 °C | 55 °C | 60 °C | 65 °C | 70 °C | 75 °C | x | | | |
| | | | | Life-time | > 100,000h | > 100,000h | > 100,000h | 95,000h | 65,000h | 45,000h | x | | |
| | TC-SEL TC-DEL | 2x9 W 2x10 W | TC-SEL | 45 °C | 55 °C | 60 °C | 65 °C | 70 °C | 75 °C | x | | | |
| | | | | Life-time | > 100,000h | > 100,000h | > 100,000h | 85,000h | 50,000h | 35,000h | x | | |
| | TC-SEL TC-DEL | 1x13 W 1x13 W | TC-SEL | 50 °C | 60 °C | 65 °C | 70 °C | 75 °C | x | x | | | |
| | | | | Life-time | > 100,000h | > 100,000h | 100,000h | 70,000h | 45,000h | x | x | | |
| | PC 1/2x11–17 TC PRO | TC-TEL HE TC-TEL HE | 1x11 W 1x14 W | TC-TEL HE | 50 °C | 60 °C | 65 °C | 70 °C | 75 °C | 80 °C | x | | |
| | | | | | Life-time | > 100,000h | > 100,000h | > 100,000h | 75,000h | 50,000h | 35,000h | x | |
| TC-TEL HE TC-TEL HE | | 2x11 W 2x14 W | TC-TEL HE | 55 °C | 65 °C | 60 °C | 75 °C | x | x | x | | | |
| | | | | Life-time | > 100,000h | > 100,000h | 95,000h | 50,000h | x | x | x | | |
| PC 1/2x18 TC PRO | | TC-DEL TC-TEL | 1x18 W 1x18 W | TC-DEL | 45 °C | 55 °C | 60 °C | 65 °C | 70 °C | 75 °C | x | | |
| | | | | | Life-time | > 100,000h | > 100,000h | > 100,000h | 90,000h | 70,000h | 50,000h | x | |
| | TC-DEL TC-TEL | 2x18 W 2x18 W | TC-DEL | 50 °C | 60 °C | 65 °C | 70 °C | 75 °C | x | x | | | |
| | | | | Life-time | > 100,000h | > 100,000h | 75,000h | 60,000h | 45,000h | x | x | | |
| PC 1/2x26–42 TC PRO | T5c TC-DEL TC-F TC-F TC-L TC-L TC-TEL | 1x22 W 1x26 W 1x18 W 1x24 W 1x18 W 1x24 W 1x26 W | tc | 50 °C | 60 °C | 65 °C | 70 °C | 75 °C | x | x | | | |
| | | | | Life-time | > 100,000h | > 100,000h | 90,000h | 65,000h | 45,000h | x | x | | |
| | | | | T5c TC-F TC-L | 1x40 W 2x18 W 2x18 W | tc | 50 °C | 60 °C | 65 °C | 70 °C | 75 °C | x | x |
| | | | | | | | Life-time | > 100,000h | > 100,000h | 75,000h | 55,000h | 40,000h | x |
| | T5c TC-DEL TC-F TC-L TC-TEL | 2x22 W 2x26 W 2x24 W 2x24 W 2x26 W | tc | 60 °C | 65 °C | 70 °C | 75 °C | x | x | x | | | |
| | | | | Life-time | > 100,000h | 85,000h | 60,000h | 45,000h | x | x | x | | |
| | | | | TC-F TC-L | 2x18 W 2x18 W | tc | 45 °C | 55 °C | 60 °C | 65 °C | 70 °C | 75 °C | 80 °C |
| | | | | | | | Life-time | > 100,000h | > 100,000h | > 100,000h | 95,000h | 70,000h | 50,000h |
| | TC-F TC-DEL TC-F TC-L TC-TEL | 2x22 W 2x26 W 2x24 W 2x24 W 2x26 W | tc | 50 °C | 60 °C | 65 °C | 70 °C | 75 °C | x | x | | | |
| | | | | Life-time | > 100,000h | > 100,000h | > 100,000h | 75,000h | 50,000h | x | x | | |
| | | | | T5c T5c | 22+40 W 2x40 W | tc | 55 °C | 65 °C | 70 °C | x | x | x | x |
| | | | | | | | Life-time | > 100,000h | 90,000h | 60,000h | x | x | x |

x = not permitted

Maximum loading of automatic circuit breakers

| Automatic circuit | C10 | C13 | C16 | C20 | B10 | B13 | B16 | B20 | Inrush current | |
|----------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------------|--------|
| Installation cross section | 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 | I _{max} | time |
| PC 1x57–70 TC PRO | 24 | 31 | 39 | 49 | 12 | 17 | 24 | 27 | 23.4 A | 238 μs |
| PC 1/2x9–13 TC PRO | 40 | 68 | 105 | 132 | 20 | 34 | 68 | 70 | 15.7 A | 236 μs |
| PC 1/2x11–17 TC PRO | 22 | 32 | 44 | 50 | 11 | 16 | 22 | 25 | 22.3 A | 255 μs |
| PC 1/2x18 TC PRO | 46 | 60 | 74 | 93 | 24 | 36 | 74 | 80 | 13.0 A | 200 μs |
| PC 1/2x26–42 TC PRO | 24 | 38 | 52 | 66 | 12 | 19 | 31 | 33 | 23.5 A | 245 μs |
| PC 2x26–42 TC PRO | 14 | 20 | 24 | 30 | 7 | 10 | 12 | 15 | 37.1 A | 205 μs |

Wiring advice

The lead length is dependant on the capacitance of the cable.

With standard solid wire 0.5/0.75 mm² the capacitance of the lead is 30–80 pF/m. This value is influenced by the way the wiring is made. Lamp connection should be made with symmetrical wiring.

| Ballast Type | Terminal | Maximum capacitance allowed | | | |
|---------------|----------|-----------------------------|------|--------|--------|
| | | Cold | Hot | Cold | Hot |
| PC 1xx TC PRO | | 4, 5 | 8, 9 | 200 pF | 100 pF |
| PC 2xx TC PRO | | 4, 5, 6, 7 | 8, 9 | 200 pF | 100 pF |

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.)

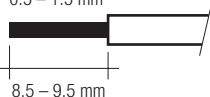
Installation instructions

Wiring type and cross section

The wiring can be in stranded wires with ferrules or solid with a cross section of 0.5–1.5 mm².

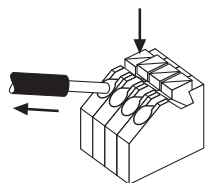
Strip 9.5 mm of insulation from the cables to ensure perfect operation of the push-wire terminals.

wire preparation:
0.5 – 1.5 mm²



Release of the wiring

Press down the "push button" and remove the cable from front.



Mounting of device

Max. torque for fixing: 0.5 Nm/M4

RFI

- Connection to the lamps of the "hot leads" must be kept as short as possible
- Mains leads should be kept apart from lamp leads
- Do not run mains leads adjacent to the electronic ballast
- Twist the lamp leads
- Keep the distance of lamp leads from the metal work as large as possible
- Ballast must be earthed
- Keep the mains leads inside the luminaire as short as possible

Defective lamp

If a lamp is defective, the ballast switches off and goes into standby. Switch off tested according to EN 61347-2-3 17.3 (EoL-Test 2). There is an automatic restart once the lamp has been changed.

Isolation and electric strength testing of luminaires

Electronic devices can be damaged by high voltage. This has to be considered during the routine testing of the luminaires in production.

According to IEC 60598-1 Annex Q (informative only) or ENEC 303-Annex A, each luminaire should be submitted to an isolation test with 500 V_{DC} for 1 second. This test voltage should be connected between the interconnected phase and neutral terminals and the earth terminal.

The isolation resistance must be at least 2 MΩ.

As an alternative, IEC 60598-1 Annex Q describes a test of the electrical strength with 1500 V_{AC} (or 1.414 x 1500 V_{DC}). To avoid damage to the electronic devices this test must not be conducted.

Glow-wire test

according to EN 61347-1 with increased temperature of 850 °C passed.

Additional information

Additional technical information at www.tridonic.com → Technical Data

Guarantee conditions at www.tridonic.com → Services

No warranty if device was opened.

Accessories

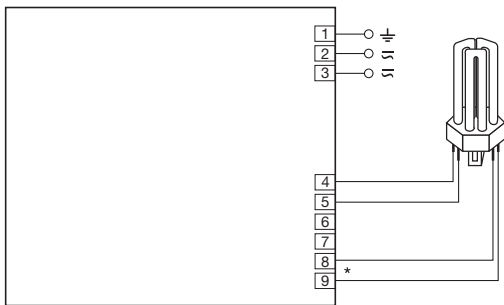
PC compact gear box for independant solutions



Ordering data

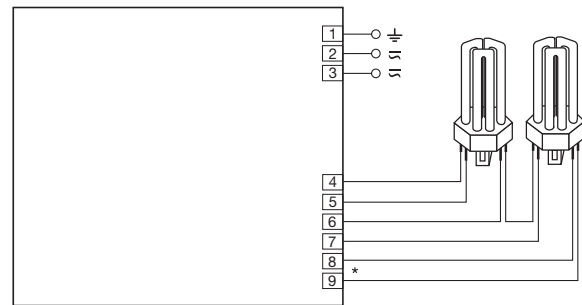
| Dimensions LxWxH | Type | Article number |
|-------------------|-------------------------------|----------------|
| 278 x 114 x 55 mm | PC Ballast box, upper section | 24138824 |
| 278 x 114 x 55 mm | PC Ballast box, lower section | 24138825 |

Wiring diagrams



* leads 8, 9 max. 1.0 m (< 100 pF)
leads 4, 5 max. 2.0 m (< 200 pF)
For luminaires of protection class I: Earthing via earth terminal (according to IEC 60598)
For luminaires of protection class II: No earthing required

- PC 1x57/70 TC PRO with 1 lamp
- PC 1/2x9-13 TC PRO with 1 lamp
- PC 1/2x11-17 TC PRO with 1 lamp
- PC 1/2x18 TC PRO with 1 lamp
- PC 1/2x26-42 TC PRO with 1 lamp



* leads 8, 9 max. 1.0 m (< 100 pF)
leads 4, 5, 6, 7 max. 2.0 m (< 200 pF)
For luminaires of protection class I: Earthing via earth terminal (according to IEC 60598)
For luminaires of protection class II: No earthing required

- PC 1/2x9-13 TC PRO with 2 lamps
- PC 1/2x11-17 TC PRO with 2 lamps
- PC 1/2x18 TC PRO with 2 lamps
- PC 1/2x26-42 TC PRO with 2 lamps
- PC 2x26-42 TC PRO with 2 lamps