Technical requirements for electronic control gears for LED- / fluorescent- luminaires for connection at INOTEC central battery systems

INOTEC Sicherheitstechnik GmbH

Manufacturer:	Type / Description:
OSRAM GmbH Marcel-Breuer-Str. 6 D-80807 München	Luminaire: EVG: OT FIT 35/220-240/ 350 D LT2 L (ident code: AM02960) LED:
Project / Place / Project ID:	Specified by: Name: D. Graser Company: OSRAM GmbH Date: 09.01.2017

	Features	Techn. data / INOTEC requirements	Explanation	Fullfilled (Yes / No)
1	Voltage range AC	230V ± 10%	Voltage range in normal mains operation	Yes
2	Voltage range DC	186V - 260V	Possible voltage range in emergency operation	Yes
3	Control gear suitable for "Joker-Voltage" ?	B2-rectification of the AC voltage (without smoothing)	Pulsating DC voltage 	Yes
4	Control gear compatible with change-over time of the system?	Change-over time: 150 - 1000ms	Typical change-over time of INOTEC systems between mains- and battery operation	Yes
5	Starting behavior of the control gear in DC operation	Stable current consumption within 3s	Necessary for individual lamp monitoring (SV)	Yes
6	Control gear complies with the standard: (only for fluorescent lamps)	DIN EN 60929	AC and/or DC-supplied electronic control gear for tubular fluorescent lamps - Performance requirements	Not relevant
/	Control gear complies with the standard: (only for fluorescent lamps)	DIN EN 61347-2-3 (incl. Attachment J)	Particular requirements for AC and/or DC supplied electronic control gear for fluorescent lamps	Not relevant
8	Control gear complies with the standard: (only for LED)	DIN EN 62384	DC or AC supplied electronic control gear for LED modules - Performance requirements	Yes
9	Control gear complies with the standard: (only for LED)	DIN EN 61347-2-13	Lamp control gear - Part 2-13: Particular requirements for DC or AC supplied electronic control gear for LED modules	Yes
10	Control gear complies with the standard:	DIN EN 55015 (Measurement on AC and DC)	Limits and methods of measurement of radio interference	Yes
11	Control gear complies with 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
12	Control gear complies with the standard:	DIN EN 61547	Equipment for general lighting purposes — EMC immunity requirements	Yes

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

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	Features	Techn. data / INOTEC requirements	Explanation	Manufacturer information
13	Nominal current of the control gear with connected illuminant in AC- operation (230V)		Selection guide for the calculation of the max. number of luminairs per circuit	See attachment converter list
14	Nominal current of the control gear with connected illuminant in DC- operation (216V)		Selection guide for the calculation of the necessary battery capacity	See attachment converter list
15	Nominal current of the control gear with connected illuminant in DC- operation (186V und 260V) and pre-set luminous flux	J-SV-Modul/S (5-120W): > 20mA = OK J-SV-Modul.2/S (20-300W): > 70mA = OK J-SV-Modul.3/S (2-30W): > 12mA = OK J-SV-Modul.4/S (18-120W): > 70mA = OK J-SV-Modul.L/S (20-120W): > 20mA = OK J-SV-Modul T/S (20-100W): > 60mA = OK	Selection guide for determination of the monitoring module: The values are not to be undercut within the voltage range 186VDC - 260VDC to recognise a normal working lamp correctly.	See attachment converter list See attachment converter list
16	Luminous flux in DC- operation (186V)		Important for the safety lighting design *	100%
17	Standby current of the control gear with no illuminant connected or with defective illuminant in DC-operation (186V and 260V) *1	J-SV-Modul/S (5-120W): < 10mA = n.OK J-SV-Modul.2/S (20-300W): < 45mA = n.OK J-SV-Modul.3/S (2-30W): < 8mA = n.OK J-SV-Modul.4/S (18-120W): < 45mA = n.OK J-SV-Modul.L/S (20-120W): < 10mA = n.OK J-SV-Modul T/S (20-100W): < 50mA = n.OK	Selection guide for determination of the monitoring module: The values are not to be exceeded within the voltage range 186VDC - 260VDC to recognise a lamp failure correctly.	See attachment converter list
18	Max. inrush current of the control gear with connected lamp in AC operation (230V)	Max. permitted inrush current per circuit / monitoring module: SK 4x2A: 250A / 500µs SK 2x4A: 250A / 500µs SK 2x3A: 250A / 500µs SK 1x6A: 250A / 500µs J-SV-Modul T/S: 40A / 500µs all other J-SV-modules: 80A / 500µs	Describes the max. inrush current of all ballasts in a circuit, to calculate the maximum contact rating of the circuit	Ipeak=13A TH=93 µs
Luminaires, which should work as emergency lighting, have to be in accordance with DIN EN 60598-2-22. (Particular requirements - Luminaires for emergency lighting).				

*1: The J-SV-monitoring modules monitor the current consumption on the primary side of the control gear for LED modules within the specified limits. Failures of individual LEDs (low-impedance) on the secondary side do not inevitably lead to a modification of current consumption on the primary side, and in such cases cannot be detected as a failure.

Notes:

For the correctness:

Lüdenscheid, 23.01.2017
Place, Date

DS D/SST
Dr. Kay Schmidtmann
Signature

DS QM LAB&SQM
Bernhard Schemmel