

Requirements for dimmable DALI control gears for fluorescent lamps and LED			Version 3
Manufacturer:		Type / description:	Manufacturer information Complies: YES/NO
ECG-type: OTi DALI 15/220-240/1A0 LT2 (AM34566)			
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 fluorescent 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 fluorescent 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
Fulfilled 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
Fulfilled 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
Fulfilled the standard:	DIN EN 61547	Equipment for general lighting purposes — EMC immunity requirements	Yes
Fulfilled 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.	Locked
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)	15%
Note: Important for the planning - Max. no. Of luminaires 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	Inrush current of one LED driver: 5 A, 220 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 15% as preset factory setting. This preset value can be adjusted project depending via DALI Magic and T4 Tronic. To enable the adjustment of the DC output level 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.			
This LED driver declaration does not substitute a system test and release in a specific installation.			
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Manufacturer: OSRAM GmbH Marcel-Breuer Str. 6 D-80807 München	Product: OTi DALI 15/220-240/1A0 LT2 (AM34566)	OSRAM GmbH
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Table 1

Values for load range			Nominal current of the control gear with connected illuminant in AC-operation		Nominal current of the control gear with connected illuminant in DC- operation (Default output current in emergency mode = 15%)			
			I _N @U _N = 230V [mA trms]	I _N @U _N = 240V [mA trms]	I _N @U _N = 186V [mA trms]	I _N @U _N = 216V [mA trms]	I _N @U _N = 240V [mA trms]	I _N @U _N = 260V [mA trms]
Minimum Load /mA	U _{out} = 20 V I _{out} = 150 mA P= 3 W		34	34	14	13	12	7
Medium Load /mA	U _{out} = 17 V I _{out} = 525 mA P= 9 W		55	54	14	12	16	10
Maximum Load /mA	U _{out} = 17 V I _{out} = 1050 mA P= 18 W		96	92	25	23	21	20
Open Load /mA			19	19	11	11	11	11
Short Load /mA			19	19	11	11	11	11

Remarks:

This table shows the currents consumption of the driver at three different operating points (P_{max}, P_{med}, P_{min}) for AC and DC operation.
 In DC operation the output current is reduced to 15% light level according to the default parameter setting. This level can be changed via T4T.