

Osram OT 40 – OT 60 – OT 90 4DIMLT2 E LED Drivers Conformity check to Synergrid C4/10

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LBE04109592 - 1.0	21/05/2015	New report

Prepared for
Synergrid

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In the framework of
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1. Introduction

This report contains the conformity check of LED drivers to the requirements of technical specification Synergrid C4/10: "Technische specificatie voorschriften voor hulpapparatuur / Prescriptions relatives aux auxiliaires"- version 09/2014.

It consists of the results of the examination of all the documents provided by the demander and their conformity check to the requirements of Synergrid technical specification C4/10.

The detailed results of the examinations are given in this report.

2. Conclusion of the conformity check

For driver type listed in Table 1, the provided documents and executed tests prove the conformity to the requirement of technical specification Synergrid C4/10.

The submitted drivers comply with the requirements of document C4/10 for the following working ranges.

Manufacturer	Model-type	Minimum Power	LED Current range
Osram	OT 40/120-277/1A0 4DIMLT2 E	16 W	350 – 1050 mA
Osram	OT 60/170-240/1A0 4DIMLT2 E	17 W	350 – 1050 mA
Osram	OT 90/170-240/1A0 4DIMLT2 E	26 W	350 – 1050 mA

Table 1 : Drivers in conformity with specification C4/10

3. Results

Conformity with standards	OT 40/120-277/1A0 4DIMLT2 E	Origin Report Certificate	OT 60/170-240/1A0 4DIMLT2 E	Origin Report Certificate	OT 90/170-240/1A0 4DIMLT2 E	Origin Report Certificate
Conformity with standard EN 61347-1	Ok	ENEC10	Ok	ENEC10	Ok	ENEC10
Conformity with EN 61347-2-13	Ok	ENEC10	Ok	ENEC10	Ok	ENEC10
Conformity with EN 55015	Ok	VDE	Ok	VDE	Ok	VDE
Conformity with EN 61000-3-2	Ok	VDE	Ok	VDE	Ok	VDE
Conformity with EN 61000-3-3	Ok	VDE	Ok	VDE	Ok	VDE
Conformity with EN 61547	Ok	VDE	Ok	VDE	Ok	VDE
Conformity with EN 62384	Ok	ENEC10	Ok	ENEC10	Ok	ENEC10
Conformity with EN 60068-2-6	Ok	OSRAM	Ok	OSRAM	Ok	OSRAM

Technical file - Driver						
Documentation from the manufacturer (where applicable)	OT 40/120-277/1A0 4DIMLT2 E	Document	OT 60/170-240/1A0 4DIMLT2 E	Document	OT 90/170-240/1A0 4DIMLT2 E	Document
technical and commercial documentation of driver,	Ok	Product Data Sheet OT 40_120-277_1A0 4DIMLT2 E V1_3 20150123.pdf	Ok	Product Data Sheet OT 60_170-240_1A0 4DIMLT2 E V1_0 20150123.pdf	Ok	Product Data Sheet OT 90_170-240_1A0 4DIMLT2 E V1_4 20150123.pdf

installation and wiring documentation,	Ok	Product Data Sheet OT 40_120-277_1A0 4DIMLT2 E V1_3 20150123.pdf	Ok	Product Data Sheet OT 60_170-240_1A0 4DIMLT2 E V1_0 20150123.pdf	Ok	Product Data Sheet OT 90_170-240_1A0 4DIMLT2 E V1_4 20150123.pdf
length and type of the cables permitted between the auxiliary equipment and the light source,	Ok	Product Data Sheet OT 40_120-277_1A0 4DIMLT2 E V1_3 20150123.pdf	Ok	Product Data Sheet OT 60_170-240_1A0 4DIMLT2 E V1_0 20150123.pdf	Ok	Product Data Sheet OT 90_170-240_1A0 4DIMLT2 E V1_4 20150123.pdf
information about the incorporated thermal protection,	Ok	Product Data Sheet OT 40_120-277_1A0 4DIMLT2 E V1_3 20150123.pdf	Ok	Product Data Sheet OT 60_170-240_1A0 4DIMLT2 E V1_0 20150123.pdf	Ok	Product Data Sheet OT 90_170-240_1A0 4DIMLT2 E V1_4 20150123.pdf
information about the safety system in the event of a defect affecting the light source,	Ok	Product Data Sheet OT 40_120-277_1A0 4DIMLT2 E V1_3 20150123.pdf	Ok	Product Data Sheet OT 60_170-240_1A0 4DIMLT2 E V1_0 20150123.pdf	Ok	Product Data Sheet OT 90_170-240_1A0 4DIMLT2 E V1_4 20150123.pdf
table specifying the maximum number of drivers per fused circuit,	Ok	Product Data Sheet OT 40_120-277_1A0 4DIMLT2 E V1_3 20150123.pdf	Ok	Product Data Sheet OT 60_170-240_1A0 4DIMLT2 E V1_0 20150123.pdf	Ok	Product Data Sheet OT 90_170-240_1A0 4DIMLT2 E V1_4 20150123.pdf
mechanical dimensions and weight of the driver,	Ok	Product Data Sheet OT 40_120-277_1A0 4DIMLT2 E V1_3 20150123.pdf	Ok	Product Data Sheet OT 60_170-240_1A0 4DIMLT2 E V1_0 20150123.pdf	Ok	Product Data Sheet OT 90_170-240_1A0 4DIMLT2 E V1_4 20150123.pdf

permissible installation options for the driver (post base, luminaire, etc, ...),	Ok	Product Data Sheet OT 40_120-277_1A0 4DIMLT2 E V1_3 20150123,pdf	Ok	Product Data Sheet OT 60_170-240_1A0 4DIMLT2 E V1_0 20150123,pdf	Ok	Product Data Sheet OT 90_170-240_1A0 4DIMLT2 E V1_4 20150123,pdf
information about the possible visual indication of working of safety system in the event of a defect affecting the light source,	NA	Product Data Sheet OT 40_120-277_1A0 4DIMLT2 E V1_3 20150123,pdf	NA	Product Data Sheet OT 60_170-240_1A0 4DIMLT2 E V1_0 20150123,pdf	NA	Product Data Sheet OT 90_170-240_1A0 4DIMLT2 E V1_4 20150123,pdf
information concerning maximum resistance to surge,	Ok	Product Data Sheet OT 40_120-277_1A0 4DIMLT2 E V1_3 20150123,pdf	Ok	Product Data Sheet OT 60_170-240_1A0 4DIMLT2 E V1_0 20150123,pdf	Ok	Product Data Sheet OT 90_170-240_1A0 4DIMLT2 E V1_4 20150123,pdf
details of the dimming control protocol	Ok	Product Data Sheet OT 40_120-277_1A0 4DIMLT2 E V1_3 20150123,pdf	Ok	Product Data Sheet OT 60_170-240_1A0 4DIMLT2 E V1_0 20150123,pdf	Ok	Product Data Sheet OT 90_170-240_1A0 4DIMLT2 E V1_4 20150123,pdf
Details of performances of the driver during dimming	Ok	Product Data Sheet OT 40_120-277_1A0 4DIMLT2 E V1_3 20150123,pdf	Ok	Product Data Sheet OT 60_170-240_1A0 4DIMLT2 E V1_0 20150123,pdf	Ok	Product Data Sheet OT 90_170-240_1A0 4DIMLT2 E V1_4 20150123,pdf
information about the safety system in the event of a defect affecting the light source during dimming,	NA	Product Data Sheet OT 40_120-277_1A0 4DIMLT2 E V1_3 20150123,pdf	NA	Product Data Sheet OT 60_170-240_1A0 4DIMLT2 E V1_0 20150123,pdf	NA	Product Data Sheet OT 90_170-240_1A0 4DIMLT2 E V1_4 20150123,pdf

Technical file - Driver						
Compliance to standard	OT 40/120-277/1A0 4DIMLT2 E	Document	OT 60/170-240/1A0 4DIMLT2 E	Document	OT 90/170-240/1A0 4DIMLT2 E	Document
Manufacturer's CE statement	Ok		Ok		Ok	
ENEC: Certificate + Report (EN 61347-1, EN 61347-2-13, EN 62384)	Ok		Ok		Ok	
Non-ENEC: - Safety standard (EN 61347-1, EN 61347-2-13, EN 62384) - Laboratory accreditation or recognition - ISO 9001-2000 accreditation	NA		NA		NA	
			-		-	

Technical file - Driver						
Signed statement	OT 40/120-277/1A0 4DIMLT2 E	Document	OT 60/170-240/1A0 4DIMLT2 E	Document	OT 90/170-240/1A0 4DIMLT2 E	Document
Minimum life at less than 10% failures at 50,000 h,	Ok	Manufacturer Declaration OT50_90_150 4DIM lifetime.pdf	Ok	Manufacturer Declaration OT50_90_150 4DIM lifetime.pdf	Ok	Manufacturer Declaration OT50_90_150 4DIM lifetime.pdf

Technical file - Driver						
Reports from a laboratory accepted by Synergrid	OT 40/120-277/1A0 4DIMLT2 E	Document	OT 60/170-240/1A0 4DIMLT2 E	Document	OT 90/170-240/1A0 4DIMLT2 E	
report concerning conformity to markings requirements	Ok	Laborelec LBE04109592	Ok	Laborelec LBE04109592	Ok	Laborelec LBE04109592
Compliance with endurance test of standard 62384	Ok	ENEC10	Ok	ENEC10	Ok	ENEC10

compliance with standard EN 61000-3-2 - Electromagnetical compatibility	Ok	EMC_Mark OT 4DIMLT2 E	Ok	EMC_Mark OT 4DIMLT2 E	Ok	EMC_Mark OT 4DIMLT2 E
-	Ok		Ok		Ok	
test report of correct operation at -20°C and +50°C	Ok	OT 40-60-90 4 DIM Thermal 2015_03_17	Ok	OT 40-60-90 4 DIM Thermal 2015_03_17	Ok	OT 40-60-90 4 DIM Thermal 2015_03_17
test report confirms that if the LED module is extinguished due to a loss of voltage, the driver shall reignite it in the following 15 minutes, without any outside intervention,	Ok	Laborelec LBE04109693	Ok	Laborelec LBE04109693	Ok	Laborelec LBE04109693
test report of the surge resistance of the drivers: Surge test 4 kV between L/N and ground and 2kV between L and N according EN 61000-4-5,	Ok	OT 40-60-90 4 DIM Surge 2015_03_17.pdf	Ok	OT 40-60-90 4 DIM Surge 2015_03_17.pdf	Ok	OT 40-60-90 4 DIM Surge 2015_03_17.pdf
test report of compliance with standard EN 60068-2-6: Frequency range 10Hz - 150 Hz - 10 Hz / Sweep rate: 1 octave/minute / Amplitude minimum 0,3 mm p-p sinusoidal minimum / acceleration : 2g / test direction minimum 3,	Ok	OT 40-60-90 4 DIM Vibration 2015_03_17.pdf	Ok	OT 40-60-90 4 DIM Vibration 2015_03_17.pdf	Ok	OT 40-60-90 4 DIM Vibration 2015_03_17.pdf

Technical file - Driver						
Report by laboratory accredited to ISO/IEC 17025:2005 for the scope	OT 40/120-277/1A0 4DIMLT2 E	Document	OT 60/170-240/1A0 4DIMLT2 E	Document	OT 90/170-240/1A0 4DIMLT2 E	
driver tests shall be carried out using the LED module contained in the luminaire which forms the subject of the application	-		-		-	
Test reports of performance at 207 V - 230 V - 253 V - Efficiency - Power Factor - System Power	Ok	OT 40-60_90 4 DIM Performance Measurement 2015_04_13.pdf	Ok	OT 40-60_90 4 DIM Performance Measurement 2015_04_13.pdf	Ok	OT 40-60_90 4 DIM Performance Measurement 2015_04_13.pdf
test reports of the driver efficiency,	Ok	OT 40-60_90 4 DIM Performance Measurement 2015_04_13.pdf	Ok	OT 40-60_90 4 DIM Performance Measurement 2015_04_13.pdf	Ok	OT 40-60_90 4 DIM Performance Measurement 2015_04_13.pdf

test report of the power factor,	Ok	OT 40-60_90 4 DIM Performance Measurement 2015_04_13.pdf	Ok	OT 40-60_90 4 DIM Performance Measurement 2015_04_13.pdf	Ok	OT 40-60_90 4 DIM Performance Measurement 2015_04_13.pdf
test report of the system power	Ok	OT 40-60_90 4 DIM Performance Measurement 2015_04_13.pdf	Ok	OT 40-60_90 4 DIM Performance Measurement 2015_04_13.pdf	Ok	OT 40-60_90 4 DIM Performance Measurement 2015_04_13.pdf
test report of the performance at 230 V for dimming: - levels 100%, 50 %, 35%: total power, efficacy, power factor results - levels >35%: total power, power factor results	Ok	OT 40-60_90 4 DIM Performance Measurement 2015_04_13.pdf	Ok	OT 40-60_90 4 DIM Performance Measurement 2015_04_13.pdf	Ok	OT 40-60_90 4 DIM Performance Measurement 2015_04_13.pdf

Appendix A. Distribution list

Electronic distribution

Nom / Naam	Société / Firma	Diffusion / Verspreiding
C. Moenaert	Synergrid	Christian.Moenaert@synergrid.be
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