

Tender documents for electronic control gears from OSRAM

Content

| | |
|---|----------|
| Electronic control gears for fluorescent and compact fluorescent lamps..... | 2 |
| Dimmable electronic control gears for with digital interface (DALI)..... | 2 |
| QUICKTRONIC® INTELLIGENT DALI DIM for compact fluorescent lamps..... | 2 |
| QUICKTRONIC® INTELLIGENT DALI DIM for T5/Ø 16 mm fluorescent lamps | 2 |
| QUICKTRONIC® INTELLIGENT DALI DIM for T8/Ø 26 mm fluorescent lamps | 3 |
| Dimmable electronic control gears with analog interface (1...10 V)..... | 4 |
| QUICKTRONIC® INTELLIGENT DIM (1...10 V) for compact fluorescent lamps..... | 4 |
| QUICKTRONIC® INTELLIGENT DIM (1...10 V) for T5/Ø 16 mm fluorescent lamps ... | 4 |
| QUICKTRONIC® INTELLIGENT DIM (1...10 V) for T8/Ø 26 mm fluorescent lamps... | 5 |
| Non dimmable electronic control gears..... | 6 |
| QUICKTRONIC® INTELLIGENT for T5/Ø 16 mm fluorescent lamps | 6 |
| QUICKTRONIC® PROFESSIONAL for compact fluorescent lamps..... | 6 |
| QUICKTRONIC® PROFESSIONAL for T5/Ø 16 mm fluorescent lamps | 6 |
| QUICKTRONIC® PROFESSIONAL for T8/Ø 26 mm fluorescent lamps | 6 |
| QUICKTRONIC® MULTIWATT for compact fluorescent lamps | 7 |
| QUICKTRONIC® for FM (T2/Ø7 mm) miniature fluorescent lamps | 7 |
| DULUXTRONIC® | 7 |
| QUICKTRONIC® ENDURA® | 7 |
| Electronic transformers for low-voltage halogen lamps: HALOTRONIC® | 8 |
| Electronic control gears for metal halide lamps: POWERTRONIC® | 8 |

Electronic control gears for fluorescent and compact fluorescent lamps:

Dimmable electronic control gears with digital interface (DALI):

QUICKTRONIC® INTELLIGENT DALI DIM for compact fluorescent lamps

Reference:

QTi DALI-T/E ... DIM

- Intelligent electronic control gears with DALI interface acc. to IEC 60929
- Compact fluorescent lamps OSRAM DULUX® T/E 18, 26, 32, 42 W and OSRAM DULUX® T/E IN 26, 32, 42 (57) W (amalgam-lamps) can be dimmed from 3 % to 100 % without any restrictions
- Pre-heated lamp start within 0.6 seconds without ignition flash
- Manual dimming function (*Touch DIM*) without controller and with standard switches, incl. memory-function (double-click) and soft start
- ECG lifetime: 50.000 h at max. temperature ($t_c = 75 \text{ °C}$, max. 10 % failure)
- ECG overheating protection by intelligent power reduction at high t_c -temperatures
- 5-year system⁺ guarantee:
Any ECG, which has failed because of a material or manufacturer's fault, will be refunded
- CELMA Energy classification EEI = A1
- Highest energy efficiency thanks to cut-off-technology
- EoL – shut-down acc. EN/IEC 61347-2-3 chapter 17
- Can be used in emergency installations acc. EN 50172 / DIN VDE 0108-100
- Configuration in emergency mode possible:
Light level can be adjusted without control signal from 100 % to 3 % light output
- Approvals: ENEC, VDE, EMV
Complies with: EN 60929, EN 61347-2-3, EN 55015, EN 61000-3-2, EN 61547, EN 61000-3-3

QUICKTRONIC® INTELLIGENT DALI DIM for T5/Ø 16 mm fluorescent lamps

References:

QTi DALI ... DIM

- Intelligent electronic control gears with DALI interface acc. to IEC 60929
- Enables T5/Ø16mm fluorescent lamps of the same length to be operated within a luminaire giving flexibility when setting the light level
- Dimming range of 1 % to 100 % without any restrictions
- Maximum dimming rate for dynamic RGB-coloured light applications 5 ms, from 1% to 100%, due to optimized pre-heating of the electrode
- Pre-heated lamp start within 0.5 seconds without ignition flash
- Manual Dimming operation (*Touch DIM*) without the need for a controller and with standard switches, incl. memory-function (double-click) and soft start
- ECG-lifetime: 50.000 h at max. temperature ($t_c = 75 \text{ °C}$, max. 10 % failure)
- ECG-over heating-protection by intelligent power reduction at high t_c -temperatures
- 5-year system⁺ guarantee:
Any ECG, which has failed because of a material or manufacturer's fault, will be refunded
- CELMA Energy classification EEI = A1
- Highest energy efficiency thanks to cut-off-technology
- EoL – shut-down acc. EN/ICE 61347-2-3 chapter 17
- Can be used in emergency installations acc. EN 50172 / DIN VDE 0108-100
- Configuration in emergency mode possible:
Light level can be adjusted without control signal from 100 % to 1 % light output
- Approvals: ENEC, VDE, EMV
Complies with: EN 60929, EN 61347-2-3, EN 55015, EN 61000-3-2, EN 61547, EN 61000-3-3

QUICKTRONIC® INTELLIGENT DALI DIM for T8/Ø 26 mm fluorescent lamps

References:

QTi DALI ... DIM

- Intelligent electronic control gears with DALI interface acc. to IEC 60929
- For operating commercial T8/Ø26mm fluorescent lamps with a dimming range from 1 % to 100 % without any restrictions
- Maximum dimming rate for dynamic RGB-coloured light applications 5 ms from 1 % to 100 % due to optimized pre-heating of the electrode
- Pre-heated lamp start within 0.5 seconds without starting flash
- Manual dimming operation (*Touch DIM*) without the need for a controller and with standard switches, incl. memory-function (double-click) and soft start
- ECG lifetime: 50.000 h at max. temperature ($t_c = 75\text{ °C}$, max. 10 % failure)
- ECG-overheating-protection by intelligent power reduction at high t_c -temperatures
- 5-year system⁺ guarantee:
- Any ECG, which has failed because of a material or manufacturer's fault, will be refunded
- CELMA Energy classification EEI = A1
- Highest energy efficiency thanks to cut-off technology
- EoL – shut-down acc. EN/ICE 61347-2-3 chapter 17
- For use in emergency installations acc. EN 50172 / DIN VDE 0108-100
- Configuration in emergency mode possible:
Light level can be adjusted without control signal from 100 % to 1 % light output
- Approvals: ENEC, VDE, EMV
- Complies with: EN 60929, EN 61347-2-3, EN 55015, EN 61000-3-2, EN 61547, EN 61000-3-3

Dimmable electronic control gears with analog interface (1...10 V):

QUICKTRONIC® INTELLIGENT DIM (1...10 V) for compact fluorescent lamps

References:

QTi-T/E ... DIM

- Intelligent electronic control gears with 1...10 V interface acc. to IEC60929
- For operating compact fluorescent lamps OSRAM DULUX® T/E 18, 26, 32, 42 W and OSRAM DULUX® T/E IN 26, 32, 42 (57) W (amalgam-lamps) with a dimming range from 3 % to 100 % without any restrictions
- Pre-heated lamp start within 0.6 seconds without starting flash
- ECG lifetime: 50.000 h at max. temperature ($t_c = 75^\circ\text{C}$, max. 10 % failure)
- ECG-overheating-protection by intelligent power reduction at high t_c -temperatures
- 5-year system⁺ guarantee:
- Any ECG, which has failed because of a material or manufacturer's fault, will be refunded
- CELMA Energy classification EEI = A1
- Highest energy efficiency thanks to cut-off technology
- EoL – shut-down acc. IC 61347-2-3 chapter 17
- For use in emergency installations acc. EN 50172 / DIN VDE 0108-100
- Approvals: ENEC, VDE, EMV
- Complies with: EN 60929, EN 61347-2-3, EN 55015, EN 61000-3-2, EN 61547, EN 61000-3-3

QUICKTRONIC® INTELLIGENT DIM (1...10 V) for T5/Ø 16 mm fluorescent lamps

References:

QTi ... DIM

- Intelligent electronic control gears with 1...10 V interface acc. to IEC 60929
- Enables T5 fluorescent lamps of the same length to be operated within a luminaire giving flexibility when setting the light level
- Dimming range 1 % to 100 % without any restrictions
- Maximum dimming rate for dynamic RGB-colored light applications 5 ms from 1% to 100% due to optimized pre-heating of the electrode
- Pre-heated lamp start within 0.5 seconds without starting flash
- Manual dimming operation (*Touch DIM*) without the need for a controller and with standard switches, incl. memory-function (double-click) and soft start
- ECG lifetime: 50.000 h at max. temperature ($t_c = 75^\circ\text{C}$, max. 10 % failure)
- 5-year system⁺ guarantee:
- Any ECG, which has failed because of a material or manufacturer's fault, will be refunded
- CELMA Energy classification EEI = A1
- Highest energy efficiency thanks to cut-off technology
- EoL – shut-down acc. EN/ICE 61347-2-3 chapter 17
- For use in emergency installations acc. EN 50172 / DIN VDE 0108-100
- Approvals: ENEC, VDE, EMV
- Complies with: EN 60929, EN 61347-2-3, EN 55015, EN 61000-3-2, EN 61547, EN 61000-3-3

QUICKTRONIC® INTELLIGENT DIM (1...10 V) for T8/Ø 26 mm fluorescent lamps

References:

QTi ... DIM

- Intelligent electronic control gears with 1...10 V interface acc. to IEC 60929
 - For operating commercial T8/Ø26mm fluorescent lamps with a dimming range from 1 % to 100 % without any restrictions
 - Maximum dimming rate for dynamic RGB-colored light applications 5 ms from 1 % to 100 % due to optimized pre-heating of the electrode
 - Pre-heated lamp start within 0.5 seconds without starting flash
 - Manual Dimming operation (*Touch DIM*) without the need for a controller and with standard switches, incl. memory-function (double-click) and soft start
 - ECG-lifetime: 50.000 h at max. temperature ($t_c = 75\text{ °C}$, max. 10 % failure)
 - 5-year system⁺ guarantee:
Any ECG, which has failed because of a material or manufacturer's fault, will be refunded
 - CELMA Energy classification EEI = A1
 - Highest energy efficiency thanks to cut-off technology
 - EoL – shut-down acc. EN/ICE 61347-2-3 chapter 17
 - For use in emergency installations acc. EN 50172 / DIN VDE 0108-100
 - Approvals: ENEC, VDE, EMV
- Complies with: EN 60929, EN 61347-2-3, EN 55015, EN 61000-3-2, EN 61547, EN 61000-3-3

Non dimmable electronic control gears:

QUICKTRONIC® INTELLIGENT for T5/Ø 16 mm fluorescent lamps

References:

QTi ...

- Intelligent electronic control gears enables T5 fluorescent lamps of the same length to be operated within a luminaire giving flexibility when setting the light level
- Pre-heated lamp start is ideal for applications using presence detectors
- ECG lifetime: 50.000 h at max. temperature ($t_c = 75\text{ °C}$, max. 10 % failure)
- 5-year system⁺ guarantee:
Any ECG, which has failed because of a material or manufacturer's fault, will be refunded
- CELMA Energy classification EEI = A2
- Highest energy efficiency thanks to cut-off technology
- EoL – shut-down acc. EN/ICE 61347-2-3 chapter 17
- For use in emergency installations acc. EN 50172 / DIN VDE 0108-100
- Approvals: ENEC, VDE, EMV
- Complies with: EN60929, EN 61347-2-3, EN 55015, EN 61000-3-2, EN 61547, EN 61000-3-3, EN 50022

QUICKTRONIC® PROFESSIONAL for compact fluorescent lamps

References:

QTP-D/E .../220-240, QTP-T/E .../220-240

- Electronic control gears to operate compact fluorescent lamps OSRAM DULUX® S/E 9 W, -11 W, -D/E 10 W, -13 W, -T/E 13 W or OSRAM DULUX® D/E 18 W, -T/E 18 W respectively
- Pre-heated lamp start is ideal for applications using presence detectors
- Temperature range: -20 °C to $+50\text{ °C}$
- For luminaires of protection classes I and II
- ECG lifetime: 50.000 h ($t_c = 75\text{ °C}$, max. 10 % failure)
- 5-year system⁺ guarantee:
Any ECG, which has failed because of a material or manufacturer's fault, will be refunded
- CELMA Energy classification EEI = A2
- Highest energy efficiency thanks to cut-off technology
- EoL – shut-down acc. EN/ICE 61347-2-3 chapter 17
- Use in emergency installations acc. EN 50172 / DIN VDE 0108-100
- Approvals: ENEC, VDE, EMV
- Complies with: EN60929, EN 61347-2-3, EN 55015, EN 61000-3-2, EN 61547, EN 61000-3-3

QUICKTRONIC® PROFESSIONAL for T5/Ø 16 mm fluorescent lamps

References:

QTP5 .../220-240

- Electronic control gears to operate T5/Ø 16 mm fluorescent lamps acc. to ICE / EN 60929
- Pre-heated lamp start is ideal for applications using presence detectors
- ECG lifetime: 50.000 h ($t_c = 75\text{ °C}$, max. 10 % failure)
- 5-year system⁺ guarantee:
Any ECG, which has failed because of a material or manufacturer's fault, will be refunded
- CELMA Energy classification EEI = A2
- Highest energy efficiency thanks to cut-off technology
- EoL – shut-down acc. EN/ICE 61347-2-3 chapter 17
- For use in emergency installations acc. EN 50172 / DIN VDE 0108-100
- Approvals: ENEC, VDE, EMV
- Complies with: EN60929, EN 61347-2-3, EN 55015, EN 61000-3-2, EN 61547, EN 61000-3-3

QUICKTRONIC® PROFESSIONAL for T8/Ø 26 mm fluorescent lamps

References:

QTP8 ... 230-240

- Electronic control gears for T8/Ø26 mm fluorescent lamps acc. to EN 60929 and IEC 60929
- Pre-heated lamp start within 2 seconds
- Temperature range: -25 °C to $+55\text{ °C}$
- ECG lifetime: 100.000 h ($t_c = 65\text{ °C}$, max. 10 % failure)
- 5-year system⁺ guarantee:
Any ECG, which has failed because of a material or manufacturer's fault, will be refunded
- CELMA Energy classification EEI = A2
- Highest energy efficiency thanks to cut-off technology
- For use in emergency installations acc. EN 50172 / DIN VDE 0108-100
- Approvals: ENEC, VDE, EMV
- Complies with: EN60929, EN 61347-2-3, EN 55015, EN 61000-3-2, EN 61547, EN 61000-3-3, EN 55022

QUICKTRONIC® MULTIWATT for compact fluorescent lamps

References:

QT-M ... S

- Electronic control gears to operate compact fluorescent lamps OSRAM DULUX® T/E 26, 32, 42 W and OSRAM DULUX® T/E IN 26, 32 (42) W (amalgam-lamps)
- Pre-heated lamp start is ideal for applications using presence detectors
- Temperature range: -20 °C to +50 °C
- ECG lifetime: 50.000 h at max. temperature (on t_c , max. 10 % failure)
- 5-year system⁺ guarantee:
Any ECG, which has failed because of a material or manufacturer's fault, will be refunded
- CELMA Energy classification EEI = A2
- Highest energy efficiency thanks to cut-off technology
- EoL – shut-down acc. EN/ICE 61347-2-3 chapter 17
- Use in emergency installations acc. EN 50172 / DIN VDE 0108-100
- Approvals: ENEC, VDE, EMV
- Complies with: EN60929, EN 61347-2-3, EN 55015, EN 61000-3-2, EN 61547, EN 61000-3-3

QUICKTRONIC® for FM (T2/Ø7 mm) miniature fluorescent lamps

References:

QT-FM ... L

- Electronic control gears for OSRAM FM-lamps 6, 8, 11, 13 W
- Optimized pre-heated lamp start
- Integrated safety shutdown of defective lamps if:
 - o the lamp electrodes cease to function
 - o there is an unusual temperature rise at the lamp electrodes
 - o the lamp output increases
- For AC-voltage only
- Approvals: VDC, ENEC, EMV
- Complies with: EN60929, EN 61347-2-3, EN 55015, EN 61000-3-2, EN 61547, EN 61000-3-3
- ECG lifetime: 50.000 h max. temperature (on t_c , max. 10 % failure)

DULUXTRONIC®

References depending on ECG-geometry and lamp-type:

DT ... /230-240

- Electronic control gears with integrated lamp-holder for OSRAM DULUX® S/E, - D/E, - T/E
- Pre-heated lamp start
- Temperature range: -15 °C to +50 °C
- For luminaires of protection classes I and II
- ECG-lifetime: 30.000 h at max. temperature ($t_c = 70$ °C, max. 10 % failure)
- CELMA Energy classification EEI = A3
- Power factor: > 0.6
- Maximum of 25 W per luminaire
- EoL – shut-down acc. EN/ICE 61347-2-3 chapter 17
- Use in emergency installations acc. EN 50172 / DIN VDE 0108-100
- Approvals: ENEC, VDE, EMV
- Complies with: EN60929, EN 61347-2-3, EN 55015, EN 61000-3-2, EN 61547, EN 61000-3-3

QUICKTRONIC® ENDURA®

References:

QT-ENDURA 70-100/120-240 S

QT-ENDURA 100-150/120-240 S

- Electronic control gears for electronic high-performance fluorescent lamps OSRAM ENDURA 70, 100, 150 W
- Lamp start within 0.5 seconds
- Switchable without limits
- Temperature range: -40 °C to +50 °C (-25 °C for 70 W lamp)
- Can be used in emergency installations acc. EN 50172 / DIN VDE 0108-100
- Voltage range: 120 V to 240 V AC
- Safety shutdown in the event of overvoltage
- Approvals: VDE, EMV
- Complies with: EN 61347-2-3, EN 55015, EN 61000-3-2, EN 61547, EN 61000-3-3
- Separation between lamp and ECG
20 m maximum load capacity of extension cable 500 pF
- Automatic restart after lamp replacement
- Integrated safety shutdown of defective lamps
- ECG lifetime: 60.000 h at $t_c = 70$ °C (max. 12 % failure)
- 5-year system⁺ guarantee:
Any ECG, which has failed because of a material or manufacturer's fault, will be refunded

Electronic transformers for low-voltage halogen lamps: HALOTRONIC®

- Electronic transformers for low-voltage halogen lamps 12 V
- Partial-load operation possible
- Output voltage ≤ 12.0 V in the entire partial-load range
- Safety shutdown to protect against defects in the unit
- Safety isolating transformer:
 - o SELV for independent transformers (standalone installation)
 - o SELV equivalent for transformers for installation in luminaires
- Mains harmonic content limits as defined in EN 61000-3-2
- HTL: suitable for emergency installations (battery voltage range 176-275 V)
- Approvals: ENEC, VDE, EMV
Comply with: EN 61347-2-2, EN 61047, EN 55015, EN 61000-3-2, EN 61547, EN 61000-3-3
- Can be used with leading-edge phase dimmers (for HTM 70/105/150 and HT L 150/225)
Or with trailing-edge phase dimmers (for HTN, HTM 70, HTL 105, HTM 105, HT 120 LF, HTM 150, HT L 225)
- Lifetime: HTL, LF: 50.000 h at max. temperature (on t_c , max. 10 % failure)
HTM and HTN: 30.000 h at max. temperature (on t_c , max. 10 % failure)
- 5-year system⁺ guarantee:
Any ECG, which has failed because of a material or manufacturer's fault, will be refunded

Electronic control gears for metal halide lamps: POWERTRONIC®

References: PTi.../230-240 S, for installation in luminaires, or PTi.../230-240 I with cable clamp for stand-alone installation

- Electronic control gears for operating metal halide lamps 35, 70, 100, 150 W
- Excellent lamp operation: lamp lifetime up to 30 % higher compared to operation on conventional control gear
- Constant lamp power which is independent from mains voltage fluctuations, ambient temperatures and age of the lamps
- Reliable lamp start: max. distance between lamps and ECG 150 cm (120 pF), ignition voltage max. 4.5 kV
- Flicker free lamp operation
- No flashing of faulty lamps (restriction of ignition time to max. 20 minutes)
- Reliable and safe shut-down at the end of the lamp's life
- ECG-efficient > 90 %
- Excellent thermal behaviour with a wide temperature range: -25 °C to +55°/65 °C
Lifetime: 40.000 h at max. temperature t_a (max. 10 % failure)
- ECG-overheating protection by intelligent power reduction at high t_c -temperatures
- 5-year system⁺ guarantee:
Any ECG, which has failed because of a material or manufacturer's fault, will be refunded
- Power factor $\geq 0,95$, no need for additional compensation
- DC voltage not permitted
- Indoor use only
- For luminaires of protection classes I and II
- No automatic restart after lamp replacement
- Approvals: ENEC, VDE, EMV
Complies with: EN 61347-2-3, EN 55015, EN 61000-3-2, EN 61547, EN 61000-3-3