

TEST REPORT Nº 2416/0524/E1

NOT CUANTITAVE GENERAL CONCLUSION IS REFERRED TO THE ACCREDITED TESTING. Page 1 of 1

The present test report modifies and replaces the Report 2416/0524 issued by SGS on 2016 October 10th in order to include a new derived model.

Test site.....: EMC Laboratory of SGS Tecnos, Madrid, Spain
 Test date.....: 2016 / 07 / 13 to 2016 / 07 / 22
 Client: MEDICAL IBERICA, S.A.
 Address: C/ LANZAHITA, 6 POL. IND. ALBARREJA
 28946 FUENLABRADA - MADRID (SPAIN)
 Equipment tested.....: ARTICULATED HOSPITAL BED
 State and reception date: CORRECT, 2016 / 06 / 23
 Supplier: MEDICAL IBERICA, S.A.
 Trade-mark.....: MEDISA
 Model tested.....: GALAXY 2
 Derived model not tested.....: MAJESTIC 2 (See page 6 of TRF 2416/0524/E1)
 Serial Number: PROTOTYPE
 Nominal Ratings: 230-110 V~; 50-60 Hz
 Life-supporting equipment: No
 Essential performance: No
 Standards applied.....: UNE-EN 60601-1-2:2008+Corr.:10

Emission:

- UNE-EN 55011:2011+A1:2011
 - Conducted emission
 - Radiated emission (*)
- UNE-EN 61000-3-2:2014(Harmonics)
- UNE-EN 61000-3-3:2013 (Voltage fluctuations)

Immunity:

- UNE-EN 61000-4-2:2010; UNE-EN 61000-4-3:2007+A1:2008+A2:2011 (1)
- UNE-EN 61000-4-4:2013; UNE-EN 61000-4-5:2015
- UNE-EN 61000-4-6:2014; UNE-EN 61000-4-8:2011
- UNE-EN 61000-4-11:2005

(*) Radiated emission test, out of accreditation scope: ENAC Nº 5/LE011
 (1) Accredited up to 1 GHz

Results: Results obtained refer to the sample tested which is the subject of this Report, considering worst case values from tests and verifications carried out.
 Measurement uncertainties associated with variables determined during tests are available from the Laboratory at Customer's request.

Conclusion.....: According to the results obtained, the sample tested **COMPLIES** in the test condition performed with the prescriptions indicated in the specifications applied.

Madrid, 20 January 2017

Tested by Project Engineer EMC	Verified by EMC Reviewer	Approval by Technical Manager of Test Laboratory
		
JOSÉ ALBERTO ORTEGA PAGE	JAVIER MORGADO DURÁN	FERNANDO MONTES CLAVER

The present test report, with 1 page, and Annex TRF 2416/0524/E1, can not be copy partially without the written consent of SGS

SGS Tecnos, S.A. C/ Trespaderne, 29 - Edif. Barajas 1 (28042 MADRID)
 LABORATORIO DE ENSAYOS ELÉCTRICOS Tfno: 913-138-000 Fax: 913-138-093



Test Report issued under the responsibility of:



SGS Tecnos, S.A.

TEST REPORT IEC 60601-1-2 Medical Electrical Equipment PART 1-2: General Requirements for Basic Safety and Essential Performance Collateral Standard: Electromagnetic Compatibility Laboratory Accredited by ENAC, with Accreditation Nº 5/LE011, to perform the tests included in this Report.	
Report Reference No.:	2416/0524/E1
Date of issue	2017/01/20
Total number of pages.....	57
CE Testing Laboratory	SGS Tecnos, S.A. (Electric Test Laboratory)
Address	C/ Trespaderne, 29 – Edificio Barajas 1 28042 – MADRID (Spain)
Applicant's name.....	MEDICAL IBERICA, S.A.
Address	C/ LANZAHITA, 6 POL. IND. ALBARREJA 28946 FUENLABRADA - MADRID (SPAIN)
Test specification	Emission and immunity tests according to the following Standard
Standard	IEC 60601-1-2:2007 (Third Edition)
Test procedure	CE Examination
Non-standard test method.....	N/A
Test Report Form No.....	IEC60601_1_2CEMC
Test Report Form(s) Originator	UL
Master TRF	Dated 2013-04
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Test item description	ARTICULATED HOSPITAL BED
Trade Mark	MEDISA
Manufacturer.....	MEDICAL IBERICA, S.A.
Model	GALAXY 2
Derived model no tested	MAJESTIC 2 (See page 6)
Serial number	PROTOTYPE
Ratings	Input: 230 – 110 V~ / 50-60 Hz

1.0 Testing Program Details

Testing procedure and testing location:	
<input checked="" type="checkbox"/> CE Testing Laboratory:	SGS Tecnos, S.A. (Electric Test Laboratory)
Testing location/ address	C/ Trespaderne, 29 – Edificio Barajas 1 28042 – MADRID (Spain)
<input type="checkbox"/> Associated CB Test Laboratory:	
Testing location/ address	
Tested by (name + signature)	José Alberto Ortega Page 
Approved by (name + signature) :	Javier Morgado Durán 
<input type="checkbox"/> Testing procedure: TMP	
<input type="checkbox"/> Testing procedure: WMT	
<input type="checkbox"/> Testing procedure: SMT	

List of Attachments (including a total number of pages in each attachment):
Summary of testing:
Tests performed (name of test and test clause):

The equipment has been tested according to the following standards:
 UNE-EN 60601-1-2:2008 + Corr.:2010,
 official edition in Spanish language of European Standard
 EN 60601-1-2:2007 + Corr.:2007
 technically equivalent to International Standard
 IEC 60601-1-2:2007

Emission:

- UNE-EN 55011:2011+A1:2011
 - Conducted emission
 - Radiated emission (*)
- UNE-EN 61000-3-2:2014(Harmonics)
- UNE-EN 61000-3-3:2013 (Voltage fluctuations)

Immunity:

- UNE-EN 61000-4-2:2010
- UNE-EN 61000-4-3:2007+A1:2008 +A2:2011
- UNE-EN 61000-4-4:2013
- UNE-EN 61000-4-5:2015
- UNE-EN 61000-4-6:2014
- UNE-EN 61000-4-8:2011
- UNE-EN 61000-4-11:2005

(*) Test of Radiated Emission outside of accreditation scope ENAC Nº 5/LE011.

All applicable tests according to the above specified standards have been carried out

From the result of inspection and tests on the submitted sample, we conclude that it complies with the requirements of the Standards.

Testing location:

SGS Tecnos, S.A. (Electric Test Laboratory)
 C/ Trespaderne, 29 - Edificio Barajas 1
 28042 – MADRID (Spain)

Summary of compliance with National Differences

List of countries addressed: EU Group differences (No specific EU countries tested)

☒ **The product fulfils the requirements of IEC 60601-1-2:2007**

Copy of marking plate (draft)


Test item description	ARTICULATED HOSPITAL BED
Trade Mark	MEDISA
Manufacturer.....	MEDICAL IBERICA, S.A.
Model	GALAXY 2
Ratings	Input: 230 – 110 V~ / 50-60 Hz
Possible test case verdicts:	
- test case does not apply to test object...: N/A	
- test object does meet requirement: P (Pass)	
- test object does not meet requirement...: F (Fail)	
Testing	
Date of receipt of test item.....	2016/06/23
Date(s) of performance of tests	2016/07/13 to 2016/07/22
General remarks:	
The test results presented in this report relate only to the object tested.	
The results contained in this report reflect the results for this particular model and serial number. It is the responsibility of the manufacturer to ensure that all production models meet the intent of the requirements detailed within this report.	
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The present test report modifies and replaces the Report 2416/0524 issued by SGS on 2016 October 10th in order to include a new derived model (See page 6).	
This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.	
<p>“(see Enclosure #)” refers to additional information appended to the report.</p> <p>“(see appended table)” refers to a table appended to the report.</p>	
Results obtained refer to the samples tested which are the subject of this Report, considering worst case values from tests and verifications carried out.	
Throughout this report <input type="checkbox"/> point <input checked="" type="checkbox"/> comma is used as decimal separator.	
General product information:	
Appliance is an articulated bed designed for adult patients admitted on hospitalization standard units as well as long-stay units.	
The EUT can perform the next movements through actuators and motors:	
<ul style="list-style-type: none"> - Lifting bed - Backrest section lifting - Upper legs section lifting - Trendelemburg and antitrendelembur positions 	

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1.1 Equipment Description

General product information:

Appliance is an articulated bed designed for adult patients admitted on hospitalization standard units as well as long-stay units.

The EUT can perform the next movements through actuators and motors:

- Lifting bed
- Backrest section lifting
- Upper legs section lifting
- Trendelemburg and antitrendelembur positions



The difference between model tested (GALAXY 2) and derived model not tested (MAJESTIC 2) is the lift motors, due to the Galaxy 2 (DEWERT / MEGAMAT MCZ - 66208) raises with the compasses and the Majestic 2 (DEWERT / GAMMA COLONNE) raises with columns.

1.1.1 Equipment Marking Plate

Copy of marking plate (draft)



1.1.2 Supporting Equipment Used During Test:

Use	Product Type	Manufacturer	Model	Comments
EUT	Medical equipment	MEDICAL IBERICA	GALAXY 2	None
EUT – Equipment Under Test				

1.1.3 Input/Output Ports:

Port No.	Name	Type*	Cable Max. >3m	Cable Shielded	Comments
0	Enclosure	N/E	—	—	None
1	Mains	AC	--	No	None
2	Movement handle	I/O	Yes >3m	--	None
*Note: AC = AC Power Port N/E = Non-Electrical I/O = Input/Output signal port					

1.1.4 EUT Internal Operating Frequencies:

Frequency (MHz)	Description
Not specified by applicant	

1.1.5 Power Interface

Mode No.	Voltage (V)	Current (A)	Power (W)	Frequency (DC/AC-Hz)	Phases (No.)	Comments
1	110	--	--	60	1	None
2	230	--	--	50	1	None
3	110	--	--	50	1	None
4	230	--	--	60	1	None
Supplementary information:						

1.2 EUT Operation Modes:

Mode #	Description
1	Standby
2	Operative (movement cycles)
3	Manual switching

1.3 EUT Configuration Modes

Mode #	Description
1	110V; 60Hz
2	230V; 50Hz
3	110V; 50Hz
4	230V; 60Hz

Supplementary information:

Only mentioned configuration modes applied to perform the tests

1.4 Immunity Performance Criteria

Medical Equipment Performance Criteria - unacceptable operating conditions / responses are:




- component failures;
- changes in programmable parameters;
- reset to factory defaults (manufacturer's presets);
- change of operating mode;
- false alarms;
- cessation or interruption of any intended operation, even if accompanied by an alarm;
- initiation of any unintended operation, including unintended or uncontrolled motion, even if accompanied by an alarm;
- error of a displayed numerical value sufficiently large to affect diagnosis or treatment;
- noise on a waveform in which the noise is indistinguishable from physiologically-produced signals or the noise interferes with interpretation of physiologically-produced signals;
- artefact or distortion in an image in which the artefact is indistinguishable from physiologically-produced signals or the distortion interferes with interpretation of physiologically-produced signals;
- failure of automatic diagnosis or treatment EQUIPMENT and SYSTEMS to diagnose or treat, even if accompanied by an alarm.

Medical Specific Compliance Criteria for the Voltage Dips and Interruptions Test:

Clause 6.2.7.1 b) - the equipment is allowed a deviation from the requirements of 6.2.1.10 at the immunity levels specified in Table 11 (<5% / >95% / 5s), provided the equipment remains safe, experiences no component failures and is restorable to the pre-test state with operator intervention.

The equipment has not essential performance.

1.5 Compliance Summary

IEC 60601-1-2				
Clause	Requirement + Test		Result - Remark	Verdict
5	Identification, Marking And Documents			P
5.1	Marking on the outside			N/A
5.1.1	RF equipment marked with symbol IEC 60417-5140 for non-ionizing radiation.			N/A
5.1.2	Equipment for which the connector testing exemption is used marked with symbol IEC 60417-5134			N/A
5.1.3	Equipment specified for use only in shielded location has appropriate marking/warning labels			N/A
5.2	Accompanying documents			P
5.2.1	Instructions for use			P
5.2.1.1	All equipment and systems:			P
a)	A statements that medical electrical equipment needs special precautions regarding EMC and needs to be installed according to EMC information			P
b)	A statement that mobile RF communications equipment can effect medical electrical equipment			P
5.2.1.2	Equipment for which the connector testing exemption is used			N/A
a)	A reproduction of the ESD warning symbol (IEC 60417-5134)			N/A
b)	A warning that pins of connectors marked with the warning symbol shall not be touched and connections shall not be made without special precautions			N/A
c)	A specification of ESD precautionary procedures			N/A
d)	A recommendation that all staff receive explanation and training in ESD procedures			N/A
e)	A specification of the minimum contents of ESD precautions procedure training			N/A
5.2.1.3	For equipment and systems without a manual sensitivity adjustment and for which the manufacturer specifies a minimum amplitude or value:			N/A
a)	The minimum amplitude or value of signal			N/A
b)	A warning that operation of the equipment below that value may cause inaccurate results			N/A
5.2.1.4	For Type A Professional ME Equipment intended for use in domestic establishment instructions for use includes a warning: This ME equipment is intended for use by professional healthcare personnel only.			N/A

IEC 60601-1-2			
Clause	Requirement + Test	Result - Remark	Verdict
5.2.2	Technical description		P
5.2.2.1	Requirement for all ME equipment and systems:		P
a)	List of cables and accessories		P
b)	A warning that other cables and accessories may negatively affect EMC performance		P
c)	Table 1, modified as appropriate using Fig. 1 and 2		P
d)	A warning regarding stacking and location close to other equipment		P
e)	A justification for each immunity compliance level below 60601 test level		N/A
f)	Table 2, completed as appropriate using Figure 3		P
g)	The essential performance of ME equipment		N/A
5.2.2.2	ME Equipment not specified for use in shielded location		P
	Tables 3 and 5 (life-supporting) using Figure 4, Tables 4 and 6 (non-life-supporting) using Figure 5 selected and completed as appropriate following a)-e)		P
5.2.2.3	ME Equipment specified for use only in shielded location		N/A
a)	A warning that equipment should be used only in the specified type of shielded location		N/A
b)	Tables modified if disturbance allowance according to 6.1.1.1 d) is used		N/A
c)	A specification of allowed emission of other equipment located within the shielded location		N/A
d)	Table 7 (life-supporting) or 8 (non-life-supporting) as appropriate		N/A
5.2.2.4	ME Equipment that intentionally apply RF energy – documents shall include guidelines for avoiding or identifying and resolving adverse electromagnetic effects on other equipment		N/A
5.2.2.5	ME Equipment that intentionally receive RF energy		N/A
a)	Each (preferred if applicable) frequency or frequency band of reception, and the bandwidth of the receiving section of the ME equipment in those bands		N/A
b)	A warning that the ME equipment may be interfered with by other equipment		N/A
5.2.2.6	ME Equipment that includes RF transmitters – documentation shall include each frequency or frequency band of transmission, the type and frequency characteristics of the modulation and ERD		N/A
5.2.2.7	Requirements of cables, transducers and accessories		P
a)	Documentation shall include list of ME Equipment		P
b)	A warning that use of other accessories results in non-compliance		P

IEC 60601-1-2			
Clause	Requirement + Test	Result - Remark	Verdict
5.2.2.8	Requirements applicable to large permanently installed ME equipment and systems		N/A
a)	A statement that an exemption has been used and that the me equipment has not been tested for radiated RF immunity over the entire frequency range 80 MHz to 2,5 GHz		N/A
b)	A warning that the ME equipment has been tested for radiated RF immunity only at selected frequencies		N/A
c)	A list of the transmitters or equipment used as RF test sources and the frequency and modulation characteristics of each source.		N/A
5.2.2.9	Requirements applicable to ME equipment that has no essential performance		P
a)	Statement that the ME equipment was not tested for immunity to electromagnetic disturbances		N/A
b)	Document shall include information applicable to the me equipment		P
5.2.2.10	Requirements applicable to ME equipment that is Type A Professional only		N/A
	Document include a justification for not complying with the CISPR 11 group 2 Class B electromagnetic radiation disturbance limit		N/A

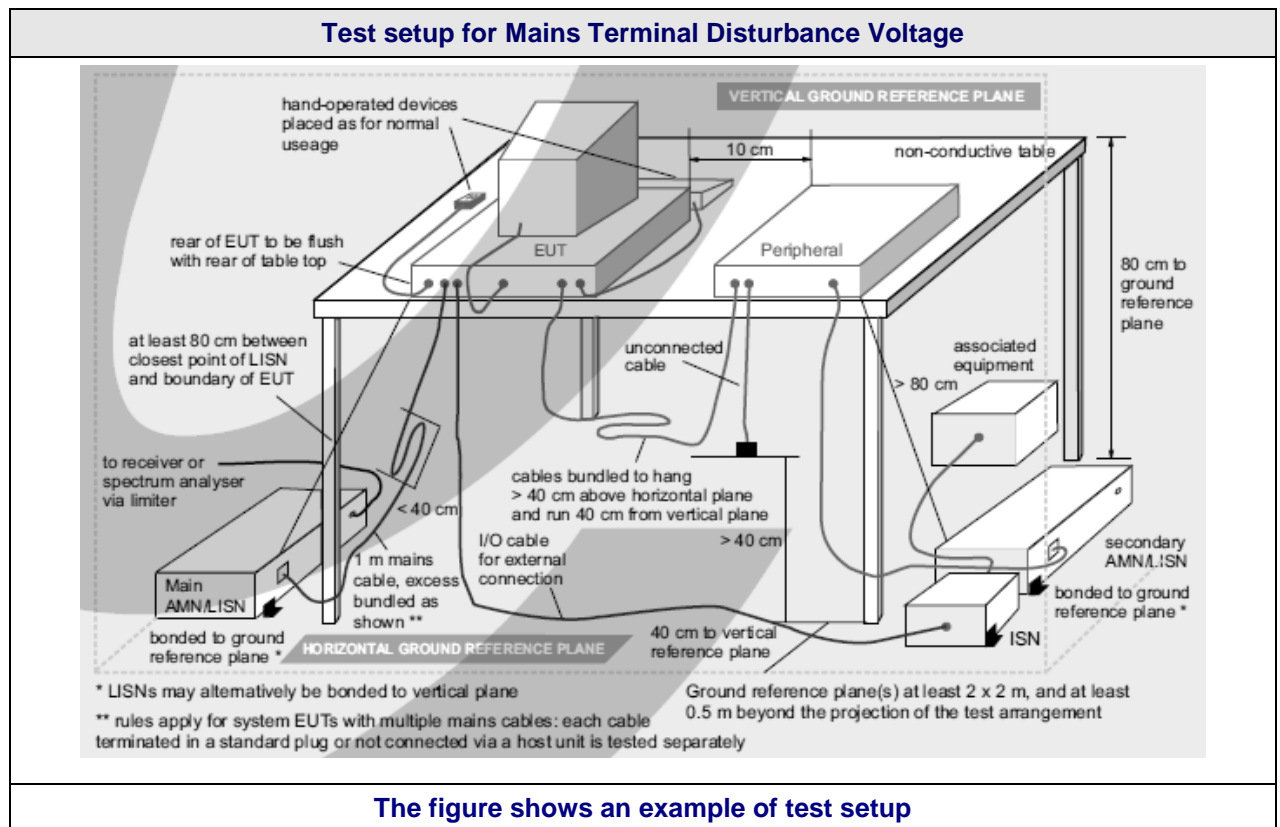
1.6 Result Summary

Clause	Requirement – Test	Result/Comments	Verdict P / F / N/A
6.1	Emissions		P
6.1.1.1	Classification		—
	Class A or B.....:	A	—
	Group 1 or 2.....:	1	—
	CISPR 11, 22, 14-1, or 15	CISPR 11	—
6.1.1.2	Limits of mains terminal disturbance voltage		P
	Limits for radiated disturbance		P (*)
	Limits for disturbance power (if applicable)		N/A
6.1.3.1	Harmonic Current Emissions per IEC61000-3-2		P
6.1.3.2	Voltage Fluctuations and Flicker per IEC61000-3-3.....:		P
6.2	Immunity		P
6.2.2	Electrostatic Discharges (ESD)	It has not essential performance.	P
6.2.3	Radiated RF electromagnetic Fields	It has not essential performance.	P
6.2.4	Electrical Fast Transients and bursts	It has not essential performance.	P
6.2.5	Surges	It has not essential performance.	P
6.2.6	Conducted Disturbances, induced by RF fields	It has not essential performance.	P
6.2.7	Voltage Dips, Interruptions, and variations.....:	It has not essential performance.	P
6.2.8	Power-frequency Magnetic Field	It has not essential performance.	P
Supplementary information:			
(*) Radiated emission test, out of accreditation scope: ENAC N° 5/LE011			

1.7 Test Conditions and Results – Conducted Emissions

CISPR 11	TEST: Limits of mains terminal disturbance voltage			Verdict
<u>Method:</u> The AMN placed 0,8 m from the boundary of the unit under test and bonded to a ground reference plane. This distance was between the closest points of the AMN and the EUT. All other units of the EUT and associated equipment were at least 0,8 m from the AMN. All power was connected to the system through Artificial Mains Network (AMN). Conducted voltage measurements on mains lines were made at the output of the AMN.				P
Laboratory Parameters		Required prior to the test		During the test
Ambient Temperature		10 to 40 °C		23°C
Relative Humidity		10 to 90 %		31%
Fully configured sample scanned over the following frequency range		Frequency range on each side of line		Measurement Point
		150kHz to 30MHz		Mains
Equipment mode		Power interface mode		2
		EUT configurations mode		2
		Operation mode		1 & 2
Limits – Group 1 - Class A				
Frequency (MHz)	Limit dB (µV)			
	Quasi-Peak	Result	Average	Result
0.15 to 0.50	79	P	66	P
0.50 to 30	73	P	60	P
Supplementary information:				
Warning:				
This is an equipment in Class A. In a domestic environment this equipment may cause radio interference, in which case it may require that the user can take appropriate actions.				

Test Equipment Used					
Used	Description	Manufacturer	Model	Cal. Date	Cal. Due
X	EMI Receiver	PMM	9010	21/12/2015	21/12/2016
X	LISN	ROHDE & SCHWARZ	ESH2-Z5	20/06/2016	20/06/2017
X	Pulse Limiter	ROHDE & SCHWARZ	ESH3-Z2	20/02/2015	20/02/2017
Supplementary information:					



The figure shows an example of test setup

Tabulated Results for Mains Terminal Disturbance Voltage				
Frequency (MHz)	Quasi Peak (dBμV)	Limit (dBμV)	Average (dBμV)	Limit (dBμV)

Supplementary information: See graphics below

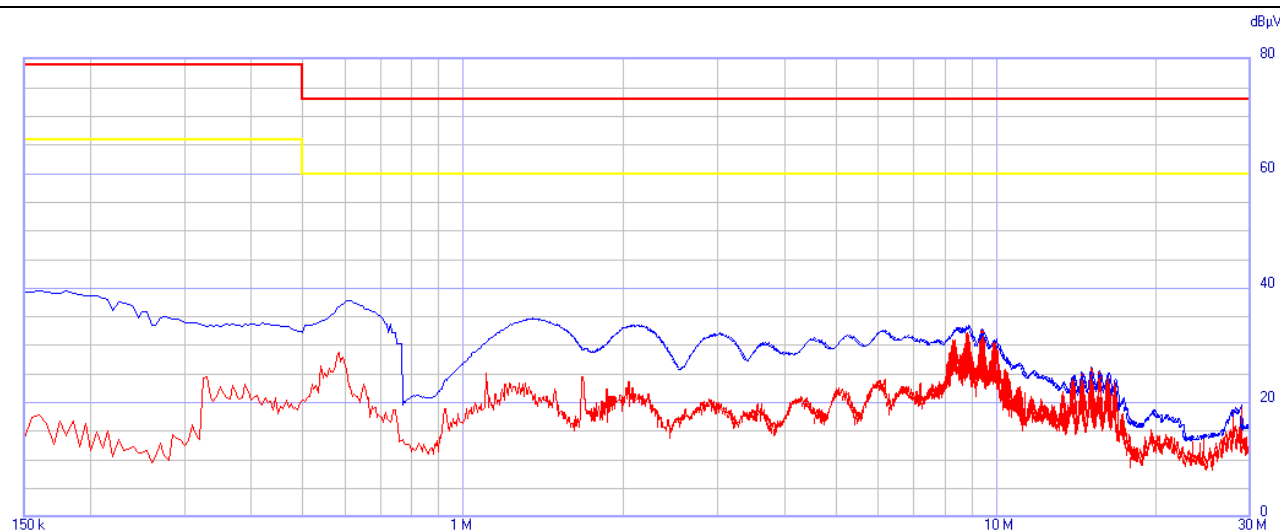
Graphical representation of Mains Terminal Disturbance Voltage Measurement

Op. Cond.: EQUIPMENT IN STANDBY MODE

Limits.: QUASIEPEAK limit (QP): red line AVERAGE limit (AV): yellow line

Comment: PHASE & NEUTRAL, sweeps QUASIEPEAK (blue) and AV (red)

230 Vac / 50 Hz



Medical_iberica_cama_cond_standby

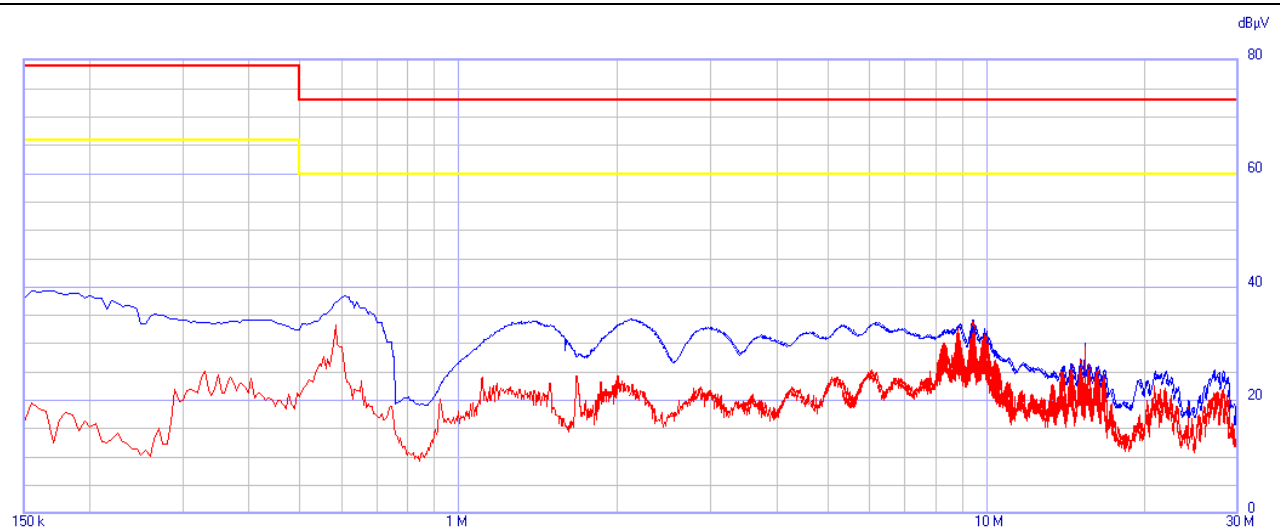
	Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt start	Ancillary
1	0.15	30	AUTO (5 kHz)	P Q A 55011aqp 55011aav	20 ms	9 kHz	10	ON	ON	...	N, L1

Ancillary = General

Limits:
55011aqp
55011aav

Factors: NONE

QPeak Avg



Medical_iberica_cama_cond_standby

	Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt start	Ancillary
1	0.15	30	AUTO (5 kHz)	P Q A 55011aqp 55011aav	20 ms	9 kHz	10	ON	ON	...	N, L1

Ancillary = General

Limits:
55011aqp
55011aav

Factors: NONE

QPeak Avg

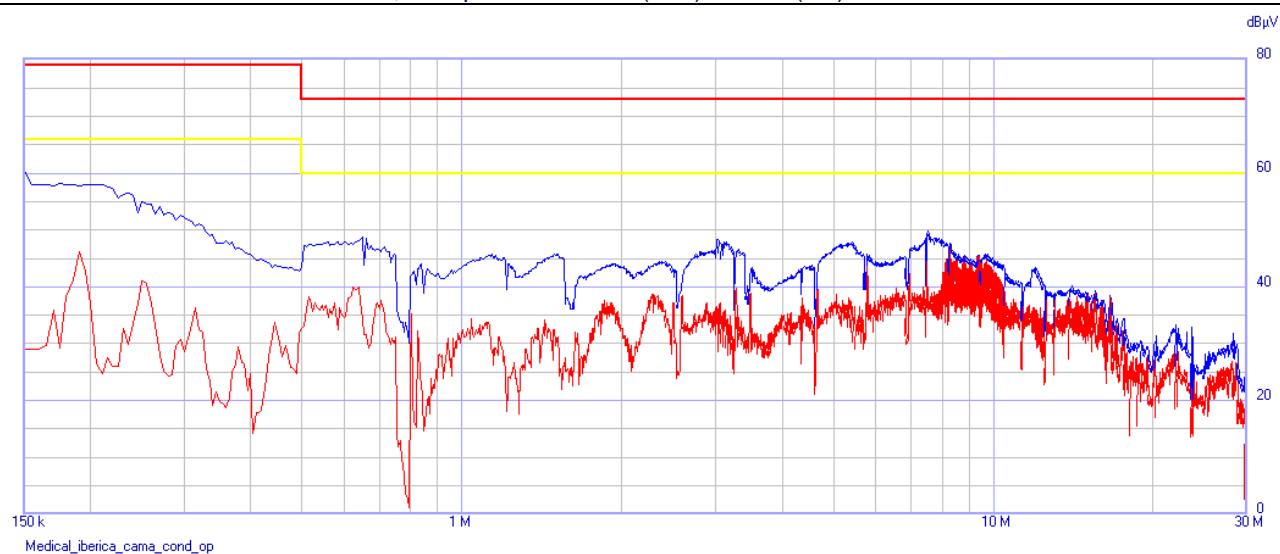
Graphical representation of Mains Terminal Disturbance Voltage Measurement

Op. Cond.: EQUIPMENT IN OPERATIVE MODE (MOVEMENT CYCLES)

Limits.: QUASIEPEAK limit (QP): red line AVERAGE limit (AV): yellow line

Comment: PHASE & NEUTRAL, sweeps QUASIEPEAK (blue) and AV (red)

230 Vac / 50 Hz



	Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt start	Ancillary
1	0.15	30	AUTO (5 kHz)	P Q A 55011.aqp 55011.aav	20 ms	9 kHz	10	ON	ON	...	N, L1

Ancillary = General

Limits:

55011.aqp

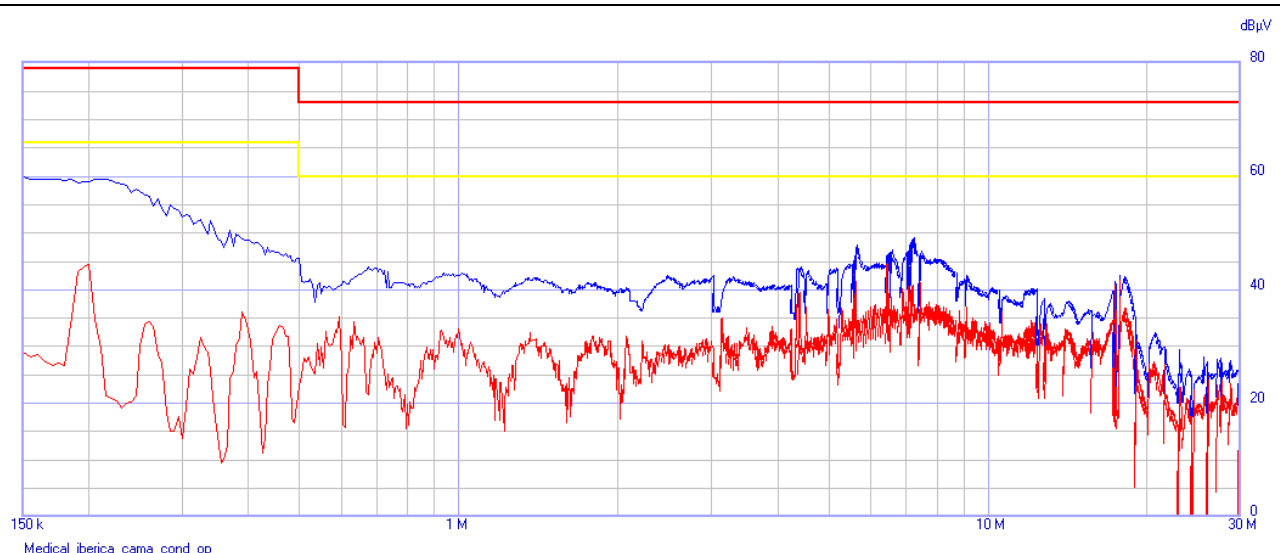
55011.aav

Factors:

NONE

QPeak

Avg



	Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt start	Ancillary
1	0.15	30	AUTO (5 kHz)	P Q A 55011.aqp 55011.aav	20 ms	9 kHz	10	ON	ON	...	N, L1

Ancillary = General

Limits:

55011.aqp

55011.aav

Factors:

NONE

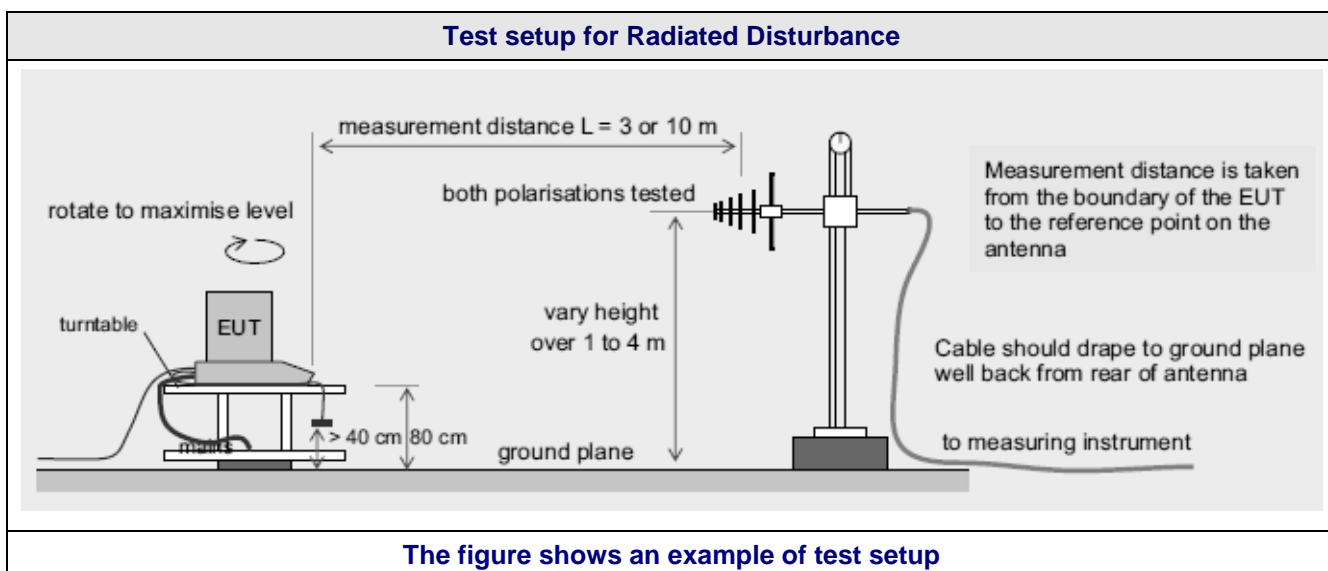
QPeak

Avg

1.8 Test Conditions and Results – Radiated Emissions

CISPR 11	TEST: Limits for radiated disturbance 30 MHz –1 GHz		Verdict
<u>Method:</u> Measurements were made in a 10-meter semi-anechoic chamber or Open Area Test Site that complies to CISPR 16. Preliminary (peak) measurements were performed at an antenna to EUT separation distance of 10 meter. The EUT was rotated 360° about its azimuth with the receive antenna located at various heights in horizontal and vertical polarities. Final measurements (quasi-peak) were then performed by rotating the EUT 360° and adjusting the receive antenna height from 1 to 4 m. All frequencies were investigated in both horizontal and vertical antenna polarity, where applicable.			P*
Laboratory Parameters:	Required prior to the test	During the test	
Ambient Temperature	10 to 40 °C	23°C	
Relative Humidity	10 to 90 %	31%	
Fully configured sample scanned over the following frequency range	Frequency range on each side of line	Measurement Point	
	30MHz – 1GHz	3 m measurement distance	
Equipment mode	Power interface mode	2	
	EUT configurations mode	2	
	Operation mode	1 & 2	
Limits – Group 1 Class A			
Frequency (MHz)	Limit dB (µV/m)		
	Quasi-Peak	Results	
30 to 230	40 + 10 = 50(**)	P	
230 to 1000	47 + 10 = 57(**)	P	
Supplementary information:			
(*) Test outside the scope of accreditation ENAC N° 5/LE011			
(**)The measurements corresponding to this test, have been performed at 3 meters of distance and the applied limits have been corrected according to the indications of clause 10.8 of the Standard EN 55022 where the following relation is indicated: L2=L1 (d1/d2) where <i>dn</i> is a distance in meters and <i>Ln</i> is the limit in mV/m.			
Warning:			
This is an equipment in Class A. In a domestic environment this equipment may cause radio interference, in which case it may require that the user can take appropriate actions.			

Test Equipment Used					
Used	Description	Manufacturer	Model	Cal. Date	Cal. Due
X	EMI Receiver	PMM	9010	21/12/2015	21/12/2016
X	EMI Receiver	PMM	9060	21/12/2015	21/12/2016
X	Bilog. Antenna	AH SYSTEMS	SAS-521F-7	--	--
Supplementary information:					



Tabulated Results for Radiated Disturbance		
Frequency (MHz)	Quasi Peak (dB μ V/m)	Limit (dB μ V/m)

Supplementary information:

There are no levels next to the limit. See graphical representation below

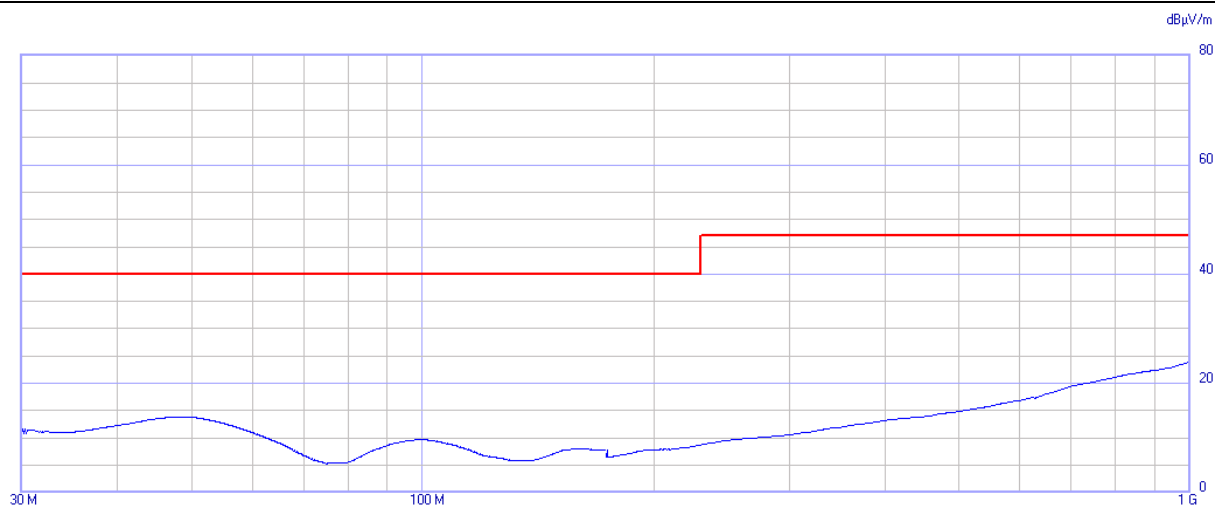
Graphical representation of Radiated Disturbance Measurement

Op. Cond.: EQUIPMENT IN STANDBY MODE

Limits.: QUASIPeAK limit (QP): red line

Comment: VERTICAL POLARIZATION, LATERAL POSITION, sweep QPK (blue)

230 Vac / 50 Hz



Medical_iberica_cama_rad_stdby

	Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt start	Ancillary
1	30	1000	AUTO (100 kHz)	P Q ind Limit10m	10 ms	120 kHz	10	ON	ON	...	V, H

Ancillary = Antenna

Limits:

ind Limit10m

Factors:

NONE

QPeak

Op. Cond.: EQUIPMENT IN STANDBY MODE

Limits.: QUASIPeAK limit (QP): red line

Comment: HORIZONTAL POLARIZATION, LATERAL POSITION, sweep QPK (blue)

230 Vac / 50 Hz



Medical_iberica_cama_rad_stdby

	Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt start	Ancillary
1	30	1000	AUTO (100 kHz)	P Q ind Limit10m	10 ms	120 kHz	10	ON	ON	...	V, H

Ancillary = Antenna

Limits:

ind Limit10m

Factors:

NONE

QPeak

Graphical representation of Radiated Disturbance Measurement

Op. Cond.: EQUIPMENT IN OPERATIVE MODE (MOVEMENT CYCLES)

Limits.: QUASIPeAK limit (QP): red line

Comment: VERTICAL POLARIZATION, LATERAL POSITION, sweep QPK (blue)

230 Vac / 50 Hz



Medical_iberica_cama_rad_op

	Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt start	Ancillary
1	30	1000	AUTO (100 kHz)	P Q ind Limit10m	10 ms	120 kHz	10	ON	ON	...	V, H

Ancillary = Antenna

Limits: ind Limit10m

Factors: NONE

QPeak

Op. Cond.: EQUIPMENT IN OPERATIVE MODE (MOVEMENT CYCLES)

Limits.: QUASIPeAK limit (QP): red line

Comment: HORIZONTAL POLARIZATION, LATERAL POSITION, sweep QPK (blue)

230 Vac / 50 Hz



Medical_iberica_cama_rad_op

	Start [MHz]	Stop [MHz]	Step	Detector	Hold Time	RBW	Min Att	Pre Amp	Pre Sel	Prompt start	Ancillary
1	30	1000	AUTO (100 kHz)	P Q ind Limit10m	10 ms	120 kHz	10	ON	ON	...	V, H

Ancillary = Antenna

Limits: ind Limit10m

Factors: NONE

QPeak

1.9 Test Conditions and Results – Disturbance Power Emissions

CISPR 14-1	TEST: Limits of disturbance power			Verdict
Method: Measurements were made on a ground plane that extends 1-meter minimum beyond all sides of the system under test. All power was connected to the system through Line Impedance Stabilization Networks (LISN). The lead to be measured on is stretched in a straight line for a distance sufficient to accommodate the absorbing clamp, and to permit the necessary measuring adjustment of position for tuning. The clamp is placed around the lead so as to measure a quantity proportional to the disturbance on the lead.				N/A
Laboratory Parameters:		Required prior to the test	During the test	
Ambient Temperature		15 to 35 °C	°C	
Relative Humidity		30 to 60 %	%	
Fully configured sample scanned over the following frequency range		Frequency range	Measurement point	
		30 MHz to 300 MHz	Mains	
Equipment mode		Power interface mode		
		EUT configurations mode		
		Operation mode		
Limits disturbance power on terminals				
Frequency 30 – 300 MHz	dB(pW)			
	Quasi-Peak	Result	Average	Result
Household and Tools < 700 W	45 to 55		35 to 45	
700 W < Tools < 1000 W	49 to 59		39 to 49	
Tools >1000 W	55 to 65		45 to 55	
Supplementary information:				

Test Equipment Used					
Used	Description	Manufacturer	Model	Cal. Date	Cal. Due
Supplementary information:					

Test setup for Disturbance Power Emissions

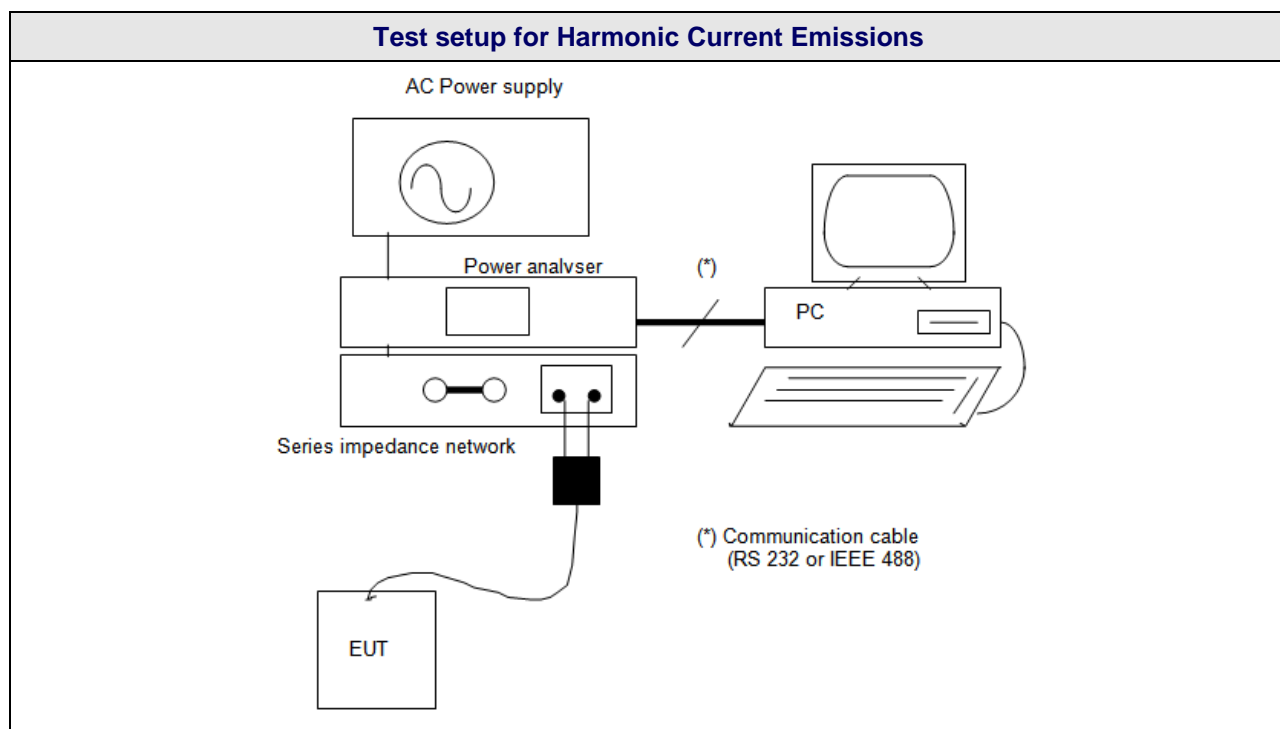
Tabulated Results for Disturbance Power Emissions							
Test Frequency (MHz)	Meter Reading dB(μV)	Detector (Pk/QP/Av)	Gain/Loss Factor (dB)	Transducer Factor(dB)	Level dB(μV/m)	Limit dB(μV/m)	Margin (dB)

Graphical representation of Disturbance Power Emissions Measurement

1.10 Test Conditions and Results – Limits for Harmonic Current Emissions

61000-3-2	TEST: Limits for Harmonic current emissions (IEC 61000-3-2: use latest ed.)	Verdict
Method: This test consists on the measurement of harmonics components of the input current which may be produced by equipment having an input current up to and including 16 A per phase, and intended to be connected to public low-voltage distribution systems. The equipment is tested under specified conditions of operation.		P
Laboratory Parameters:	Required prior to the test	During the test
Ambient Temperature	15 to 35 °C	25°C
Relative Humidity	30 to 60 %	34 %
Equipment mode	Power interface mode	2
	EUT configurations modes	2
	Operation modes	1 & 2
Classification of Equipment..... :		Class A
Supplementary information: According applied Standard, clause 1, for systems with nominal voltage less than 220V (phase-neutral), the limits have not yet been considered. Due to this, the test only has been performed at 230 V / 50 Hz.		

Test Equipment Used					
Used	Description	Manufacturer	Model	Cal. Date	Cal. Due
X	AC Power supply	PACIFIC	360-AMX	13/07/2015	13/07/2017
X	Power analyser	VOLTECH	IEC555	27/11/2015	27/11/2016
Supplementary information:					



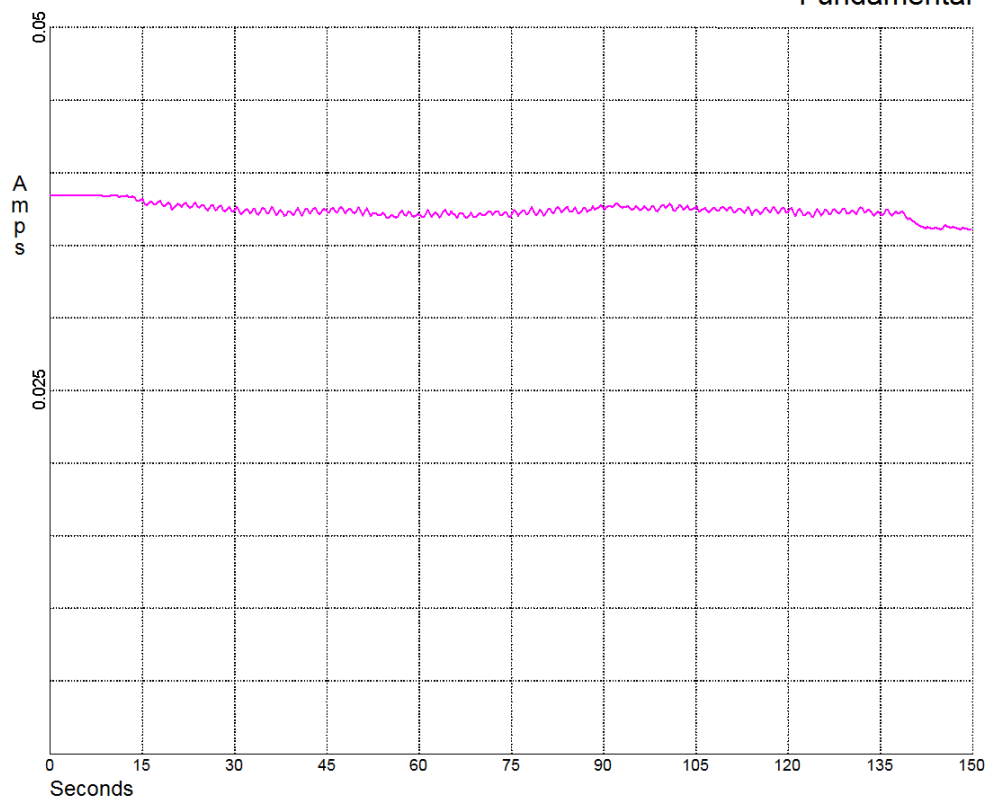
Tabulated Results for Harmonic Current Emissions		
Op. Cond.: EQUIPMENT IN STANDBY MODE		
Product: CAMA HOSPITALARIA Serial no: -- Description: STANDBY 2416/0524 JCC Test Date: 21 Jul 2016 13:45 Result Name: M. IBERICA/GALAXY2--		01 Aug 2016 14:15 Page 1 of 1
Type of Test: EN61000:2001 Harmonics Limits: Class A Power Analyzer: Voltech PM3000A v2.20 s/n 0723 AC Source: Mains / Manual Source		
Harmonic Results Against Chosen Limits: <div>PASS</div>	Notes:	
Test Parameter Details Operating Frequency: Operating Voltage: Specified Power: Fundamental Current: Power Factor: Average Input Current: Maximum POHC: POHC Limit: Maximum THC: Minimum Power: Class Multiplier: Test Duration:	User Entered 50 230 0.0000 0.0000 0.0000 75 1.0000 00:02:30	Measured 49.9922 230.9808 7.5762 0.0385 0.3118 0.1040 0.0426 0.2514 0.0978

Tabulated Results for Harmonic Current Emissions

Op. Cond.: EQUIPMENT IN STANDBY MODE

Product:	CAMA HOSPITALARIA	01 Aug 2016 14:15
Serial no:	--	Page 1 of 1
Description:	STANDBY 2416/0524 JCC	
Result Name:	M. IBERICA/GALAXY2--	
Voltech IEC1000-3 Windows Software 3.11.07	Test Date:	21 Jul 2016 13:45
Type of Test:	Fluctuating Harmonics Test - Single Harmonic Plot (2001)	
Power Analyzer:	Voltech PM3000A v2.20 s/n 0723	
AC Source:	Mains / Manual Source	
Overall Result:	<div>PASS</div>	

Fundamental

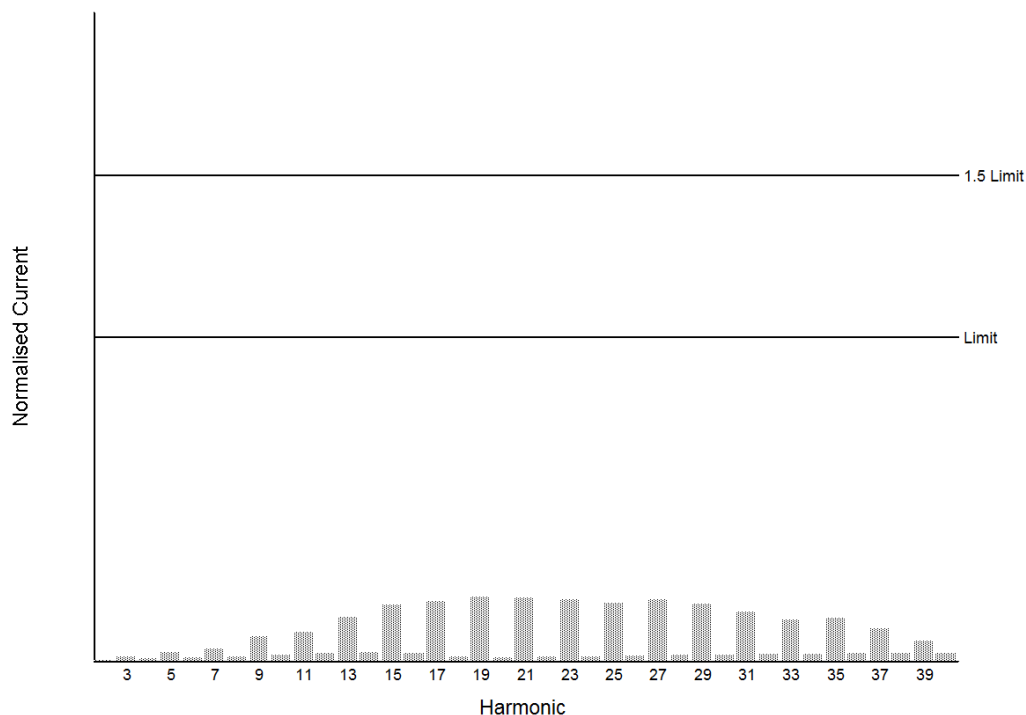


Tabulated Results for Harmonic Current Emissions

Op. Cond.: EQUIPMENT IN STANDBY MODE

Product:	CAMA HOSPITALARIA	01 Aug 2016 14:15
Serial no:	--	Page 1 of 1
Description:	STANDBY 2416/0524 JCC	
Result Name:	M. IBERICA/GALAXY2--	
Voltech IEC1000-3 Windows Software 3.11.07	Test Date:	21 Jul 2016 13:45
Type of Test:	Fluctuating Harmonics Test - Normalised Worst Case Bar Chart (2001)	
Power Analyzer:	Voltech PM3000A v2.20 s/n 0723	
AC Source:	Mains / Manual Source	
Overall Result:	<div>PASS</div>	

Class	Class A
Class Multiplier	1



Tabulated Results for Harmonic Current Emissions

Op. Cond.: EQUIPMENT IN STANDBY MODE

Product:	CAMA HOSPITALARIA	01 Aug 2016 14:16
Serial no:	--	Page 1 of 1
Description:	STANDBY 2416/0524 JCC	
Result Name:	M. IBERICA/GALAXY2--	
Voltech IEC1000-3 Windows Software 3.11.07	Test Date:	21 Jul 2016 13:45
Type of Test:	Fluctuating Harmonics Test - Source Qualification (2001)	
Power Analyzer:	Voltech PM3000A v2.20 s/n 0723	
AC Source:	Mains / Manual Source	
Overall Result:	PASS	

	Nominal	Measured	Deviation	Allowed Deviation	Result
Supply Voltage	230.00V	230.98V	0.98V	4.60V	Pass
Supply Frequency	50.00Hz	49.99Hz	0.01Hz	0.25Hz	Pass

Harmonic	Reading	Limit	Result	Harmonic	Reading	Limit	Result
2	0.03%	0.20%	Pass	3	0.03%	0.90%	Pass
4	0.03%	0.20%	Pass	5	0.03%	0.40%	Pass
6	0.03%	0.20%	Pass	7	0.03%	0.30%	Pass
8	0.03%	0.20%	Pass	9	0.03%	0.20%	Pass
10	0.03%	0.20%	Pass	11	0.03%	0.10%	Pass
12	0.03%	0.10%	Pass	13	0.03%	0.10%	Pass
14	0.03%	0.10%	Pass	15	0.03%	0.10%	Pass
16	0.03%	0.10%	Pass	17	0.03%	0.10%	Pass
18	0.03%	0.10%	Pass	19	0.03%	0.10%	Pass
20	0.03%	0.10%	Pass	21	0.03%	0.10%	Pass
22	0.03%	0.10%	Pass	23	0.03%	0.10%	Pass
24	0.03%	0.10%	Pass	25	0.03%	0.10%	Pass
26	0.03%	0.10%	Pass	27	0.03%	0.10%	Pass
28	0.03%	0.10%	Pass	29	0.03%	0.10%	Pass
30	0.03%	0.10%	Pass	31	0.03%	0.10%	Pass
32	0.03%	0.10%	Pass	33	0.03%	0.10%	Pass
34	0.03%	0.10%	Pass	35	0.03%	0.10%	Pass
36	0.03%	0.10%	Pass	37	0.03%	0.10%	Pass
38	0.03%	0.10%	Pass	39	0.03%	0.10%	Pass
40	0.03%	0.10%	Pass				

Tabulated Results for Harmonic Current Emissions

Op. Cond.: EQUIPMENT IN STANDBY MODE

Product:	CAMA HOSPITALARIA	01 Aug 2016 14:16
Serial no:	--	Page 1 of 1
Description:	STANDBY 2416/0524 JCC	
Result Name:	M. IBERICA/GALAXY2--	
Voltech IEC1000-3 Windows Software 3.11.07	Test Date:	21 Jul 2016 13:45
Type of Test:	Fluctuating Harmonics Test - Worst Case Table (2001)	
Power Analyzer:	Voltech PM3000A v2.20 s/n 0723	
AC Source:	Mains / Manual Source	
Overall Result:	PASS	

Class	Class A
Class Multiplier	1

Harm	Limit 1	Limit 2	Average Reading	<L1 <L2	Max Reading	<L2	Pass FAIL	Harm	Limit 1	Limit 2	Average Reading	<L1 <L2	Max Reading	<L2	Pass FAIL
2	1.0800A	1.6200A	1.982mA	✓✓	3.726mA	✓	N/A	3	2.3000A	3.4500A	32.94mA	✓✓	33.54mA	✓	Pass
4	430.0mA	645.0mA	1.806mA	✓✓	3.726mA	✓	N/A	5	1.1400A	1.7100A	31.85mA	✓✓	33.51mA	✓	Pass
6	300.0mA	450.0mA	1.607mA	✓✓	3.705mA	✓	N/A	7	770.0mA	1.1550A	31.06mA	✓✓	31.18mA	✓	Pass
8	230.0mA	345.0mA	1.741mA	✓✓	3.726mA	✓	N/A	9	400.0mA	600.0mA	30.85mA	✓✓	31.05mA	✓	Pass
10	184.0mA	276.0mA	1.700mA	✓✓	3.717mA	✓	N/A	11	330.0mA	495.0mA	28.66mA	✓✓	29.92mA	✓	Pass
12	153.3mA	230.0mA	1.760mA	✓✓	3.726mA	✓	N/A	13	210.0mA	315.0mA	28.34mA	✓✓	28.57mA	✓	Pass
14	131.4mA	197.1mA	1.634mA	✓✓	3.706mA	✓	N/A	15	150.0mA	225.0mA	26.08mA	✓✓	26.19mA	✓	Pass
16	115.0mA	172.5mA	1.363mA	✓✓	3.020mA	✓	N/A	17	132.3mA	198.5mA	23.67mA	✓✓	24.56mA	✓	Pass
18	102.2mA	153.3mA	1.247mA	✓✓	1.538mA	✓	N/A	19	118.4mA	177.6mA	22.45mA	✓✓	23.60mA	✓	Pass
20	92.00mA	138.0mA	1.242mA	✓✓	1.242mA	✓	N/A	21	107.1mA	160.7mA	20.96mA	✓✓	21.11mA	✓	Pass
22	83.63mA	125.4mA	1.242mA	✓✓	1.242mA	✓	N/A	23	97.82mA	146.7mA	18.63mA	✓✓	18.63mA	✓	Pass
24	76.66mA	115.0mA	1.242mA	✓✓	1.242mA	✓	N/A	25	90.00mA	135.0mA	16.14mA	✓✓	16.14mA	✓	Pass
26	70.76mA	106.1mA	1.242mA	✓✓	1.242mA	✓	N/A	27	83.33mA	125.0mA	13.82mA	✓✓	15.92mA	✓	Pass
28	65.71mA	98.57mA	1.242mA	✓✓	1.242mA	✓	N/A	29	77.58mA	116.3mA	12.38mA	✓✓	13.66mA	✓	Pass
30	61.33mA	92.00mA	1.242mA	✓✓	1.242mA	✓	N/A	31	72.58mA	108.8mA	11.18mA	✓✓	11.18mA	✓	Pass
32	57.50mA	86.25mA	1.242mA	✓✓	1.242mA	✓	N/A	33	68.18mA	102.2mA	8.695mA	✓✓	8.695mA	✓	Pass
34	54.11mA	81.17mA	1.242mA	✓✓	1.242mA	✓	N/A	35	64.28mA	96.42mA	6.512mA	✓✓	8.566mA	✓	Pass
36	51.11mA	76.66mA	1.242mA	✓✓	1.242mA	✓	N/A	37	60.81mA	91.21mA	6.207mA	✓✓	6.211mA	✓	Pass
38	48.42mA	72.63mA	1.242mA	✓✓	1.242mA	✓	N/A	39	57.69mA	86.53mA	3.726mA	✓✓	3.726mA	✓	N/A
40	46.00mA	69.00mA	1.242mA	✓✓	1.242mA	✓	N/A								

<L1 : Reading is below limit 1.

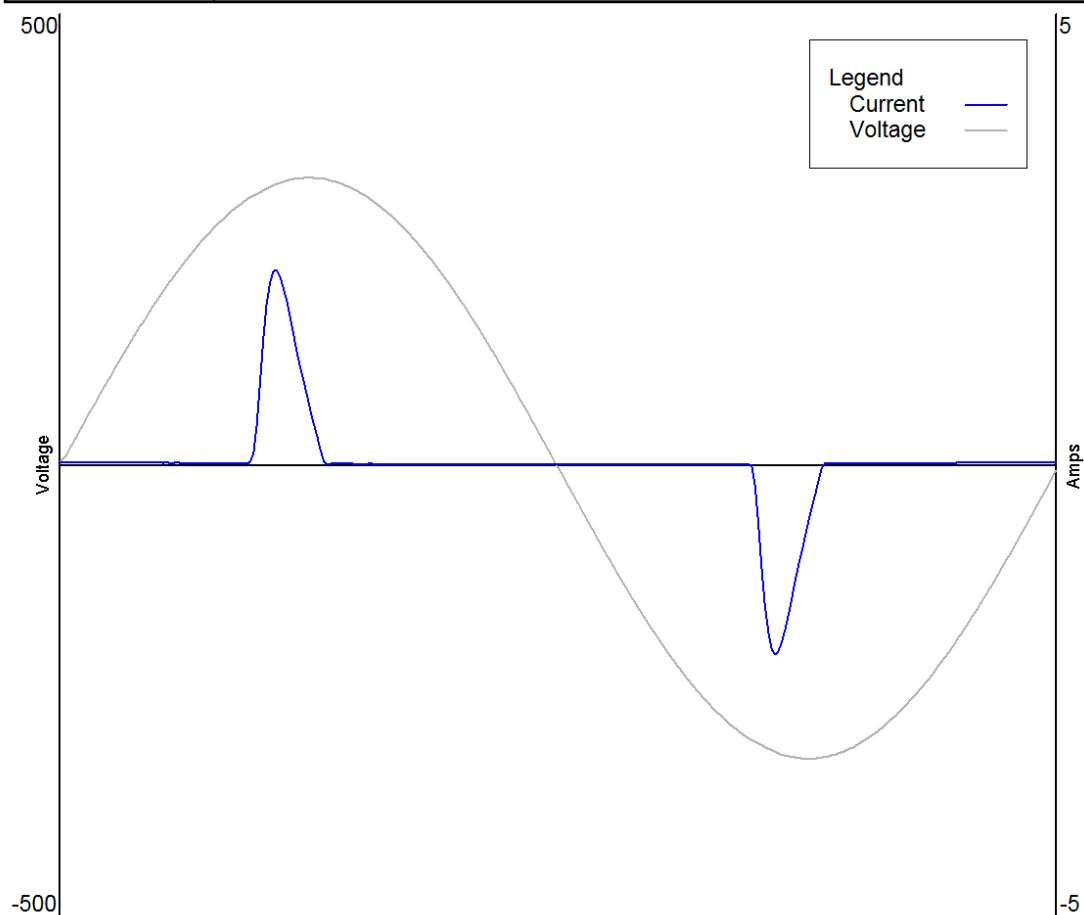
<L2 : Reading is below limit 2.

N/A : Harmonic current below 0.6% of rated current or 5mA, whichever is greater, are disregarded.

Tabulated Results for Harmonic Current Emissions

Op. Cond.: EQUIPMENT IN STANDBY MODE

Product:	CAMA HOSPITALARIA	01 Aug 2016 14:17
Serial no:	--	Page 1 of 1
Description:	STANDBY 2416/0524 JCC	
Result Name:	M. IBERICA/GALAXY2	
Voltech IEC1000-3 Windows Software 3.11.07	Test Date:	21 Jul 2016 13:09
Type of Test:	Waveform	
Power Analyzer:	Voltech PM3000A v2.20 s/n 0723	
AC Source:	Mains / Manual Source	



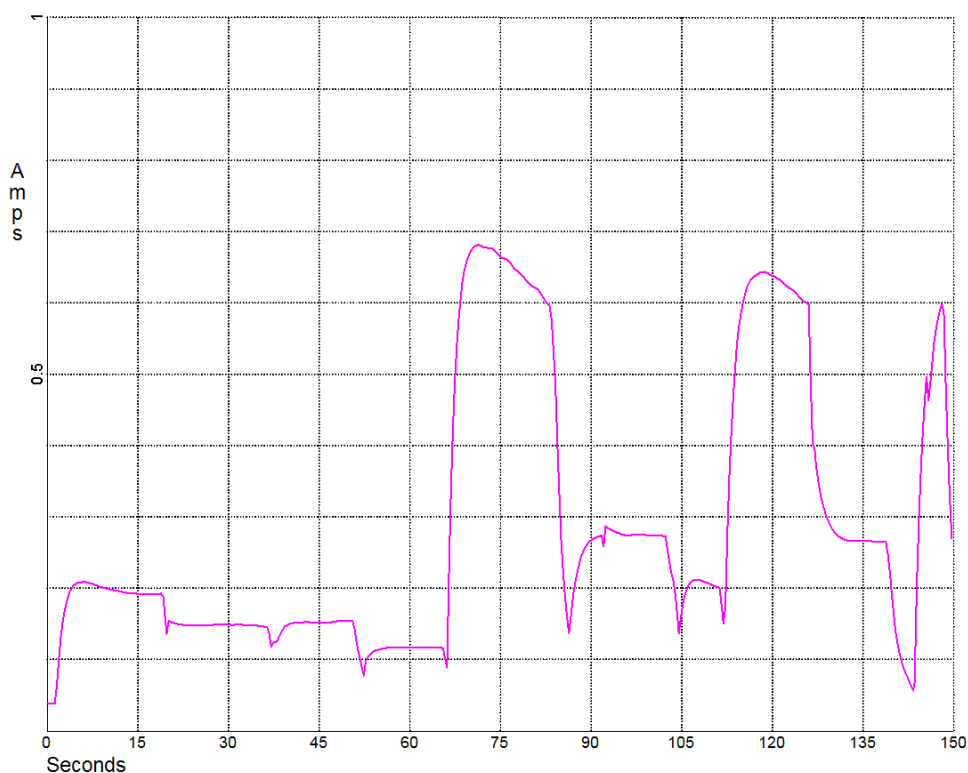
Tabulated Results for Harmonic Current Emissions		
Op. Cond.: EQUIPMENT IN OPERATIVE MODE		
Product: CAMA HOSPITALARIA Serial no: -- Description: OPERATIVO (CICLOS SUBIDA/BAJADA) 2416/0524 JCC Test Date: 21 Jul 2016 13:39 Result Name: M. IBERICA/GALAXY2-		01 Aug 2016 14:11 Page 1 of 1
Type of Test: EN61000:2001 Harmonics Limits: Class A Power Analyzer: Voltech PM3000A v2.20 s/n 0723 AC Source: Mains / Manual Source		
Harmonic Results Against Chosen Limits: <div>PASS</div>	Notes:	
Test Parameter Details Operating Frequency: Operating Voltage: Specified Power: Fundamental Current: Power Factor: Average Input Current: Maximum POHC: POHC Limit: Maximum THC: Minimum Power: Class Multiplier: Test Duration:	User Entered 50 230 0.0000 0.0000 0.0000 0.0000 75 1.0000 00:02:30	Measured 49.9922 228.7659 152.0078 0.6826 0.4874 0.4687 0.2023 0.2514 1.1814

Tabulated Results for Harmonic Current Emissions

Op. Cond.: EQUIPMENT IN OPERATIVE MODE

Product:	CAMA HOSPITALARIA	01 Aug 2016 14:12
Serial no:	--	Page 1 of 1
Description:	OPERATIVO (CICLOS SUBIDA/BAJADA) 2416/0524 JCC	
Result Name:	M. IBERICA/GALAXY2-	
Voltech IEC1000-3 Windows Software 3.11.07		Test Date: 21 Jul 2016 13:39
Type of Test:	Fluctuating Harmonics Test - Single Harmonic Plot (2001)	
Power Analyzer:	Voltech PM3000A v2.20 s/n 0723	
AC Source:	Mains / Manual Source	
Overall Result:	PASS	

Fundamental

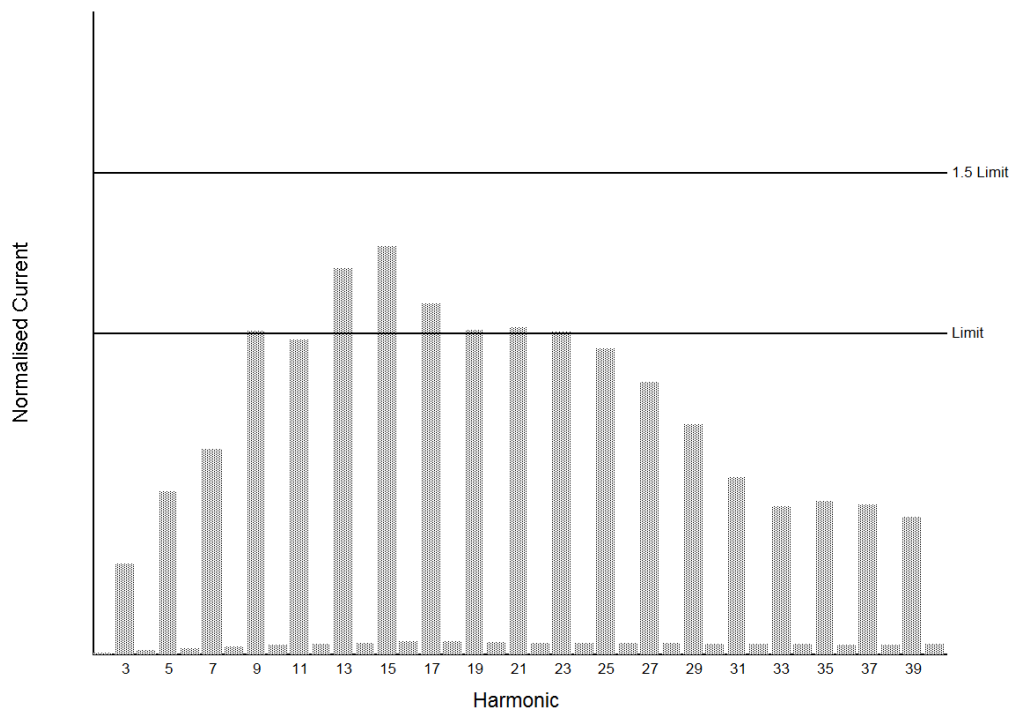


Tabulated Results for Harmonic Current Emissions

Op. Cond.: EQUIPMENT IN OPERATIVE MODE

Product:	CAMA HOSPITALARIA	01 Aug 2016 14:12
Serial no:	--	Page 1 of 1
Description:	OPERATIVO (CICLOS SUBIDA/BAJADA) 2416/0524 JCC	
Result Name:	M. IBERICA/GALAXY2-	
Voltech IEC1000-3 Windows Software 3.11.07		Test Date: 21 Jul 2016 13:39
Type of Test:	Fluctuating Harmonics Test - Normalised Worst Case Bar Chart (2001)	
Power Analyzer:	Voltech PM3000A v2.20 s/n 0723	
AC Source:	Mains / Manual Source	
Overall Result:	PASS	

Class	Class A
Class Multiplier	1



Tabulated Results for Harmonic Current Emissions

Op. Cond.: EQUIPMENT IN OPERATIVE MODE

Product:	CAMA HOSPITALARIA	01 Aug 2016 14:13
Serial no:	--	Page 1 of 1
Description:	OPERATIVO (CICLOS SUBIDA/BAJADA) 2416/0524 JCC	
Result Name:	M. IBERICA/GALAXY2-	
Voltech IEC1000-3 Windows Software	3.11.07	Test Date: 21 Jul 2016 13:39
Type of Test:	Fluctuating Harmonics Test - Source Qualification (2001)	
Power Analyzer:	Voltech PM3000A v2.20 s/n 0723	
AC Source:	Mains / Manual Source	
Overall Result:	PASS	

	Nominal	Measured	Deviation	Allowed Deviation	Result
Supply Voltage	230.00V	228.77V	1.23V	4.60V	Pass
Supply Frequency	50.00Hz	49.99Hz	0.01Hz	0.25Hz	Pass

Harmonic	Reading	Limit	Result	Harmonic	Reading	Limit	Result
2	0.03%	0.20%	Pass	3	0.03%	0.90%	Pass
4	0.03%	0.20%	Pass	5	0.03%	0.40%	Pass
6	0.03%	0.20%	Pass	7	0.04%	0.30%	Pass
8	0.03%	0.20%	Pass	9	0.03%	0.20%	Pass
10	0.03%	0.20%	Pass	11	0.03%	0.10%	Pass
12	0.03%	0.10%	Pass	13	0.03%	0.10%	Pass
14	0.03%	0.10%	Pass	15	0.03%	0.10%	Pass
16	0.03%	0.10%	Pass	17	0.03%	0.10%	Pass
18	0.03%	0.10%	Pass	19	0.03%	0.10%	Pass
20	0.03%	0.10%	Pass	21	0.03%	0.10%	Pass
22	0.03%	0.10%	Pass	23	0.03%	0.10%	Pass
24	0.03%	0.10%	Pass	25	0.03%	0.10%	Pass
26	0.03%	0.10%	Pass	27	0.03%	0.10%	Pass
28	0.03%	0.10%	Pass	29	0.03%	0.10%	Pass
30	0.03%	0.10%	Pass	31	0.03%	0.10%	Pass
32	0.03%	0.10%	Pass	33	0.03%	0.10%	Pass
34	0.03%	0.10%	Pass	35	0.03%	0.10%	Pass
36	0.03%	0.10%	Pass	37	0.03%	0.10%	Pass
38	0.03%	0.10%	Pass	39	0.03%	0.10%	Pass
40	0.03%	0.10%	Pass				

Tabulated Results for Harmonic Current Emissions

Op. Cond.: EQUIPMENT IN OPERATIVE MODE

Product:	CAMA HOSPITALARIA	01 Aug 2016 14:13
Serial no:	--	Page 1 of 1
Description:	OPERATIVO (CICLOS SUBIDA/BAJADA) 2416/0524 JCC	
Result Name:	M. IBERICA/GALAXY2-	
Voltech IEC1000-3 Windows Software 3.11.07	Test Date: 21 Jul 2016 13:39	
Type of Test:	Fluctuating Harmonics Test - Worst Case Table (2001)	
Power Analyzer:	Voltech PM3000A v2.20 s/n 0723	
AC Source:	Mains / Manual Source	
Overall Result:	<div style="color: green; font-weight: bold; font-size: 1.2em;">PASS</div>	

Class	Class A
Class Multiplier	1

Harm	Limit 1	Limit 2	Average Reading	<L1 <L2	Max Reading	<L2	Pass FAIL	Harm	Limit 1	Limit 2	Average Reading	<L1 <L2	Max Reading	<L2	Pass FAIL
2	1.0800A	1.6200A	2.584mA	✓ ✓	6.076mA	✓	N/A	3	2.3000A	3.4500A	276.2mA	✓ ✓	647.6mA	✓	Pass
4	430.0mA	645.0mA	2.296mA	✓ ✓	6.025mA	✓	N/A	5	1.1400A	1.7100A	257.5mA	✓ ✓	579.6mA	✓	Pass
6	300.0mA	450.0mA	2.205mA	✓ ✓	5.900mA	✓	N/A	7	770.0mA	1.1550A	231.1mA	✓ ✓	493.2mA	✓	Pass
8	230.0mA	345.0mA	2.147mA	✓ ✓	5.578mA	✓	N/A	9	400.0mA	600.0mA	201.4mA	✓ ✓	402.8mA	✓	Pass
10	184.0mA	276.0mA	2.068mA	✓ ✓	5.345mA	✓	N/A	11	330.0mA	495.0mA	171.7mA	✓ ✓	323.6mA	✓	Pass
12	153.3mA	230.0mA	1.977mA	✓ ✓	5.236mA	✓	N/A	13	210.0mA	315.0mA	142.1mA	✓ ✓	252.7mA	✓	Pass
14	131.4mA	197.1mA	1.923mA	✓ ✓	4.914mA	✓	N/A	15	150.0mA	225.0mA	115.4mA	✓ ✓	190.6mA	✓	Pass
16	115.0mA	172.5mA	1.871mA	✓ ✓	4.584mA	✓	N/A	17	132.3mA	198.5mA	94.42mA	✓ ✓	144.4mA	✓	Pass
18	102.2mA	153.3mA	1.747mA	✓ ✓	4.137mA	✓	N/A	19	118.4mA	177.6mA	79.15mA	✓ ✓	119.8mA	✓	Pass
20	92.00mA	138.0mA	1.627mA	✓ ✓	3.577mA	✓	N/A	21	107.1mA	160.7mA	66.12mA	✓ ✓	109.0mA	✓	Pass
22	83.63mA	125.4mA	1.530mA	✓ ✓	3.125mA	✓	N/A	23	97.82mA	146.7mA	53.81mA	✓ ✓	98.16mA	✓	Pass
24	76.66mA	115.0mA	1.407mA	✓ ✓	2.685mA	✓	N/A	25	90.00mA	135.0mA	42.46mA	✓ ✓	85.65mA	✓	Pass
26	70.76mA	106.1mA	1.371mA	✓ ✓	2.468mA	✓	N/A	27	83.33mA	125.0mA	32.30mA	✓ ✓	70.75mA	✓	Pass
28	65.71mA	98.57mA	1.345mA	✓ ✓	2.413mA	✓	N/A	29	77.58mA	116.3mA	24.47mA	✓ ✓	55.57mA	✓	Pass
30	61.33mA	92.00mA	1.320mA	✓ ✓	2.078mA	✓	N/A	31	72.58mA	108.8mA	19.68mA	✓ ✓	40.00mA	✓	Pass
32	57.50mA	86.25mA	1.312mA	✓ ✓	1.907mA	✓	N/A	33	68.18mA	102.2mA	17.52mA	✓ ✓	31.44mA	✓	Pass
34	54.11mA	81.17mA	1.294mA	✓ ✓	1.757mA	✓	N/A	35	64.28mA	96.42mA	16.57mA	✓ ✓	30.70mA	✓	Pass
36	51.11mA	76.66mA	1.281mA	✓ ✓	1.578mA	✓	N/A	37	60.81mA	91.21mA	15.86mA	✓ ✓	28.46mA	✓	Pass
38	48.42mA	72.63mA	1.273mA	✓ ✓	1.501mA	✓	N/A	39	57.69mA	86.53mA	14.25mA	✓ ✓	24.76mA	✓	Pass
40	46.00mA	69.00mA	1.267mA	✓ ✓	1.500mA	✓	N/A								

<L1 : Reading is below limit 1.

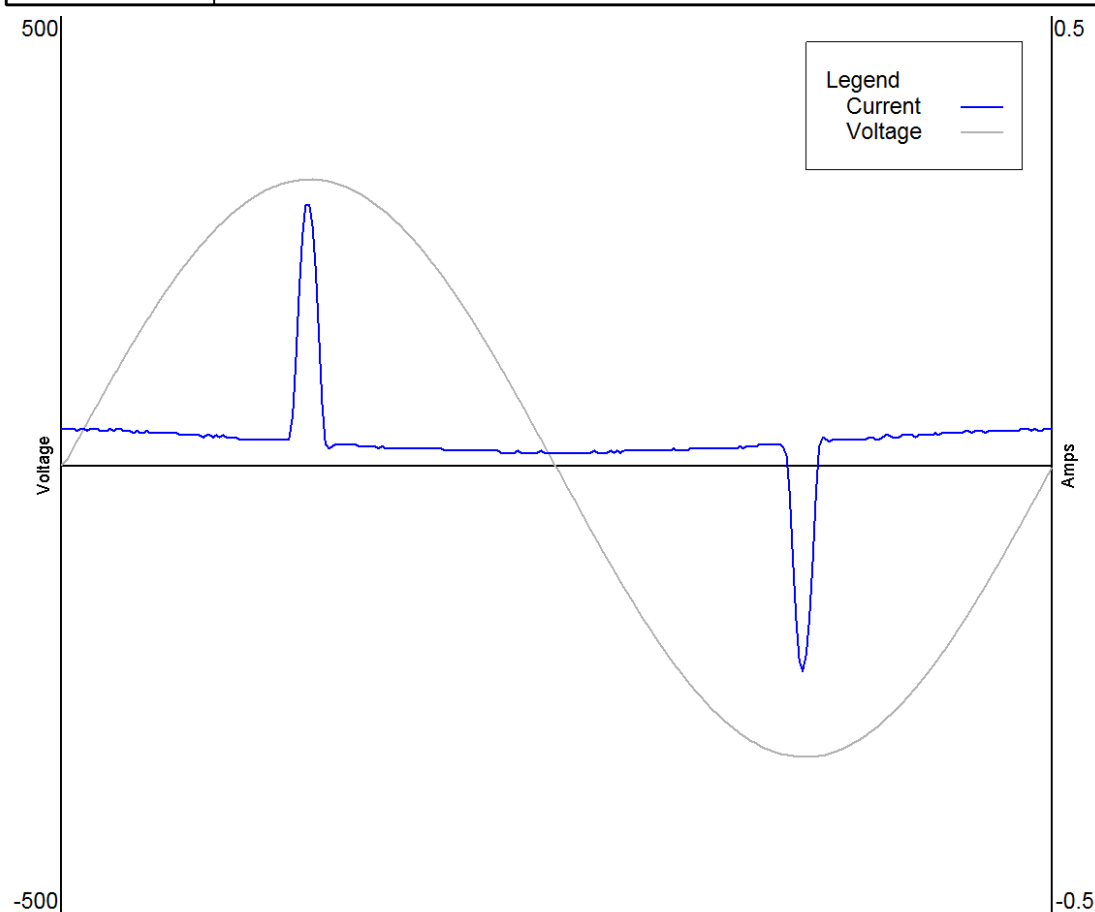
<L2 : Reading is below limit 2.

N/A : Harmonic current below 0.6% of rated current or 5mA, whichever is greater, are disregarded.

Tabulated Results for Harmonic Current Emissions

Op. Cond.: EQUIPMENT IN OPERATIVE MODE

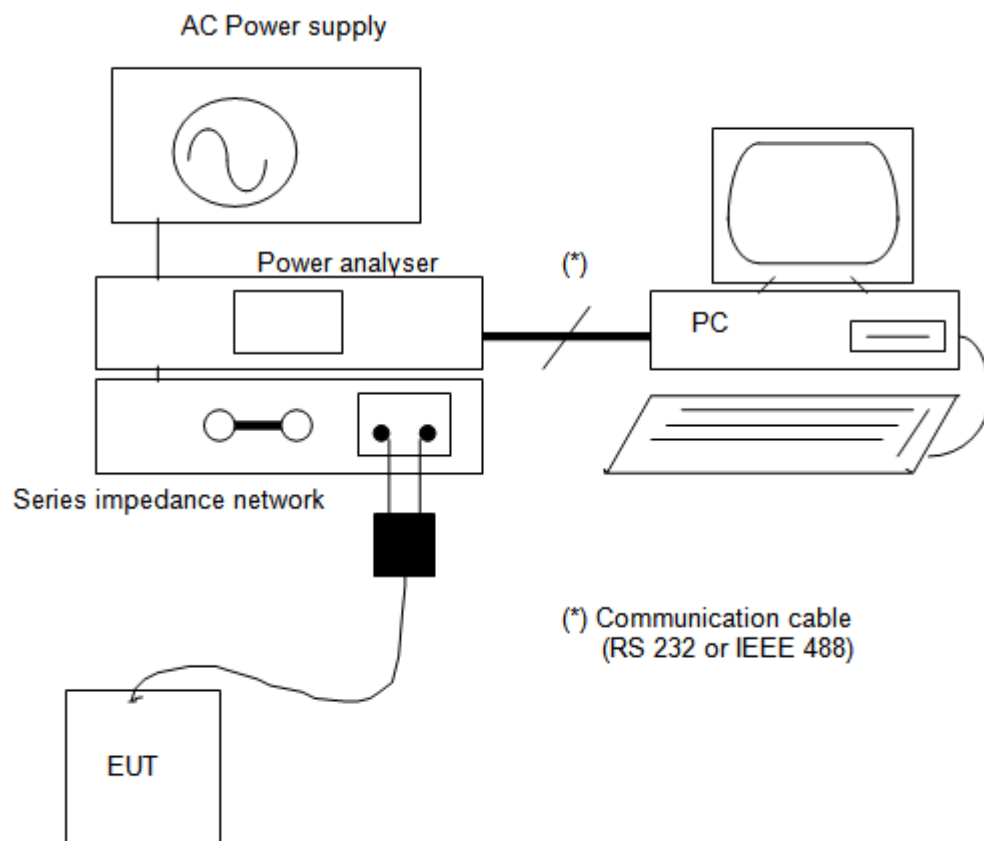
Product:	CAMA HOSPITALARIA	01 Aug 2016 14:18
Serial no:	--	Page 1 of 1
Description:	OPERATIVO (CICLOS SUBIDA/BAJADA) 2416/0524 JCC	
Result Name:	M. IBERICA/GALAXY2--	
Voltech IEC1000-3 Windows Software 3.11.07	Test Date:	21 Jul 2016 13:49
Type of Test:	Waveform	
Power Analyzer:	Voltech PM3000A v2.20 s/n 0723	
AC Source:	Mains / Manual Source	



1.11 Test Conditions and Results – Limitation of Voltage Fluctuations and Flicker

61000-3-3	TEST: Limitation of Voltage Fluctuations And Flicker (IEC 61000-3-3: - use latest edition)		Verdict
Method: The test circuit consists of a test supply voltage, reference impedance, the equipment under test and a flicker meter compliant with IEC 60868. The equipment shall be tested in the condition in which the manufacturer supplies it.			P
Laboratory Parameters:	Required prior to the test	During the test	
Ambient Temperature	15 to 35 °C	26 °C	
Relative Humidity	30 to 60 %	32 %	
Equipment mode	Power interface modes :	2	
	EUT configurations modes..... :	2	
	Operation modes :	1, 2 & 3	
Control Method of Equipment (see below)..... :		1 & 2	
1 - without additional conditions			
2 - switched manually, or switched automatically more frequently than twice per day, and also has either a delayed restart (the delay being not less than a few tens of seconds), or manual restart, after a power supply interruption.			
3 - attended while in use (for example: hair dryers, vacuum cleaners, kitchen equipment such as mixers, garden equipment such as lawn mowers, portable tools such as electric drills), or switched on automatically, or is intended to be switched on manually, no more than twice per day, and also has either a delayed restart (the delay being not less than a few tens of seconds) or manual restart, after a power supply interruption.			
Supplementary information: According applied Standard, clause 1, for systems with nominal voltage less than 220V (phase-neutral), the limits have not yet been considered. Due to this, the test only has been performed at 230 V / 50 Hz.			

Test Equipment Used					
Used	Description	Manufacturer	Model	Cal. Date	Cal. Due
X	AC Power supply	PACIFIC	360-AMX	13/07/2015	13/07/2017
X	Flicker meter	VOLTECH	PM3000A	27/11/2015	27/11/2016
X	Series impedance network	VOLTECH	IEC555	27/11/2015	27/11/2016
Supplementary information:					

Test setup for Voltage Fluctuations And Flicker

Tabulated Results for Voltage Fluctuations And Flicker

Op. Cond.: EQUIPMENT IN STANDBY MODE

Product:	CAMA HOSPITALARIA	01 Aug 2016 14:19
Serial no:	--	Page 1 of 1
Description:	STANDBY 2416/0524 JCC	
Result Name:	M. IBERICA/GALAXY2--	
Voltech IEC1000-3 Windows Software 3.11.07	Test Date:	21 Jul 2016 14:15
Type of Test:	Flickermeter Test - Table	
Power Analyzer:	Voltech PM3000A v2.20 s/n 0723	
AC Source:	Mains / Manual Source	
Overall Result:	Notes: Plt test duration only 20 minutes Measurement method - Voltage PASS	

	Plt
Limit	0.650
Reading	0.071

	Pst	dc (%)	dmax (%)	d(t) > 3.3%(ms)
Limit	1.000	3.300	4.000	500
Reading 1	0.071	0.015	0.052	0
Reading 2	0.071	0.015	0.052	0

Tabulated Results for Voltage Fluctuations And Flicker

Op. Cond.: EQUIPMENT IN OPERATIVE MODE

Product:	CAMA HOSPITALARIA	01 Aug 2016 14:18
Serial no:	--	Page 1 of 1
Description:	OPERATIVO (CICLOS SUBIDA/BAJADA) 2416/0524 JCC	
Result Name:	M. IBERICA/GALAXY2	
Voltech IEC1000-3 Windows Software 3.11.07	Test Date:	21 Jul 2016 13:52
Type of Test:	Flickermeter Test - Table	
Power Analyzer:	Voltech PM3000A v2.20 s/n 0723	
AC Source:	Mains / Manual Source	
Overall Result:	Notes: Plt test duration only 20 minutes Measurement method - Voltage PASS	

	Plt
Limit	0.650
Reading	0.084

	Pst	dc (%)	dmax (%)	d(t) > 3.3%(ms)
Limit	1.000	3.300	4.000	500
Reading 1	0.087	0.110	0.363	0
Reading 2	0.082	0.102	0.407	0

Tabulated Results for Voltage Fluctuations And Flicker

Op. Cond.: MANUAL SWITCHING OPERATIONS

Product:	CAMA HOSPITALARIA	01 Aug 2016 14:19
Serial no:	--	Page 1 of 1
Description:	OPERACIONES MANUALES (ON/OFF) 2416/0524 JCC	
Result Name:	M. IBERICA/GALAXY2	
Voltech IEC1000-3 Windows Software 3.11.07		Test Date: 22 Jul 2016 08:30
Type of Test:	Manual Switching - Table	
Power Analyzer:	Voltech PM3000A v2.20 s/n 0723	
AC Source:	Mains / Manual Source	
Overall Result:	Notes: Measurement method - Voltage	
PASS		

Average dmax	0.7773
dmax limit	6

Result	dc	dt > dc	dmax	dmax pass / fail	included
1	0.117	0.000	0.334	Pass	✓
2	0.015	0.000	0.552	Pass	✓
3	0.102	0.000	0.516	Pass	✓
4	0.125	0.000	0.653	Pass	✓
5	0.015	0.000	0.996	Pass	✓
6	0.015	0.000	0.458	Pass	✓
7	0.015	0.000	0.975	Pass	✓
8	0.015	0.000	0.421	Pass	✓
9	0.015	0.000	0.842	Pass	✓
10	0.131	0.000	0.574	Pass	✓
11	0.139	0.000	0.836	Pass	✓
12	0.015	0.000	0.690	Pass	✓
13	0.015	0.000	1.237	Pass	✓
14	0.038	0.000	2.958	Pass	✗
15	0.015	0.000	1.033	Pass	✓
16	0.015	0.000	1.209	Pass	✓
17	0.015	0.000	0.442	Pass	✓
18	0.125	0.000	0.915	Pass	✓
19	0.015	0.000	0.305	Pass	✗
20	0.117	0.000	1.428	Pass	✓
21	0.015	0.000	0.465	Pass	✓
22	0.117	0.000	1.201	Pass	✓
23	0.096	0.000	0.887	Pass	✓
24	0.096	0.000	0.436	Pass	✓

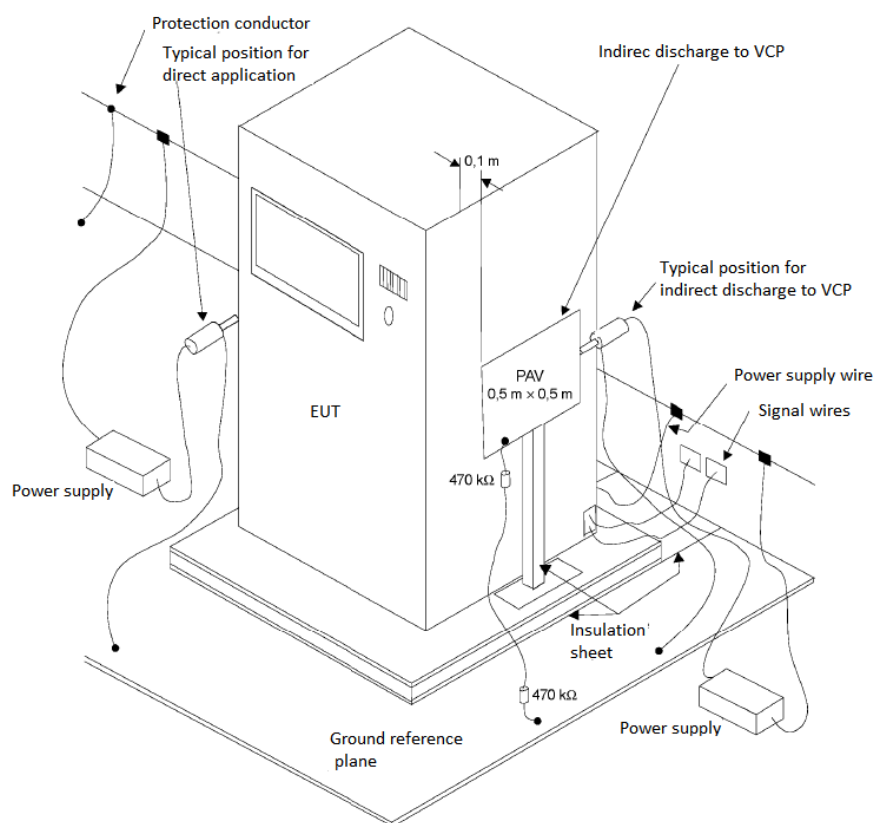
1.12 Test Conditions and Results – Immunity to Electrostatic Discharges

61000-4-2	TEST: Electrostatic discharges (IEC 61000-4-2: - use latest edition)		Verdict
<u>Method:</u> The test is intended to demonstrate the immunity of equipment subjected to static electricity discharges from operators directly and to adjacent objects. The table top equipment under test is placed on a wooden table, 0.8 m high, standing on the ground reference plane. A horizontal coupling plane (HCP), 1.6 x 0.8 m, is placed on the table. The EUT and the cables are isolated from the coupling plane by an insulating support 0.5 mm thick. The floor standing equipment is isolated from the ground reference plane by an insulating support about 0.1 m thick. The vertical coupling plane (VCP) of dimensions 0.5 m x 0.5 m is placed parallel to, and positioned at a distance of 0.1 m from, the EUT.			P
Laboratory Parameters:		Required prior to the test	During the test
Ambient Temperature		15 to 35 °C	25°C
Relative Humidity		30 to 60 %	41%
Equipment mode		Power interface mode	2
		EUT configurations mode	2
		Operation mode	1 & 2
Test Levels			
Discharge type	Discharge Level (kV)		Number of discharges per location (each polarity)
	Positive	Negative	
Air – Direct	2, 4, 8	2, 4, 8	10
Contact – Direct	2, 4, 6	2, 4, 6	10
Contact – Indirect	2, 4, 6	2, 4, 6	10
Discharge location	See photo documentation of the test set-up All external locations accessible by hand, Horizontal plate (HCP) Vertical coupling plate (VCP)		
Supplementary information:			

Test Equipment Used					
Used	Description	Manufacturer	Model	Cal. Date	Cal. Due
X	ESD Generator	HAEFELY	ONYX30	12/01/2015	12/01/2017
X	Vertical coupling plane	SGS	--	--	--
X	Insulated support (wood)	--	--	--	--
X	Reference ground plane (aluminium sheet metal 2x1 m)	SGS	--	--	--
X	Weather Station	Testo 622	TESTO	29/02/2016	01/03/2017
Supplementary information:					

Test setup for Immunity to Electrostatic Discharges

Floor-standing equipment



The figure shows an example of test setup

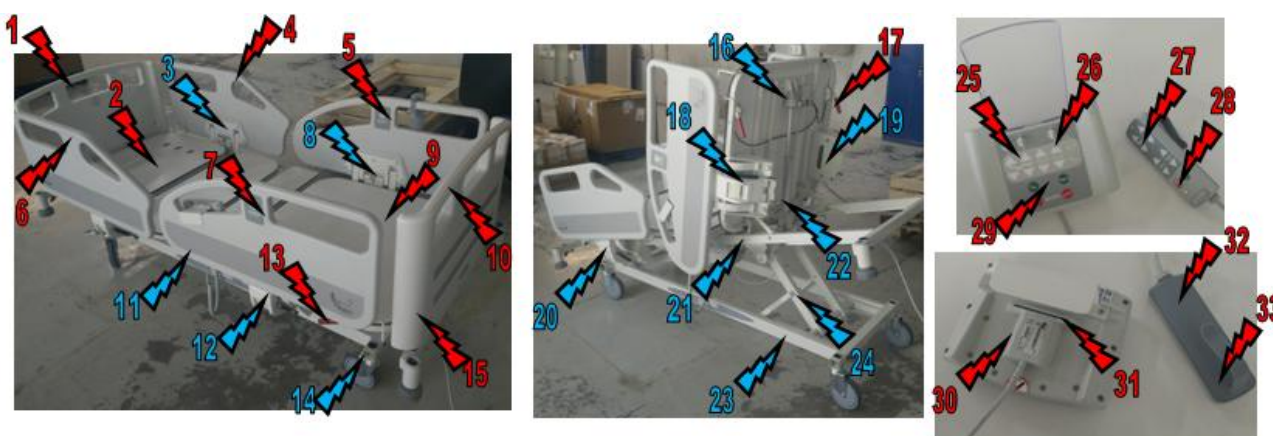
ESD Waveform Verification (Optional)

Positive 6 kV Amplitude	Negative 6 kV Amplitude

Tabulated Results for Electrostatic Discharges			
Nominal Voltage (V)			230 V
Nominal Frequency (Hz)			50 Hz
Direct discharges: Air and Contact			
Discharge location	Air discharge voltage (kV)	Polarity	Remark
1	2, 4, 8	+/-	1
2	2, 4, 8	+/-	1
4	2, 4, 8	+/-	1
5	2, 4, 8	+/-	1
6	2, 4, 8	+/-	1
7	2, 4, 8	+/-	1
9	2, 4, 8	+/-	1
10	2, 4, 8	+/-	1
13	2, 4, 8	+/-	1
15	2, 4, 8	+/-	1
17	2, 4, 8	+/-	1
25	2, 4, 8	+/-	1
26	2, 4, 8	+/-	1
27	2, 4, 8	+/-	1
28	2, 4, 8	+/-	1
29	2, 4, 8	+/-	1
30	2, 4, 8	+/-	1
31	2, 4, 8	+/-	1
32	2, 4, 8	+/-	1
33	2, 4, 8	+/-	1
Discharge location	Contact discharge voltage (kV)	Polarity	Remark
3	2, 4, 6	+/-	1
8	2, 4, 6	+/-	1
11	2, 4, 6	+/-	1
12	2, 4, 6	+/-	1
14	2, 4, 6	+/-	1
16	2, 4, 6	+/-	1
18	2, 4, 6	+/-	1
19	2, 4, 6	+/-	1
20	2, 4, 6	+/-	1
21	2, 4, 6	+/-	1
22	2, 4, 6	+/-	1
23	2, 4, 6	+/-	1
24	2, 4, 6	+/-	1

Indirect discharges			
Discharge location	Contact discharge voltage (kV)	Polarity	Remark
HCP – Front	2, 4, 6	+/-	1
HCP – Left	2, 4, 6	+/-	1
HCP – Right	2, 4, 6	+/-	1
HCP – Rear	2, 4, 6	+/-	1
VCP – Front	2, 4, 6	+/-	1
VCP – Left	2, 4, 6	+/-	1
VCP – Right	2, 4, 6	+/-	1
VCP – Rear	2, 4, 6	+/-	1
Results Descriptions: X - Not Performed nor required. 1 – Compliant - No observed response from EUT. Verifying leds of the movement handle and normal function.			

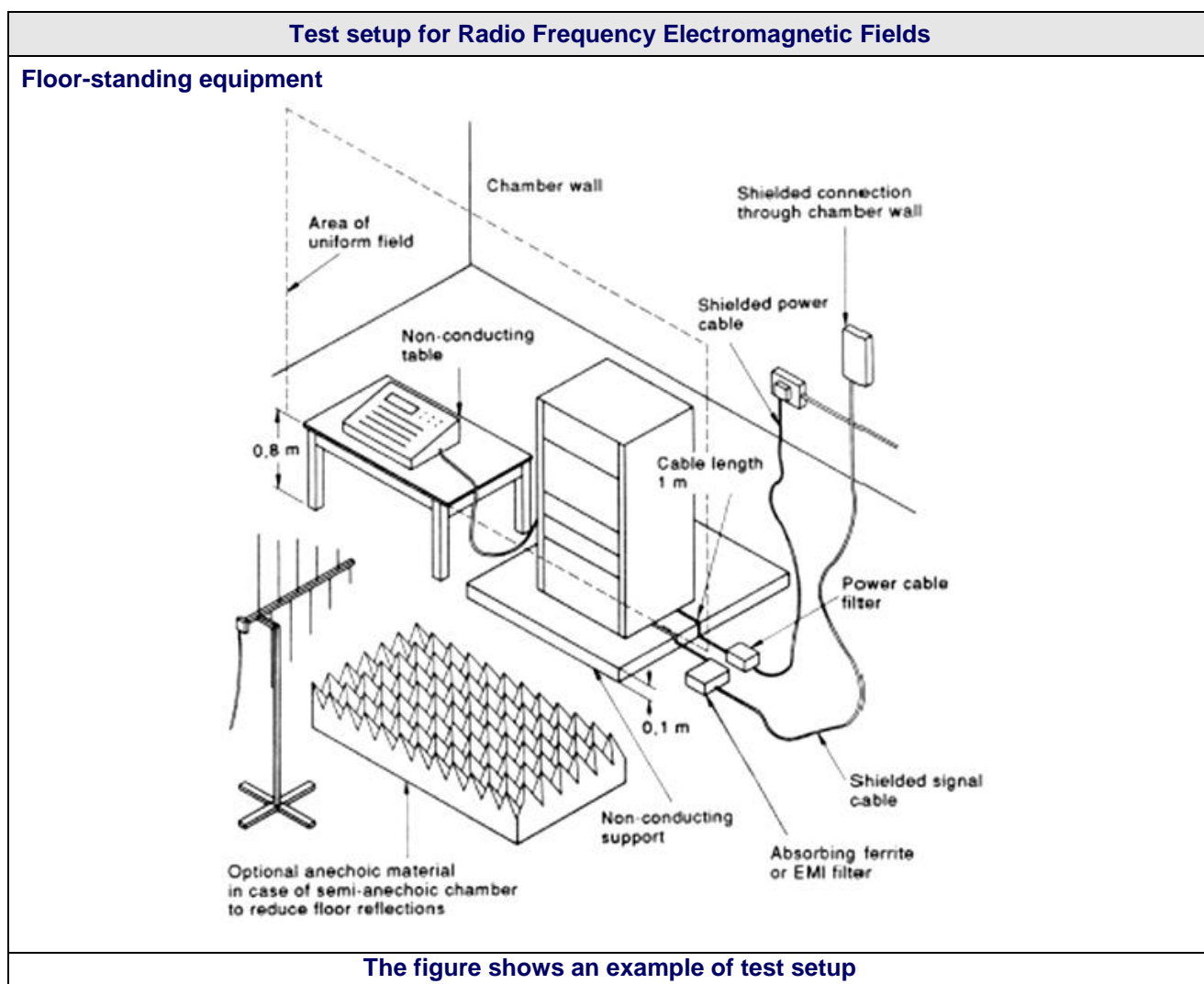
Graphic representation for Electrostatic Discharges



1.13 Test Conditions and Results - Immunity to Radio Frequency Electromagnetic Fields

61000-4-3		TEST: RF electromagnetic fields (IEC 61000-4-3: - use latest edition)			Verdict	
Method: The test allows estimating of the radiated immunity of electrical and electronic equipment to electromagnetic disturbances coming from intended radio-frequency (RF) transmitters in the frequency range 80 MHz to 2500 MHz. The interference is applied on the enclosure of the equipment by using transmitting antennas.					P	
Laboratory Parameters:			Required prior to the test		During the test	
Ambient Temperature			15 to 35 °C		23 °C	
Relative Humidity			30 to 60 %		45 %	
Equipment mode			Power interface mode		2	
			EUT configurations mode		2	
			Operation mode		1	
Test specifications						
Calibration Requirements			Uniform field area (UFA)	1.5 m x 1.5 m, 16 points with a minimum UFA size 0.5 m x 0.5 m		
				75 % of calibration points within specifications if UFA is larger than 0.5 m x 0.5 m. 100 % (all 4 points) in the specifications for 0.5 x 0.5 m UFA		
Frequency bandwidth			80 MHz to 2500 MHz			
Level	<input checked="" type="checkbox"/>	Non-Life Supporting Equipment	3 V/m			
			Amplitude modulation	80 % / 1 kHz sine wave		
				Controls, monitors or measures a physiological parameter, (80 % / 2 Hz)		
	<input type="checkbox"/>	Life Supporting Equipment	10 V/m			
			Amplitude modulation	80 % / 1 kHz sine wave		
				Controls, monitors or measures a physiological parameter, (80 % / 2 Hz)		
Frequency step			1% or less of fundamental test frequency			
Dwell time	<input type="checkbox"/>	2 Hz Modulation	3 sec minimum			
	<input checked="" type="checkbox"/>	1 kHz Modulation	1 sec minimum			
Supplementary information:						

Test Equipment Used					
Used	Description	Manufacturer	Model	Cal. Date	Cal. Due
X	Signal generator	PMM	3030-1	29/12/2015	29/12/2016
X	Electromagnetic field meter	WANDEL & GOLTERMANN	EMR-300	22/09/2015 30/09/2016	22/09/2016 30/09/2017
X	RF Amplifier	FRANKONIA	FLG-30C	06/03/2016	06/03/2017
X	RF Amplifier	FRANKONIA	FLH-70B	05/07/2016	05/07/2018
Supplementary information:					



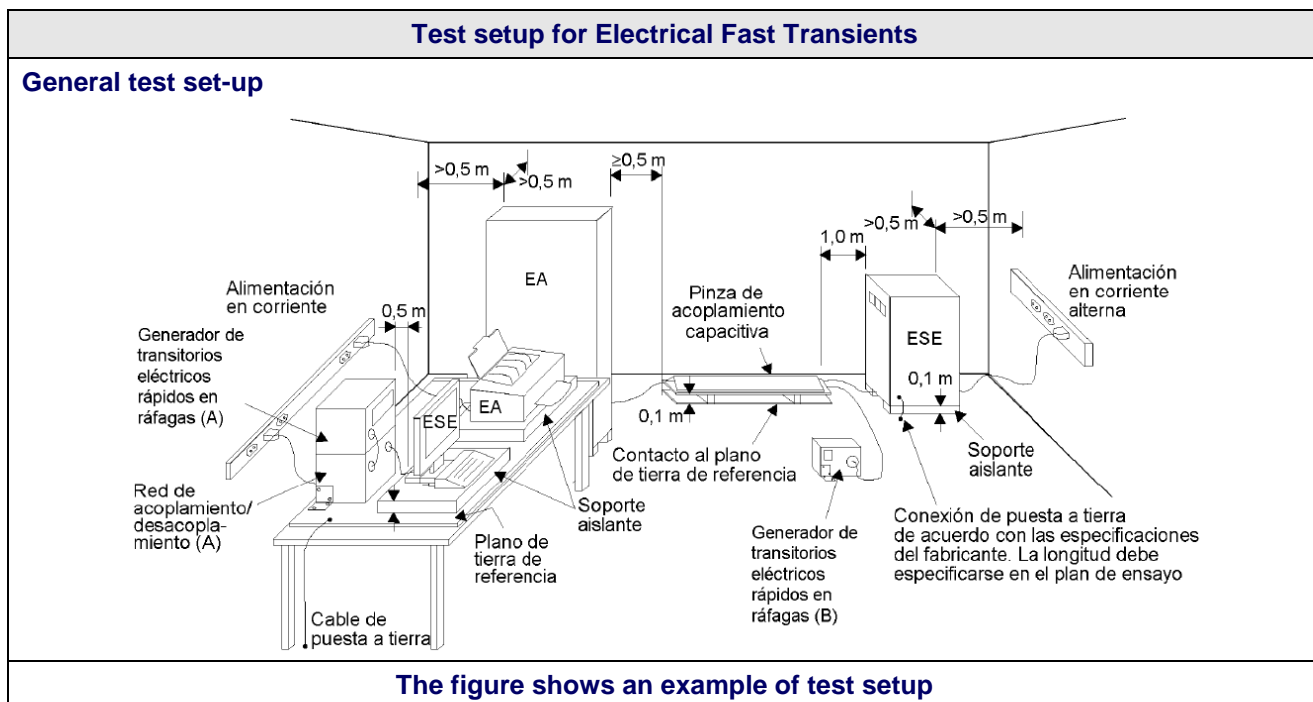
Tabulated Results for RF Electromagnetic Field 80 MHz to 2500 MHz				
Nominal Voltage (V)				230 V
Nominal Frequency (Hz).....				50 Hz
Side of the equipment under test	Frequency (MHz)	Antenna polarization (V/H)	Dwell Time (second)	Remark
Left	80 – 250	V	1	1
	80 – 250	H	1	1
	250 – 1000	V	1	1
	250 – 1000	H	1	1
	1000 – 2500	V	1	1
	1000 – 2500	H	1	1
Back				X
Front				X
Right				X
Supplementary information: Results Descriptions: X - Not performed nor required 1 – Compliant - No observed response from EUT. Verifying leds of the movement handle and normal function. Note: Left side is considered the worst side				

1.14 Test Conditions and Results – Electrical Fast Transients

61000-4-4	TEST: Fast Transients – (IEC61000-4-4: - use latest edition)		Verdict
<u>Method:</u> Measurements were made on a ground plane that extends 1-meter minimum beyond all sides of the system under test. Mains power tests were conducted with the product connected to a Coupling/Decoupling Network (CDN). I/O lines were tested in a Capacitive Coupling Clamp. One of each unique interface was tested for a period of one (1) minute per polarity.			P
Laboratory Parameters:	Required prior to the test	During the test	
Ambient Temperature	10 to 40 °C	24°C	
Relative Humidity	10 to 90 %	42 %	
Fully configured sample subject to the levels shown below.	Measurement Point		
	Input a.c. Power Ports		
	Signal Ports longer than 3 meters		
Equipment mode	Power interface mode	1 & 2	
	EUT configurations mode	1 & 2	
	Operation mode	1 & 2	
Applied Level			
Application Point	(kV)	Repetition Frequency (kHz)	
Input a.c. Power Ports	±2	5	
Movement handle cable	±1	5	
Supplementary information:			

Test Equipment Used					
Used	Description	Manufacturer	Model	Cal. Date	Cal. Due
X	EFT Generator	EMC PARTNER	TRA-3000	10/08/2015 (*)	10/08/2016 (*)
X	Insulated support (wood)	--	--	--	--
X	Reference ground plane (2 aluminium sheet metal 2x1 m)	SGS	--	--	--
Supplementary information:					
(*) Test performed on 2016/07/13					

Electrical Fast Transients Waveform Verification (Optional)



Tabulated Results for Minimum Input Voltage	
Minimum Rated Voltage (V).....:	110
Nominal Rated Frequency (Hz) :	60
Point of application	Comments/Results
Mains	1
I/O signal ports	1
Supplementary information: Result description: X – Not performed 1 – Compliant – No observed response from EUT. Verifying leds of the movement handle and normal function.	
Tabulated Results for Maximum Input Voltage	
Maximum Rated Voltage (V).....:	230
Nominal Rated Frequency (Hz) :	50
Point of application	Comments/Results
Mains	1
I/O signal ports	1
Supplementary information: Result description: X - Not performed 1 – Compliant - No observed response from EUT. Verifying leds of the movement handle and normal function.	

1.15 Test Conditions and Results – Surge Immunity

61000-4-5	TEST: Surge Immunity Test – (IEC61000-4-5: - use latest edition)		Verdict
<u>Method:</u> Mains power tests were conducted with the product connected to a Coupling/ Decoupling Network (CDN). The test voltage was increased from the lowest indicated level up to the maximum level. Five (5) positive surges and five (5) negative surges were applied at each of phases of the a.c. waveform: 0°, 90°, 180° and 270°. Each surge was applied 60 seconds after the previous surge. Signal and Telecommunications ports were subject to five (5) positive and five (negative) surges applied through the appropriate Coupling/Decoupling Network (CDN).			P
Laboratory Parameters:		Required prior to the test	During the test
Ambient Temperature		10 to 40 °C	24°C
Relative Humidity		10 to 90 %	42%
Fully configured sample subject to the levels shown below.		Measurement Point	
		Input AC Power Ports	
Equipment mode		Power interface mode	1 & 2
		EUT configurations mode	1 & 2
		Operation mode	1 & 2
Applied Level			
Application Point	[kV]	Required Surge Waveform	
Input Power Ports	0.5 and 1.0 (Line to Line)	Combination Wave (2µs x 50µs Voltage, 8µs x 20µs Current)	
	0.5, 1.0 and 2.0 (Line to Earth)		
ME EQUIPMENT and ME SYSTEMS that do not have a surge protection device in the primary power circuit may be tested only at 2 kV line(s) to earth and 1 kV line(s) to line(s).			
Supplementary information:			

Test Equipment Used					
Used	Description	Manufacturer	Model	Cal. Date	Cal. Due
X	SURGE Generator	EMC PARTNER	TRA-3000	10/08/2015 (*)	10/08/2016 (*)
X	Insulated support (wood)	--	--	--	--
X	Reference ground plane (aluminium sheets metal 2x1 m)	SGS	--	--	--
Supplementary information:					
(*) Test performed on 2016/07/13					

Surge Waveform Verification (Optional)

Test setup for Surge Immunity
Test setup similar to Electrical Fast Transients for supply line coupling

Tabulated Results for Surges for Minimum Input Voltage			
Minimum Rated Voltage (V)			110
Nominal Rated Frequency (Hz)			60
Mode of Application – Mains	Level	Polarity	Comments/Results
Line 1 to Line 2 (Differential mode)	0.5kV	Positive	X
		Negative	X
	1.0kV	Positive	1
		Negative	1
Line 1 to Earth (Common mode)	0.5kV	Positive	X
		Negative	X
	1.0kV	Positive	X
		Negative	X
	2.0kV	Positive	1
		Negative	1
Line 2 to Earth (Common mode)	0.5kV	Positive	X
		Negative	X
	1.0kV	Positive	X
		Negative	X
	2.0kV	Positive	1
		Negative	1
Supplementary information: Result description: X - Not performed 1 – Compliant - No observed response from EUT. Verifying leds of the movement handle and normal function.			

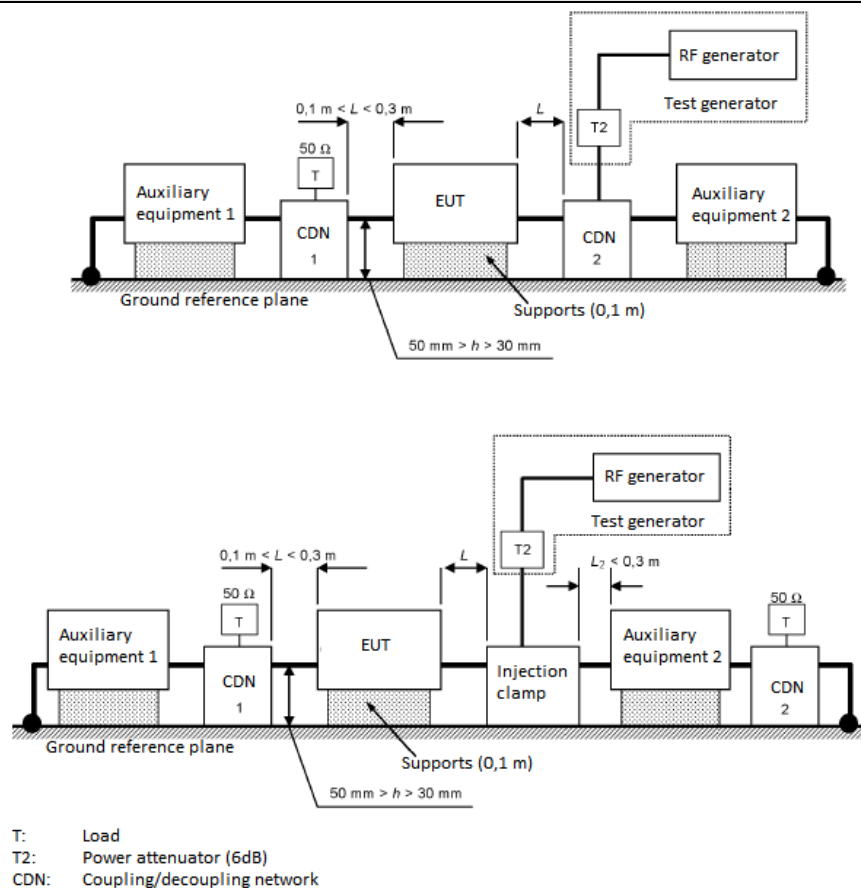
Tabulated Results for Surges for Maximum Input Voltage			
Maximum Rated Voltage (V) ...			230
Nominal Rated Frequency (Hz)			50
Mode of Application - Mains	Level	Polarity	Comments
Line 1 to Line 2 (Differential mode)	0.5kV	Positive	X
		Negative	X
	1.0kV	Positive	1
		Negative	1
Line 1 to Earth (Common mode)	0.5kV	Positive	X
		Negative	X
	1.0kV	Positive	X
		Negative	X
	2.0kV	Positive	1
		Negative	1
Line 2 to Earth (Common mode)	0.5kV	Positive	X
		Negative	X
	1.0kV	Positive	X
		Negative	X
	2.0kV	Positive	1
		Negative	1
Supplementary information: Result description: X - Not performed 1 – Compliant - No observed response from EUT. Verifying leds of the movement handle and normal function.			

1.16 Test Conditions and Results – Conducted Disturbances Immunity

61000-4-6		TEST: RF Continuous Conducted – (IEC61000-4-6: 2003 + A1:2004 + A2:2006)			Verdict
Method: Measurements were made on a ground plane that extends 0.5-meter minimum beyond all sides of the system under test. The EUT was located 10cm above the reference ground plane and any associated I/O cables attached to the EUT were located between 30mm and 50mm above the ground plane. The indicated field was pre-calibrated prior to placement of the system under test.					P
Laboratory Parameters:		Required prior to the test		During the test	
Ambient Temperature		10 to 40 °C		24°C	
Relative Humidity		10 to 90 %		45%	
Equipment mode		Power interface mode		2	
		EUT configurations mode		2	
		Operation mode		1 & 2	
Test Specifications:		Frequency range		Measurement Point	
Fully configured sample scanned over the following frequency range		150kHz to 80MHz		Input a.c. Power Ports Signal Ports	
Level	<input checked="" type="checkbox"/> Non-Life Supporting Equipment	3 V RMS			
		Amplitude modulation	80 % / 1 kHz sine		
			Controls, monitors or measures a physiological parameter (80 % / 2 Hz)		
	<input type="checkbox"/> Life Supporting Equipment	3 V RMS outside the ISM band, 10 V RMS in the ISM band			
		Amplitude modulation	80 % / 1 kHz sine		
			Controls, monitors or measures a physiological parameter (80 % / 2 Hz)		
Frequency step		1% or less of fundamental test frequency			
Dwell time	<input type="checkbox"/> 2 Hz Modulation	3 sec minimum			
	<input checked="" type="checkbox"/> 1 kHz Modulation	1 sec minimum			
Supplementary information:					

Test Equipment Used					
Used	Description	Manufacturer	Model	Cal. Date	Cal. Due
X	Signal generator	PMM	3030-1	29/12/2015	29/12/2016
X	RF Amplifier	FRANKONIA	FLL-25	28/08/2014 02/09/2016	28/08/2016 02/09/2018
X	Supply line coupling network	FCC	FCC-801-M3-25	14/11/2014	14/11/2016
Supplementary information:					

Test setup for Conducted Disturbances



The figure shows an example of test setup

Tabulated Results for Conducted Disturbances

Nominal Rated Voltage (V)		230
Nominal Rated Frequency (Hz)		50
Point of Application	Comments/Results	Dwell Time (second)
Mains	1	1
I/O signal ports	1	1

Supplementary information:

Result description:

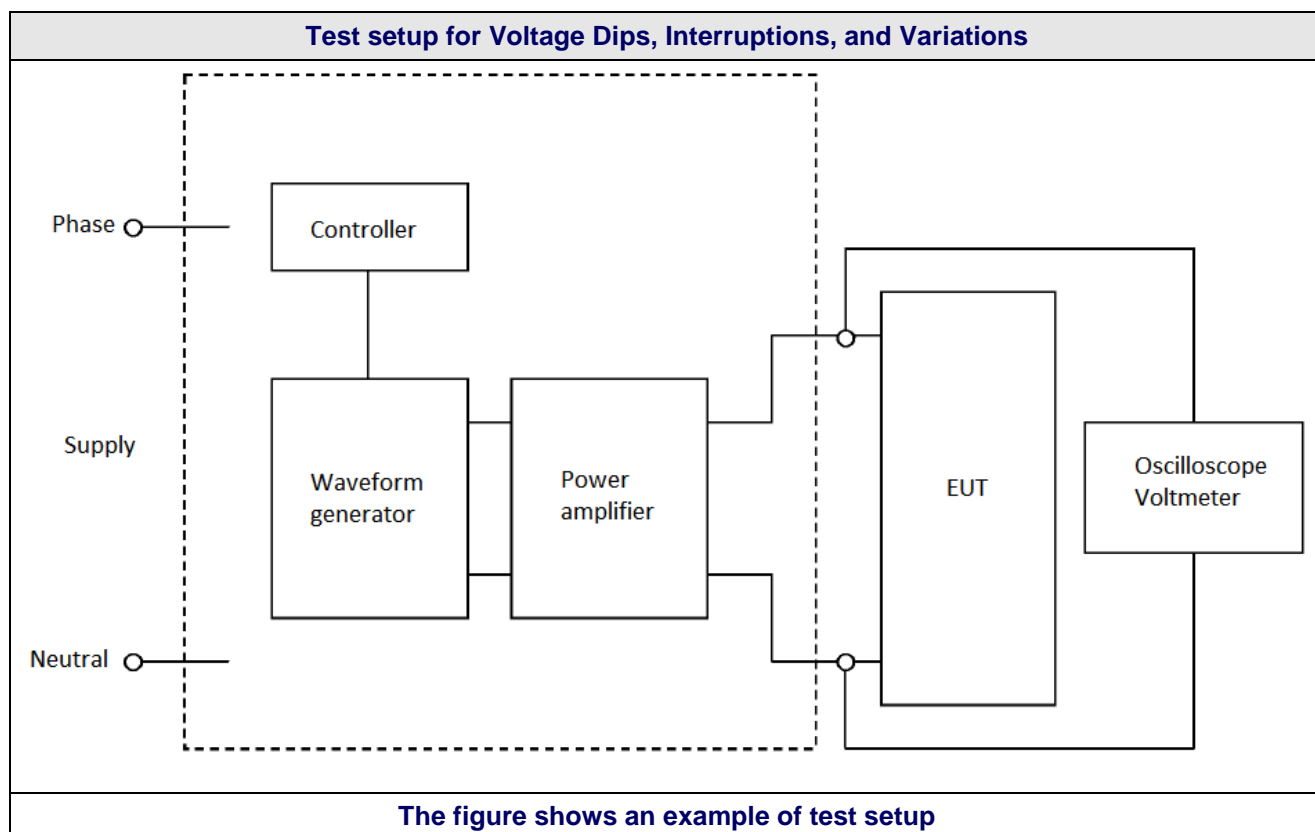
X - Not performed

1 – Compliant - No observed response from EUT. Verifying leds of the movement handle and normal function.

1.17 Test Conditions and Results – Voltage Dips, Interruptions, and Variations

61000-4-11	TEST: Voltage Dips and Interruptions – (IEC61000-4-11: - use latest edition)		Verdict
<u>Method</u> : The product was subjected to voltage dips and interruptions. Testing was performed with the product connected directly to a generator capable of simulating the voltage drops and interrupts as described.			P
Laboratory Parameters:	Required prior to the test	During the test	
Ambient Temperature	10 to 40 °C	23°C	
Relative Humidity	10 to 90 %	41%	
Fully configured subjected to the levels indicated below.	Measurement Point		
	Input A.C. Power Ports		
Equipment mode	Power interface mode	2 & 3	
	EUT configurations mode	2 & 3	
	Operation mode	1 & 2	
Applied Levels			
Voltage Dips % U _T	Period (Cycles)	Sync Angle [degrees]	
30	25	0	
60	5	0	
>95	0.5	0, 180	
Voltage Interruption % U _T	Seconds	Sync Angle [degrees]	
>95	5	0	
0 degrees is the crossover point of the voltage waveform.			
Supplementary information:			

Test Equipment Used					
Used	Description	Manufacturer	Model	Cal. Date	Cal. Due
X	AC Power supply	PACIFIC	360-AMX	13/07/2015	13/07/2017
Supplementary information:					



Voltage Dips and Interruption Verifications (Optional)	
30% Dip	60% Dip
>95% Interruption	
	Intentionally Left Blank

Power Interface Mode #	EUT Configurations Mode #	EUT Operation Mode #
1	2	1 & 2
2	3	1 & 2
Supplementary information: None		

Tabulated Results for Voltage Dips and Interruptions			
Minimum Rated Voltage (V).....			110
Maximum Rated Frequency (Hz)			50
Point of application	Voltage reduction	Period (Cycles)	Comments/Results
Mains	30	25	1
Mains	60	5	1
Mains	>95	0.5	1
Point of application	Voltage reduction	Seconds	Comments/Results
Mains	>95	5	1
Supplementary information:			
Result description:			
1 – Compliant – No Observed/perceived response from EUT. Verifying leds of the movement handle and normal function.			

Tabulated Results for Voltage Dips and Interruptions			
Maximum Rated Voltage (V)....			230
Minimum Rated Frequency (Hz)			50
Point of application	Voltage reduction	Period (Cycles)	Comments/Results
Mains	30	25	1
Mains	60	5	1
Mains	>95	0.5	1
Point of application	Voltage reduction	Seconds	Comments/Results
Mains	>95	5	1
Supplementary information:			
Result description:			
1 – Compliant – No Observed/perceived response from EUT. Verifying leds of the movement handle and normal function.			

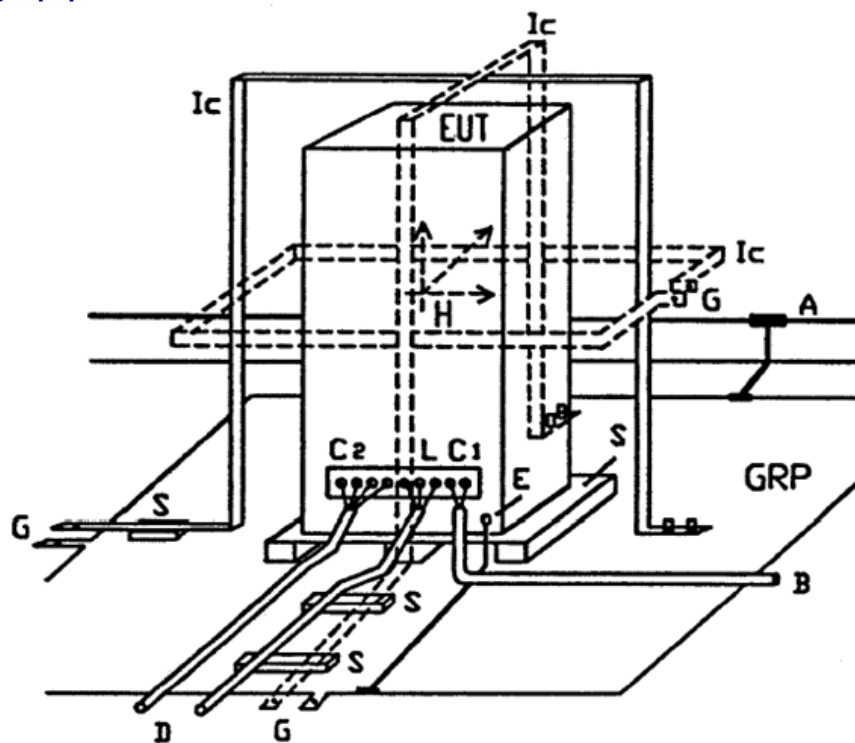
1.18 Test Conditions and Results – Power- Frequency Magnetic Fields

61000-4-8	TEST: Power-frequency magnetic field – (IEC61000-4-8: - use latest edition)		Verdict
Method: Measurements were made on a ground plane that extends 1-meter minimum beyond sides of the system under test. Table top EUT is located 80cm above the reference ground plane and floor-standing EUT is located 10cm above the reference ground plane. The indicated field was pre-calibrated prior to placement of the EUT under test.			P
Laboratory Parameters:		Required prior to the test	During the test
Ambient Temperature		10 to 40 °C	23°C
Relative Humidity		10 to 90 %	41%
Equipment mode		Power interface mode	2 & 4
		EUT configurations mode	2 & 4
		Operation mode	1 & 2
Fully configured sample tested at the power line frequency (See Note 1)		Frequency	Application Point
		50Hz and 60 Hz ¹	Enclosure
Frequency (Hz)		Test Level (A/m)	
50		3	
60		3	
Supplementary information:			

Test Equipment Used					
Used	Description	Manufacturer	Model	Cal. Date	Cal. Due
X	AC Power supply	PACIFIC	360-AMX	13/07/2015	13/07/2017
X	Electromagnetic field meter	HOLADAY	HI-3604	14/07/2016	14/07/2018
X	Square coil (1x1 m)	SGS	--	14/07/2016	14/07/2018
Supplementary information:					

Test setup for Power- Frequency Magnetic Fields

Floor-standing equipment



- | | |
|---------------------------|--------------------------------|
| GRP: Ground plane | C1: Power supply circuit |
| A: Safety earth | C2: Signal circuit |
| S: Insulating support | L: Communication line |
| EUT: Equipment under test | B: To power supply source |
| Ic: Induction coil | D: To signal source, simulator |
| E: Earth terminal | G: To the test generator |

The figure shows an example of test setup

Tabulated Results for Power Frequency Magnetic Field

Nominal Rated Voltage (V)			230
Point of application	Results		
	50 Hz	60 Hz	
X-Axis	1	1	
Y-Axis	1	1	
Z-Axis	1	1	

Supplementary information:

Result description:

X - Not performed

1 – Compliant - No observed response from EUT. Verifying leds of the movement handle and normal function.