

Test report No:  
6185625.50

## TEST REPORT

### Electromagnetic Compatibility (EMC)

Identification of item tested	Magnetic Core Drill
Trademark	AGP
Model and /or type reference	PMD3530G, PMD3530, PME3530, PMX3530, CM/705/1, CM/705/3, LM35G, LMG35, L35G, LG35, LG3530, L3530G, LM3530G, LMG3530, LPG35, LP35G, LP3530G, LPG3530, UNI3530, EM12, KB3001, ECO.35-F, RB30, MBA3530, 29-MD35-2, MAGPRO35, MD3530, MBREVOLP, MB351F, MBA3530, 35PMHPR, HFLP-35
Ratings	110-120 Vac; 50-60 Hz; 1100 W; 220-240 Vac; 50-60 Hz; 1100 W; Class I
Test Laboratory / address	DEKRA Testing and Certification (Shanghai) Ltd. No.250, Jiangchangsang Road, Jing'an District, Shanghai, China
Applicant / address	LEE YEONG INDUSTRIAL CO., LTD. No.2, Kejia Rd., Douliu City, Yunlin County 64057, Taiwan
Test method requested, standard	EN IEC 55014-1:2021 EN IEC 55014-2:2021 EN IEC 61000-3-2:2019+A1:2021 EN 61000-3-3:2013+A1:2019+A2:2021
Verdict Summary	IN COMPLIANCE
Tested by (name / position & signature)	Stefan Zhao Senior Project Manager 
Approved by (name / position & signature)	Wency Yang Technical Manager 
Date of issue	2024-04-15
Report template No	TRF_EN55014-1_EN55014-2 EMC02 V1.1

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## COMPETENCES AND GUARANTEES

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DEKRA is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

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## GENERAL CONDITIONS

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1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or Competent Authorities.
3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA.
5. The information provided by the customer in this report may affect the validity of the results, the test lab is not responsible for it.
6. The test results presented in this report relate only to the object tested.

## UNCERTAINTY

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For all measurements where guidance for the calculation of the instrumentation uncertainty of a measurement is specified in EN 55016-4-2 (CISPR 16-4-2), EN/IEC 61000-4 series or a product standard, the measurement instrumentation uncertainty has been calculated and applied in accordance with these standards.

Uncertainties have been calculated according to the DEKRA internal document. The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately 95 %. Refer to the Annex 1 for further information.

## ENVIRONMENTAL CONDITIONS

The climatic conditions during the tests are within the limits specified by the manufacturer for the operation of the EUT and the test equipment. The climatic conditions during the tests were within the following limits:

Ambient temperature	15 °C – 35 °C
Relative Humidity air	30 % – 60 %
Atmospheric pressure	86 kPa – 106 kPa

If explicitly required in the basic standard or applied product / product family standard the climatic values are recorded and documented separately in this test report.

## POSSIBLE TEST CASE VERDICTS

Test case does not apply to test object	N/A
Test object does meet requirement	P (Pass) / PASS
Test object does not meet requirement	F (Fail) / FAIL
Not measured	N/M

## DEFINITION OF SYMBOLS USED IN THIS TEST REPORT

<input checked="" type="checkbox"/> Indicates that the listed condition, standard or equipment is applicable for this report/test/EUT.			
<input type="checkbox"/> Indicates that the listed condition, standard or equipment is not applicable for this report/test/EUT.			
Decimal separator used in this report	<input type="checkbox"/>	Comma (.)	<input checked="" type="checkbox"/> Point (.)

## ABBREVIATIONS

For the purposes of the present document, the following abbreviations apply:

EUT	:	Equipment Under Test
QP	:	Quasi-Peak
CAV	:	CISPR Average
AV	:	Average
CDN	:	Coupling Decoupling Network
SAC	:	Semi-Anechoic Chamber
OATS	:	Open Area Test Site
BW	:	Bandwidth
AM	:	Amplitude Modulation
PM	:	Pulse Modulation
HCP	:	Horizontal Coupling Plane
VCP	:	Vertical Coupling Plane
$U_N$	:	Nominal voltage
N/A	:	Not Applicable
N/M	:	Not Measured

## DOCUMENT HISTORY

Report nr.	Date	Description
6185625.50	2024-04-15	First release

## REMARKS AND COMMENTS

The equipment under test (EUT) does meet the requirements of the stated standard(s)/test(s).

The test results relate only to the samples tested.

According to information provided by the manufacturer,  
 Model PME3530, PMX3530, CM/705/1, CM/705/3, LM35G, LMG35, L35G, LG35, LG3530, L3530G, LM3530G,  
 LMG3530, LPG35, LP35G, LP3530G, LPG3530, UNI3530, EM12, KB3001, ECO.35-F, RB30, MBA3530, 29-  
 MD35-2, MAGPRO35, MD3530, MBREVOLP, MB351F, MBA3530, 35PMHPR and HFLP-35 are same as model  
 PMD3530 except model name.

After review, all tests were carried out on the following models PMD3530 (110-120 V), PMD3530 (220-240 V),  
 PMD3530G (110-120 V) and PMD3530G (220-240 V). The test results stated in this report are also representative  
 for all models.

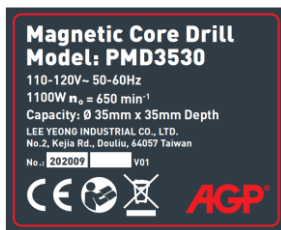
## USAGE OF SAMPLES

Samples undergoing test have been selected by: LEE YEONG INDUSTRIAL CO., LTD.

Samples are composed of the following elements:

Control N°	Description	Model	Serial N°	Date of reception
6185625-1	Magnetic Core Drill	PMD3530 (110-120 V)	202009	2023-11-12
6185625-2	Magnetic Core Drill	PMD3530 (220-240 V)	2022047084	2023-11-12
6185625-3	Magnetic Core Drill	PMD3530G (110-120 V)	2023127001	2023-11-12
6185625-4	Magnetic Core Drill	PMD3530G (220-240 V)	N/A	2023-11-12

Supplemental information:



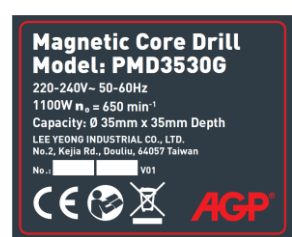
6185625-1



6185625-2



6185625-3



6185625-4

# 1 GENERAL INFORMATION

## 1.1 General Description of the Item(s)

Description of the item .....	Magnetic Core Drill
Model / Type number .....	PMD3530G, PMD3530, PME3530, PMX3530, CM/705/1, CM/705/3, LM35G, LMG35, L35G, LG35, LG3530, L3530G, LM3530G, LMG3530, LPG35, LP35G, LP3530G, LPG3530, UNI3530, EM12, KB3001, ECO.35-F, RB30, MBA3530, 29-MD35-2, MAGPRO35, MD3530, MBREVOLP, MB351F, MBA3530, 35PMHPR, HFLP-35
Trademark.....	AGP
Manufacturer.....	LEE YEONG INDUSTRIAL CO., LTD. No.2, Kejia Rd., Douliu City, Yunlin County 64057, Taiwan
Factory .....	LEE YEONG INDUSTRIAL CO., LTD. No.2, Kejia Rd., Douliu City, Yunlin County 64057, Taiwan

Rated power supply .....	Voltage and Frequency		Reference poles				
			L1	L2	L3	N	PE
	<input checked="" type="checkbox"/>	AC: 110-120 V; 50-60 Hz	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/>	AC: 220-240 V; 50-60 Hz	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	AC:					
<input type="checkbox"/>	DC:						
Rated Power .....	Refer to page 1						
Clock frequencies .....	< 15 MHz						
Other parameters.....	N/A						
Mounting position.....	<input checked="" type="checkbox"/>	Table top equipment					
	<input type="checkbox"/>	Wall/Ceiling mounted equipment					
	<input type="checkbox"/>	Floor standing equipment					
	<input type="checkbox"/>	Hand-held equipment					
	<input type="checkbox"/>	Other:					

Intended use of the Equipment Under Test (EUT)
The apparatus as supplied for the test is a Magnetic Core Drill, intended for residential, commercial and light-industrial use.

No	Module/parts of test item	Type	Manufacturer
	N/A		

No	Documents as provided by the applicant – Description	File name	Issue date
	N/A		

Copy of marking plate:
N/A

## 1.2 Environment

The requirements and standards apply to equipment intended for use in:

<input checked="" type="checkbox"/>	Residential (domestic) environment.
<input checked="" type="checkbox"/>	Commercial and light-industrial environment.
<input type="checkbox"/>	Industrial environment.

## 1.3 Test Location

Test Location	SERTC Testing Center Co., Ltd No. 230, Section 2, Fengshi Road, Fengyuan District, Taichung City, Taiwan
Date (receive sample)	2023-11-12
Date (start test)	2023-11-12
Date (finish test)	2024-03-19



## 1.4 Classification according to EN IEC 55014-2

The standard EN IEC 55014-2 is subdivided in five categories. For each category, specific immunity requirements are formulated.

<input type="checkbox"/>	<p><b>Category I:</b> equipment containing no electronic control circuitry.</p> <p><u>Examples:</u> Appliances, tools and toys that contain no electronic control circuits and only electromechanical components such as switches, thermostats, brush motors, induction motors, heating elements, lighting toys containing only batteries and LED.</p> <p>Electric circuits consisting of passive components (such as radio interference suppression capacitors or inductors, mains transformers and mains frequency rectifiers) are not considered to be electronic control circuitry.</p>
<input checked="" type="checkbox"/>	<p><b>Category II:</b> mains operated equipment containing electronic control circuitry with no clock frequency higher than 15 MHz.</p>
<input type="checkbox"/>	<p><b>Category III:</b> battery operated equipment not included in Category I.</p> <p><u>Examples:</u> Appliances, tools and toys powered by batteries and that include a microprocessor to provide a selection of functions.</p> <p>NOTE The assignment to Category III is independent of the clock frequency.</p> <p>This category also includes equipment provided with rechargeable batteries, which can be charged, directly or indirectly, from the mains. Accordingly, this equipment shall also be subjected to the test requirements for mains operated equipment but only when testing the charging function.</p> <p>If the equipment can operate its intended functions when connected, directly or indirectly to the mains, then it is not battery operated. Accordingly, it shall be classified as Category II, Category IV or Category V, as applicable, and subjected to the corresponding test requirements when in mains operation.</p>
<input type="checkbox"/>	<p><b>Category IV:</b> mains operated equipment containing electronic control circuitry with a highest clock frequency greater than 15 MHz but lower than or equal to 200 MHz.</p>
<input type="checkbox"/>	<p><b>Category V:</b> mains operated equipment containing electronic control circuitry with a highest clock frequency greater than 200 MHz.</p>
<p><b>Clock frequency:</b> Fundamental frequency of any signal used in the device, excluding those which are solely used inside integrated circuits (IC).</p>	

## 2 DESCRIPTION OF TEST SETUP

### 2.1 Operating mode(s) used for tests

During the tests the following operating mode(s) has(have) been used.

Operating mode	Operating mode description	Used for testing	
		Emission	Immunity
1	Continuous operation without load	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2		<input type="checkbox"/>	<input type="checkbox"/>
<u>Supplemental information:</u>			

### 2.2 Port(s) of the EUT

Port name and description	Connected to / Termination	Cable		
		Length used during test [m]	Attached during test	Shielded
AC Mains port	AC Main	2.0	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
<u>Supplemental information:</u>				

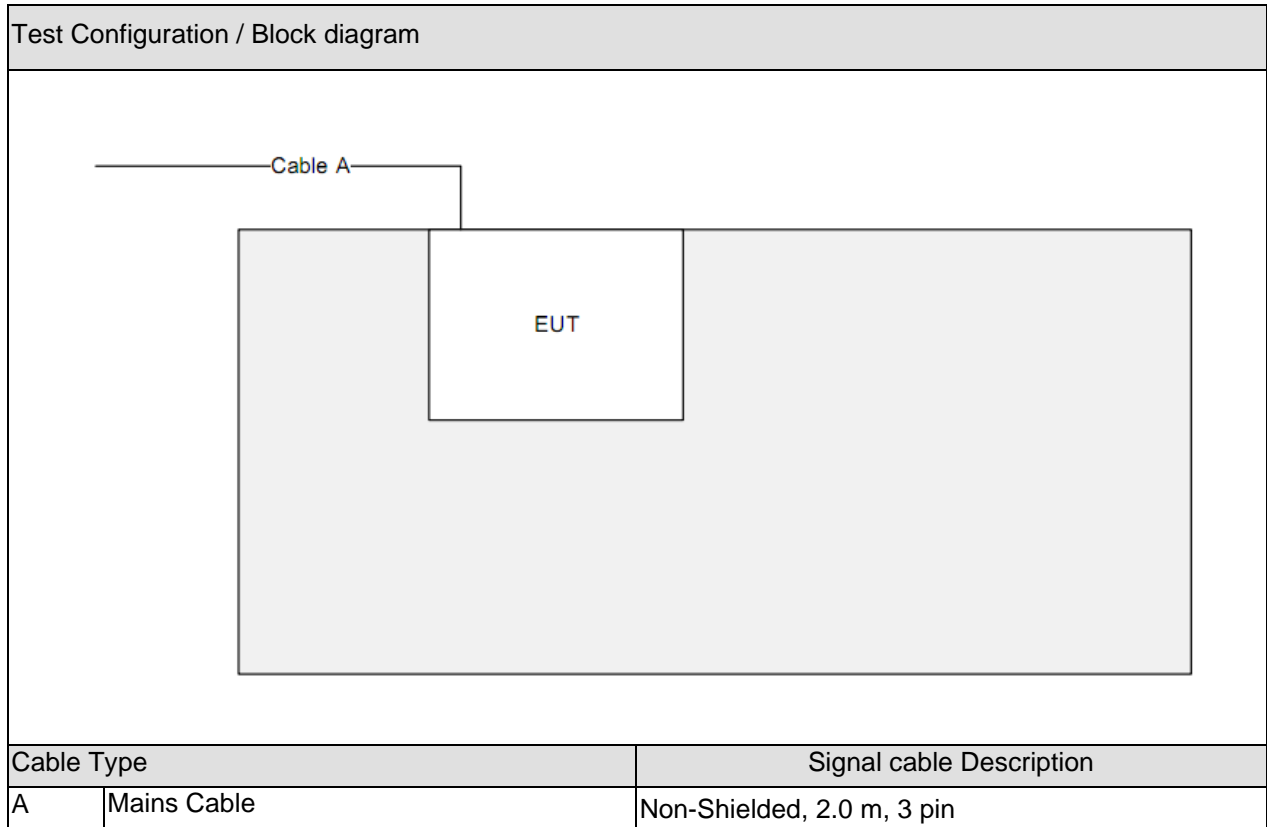
### 2.3 Support / Auxiliary equipment / unit / software for the EUT

The EUT has been tested with the following auxiliary equipment / unit / software:

Auxiliary equipment / unit / software	Type / Version	Manufacturer	Supplied by
N/A			
<u>Supplemental information:</u>			

## 2.4 Test Configuration / Block diagram used for tests

The following test setup / configuration / block diagram has been used during the tests:



### 3 VERDICT SUMMARY SECTION

This chapter presents an overview of standards and results. Refer to the next chapters for details of measured test results and applied test levels.

#### 3.1 Standards

Standard	Year	Description
EN IEC 55014-1	2021 <sup>1)</sup>	Requirements for household appliances, electric tools and similar apparatus – Part 1: Emission.
EN 55016-2-1 +A1	2014 2017	Methods of measurement of disturbances and immunity - Conducted disturbance measurements.
EN 55016-2-2	2011	Methods of measurement of disturbances and immunity – Measurement of disturbance power.
EN 55016-2-3 +A1	2017 2019	Methods of measurement of disturbances and immunity - Radiated disturbance measurements.
EN 55032	2015	Electromagnetic compatibility of multimedia equipment - Emission requirements
EN IEC 61000-3-2 +A1	2019 <sup>1)</sup> 2021 <sup>1)</sup>	Limits for harmonic current emissions (equipment input current ≤ 16 A per phase).
EN 61000-3-3 +A1 +A2	2013 2019 <sup>1)</sup> 2021 <sup>1)</sup>	Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection.
EN IEC 55014-2	2021 <sup>1)</sup>	Requirements for household appliances, electric tools and similar apparatus – Part 2: Immunity – Product family standard.
EN 61000-4-2	2009	Electrostatic discharge immunity test.
EN 61000-4-3 +A1 +A2	2006 2008 2010	Radiated, radio-frequency, electromagnetic field immunity test.
EN 61000-4-4	2012	Electrical fast transient/burst immunity test.
EN 61000-4-5 +A1	2014 2017	Surge immunity test.
EN 61000-4-6	2014	Immunity to conducted disturbances, induced by radio-frequency fields.
EN IEC 61000-4-11	2020	Voltage dips, short interruptions and voltage variations immunity tests.

<sup>1)</sup> Not harmonized yet.

#### 3.2 Deviation(s) from the Standard(s) / Test Specification(s)

The following deviation(s) was / were made from the published requirements of the listed standards:  
 N/A.

### 3.3 Overview of results

EMISSION TESTS – EN IEC 55014-1			
Requirement – Test case	Basic standard(s)	Verdict	Remark
Conducted disturbance at mains terminals (150 kHz – 30 MHz)	EN 55016-2-1	PASS	---
Conducted disturbance at wired network ports (150 kHz – 30 MHz)	EN 55016-2-1 EN 55032	N/A	See 2)
Disturbance power (30 MHz – 300 MHz)	EN 55016-2-2	PASS	---
Radiated disturbance (30 MHz – 1000 MHz)	EN 55016-2-3	N/A	See 4)
Radiated disturbance (1 GHz – 6 GHz)	EN 55016-2-3	N/A	See 3)
Discontinuous disturbance (clicks) on AC power leads	EN IEC 55014-1	N/A	See 1)
<u>Supplementary information:</u>			
1) Exemptions from click measurements applicable (clause 5.4.3).			
2) The test is not applicable as the EUT does not have associated ports / wired network ports.			
3) The highest internal frequency of the EUT is less than 108 MHz.			
4) According to clause 4.3.4.2 procedure (a) of the CISRP 14-1 standard the EUT is deemed to comply in the frequency range from 300 MHz to 1000 MHz without further measurements.			

EMISSION TESTS – EN IEC 61000-3-2, EN 61000-3-3			
Requirement – Test case	Basic standard(s)	Verdict	Remark
Harmonic current emissions	EN IEC 61000-3-2	PASS	---
Voltage changes, voltage fluctuations and flicker	EN 61000-3-3	PASS	---
<u>Supplementary information:</u>			

IMMUNITY TESTS – EN IEC 55014-2			
Requirement – Test case	Basic standard(s)	Verdict	Remark
Electrostatic discharge	EN 61000-4-2	PASS	---
Radio-frequency electromagnetic fields	EN 61000-4-3	N/A	See 1)
Fast transients	EN 61000-4-4	PASS	---
Surge transient	EN 61000-4-5	PASS	---
Injected currents (radio-frequency common mode)	EN 61000-4-6	PASS	---
Voltage dips and short interruptions	EN IEC 61000-4-11	PASS	---
<u>Supplementary information:</u>			
1) The equipment is classified as category II equipment according to EN 55014-2, no radio-frequency electromagnetic fields immunity test is applicable.			

## 4 EMISSION TEST RESULTS

<b>4.1</b>	<b>Conducted disturbance voltage – Mains</b>	<b>VERDICT: PASS</b>
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Standard	EN IEC 55014-1
Basic standard	EN 55016-2-1

### Limits – Tools

Frequency range [MHz]	Limit: QP [dB(μV) <sup>1)</sup>	Limit: AV [dB(μV) <sup>1)</sup>	IF BW	Detector(s)
0.15 - 0,35	66 – 56 <sup>2)</sup>	59 - 46 <sup>2)</sup>	9 KHz	QP, CAV
0,35 - 5,0	56	46	9 KHz	QP, CAV
5,0 - 30	60	50	9 KHz	QP, CAV

<sup>1)</sup> At the transition frequency, the lower limit applies.  
<sup>2)</sup> The limit decreases linearly with the logarithm of the frequency.

<input type="checkbox"/>	Rated power below 700 W	Limits as above
<input type="checkbox"/>	Rated power between 700 and 1000 W	Limits +4 dB
<input checked="" type="checkbox"/>	Rated power above 1000 W	Limits +10 dB

### Performed measurements

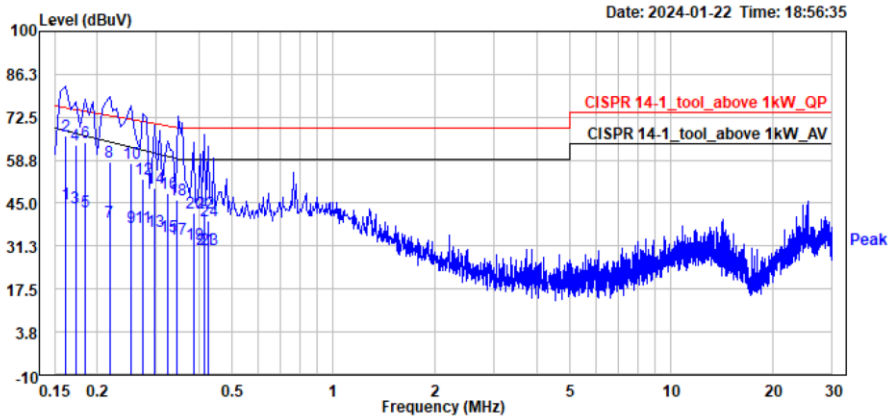
Scan range (0,9 – 1,1 U <sub>N</sub> )	<input type="checkbox"/>	198 – 264 V <sub>AC</sub>	<input type="checkbox"/>	207 – 253 V <sub>AC</sub>	<input checked="" type="checkbox"/>	110/220 V <sub>AC</sub>				
Tested terminal(s) / port	<input checked="" type="checkbox"/>	AC mains input power	<input checked="" type="checkbox"/>	N	<input checked="" type="checkbox"/>	L1	<input type="checkbox"/>	L2	<input type="checkbox"/>	L3
	<input type="checkbox"/>	DC mains input power	<input type="checkbox"/>	Positive (+)	<input type="checkbox"/>	Negative (-)				
Voltage – Mains [V]	110 Vac / 220 Vac									
Frequency – Mains [Hz]	60 Hz / 50 Hz									
Test method applied	<input checked="" type="checkbox"/>	Artificial mains network								
	<input type="checkbox"/>	Voltage probe								
Test setup	<input checked="" type="checkbox"/>	Table top	<input type="checkbox"/>	Artificial hand applied						
	<input type="checkbox"/>	Floor standing	<input type="checkbox"/>	Other:						
	Refer to the Annex 3 for test setup photo(s).									
Operating mode(s) used	Mode 1									
Remark	For the level of continuous disturbance is not steady, the reading on the measuring receiver is observed for at least 15 s for each measurement.									

Measurement data	Port under test	AC mains power input
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Operating mode / voltage / frequency used during the test	Mode 1/ 110 Vac/ 60 Hz
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Result for sample no.: 6185625-1

Line



	Read Freq	Read Level	Factor	Level	Limit	Over	Pol/Phase	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB		
1 AV	0.161	34.46	10.15	44.61	68.15	-23.54	line1	Average
2 PP	0.161	56.38	10.15	66.53	75.40	-8.87	line1	QP
3	0.173	33.57	10.15	43.72	67.35	-23.63	line1	Average
4	0.173	53.63	10.15	63.78	74.84	-11.06	line1	QP
5	0.184	32.34	10.14	42.48	66.60	-24.12	line1	Average
6	0.184	54.26	10.14	64.40	74.32	-9.92	line1	QP
7	0.218	28.97	10.14	39.11	64.61	-25.50	line1	Average
8	0.218	48.04	10.14	58.18	72.93	-14.75	line1	QP
9	0.251	27.05	10.14	37.19	62.91	-25.72	line1	Average
10	0.251	47.57	10.14	57.71	71.74	-14.03	line1	QP
11	0.273	27.11	10.14	37.25	61.94	-24.69	line1	Average
12	0.273	42.72	10.14	52.86	71.06	-18.20	line1	QP
13	0.295	25.89	10.14	36.03	61.00	-24.97	line1	Average
14	0.295	39.59	10.14	49.73	70.40	-20.67	line1	QP
15	0.325	24.17	10.14	34.31	59.89	-25.58	line1	Average
16	0.325	37.81	10.14	47.95	69.62	-21.67	line1	QP
17	0.346	23.34	10.15	33.49	59.13	-25.64	line1	Average
18	0.346	35.86	10.15	46.01	69.09	-23.08	line1	QP
19	0.387	21.47	10.15	31.62	59.00	-27.38	line1	Average
20	0.387	31.61	10.15	41.76	69.00	-27.24	line1	QP
21	0.415	20.13	10.15	30.28	59.00	-28.72	line1	Average
22	0.415	31.90	10.15	42.05	69.00	-26.95	line1	QP
23	0.426	19.94	10.15	30.09	59.00	-28.91	line1	Average
24	0.426	29.32	10.15	39.47	69.00	-29.53	line1	QP

Remark:

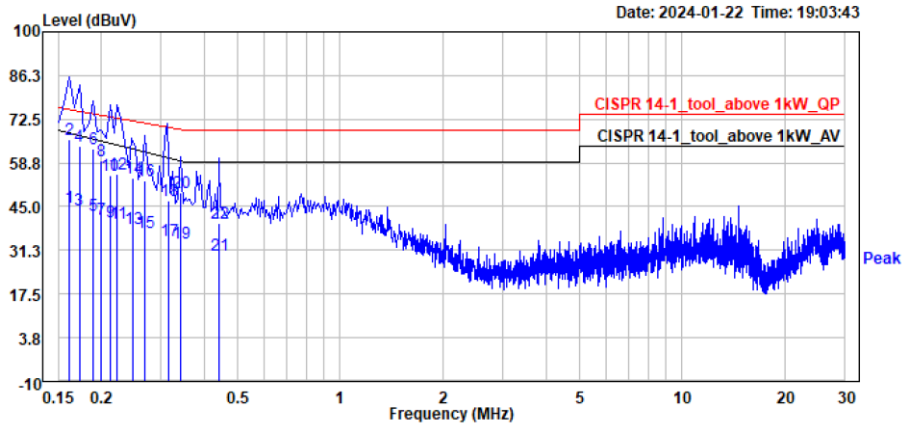
1. "orange color" means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level – Limit.

Remark	
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Measurement data	Port under test	AC mains power input
Operating mode / voltage / frequency used during the test		Mode 1/ 110 Vac/ 60 Hz

Result for sample no.: 6185625-1

Neutral



	Read Freq	Read Level	Read Factor	Limit Level	Limit Line	Over Limit	Pol/Phase	Remark	
	MHz	dBuV	dB	dBuV	dBuV	dB			
1	AV	0.161	34.68	10.14	44.82	68.15	-23.33	neutral	Average
2	PP	0.161	56.01	10.14	66.15	75.40	-9.25	neutral	QP
3		0.173	33.86	10.14	44.00	67.35	-23.35	neutral	Average
4		0.173	53.89	10.14	64.03	74.84	-10.81	neutral	QP
5		0.189	32.06	10.14	42.20	66.25	-24.05	neutral	Average
6		0.189	52.97	10.14	63.11	74.07	-10.96	neutral	QP
7		0.201	31.00	10.14	41.14	65.56	-24.42	neutral	Average
8		0.201	49.20	10.14	59.34	73.60	-14.26	neutral	QP
9		0.212	30.22	10.14	40.36	64.92	-24.56	neutral	Average
10		0.212	44.62	10.14	54.76	73.14	-18.38	neutral	QP
11		0.223	29.70	10.14	39.84	64.31	-24.47	neutral	Average
12		0.223	45.03	10.14	55.17	72.72	-17.55	neutral	QP
13		0.247	28.05	10.14	38.19	63.13	-24.94	neutral	Average
14		0.247	43.76	10.14	53.90	71.89	-17.99	neutral	QP
15		0.269	26.63	10.14	36.77	62.10	-25.33	neutral	Average
16		0.269	43.12	10.14	53.26	71.17	-17.91	neutral	QP
17		0.314	24.39	10.14	34.53	60.27	-25.74	neutral	Average
18		0.314	36.59	10.14	46.73	69.89	-23.16	neutral	QP
19		0.341	23.50	10.15	33.65	59.29	-25.64	neutral	Average
20		0.341	39.14	10.15	49.29	69.20	-19.91	neutral	QP
21		0.444	19.79	10.15	29.94	59.00	-29.06	neutral	Average
22		0.444	29.60	10.15	39.75	69.00	-29.25	neutral	QP

Remark:

1. " orange color " means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level – Limit.

Remark

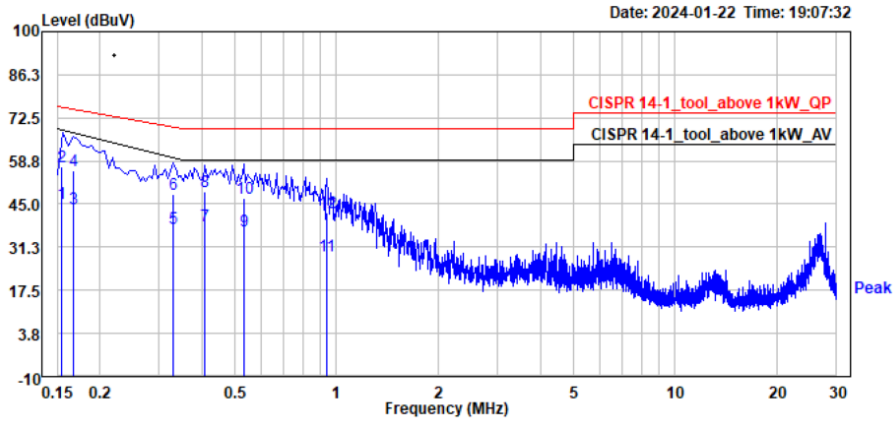


Measurement data	Port under test	AC mains power input
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Operating mode / voltage / frequency used during the test	Mode 1/ 220 Vac/ 50 Hz
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Result for sample no.: 6185625-2

Line



	Read Freq	Read Level	Read Factor	Limit Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB		
1	0.155	34.94	10.15	45.09	68.64	-23.55	line1	Average
2 PP	0.155	46.91	10.15	57.06	75.75	-18.69	line1	QP
3	0.167	33.31	10.15	43.46	67.74	-24.28	line1	Average
4	0.167	45.71	10.15	55.86	75.12	-19.26	line1	QP
5	0.330	27.22	10.15	37.37	59.69	-22.32	line1	Average
6	0.330	38.01	10.15	48.16	69.48	-21.32	line1	QP
7 AV	0.409	28.11	10.15	38.26	59.00	-20.74	line1	Average
8	0.409	38.88	10.15	49.03	69.00	-19.97	line1	QP
9	0.533	26.10	10.15	36.25	59.00	-22.75	line1	Average
10	0.533	36.92	10.15	47.07	69.00	-21.93	line1	QP
11	0.937	18.51	10.18	28.69	59.00	-30.31	line1	Average
12	0.937	31.94	10.18	42.12	69.00	-26.88	line1	QP

Remark:

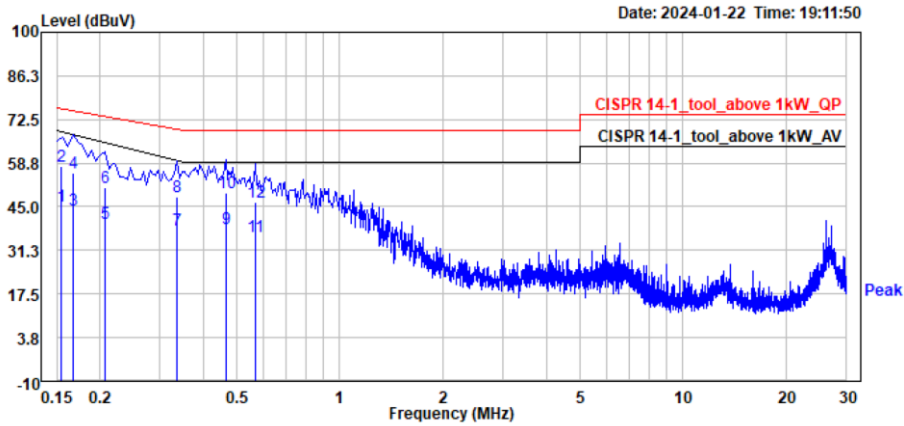
1. " orange color " means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level – Limit.

Remark	
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Measurement data	Port under test	AC mains power input
Operating mode / voltage / frequency used during the test		Mode 1/ 220 Vac/ 50 Hz

Result for sample no.: 6185625-2

Neutral



	Read Freq	Read Level	Factor	Limit Level	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.155	35.27	10.14	45.41	68.64	-23.23	neutral Average
2 PP	0.155	47.77	10.14	57.91	75.75	-17.84	neutral QP
3	0.167	33.77	10.14	43.91	67.74	-23.83	neutral Average
4	0.167	45.73	10.14	55.87	75.12	-19.25	neutral QP
5	0.206	29.70	10.14	39.84	65.24	-25.40	neutral Average
6	0.206	40.73	10.14	50.87	73.37	-22.50	neutral QP
7	0.336	27.37	10.15	37.52	59.49	-21.97	neutral Average
8	0.336	37.91	10.15	48.06	69.34	-21.28	neutral QP
9 AV	0.465	27.97	10.15	38.12	59.00	-20.88	neutral Average
10	0.465	39.25	10.15	49.40	69.00	-19.60	neutral QP
11	0.567	25.35	10.15	35.50	59.00	-23.50	neutral Average
12	0.567	36.34	10.15	46.49	69.00	-22.51	neutral QP

Remark:

1. " orange color " means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level – Limit.

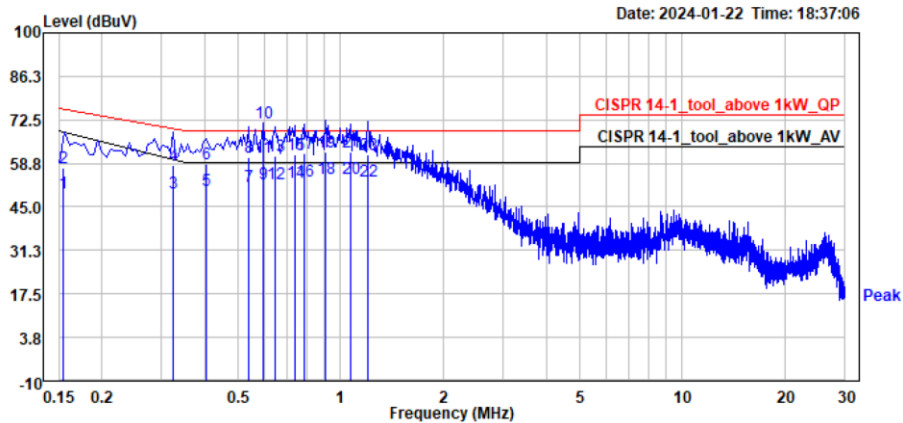
Remark

Measurement data	Port under test	AC mains power input
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Operating mode / voltage / frequency used during the test	Mode 1/ 110 Vac/ 60 Hz
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Result for sample no.: 6185625-3

Line



	Read Freq	Read Level	Factor	Limit Level	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.155	39.36	10.15	49.51	68.64	-19.13	line1 Average
2	0.155	47.17	10.15	57.32	75.75	-18.43	line1 QP
3	0.325	39.22	10.14	49.36	59.89	-10.53	line1 Average
4	0.325	48.13	10.14	58.27	69.62	-11.35	line1 QP
5	0.403	40.02	10.15	50.17	59.00	-8.83	line1 Average
6	0.403	48.46	10.15	58.61	69.00	-10.39	line1 QP
7	0.539	41.44	10.15	51.59	59.00	-7.41	line1 Average
8	0.539	50.52	10.15	60.67	69.00	-8.33	line1 QP
9	0.595	41.97	10.16	52.13	59.00	-6.87	line1 Average
11	0.595	50.39	10.16	60.55	69.00	-8.45	line1 QP
12	0.646	42.13	10.16	52.29	59.00	-6.71	line1 Average
13	0.646	50.74	10.16	60.90	69.00	-8.10	line1 QP
14	0.736	42.75	10.16	52.91	59.00	-6.09	line1 Average
15	0.736	51.20	10.16	61.36	69.00	-7.64	line1 QP
16	0.782	43.01	10.17	53.18	59.00	-5.82	line1 Average
17	0.782	51.79	10.17	61.96	69.00	-7.04	line1 QP
18	0.906	43.60	10.18	53.78	59.00	-5.22	line1 Average
19 QP	0.906	52.20	10.18	62.38	69.00	-6.62	line1 QP
20 AV	1.068	43.99	10.18	54.17	59.00	-4.83	line1 Average
21	1.068	52.18	10.18	62.36	69.00	-6.64	line1 QP
22	1.202	43.18	10.18	53.36	59.00	-5.64	line1 Average
23	1.202	51.55	10.18	61.73	69.00	-7.27	line1 QP

Remark:

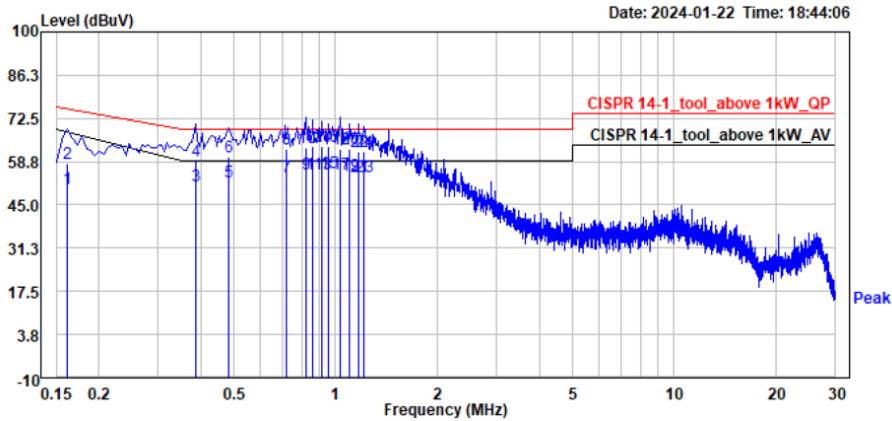
1. "orange color" means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level – Limit.

Remark	
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Measurement data	Port under test	AC mains power input
Operating mode / voltage / frequency used during the test		Mode 1/ 110 Vac/ 60 Hz

Result for sample no.: 6185625-3

**Neutral**



	Read	Limit	Over					
Freq	Level	Factor	Level	Line	Limit	Pol/Phase	Remark	
MHz	dBuV	dB	dBuV	dBuV	dB			
1	0.161	40.28	10.14	50.42	68.15	-17.73	neutral	Average
2	0.161	48.10	10.14	58.24	75.40	-17.16	neutral	QP
3	0.387	41.00	10.15	51.15	59.00	-7.85	neutral	Average
4	0.387	49.03	10.15	59.18	69.00	-9.82	neutral	QP
5	0.483	42.19	10.15	52.34	59.00	-6.66	neutral	Average
6	0.483	50.18	10.15	60.33	69.00	-8.67	neutral	QP
7	0.715	43.84	10.16	54.00	59.00	-5.00	neutral	Average
8	0.715	52.42	10.16	62.58	69.00	-6.42	neutral	QP
9	0.818	44.53	10.17	54.70	59.00	-4.30	neutral	Average
10	0.818	52.92	10.17	63.09	69.00	-5.91	neutral	QP
11	0.860	44.80	10.17	54.97	59.00	-4.03	neutral	Average
12	0.860	53.29	10.17	63.46	69.00	-5.54	neutral	QP
13	0.911	44.77	10.17	54.94	59.00	-4.06	neutral	Average
14	0.911	53.31	10.17	63.48	69.00	-5.52	neutral	QP
15	0.955	45.04	10.17	55.21	59.00	-3.79	neutral	Average
16	0.955	53.53	10.17	63.70	69.00	-5.30	neutral	QP
17	1.035	44.67	10.17	54.84	59.00	-4.16	neutral	Average
18	1.035	52.77	10.17	62.94	69.00	-6.06	neutral	QP
19	1.103	44.22	10.17	54.39	59.00	-4.61	neutral	Average
20	1.103	52.53	10.17	62.70	69.00	-6.30	neutral	QP
21	1.169	43.69	10.17	53.86	59.00	-5.14	neutral	Average
22	1.169	51.95	10.17	62.12	69.00	-6.88	neutral	QP
23	1.213	43.63	10.17	53.80	59.00	-5.20	neutral	Average
24	1.213	51.69	10.17	61.86	69.00	-7.14	neutral	QP

Remark:

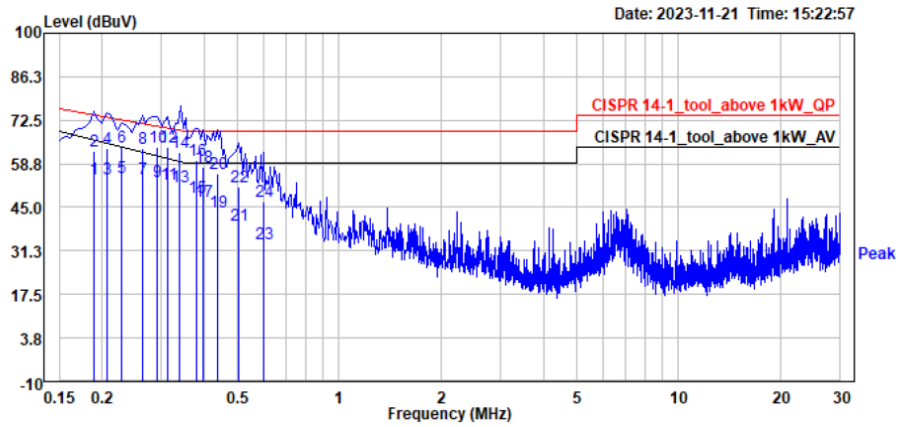
1. " orange color " means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level – Limit.

Remark

Measurement data	Port under test	AC mains power input
Operating mode / voltage / frequency used during the test		Mode 1/ 220 Vac/ 50 Hz

Result for sample no.: 6185625-4

Line



	Read Freq	Read Level	Read Factor	Limit Level	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.189	43.65	10.14	53.79	66.25	-12.46	line1 Average
2	0.189	52.70	10.14	62.84	74.07	-11.23	line1 QP
3	0.206	43.90	10.14	54.04	65.24	-11.20	line1 Average
4	0.206	53.31	10.14	63.45	73.37	-9.92	line1 QP
5	0.229	44.08	10.14	54.22	64.02	-9.80	line1 Average
6	0.229	53.77	10.14	63.91	72.51	-8.60	line1 QP
7	0.263	43.65	10.14	53.79	62.39	-8.60	line1 Average
8	0.263	53.29	10.14	63.43	71.37	-7.94	line1 QP
9	0.291	43.08	10.14	53.22	61.19	-7.97	line1 Average
10	0.291	53.89	10.14	64.03	70.53	-6.50	line1 QP
11 AV	0.313	42.32	10.14	52.46	60.31	-7.85	line1 Average
12 PP	0.313	53.76	10.14	63.90	69.92	-6.02	line1 QP
13	0.339	41.16	10.15	51.31	59.36	-8.05	line1 Average
14	0.339	52.41	10.15	62.56	69.25	-6.69	line1 QP
15	0.381	37.93	10.15	48.08	59.00	-10.92	line1 Average
16	0.381	49.61	10.15	59.76	69.00	-9.24	line1 QP
17	0.398	36.84	10.15	46.99	59.00	-12.01	line1 Average
18	0.398	47.80	10.15	57.95	69.00	-11.05	line1 QP
19	0.440	33.54	10.15	43.69	59.00	-15.31	line1 Average
20	0.440	45.57	10.15	55.72	69.00	-13.28	line1 QP
21	0.506	29.00	10.15	39.15	59.00	-19.85	line1 Average
22	0.506	41.43	10.15	51.58	69.00	-17.42	line1 QP
23	0.601	23.45	10.16	33.61	59.00	-25.39	line1 Average
24	0.601	36.82	10.16	46.98	69.00	-22.02	line1 QP

Remark:

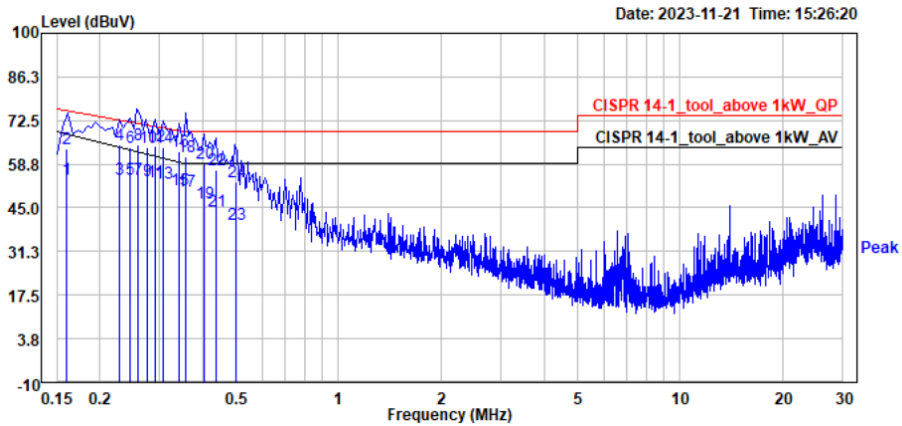
1. " orange color " means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level – Limit.

Remark	
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Measurement data	Port under test	AC mains power input
Operating mode / voltage / frequency used during the test		Mode 1/ 220 Vac/ 50 Hz

Result for sample no.: 6185625-4

**Neutral**



	Read Freq	Read Level	Read Factor	Limit Level	Over Limit	Over Limit	Pol/Phase	Remark	
	MHz	dBuV	dB	dBuV	dBuV	dB			
1	0.160	43.65	10.14	53.79	68.22	-14.43	neutral	Average	
2	0.160	53.39	10.14	63.53	75.45	-11.92	neutral	QP	
3	0.228	43.78	10.14	53.92	64.07	-10.15	neutral	Average	
4	0.228	54.74	10.14	64.88	72.55	-7.67	neutral	QP	
5	0.246	43.71	10.14	53.85	63.17	-9.32	neutral	Average	
6	0.246	53.93	10.14	64.07	71.92	-7.85	neutral	QP	
7	0.258	43.65	10.14	53.79	62.60	-8.81	neutral	Average	
8	0.258	54.66	10.14	64.80	71.52	-6.72	neutral	QP	
9	0.275	43.34	10.14	53.48	61.85	-8.37	neutral	Average	
10	0.275	54.01	10.14	64.15	71.00	-6.85	neutral	QP	
11	0.291	42.87	10.14	53.01	61.19	-8.18	neutral	Average	
12	0.291	54.21	10.14	64.35	70.53	-6.18	neutral	QP	
13	AV	0.308	42.54	10.14	52.68	60.52	-7.84	neutral	Average
14	PP	0.308	53.96	10.14	64.10	70.07	-5.97	neutral	QP
15	0.342	40.61	10.15	50.76	59.26	-8.50	neutral	Average	
16	0.342	52.43	10.15	62.58	69.18	-6.60	neutral	QP	
17	0.356	39.96	10.15	50.11	59.00	-8.89	neutral	Average	
18	0.356	51.16	10.15	61.31	69.00	-7.69	neutral	QP	
19	0.404	36.29	10.15	46.44	59.00	-12.56	neutral	Average	
20	0.404	48.78	10.15	58.93	69.00	-10.07	neutral	QP	
21	0.437	33.98	10.15	44.13	59.00	-14.87	neutral	Average	

Remark:

1. " orange color " means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level – Limit.

Remark

<b>4.2 Disturbance power (30 MHz – 300 MHz)</b>	<b>VERDICT: PASS</b>
---	----------------------

Standard	EN IEC 55014-1
Basic standard	EN 55016-2-2

**Limits – Tools**

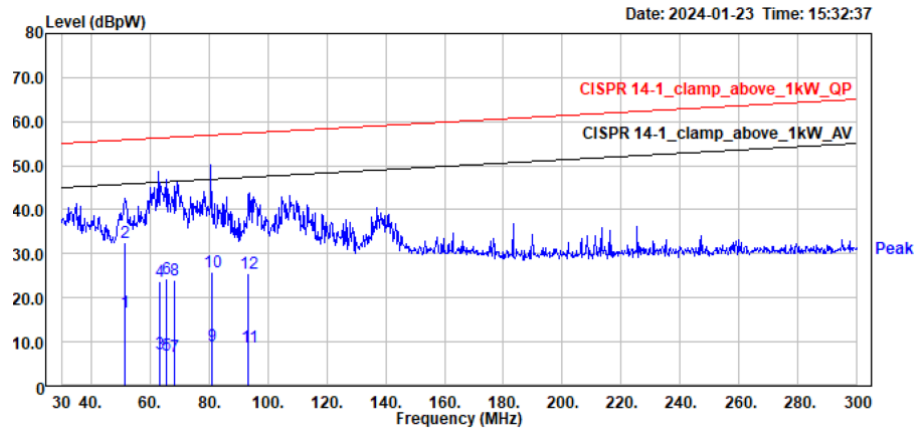
Frequency range [MHz]	Limit: QP [dB(pW)]	Limit: AV [dB(pW)]	IF BW	Detector(s)
30 - 300	45 – 55 <sup>1)</sup>	35 – 45 <sup>1)</sup>	120 KHz	QP, CAV
Margin				
200 - 300	0 – 10 <sup>1)</sup>	---	120 KHz	QP, CAV
<sup>1)</sup> The limit increases linearly with the frequency.				
<input type="checkbox"/>	Rated power below 700 W			Limits as above
<input type="checkbox"/>	Rated power between 700 and 1000 W			Limits +4 dB
<input checked="" type="checkbox"/>	Rated power above 1000 W			Limits +10 dB

**Performed measurements**

Port(s) under test						
<input checked="" type="checkbox"/>	AC mains input power	<input type="checkbox"/>	Load	<input type="checkbox"/>	Control	
<input type="checkbox"/>	Other:	<input type="checkbox"/>	Other:	<input type="checkbox"/>	Other:	
Scan range (0,9 – 1,1 U <sub>N</sub> )	<input type="checkbox"/>	198 – 264 V <sub>AC</sub>	<input type="checkbox"/>	207 – 253 V <sub>AC</sub>	<input checked="" type="checkbox"/>	110/220 V <sub>AC</sub>
Voltage – Mains [V]	110 Vac / 220 Vac					
Frequency – Mains [Hz]	60 Hz / 50 Hz					
Test setup	<input checked="" type="checkbox"/>	Table top	<input type="checkbox"/>	Floor standing		
	<input type="checkbox"/>	Other:				
Refer to the Annex 3 for test setup photo(s).						
Conditions for exemption from measurements above 300 MHz	<input checked="" type="checkbox"/>	"Limits" reduced by "Margin" applied and passed				
	<input checked="" type="checkbox"/>	Maximum clock frequency < 30 MHz				
Operating mode(s) used	Mode 1					
Remark	For the level of continuous disturbance is not steady, the reading on the measuring receiver is observed for at least 15 s for each measurement.					

<b>Measurement data</b>	<b>Port under test</b>	<b>AC mains power input</b>
Operating mode / voltage / frequency used during the test		Mode 1/ 110 Vac/ 60 Hz

Result for sample no.: 6185625-1



		Read		Limit	Over		APos		
	Freq	Level	Factor	Level	Line	Limit	Pol/Phase		
	MHz	dBpW	dB	dBpW	dBpW	dB	Remark		
1	AV	51.480	-6.84	23.43	16.59	45.78	-29.19	Average	0
2	PP	51.480	9.18	23.43	32.61	55.78	-23.17	QP	0
3		63.415	-16.16	23.52	7.36	46.22	-38.86	Average	170
4		63.415	0.29	23.52	23.81	56.22	-32.41	QP	170
5		65.470	-16.05	23.08	7.03	46.29	-39.26	Average	150
6		65.470	1.15	23.08	24.23	56.29	-32.06	QP	150
7		68.350	-15.91	22.45	6.54	46.40	-39.86	Average	70
8		68.350	1.46	22.45	23.91	56.40	-32.49	QP	70
9		80.875	-13.57	22.81	9.24	46.86	-37.62	Average	250
10		80.875	3.12	22.81	25.93	56.86	-30.93	QP	250
11		93.520	-14.33	23.06	8.73	47.33	-38.60	Average	180
12		93.520	2.39	23.06	25.45	57.33	-31.88	QP	180

Remark:

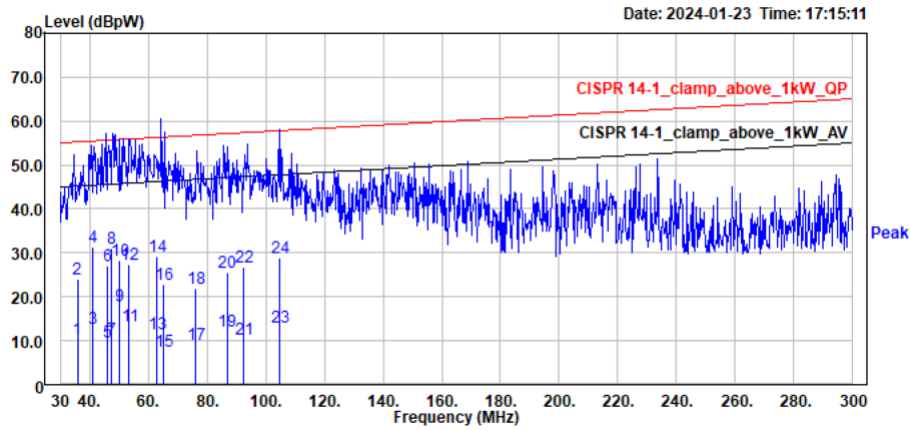
1. "orange color" means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level – Limit.

Remark



Measurement data	Port under test	AC mains power input
Operating mode / voltage / frequency used during the test		Mode 1/ 220 Vac/ 50 Hz

Result for sample no.: 6185625-2



	Read Freq	Read Level	Read Factor	Limit Level	Over Limit	Pol/Phase	Remark	APos
	MHz	dBpW	dB	dBpW	dBpW	dB		cm
1	35.757	-14.44	24.75	10.31	45.19	-34.88	Average	230
2	35.757	-0.64	24.75	24.11	55.19	-31.08	QP	230
3	40.908	-11.38	24.28	12.90	45.38	-32.48	Average	200
4 PP	40.908	6.98	24.28	31.26	55.38	-24.12	QP	200
5	46.131	-13.88	23.71	9.83	45.58	-35.75	Average	120
6	46.131	3.32	23.71	27.03	55.58	-28.55	QP	120
7	47.322	-13.22	23.58	10.36	45.62	-35.26	Average	170
8	47.322	7.30	23.58	30.88	55.62	-24.74	QP	170
9 AV	50.259	-5.35	23.31	17.96	45.73	-27.77	Average	90
10	50.259	4.97	23.31	28.28	55.73	-27.45	QP	90
11	53.454	-10.28	23.63	13.35	45.85	-32.50	Average	130
12	53.454	3.74	23.63	27.37	55.85	-28.48	QP	130
13	63.036	-12.15	23.61	11.46	46.20	-34.74	Average	130
14	63.036	5.50	23.61	29.11	56.20	-27.09	QP	130
15	65.130	-15.56	23.16	7.60	46.28	-38.68	Average	70
16	65.130	-0.33	23.16	22.83	56.28	-33.45	QP	70
17	76.062	-13.36	22.50	9.14	46.69	-37.55	Average	250
18	76.062	-0.70	22.50	21.80	56.69	-34.89	QP	250
19	86.736	-10.88	23.09	12.21	47.08	-34.87	Average	200
20	86.736	2.40	23.09	25.49	57.08	-31.59	QP	200
21	92.526	-12.73	23.12	10.39	47.30	-36.91	Average	60
22	92.526	3.62	23.12	26.74	57.30	-30.56	QP	60
23	104.856	-9.58	22.77	13.19	47.75	-34.56	Average	320
24	104.856	6.17	22.77	28.94	57.75	-28.81	QP	320

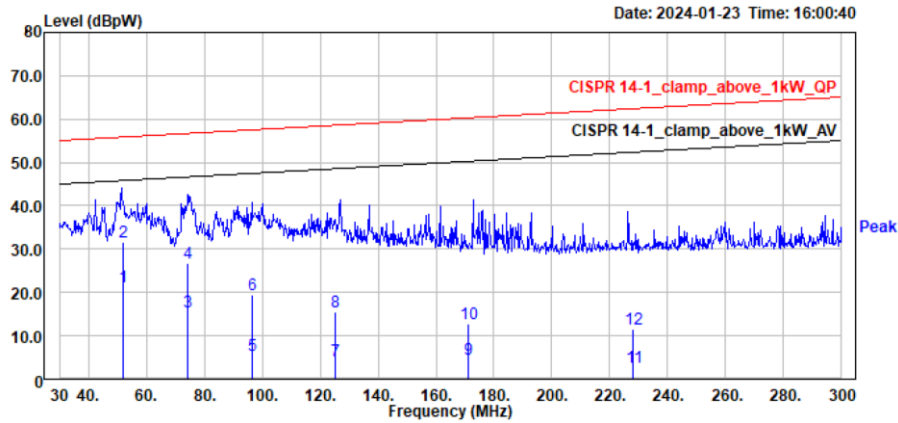
Remark:

1. " orange color " means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level – Limit.

Remark	
--------	--

Measurement data	Port under test	AC mains power input
Operating mode / voltage / frequency used during the test		Mode 1/ 110 Vac/ 60 Hz

Result for sample no.: 6185625-3



	Read	Limit	Over	APos					
	Freq	Level	Factor	Level	Line	Limit	Pol/Phase	Remark	
	MHz	dBpW	dB	dBpW	dBpW	dB			cm
1	AV	51.759	-2.20	23.47	21.27	45.79	-24.52	Average	120
2	PP	51.759	8.13	23.47	31.60	55.79	-24.19	QP	120
3		74.022	-6.76	22.35	15.59	46.61	-31.02	Average	0
4		74.022	4.27	22.35	26.62	56.61	-29.99	QP	0
5		96.441	-17.40	22.91	5.51	47.44	-41.93	Average	70
6		96.441	-3.38	22.91	19.53	57.44	-37.91	QP	70
7		125.210	-18.59	22.77	4.18	48.51	-44.33	Average	0
8		125.210	-7.15	22.77	15.62	58.51	-42.89	QP	0
9		171.230	-17.26	21.75	4.49	50.21	-45.72	Average	125
10		171.230	-9.02	21.75	12.73	60.21	-47.48	QP	125
11		228.240	-18.97	21.74	2.77	52.32	-49.55	Average	0
12		228.240	-10.14	21.74	11.60	62.32	-50.72	QP	0

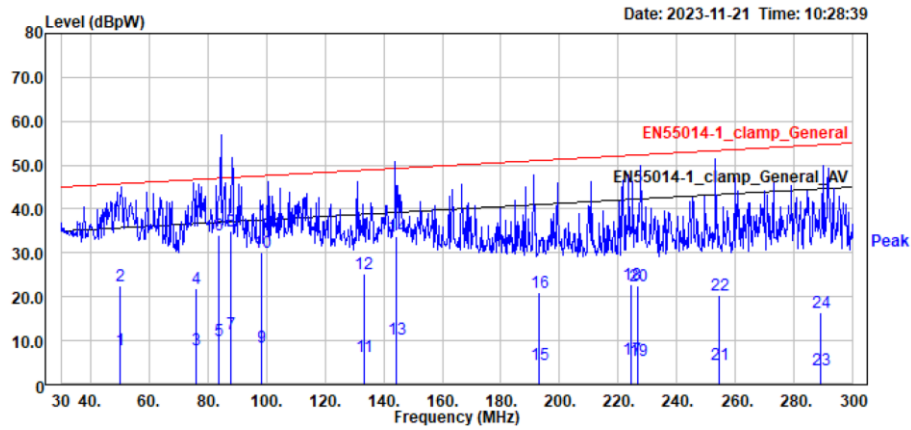
Remark:

1. "orange color" means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level – Limit.

Remark

<b>Measurement data</b>	<b>Port under test</b>	<b>AC mains power input</b>
Operating mode / voltage / frequency used during the test		Mode 1/ 220 Vac/ 50 Hz

Result for sample no.: 6185625-4



	Read Freq	Read Level	Read Factor	Limit Level	Over Limit	Pol/Phase	Remark	APos
	MHz	dBpW	dB	dBpW	dBpW	dB		cm
1	49.970	-15.79	23.76	7.97	35.72	-27.75	Average	0
2	49.970	-1.24	23.76	22.52	45.72	-23.20	QP	0
3	75.975	-14.44	22.42	7.98	36.68	-28.70	Average	150
4	75.975	-0.38	22.42	22.04	46.68	-24.64	QP	150
5	83.600	-12.48	22.63	10.15	36.97	-26.82	Average	110
6	83.600	11.38	22.63	34.01	46.97	-12.96	QP	110
7 AV	88.080	-11.16	22.75	11.59	37.13	-25.54	Average	70
8 PP	88.080	12.20	22.75	34.95	47.13	-12.18	QP	70
9	98.150	-14.39	22.78	8.39	37.50	-29.11	Average	60
10	98.150	7.28	22.78	30.06	47.50	-17.44	QP	60
11	133.170	-16.18	22.55	6.37	38.80	-32.43	Average	0
12	133.170	2.59	22.55	25.14	48.80	-23.66	QP	0
13	144.360	-11.84	22.17	10.33	39.22	-28.89	Average	35
14	144.360	11.46	22.17	33.63	49.22	-15.59	QP	35
15	192.825	-16.84	21.55	4.71	41.01	-36.30	Average	0
16	192.825	-0.63	21.55	20.92	51.01	-30.09	QP	0
17	224.595	-15.66	21.56	5.90	42.19	-36.29	Average	0
18	224.595	1.23	21.56	22.79	52.19	-29.40	QP	0
19	226.625	-16.11	21.58	5.47	42.26	-36.79	Average	0
20	226.625	0.90	21.58	22.48	52.26	-29.78	QP	0
21	254.310	-17.33	21.84	4.51	43.29	-38.78	Average	110
22	254.310	-1.32	21.84	20.52	53.29	-32.77	QP	110
23	289.220	-18.42	21.81	3.39	44.58	-41.19	Average	70
24	289.220	-5.34	21.81	16.47	54.58	-38.11	QP	70

Remark:

1. " orange color " means this data is the worst emission level.
2. Emission Level = Reading Level + Correct Factor (Correct Factor = LISN Insertion Loss + Cable Loss).
3. Margin = Emission Level – Limit.

Remark

<b>4.3 Harmonic current emissions</b>	<b>VERDICT: PASS</b>
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Standard	EN IEC 61000-3-2	
Exclusions  (For these categories of equipment, limits are not specified in the EN 61000-3-2 standard)	<input type="checkbox"/>	Arc welding equipment intended for professional use.
	<input type="checkbox"/>	System(s) with nominal voltage(s) less than 220 V <sub>AC</sub> (line-to-neutral).
	<input type="checkbox"/>	Equipment with rated power of ≤ 75 W (other than lighting equipment).
	<input type="checkbox"/>	Professional equipment with total rated power > 1 kW.
	<input type="checkbox"/>	Symmetrically controlled heating elements with a rated power ≥ 200 W.
	<input type="checkbox"/>	Independent dimmers for incandescent lamps with rated power ≤ 1 kW.

Classification			
<input type="checkbox"/>	Class A	All apparatus not classified as Class B, C or D	
<input checked="" type="checkbox"/>	Class B	Portable tools	
<input type="checkbox"/>	Class C	<input type="checkbox"/>	Lighting equipment with active input power > 25 W
		<input type="checkbox"/>	Lighting equipment with active input power ≤ 25 W (First requirement, Table 3 column 2)
		<input type="checkbox"/>	Lighting equipment with active input power ≤ 25 W (Second requirement)
<input type="checkbox"/>	Class D	Personal computers, television receivers	

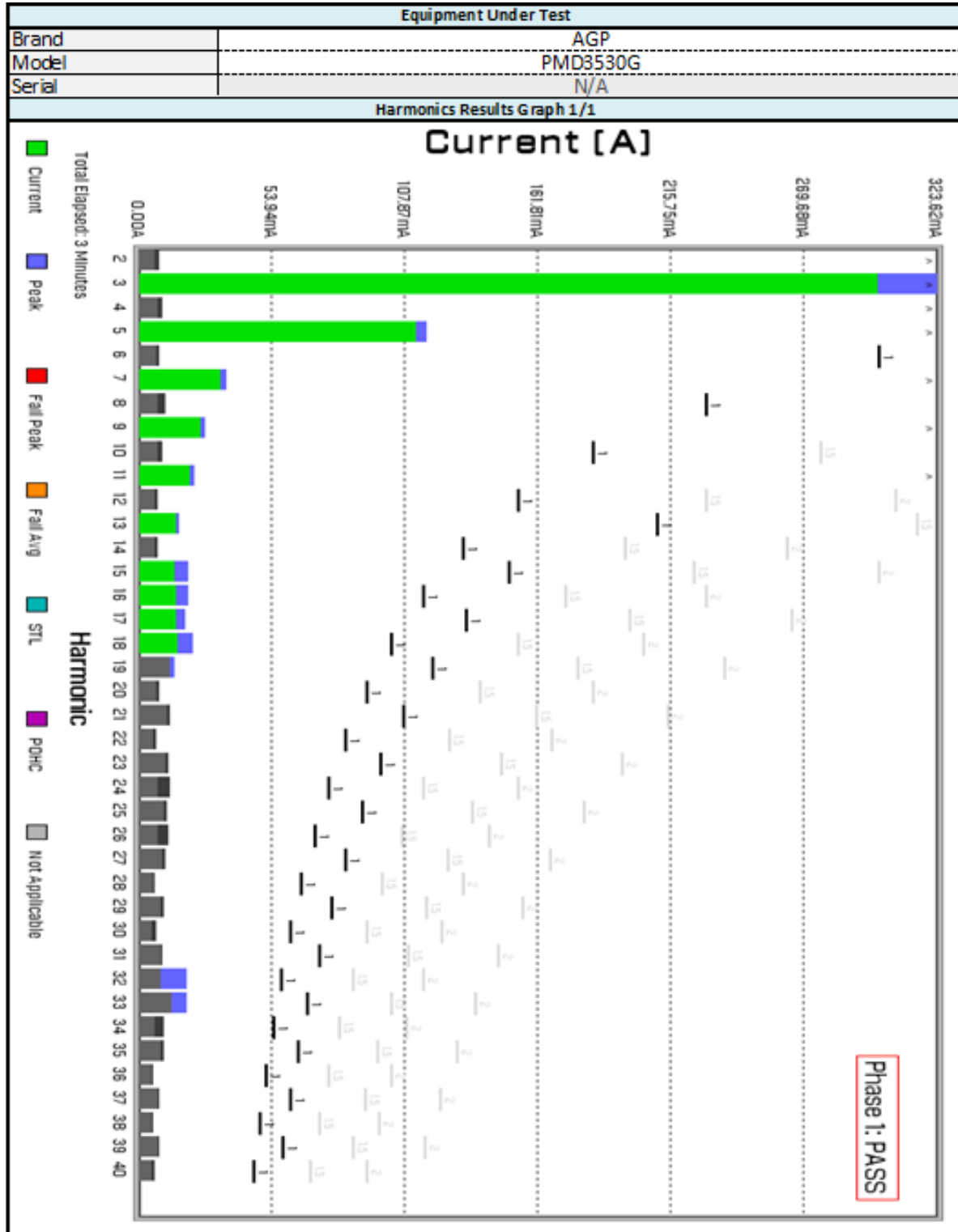
**Performed measurements**

Port under test	AC mains power input					
Voltage – Mains [V]	220 Vac					
Frequency – Mains [Hz]	50 Hz					
Observation period	<input type="checkbox"/>	6.5 min.	<input checked="" type="checkbox"/>	2.5 min.	<input type="checkbox"/>	Other:
Version of measurement instrument standard used EN / IEC61000-4-7 (Cl. 7)	<input checked="" type="checkbox"/>	EN 61000-4-7:2002 + AM1:2009 (IEC 61000-4-7:2002+AM1:2008)				
	<input type="checkbox"/>	EN 61000-4-7:1991				
Control principle used in the EUT	<input checked="" type="checkbox"/>	Comply with the requirements of the Clause 6.1 (EN / IEC 61000-3-2).				
	<input type="checkbox"/>	Not comply with the requirements of the Clause 6.1 (EN / IEC 61000-3-2).				
Operating mode(s) used	Mode 1					
Remark	---					

Measurement data	Port under test	AC mains power input
Operating mode / voltage / frequency used during the test		Mode 1/ 220 Vac/ 50 Hz

Results and limits for 6185625-2

**Test Result: Pass**      **Source qualification: Normal**

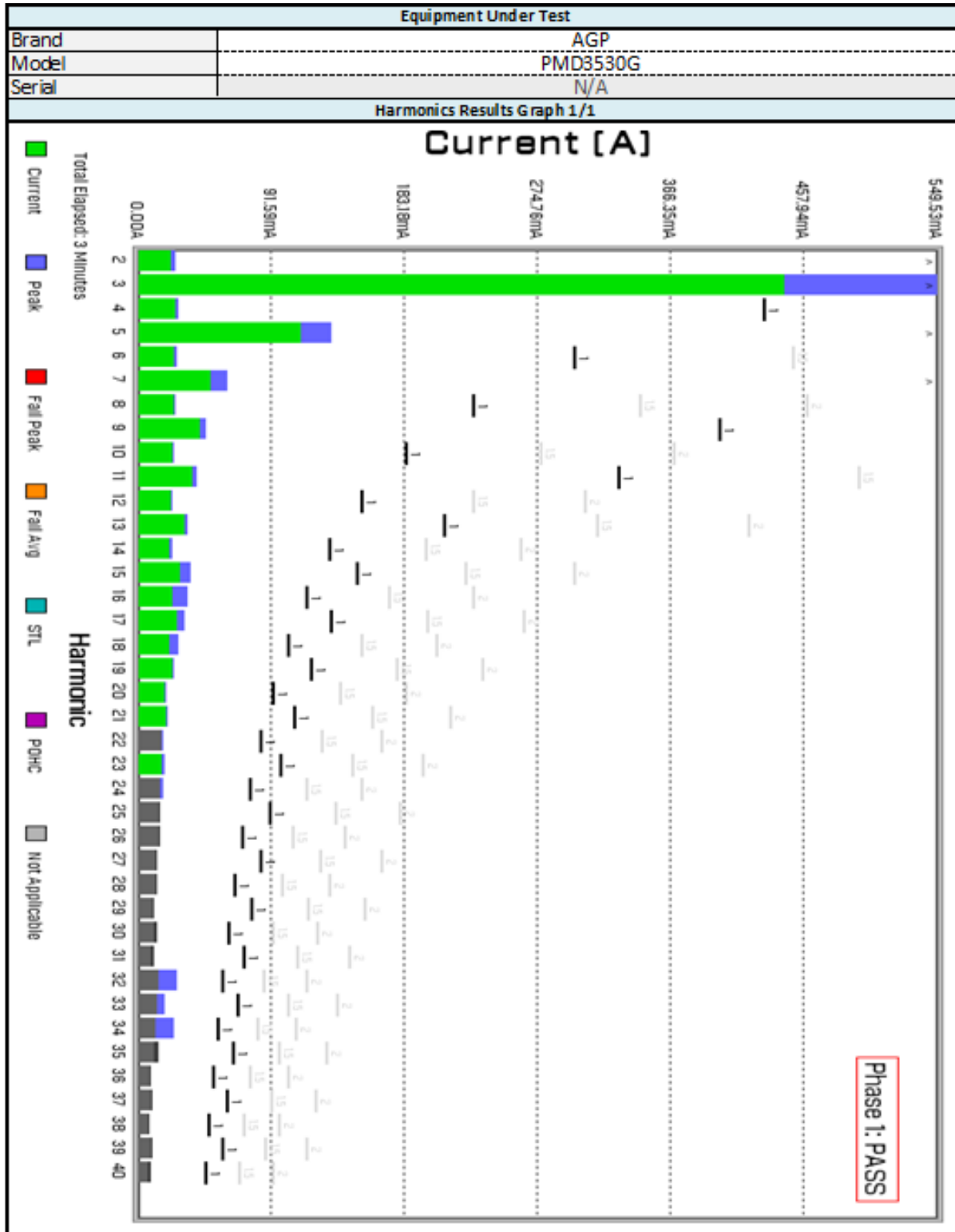


Measurement data		Port under test		AC mains power input			
<b>Extra Test Information</b>							
Current THDG		14.53%					
	Average	Peak		Limit			
THC	323.039mA	346.649mA		N/A			
POHC	31.588mA	34.712mA		251.375mA			
Voltage Crest Factor	1.408	1.41		N/A			
Current Crest Factor	1.698	1.72		N/A			
<b>Harmonics Results 1/1</b>							
Harmonic	Status	Avg (A)	Avg L(A)	Avg %ofL	Peak (A)	Peak L(A)	Peak %ofL
1	PASS	2.2771	No Limit	N/A	2.3663	No Limit	N/A
2	PASS	0.006501	1.08	0.601917	0.008418	1.62	0.519636
3	PASS	0.30004	2.3	13.0452	0.32362	3.45	9.38029
4	PASS	0.007594	0.43	1.76612	0.009737	0.645	1.50955
5	PASS	0.11222	1.14	9.84386	0.11673	1.71	6.82632
6	PASS	0.00732	0.3	2.43993	0.008625	0.45	1.91667
7	PASS	0.032954	0.77	4.27974	0.035391	1.155	3.06416
8	PASS	0.007927	0.23	3.44657	0.011016	0.345	3.19304
9	PASS	0.025368	0.4	6.342	0.027014	0.6	4.50233
10	PASS	0.007447	0.184	4.04728	0.009851	0.276	3.56917
11	PASS	0.020707	0.33	6.27485	0.022559	0.495	4.55737
12	PASS	0.006449	0.15333	4.20609	0.007599	0.229995	3.3039
13	PASS	0.015298	0.21	7.28476	0.016401	0.315	5.20667
14	PASS	0.006818	0.13143	5.18778	0.007847	0.197145	3.98027
15	PASS	0.014737	0.15	9.82467	0.020029	0.225	8.90178
16	PASS	0.015103	0.115	13.133	0.020216	0.1725	11.7194
17	PASS	0.014888	0.13235	11.249	0.018659	0.198525	9.39882
18	PASS	0.015721	0.10222	15.3796	0.021961	0.15333	14.3227
19	PASS	0.012896	0.11842	10.8901	0.01456	0.17763	8.19681
20	PASS	0.007038	0.092	7.65033	0.008551	0.138	6.19616
21	PASS	0.011542	0.10714	10.7728	0.012825	0.16071	7.98021
22	PASS	0.006121	0.083636	7.31874	0.007323	0.125454	5.83696
23	PASS	0.01084	0.097826	11.0809	0.012245	0.146739	8.34475
24	PASS	0.007771	0.076667	10.1357	0.012713	0.115001	11.0547
25	PASS	0.010347	0.09	11.4967	0.011596	0.135	8.58963
26	PASS	0.007602	0.070769	10.7424	0.012004	0.106154	11.3082
27	PASS	0.009711	0.083333	11.6537	0.010566	0.125	8.45283
28	PASS	0.005643	0.065714	8.58751	0.006809	0.098571	6.90812
29	PASS	0.009023	0.077586	11.6297	0.009999	0.116379	8.59184
30	PASS	0.005501	0.061333	8.96891	0.00705	0.092	7.6633
31	PASS	0.008719	0.072581	12.0133	0.009785	0.108872	8.98738
32	PASS	0.008742	0.0575	15.2033	0.01954	0.08625	22.6551
33	PASS	0.013552	0.068182	19.8762	0.019477	0.102273	19.0441
34	PASS	0.006253	0.054118	11.554	0.010452	0.081177	12.8756
35	PASS	0.008789	0.064286	13.672	0.010519	0.096429	10.9085
36	PASS	0.005223	0.051111	10.2185	0.005871	0.076667	7.65797
37	PASS	0.00771	0.060811	12.6778	0.008509	0.091217	9.32792
38	PASS	0.005207	0.048421	10.7544	0.005926	0.072632	8.15844
39	PASS	0.007517	0.057692	13.0297	0.008388	0.086538	9.69274
40	PASS	0.005237	0.046	11.3837	0.006255	0.069	9.06478
22nd January 2024 - 10:51:35		Ph:1 Page 3/3				IECSoft v2.6	
IEC61000-3-2:2018 Fluctuating Harmonics							
Remark							

Measurement data	Port under test	AC mains power input
Operating mode / voltage / frequency used during the test		Mode 1/ 220 Vac/ 50 Hz

Results and limits for 6185625-4

**Test Result: Pass**      **Source qualification: Normal**



Measurement data		Port under test		AC mains power input			
<b>Equipment Under Test</b>							
Brand	AGP						
Model	PMD3530G						
Serial	N/A						
<b>Extra Test Information</b>							
Current THDG	16.82%						
THC	Average	Peak		Limit			
POHC	467.444mA	575.659mA		N/A			
Voltage Crest Factor	40.836mA	43.062mA		251.375mA			
Current Crest Factor	1.41	1.412		N/A			
	1.695	1.733		N/A			
<b>Harmonics Results 1/1</b>							
Harmonic	Status	Avg (A)	Avg L(A)	Avg %ofL	Peak (A)	Peak L(A)	Peak %ofL
1	PASS	2.7931	No Limit	N/A	2.9809	No Limit	N/A
2	PASS	0.022826	1.08	2.11352	0.026041	1.62	1.60747
3	PASS	0.44523	2.3	19.3578	0.54953	3.45	15.9284
4	PASS	0.025537	0.43	5.93884	0.028417	0.645	4.40574
5	PASS	0.1118	1.14	9.80702	0.13331	1.71	7.79591
6	PASS	0.025216	0.3	8.40533	0.026772	0.45	5.94933
7	PASS	0.050453	0.77	6.55234	0.061715	1.155	5.34329
8	PASS	0.024449	0.23	10.63	0.026117	0.345	7.57015
9	PASS	0.04221	0.4	10.5525	0.046795	0.6	7.79917
10	PASS	0.023544	0.184	12.7957	0.025074	0.276	9.08478
11	PASS	0.037184	0.33	11.2679	0.040107	0.495	8.10242
12	PASS	0.022485	0.15333	14.6644	0.023558	0.229995	10.2428
13	PASS	0.031739	0.21	15.1138	0.034416	0.315	10.9257
14	PASS	0.022007	0.13143	16.7443	0.023751	0.197145	12.0475
15	PASS	0.029419	0.15	19.6127	0.035998	0.225	15.9991
16	PASS	0.023696	0.115	20.6052	0.033901	0.1725	19.6528
17	PASS	0.026897	0.13235	20.3226	0.032539	0.198525	16.3904
18	PASS	0.021591	0.10222	21.1221	0.027852	0.15333	18.1647
19	PASS	0.023286	0.11842	19.6639	0.025123	0.17763	14.1434
20	PASS	0.018011	0.092	19.5772	0.01989	0.138	14.413
21	PASS	0.019784	0.10714	18.4656	0.021024	0.16071	13.082
22	PASS	0.016291	0.083636	19.4785	0.017297	0.125454	13.7875
23	PASS	0.016828	0.097826	17.202	0.018152	0.146739	12.3703
24	PASS	0.015308	0.076667	19.9669	0.017127	0.115001	14.893
25	PASS	0.014221	0.09	15.8011	0.015738	0.135	11.6578
26	PASS	0.013829	0.070769	19.541	0.015239	0.106154	14.3556
27	PASS	0.011966	0.083333	14.3593	0.012932	0.125	10.3456
28	PASS	0.012305	0.065714	18.7251	0.013561	0.098571	13.7576
29	PASS	0.010249	0.077586	13.2099	0.010902	0.116379	9.36767
30	PASS	0.011166	0.061333	18.2055	0.013675	0.092	14.8642
31	PASS	0.00922	0.072581	12.7028	0.010765	0.108872	9.8878
32	PASS	0.014144	0.0575	24.5983	0.02692	0.08625	31.2116
33	PASS	0.01328	0.068182	19.4773	0.018322	0.102273	17.9148
34	PASS	0.012257	0.054118	22.6487	0.024557	0.081177	30.2512
35	PASS	0.01083	0.064286	16.8466	0.013834	0.096429	14.3463
36	PASS	0.008001	0.051111	15.6538	0.009344	0.076667	12.188
37	PASS	0.008609	0.060811	14.1563	0.009478	0.091217	10.3911
38	PASS	0.007089	0.048421	14.6399	0.007974	0.072632	10.9787
39	PASS	0.008864	0.057692	15.3638	0.009924	0.086538	11.4673
40	PASS	0.006627	0.046	14.4074	0.008734	0.069	12.6581
22nd January 2024 - 15:00:29		Ph:1 Page 3/3				ECSoft v2_6	
IEC61000-3-2:2018 Fluctuating Harmonics							
Remark							



<b>4.4 Voltage changes, voltage fluctuations and flicker</b>	<b>VERDICT: PASS</b>
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Standard	EN 61000-3-3
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**Limits**

P <sub>ST</sub> (Short term flicker)	<input type="checkbox"/>	≤ 1	<input checked="" type="checkbox"/>	Not Applicable
P <sub>LT</sub> (Long term flicker)	<input type="checkbox"/>	≤ 0,65	<input checked="" type="checkbox"/>	Not Applicable
d <sub>c</sub> (Relative Voltage change)	<input checked="" type="checkbox"/>	≤ 3,3%	<input type="checkbox"/>	Not Applicable
d <sub>MAX</sub> (Max. voltage change)	<input type="checkbox"/>	≤ 4%	<input type="checkbox"/>	6%
	<input checked="" type="checkbox"/>	7%	<input type="checkbox"/>	Not Applicable
<u>Supplemental information:</u>				

**Performed measurements**

Reason for not performing the measurement(s)	<input type="checkbox"/>	Tests are not necessary because the EUT is unlikely to produce significant voltage fluctuations or flicker (clause 6.1).		
Port under test	AC Mains power input			
Voltage – Mains [V]	220 Vac			
Frequency – Mains [Hz]	50 Hz			
Test method	<input checked="" type="checkbox"/>	Flickermeter according EN / IEC 61000-4-15:2011		
	<input type="checkbox"/>	Simulation (Clause 4.2.3 of EN / IEC 61000-3-3)		
	<input type="checkbox"/>	Analytical method (Clause 4.2.4 of EN / IEC 61000-3-3)		
	<input type="checkbox"/>	Use of P <sub>st</sub> = 1 curve (Clause 4.2.5 of EN / IEC 61000-3-3)		
Observation period	<input type="checkbox"/>	10 min.	<input type="checkbox"/>	120 min.
	<input type="checkbox"/>	Other:		
	<input checked="" type="checkbox"/>	24 times switching according to Annex B		
Operating mode(s) used	Mode 1			
Remark	---			

See next page.

Measurement data	Port under test	AC mains power input															
Operating mode used during the test	Mode1/ 220 Vac/ 50 Hz																
Results and limits for 6185625-2																	
<table border="1"> <tbody> <tr> <td>T-max (dt &gt; 3.3%)</td> <td colspan="2">0 ms</td> </tr> <tr> <td>Maximum voltage change <math>d_{MAX}</math></td> <td colspan="2">0.0456 %</td> </tr> <tr> <td>Relative Voltage change <math>d_C</math></td> <td colspan="2">0.0028 %</td> </tr> <tr> <td>Short term flicker <math>P_{ST}</math></td> <td colspan="2">Not applicable</td> </tr> <tr> <td>Long term flicker <math>P_{LT}</math></td> <td colspan="2">Not applicable</td> </tr> </tbody> </table>			T-max (dt > 3.3%)	0 ms		Maximum voltage change $d_{MAX}$	0.0456 %		Relative Voltage change $d_C$	0.0028 %		Short term flicker $P_{ST}$	Not applicable		Long term flicker $P_{LT}$	Not applicable	
T-max (dt > 3.3%)	0 ms																
Maximum voltage change $d_{MAX}$	0.0456 %																
Relative Voltage change $d_C$	0.0028 %																
Short term flicker $P_{ST}$	Not applicable																
Long term flicker $P_{LT}$	Not applicable																
Results and limits for 6185625-4																	
<table border="1"> <tbody> <tr> <td>T-max (dt &gt; 3.3%)</td> <td colspan="2">0 ms</td> </tr> <tr> <td>Maximum voltage change <math>d_{MAX}</math></td> <td colspan="2">0.0728 %</td> </tr> <tr> <td>Relative Voltage change <math>d_C</math></td> <td colspan="2">0.0010 %</td> </tr> <tr> <td>Short term flicker <math>P_{ST}</math></td> <td colspan="2">Not applicable</td> </tr> </tbody> </table>			T-max (dt > 3.3%)	0 ms		Maximum voltage change $d_{MAX}$	0.0728 %		Relative Voltage change $d_C$	0.0010 %		Short term flicker $P_{ST}$	Not applicable				
T-max (dt > 3.3%)	0 ms																
Maximum voltage change $d_{MAX}$	0.0728 %																
Relative Voltage change $d_C$	0.0010 %																
Short term flicker $P_{ST}$	Not applicable																
Remark																	

## 5 IMMUNITY TEST RESULTS

### 5.1 Performance (Compliance) criteria

[According to EN IEC 55014-2 (CISPR 14-2)]

Performance criteria A : The apparatus shall continue to operate as intended during the test. No degradation of performance or loss of function is allowed below a performance level (or permissible loss of performance) specified by the manufacturer when the apparatus is used as intended. If the minimum performance level or the permissible performance loss is not specified by the manufacturer then either of these may be derived from the product description and documentation and from what the user may reasonably expect from the apparatus if used as intended.

Performance criteria B : The apparatus shall continue to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level ( or permissible loss of performance) specified by the manufacturer when the apparatus is used as intended. During the test, degradation of performance is allowed however no change of actual operating state or stored data is allowed. If the minimum performance level or the permissible performance loss is not specified by the manufacturer then either of these may be derived from the product description and documentation and from what the user may reasonable expect from the apparatus if used as intended.

Performance criteria C : Temporary loss of function is allowed provided the function is self- recoverable or can be restored by the operation of the controls or by any operation specified in the instruction for use.

#### 5.1.1 Performance criteria related to immunity tests

Immunity test	Performance criteria
Electrostatic discharge	B
Radio-frequency electromagnetic fields	A
Fast transients	B
Surge transient	B
Injected currents (radio-frequency common mode)	A
Voltage dips and short interruptions	C

#### 5.1.2 Manufacturer defined performance criteria

Not provided.

**5.2 Monitored – Checked Functions / Parameters**

During the immunity tests the following functions of the EUT has/have been monitored/checked.

<input checked="" type="checkbox"/>	Motor speed	<input type="checkbox"/>	Display data
<input type="checkbox"/>	Switching	<input type="checkbox"/>	Data storage
<input type="checkbox"/>	Standby mode	<input type="checkbox"/>	Sensor functions
<input type="checkbox"/>	Temperature	<input type="checkbox"/>	Audible signals
<input type="checkbox"/>	Power consumption	<input type="checkbox"/>	Others : LED's
<input type="checkbox"/>	AC mains input current	<input checked="" type="checkbox"/>	Others : function status
<input type="checkbox"/>	Timing	<input type="checkbox"/>	Others :
<input type="checkbox"/>	Illumination	<input type="checkbox"/>	Others :
<u>Supplementary information :</u>			

Immunity test	Monitored - Checked function(s)/parameter(s) during / after the test	Method
Electrostatic discharge	Tool speed / function status	Visual
Radio-frequency electromagnetic fields	---	Visual / Camera/ tachometer
Fast transients	Tool speed / function status	Visual
Surge transient	Tool speed / function status	Visual
Injected currents (radio-frequency common mode)	Tool speed / function status	Visual
Voltage dips and short interruptions	Tool speed / function status	Visual
<u>Supplementary information :</u>		

<b>5.3 Electrostatic discharge immunity</b>	<b>VERDICT: PASS</b>
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Electrostatic discharges (ESD) are the result of persons or objects that accumulate static electricity due to for instance walking on synthetic carpets. The ESD can influence the operation of equipment or damage its electronics, either by a direct discharge or indirectly by coupling or radiation. Both effects are simulated during the tests.

**Requirements**

Standard	EN IEC 55014-2							
Basic standard	EN 61000-4-2							
Port under test	Enclosure							
Air discharges <sup>1)</sup>	<input type="checkbox"/>	±2 kV	<input type="checkbox"/>	±4 kV	<input checked="" type="checkbox"/>	±8 kV	<input type="checkbox"/>	kV
Contact discharges <sup>1)</sup>	<input type="checkbox"/>	±2 kV	<input checked="" type="checkbox"/>	±4 kV	<input type="checkbox"/>	±8 kV	<input type="checkbox"/>	kV
Number of discharges	≥ 10 per polarity with ≥ 1 sec interval.							
<sup>1)</sup> Tests with lower voltages are not required.								

**Performed tests for sample 6185625-1, 6185625-2, 6185625-3 and 6185625-4**

Set-up	<input checked="" type="checkbox"/>	Table-top	<input type="checkbox"/>	Floor standing
Ambient temperature [°C]	18 °C		Relative Humidity air [%]	55 %
Voltage – Mains [V]	110 Vac / 220 Vac			
Frequency – Mains [Hz]	60 Hz / 50 Hz			
Operating mode(s) used	Mode 1			

Test Point	Test Voltage [kV] & Polarity	Coupling type	# of applied discharges / polarity	Discharge interval [s]
<input checked="" type="checkbox"/> Points on conductive surface.	±4	Contact	10	1
<input checked="" type="checkbox"/> Points on non-conductive surface.	±8	Air	10	1
<input checked="" type="checkbox"/> HCP top side.	±4	Contact	10	1
<input checked="" type="checkbox"/> HCP bottom side.	±4	Contact	10	1
<input checked="" type="checkbox"/> VCP right side.	±4	Contact	10	1
<input checked="" type="checkbox"/> VCP left side.	±4	Contact	10	1
<input checked="" type="checkbox"/> VCP front side.	±4	Contact	10	1
<input checked="" type="checkbox"/> VCP rear side.	±4	Contact	10	1

Observation(s)	During the test no loss of performance was observed. After the test the EUT functioned as intended. No unacceptable loss of performance or data was observed.
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Supplementary information:

<b>5.4 Electrical Fast Transients immunity</b>	<b>VERDICT: PASS</b>
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The EFT immunity test simulates disturbances by bursts of very short transients caused for example by switching off loads such as an AC motor or bouncing relay contacts. The transients are likely to disturb electronics but less likely to cause damage.

**Requirements**

Standard	EN IEC 55014-2			
Basic standard	EN 61000-4-4			
Pulse characteristics	5/50 ns			
Port	Test level	Repetition frequency	Duration	
<input checked="" type="checkbox"/> AC input-output power <sup>1)</sup>	± 1000 V	5 KHz	2 min. / polarity	
<input type="checkbox"/> DC input-output power <sup>2)</sup>	± 500 V	5 KHz	2 min. / polarity	
<input type="checkbox"/> Signal and Control lines <sup>3)</sup>	± 500 V	5 KHz	2 min. / polarity	
<sup>1)</sup> For extra low voltage a.c ports, this testing is only applicable to ports interfacing with cables whose total length may exceed 3 m according to the manufacturer's functional specification. <sup>2)</sup> Not applicable to battery operated appliances that cannot be connected to the mains while in use. <sup>3)</sup> Applicable only to ports interfacing with cables whose total length may exceed 3 m according to the manufacturer's functional specification.				

**Performed tests for sample 6185625-1, 6185625-2, 6185625-3 and 6185625-4**

Voltage – Mains [V]	110 Vac / 220 Vac		
Frequency – Mains [Hz]	60 Hz / 50 Hz		
Operating mode(s) used	Mode 1		
Test Set-up	<input type="checkbox"/>	Equipment standing on floor at (0.1 ± 0.01) m above ground plane	
	<input checked="" type="checkbox"/>	Equipment on the table (0.1 ± 0.01) m above ground plane	
	<input type="checkbox"/>	Artificial hand applied. Location refer to annex 3.	
Coupling	<input checked="" type="checkbox"/>	Common mode	<input type="checkbox"/> Other: unsymmetric mode

Port(s) under test	Test Voltage & Polarity	Repetition Frequency	Test duration / polarity	Injection method		
AC / DC mains power input	1 kV	5 KHz	2 min	<input checked="" type="checkbox"/>	CDN	<input type="checkbox"/> Clamp
AC / DC power output		5 KHz		<input type="checkbox"/>	CDN	<input type="checkbox"/> Clamp
Ethernet / LAN		5 KHz		<input type="checkbox"/>	CDN	<input type="checkbox"/> Clamp
Observation(s)	During the test no loss of performance was observed. After the test the EUT functioned as intended. No unacceptable loss of performance was observed.					

<b>5.5 Surge transient immunity</b>	<b>VERDICT: PASS</b>
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The surge transient immunity test simulates the surges that are caused by over-voltages due to indirect (induced) lightning transients. The pulse is a slow transient with high-energy contents and due to its long duration may cause damage to an unprotected EUT.

**Requirements**

Standard	EN IEC 55014-2		
Basic standard	EN 61000-4-5		
Pulse characteristics	1.2/50 µs Voltage; 8/20 µs Current		
Repetition rate	≥ 60 secs. (for each test level and phase angle)		
Number of pulses	5 pulses (at each polarity and phase angle)		
Port	Test level & Polarity & Coupling		Phase angle [°]
	Line to Line	Line to Earth	
AC input power <sup>1)</sup>	+ 1 kV	+ 2 kV	90
AC input power <sup>1)</sup>	- 1 kV	- 2 kV	270
<sup>1)</sup> Tests with lower voltages are not required.			

**Performed tests for sample 6185625-1, 6185625-2, 6185625-3 and 6185625-4**

Voltage – Mains [V]	110 Vac / 220 Vac
Frequency – Mains [Hz]	60 Hz / 50 Hz
Operating mode(s) used	Mode 1
Repetition rate	60 secs. (for each test level and phase angle)
Number of pulses	5 pulses (at each polarity and phase angle)

Port(s) under test	Coupling	Test level & Polarity	Phase angle [°]	Remark
<input checked="" type="checkbox"/> AC mains input power	Line to Neutral	+1 kV	90	
<input checked="" type="checkbox"/> AC mains input power	Line to Neutral	-1 kV	270	
<input checked="" type="checkbox"/> AC mains input power	Line to Earth	+ 2 kV	90	
<input checked="" type="checkbox"/> AC mains input power	Line to Earth	- 2 kV	270	
<input checked="" type="checkbox"/> AC mains input power	Neutral to Earth	+ 2 kV	90	
<input checked="" type="checkbox"/> AC mains input power	Neutral to Earth	- 2 kV	270	
Observation(s)	During the test no loss of performance was observed. After the test the EUT functioned as intended. No unacceptable loss of performance or data was observed.			
Supplementary information:				

<b>5.6</b>	<b>Injected currents (RF common mode) immunity</b>	<b>VERDICT: PASS</b>
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During this test the immunity of the equipment for induced or conducted electromagnetic fields is checked. Fields generated by radio and other transmitters cause RF voltages in long cables like the mains network. This test reproduces these induced disturbing voltages by injecting them to the EUT via the cabling.

**Requirements**

Standard		EN IEC 55014-2		
Basic standard		EN 61000-4-6		
Frequency range		Modulation	Step size	Dwell time
<input type="checkbox"/>	0.15 – 80 MHz	80 % AM (1 kHz)	≤ 1%	≥ 0,5 s
<input checked="" type="checkbox"/>	0.15 – 230 MHz	80 % AM (1 kHz)	≤ 1%	≥ 0,5 s
Port			Test level, U <sub>0</sub>	
<input checked="" type="checkbox"/>	AC input-output power <sup>1)</sup>		3 V	
<input type="checkbox"/>	DC input-output power <sup>2) 3)</sup>		1 V	
<input type="checkbox"/>	Signal and Control lines <sup>4)</sup>		1 V	
<sup>1)</sup> For extra low voltage a.c ports, this testing is only applicable to ports interfacing with cables whose total length may exceed 3 m according to the manufacturer's functional specification. <sup>2)</sup> Not applicable to battery operated appliances that cannot be connected to the mains while in use. <sup>3)</sup> Applicable to battery operated appliances that can be connected to the mains while in use, or to appliances for which the length of d.c. cables may exceed 3 m according to the manufacturer's functional specification. <sup>4)</sup> Applicable only to ports interfacing with cables whose total length may exceed 3 m according to the manufacturer's functional specification.				

**Performed tests for sample 6185625-1, 6185625-2, 6185625-3 and 6185625-4**

Frequency range (applied)		Modulation (applied)		Step size (applied)	
<input type="checkbox"/>	0.15 – 80 MHz	<input checked="" type="checkbox"/>	0.15 – 230 MHz	80 % AM (1 kHz)	
Voltage – Mains [V]		110 Vac / 220 Vac		Frequency – Mains [Hz]	
Operating mode(s) used		Mode 1			
Test set-up		<input type="checkbox"/>	Equipment standing on floor at (0.1 ± 0.01) m above ground plane.		
		<input checked="" type="checkbox"/>	Equipment on the table (0.1 ± 0.01) m above ground plane.		
		<input type="checkbox"/>	Artificial hand applied.		

Port(s) under test	Test Level (applied)	Injection method	Dwell time (applied)	Remark
AC mains power input	3 V	CDN-M3	3 s	
Observation(s)	During the test no loss of performance was observed. After the test the EUT functioned as intended. No unacceptable loss of performance or data was observed.			
Supplementary information:				



<b>5.7</b>	<b>Power supply interruptions and dips immunity</b>	<b>VERDICT: PASS</b>
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The purpose of the test is to verify the immunity of the equipment against voltage dips and voltage interruptions. It helps to ensure that the equipment functions properly (as expected and safely) with power supply fluctuations. Voltage dips and interruptions are caused by faults in the LV, MV, HV networks (short-circuit or ground faults).

**Requirements**

Standard	EN IEC 55014-2			
Basic standard	EN 61000-4-11			
# of dips & interruptions	3 dips / interruptions for each test level and phase angle			
Interval between events	≥ 10 seconds			
Port	Test level <sup>1)</sup>	Period (Cycles)		Performance Criteria
		50 Hz	60 Hz	
AC input power port	$U_{NOM} - 100\%$	0.5	0.5	C; Refer to the chapter 5.1 for details.
AC input power port	$U_{NOM} - 60\%$	10	12	C; Refer to the chapter 5.1 for details.
AC input power port	$U_{NOM} - 30\%$	25	30	C; Refer to the chapter 5.1 for details.
<sup>1)</sup> Changes to the voltage level shall occur at a zero crossing point in the a.c. voltage waveform. <b>NOTE:</b> Where the equipment has a rated voltage range the following shall apply: <ul style="list-style-type: none"> <li>- If the voltage range does not exceed 20% of the lower voltage specified for the rated voltage range. A single voltage within that range may be selected for testing.</li> <li>- In all other cases, the test procedure shall be applied for both the lowest and highest voltages declared in the voltage range.</li> </ul>				

**Performed tests for sample 6185625-1, 6185625-2, 6185625-3 and 6185625-4**

$U_{NOM}$ [V <sub>AC</sub> ]	Terminal	Voltage dip [% $U_{NOM}$ ]	Duration [cycles]		Repetition rate [s]	Number of dips per test	Phase angle [°]
			50 Hz	60 Hz			
220	L-N	0	0,5	/	10	3	0, 180
220	L-N	40	10	/	10	3	0, 180
220	L-N	70	25	/	10	3	0, 180
110	L-N	0	/	0.5	10	3	0, 180
110	L-N	40	/	12	10	3	0, 180
110	L-N	70	/	30	10	3	0, 180
Operating mode(s) used		Mode 1					
Observation(s)		During the test no loss of performance was observed. After the test the EUT functioned as intended. No unacceptable loss of performance was observed.					
<u>Supplementary information:</u>							

## 6 IDENTIFICATION OF THE EQUIPMENT UNDER TEST

### EUT PHOTOS



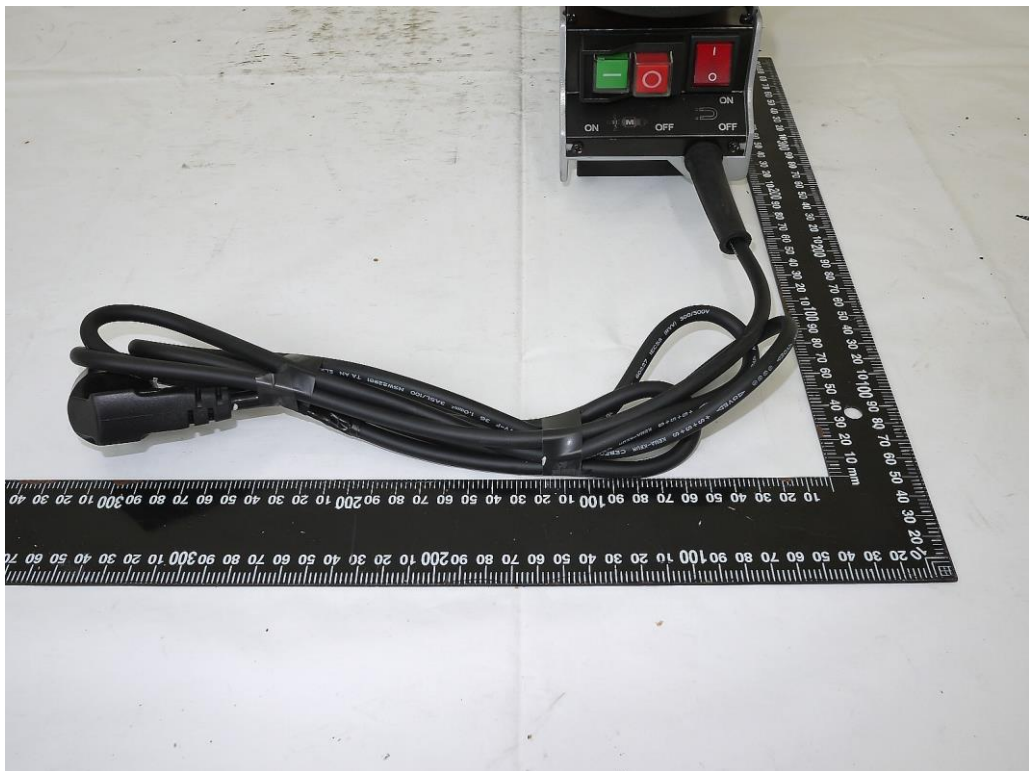
PMD3530 (110-120 V)



PMD3530 (110-120 V)



PMD3530 (220-240 V)



PMD3530 (220-240 V)

EUT PHOTOS



PMD3530G (110-120 V)



PMD3530G (110-120 V)



PMD3530G (220-240 V)



PMD3530G (220-240 V)

## 7 ANNEX 1- MEASUREMENT UNCERTAINTIES

The table(s) below show(s) measurement uncertainties of the EMC test set-ups. The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately 95 %.

<b>Electromagnetic Interference</b>			
<b>Measurement Item</b>	<b>Measurement Frequency</b>	<b>Polarization</b>	<b>Uncertainty</b>
Conducted Emission	150 kHz ~ 30 MHz	LINE / NEUTRAL	$\pm 3.44\text{dB}$
Absorbing clamp test	30MHz ~ 300MHz	Voltage	$\pm 4.37\text{dB}$
Harmonic current emission	-	-	$\pm 0.53\%$
voltage fluctuations and flicker	-	-	$\pm 0.44\%$
<b>Electromagnetic Susceptibility</b>			
<b>Measurement</b>	<b>Item</b>	<b>Uncertainty</b>	
Electrostatic Discharges (ESD)	--	Rise time $T_r \pm 12.71\% \text{ ns}$ Voltage peak $\pm 1.74\%V$ Peak current $I_p \pm 3.35\% A$ Current at 30 ns $\pm 3.47\% \text{ ns}$ Current at 60 ns $\pm 3.47\% \text{ ns}$	
Electrical Fast Transients and bursts	--	CDN & Clamp V peak $\pm 12.82\% V$ Rise time $\pm 9.25\% \text{ ns}$ Pulse width $\pm 6.25\% \text{ ns}$	
Surges	--	V peak = $\pm 9.75\% V$ Rise time = $\pm 14.54\% \text{ us}$ Duration = $\pm 2.04\% \text{ us}$	
Conducted Disturbances, induced by RF fields	--	M2/M3/M5 $\pm 1.40 \text{ dB}$ Clamp $\pm 3.21 \text{ dB}$	
Voltage Dips, Interruptions, and variations	--	$\pm 1.61\% V$	

## 8 ANNEX 2 - USED EQUIPMENT

Conducted disturbance					
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
Receiver	R&S	ESHS10	835499/012	10/30/2023	10/29/2024
LISN	INTRX	LIN63-4	1803001	03/12/2024	03/12/2025
LISN	Schwarzbeck	NSLK-8127	01071	7/6/2023	7/5/2024
Coaxial Cable	SUHNER	RG214	C001-1358175	6/21/2023	6/20/2024
Attenuator	JYEBAO	FAT-NM5NF5T6G2W10	ATT002	10/24/2023	10/23/2024
test software	Audix	E3	20180316b	NA	NA

Disturbance power					
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
EMI test receiver	R&S	ESR7	102004	4/28/2023	4/27/2024
Absorbing clamp	AMETEK CTS Europe GmbH	MDS21	60696	6/14/2023	6/13/2024
Coaxial cable	HUBER+SHUNER	RG223	C002	6/13/2023	6/12/2024
Attenuator	AMETEK CTS Europe GmbH	ATT6dB	LE263	6/13/2023	6/12/2024
test software	Audix	E3	20180316b	NA	NA

Harmonic current emissions & Voltage changes, voltage fluctuations and flicker					
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
Power source	N4L	N4A30	91J-12901	4/14/2023	4/13/2024
Flicker Impedance Network	N4L	IMP323	91G-12804	4/14/2023	4/13/2024
power Analyzer	N4L	PPA5531	166-05417	4/14/2023	4/13/2024
Test software	N4L	IEC_Soft	2.6	NA	NA

Electrostatic discharge immunity					
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
ESD Simulator	NoiseKen	ESS-S3011A	ESS1848144	02/03/2024	02/02/2025
ESD Gun	NoiseKen	GT-30RA	ESS1848164	02/03/2024	02/02/2025
Thermometer	Elitech	GSP-6	EFG22A102880	3/12/2024	3/11/2025

Fast transient immunity					
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
EFT Burst Generator	EMCLioncel	EFT-406CB	180803	02/16/2024	02/15/2025
Coupling Decoupling	EMCLioncel	CDN-433CB	180801	02/16/2024	02/15/2025

Networks					
EMC clamp	EMCLioncel	EFTC	18071802	02/15/2024	02/14/2025

Surge immunity					
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
Surge controller	EMCLioncel	SCU-614A+	0180202	NA	NA
Surge generator	EMCLioncel	LSG-510CB+	0171101	02/16/2024	02/15/2025
coupling Device Network	EMCLioncel	CDN-5310P	0180302	02/16/2024	02/15/2025

Injected currents immunity					
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
Signal generator	Keysight	N5171B	MY57281132	3/12/2024	3/11/2025
Power Amplifier	fflight communication	NTWPA-4K0100	18103215	NA	NA
100W attenuator	JPT	JPTATT-03-6	ATT17001	3/13/2024	3/12/2025
Couple device network	EMC Liconcel	CDN-M5-32	181001	5/10/2023	5/9/2024
Couple device network	EMC Liconcel	CDN-M3-16	181103	5/10/2023	5/9/2024
Couple device network	EMC Liconcel	CDN-M2-16	018074	5/10/2023	5/9/2024
EM Clamp	FRANKONIA	EMCL-20	18101672-0113	5/10/2023	5/9/2024
Power sensor	Keysight	U2004A	MY57420018	3/12/2024	3/11/2025
test software	Audix	I2	20181211	NA	NA

Voltage dips and short interruptions immunity					
Instrument	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
Power source	N4L	N4A30	91J-12901	02/15/2024	02/14/2025
Voltage drop simulator	EMCLioncel	VDS-1103	21101	02/15/2024	02/14/2025
Adjust power module	EMCLioncel	RGL-232	21101	02/15/2024	02/14/2025



## 9 ANNEX 3 - TEST PHOTOS

### Conducted disturbance at mains terminals



### Disturbance power



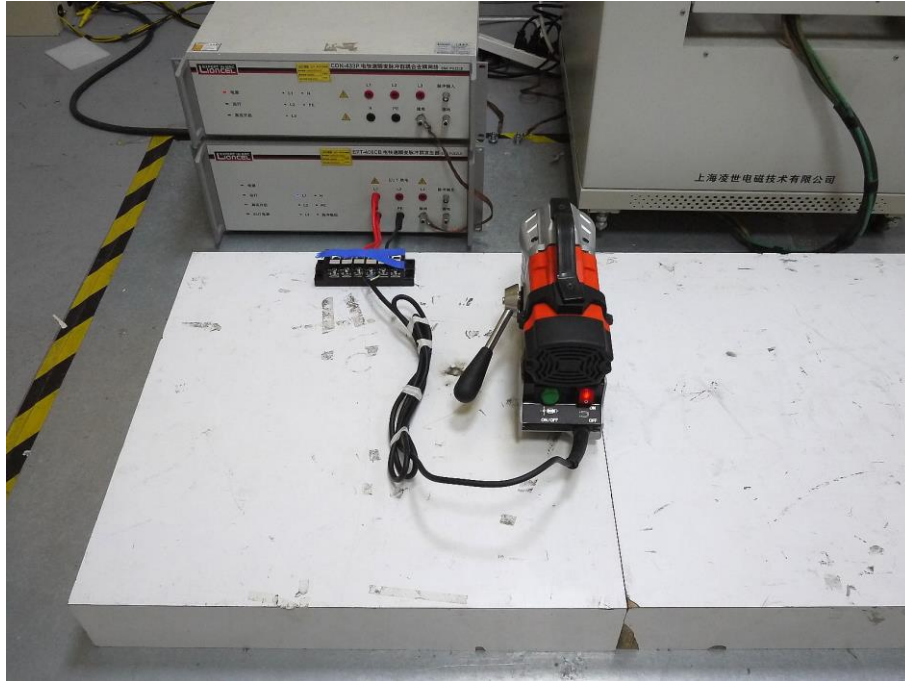
### Harmonic current emissions & Voltage changes, voltage fluctuations and flicker



### Electrostatic discharge immunity



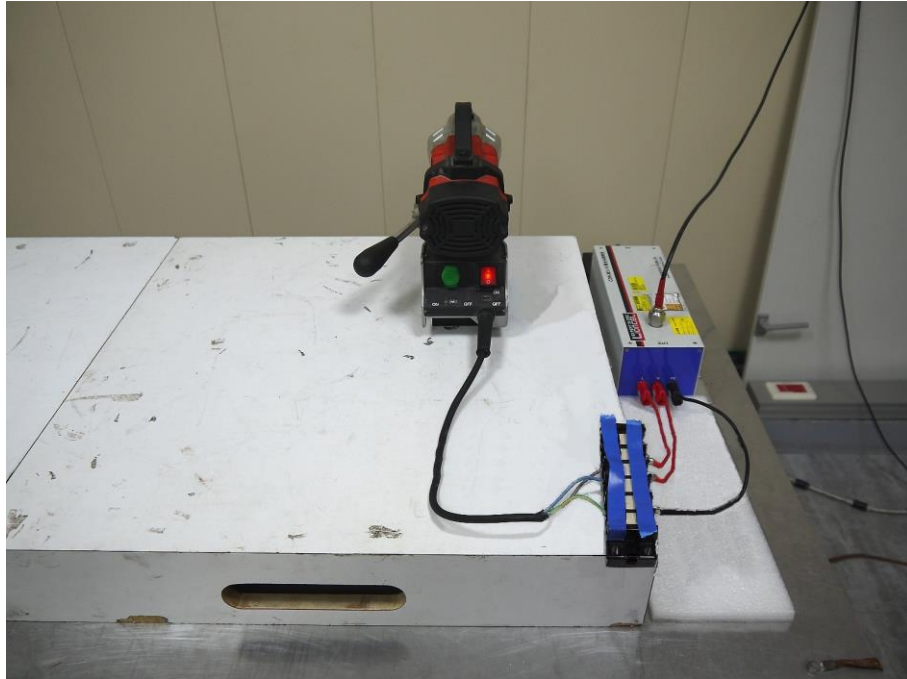
## Fast transients



## Surges



### Injected currents (radio-frequency common mode) immunity



### Voltage dips and short interruptions immunity



End of the report