

### PCA TC EXCEL one4all xitec II, 18 – 57 W

#### EXCEL compact

#### Product description

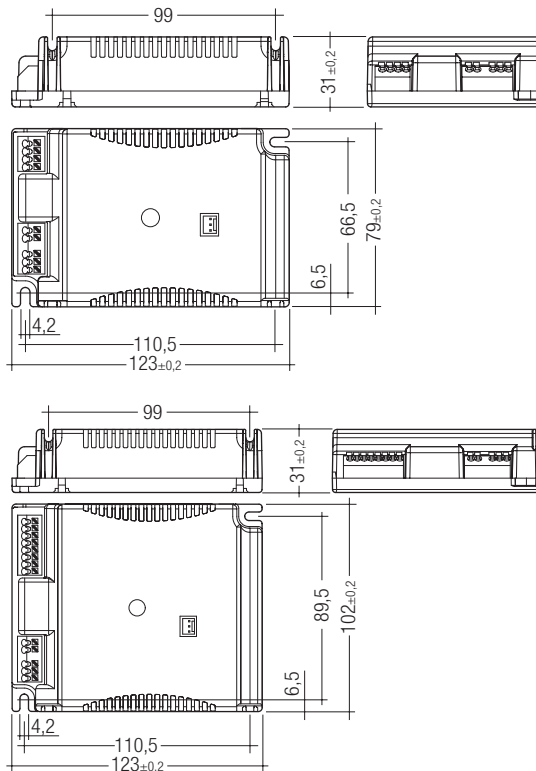
- Processor-controlled ballast with xitec II inside
- Highest possible energy class CELMA EEI = A1 BAT<sup>®</sup>
- Noise-free precise control via DALI or DSI signal, switchDIM or corridorFUNCTION
- Nominal life up to 100,000 h (at ta 50 °C with a failure rate max. 0.2 % per 1,000 h)
- OEM-specific reserved memory areas
- Extended DALI commands
- 5-year guarantee

#### Interfaces

- DALI
- DSI
- switchDIM (with memory function + selectable dimming rate)
- corridorFUNCTION (3 preprogrammed profiles + individually programmable)
- Integrated SMART interface for function with all SMART Sensors and SMART plugs of the xitec II range

#### Functions

- Intelligent Temperature Guard (overtemperature protection)
- Intelligent Voltage Guard (overvoltage indication and undervoltage shutdown)
- Optimum filament heating in any dimmer setting
- Disconnection of filament heating from a dimming level of approx. 90 % for maximum energy efficiency (SMART-Heating concept)
- Fade rates between 100 ms and 90 s (min. – max.)
- corridorFUNCTION with ambient light control
- Automatically triggered emergency lighting value in DC mode 15 %, can be set between 3 and 100 %
- For emergency lighting systems as per EN 50172
- Automatic start after replacement of defective lamps
- Automatic shutdown if the lamp is faulty
- Dimming possible in DC mode



#### Technical data

|                             |                                     |
|-----------------------------|-------------------------------------|
| Mains voltage range         | 220 – 240 V                         |
| AC voltage range            | 198 – 264 V                         |
| DC voltage range            | 176 – 280 V (lamp start ≥ 198 V DC) |
| Mains frequency             | 0 / 50 / 60 Hz                      |
| Overvoltage protection      | 320 V AC, 1 h                       |
| Typ. power input on standby | < 0.2 W                             |
| Protective hot restart      | 0.5 s for AC / 0.2 s for DC         |
| Dimming range               | 3 – 100 %                           |
| Lamp start possible from    | 3 %                                 |
| Operating frequency         | ~ 40 – 130 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              |                |                   |                   |                |
| PCA 1x11/13 TC EXCEL one4all xtec II    | 22185134       | 10 pc(s).         | 500 pc(s).        | 0.201 kg       |
| PCA 1x18 TC EXCEL one4all xtec II       | 22185130       | 10 pc(s).         | 500 pc(s).        | 0.147 kg       |
| PCA 1x18/24 TCL EXCEL one4all c xtec II | 22185251       | 10 pc(s).         | 500 pc(s).        | 0.147 kg       |
| PCA 1x26-57 TC EXCEL one4all xtec II    | 22185128       | 10 pc(s).         | 500 pc(s).        | 0.163 kg       |
| PCA 1x28 TC-DD EXCEL one4all xtec II    | 22185254       | 10 pc(s).         | 500 pc(s).        | 0.147 kg       |
| PCA 1x55 T5c EXCEL one4all xtec II      | 22185132       | 10 pc(s).         | 500 pc(s).        | 0.162 kg       |
| For luminaires with 2 lamps             |                |                   |                   |                |
| PCA 2x11/13 TC EXCEL one4all xtec II    | 22185135       | 10 pc(s).         | 500 pc(s).        | 0.144 kg       |
| PCA 2x18 TC EXCEL one4all xtec II       | 22185131       | 10 pc(s).         | 500 pc(s).        | 0.201 kg       |
| PCA 2x18/24 TCL EXCEL one4all c xtec II | 22185257       | 10 pc(s).         | 500 pc(s).        | 0.203 kg       |
| PCA 2x26/32/42 TC EXCEL one4all xtec II | 22185129       | 10 pc(s).         | 500 pc(s).        | 0.206 kg       |

### Specific technical data

| Lamp wattage               | Lamp type | Type                                    | Article number | Dimensions L x W x H | Lamp power® | Circuit power® | EEL    | Current at 50 Hz 230 V® | λ at 50 Hz 230 V | tc point max. | Ambient temperature ta® |
|----------------------------|-----------|-----------------------------------------|----------------|----------------------|-------------|----------------|--------|-------------------------|------------------|---------------|-------------------------|
| For luminaires with 1 lamp |           |                                         |                |                      |             |                |        |                         |                  |               |                         |
| 1 x 11 W                   | TC-SEL    | PCA 1x11/13 TC EXCEL one4all xtec II    | 22185134       | 123 x 79 x 31 mm     | 11.0 W      | 12.5 W         | A1     | 0.06 A                  | 0.96             | 75 °C         | -25 ... 70 °C           |
| 1 x 11 W                   | TC-TEL HE | PCA 1x11/13 TC EXCEL one4all xtec II    | 22185134       | 123 x 79 x 31 mm     | 11.5 W      | 13.0 W         | A1     | 0.07 A                  | 0.96             | 75 °C         | -25 ... 70 °C           |
| 1 x 13 W                   | TC-DEL    | PCA 1x11/13 TC EXCEL one4all xtec II    | 22185134       | 123 x 79 x 31 mm     | 12.5 W      | 13.5 W         | A1 BAT | 0.07 A                  | 0.96             | 75 °C         | -25 ... 70 °C           |
| 1 x 13 W                   | TC-TEL    | PCA 1x11/13 TC EXCEL one4all xtec II    | 22185134       | 123 x 79 x 31 mm     | 12.5 W      | 14.0 W         | A1 BAT | 0.07 A                  | 0.96             | 75 °C         | -25 ... 70 °C           |
| 1 x 14 W                   | TC-TEL HE | PCA 1x11/13 TC EXCEL one4all xtec II    | 22185134       | 123 x 79 x 31 mm     | 14.5 W      | 16.0 W         | A1 BAT | 0.08 A                  | 0.97             | 75 °C         | -25 ... 70 °C           |
| 1 x 17 W                   | TC-TEL HE | PCA 1x11/13 TC EXCEL one4all xtec II    | 22185134       | 123 x 79 x 31 mm     | 17.5 W      | 19.0 W         | A1 BAT | 0.09 A                  | 0.98             | 75 °C         | -25 ... 70 °C           |
| 1 x 18 W                   | TC-DEL    | PCA 1x18 TC EXCEL one4all xtec II       | 22185130       | 123 x 79 x 31 mm     | 16.5 W      | 19.0 W         | A1 BAT | 0.09 A                  | 0.95             | 80 °C         | -25 ... 70 °C           |
| 1 x 18 W                   | TC-TEL    | PCA 1x18 TC EXCEL one4all xtec II       | 22185130       | 123 x 79 x 31 mm     | 16.5 W      | 18.5 W         | A1 BAT | 0.09 A                  | 0.95             | 80 °C         | -25 ... 70 °C           |
| 1 x 18 W                   | TC-F      | PCA 1x18/24 TCL EXCEL one4all c xtec II | 22185251       | 123 x 79 x 31 mm     | 15.0 W      | 18.5 W         | A1 BAT | 0.08 A                  | 0.96             | 75 °C         | -25 ... 65 °C           |
| 1 x 18 W                   | TC-L      | PCA 1x18/24 TCL EXCEL one4all c xtec II | 22185251       | 123 x 79 x 31 mm     | 16.0 W      | 18.5 W         | A1 BAT | 0.08 A                  | 0.96             | 75 °C         | -25 ... 65 °C           |
| 1 x 22 W                   | T5c       | PCA 1x18/24 TCL EXCEL one4all c xtec II | 22185251       | 123 x 79 x 31 mm     | 22.0 W      | 25.0 W         | A1 BAT | 0.11 A                  | 0.98             | 75 °C         | -25 ... 65 °C           |
| 1 x 24 W                   | TC-F      | PCA 1x18/24 TCL EXCEL one4all c xtec II | 22185251       | 123 x 79 x 31 mm     | 20.0 W      | 24.5 W         | A1 BAT | 0.11 A                  | 0.98             | 75 °C         | -25 ... 65 °C           |
| 1 x 24 W                   | TC-L      | PCA 1x18/24 TCL EXCEL one4all c xtec II | 22185251       | 123 x 79 x 31 mm     | 16.0 W      | 24.5 W         | A1 BAT | 0.12 A                  | 0.98             | 75 °C         | -25 ... 65 °C           |
| 1 x 26 W                   | TC-DEL    | PCA 1x26-57 TC EXCEL one4all xtec II    | 22185128       | 123 x 79 x 31 mm     | 24.0 W      | 26.5 W         | A1 BAT | 0.13 A                  | 0.95             | 75 °C         | -25 ... 65 °C           |
| 1 x 26 W                   | TC-TEL    | PCA 1x26-57 TC EXCEL one4all xtec II    | 22185128       | 123 x 79 x 31 mm     | 24.0 W      | 27.0 W         | A1 BAT | 0.13 A                  | 0.95             | 75 °C         | -25 ... 65 °C           |
| 1 x 32 W                   | TC-TEL    | PCA 1x26-57 TC EXCEL one4all xtec II    | 22185128       | 123 x 79 x 31 mm     | 32.0 W      | 35.0 W         | A1 BAT | 0.15 A                  | 0.96             | 75 °C         | -25 ... 65 °C           |
| 1 x 40 W                   | T5c       | PCA 1x26-57 TC EXCEL one4all xtec II    | 22185128       | 123 x 79 x 31 mm     | 40.0 W      | 43.0 W         | A1 BAT | 0.16 A                  | 0.97             | 75 °C         | -25 ... 65 °C           |
| 1 x 40 W                   | TC-L      | PCA 1x26-57 TC EXCEL one4all xtec II    | 22185128       | 123 x 79 x 31 mm     | 40.0 W      | 43.0 W         | A1 BAT | 0.18 A                  | 0.97             | 75 °C         | -25 ... 65 °C           |
| 1 x 42 W                   | TC-TEL    | PCA 1x26-57 TC EXCEL one4all xtec II    | 22185128       | 123 x 79 x 31 mm     | 42.0 W      | 44.0 W         | A1 BAT | 0.20 A                  | 0.98             | 75 °C         | -25 ... 65 °C           |
| 1 x 57 W                   | TC-TEL    | PCA 1x26-57 TC EXCEL one4all xtec II    | 22185128       | 123 x 79 x 31 mm     | 57.0 W      | 61.0 W         | A1 BAT | 0.24 A                  | 0.98             | 75 °C         | -25 ... 65 °C           |
| 1 x 28 W                   | TC-DD     | PCA 1x28 TC-DD EXCEL one4all xtec II    | 22185254       | 123 x 79 x 31 mm     | 26.5 W      | 27.5 W         | A1 BAT | 0.13 A                  | 0.98             | 75 °C         | -25 ... 65 °C           |
| 1 x 55 W                   | T5c       | PCA 1x55 T5c EXCEL one4all xtec II      | 22185132       | 123 x 79 x 31 mm     | 55.0 W      | 59.0 W         | A1 BAT | 0.26 A                  | 0.98             | 70 °C         | -25 ... 55 °C           |

### For luminaires with 2 lamps

|          |           |                                         |          |                   |        |        |        |        |      |       |               |
|----------|-----------|-----------------------------------------|----------|-------------------|--------|--------|--------|--------|------|-------|---------------|
| 2 x 11 W | TC-SEL    | PCA 2x11/13 TC EXCEL one4all xtec II    | 22185135 | 123 x 102 x 31 mm | 22.0 W | 24.5 W | A1 BAT | 0.11 A | 0.96 | 70 °C | -25 ... 60 °C |
| 2 x 11 W | TC-TEL HE | PCA 2x11/13 TC EXCEL one4all xtec II    | 22185135 | 123 x 102 x 31 mm | 23.5 W | 26.0 W | A1 BAT | 0.12 A | 0.96 | 70 °C | -25 ... 60 °C |
| 2 x 13 W | TC-DEL    | PCA 2x11/13 TC EXCEL one4all xtec II    | 22185135 | 123 x 102 x 31 mm | 25.0 W | 27.0 W | A1 BAT | 0.12 A | 0.96 | 70 °C | -25 ... 60 °C |
| 2 x 13 W | TC-TEL    | PCA 2x11/13 TC EXCEL one4all xtec II    | 22185135 | 123 x 102 x 31 mm | 25.0 W | 27.5 W | A1 BAT | 0.12 A | 0.96 | 70 °C | -25 ... 60 °C |
| 2 x 14 W | TC-TEL HE | PCA 2x11/13 TC EXCEL one4all xtec II    | 22185135 | 123 x 102 x 31 mm | 29.0 W | 31.0 W | A1 BAT | 0.15 A | 0.97 | 70 °C | -25 ... 60 °C |
| 2 x 17 W | TC-TEL HE | PCA 2x11/13 TC EXCEL one4all xtec II    | 22185135 | 123 x 102 x 31 mm | 35.0 W | 37.5 W | A1 BAT | 0.17 A | 0.98 | 70 °C | -25 ... 60 °C |
| 2 x 18 W | TC-DEL    | PCA 2x18 TC EXCEL one4all xtec II       | 22185131 | 123 x 102 x 31 mm | 33.0 W | 36.0 W | A1 BAT | 0.17 A | 0.97 | 75 °C | -25 ... 70 °C |
| 2 x 18 W | TC-TEL    | PCA 2x18 TC EXCEL one4all xtec II       | 22185131 | 123 x 102 x 31 mm | 33.0 W | 36.0 W | A1 BAT | 0.17 A | 0.97 | 75 °C | -25 ... 70 °C |
| 2 x 18 W | TC-F      | PCA 2x18/24 TCL EXCEL one4all c xtec II | 22185257 | 123 x 102 x 31 mm | 15.0 W | 37.0 W | A1 BAT | 0.15 A | 0.96 | 75 °C | -25 ... 60 °C |
| 2 x 18 W | TC-L      | PCA 2x18/24 TCL EXCEL one4all c xtec II | 22185257 | 123 x 102 x 31 mm | 16.0 W | 37.0 W | A1 BAT | 0.16 A | 0.97 | 75 °C | -25 ... 60 °C |
| 2 x 24 W | TC-F      | PCA 2x18/24 TCL EXCEL one4all c xtec II | 22185257 | 123 x 102 x 31 mm | 20.0 W | 48.0 W | A1 BAT | 0.21 A | 0.98 | 75 °C | -25 ... 60 °C |
| 2 x 24 W | TC-L      | PCA 2x18/24 TCL EXCEL one4all c xtec II | 22185257 | 123 x 102 x 31 mm | 22.0 W | 48.0 W | A1 BAT | 0.24 A | 0.98 | 75 °C | -25 ... 60 °C |
| 2 x 26 W | TC-DEL    | PCA 2x26/32/42 TC EXCEL one4all xtec II | 22185129 | 123 x 102 x 31 mm | 48.0 W | 52.0 W | A1 BAT | 0.24 A | 0.96 | 75 °C | -25 ... 60 °C |
| 2 x 26 W | TC-TEL    | PCA 2x26/32/42 TC EXCEL one4all xtec II | 22185129 | 123 x 102 x 31 mm | 48.0 W | 52.0 W | A1 BAT | 0.24 A | 0.96 | 75 °C | -25 ... 60 °C |
| 2 x 32 W | TC-TEL    | PCA 2x26/32/42 TC EXCEL one4all xtec II | 22185129 | 123 x 102 x 31 mm | 64.0 W | 68.0 W | A1 BAT | 0.29 A | 0.97 | 75 °C | -25 ... 60 °C |
| 2 x 42 W | TC-TEL    | PCA 2x26/32/42 TC EXCEL one4all xtec II | 22185129 | 123 x 102 x 31 mm | 84.0 W | 88.5 W | A1 BAT | 0.39 A | 0.98 | 75 °C | -25 ... 60 °C |

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

® Valid at 100 % dimming level.

® +10 °C to ta max: unrestricted dimming. -25 °C to +10 °C: unrestricted dimming from 100 % to 30 %.

-25 °C to +10 °C, dimming below 30 %: malfunction possible but no damage to ECG. This applies to AC and DC operation.