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Requirements for dimmable DALI control gears for fluorescent lamps and LED

Version 3

Manufacturer: **OSRAM GmbH** **Marcel-Breuer-Str. 6** **D-80807 München**	**Type / description:** **ECG-type: OT 165/170-240/1A0 4DIMLT2 G2 CE (AM27702)**		**Manufacturer information Complies: YES/NO**
Features:	**CEAG data:**	**Explanation:**	
Control gear suitable for a DC voltage range:	**186V - 260V DC (for Lead-Battery)**	Possible voltage range of the battery in emergency mode. *(Not for AT-S⁺ Systems required)*	**YES**
Control gear compatible with the switch-over time of the system?	**Switch-over time:** **180 ms - 450 ms**	Typical switch-over time of CEAG systems between mains supply and emergency power supply	**YES**
Starting behavior of the control gear:	**Stable current consumption after less than 1.6 sec. maximum.**	A stable operation of the control gear after 1.6 seconds of start up is required for the right functionality of the individual monitoring. With max. 20 luminaires for one current circuit: Δ I in sum < 250 mA are allowed	**YES**
only for flourescent lamps: Control gear complies with the standard:	**DIN EN 60929**	AC and/or DC-supplied electronic control gear for tubular fluorescent lamps - Performance requirements	**Not Relevant**
only for flourescent lamps: Control gear complies with the standard:	**DIN EN 61347-2-3 (incl. Attachment J)**	Particular requirements for AC and/or DC supplied electronic control gear for fluorescent lamps	**Not Relevant**
only for LED: Control gear complies with the standard:	**DIN EN 62384**	DC. Or AC supplied electronic control gear for LED modules - Performance requirements	**YES**
only for LED: Control gear complies with the standard:	**DIN EN 61347-2-13**	Lamp controlgear — Part 2-13: Particular requirements for d. c. or a. c. supplied electronic controlgear for LED modules	**YES**
Fullfilled the standard:	**DIN EN 55015** **(Measurement on AC And DC)**	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment	**YES**
Fullfilled the standard:	**DIN EN 61000-3-2**	Electromagnetic compatibility (EMC) — Part 3-2: Limits — Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)	**YES**
Fullfilled the standard:	**DIN EN 61547**	Equipment for general lighting purposes — EMC immunity requirements	**(*2) YES**
Fullfilled the DALI standards:	**DIN EN 62386-101 /-102 / -207***	**Control gear must have the DALI Logo***	**YES**

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

Features:	**CEAG-Data:**	**Explanation:**	**Manufacturer information:**
Important for function test! According to IEC 62386 Part 102 Support of : **DALI command 145** (Query Control Gear) **DALI command 146** (Query Lamp Failure)	**According to IEC 62386 Part 102**	To detect a lamp failure, the V-CG-SB.1 module send DALI command queries (145/146) to the DALI LED driver. These DALI commands are necessary to ensure the lamp failure detection, and must be support by the control gear.	**YES**
Important for DC operation: DALI light level	**In case of locked DALI light level in DC operation (EOF=Emergency Output Level), the V-CG-SB.1 can not change the light level !**	In DC-emergency case the DALI-Light Level is locked to prevent unwanted changes of the luminous flux.	**UNLOCKED**
Important for lighting design: If DALI-Light level is locked, the value of the preset DC-Lightlevel (in %) is required		Pre-set DC-Light Level ** e.g. 15% (DALI-value 185 for logarithmic dimming curve)	**(*1) 100%**

Note: Important for the planning - Max. no. Of luminiares per circuit

Important for the contact load SKU: Max. inrush current each converter/luminaire in AC-operation:	**Max. permitted inrush current per circuit:** **SKU 2 x 3A (CG) => 120 A** **SKU 1 x 6A (CG) => 180 A** **SKU 4 x 1,5A CG-S => 60 A** **SKU 2 x 3A CG-S => 250 A** **SKU 1 x 6A CG-S => 250 A** **SOU CG-S // S⁺ => 250 A** **SU S⁺ => 250 A**	**Ipeak =77 A, TH = 172 µs** Describes the max. inrush current of all ballasts in a circuit, to calculate the maximum contact rating of the circuit.

Luminaires, which are used for emergency lighting, must be according to the standard DIN EN 60598-2-22 (particular requirements - Luminaires for emergency lighting)

***1:** The DC Output Level is locked in DC Mode to 100% as preset factory setting.
This preset value (luminous flux in case of DC-voltage) can be adjusted project depending via DALI Magic and T4 Tronic.
To enable the adjustment of the luminous flux via the V-CG-SB.1, the DC detection has to be deactivated via T4T.

***2:** Not to be used in high risk areas, special release required.

Max. one DALI- Driver to wire with one EL-monitoring module

Date: 12.March 2020

Requirements for electronic non-dimmable control gears for fluorescent lamps and LED

Manufacturer: OSRAM GmbH Marcel-Breuer Str. 6 D-80807 München	Product: **OT 165/170-240/1A0 4DIMLT2 G2 CE**	**OSRAM GmbH**

Table 1

LED controller type	Values for load range		IN in AC-operation (230V) / mA (trms)	IN in AC-operation (240V) / mA (trms)	IN in DC-operation (186V) / mA (trms)	IN in DC-operation (216V) / mA (trms)	IN in DC-operation (240V) / mA (trms)	IN in DC-operation (260V) / mA (trms)
OT 165/170-240/1A0 4DIMLT2 G2 CE	Minimum Load /mA	Uout= 130 V Iout= 200 mA	148	146	165	141	128	121
	Medium Load /mA	Uout= 157 V Iout= 525 mA	394	378	483	415	373	345
	Maximum Load /mA	Uout= 157 V Iout= 1050 mA	781	748	795	681	612	565
	No Load		48	50	8	5	5	4
	Short Load		47	49	1	1	2	2

Maximum inrush current for ECG in AC Operation: Ipeak = 77 A TH = 172 µs