

| Requirements for dimmable DALI control gears for fluorescent lamps and LED | | | Version 3 |
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| Manufacturer: OSRAM GmbH Marcel-Breuer-Str. 6 D-80807 München | Type / description: ECG-type: OTi DALI 90/220-240/700 D LT2 L AN00951 | | 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 |
| <u>only for fluorescent lamps:</u> 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 |
| <u>only for fluorescent lamps:</u> 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 |
| <u>only for LED:</u> Control gear complies with the standard: | DIN EN 62384 | DC. Or AC supplied electronic control gear for LED modules - Performance requirements | YES |
| <u>only for LED:</u> 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: | 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) | (*2) 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 | I_{peak} = 27 A, TH = 193 us 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: Communication between V-CG-SB.1 and 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% 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. *3: Not to be used in high risk areas, special release required. Max. one DALI- Driver to wire with one EL-monitoring module 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. | | | |
| Date: 22.August 2019 | | | |

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Table 1

| Values for load range | AC-operation | | DC-Operation | | | |
|--|-------------------------------|-------------------------------|----------------|----------------|----------------|----------------|
| | AC-operation @ 230V (mA) | AC-operation @ 240V (mA) | 186V (mA) | 216V (mA) | 240V (mA) | 260V (mA) |
| Maximum Load /mA Uout= 240 V Iout= 375 mA P= 90 W | 423 | 407 | 89 | 77 | 69 | 64 |
| Short Load | 33 | 33 | < 15 | < 15 | < 15 | < 15 |
| Open Load | 33 | 33 | < 15 | < 15 | < 15 | < 15 |