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Requirements for dimmable DALI control gears for fluorescent lamps and LED — Version 0

Manufacturer: **Osram GmbH** **Marcel-Breuer-Straße 6** **D-80807 München**	**Type / description:** **ECG-type: Oti DALI 90/220-240/1A0 LT2 L (ident code: AM00141)**		
Features:	**CEAG data:**	**Comment:**	**Complies: (Yes/No)**
Control gear suitable for a DC voltage range:	**186V - 260V DC (for Lead-Battery)** **186V - 275V DC (for NiCD-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.**	Necessary for an individual monitoring. Δ I < 12,5 mA per luminaire, with max. 20 luminaires per circuit Δ I sum < 250 mA	**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	**(*3) Yes**
Fullfilled the DALI standards:	**DIN EN 62386-101 /-102 / -207**	**Control gear must have the DALI Logo**	**(*1) Yes**

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

Features:	**CEAG-Data:**	**Comment:**	**Manufacturer's instructions:**
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	**Yes**
Important for DC light output: Behavior in DC operation: - **Unlocked** DC light output level - **Locked** DC light output level	**DC light output settings on V-CG-SB.1 only active if control gear is unlocked!**	**In case of locked DC light output level, the DC level of V-CG-SB.1 is not active !**	**Unlocked DC [ ]** **Locked DC [x]**
Important for lighting design: If locked DC light output the lightout level in % is required	**No control of light output level from V-CG-SB.1 in DC operation possible!**	Locked light output level in %, e.g. 15%	**(*2)15%**
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**	Describes the max. inrush current of all ballasts in a circuit, to calculate the maximum contact rating of the circuit.	**Ip=27A / Th=193µs**
Important for lighting design: Luminous flux ratio: DC-operation at 186 V in comparison to 230 V AC operation	-	Light output In battery opertion of the ballast, for the light calculation	**(*2) 15%**

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: Control of V-CG-SB.1 to the DALI LED driver is 100% done via DALI-commands according to IEC 62386-101 /-102 so the DALI LED driver must sign with the DALI logo

*2: The DC Output Level is locked in DC Mode to 15%, it is possibe to unlock with DALI magic and Tuner 4 Tronic

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

Max. 1 DALI- Driver to wire with 1 V-CG-SB.1

In use of manifold ballasts, the different lamp failure detection of the manufacturer must be consider! Some devices don`t detect a failure if one lamp is defect.

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Requirements for electronic non-dimmable control gears for fluorescent lamps and LED	EATON Powering Business Worldwide

Manufacturer: OSRAM GmbH Marcel-Breuer Str. 6 D-80807 München	Product: **Oti DALI 90/220-240/1A0 LT2 L**	OSRAM

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)
Oti DALI 90/220-240/1A0 LT2 L	Umin, Imin	87,22	86,13	19,24	16,45	15,08	13,84
	Umin, Imax	280,59	245,61	48,13	41,07	37,00	34,13
	Umax, Imin	298,93	285,87	62,24	53,51	47,77	44,22
	Umax, Imax	446,08	424,50	83,72	71,80	64,67	59,28
	Open Load	25,62	32,97	2,27	2,19	2,15	2,12
	Short Load	25,62	32,97	1,54	2,19	2,15	2,13

Maximum inrush current for ECG in AC Operation

Ipeak= 27 A

TH= 193 µs