

# Tender documents for POWERTRONIC ECGs

Electronic gears for High pressure discharge lamps:

## **POWERTRONIC® PTi**

**Product description:**

**PTi .../220-240 S for luminaire installation**

**PTi .../220-240 B for luminaire installation**

**PTi .../220-240 I with protection against pulling through cable clamps fixed in place by screws**

- ECGs for operating metal halide lamps with 35, 50, 70, 100, 150 W
- Excellent lamp operation: Up to 30 % longer service life of the lamp compared to CCG
- Constant lamp power independent of mains voltage fluctuations, ambient temperatures and aging of the lamps
- Reliable lamp starting: max. cable length 150 cm (120 pF), ignition voltage max. 4.5 kV
- Flicker-free lamp operation
- No flashing of defective lamps (ignition time limited to 20 min.)
- Reliable and safe lamp switch-off at the end of the service life of the lamp
- ECG efficiency > 90 %
- Excellent temperature response in a wide temperature range from -25 °C to +55°/65 °C
- Service life: 40,000 h at max. permissible ambient temperature  $t_a$  (max. 10 % failure rate)
- Power reduction at excess temperature of the ECG
- 5-year system+ guarantee: For every ECG that has failed due to a material or manufacturing fault, there is a replacement
- Power factor without further compensation  $\geq 0.95$
- Only for AC
- For interior lighting only
- For luminaires of protection class I and suitable for protection class II applications
- No automatic restart after lamp replacement
- Test mark: VDE, EMC, c-tick. GOST
- EN 61347-2-12, EN 55015, EN 61000-3-2, EN 61547, EN 61000-3-3, EN 62493 (for I, SNAP units)

## **POWERTRONIC® PT-FIT**

### **Product description:**

**PT-FIT.../220-240 S for luminaire installation**

**PT-FIT .../220-240 B for luminaire installation**

**PT-FIT .../220-240 I with protection against pulling through cable clamps fixed in place by screws**

- ECGs for operating metal halide lamps with 35, 50, 70, 100, 150 W
- Excellent lamp operation: Up to 30 % longer service life of the lamp compared to CCG
- Constant lamp power independent of mains voltage fluctuations, ambient temperatures and aging of the lamps
- Reliable lamp starting: max. cable length 150 cm (120 pF), ignition voltage max. 4.5 kV
- Flicker-free lamp operation
- No flashing of defective lamps (ignition time limited to 20 min.)
- Reliable and safe lamp switch-off at the end of the service life of the lamp
- ECG efficiency > 90 %
- Excellent temperature response in a wide temperature range from -25 °C to +55°/65 °C
- Service life: 30,000 h at max. permissible ambient temperature  $t_a$  (max. 10 % failure rate)
- Power reduction at excess temperature of the ECG
- 5-year system+ guarantee: For every ECG that has failed due to a material or manufacturing fault, there is a replacement
- Power factor without further compensation  $\geq 0.95$
- Only for AC
- For interior lighting only
- For luminaires of protection class I and suitable for protection class II applications
- No automatic restart after lamp replacement
- Test mark: VDE, EMC, c-tick. GOST
- EN 61347-2-12, EN 55015, EN 61000-3-2, EN 61547, EN 61000-3-3, EN 62493 (for I, SNAP units)

## POWERTRONIC® OUTDOOR PTo...3DIM

### Product description:

#### PTo.../220-240 3DIM for luminaire installation

- Electronic gears for operation of Metal halide lamp (POWERBALL® HCl®, POWERSTAR® HQI®)- and sodium high pressure discharge lamps (VIALO® NAV®)
- Excellent lamp operation: Up to 30 % longer service life of the lamp compared to CCG
- Constant lamp power independent of mains voltage fluctuations, ambient temperatures and aging of the lamps
- Reliable lamp starting: max. cable length 150 cm (120 pF), ignition voltage max. 4.5 kV
- Flicker-free lamp operation
- Dim function for ceramic metal halide lamps (POWERBALL® HCl®)- and sodium high pressure discharge lamps (VIALOX® NAV®) by choosing one of the three possible dimming modes DALI, StepDIM or AstroDIM (3DIM Feature):
  - DALI for bidirectional dataexchange and continuous dimming inside the possible dim range
  - StepDIM for switching between two power steps (operation can be provided by a pre-selection by the luminaire manufacturer and can be changed anytime by reprogramming the gear over the DALI interface)
  - AstroDIM for autonomous dimming without external control (operation can be provided by a pre-selection by the luminaire manufacturer and can be changed anytime by reprogramming the gear over the DALI interface)
- Dim range between 60 %...100 % -> Energy saving up to 40 % in compare to a non-dimmable gear<sup>1</sup>
- Surge protection according to IEC 61547: 4 kV: L/N – Equi; 3 kV: L-N (Norm: 2 kV)
- Lighting protection with connected Equipotential clamp: up to 10 surges of 10 kV in pulse format (derived from IEC 61000-4-5)
- ECG is protected against witness by complete potting inside the plastic housing
- No flashing of defective lamps (ignition time limited to 20 min.)
- Reliable and safe lamp switch-off at the end of the service life of the lamp
- ECG efficiency ~ 91 %
- Excellent temperature response in a wide temperature range from -25 °C to +55°C and  $t_c = 75^\circ\text{C}$
- Service life: 60,000<sup>2</sup> h at max. permissible ambient temperature  $t_c$  (max. 10 % failure rate)
- Power reduction at excess temperature of the ECG
- 5-year system+ guarantee: For every ECG that has failed due to a material or manufacturing fault, there is a replacement
- Power factor without further compensation  $\geq 0.95$
- For luminaires with IP54 and higher of protection class I and II in outdoor installations
- No automatic restart after lamp replacement
- Test mark: VDE, EMC, c-tick. GOST
- EN 61347-2-12, EN 55015, EN 61000-3-2, EN 61547, EN 61000-3-3

<sup>1</sup> Only valid for ECG with 3DIM Feature

<sup>2</sup> 40.000 h by PTo 150 3DIM

