INOTEC – Conformity Declarations with Central Battery Systems

1. QUICKTRONIC QTi DALI
   DIM/ DIM

2. QUICKTRONIC INTELLIGENT
   QTi

3. QUICKTRONIC PROFESSIONAL
   QTP-FC 1x55

4. QUICKTRONIC MULTIWATT
   QT-M...S(E), QTP-M

5. QUICKTRONIC PROFESSIONAL
   QTP5

(VII/2015)

INOTEC
Sicherheitstechnik GmbH

Technische Anforderungen an elektrische Betriebsgeräte (EVGs) zum Anschluss an INOTEC Zentralbatteriegeräte

Hersteller:	Typ / Bezeichnung:
OSRAM	QTi DALI T/E DIM Family
Projekt / Projektort:	Projektnummer:
Marcel-Breuer-Straße 6, 80807 München	

Merkmale	Techn. Daten / INOTEC Anforderung	Erklärung	Erfüllt (Ja / Nein)
Betriebsspannungsbereich AC	230V ± 10%	Spannungsbereich im Netzbetrieb	JA
Betriebsspannungsbereich DC	186V - 260V	Möglicher Batteriespannungsbereich im Notstrombetrieb	JA
Betriebsgerät geeignet für "Joker-Spannung" ?		ungeglättete Gleichspannung - (hochgeklappte Halbwelle)	JA
Betriebsgerät kompatibel mit der Umschaltzeit der Anlage ?	Umschaltzeit: von AC auf DC: 150 - 1000ms von DC auf AC: 150 - 1000ms	Typische Umschaltzeit von INOTEC Anlagen zwischen Netz- und Ersatzstromquelle	JA (1)
Startverhalten Betriebsgerät im DC-Betrieb	Stabile Stromaufnahme innerhalb von 3s	Notwendig für Erkennung eines defekten Leuchtmittels	JA (2)

Merkmale	Techn. Daten / INOTEC Anforderung	Erklärung	Angabe Hersteller
Nennstrom des Betriebsgerätes mit angeschlossenem Leuchtmittel im AC Betrieb		Auswahlhilfe zur Bestimmung der maximal zulässigen Anzahl Leuchten je Stromkreis	see "Overview Qti TE"
Nennstrom des Betriebsgerätes mit angeschlossenem Leuchtmittel im **DC Betrieb** (bei eingestelltem Lichtstrom-verhältnis)	J-SV-Modul/S (5-120W): > 20mA = OK J-SV-Modul.2/S (20-300W): > 70mA = OK J-SV-Modul.3/S (2-30W): > 12mA = OK J-SV-Modul.4/S (18-120W): > 70mA = OK J-SV-Modul.L/S (20-120W): > 20mA = OK J-SV-Modul T/S (20-100W): > 60mA = OK	Auswahlhilfe Überwachungsmodul und zur Bestimmung der benötigten Batteriekapazität. Diese Werte dürfen im Spannungsbereich 186 - 260V DC nicht unterschritten werden, damit die Leuchte als OK gemeldet wird.	see "Overview Qti TE"
Lichtsromverhältnis: 186V DC-Betrieb zu 230V AC-Betrieb		Lichstrom im Batteriebetrieb zur Lichtplanung	>75%
Leerlaufstrom des Betriebsgerätes (ohne oder defektes Leuchtmittel) im DC Betrieb	J-SV-Modul/S (5-120W): < 10mA = n.OK J-SV-Modul.2/S (20-300W): < 45mA = n.OK J-SV-Modul.3/S (2-30W): < 8mA = n.OK J-SV-Modul.4/S (18-120W): < 45mA = n.OK J-SV-Modul.L/S (20-120W): < 10mA = n.OK J-SV-Modul T/S (20-100W): < 50mA = n.OK	Auswahlhilfe Überwachungsmodul. Diese Werte dürfen im Spannungsbereich 186 - 260V DC nicht überschritten werden, damit ein defektes Leuchtmittel als Fehler gemeldet wird.	see "Overview Qti TE"
Max. Einschaltstrom des Betriebsgerätes mit angeschlossenem Leuchtmittel im **AC Betrieb**	80A / 500µs (für alle J-SV-Module, ohne J-SV-Modul T/S) 40A / 500µs (für J-SV-Modul T/S) SK 4x2A: 250A / 500µs SK 2x4A: 250A / 500µs SK 2x3A: 250A / 500µs SK 1x6A: 250A / 500µs	Bezieht sich auf den maximalen zulässigen Einschaltstrom der Leuchte je Überwachungsbaustein, bzw. aller Leuchten in einem Stromkreis, um die maximale Kontaktbelastbarkeit des Überwachungsbausteins bzw. der Stromkreisschaltung zu berücksichtigen	see "Overview Qti TE"

Notiz:
(1)DALI Vorschaltgeräte warten bei Anlegen der Netzspannung 600ms auf ein DALI-Signal bevor vorgeheizt wird. Vorheizzeit normativ (IEC60901/IEC60081) auf mindestens 400ms festgelegt. Vorheizzeit OSRAM EVG >=500ms
(2) Abhängig von der Lampentemperatur

Leuchten, die für den Einsatz als Sicherheitsleuchte vorgesehen sind, müssen u.a. der Norm DIN EN 60598-2-22 (Besondere Anforderungen - Leuchten für Notbeleuchtung) entsprechen.

Manufacturer: OSRAM GmbH Marcel-Breuer-Straße 6 80807 München	Typ / Bezeichnung: EVG-Familie: QUICKTRONIC QTi DALI-T/E DIM // QUICKTRONIC QTi-T/E DIM	

ECG type	Max. inrush current for ECG AC-operation	Lamp type	I_N in AC-operation	I_N in DC-operation	I_{NoLoad} in AC-operation	I_{NoLoad} in DC-operation
QTi DALI-T/E 1x18-57 DIM	Ip = 30 A; TH = 225 µs	D/T-E 18: D/T-E 26: D/T-E 26 CONSTANT: D/T-E 32: D/T-E 32 CONSTANT: D/T-E 42: D/T-E 42 CONSTANT: D/T-E 57: D/T-E 57 CONSTANT: DL 24: DL 40:	0,09 A 0,13 A 0,13 A 0,16 A 0,16 A 0,21 A 0,21 A 0,26 A 0,26 A 0,12 A 0,20 A	0,09 A 0,13 A 0,13 A 0,16 A 0,16 A 0,21 A 0,21 A 0,26 A 0,26 A 0,12 A 0,20 A	< 30 mA	< 5mA
QTi-T/E 1x18-57 DIM	Ip = 30 A; TH = 225 µs	D/T-E 18: D/T-E 26: D/T-E 26 CONSTANT: D/T-E 32: D/T-E 32 CONSTANT: D/T-E 42: D/T-E 42 CONSTANT: D/T-E 57: D/T-E 57 CONSTANT: DL 24: DL 40:	0,09 A 0,13 A 0,13 A 0,16 A 0,16 A 0,21 A 0,21 A 0,26 A 0,26 A 0,12 A 0,20 A	0,09 A 0,13 A 0,13 A 0,16 A 0,16 A 0,21 A 0,21 A 0,26 A 0,26 A 0,12 A 0,20 A	< 30 mA	< 5mA
QTi DALI-T/E 2x18-42 DIM	Ip = 45 A; TH = 205 µs	D/T-E 18: D/T-E 26: D/T-E 26 CONSTANT: D/T-E 32: D/T-E 32 CONSTANT: D/T-E 42: D/T-E 42 CONSTANT: DL 24: DL 40:	0,17 A 0,25 A 0,25 A 0,30 A 0,30 A 0,39 A 0,39 A 0,22 A 0,38 A	0,17 A 0,25 A 0,25 A 0,30 A 0,30 A 0,39 A 0,39 A 0,22 A 0,38 A	< 50 mA	< 5mA
QTi-T/E 2x18-42 DIM	Ip = 45 A; TH = 205 µs	D/T-E 18: D/T-E 26: D/T-E 26 CONSTANT: D/T-E 32: D/T-E 32 CONSTANT: D/T-E 42: D/T-E 42 CONSTANT: DL 24: DL 40:	0,17 A 0,25 A 0,25 A 0,30 A 0,30 A 0,39 A 0,39 A 0,22 A 0,38 A	0,17 A 0,25 A 0,25 A 0,30 A 0,30 A 0,39 A 0,39 A 0,22 A 0,38 A	< 50 mA	< 5mA

INOTEC
Sicherheitstechnik GmbH

Technische Anforderungen an elektrische Betriebsgeräte (EVGs) zum Anschluss an INOTEC Zentralbatteriegeräte

Hersteller:	Typ / Bezeichnung:
OSRAM	QTi DALI DIM Family
Projekt / Projektort:	Projektnummer:
Marcel-Breuer-Straße 6, 80807 München	

Merkmale	Techn. Daten / INOTEC Anforderung	Erklärung	Erfüllt (Ja / Nein)
Betriebsspannungsbereich AC	230V ± 10%	Spannungsbereich im Netzbetrieb	JA
Betriebsspannungsbereich DC	186V - 260V	Möglicher Batteriespannungsbereich im Notstrombetrieb	JA
Betriebsgerät geeignet für "Joker-Spannung" ?		ungeglättete Gleichspannung - (hochgeklappte Halbwelle)	JA
Betriebsgerät kompatibel mit der Umschaltzeit der Anlage ?	Umschaltzeit: von AC auf DC: 150 - 1000ms von DC auf AC: 150 - 1000ms	Typische Umschaltzeit von INOTEC Anlagen zwischen Netz- und Ersatzstromquelle	JA (1)
Startverhalten Betriebsgerät im DC-Betrieb	Stabile Stromaufnahme innerhalb von 3s	Notwendig für Erkennung eines defekten Leuchtmittels	JA (2)

Merkmale	Techn. Daten / INOTEC Anforderung	Erklärung	Angabe Hersteller
Nennstrom des Betriebsgerätes mit angeschlossenem Leuchtmittel im AC Betrieb		Auswahlhilfe zur Bestimmung der maximal zulässigen Anzahl Leuchten je Stromkreis	see "Overview Qti DALI DIM"
Nennstrom des Betriebsgerätes mit angeschlossenem Leuchtmittel im **DC Betrieb** (bei eingestelltem Lichtstrom-verhältnis)	J-SV-Modul/S (5-120W): > 20mA = OK J-SV-Modul.2/S (20-300W): > 70mA = OK J-SV-Modul.3/S (2-30W): > 12mA = OK J-SV-Modul.4/S (18-120W): > 70mA = OK J-SV-Modul.L/S (20-120W): > 20mA = OK J-SV-Modul T/S (20-100W): > 60mA = OK	Auswahlhilfe Überwachungsmodul und zur Bestimmung der benötigten Batteriekapazität. Diese Werte dürfen im Spannungsbereich 186 - 260V DC nicht unterschritten werden, damit die Leuchte als OK gemeldet wird.	see "Overview Qti DALI DIM"
Lichtsromverhältnis: 186V DC-Betrieb zu 230V AC-Betrieb		Lichstrom im Batteriebetrieb zur Lichtplanung	>75%
Leerlaufstrom des Betriebsgerätes (ohne oder defektes Leuchtmittel) im DC Betrieb	J-SV-Modul/S (5-120W): < 10mA = n.OK J-SV-Modul.2/S (20-300W): < 45mA = n.OK J-SV-Modul.3/S (2-30W): < 8mA = n.OK J-SV-Modul.4/S (18-120W): < 45mA = n.OK J-SV-Modul.L/S (20-120W): < 10mA = n.OK J-SV-Modul T/S (20-100W): < 50mA = n.OK	Auswahlhilfe Überwachungsmodul. Diese Werte dürfen im Spannungsbereich 186 - 260V DC nicht überschritten werden, damit ein defektes Leuchtmittel als Fehler gemeldet wird.	see "Overview Qti DALI DIM"
Max. Einschaltstrom des Betriebsgerätes mit angeschlossenem Leuchtmittel im AC Betrieb	80A / 500µs (für alle J-SV-Module, ohne J-SV-Modul T/S) 40A / 500µs (für J-SV-Modul T/S) SK 4x2A: 250A / 500µs SK 2x4A: 250A / 500µs SK 2x3A: 250A / 500µs SK 1x6A: 250A / 500µs	Bezieht sich auf den maximalen zulässigen Einschaltstrom der Leuchte je Überwachungsbaustein, bzw. aller Leuchten in einem Stromkreis, um die maximale Kontaktbelastbarkeit des Überwachungsbausteins bzw. der Stromkreisschaltung zu berücksichtigen	see "Overview Qti DALI DIM"

Notiz:
(1)DALI Vorschaltgeräte warten bei Anlegen der Netzspannung 600ms auf ein DALI-Signal bevor vorgeheizt wird. Vorheizzeit normativ (IEC60901/IEC60081) auf mindestens 400ms festgelegt. Vorheizzeit OSRAM EVG >=500ms
(2) Abhängig von der Lampentemperatur

Leuchten, die für den Einsatz als Sicherheitsleuchte vorgesehen sind, müssen u.a. der Norm DIN EN 60598-2-22 (Besondere Anforderungen - Leuchten für Notbeleuchtung) entsprechen.

Manufacturer: OSRAM GmbH Marcel-Breuer-Straße 6 80807 München	Type / Description: ECG-family: QUICKTRONIC QTi DALI-DIM // QUICKTRONIC QTi-DIM	

ECG type	Max. inrush current for ECG AC-operation	Lamp type	I_N in AC-operation	I_N in DC-operation	I_{NoLoad} in AC-operation	I_{NoLoad} in DC-operation
QTi DALI 1x18 DIM	Ip = 25 A; TH = 175 µs	DL 18 L 18	0,08 A 0,08 A	0,08 A 0,08 A	< 20 mA	< 5 mA
QTi 1x18 DIM	Ip = 25 A; TH = 175 µs	DL 18 L 18	0,08 A 0,08 A	0,08 A 0,08 A	< 20 mA	< 5 mA
QTi DALI 1x36 DIM	Ip = 25 A; TH = 175 µs	DL 36 L 36	0,16 A 0,16 A	0,16 A 0,16 A	< 30 mA	< 5 mA
QTi 1x36 DIM	Ip = 25 A; TH = 175 µs	DL 36 L 36	0,16 A 0,16 A	0,16 A 0,16 A	< 30 mA	< 5 mA
QTi DALI 1x58 DIM	Ip = 25 A; TH = 175 µs	L 58	0,25 A	0,25 A	< 30 mA	< 5 mA
QTi 1x58 DIM	Ip = 25 A; TH = 175 µs	L 58	0,25 A	0,25 A	< 30 mA	< 5 mA
QTi DALI 2x18 DIM	Ip = 35 A; TH = 180 µs	DL 18 L 18	0,16 A 0,16 A	0,16 A 0,16 A	< 35 mA	< 5 mA
QTi 2x18 DIM	Ip = 35 A; TH = 180 µs	DL 18 L 18	0,16 A 0,16 A	0,16 A 0,16 A	< 35 mA	< 5 mA
QTi DALI 2x36 DIM	Ip = 45 A; TH = 205 µs	DL 36 L 36	0,31 A 0,31 A	0,31 A 0,31 A	< 40 mA	< 5 mA
QTi 2x36 DIM	Ip = 45 A; TH = 205 µs	DL 36 L 36	0,31 A 0,31 A	0,31 A 0,31 A	< 40 mA	< 5 mA
QTi DALI 2x58 DIM	Ip = 45 A; TH = 205 µs	L 58	0,47 A	0,47 A	< 40 mA	< 5 mA
QTi 2x58 DIM	Ip = 45 A; TH = 205 µs	L 58	0,47 A	0,47 A	< 40 mA	< 5 mA
QTi DALI 3x18 DIM	Ip = 25 A; TH = 175 µs	DL 18 L 18	0,24 A 0,24 A	0,24 A 0,24 A	< 35 mA	< 5 mA
QTi 3x18 DIM	Ip = 25 A; TH = 175 µs	DL 18 L 18	0,24 A 0,24 A	0,24 A 0,24 A	< 35 mA	< 5 mA
QTi DALI 4x18 DIM	Ip = 35 A; TH = 180 µs	DL 18 L 18	0,31 A 0,31 A	0,31 A 0,31 A	< 40 mA	< 5 mA
QTi 4x18 DIM	Ip = 35 A; TH = 180 µs	DL 18 L 18	0,31 A 0,31 A	0,31 A 0,31 A	< 40 mA	< 5 mA
QTi DALI 1x14/24 DIM	Ip = 25 A; TH = 175 µs	DL 24 HE 14 HO 24	0,11 A 0,07 A 0,11 A	0,11 A 0,07 A 0,11 A	< 20 mA	< 5 mA
QTi 1x14/24 DIM	Ip = 25 A; TH = 175 µs	DL 24 HE 14 HO 24	0,11 A 0,07 A 0,11 A	0,11 A 0,07 A 0,11 A	< 20 mA	< 5 mA
QTi DALI 1x21/39 DIM	Ip = 25 A; TH = 175 µs	DL 40 HE 21 HO 39 L 70	0,18 A 0,11 A 0,18 A 0,29 A	0,18 A 0,11 A 0,18 A 0,29 A	< 30 mA	< 5 mA
QTi 1x21/39 DIM	Ip = 25 A; TH = 175 µs	DL 40 HE 21 HO 39 L 70	0,18 A 0,11 A 0,18 A 0,29 A	0,18 A 0,11 A 0,18 A 0,29 A	< 30 mA	< 5 mA
QTi DALI 1x28/54 DIM	Ip = 25 A; TH = 175 µs	DL 55 HE 28 HO 54	0,26 A 0,14 A 0,26 A	0,26 A 0,14 A 0,26 A	< 30 mA	< 5 mA
QTi 1x28/54 DIM	Ip = 25 A; TH = 175 µs	DL 55 HE 28 HO 54	0,26 A 0,14 A 0,26 A	0,26 A 0,14 A 0,26 A	< 30 mA	< 5 mA
QTi DALI 1x35/49/80 DIM	Ip = 30 A; TH = 225 µs	DL 80 HE 35 HO 49 HO 80	0,40 A 0,17 A 0,24 A 0,39 A	0,40 A 0,17 A 0,24 A 0,39 A	< 35 mA	< 5 mA
QTi 1x35/49/80 DIM	Ip = 30 A; TH = 225 µs	DL 80 HE 35 HO 49 HO 80	0,40 A 0,17 A 0,24 A 0,39 A	0,40 A 0,17 A 0,24 A 0,39 A	< 35 mA	< 5 mA
QTi DALI 2x14/24 DIM	Ip = 35 A; TH = 180 µs	DL 24 HE 14 HO 24	0,22 A 0,14 A 0,22 A	0,22 A 0,14 A 0,22 A	< 35 mA	< 5 mA
QTi 2x14/24 DIM	Ip = 35 A; TH = 180 µs	DL 24 HE 14 HO 24	0,22 A 0,14 A 0,22 A	0,22 A 0,14 A 0,22 A	< 35 mA	< 5 mA

QTi DALI 2x21/39 DIM	Ip = 45 A; TH = 205 µs	DL 40 HE 21 HO 39 L 70	0,36 A 0,21 A 0,36 A 0,56 A	0,36 A 0,21 A 0,36 A 0,56 A	< 40 mA	< 5 mA
QTi 2x21/39 DIM	Ip = 45 A; TH = 205 µs	DL 40 HE 21 HO 39 L 70	0,36 A 0,21 A 0,36 A 0,56 A	0,36 A 0,21 A 0,36 A 0,56 A	< 40 mA	< 5 mA
QTi DALI 2x28/54 DIM	Ip = 45 A; TH = 205 µs	DL 55 HE 28 HO 54	0,51 A 0,27 A 0,51 A	0,51 A 0,27 A 0,51 A	< 40 mA	< 5 mA
QTi 2x28/54 DIM	Ip = 45 A; TH = 205 µs	DL 55 HE 28 HO 54	0,51 A 0,27 A 0,51 A	0,51 A 0,27 A 0,51 A	< 40 mA	< 5 mA
QTi DALI 2x35/49 DIM	Ip = 45 A; TH = 205 µs	HE 35 HO 49	0,33 A 0,45 A	0,33 A 0,45 A	< 40 mA	< 5 mA
QTi 2x35/49 DIM	Ip = 45 A; TH = 205 µs	HE 35 HO 49	0,33 A 0,45 A	0,33 A 0,45 A	< 40 mA	< 5 mA
QTi DALI 2x35/49/80 DIM	Ip = 60 A; TH = 205 µs	DL 80 HE 35 HO 49 HO 80	0,74 A 0,34 A 0,46 A 0,74 A	0,74 A 0,34 A 0,46 A 0,74 A	< 40 mA	< 5 mA
QTi 2x35/49/80 DIM	Ip = 60 A; TH = 205 µs	DL 80 HE 35 HO 49 HO 80	0,74 A 0,34 A 0,46 A 0,74 A	0,74 A 0,34 A 0,46 A 0,74 A	< 40 mA	< 5 mA
QTi DALI 3x14/24 DIM	Ip = 35 A; TH = 180 µs	DL 24 HE 14 HO 24	0,32 A 0,20 A 0,32 A	0,32 A 0,20 A 0,32 A	< 35 mA	< 5 mA
QTi 3x14/24 DIM	Ip = 35 A; TH = 180 µs	DL 24 HE 14 HO 24	0,32 A 0,20 A 0,32 A	0,32 A 0,20 A 0,32 A	< 35 mA	< 5 mA
QTi DALI 4x14/24 DIM	Ip = 45 A; TH = 205 µs	DL 24 HE 14 HO 24	0,43 A 0,27 A 0,43 A	0,43 A 0,27 A 0,43 A	< 40 mA	< 5 mA
QTi 4x14/24 DIM	Ip = 45 A; TH = 205 µs	DL 24 HE 14 HO 24	0,43 A 0,27 A 0,43 A	0,43 A 0,27 A 0,43 A	< 40 mA	< 5 mA

Technical requirements for electronic control gears for LED- / fluorescent- luminaires for connection at INOTEC central battery systems

INOTEC Sicherheitstechnik GmbH

Manufacturer: OSRAM GmbH Marcel-Breuer-Str. 6 D-80807 München	Type / Description: Luminaire: EVG: QUICKTRONIC INTELLIGENT QTi LED:
Project / Place / Project ID:	Specified by: Name: Dr. Kay Schmidtmann Company: Osram GmbH Date: 28.09.2016

	Features	Techn. data / INOTEC requirements	Explanation	Fullfilled(yes/no)
1	Voltage range AC	230V ± 10%	Voltage range in normal mains operation	Yes
2	Voltage range DC	186V - 260V	possible voltage range in emergency operation	Yes
3	Control gear suitable for "Joker-Voltage" ?	B2-rectification of the AC voltage (without smoothing)	Pulsating DC voltage 	Yes
4	Control gear compatible with change-over time of the system?	Change-over time: 150-1000ms	Typical change-over time of INOTEC systems between mains- and battery operation	Yes
5	Starting behavior of the control gear in DC operation	Stable current consumption within 3s	Necesseray for individual lamp monitoring (SV)	Yes
6	Control gear complies with the standard. (only for fluorescent lamps)	DIN EN 60929	AC and/or DC-supplied electronic control gear for tubular fluorescent lamps - Performance requirements	Yes
7	Control gear complies with the standard: (only for fluorescent lamps)	DIN EN 61347-2-3(incl. Attachement J)	Particular requirements for AC and/or DC supplied electronic control gear for fluosrescent lamps	Yes
8	Control gear complies with the standard: (only for LED)	DIN EN 62384	DC or AC supplied electronic control gear for LED modules - Performance requirements	Not relevant
9	Control gear complies with the standard:	DIN EN 61347-2-13	Lamp control gear - Part 2-13: Particular requirements for DC or AC supplied electronic control gear for LED modules	Not relevant
10	Control gear complies with the standard:	DIN EN 55015 (Measurement on AC and DC)	Limits and methods of measurement of radio interference	Yes
11	Control gear complies with the standard:	DIN EN 61000-3-2	Electromagnetic compatibility (EMC)-Part 3-2: Limits-Limits for harmonic current emissions (equipment input current ≤ 16A per phase)	Yes
12	Control gear complies with the standard:	DIN EN 61547	Equipment for general lighting purposes - EMC immunity requirements	Yes

Note: VDE 0108 is not a standard for ECG, marking is not applicable

Technical requirements for electronic control gears for LED- / fluorescent- luminaires for connection at INOTEC central battery systems

INOTEC Sicherheitstechnik GmbH

Manufacturer:	Type / Description:
OSRAM GmbH Marcel-Breuer-Str. 6 D-80807 München	Luminaire: EVG: QUICKTRONIC INTELLIGENT QTi LED:
Project/ Place/ Project ID:	Specified by: Name: Dr. Kay Schmidtmann Company: Osram GmbH Date: 28.09.2016

	Features	Techn.Data/INOTEC requirements	Explanation	Manufacturer information
13	Nominal current of the control gear with connected illuminant in AC-operation		Selection guide for the calculation of the max. numberof luminairs per circuit	see register "overview QTi"
14	Nominal current of the control gear with connected illuminant in DC-operation		Selection guide for the calculation of the necessary battery capacity	see register "overview QTi"
15	Nominal current of the control gear with connected illuminant in DC-operation (186V and 260V) and pre-set luminous flux	J-SV-Modul/S (5-120W): > 20mA = OK J-SV-Modul.2/S (20-300W): > 70mA = OK J-SV-Modul.3/S (2-30W): > 12mA = OK J-SV-Modul.4/S (18-120W): >70mA= OK J-SV-Modul.L/S (20-120W): > 20mA= OK J-SV-Modul T/S (20-100W): > 60mA= OK	Selection guide for determination of the monitoring module: The values are not to be undercut within the voltage range 186VDC - 260VDC to recognise a normal working lamp correctly.	see register "overview QTi"
16	Luminous flux in DC- operation (186V)		Important for the safety lighting design	>75%
17	Standby current of the control gear with no illuminant connected or with defective illuminant in DC-operation *1	J-SV-Modul/S (5-120W): < 10mA = n.OK J-SV-Modul.2/S (20-300W): < 45mA = n.OK J-SV-Modul.3/S (2-30W): < 8mA = n.OK J-SV-Modul.4/S (18-120W): < 45mA = n.OK J-SV-Modul.L/S (20-120W): < 10mA = n.OK J-SV-Modul T/S (20-100W): < 50mA = n.OK	Selection guide for determination of the monitoring module: The values are not to be exceeded within the voltage range 186VDC - 260VDC to recognise a lamp failure correctly.	<10mA
18	Max. inrush current of the control gear with connected lamp in AC operation (230V)	Max. permitted inrush current per circuit/ monitoring module: SK 4x2A: 250A / 500µs SK 2x4A: 250A / 500µs SK 2x3A: 250A / 500µs SK 1x6A: 250A / 500µs J-SV-Modul T/S: 40A / 500µs all other J-SV-modules: 80A / 500µs	Describes the max. inrush current of all ballasts in a circuit, to calculate the maximum contact rating of the circuit	see register "overview QTi"

Luminaires, which should work as emergency lighting, have to be in accordance with DIN EN 60598-2-22.
(Particular requirements - Luminaires for emergency lighting).

*1: The J-SV-monitoring modules monitor the current consumption on the primary side of control gear for LED modules within the specified limits. Failures of individual LEDs (low-impedance) on the secondary side do not inevitably lead to a modification of current consumption on the primary side, and in such cases cannot be detected as a failure.

Notes:

For the correctness:

Garching, 28.09.2016
Place, Date

DS D SST
Dr. Kay Schmidtmann
Signature

DS QM LAB&SQM
Bernhard Schemmel

Technical requirements for electronic control gears for
LED- / fluorescent- luminaires for connection at INOTEC
central battery systems

INOTEC Sicherheitstechnik GmbH

Manufacturer: OSRAM GmbH Marcel-Breuer-Str. 6 D-80807 München	**ECG Family QUICKTRONIC INTELLIGENT Qti**	OSRAM

ECG type	Max Inrush current / ECG in AC-operation	I_N **rated current in AC-operation**	I_N **rated current in DC-operation**		
QTi 1x14/24/21/39	Ip = 1,5 A; TH = 500 µs	HE 14: 0,08 A HE 21: 0,11 A HE 28: 0,15 A HE 35: 0,18 A HO 24: 0,12A HO 39: 0,19 A L18: 0,09 A L30: 0,15 A L36: 0,16 A DL 18: 0,09 A DL 24: 0,12 A DL 36: 0,16 A DL 40: 0,20 A DF 18: 0,09 A DF 24: 0,12 A DF 36: 0,16 A FC 22: 0,12 A FC 40: 0,19 A	HE 14: 0,08 A HE 21: 0,11 A HE 28: 0,15 A HE 35: 0,18 A HO 24: 0,12A HO 39: 0,19 A L18: 0,09 A L30: 0,15 A L36: 0,16 A DL 18: 0,09 A DL 24: 0,12 A DL 36: 0,16 A DL 40: 0,20 A DF 18: 0,09 A DF 24: 0,12 A DF 36: 0,16 A FC 22: 0,12 A FC 40: 0,19 A		
QTi 1x28/54	Ip = 1,5 A; TH = 500 µs	HE 14: 0,08 A HE 21: 0,11 A HE 28: 0,15 A HE 35: 0,18 A HO 54: 0,27 A L58: 0,26 A L70: 0,29 A	HE 14: 0,08 A HE 21: 0,11 A HE 28: 0,15 A HE 35: 0,18 A HO 54: 0,27 A L58: 0,26 A L70: 0,29 A		

QTi 1x35/49/80	Ip = 1,5 A; TH = 500 µs	HE 14: 0,08 A HE 21: 0,11 A HE 28: 0,15 A HE 35: 0,18 A HO 49: 0,24 A HO 80: 0,38 A DL 55: 0,30 A DL 80: 0,39 A FC 55: 0,27 A	HE 14: 0,08 A HE 21: 0,11 A HE 28: 0,15 A HE 35: 0,18 A HO 49: 0,24 A HO 80: 0,38 A DL 55: 0,30 A DL 80: 0,39 A FC 55: 0,27 A		
QTi 2x14/24/21/39	Ip = 1,5 A; TH = 500 µs	HE 14: 0,15 A HE 21: 0,21 A HE 28: 0,28 A HE 35: 0,35 A HO 24: 0,24A HO 39: 0,36 A L18: 0,18 A L30: 0,29 A L36: 0,32 A DL 18: 0,17 A DL 24: 0,24 A DL 36: 0,31 A DL 40: 0,39 A DF 18: 0,16 A DF 24: 0,22 A DF 36: 0,29 A FC 22: 0,23 A FC 40: 0,39 A	HE 14: 0,15 A HE 21: 0,21 A HE 28: 0,28 A HE 35: 0,35 A HO 24: 0,24A HO 39: 0,36 A L18: 0,18 A L30: 0,29 A L36: 0,32 A DL 18: 0,17 A DL 24: 0,24 A DL 36: 0,31 A DL 40: 0,39 A DF 18: 0,16 A DF 24: 0,22 A DF 36: 0,29 A FC 22: 0,23 A FC 40: 0,39 A		
QTi 2x28/54	Ip = 1,5 A; TH = 500 ms	HE 14: 0,15 A HE 21: 0,21 A HE 28: 0,28 A HE 35: 0,35 A HO 54: 0,54 A L58: 0,49 A	HE 14: 0,15 A HE 21: 0,21 A HE 28: 0,28 A HE 35: 0,35 A HO 54: 0,54 A L58: 0,49 A		
QTi 2x35/49	Ip = 1,5 A; TH = 500 µs	HE 14: 0,15 A HE 21: 0,21 A HE 28: 0,28 A HE 35: 0,35 A HO 49: 0,52 A	HE 14: 0,15 A HE 21: 0,21 A HE 28: 0,28 A HE 35: 0,35 A HO 49: 0,52 A		

QTi 2x35/49/80	Ip = 60 A; TH = 230µs	HE 35: 0,34 A HO 49: 0,52 A HO 80: 0,74 A DL 80: 0,74 A	HE 35: 0,34 A HO 49: 0,52 A HO 80: 0,74 A DL 80: 0,74 A		

Technical requirements for electronic control gears for LED- / fluorescent- luminaires for connection at INOTEC central battery systems

INOTEC Sicherheitstechnik GmbH

Manufacturer:	Type / Description:
OSRAM GmbH Marcel-Breuer-Str. 6 D-80807 München	Luminaire: EVG: QUICKTRONIC FC 1x55 LED:
Project / Place / Project ID:	Specified by: Name: Dr. Kay Schmidtmann Company: Osram GmbH Date: 28.09.2016

	Features	Techn. data / INOTEC requirements	Explanation	Fullfilled(yes/no)
1	Voltage range AC	230V ± 10%	Voltage range in normal mains operation	Yes
2	Voltage range DC	186V - 260V	possible voltage range in emergency operation	Yes
3	Control gear suitable for "Joker-Voltage" ?	B2-rectification of the AC voltage (without smoothing)	Pulsating DC voltage 	Yes
4	Control gear compatible with change-over time of the system?	Change-over time: 150-1000ms	Typical change-over time of INOTEC systems between mains- and battery operation	Yes
5	Starting behavior of the control gear in DC operation	Stable current consumption within 3s	Necesseray for individual lamp monitoring (SV)	Yes
6	Control gear complies with the standard. (only for fluorescent lamps)	DIN EN 60929	AC and/or DC-supplied electronic control gear for tubular fluorescent lamps - Performance requirements	Yes
7	Control gear complies with the standard: (only for fluorescent lamps)	DIN EN 61347-2-3(incl. Attachement J)	Particular requirements for AC and/or DC supplied electronic control gear for fluosrescent lamps	Yes
8	Control gear complies with the standard: (only for LED)	DIN EN 62384	DC or AC supplied electronic control gear for LED modules - Performance requirements	Not relevant
9	Control gear complies with the standard:	DIN EN 61347-2-13	Lamp control gear - Part 2-13: Particular requirements for DC or AC supplied electronic control gear for LED modules	Not relevant
10	Control gear complies with the standard:	DIN EN 55015 (Measurement on AC and DC)	Limits and methods of measurement of radio interference	Yes
11	Control gear complies with the standard:	DIN EN 61000-3-2	Electromagnetic compatibility (EMC)-Part 3-2: Limits-Limits for harmonic current emissions (equipment input current ≤ 16A per phase)	Yes
12	Control gear complies with the standard:	DIN EN 61547	Equipment for general lighting purposes - EMC immunity requirements	Yes

Note: VDE 0108 is not a standard for ECG, marking is not applicable

Technical requirements for electronic control gears for LED- / fluorescent- luminaires for connection at INOTEC central battery systems

INOTEC Sicherheitstechnik GmbH

Manufacturer:	Type / Description:
OSRAM GmbH Marcel-Breuer-Str. 6 D-80807 München	Luminaire: EVG: QUICKTRONIC FC 1x55 LED:
Project/ Place/ Project ID:	Specified by: Name: Dr. Kay Schmidtmann Company: Osram GmbH Date: 28.09.2016

	Features	Techn.Data/INOTEC requirements	Explanation	Manufacturer information
13	Nominal current of the control gear with connected illuminant in AC-operation		Selection guide for the calculation of the max. numberof luminairs per circuit	0,26A
14	Nominal current of the control gear with connected illuminant in DC-operation		Selection guide for the calculation of the necessary battery capacity	0,26A
15	Nominal current of the control gear with connected illuminant in DC-operation	J-SV-Modul/S (5-120W): > 20mA = OK J-SV-Modul.2/S (20-300W): > 70mA = OK J-SV-Modul.3/S (2-30W): > 12mA = OK J-SV-Modul.4/S (18-120W): >70mA= OK J-SV-Modul.L/S (20-120W): > 20mA= OK J-SV-Modul T/S (20-100W): > 60mA= OK	Selection guide for determination of the monitoring module: The values are not to be undercut within the voltage range 186VDC - 260VDC to recognise a normal working lamp correctly.	0,26A
16	Luminous flux in DC- operation (186V)		Important for the safety lighting design	>75%
17	Standby current of the control gear with no illuminant connected or with defective illuminant in DC-operation *1	J-SV-Modul/S (5-120W): < 10mA = n.OK J-SV-Modul.2/S (20-300W): < 45mA = n.OK J-SV-Modul.3/S (2-30W): < 8mA = n.OK J-SV-Modul.4/S (18-120W): < 45mA = n.OK J-SV-Modul.L/S (20-120W): < 10mA = n.OK J-SV-Modul T/S (20-100W): < 50mA = n.OK	Selection guide for determination of the monitoring module: The values are not to be exceeded within the voltage range 186VDC - 260VDC to recognise a lamp failure correctly.	<10mA
18	Max. inrush current of the control gear with connected lamp in AC operation (230V)	Max. permitted inrush current per circuit/ monitoring module: SK 4x2A: 250A / 500µs SK 2x4A: 250A / 500µs SK 2x3A: 250A / 500µs SK 1x6A: 250A / 500µs J-SV-Modul T/S: 40A / 500µs all other J-SV-modules: 80A / 500µs	Describes the max. inrush current of all ballasts in a circuit, to calculate the maximum contact rating of the circuit	28 A / 230 µs

Luminaires, which should work as emergency lighting, have to be in accordance with DIN EN 60598-2-22.
(Particular requirements - Luminaires for emergency lighting).

*1: The J-SV-monitoring modules monitor the current consumption on the primary side of control gear for LED modules within the specified limits.
Failures of individual LEDs (low-impedance) on the secondary side do not inevitably lead to a modification of current consumption on the primary side, and in such cases cannot be detected as a failure.

Notes:

For the correctness:

Garching, 28.09.2016
Place, Date

DS D.SST
Dr. Kay Schmidtmann
Signature

DS QM I.A.
Bernhard Schemmel

Technical requirements for electronic control gears for LED- / fluorescent- luminaires for connection at INOTEC central battery systems

INOTEC Sicherheitstechnik GmbH

Manufacturer:	Type / Description:
OSRAM GmbH Marcel-Breuer-Str. 6 D-80807 München	Luminaire:
	EVG: QUICKTRONIC MULTIWATT QT-M...S(E), QTP-M
	LED:
Project / Place / Project ID:	Specified by:
	Name: Dr. Kay Schmidtmann
	Company: Osram GmbH
	Date: 08.11.2016

	Features	Techn. data / INOTEC requirements	Explanation	Fullfilled(yes/no)
1	Voltage range AC	230V ± 10%	Voltage range in normal mains operation	Yes
2	Voltage range DC	186V - 260V	possible voltage range in emergency operation	Yes
3	Control gear suitable for "Joker-Voltage" ?	B2-rectification of the AC voltage (without smoothing)	Pulsating DC voltage 	Yes
4	Control gear compatible with change-over time of the system?	Change-over time: 150-1000ms	Typical change-over time of INOTEC systems between mains- and battery operation	Yes
5	Starting behavior of the control gear in DC operation	Stable current consumption within 3s	Necesseray for individual lamp monitoring (SV)	Yes
6	Control gear complies with the standard. (only for fluorescent lamps)	DIN EN 60929	AC and/or DC-supplied electronic control gear for tubular fluorescent lamps - Performance requirements	Yes
7	Control gear complies with the standard: (only for fluorescent lamps)	DIN EN 61347-2-3(incl. Attachement J)	Particular requirements for AC and/or DC supplied electronic control gear for fluosrescent lamps	Yes
8	Control gear complies with the standard: (only for LED)	DIN EN 62384	DC or AC supplied electronic control gear for LED modules - Performance requirements	Not relevant
9	Control gear complies with the standard:	DIN EN 61347-2-13	Lamp control gear - Part 2-13: Particular requirements for DC or AC supplied electronic control gear for LED modules	Not relevant
10	Control gear complies with the standard:	DIN EN 55015 (Measurement on AC and DC)	Limits and methods of measurement of radio interference	Yes
11	Control gear complies with the standard:	DIN EN 61000-3-2	Electromagnetic compatibility (EMC)-Part 3-2: Limits-Limits for harmonic current emissions (equipment input current ≤ 16A per phase)	Yes
12	Control gear complies with the standard:	DIN EN 61547	Equipment for general lighting purposes - EMC immunity requirements	Yes

Note: VDE 0108 is not a standard for ECG, marking is not applicable

Technical requirements for electronic control gears for LED- / fluorescent- luminaires for connection at INOTEC central battery systems

INOTEC Sicherheitstechnik GmbH

Manufacturer:	Type / Description:
OSRAM GmbH Marcel-Breuer-Str. 6 D-80807 München	Luminaire: EVG: QUICKTRONIC MULTIWATT QT-M...S(E), QTP-M LED:
Project/ Place/ Project ID:	Specified by: Name: Dr. Kay Schmidtmann Company: Osram GmbH Date: 08.11.2016

	Features	Techn.Data/INOTEC requirements	Explanation	Manufacturer information
13	Nominal current of the control gear with connected illuminant in AC-operation		Selection guide for the calculation of the max. numberof luminairs per circuit	see register "overview QTP-M"
14	Nominal current of the control gear with connected illuminant in DC-operation		Selection guide for the calculation of the necessary battery capacity	see register "overview QTP-M"
15	Nominal current of the control gear with connected illuminant in DC-operation (186V and 260V) and pre-set luminous flux	J-SV-Modul/S (5-120W): > 20mA = OK J-SV-Modul.2/S (20-300W): > 70mA = OK J-SV-Modul.3/S (2-30W): > 12mA = OK J-SV-Modul.4/S (18-120W): >70mA= OK J-SV-Modul.L/S (20-120W): > 20mA= OK J-SV-Modul T/S (20-100W): > 60mA= OK	Selection guide for determination of the monitoring module: The values are not to be undercut within the voltage range 186VDC - 260VDC to recognise a normal working lamp correctly.	see register "overview QTP-M"
16	Luminous flux in DC- operation (186V)		Important for the safety lighting design	>75%
17	Standby current of the control gear with no illuminant connected or with defective illuminant in DC-operation *1	J-SV-Modul/S (5-120W): < 10mA = n.OK J-SV-Modul.2/S (20-300W): < 45mA = n.OK J-SV-Modul.3/S (2-30W): < 8mA = n.OK J-SV-Modul.4/S (18-120W): < 45mA = n.OK J-SV-Modul.L/S (20-120W): < 10mA = n.OK J-SV-Modul T/S (20-100W): < 50mA = n.OK	Selection guide for determination of the monitoring module: The values are not to be exceeded within the voltage range 186VDC - 260VDC to recognise a lamp failure correctly.	<10mA
18	Max. inrush current of the control gear with connected lamp in AC operation (230V)	Max. permitted inrush current per circuit/ monitoring module: SK 4x2A: 250A / 500µs SK 2x4A: 250A / 500µs SK 2x3A: 250A / 500µs SK 1x6A: 250A / 500µs J-SV-Modul T/S: 40A / 500µs all other J-SV-modules: 80A / 500µs	Describes the max. inrush current of all ballasts in a circuit, to calculate the maximum contact rating of the circuit	see register "overview QTP-M"

Luminaires, which should work as emergency lighting, have to be in accordance with DIN EN 60598-2-22.
(Particular requirements - Luminaires for emergency lighting).

*1: The J-SV-monitoring modules monitor the current consumption on the primary side of control gear for LED modules within the specified limits.
Failures of individual LEDs (low-impedance) on the secondary side do not inevitably lead to a modification of current consumption on the primary side, and in such cases cannot be detected as a failure.

Notes:

For the correctness:

Garching, 08.11.2016
Place, Date

DS D SST
Dr. Kay Schmidtmann
Signature

DS QM LAB&SQM
Bernhard Schimmel

Technical requirements for electronic control gears for LED- / fluorescent- luminaires for connection at INOTEC central battery systems

INOTEC Sicherheitstechnik GmbH

Manufacturer: OSRAM GmbH Marcel-Breuer-Str. 6 D-80807 München	**ECG product family: QUICKTRONIC MULTIWATT QT-M...S(E), QTP-M**	OSRAM

ECG type	Max Inrush current / ECG in AC-operation	I_N **rated current in AC-operation**	I_N **rated current in DC-operation**		
QTP-M 1x26-42/220-240	Ip = 15 A; TH = 200 µs	DD/(T)E 26: 0.12 A DT/E 32: 0.16 A DT/E 42: 0.20 A DL/DF 18: 0.09 A DL/DF 24: 0.12 A DL/DF 36: 0.15 A DL 40: 0.19 A L18: 0.10 A L36: 0.16 A FC 22: 0.12 A FC 40: 0.19 A HO 24: 0.12 A HO 39: 0.18 A	DD/(T)E 26: 0.12 A DT/E 32: 0.16 A DT/E 42: 0.20 A DL/DF 18: 0.09 A DL/DF 24: 0.12 A DL/DF 36: 0.16 A DL 40: 0.19 A L18: 0.10 A L36: 0.16 A FC 22: 0.12 A FC 40: 0.19 A HO 24: 0.12 A HO 39: 0.8 A		

QT-M 1x26-42/230-240 SE	Ip = 20 A; TH = 210 µs	DD/(T)E 26: 0.12 A DT/E 32: 0.15 A DT/E 42: 0.20 A DL/DF 18: 0.09 A DL/DF 24: 0.12 A DL/DF 36: 0.15 A DL 40: 0.19 A L18: 0.09 A L36: 0.15 A FC 22: 0.11 A FC 40: 0.18 A HO 24: 0.12 A HO 39: 0.17 A	DD/(T)E 26: 0.12 A DT/E 32: 0.15 A DT/E 42: 0.20 A DL/DF 18: 0.09 A DL/DF 24: 0.12 A DL/DF 36: 0.15 A DL 40: 0.19 A L18: 0.09 A L36: 0.15 A FC 22: 0.11 A FC 40: 0.18 A HO 24: 0.12 A HO 39: 0.17 A		
QTP-M 2x26-32/220-240	Ip = 25 A; TH = 250 µs	DD/(T)E 26: 0.24 A DT/E 32: 0.30 A DT/E 42: 0.20 A FSMH-57 (DT/E 57): 0.27 A DL/DF 18: 0.16 A DL/DF 24: 0.22 A DL/DF 36: 0.30 A L18: 0.17 A FC 22: 0.22 A FC 22 + 40: 0.30 A HO 24: 0.23 A	DD/(T)E 26: 0.24 A DT/E 32: 0.30 A DT/E 42: 0.20 A FSMH-57 (DT/E 57): 0.27 A DL/DF 18: 0.16 A DL/DF 24: 0.22 A DL/DF 36: 0.30 A L18: 0.17 A FC 22: 0.22 A FC 22 + 40: 0.30 A HO 24: 0.23 A		
QT-M 2x26-42/220-240 S	Ip = 28 A; TH = 230 µs	DD/(T)E 26: 0.23 A DT/E 32: 0.30 A DT/E 42: 0.39 A DL/DF 24: 0.23 A DL/DF 36: 0.30 A L36: 0.30 A FC 22: 0.23 A FC 22 + 40: 0.30 A FQ 24: 0.23 A FC 40: 0.38 A	DD/(T)E 26: 0.23 A DT/E 32: 0.30 A DT/E 42: 0.39 A DL/DF 24: 0.23 A DL/DF 36: 0.30 A L36: 0.30 A FC 22: 0.23 A FC 22 + 40: 0.30 A FQ 24: 0.23 A FC 40: 0.38 A		

Technical requirements for electronic control gears for LED- / fluorescent- luminaires for connection at INOTEC central battery systems

INOTEC Sicherheitstechnik GmbH

Manufacturer: OSRAM GmbH Marcel-Breuer-Str. 6 D-80807 München	Type / Description: Luminaire: EVG: QUICKTRONIC PROFESSIONAL QTP5 LED:
Project / Place / Project ID:	Specified by: Name: Dr. Kay Schmidtmann Company: Osram GmbH Date: 28.09.2016

	Features	Techn. data / INOTEC requirements	Explanation	Fullfilled(yes/no)
1	Voltage range AC	230V ± 10%	Voltage range in normal mains operation	Yes
2	Voltage range DC	186V - 260V	possible voltage range in emergency operation	Yes
3	Control gear suitable for "Joker-Voltage" ?	B2-rectification of the AC voltage (without smoothing)	Pulsating DC voltage 	Yes
4	Control gear compatible with change-over time of the system?	Change-over time: 150-1000ms	Typical change-over time of INOTEC systems between mains- and battery operation	Yes
5	Starting behavior of the control gear in DC operation	Stable current consumption within 3s	Necesseray for individual lamp monitoring (SV)	Yes
6	Control gear complies with the standard. (only for fluorescent lamps)	DIN EN 60929	AC and/or DC-supplied electronic control gear for tubular fluorescent lamps - Performance requirements	Yes
7	Control gear complies with the standard: (only for fluorescent lamps)	DIN EN 61347-2-3(incl. Attachement J)	Particular requirements for AC and/or DC supplied electronic control gear for fluosrescent lamps	Yes
8	Control gear complies with the standard: (only for LED)	DIN EN 62384	DC or AC supplied electronic control gear for LED modules - Performance requirements	Not relevant
9	Control gear complies with the standard:	DIN EN 61347-2-13	Lamp control gear - Part 2-13: Particular requirements for DC or AC supplied electronic control gear for LED modules	Not relevant
10	Control gear complies with the standard:	DIN EN 55015 (Measurement on AC and DC)	Limits and methods of measurement of radio interference	Yes
11	Control gear complies with the standard:	DIN EN 61000-3-2	Electromagnetic compatibility (EMC)-Part 3-2: Limits-Limits for harmonic current emissions (equipment input current ≤ 16A per phase)	Yes
12	Control gear complies with the standard:	DIN EN 61547	Equipment for general lighting purposes - EMC immunity requirements	Yes

Note: VDE 0108 is not a standard for ECG, marking is not applicable

Technical requirements for electronic control gears for LED- / fluorescent- luminaires for connection at INOTEC central battery systems

INOTEC Sicherheitstechnik GmbH

Manufacturer:	Type / Description:
OSRAM GmbH Marcel-Breuer-Str. 6 D-80807 München	Luminaire: EVG: QUICKTRONIC PROFESSIONAL QTP5 LED:
Project/ Place/ Project ID:	Specified by: Name: Dr. Kay Schmidtmann Company: Osram GmbH Date: 28.09.2016

	Features	Techn.Data/INOTEC requirements	Explanation	Manufacturer information
13	Nominal current of the control gear with connected illuminant in AC-operation		Selection guide for the calculation of the max. numberof luminairs per circuit	see register "overview QTP5"
14	Nominal current of the control gear with connected illuminant in DC-operation		Selection guide for the calculation of the necessary battery capacity	see register "overview QTP5"
15	Nominal current of the control gear with connected illuminant in DC-operation (186V and 260V) and pre-set luminous flux	J-SV-Modul/S (5-120W): > 20mA = OK J-SV-Modul.2/S (20-300W): > 70mA = OK J-SV-Modul.3/S (2-30W): > 12mA = OK J-SV-Modul.4/S (18-120W): >70mA= OK J-SV-Modul.L/S (20-120W): > 20mA= OK J-SV-Modul T/S (20-100W): > 60mA= OK	Selection guide for determination of the monitoring module: The values are not to be undercut within the voltage range 186VDC - 260VDC to recognise a normal working lamp correctly.	see register "overview QTP5"
16	Luminous flux in DC- operation (186V)		Important for the safety lighting design	>75%
17	Standby current of the control gear with no illuminant connected or with defective illuminant in DC-operation *1	J-SV-Modul/S (5-120W): < 10mA = n.OK J-SV-Modul.2/S (20-300W): < 45mA = n.OK J-SV-Modul.3/S (2-30W): < 8mA = n.OK J-SV-Modul.4/S (18-120W): < 45mA = n.OK J-SV-Modul.L/S (20-120W): < 10mA = n.OK J-SV-Modul T/S (20-100W): < 50mA = n.OK	Selection guide for determination of the monitoring module: The values are not to be exceeded within the voltage range 186VDC - 260VDC to recognise a lamp failure correctly.	<10mA
18	Max. inrush current of the control gear with connected lamp in AC operation (230V)	Max. permitted inrush current per circuit/ monitoring module: SK 4x2A: 250A / 500µs SK 2x4A: 250A / 500µs SK 2x3A: 250A / 500µs SK 1x6A: 250A / 500µs J-SV-Modul T/S: 40A / 500µs all other J-SV-modules: 80A / 500µs	Describes the max. inrush current of all ballasts in a circuit, to calculate the maximum contact rating of the circuit	see register "overview QTP5"

Luminaires, which should work as emergency lighting, have to be in accordance with DIN EN 60598-2-22.
(Particular requirements - Luminaires for emergency lighting).

*1: The J-SV-monitoring modules monitor the current consumption on the primary side of control gear for LED modules within the specified limits.
Failures of individual LEDs (low-impedance) on the secondary side do not inevitably lead to a modification of current consumption on the primary side, and in such cases cannot be detected as a failure.

Notes:

For the correctness:

Garching, 28.09.2016
Place, Date

DS D SST DS QM LAB&SQM
Dr. Kay Schmidtmann
Signature

Technical requirements for electronic control gears for LED- / fluorescent- luminaires for connection at INOTEC central battery systems

INOTEC Sicherheitstechnik GmbH

Manufacturer: OSRAM GmbH Marcel-Breuer-Str. 6 D-80807 München	**ECG Family QUICKTRONIC PROFESSIONAL QTP5**	OSRAM

ECG type	Max Inrush current / ECG in AC-operation	I_N **rated current in AC-operation**	I_N **rated current in DC-operation**		
QTP5 1x14-35	Ip = 24 A; TH = 230µs	HE 14: 0,08 A HE 21: 0,11 A HE 28: 0,14 A HE 35: 0,18 A	HE 14: 0,08 A HE 21: 0,11 A HE 28: 0,14 A HE 35: 0,18 A		
QTP5 2x14-35	Ip = 40 A; TH = 200µs	HE 14: 0,15 A HE 21: 0,21 A HE 28: 0,28 A HE 35: 0,35 A	HE 14: 0,15 A HE 21: 0,21 A HE 28: 0,28 A HE 35: 0,35 A		
QTP5 1x24-39	Ip = 24 A; TH = 230µs	HO 24: 0,12 A HO 39: 0,20 A	HO 24: 0,12 A HO 39: 0,20 A		
QTP5 1x49	Ip = 33 A; TH = 180µs	HO 49: 0,24 A	HO 49: 0,24 A		
QTP5 1x54	Ip = 37 A; TH = 200µs	HO 54: 0,27 A	HO 54: 0,27 A		
QTP5 1x80	Ip = 57 A; TH = 150µs	HO 80: 0,39 A	HO 80: 0,39 A		
QTP5 2x24-39	Ip = 57 A; TH = 150µs	HO 24: 0,22 A HO 39: 0,36 A	HO 24: 0,22 A HO 39: 0,36 A		
QTP5 2x49	Ip = 53 A; TH = 190µs	HO 49: 0,48 A	HO 49: 0,48 A		
QTP5 2x54	Ip = 50 A; TH = 160µs	HO 54: 0,53 A	HO 54: 0,53 A		