Requirements for electronic non-dimmable Operating equipment for fluorescent lamps and LED

Version 14

DOTLUX GmbH	Type/name: EVG Type: 5333	Manufacturer: Complies Yes/No

Features:	CEAG data:	Explanation:	Manufacturer: Complies Yes/No
Operating device suitable for DC voltage range:	186V-260V DC (for lead-acid batteries)	Possible battery voltage range under emergency current operation (not for AT-S + Systems necessary.)	Yes ☑ No ☐
Operating device compatible with system switching time?	Switching time: 150 ms - 1000 ms	Typical CEAG system switching time Between the grid and the backup power supply	Yes ☐ <500ms No ☐
Start-up behavior Operating device:	Stable power consumption Operating device after less than 1.6 s	Stable power consumption after 1.6 seconds is important for the correct function of single light monitoring. At Max's. 20 lamps per circuit are D I Total < 250 mA allowed	Yes ☑ No ☐
Operating device compatible with CEAG STAR technology:	Phase Anschnittstelegram (PAT) : max. 30 phases (half waves) with max. 60 ° phase cut Total length of the PAT: 600ms	In the CEAG STAR switching process, up to 30 half-waves with max. 60 ° cut. The operating device used shall not have any unsafe behavior, such as the use of the operating device, and the use of the operating device. B. Switch off, flicker, etc.	Yes ☑ No ☐
Only For Fluorescent lamp: Operating device complies with the standard:	DIN EN 60929	Electronic operating equipment for tubular fluorescent lamps powered by alternating and/or DC-operating requirements	Yes ☐ No ☐ N/A
Only For Fluorescent lamp: Operating device complies with the standard:	DIN EN 61347-2-3 (incl . Annex J)	Particular requirements for electronic operating equipment for fluorescent lamps powered by alternating and/or DC power	Yes ☐ No ☐ N/A
Only For LED: Operating device complies with the standard:	DIN EN 62384	Electronics supplied with equivalent or alternating current Operating equipment for LED modules- Operating requirements	Yes ☑ No ☐
Only For LED: Operating device complies with the standard:	DIN EN 61347-2- 13 (incl . Annex J)	Particular requirements for electronic operating equipment powered by equal or alternating current for LED modules	Yes ☑ No ☐
Operating device complies with the standard:	DIN EN 55015 (Measuring at AC and DC)	Limits and methods of measurement for radio interference characteristics of electrical lighting and similar electrical equipment	Only Measurement on AC
Operating device complies with the standard:	DIN EN 61000-3-2, Pkt. 7.3 (a)	See * Important note!	Yes ☑ No ☐
Operating device complies with the standard:	DIN EN 61547	General lighting fixtures-requirements for resistance to EMC interference	Yes ☑ No ☐

Note: The labeling according to VDE 0108 is not meaningful because this is not an EVG equipment standard.

Features:	CEAG data:	Explanation:	Manufacturer's description:
mportant For In Functional test: voltage dependent input current of the operating device incl. Bulb In DC and AC operation:	V-CG-S2: < 5.8 mA or < 7.9 mA = n. OK V-CG-S: < 10 mA or < 28 mA = n. OK V-CG -SE: < 10 mA or < 28 mA = n. OK V-CG-SUW: < 28 mA = n. OK CG-K: < 10 mA or < 28 mA = n. OK	Minimum operating device currents with lamps for good detection by the monitoring module. At 189-264 V in AC operation on AT-S + or 186-260V in DC operation on ZB-S/LP-STAR, the current intake must be greater than the specified current values. See * Important note!	Ratio ratio: 82-87mA (trms) (AT-S+) Ratio ratio: 75-103mA (trms) (ZB-S/LP-STAR)
Voltage-dependent idle current of the operating device (without or with defective bulbs) In DC and AC operation:	V-CG-S2: <5,8 mA oder <7,9 mA = n.OK V-CG-S: <10 mA oder <28 mA = n.OK V-CG-SE: <10 mA oder <28 mA = n.OK V-CG-SUW: <28 mA = n.OK CG-K: <10 mA oder <28 mA = n.OK	Maximum currents of the operating device with defective bulb for bad detection by the monitoring module. At 189-264 V in AC operation on AT-S + or 186-260V in DC operation on ZB-S/LP-STAR, the current intake must be less than the specified current values. See * Important note!	Ratio ratio: 134-140mA (trms) (AT-S+) Ratio ratio: 123-170mA (trms) (ZB-S/LP-STAR)
Max. Input current Operating equipment	V-CG-S2 = V- Max. 30A CG-S = V-CG max. 30A -SE = V-CG- max. 30A SUW = CG-K max. 80A max. 30A =	The maximum input current of the monitoring module must be observed!	Ratio ratio: 22.8A (AT-S+) Ratio ratio: N/A (ZB-S/LP-STAR)

Notes:

For the correctness:

June, 2024

Place, Date

Signature

Stand: jun. 2024

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)
XZ-QK30B-400070-AB07	Maximum Load / mA Uout=40V Iout= 700mA	140	134	170	147	133	123
	Maximum Load / mA Uout=40V Iout= 600mA	123	117	150	130	118	108
	Maximum Load / mA Uout=40V Iout= 500mA	104	102	127	110	99	91
	Maximum Load / mA Uout=40V Iout= 400mA	87	82	103	90	81	75
	Maximum Load / mA Uout=25V Iout= 700mA	94	89	112	97	87	81
	Maximum Load / mA Uout=25V Iout= 600mA	83	80	100	86	79	72
	Maximum Load / mA Uout=25V Iout= 500mA	71	69	85	73	67	61
	Maximum Load / mA Uout=25V Iout= 400mA	60	59	71	61	55	51
	No Load	15	17	5	5	3	4
	Short Load	16	17	2	4	5	3

Note: Important for planning-maximum number of lights per circuit:

Important For The Contact load In SKU (Circuit switching): Max. Input current of the lamps on the circuit in AC operation:	**Allowable total on-off current Per circuit: SKU** **2SKU 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**	**The indication of the light's on-current in the above line is important to maximize the Determine the number of lights allowed in a circuit to maximize the The contact load of the circuit switches can be taken into account.**

Lights intended for use as safety lamps shall be subject to the standard

Complies with DIN EN 60598-2-22 (Special requirements-lamps for emergency lighting).

*** More important Hinweis!**

For AT-S + systems and battery systems (e.g. B-S/LP-STAR) with AC feed-in activated for more than 300 seconds in the functional test, for end of life detection [EOL] for T5 lamps, the current intake must be sinusoidal.

This means that all operating devices (including < 25W) must have active Power Factor Correction (PFC) filters! See DIN EN 61000-3-2, Pkt. 7.3 a.

Note EOL detection (T5 > = 14W): The AC feed can only be set for a complete system and not for individual circuits. The V-CG-S series modules monitor the power consumption on the primary side of the LED module operating device within the specified limits. The failure of a single LED (low resistance) on the secondary side does not necessarily lead to a change in the current intake on the primary side, and cannot be detected as a fault in these cases.

6. March 2021