



# NSAI

## ECE TYPE-APPROVAL CERTIFICATE



Concerning:<sup>2</sup>

Approval granted  
~~Approval extended~~  
~~Approval refused~~  
~~Approval withdrawn~~  
~~Production definitively discontinued~~

Of a type of ~~vehicle~~/component/~~separate technical unit~~<sup>2</sup> with regard to Regulation No. 10.  
Of a type of electrical/electronic sub-assembly<sup>2</sup> with regard to Regulation No.10.

Approval No: **E24\*10R06/02\*5478\*00**

Reason for extension:

*-N/A*

1. Make (trade name of manufacturer): ***MATROMARINE PRODUCTS S.r.l.***
  
2. Type and general commercial description: ***Toilet Silent Hidro***
  
3. Means of identification of type, if marked on the ~~vehicle~~/  
component/~~separate technical unit~~<sup>2</sup>: ***Label***
  
- 3.1 Location of that marking: ***Adhesive label on the exterior of the pump***
  
4. Category of vehicle: ***N/A***
  
5. Name and address of manufacturer: ***MATROMARINE PRODUCTS S.r.l.  
Via Sereghè 1  
16017 Isola del Cantone (GE)  
Italy***
  
6. In the case of components and separate technical units,  
location and method of affixing of the approval mark: ***Adhesive label on the exterior of the pump***
  
7. Address(es) of assembly plant(s): ***MATROMARINE PRODUCTS S.r.l.  
Via Sereghè 1  
16017 Isola del Cantone (GE)  
Italy***



Approval No: E24\*10R06/02\*5478\*00

8. Additional information (where applicable): *See Appendix below*
9. Technical service responsible for carrying out the tests: *DEKRA Testing and Certification S.r.l.  
Via Fratelli Gracchi, n°27 c.a.p.20092 –  
Cinisello Balsamo (MI)*
10. Date of test report: *12.02.2024*
11. Number of test report: *TSH-R10-00*
12. Remarks (if any): *See Appendix below*
13. Place: *Dublin*
14. Date: *20<sup>th</sup> March, 2024*
15. Signature:



16. The index to the information package lodged with the approval authority, which may be obtained on Request, is attached.

- 
1. Distinguishing number of the country which issued/extended/refused or withdrawn approval.  
(see Regulation, provisions on approval).
2. Strike out what does not apply.



Approval No: E24\*10R06/02\*5478\*00

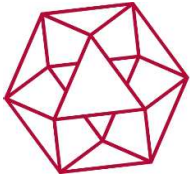
### Appendix

To type-approval communication concerning the type approval of an electrical/electronic sub-assembly under Regulation No.10.

1. Additional information
  - 1.1. Electrical system rated voltage: *12 VDC, no ground.*
  - 1.2. This ESA can be used on any vehicle type with the following restrictions: *See manufacturer's specifications.*
    - 1.2.1 Installation conditions, if any: *See manufacturer's specifications.*
  - 1.3. This ESA can only be used on the following vehicle types: *N/A*
    - 1.3.1 Installation conditions, if any: *N/A*
  - 1.4. The specific test method(s) used and the frequency ranges covered to determine immunity were: *N/A*
  - 1.5. Laboratory accredited to ISO 17025 and recognized by the Approval Authority responsible for carrying out the tests: *DEKRA Testing and Certification S.r.l.*
2. Remarks: *N/A*

Appendix to type-approval communication concerning the type approval of a vehicle under Regulation No.10.

1. Additional information
2. Electrical system rated voltage: *N/A*
3. Type of bodywork: *N/A*
4. List of electronic systems installed in the tested vehicle(s) not limited to the items in the information document: *N/A*
  - 4.1. Vehicle equipped with 24 GHz short-range radar equipment (yes/no/optional)<sup>2</sup>: *N/A*
5. Laboratory accredited to ISO 17025 and recognized by the Approval Authority responsible for carrying out the tests: *N/A*
6. Remarks: *N/A*



# NSAI

Approval No: *E24\*10R06/02\*5478\*00*

## Index to the Information Package

Date of issue:	<i>20<sup>th</sup> March, 2024</i>
Date of latest amendment:	<i>N/A</i>
Reason for extension/revision:	<i>N/A</i>
1. Additional conditions, and advisory notes on legal alternatives.	
2. Test report(s)	
- numbers(s):	<i>TSH-R10-00</i>
- date of issue:	<i>12.02.2024</i>
- date of latest amendment:	<i>N/A</i>
3. Information document	
- number(s):	<i>Annex 2B</i>
- date of issue:	<i>17.01.2024</i>
- date of latest amendment:	<i>N/A</i>
Documentation:	<i>57 pages</i>



Approval No: E24\*10R06/02\*5478\*00

Appendix: **Additional conditions, and advisory notes on legal alternatives**

A: Additional conditions:

1. The attached technical report, with any of its attachments, forms part of this Type Approval certificate.
2. Each device from series production shall be to the measurements specified in the attached drawings, and shall be manufactured only from the materials specified in the Approval documents.
3. Changes in the type are permitted only with the explicit permission of NSAI. Breaches of this requirement will lead to a withdrawal of the Type Approval, and in addition may be subject to criminal prosecution.
4. At regular intervals, any tests or associated checks prescribed by the applicable legislation to verify continued conformity with the approved type shall be carried out. The manufacturer shall demonstrate compliance with this by submitting to NSAI evidence of adequate arrangements and documented control plans for each type approved.
5. Any set of samples or test pieces showing evidence of non-conformity shall give rise to further sampling and testing and all steps shall be taken to restore conformity of production.
6. This Type Approval will expire when it is surrendered by the holder, or withdrawn by NSAI, or when the approved type no longer conforms to legal requirements. The recall of the Type Approval can be issued by NSAI when the conditions required for the issuing or continuation of the Type Approval are no longer current, or when the Approval holder is in breach of the duties attached to the Type Approval, or when it is established that the approved type no longer meets the requirements of traffic safety.
7. Changes in the company name, address or manufacturing site, as well as in any of the sales or other agents specified in the issuing of the approval must immediately be notified to NSAI.
8. The duties imposed by the issuing of this certificate are not transferable. The legal protection of third parties is not affected by this certificate.
9. When the manufacture or sale of the system, component or separate technical unit has not been started within one year of the date of issue of this certificate, then NSAI is to be informed. This requirement also applies when the manufacture or sale has been halted for more than one year, or when it ought to have been halted for more than one year. The initial commencement of manufacture or sale, or the resumption of manufacture or sale, shall then be notified to NSAI within one month of commencement or resumption.

B: Legal Options:

Any objection to the requirements set out in this certificate shall be made within one month of the date of issue. The objection shall be made, in writing, to NSAI in Dublin.

Test Report no.

**TSH-R10-00**

ECE Regulation 10

Internal Procedure Applied: PO DIR-11



Type : **Toilet Silent Hidro**  
Manufacturer : **MATROMARINE PRODUCTS S.r.l.**

Test Report

according to the regulation of the United Nations  
Economic Commission for Europe relating to

**Electromagnetic compatibility  
for electrical/electronic sub assembly of motor vehicles**

**ECE R10.00** dated **01.04.1969**  
last amended by  
**ECE R10.06, Amendment 02** dated **08.10.2022**

**I. General information**

1. Make (trade name of manufacturer) : MATROMARINE PRODUCTS S.r.l.
2. Type : Toilet Silent Hidro
- 2.1 Commercial descriptions : Not applicable
- 2.2 Variants : See information document
3. Means of identification of type, if marked on the component/separate technical unit : Label
4. Location of that marking : Adhesive label on the exterior of the pump
5. Name and address of the manufacturer : MATROMARINE PRODUCTS S.r.l.  
Via Sereghè 1  
16017 Isola del Cantone (GE), Italy
6. location of the ECE type approval mark : Adhesive label on the exterior of the pump
7. Address(es) of assembly plant(s) : MATROMARINE PRODUCTS S.r.l.  
Via Sereghè 1  
16017 Isola del Cantone (GE), Italy



ISP N°054 E  
Membro di MLA EA, MRA ILAC  
Signatory of EA MLA, ILAC MRA

Test Laboratory appointed as Technical Service,  
Category B by NSAI

Certificate of Appointment N° 94 issued by NSAI

DEKRA Testing and Certification S.r.l.  
Via Fratelli Gracchi, n°27  
c.a.p.20092 - Cinisello Balsamo (MI)  
P.IVA – C.F.: 02894270962  
www.dekra.it

Test Report no.

**TSH-R10-00**

ECE Regulation 10

Internal Procedure Applied: PO DIR-11



Type : **Toilet Silent Hidro**  
Manufacturer : **MATROMARINE PRODUCTS S.r.l.**

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## II Test record

1. Test conditions
  - 1.1 Description of the ESA chosen to be tested : Toilet Silent Hidro  
Remarks : Not applicable
  - 1.2 Measuring and testing equipment : See Test Methods
  - 1.3 Basic conditions : According to standard
  - 1.4 Operating condition : 12Vdc
  - 1.5 Operating system : For vehicles with 12V system
- 2 Test results : See Annex R24003801
- 3 Remarks : Not applicable
- 4 Test date : 15.01.2024 – 16.01.2024
- 5 Test place : DEKRA Testing and Certification S.r.l.  
Via della Fisica, 20 – 36016 Thiene (VI) - ITALY
- 6 Annexes : R24003801



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Membro di MLA EA, MRA ILAC  
Signatory of EA MLA, ILAC MRA

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ECE Regulation 10

Internal Procedure Applied: PO DIR-11



Type : **Toilet Silent Hidro**  
Manufacturer : **MATROMARINE PRODUCTS S.r.l.**

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### III. Statement of Conformity

The described component is in compliance with the test specification mentioned above.

The test report comprises the pages 1 to 3.

**TEST LABORATORY**  
appointed as Technical Service Category B by NSAI

Cinisello Balsamo (MI), 12.02.2024

Andrea Buontempo  
Type Approval Engineer

Enrico Elmi  
Technical Responsible

Tel.: +39 02 89929090 – Fax: +39 02 89929200 – e-mail: [info.automotive.it@dekra.com](mailto:info.automotive.it@dekra.com)

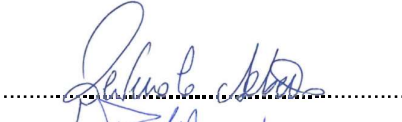



ISP N°054 E  
Membro di MLA EA, MRA ILAC  
Signatory of EA MLA, ILAC MRA

Test Laboratory appointed as Technical Service,  
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Certificate of Appointment N° 94 issued by NSAI

DEKRA Testing and Certification S.r.l.  
Via Fratelli Gracchi, n°27  
c.a.p.20092 - Cinisello Balsamo (MI)  
P.IVA – C.F.: 02894270962  
[www.dekra.it](http://www.dekra.it)

TEST REPORT Nr. R24003801	
ElectroMagnetic Compatibility (EMC)	
Report Reference No. ....	R24003801
Date of issue: .....	22.01.2024
Total number pages: .....	42
Customer name .....	Matromarine Products S.r.l.
Address .....	Via Sereghe, 1 – 16017 Isola del Cantone (GE) – Italy
<b>Test specification:</b>	
Standards .....	Regulation ECE R10-06
Non-standard test method .....	N/A
Test Report Form No. ....	ECE_06DEKRA
Test Report Form(s) Originator ...	DEKRA Testing and Certification S.r.l.
Master TRF .....	2023-11
<b>General disclaimer:</b>	
The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of DEKRA Testing and Certification S.r.l.	
(*) Test item description .....	Toilet equipped with the hydro system silent pump ECE 10/06
(*) Trademark .....	Matromarine Products
(*) Manufacturer .....	Matromarine Products S.r.l.
(*) Model / Type reference .....	Toilet electric silent luxury 12 volt variant 6500003212
(*) Rating(s) .....	12 Vdc
<b>Report</b>	
Tested by (name + signature) .....	A. Bertezolo 
Approved by (name + signature) .....	F. Marena 

(\*) information provided by the customer

**1 Summary**

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<b>2 Reference standard</b>	
Regulation ECE R10-06	Agreement concerning the adoption of uniform technical prescriptions for wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicles and the conditions for reciprocal recognition of approvals granted on the basis of these prescriptions.
<b>3 List of attachments</b>	
Attachment 1: Measurement uncertainty, judgement of compliance and quality manual references Attachment 2: Components list	
<b>4 Deviation(s) from test specification</b>	
None	
<b>5 Testing location</b>	
DEKRA Testing and Certification S.r.l. Via della Fisica, 20 – 36016 Thiene (VI) – Italy	

<i>Revision index</i>	<i>Date</i>	<i>Change history</i>
1.0	22.01.2024	--

<b>Testing and sampling:</b>	
Date of receipt of test item .....	12.01.2024
Testing start date .....	15.01.2024
Testing end date .....	16.01.2024
Sampling procedure .....	Sample used for testing chosen by the customer; DEKRA Testing and Certification S.r.l. cannot be considered responsible for the selection of the sample
Internal identification .....	Adhesive label with the product number P240018
<b>General remarks:</b>	
<p>This report shall not be reproduced, except in full, without the written approval of DEKRA Testing and Certification S.r.l.</p> <p>The test results presented in this report relate only to the object tested.</p> <p>“(see appended table)”: refers to a table appended to the report.</p> <p>Throughout this report a comma is used as the decimal separator.</p> <p>Tests reported in this test report marked by wording: “Test not accredited by ACCREDIA” are not part of the ACCREDIA accreditation of this laboratory.</p>	
<b>Possible test case verdicts:</b>	
Test case does not apply to the test object:	N/A (Not Applicable)
Test object meets the requirement:	P (Pass)
Test object does not meet the requirement:	F (Fail)
Test object was not evaluated for the requirement:	N/E (Not Executed)
<b>Definition of symbols used in this test report:</b>	
<input checked="" type="checkbox"/> Indicates that the listed condition, standard or equipment is applicable for this report. <input type="checkbox"/> Indicates that the listed condition, standard or equipment is not applicable for this report.	

**6 General description of tested item and testing condition(s)**

Description .....	Toilet equipped with the hydro system silent pump ECE 10/06						
Model Number .....	Toilet electric silent luxury 12 volt variant 6500003212						
Serial Number .....	--						
Brand name .....	Matromarine Products						
Test power supply .....		Voltagge and Frequency	Reference poles				
			N	L1	L2	L3	PE
	<input type="checkbox"/>	AC:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	AC:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/>	DC: 12 V				<input type="checkbox"/>	
Mounting position .....	Vehicular equipment						
Immunity related functions .....	ESA with no immunity related function						
Operating during engine start phase .....	No						
Components list .....	Attachment 2						
Operating modes .....	No.	Operating mode of test item	Applied for testing				
			Emission		Immunity		
	1	Standby mode, DUT supplied, waiting for cycle commands	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
2	Cycle mode, "Before use" and "After use" sequence, regulation trimmer set at mid-stroke	<input type="checkbox"/>		<input checked="" type="checkbox"/>			
Declination of responsibility .....	<p>Information relating to the description of the sample, components list, and software/hardware version (if reported) are provided by the customer. DEKRA Testing and Certification S.r.l. cannot be considered responsible for this information, for any other document sent by the customer and for any difference between the software version present in the tested sample and that present in the object intended for final sale.</p> <p>In some cases, the software in the tested sample is in a version dedicated exclusively to the test, and therefore does not represent the software installed in the final version of the product.</p>						

6.1 Photos of the test item



## 7 Verdict summary section

Regulation ECE R10-06				
Clause	Requirement – Test case	Basic standard	Test sequence	Verdict
cl. 6.5 and Annex 7	Radiated broadband electromagnetic emissions from electrical/electronic sub-assemblies	CISPR 25	1	P
cl. 6.6 and Annex 8	Radiated narrowband electromagnetic emissions from electrical/electronic sub-assemblies	CISPR 25	2	P
cl. 6.7 and Annex 10	Emission of transients of electrical/electronic sub-assemblies	ISO 7637-2	3	P
Regulation ECE R10-06				
Clause	Requirement – Test case	Basic standard	Test sequence	Verdict
cl. 6.8 and Annex 9	Immunity of electrical/electronic sub-assemblies to electromagnetic radiation	ISO 11452-2 ISO 11452-4	--	N/A (+)
cl. 6.9 and Annex 10	Immunity to transients of electrical/electronic sub-assemblies	ISO 7637-2	4	P

(+) ESA with no immunity related functions

<b>Normative references</b>	
<b>Reference no.</b>	<b>Description</b>
ECE R10 – 06	Agreement concerning the adoption of uniform technical prescriptions for wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicles and the conditions for reciprocal recognition of approvals granted on the basis of these prescriptions.
CISPR 25:2002 + COR1:2004	Vehicles, boats and internal combustion engines - Radio disturbance characteristics - Limits and methods of measurement for the protection of on-board receivers
ISO 11452-1:2005 + AMD1:2008	Road vehicles — Component test methods for electrical disturbances from narrowband radiated electromagnetic energy — Part 1: General principles and terminology
ISO 11452-2:2004	Road vehicles -- Component test methods for electrical disturbances from narrowband radiated electromagnetic energy -- Part 2: Absorber-lined shielded enclosure
ISO 11452-4:2011	Road vehicles -- Component test methods for electrical disturbances from narrowband radiated electromagnetic energy -- Part 4: Harness excitation methods
ISO 7637-2:2004	Road vehicles -- Electrical disturbances from conduction and coupling -- Part 2: Electrical transient conduction along supply lines only

**8 Test conditions**

**8.1 General**

Environmental reference 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:		
	<b>Temperature</b>	<b>Humidity</b>	<b>Atmospheric pressure</b>
	15 °C – 35 °C	30 % - 60 %	800 hPa – 1060 hPa
	If explicitly required in the basic standard or applied product standard the climatic values are recorded and documented separately in this test report.		
Measurement uncertainties ..... :	Attachment 1		

## 9 Emission

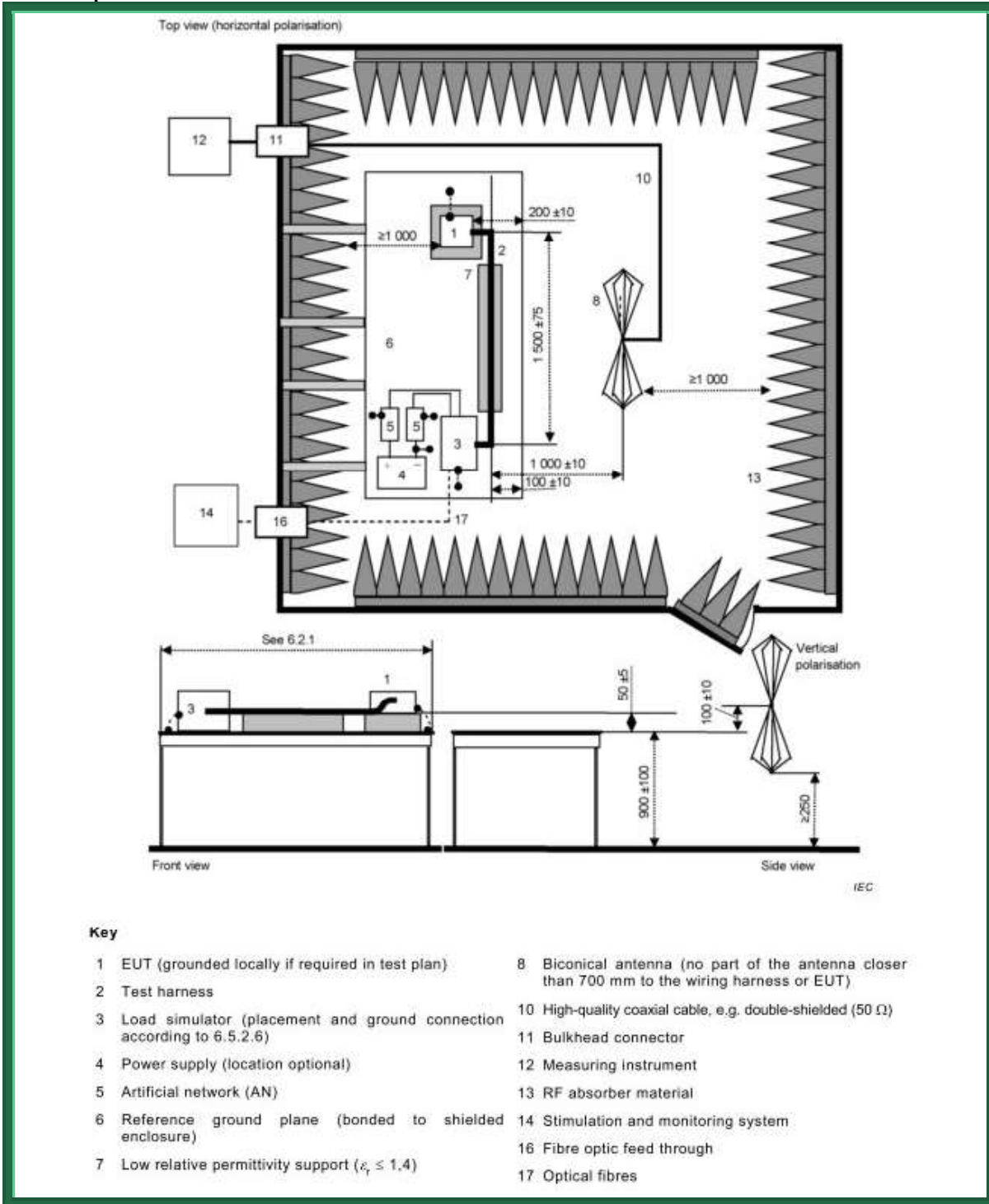
### 9.1 Radiated broadband electromagnetic emissions from electrical/electronic sub-assemblies

Tested by .....	A. Bertezolo
Test date .....	16.01.2024
Test location (stand) .....	Semi-anechoic chamber (CMC A076)
Reference standards.....	Regulation ECE R10-06 cl. 6.5, 6.6 and Annexes 7 and 8 CISPR 25
Test set-up description.....	Equipment on a table of 90 cm height
Supplementary test set-up description.....	--
Test method applied .....	SAC with measurement distance [m]: 1
Supplementary information .....	<input type="checkbox"/> Measurements performed with PK detector and limit (cl. 4.2 of Annex 4 or Annex 7) <input type="checkbox"/> Measurements performed with PK detector, with final QP analysis, and QP limit. In agreement with the manufacturer, QP analysis is performed at least on the 6 highest PK level emission frequencies <input checked="" type="checkbox"/> Measurements performed with QP detector and QP limit <input checked="" type="checkbox"/> Measurements performed with AV detector and limit

#### Acceptance limits

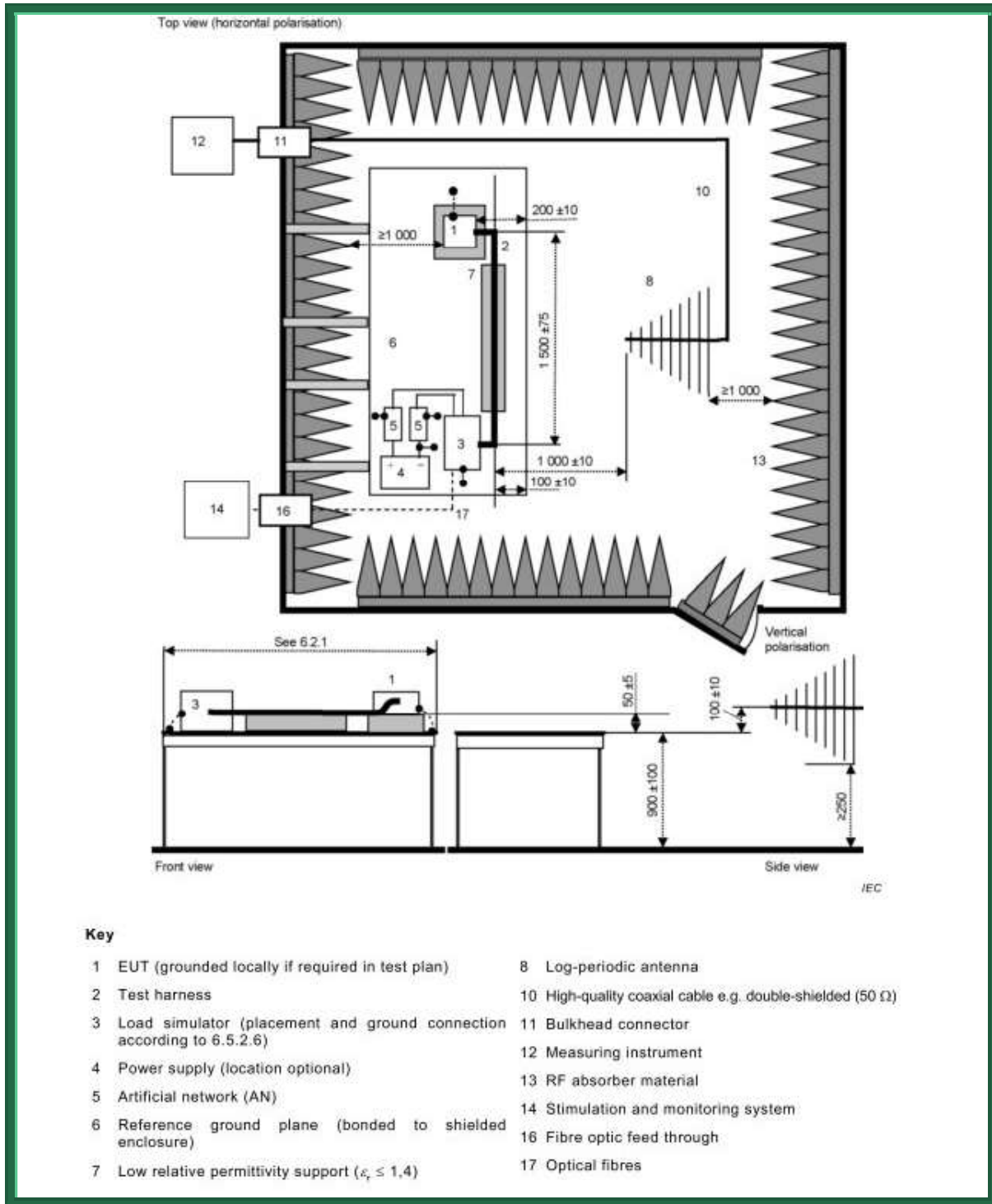
Frequency range (MHz)	Broadband emissions		Narrowband emissions	
	Limits [dB( $\mu$ V/m)]	Detector	Limits [dB( $\mu$ V/m)]	Detector
30 to 75	62 - 25,13log(F/30)	QP – 120 kHz bandwidth	52 - 25,13log(F/30)	AV – 120 kHz bandwidth
75 to 400	52 + 15,13log(F/75)	QP – 120 kHz bandwidth	42 + 15,13log(F/75)	AV – 120 kHz bandwidth
400 to 1000	63	QP – 120 kHz bandwidth	63	AV – 120 kHz bandwidth

Test setup



Test setup PA003\_02

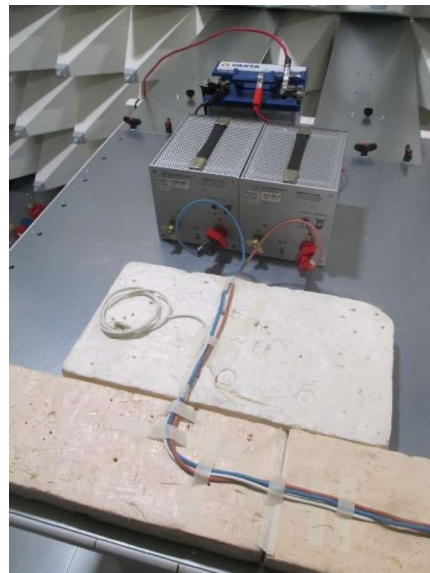
Nr.	Id. Number	Manufacturer	Model	Serial number	Description
12	CMC S227	Rohde & Schwarz	ESR7	101121	EMI Test Receiver
8	CMC S236	Schwarzbeck	BBA 9106 + VHBB 9124	9124-672	Biconical Antenna

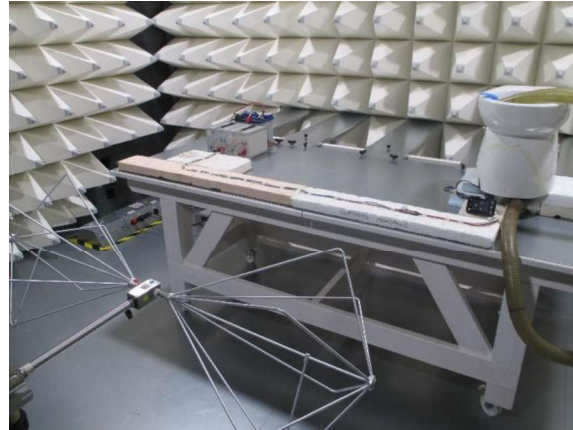


## Test setup PA003\_03

Nr.	Id. Number	Manufacturer	Model	Serial number	Description
12	CMC S227	Rohde & Schwarz	ESR7	101121	EMI Test Receiver
8	CMC S235	Schwarzbeck	VUSLP 9111B	9111B-118	Log-periodic Antenna

Photograph(s) of setup




**Ground noise measurements**

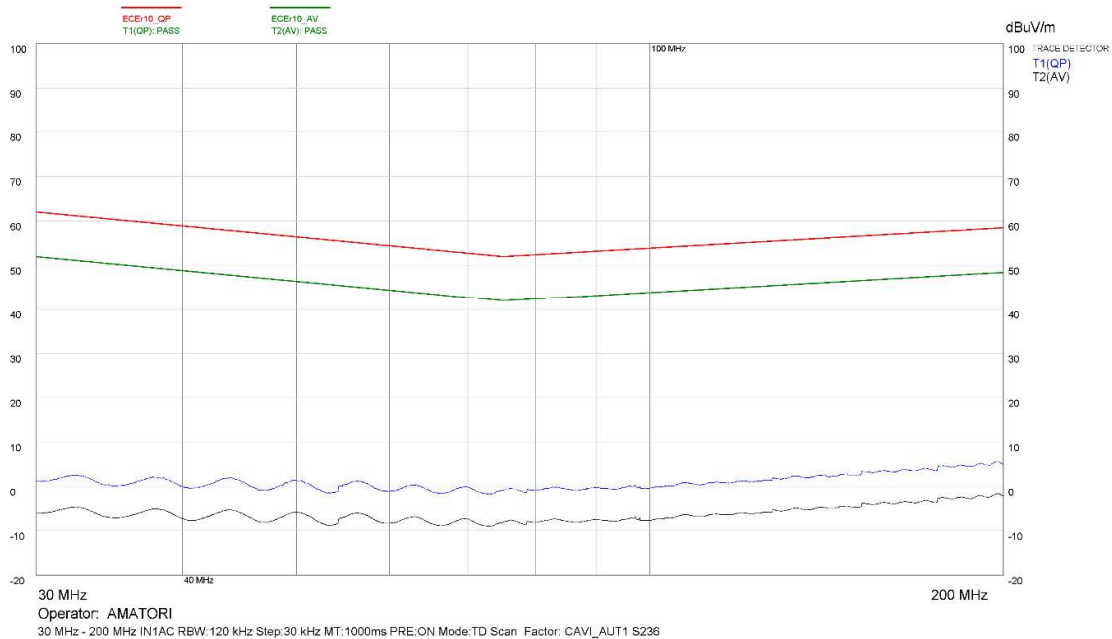
<i>Polarization</i>	<i>Frequency Range (MHz)</i>	<i>Graphs</i>
Worst case	30 – 200	240038_00_001
Worst case	200 – 1000	240038_00_002

**Result**

<i>Operating mode</i>	<i>Polarization</i>	<i>Frequency Range (MHz)</i>	<i>Graphs</i>	<i>Verdict</i>
Standby mode	V	30 – 200	240038_01_001	P
Standby mode	H	30 – 200	240038_01_002	P
Standby mode	V	200 – 1000	240038_01_003	P
Standby mode	H	200 – 1000	240038_01_004	P
Cycle mode	V	30 – 200	240038_01_101	P
Cycle mode	H	30 – 200	240038_01_102	P
Cycle mode	V	200 – 1000	240038_01_103	P
Cycle mode	H	200 – 1000	240038_01_104	P

**Graphs**

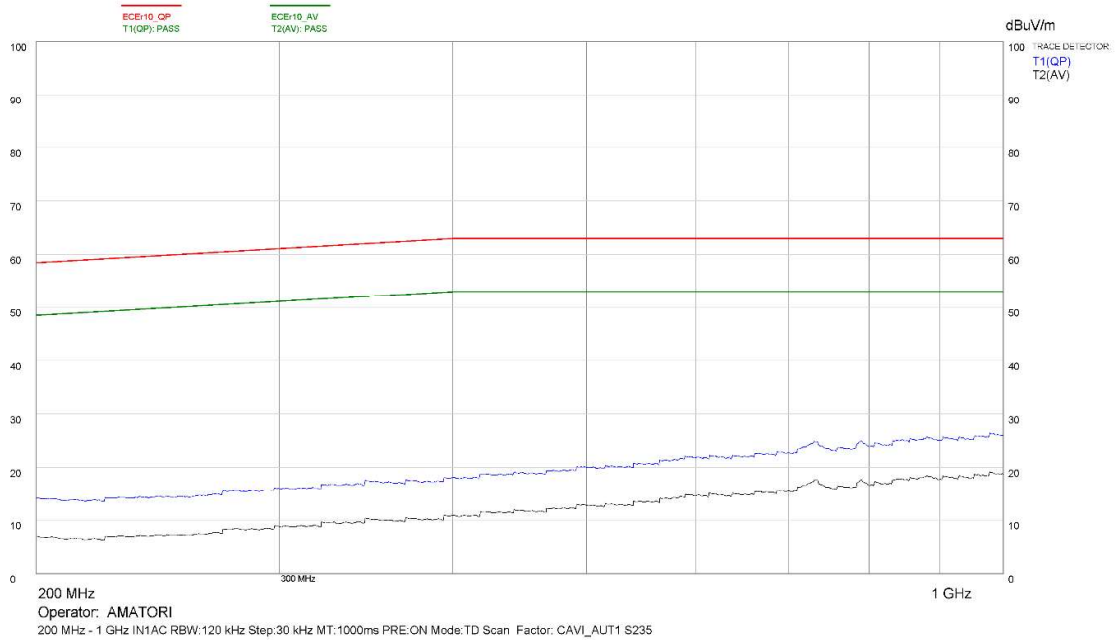
Sample:   
 Test Spec:   
 Graph: 240038\_00\_001   
 Test Mode: **Background noise**   
 Note:   
 Detector: Qp Av - RBW 120 kHz



**Results** **NO EXCEEDING VALUES.**  
 QP min margin = 52.4 dB at 76.17 MHz  
 AV min margin = 49.7 dB at 76.26 MHz

Sample:  
 Test Spec:  
 Graph: 240038\_00\_002

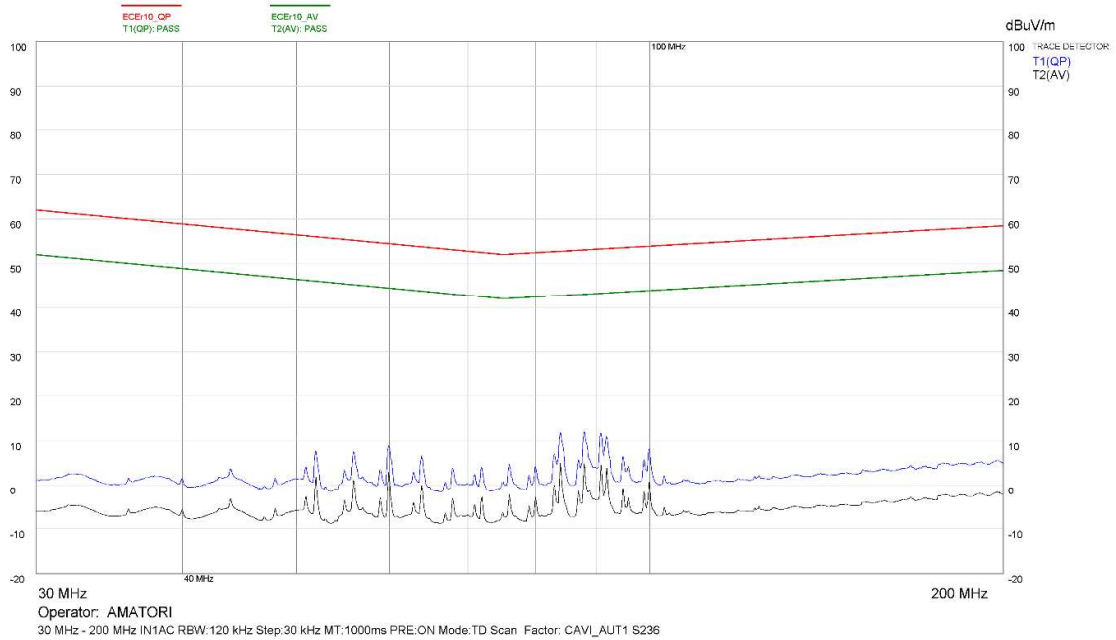
Test Mode: **Background noise**  
 Note:  
 Detector: Qp Av - RBW 120 kHz



**Results** **NO EXCEEDING VALUES.**  
 QP min margin = 36.5 dB at 978.2 MHz  
 AV min margin = 33.7 dB at 977.660032 MHz

Sample:  
 Test Spec: **Vertical**  
 Graph: 240038\_01\_001

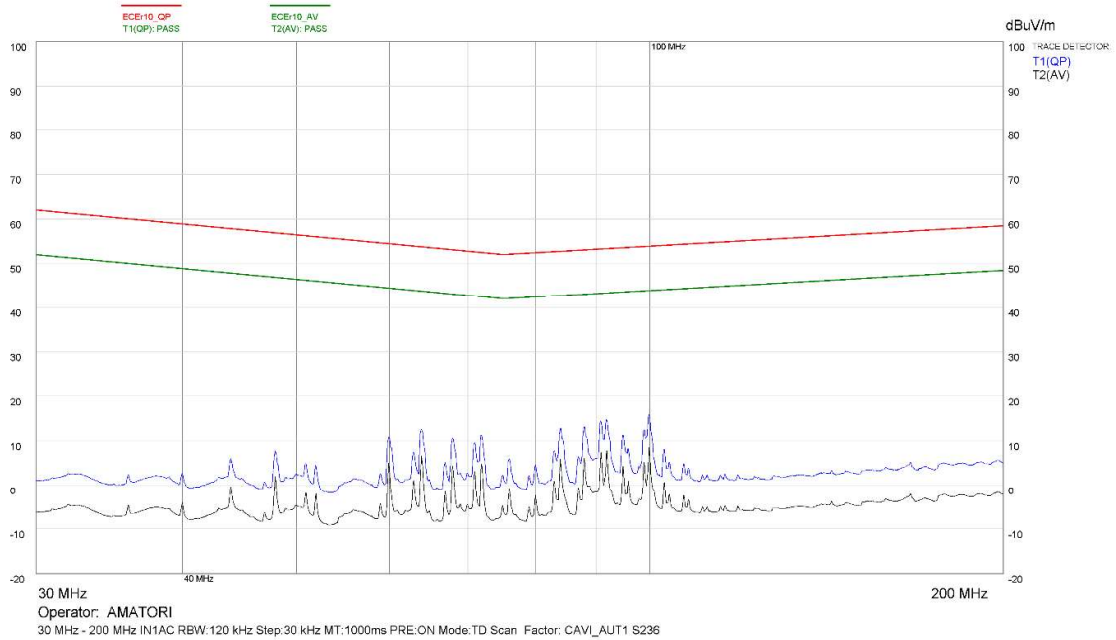
Test Mode: **STANDBY**  
 Note:  
 Detector: Qp Av - RBW 120 kHz



**Results** **NO EXCEEDING VALUES.**  
 QP min margin = 40.9 dB at 83.91 MHz  
 AV min margin = 37.7 dB at 83.91 MHz

Sample:  
 Test Spec: **Horizontal**  
 Graph: 240038\_01\_002

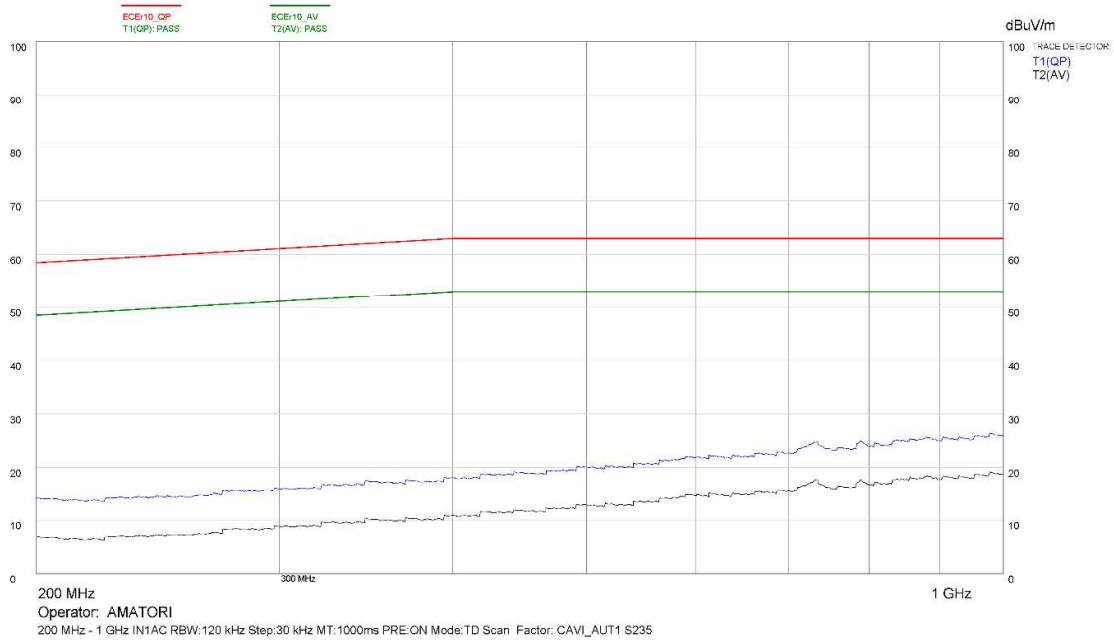
Test Mode: **STANDBY**  
 Note:  
 Detector: Qp Av - RBW 120 kHz



**Results** **NO EXCEEDING VALUES.**  
 QP min margin = 38.0 dB at 99.78 MHz  
 AV min margin = 35.3 dB at 99.84 MHz

Sample:  
Test Spec: **Vertical**  
Graph: 240038\_01\_003

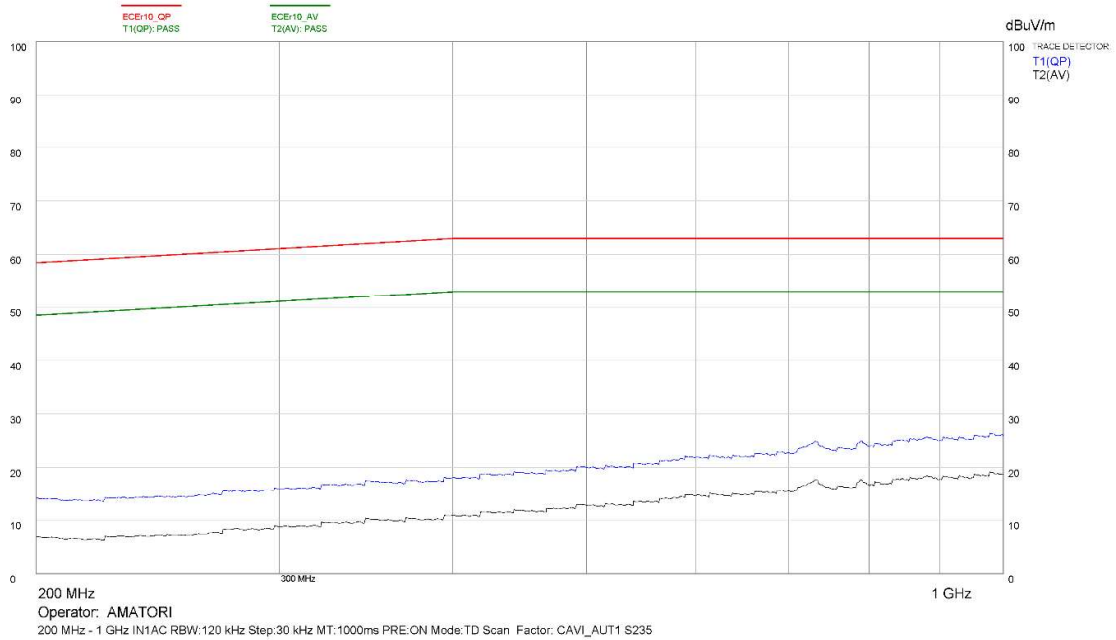
Test Mode: **STANDBY**  
Note:  
Detector: Qp Av - RBW 120 kHz



**Results** **NO EXCEEDING VALUES.**  
QP min margin = 36.5 dB at 977.630016 MHz  
AV min margin = 33.8 dB at 977.630016 MHz

Sample:  
 Test Spec: **Horizontal**  
 Graph: 240038\_01\_004

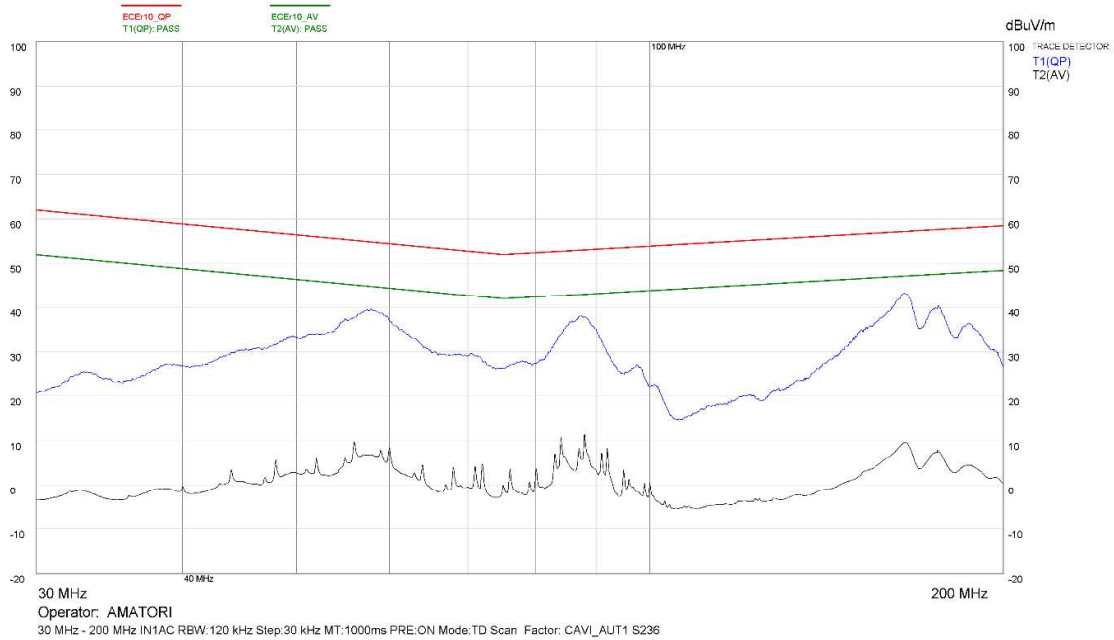
Test Mode: **STANDBY**  
 Note:  
 Detector: Qp Av - RBW 120 kHz



**Results** **NO EXCEEDING VALUES.**  
 QP min margin = 36.5 dB at 978.289984 MHz  
 AV min margin = 33.8 dB at 977.72 MHz

Sample:  
Test Spec: **Vertical**  
Graph: 240038\_01\_101

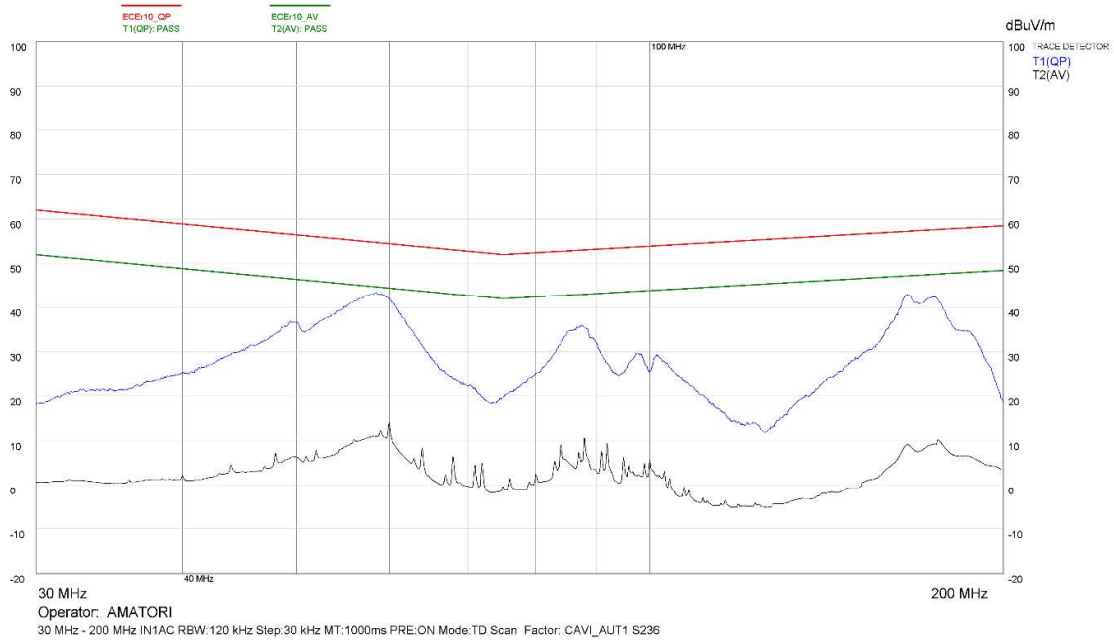
Test Mode: **CICLO**  
Note:  
Detector: Qp Av - RBW 120 kHz



**Results** **NO EXCEEDING VALUES.**  
QP min margin = 13.8 dB at 164.64 MHz  
AV min margin = 31.6 dB at 87.99 MHz

Sample:  
Test Spec: **Horizontal**  
Graph: 240038\_01\_102

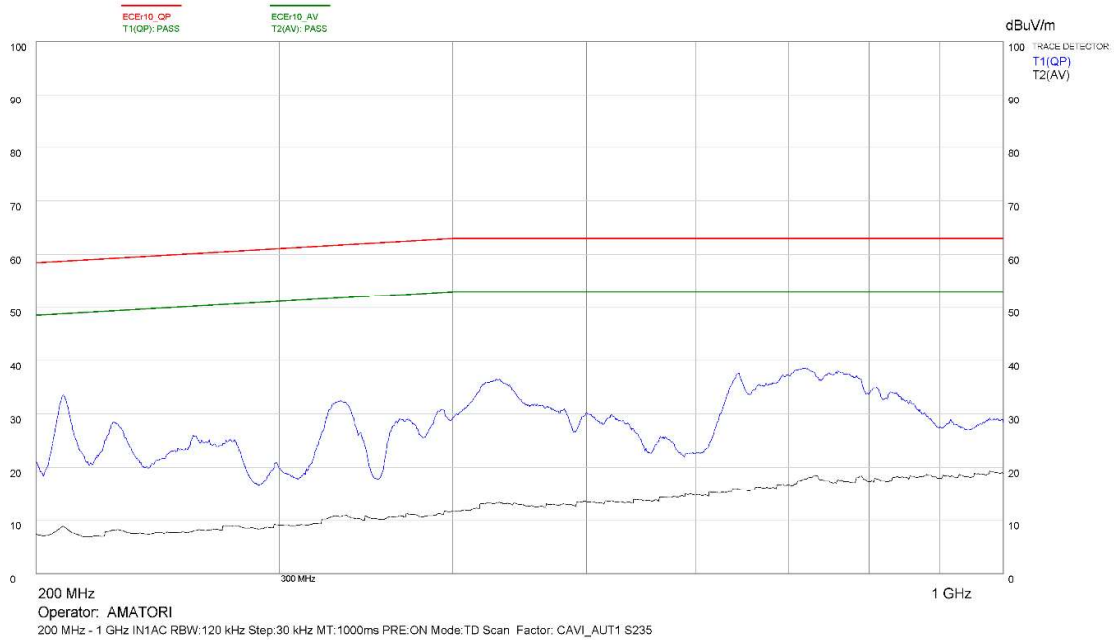
Test Mode: **CICLO**  
Note:  
Detector: Qp Av - RBW 120 kHz



**Results** **NO EXCEEDING VALUES.**  
QP min margin = 11.3 dB at 58.44 MHz  
AV min margin = 30.4 dB at 59.97 MHz

Sample:  
Test Spec: **Vertical**  
Graph: 240038\_01\_103

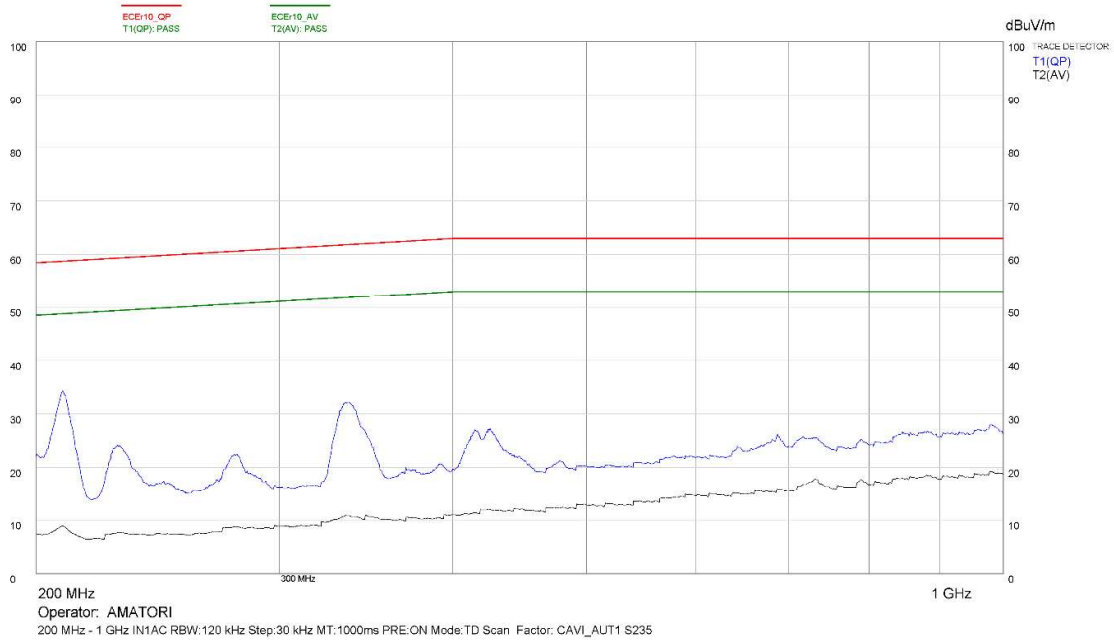
Test Mode: **CICLO**  
Note:  
Detector: Qp Av - RBW 120 kHz



**Results** **NO EXCEEDING VALUES.**  
QP min margin = 24.4 dB at 719.6 MHz  
AV min margin = 33.6 dB at 977.809984 MHz

Sample:  
 Test Spec: **Horizontal**  
 Graph: 240038\_01\_104

Test Mode: **CICLO**  
 Note:  
 Detector: Qp Av - RBW 120 kHz



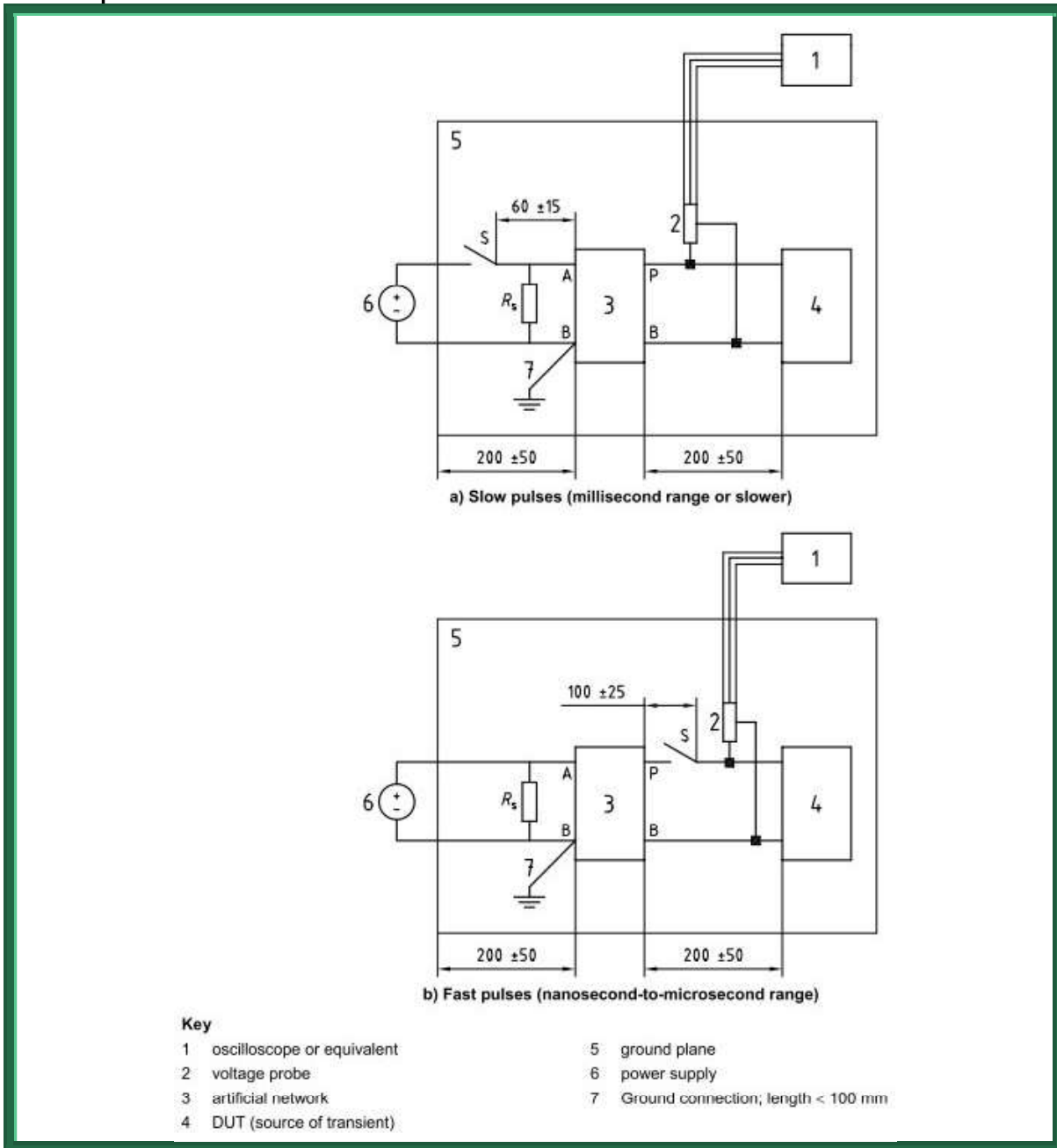
**Results** **NO EXCEEDING VALUES.**  
 QP min margin = 24.4 dB at 209.03 MHz  
 AV min margin = 33.6 dB at 977.630016 MHz

**9.2 Emission of transients of electrical/electronic sub-assemblies**

Tested by .....	A. Bertezolo	
Test date .....	16.01.2024	
Test location (stand) .....	Laboratory	
Reference standards.....	Regulation ECE R10-06 cl. 6.7 and Annex 10 ISO 7637-2	
Test set-up description.....	Equipment on a ground plane	
Supply voltage.....	<input checked="" type="checkbox"/>	12 V systems
	<input type="checkbox"/>	24 V systems
Supplementary information .....	--	

**Acceptance limits**

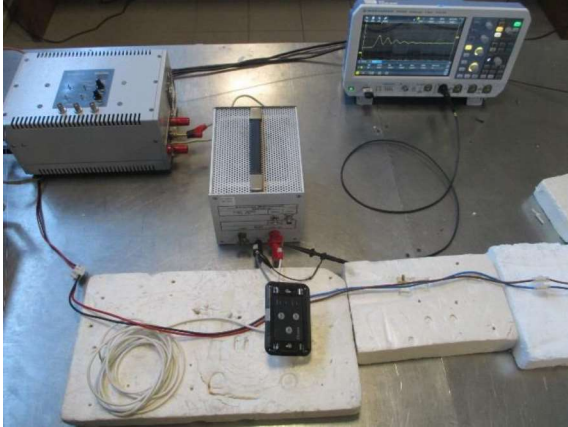
<i>Polarity of pulse amplitude</i>	<i>Maximum allowed pulse amplitude for</i>	
	<i>Vehicles with 12 V systems</i>	<i>Vehicles with 24 V systems</i>
Positive	+75 V	+150 V
Negative	-100 V	-450 V

**Test setup**

**Test setup PA005\_01**

Nr.	Id. Number	Manufacturer	Model	Serial number	Description
1+2	CMC S156	Yokogawa	DL9040	91F643771	Digital oscilloscope
3	CMC S205	Schwarzbeck	NNBM 8124	65	LISN 5 $\mu$ H
S	CMC S196	EM TEST	BS 200N	V100510506	Electronic switch
3	CMC S094	Schwarzbeck	NNBM 8126-A	8126A161	LISN 5 $\mu$ H
3	CMC S249	Schwarzbeck	NNBM 8124	685	LISN 5 $\mu$ H
3	CMC S340	Schwarzbeck	NNBM 8124 200A	8124-200 00629	LISN 5 $\mu$ H
3	CMC S341	Schwarzbeck	NNBM 8124 200A	8124-200 00630	LISN 5 $\mu$ H

**Photograph(s) of setup**

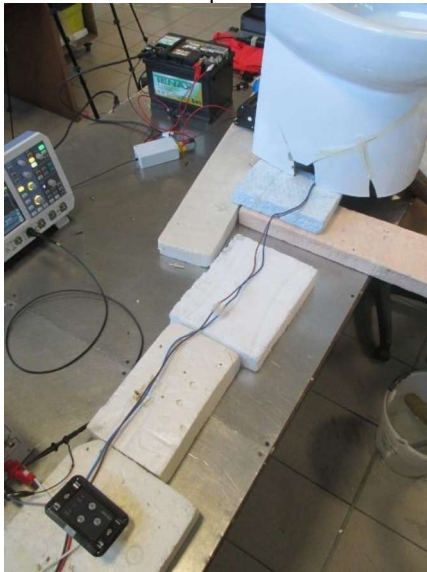
Slow pulses



Slow pulses



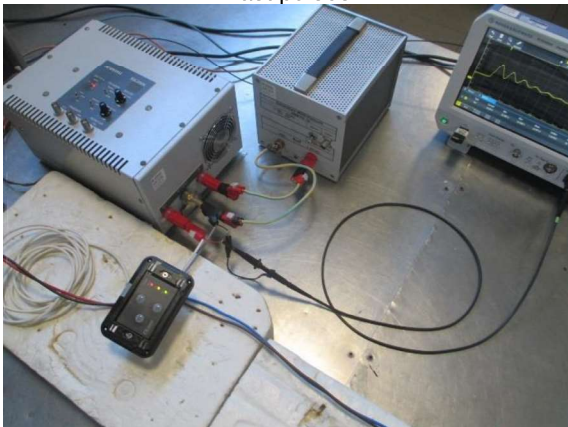
Fast pulses



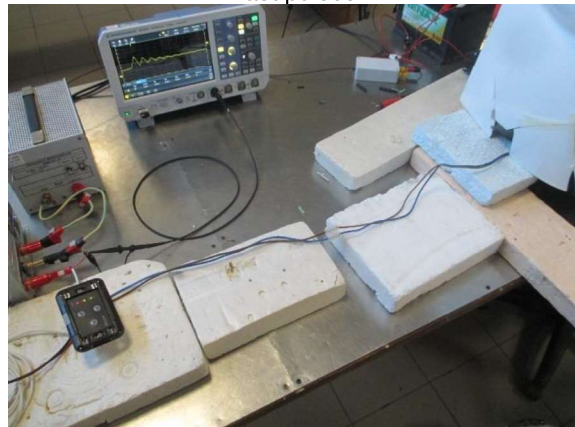
Fast pulses



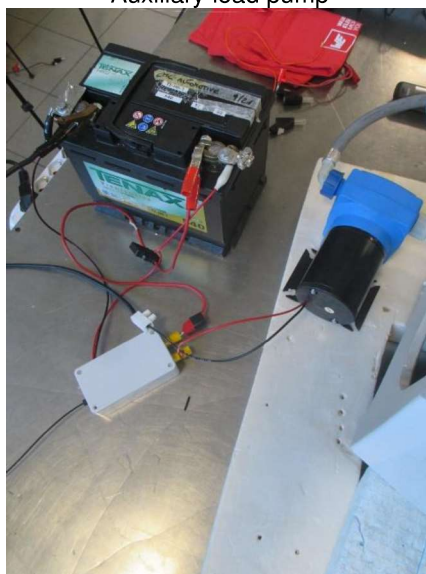
Fast pulses



Fast pulses



Auxiliary load pump

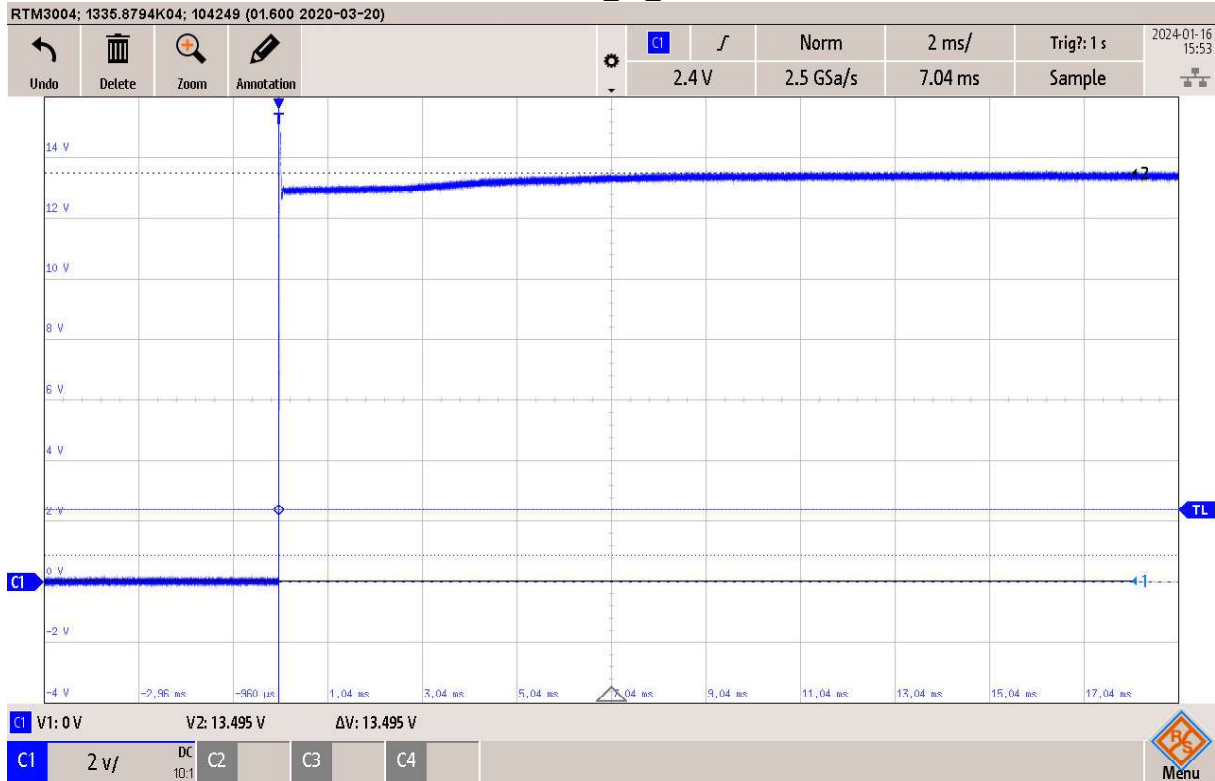


**Result**

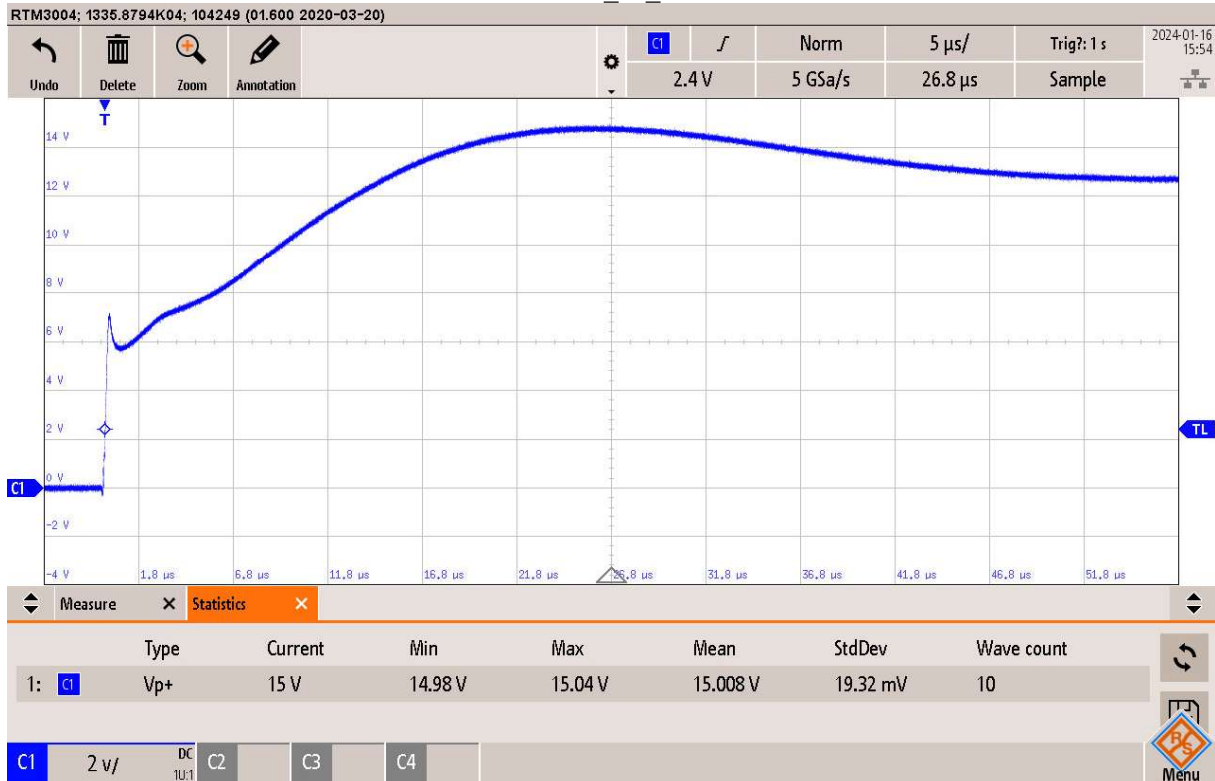
<i>Operating mode</i>	<i>Pulse setup</i>	<i>Measured on</i>	<i>Vmin (V)</i>	<i>Vmax (V)</i>	<i>Graphs</i>	<i>Verdict</i>
Standby mode	Fast	OFF -> ON	--	1,60	240038_01_005 240038_01_006	P
Standby mode	Fast	ON -> OFF	--	--	240038_01_007 240038_01_008	P
Cycle mode	Fast	Switching of connected actuators	--	12,60	240038_01_009 240038_01_010	P
Standby mode	Slow	OFF -> ON	--	1,50	240038_01_105 240038_01_106	P
Standby mode	Slow	ON -> OFF	--	--	240038_01_107 240038_01_108	P
Cycle mode	Slow	Switching of connected actuators	--	12,70	240038_01_109 240038_01_110	P

Graphs

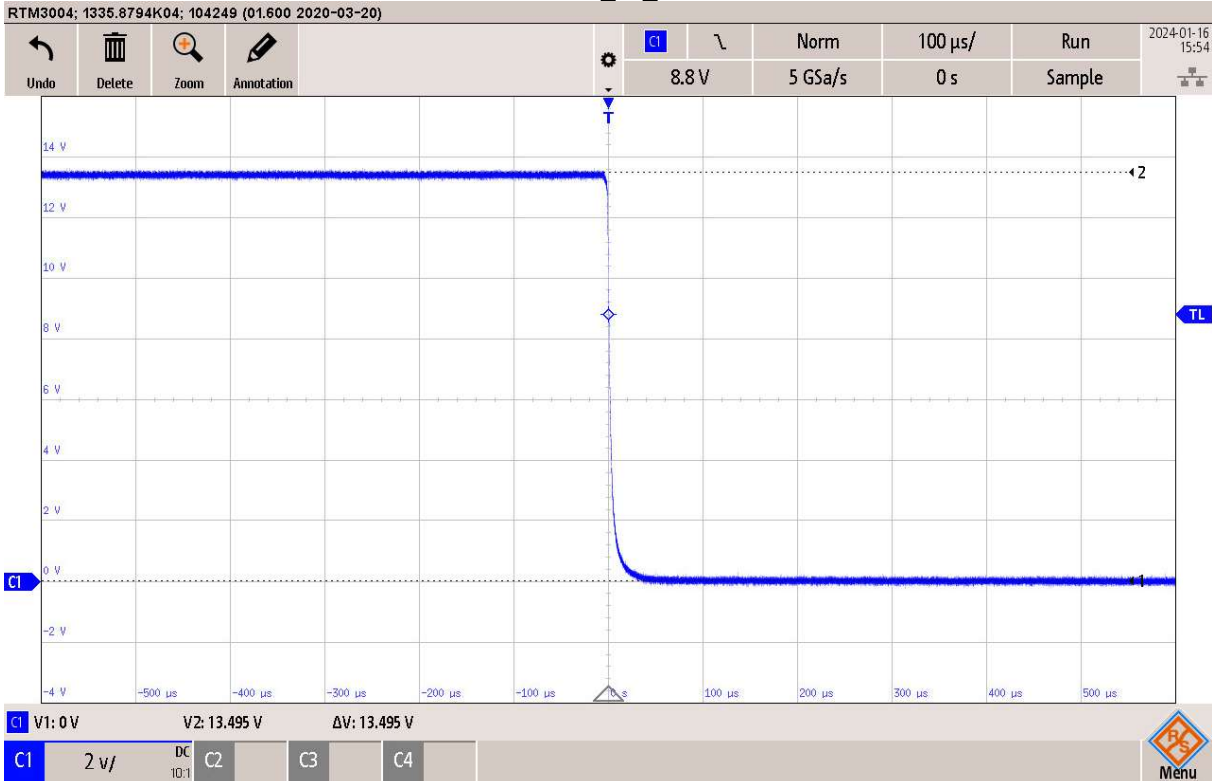
240038\_01\_005



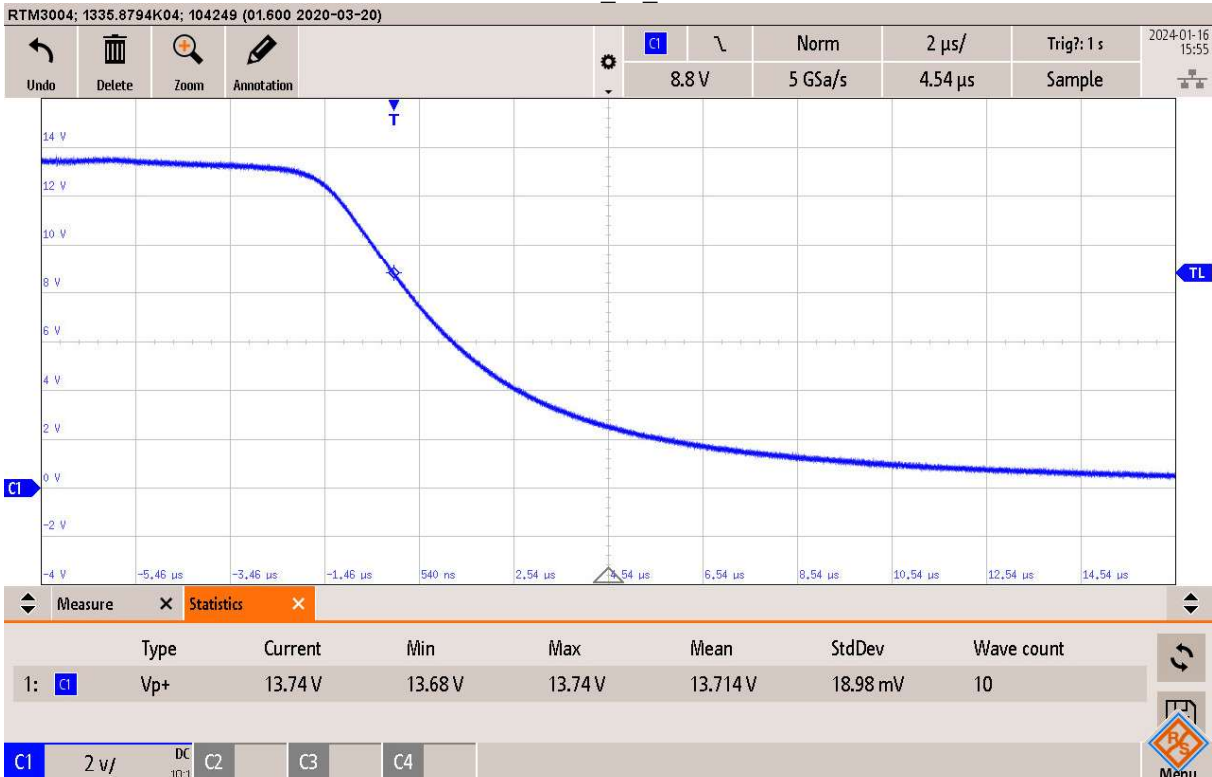
240038\_01\_006



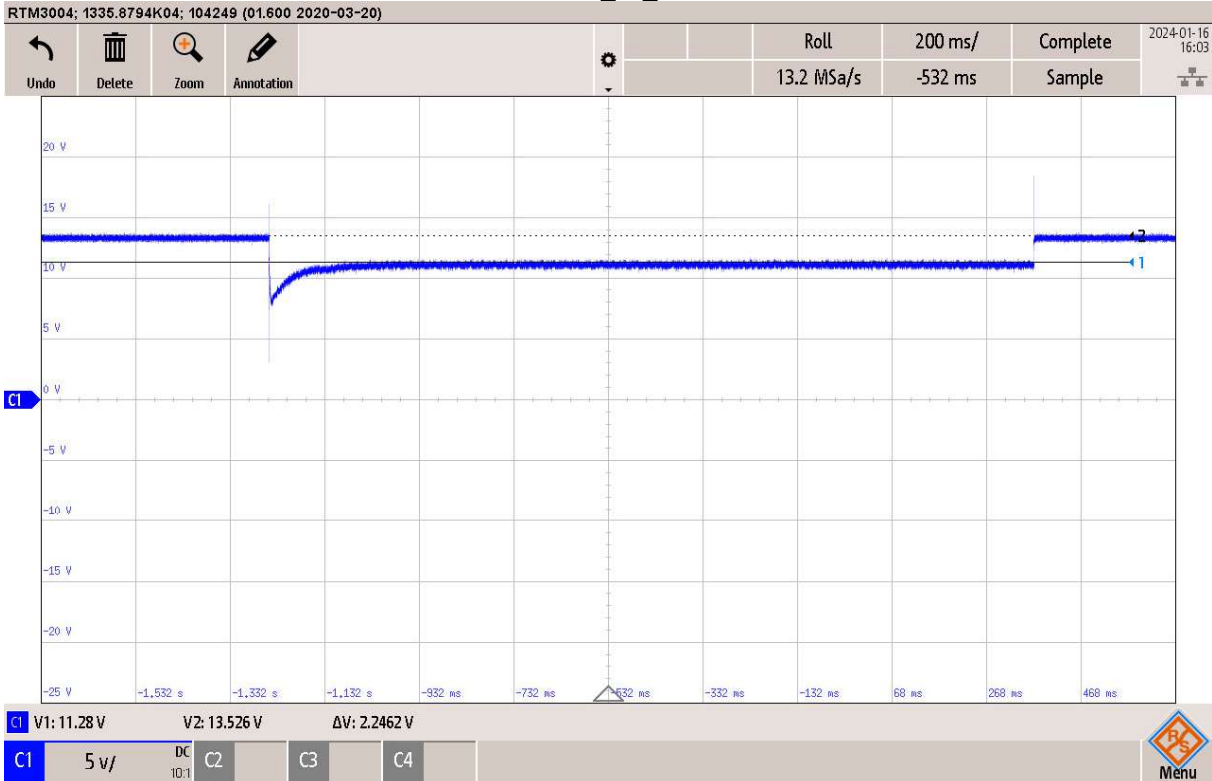
240038\_01\_007



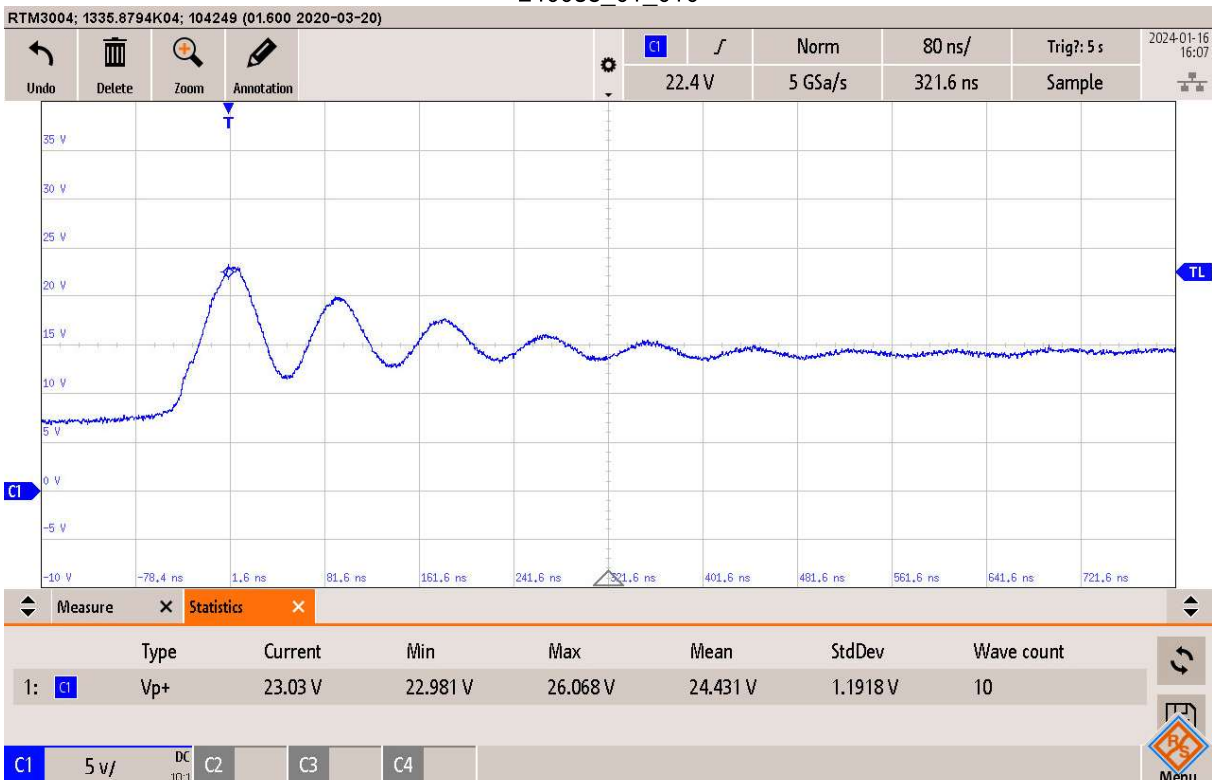
240038\_01\_008



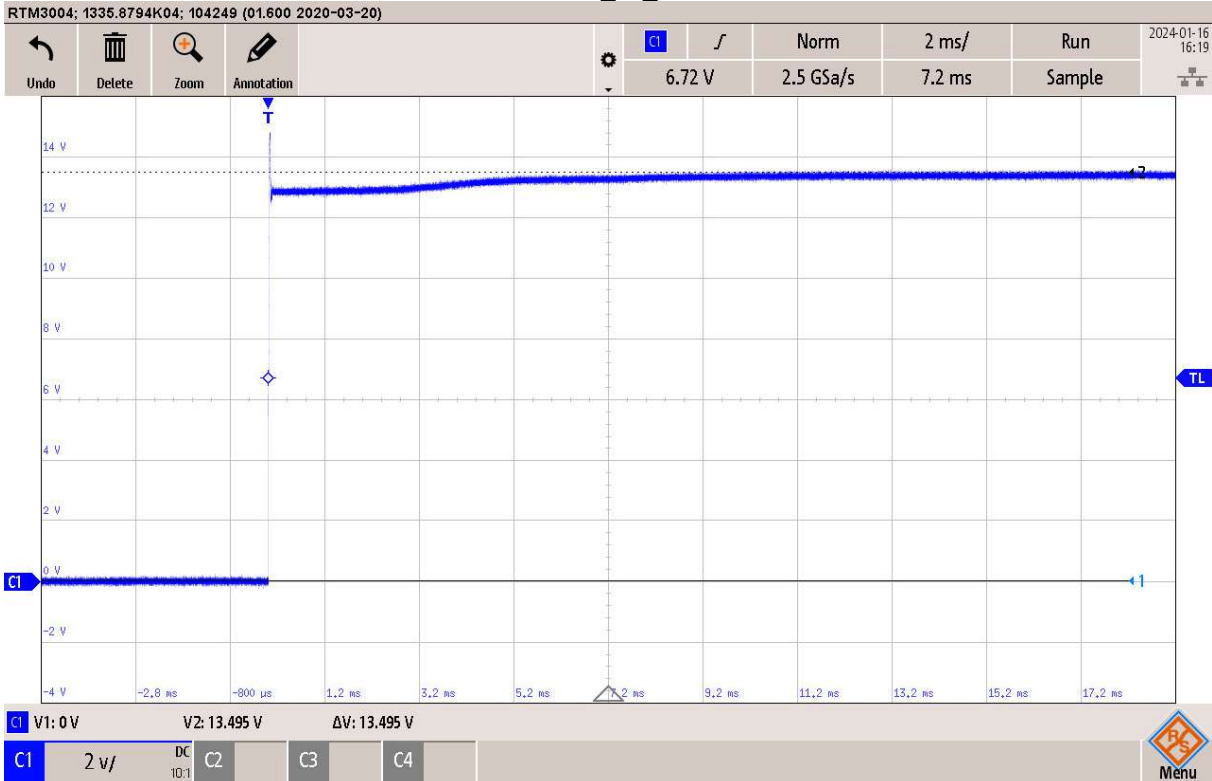
240038\_01\_009



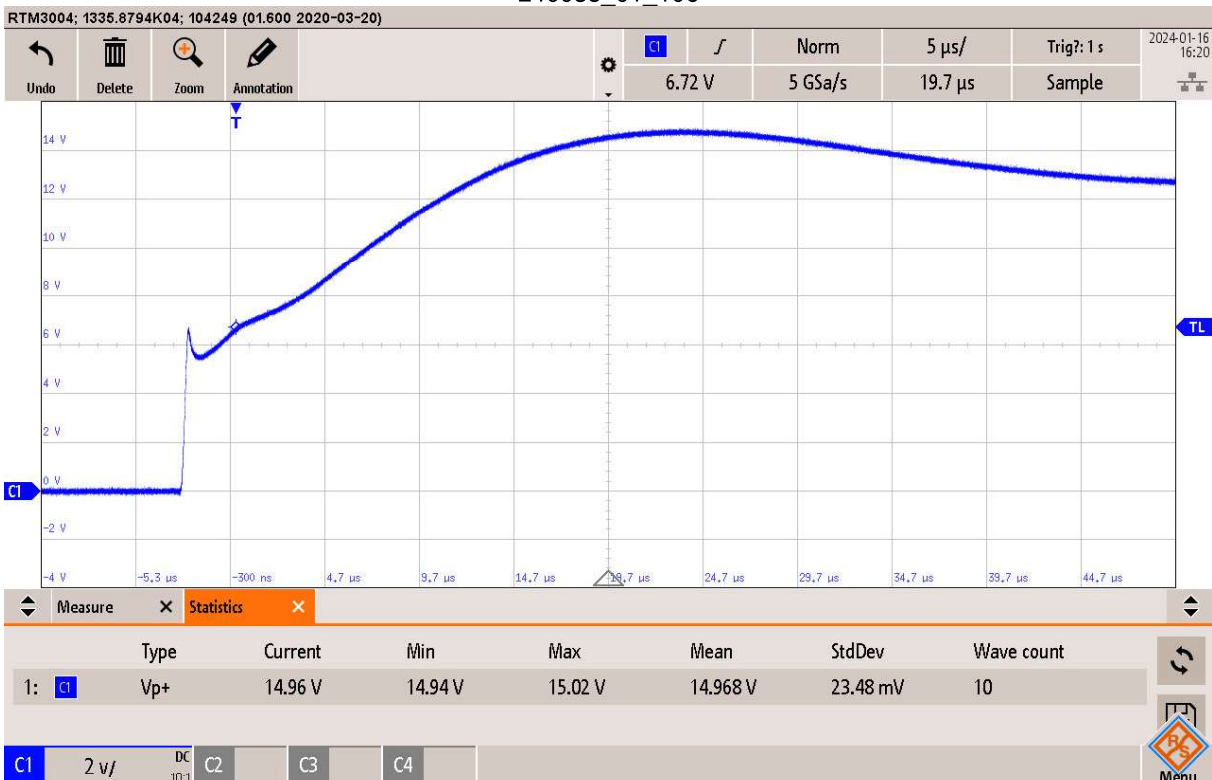
240038\_01\_010



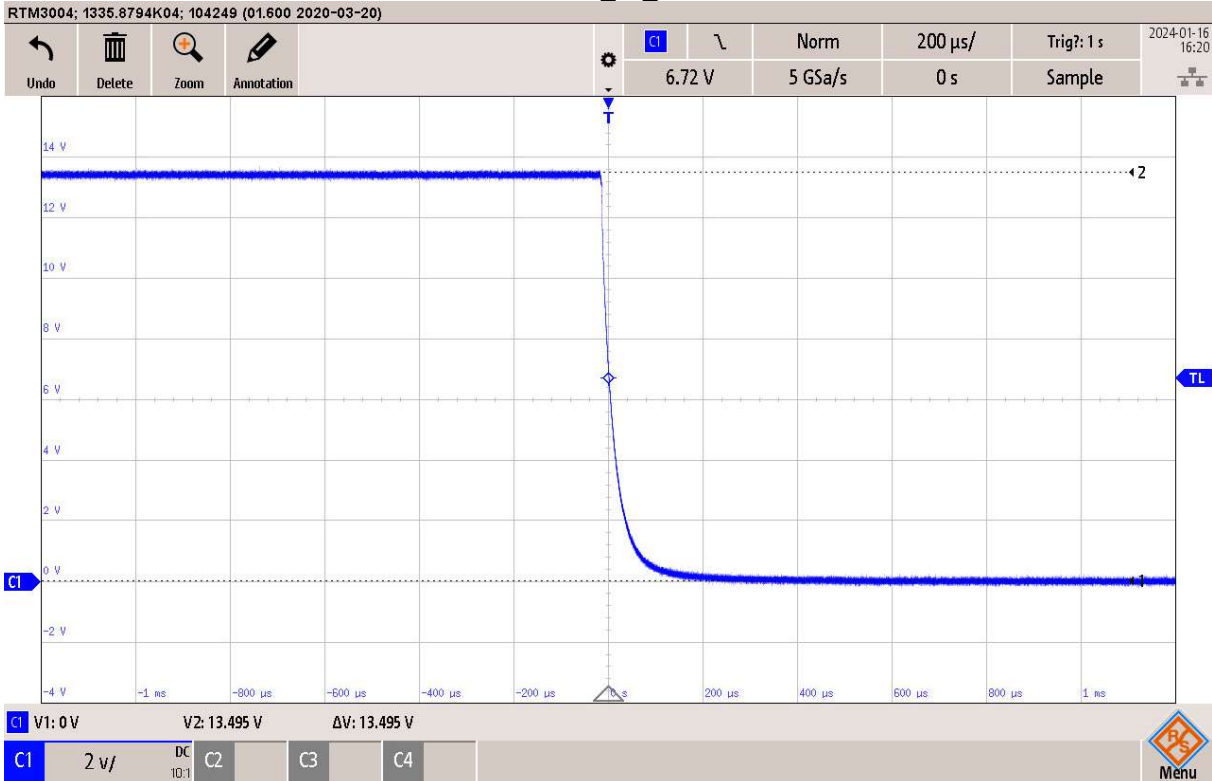
240038\_01\_105



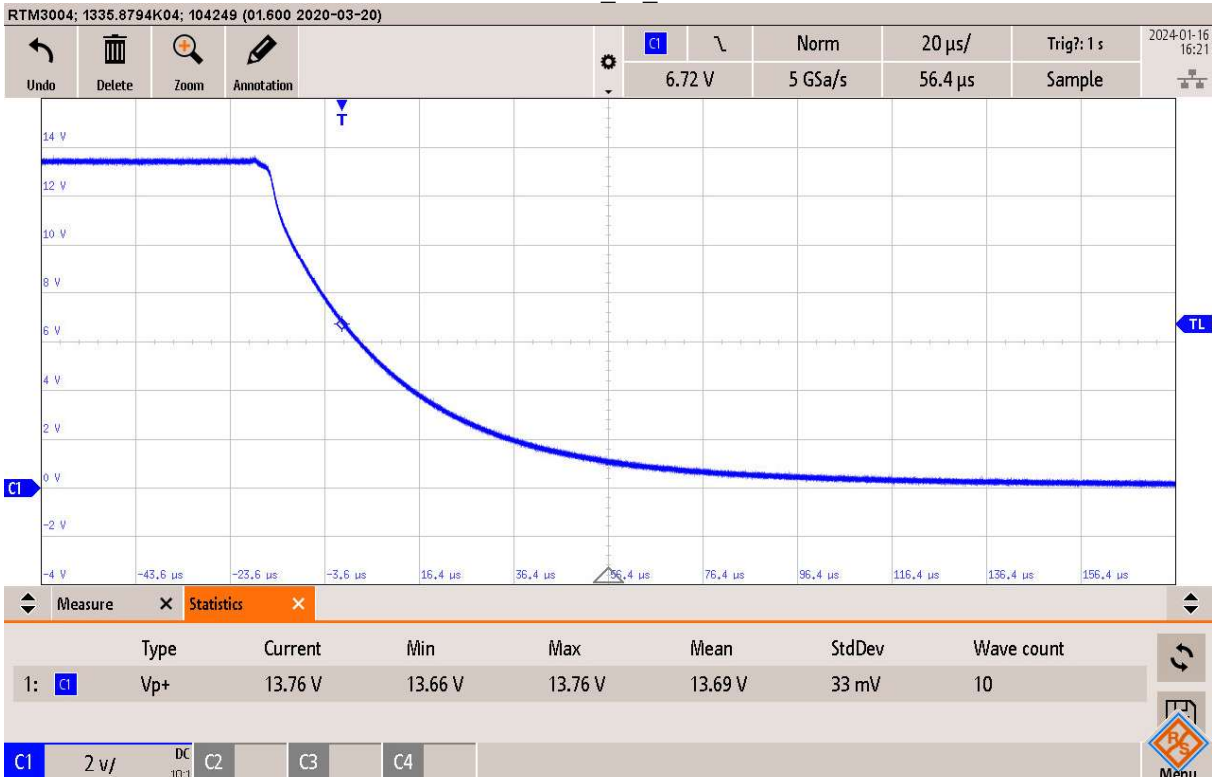
240038\_01\_106



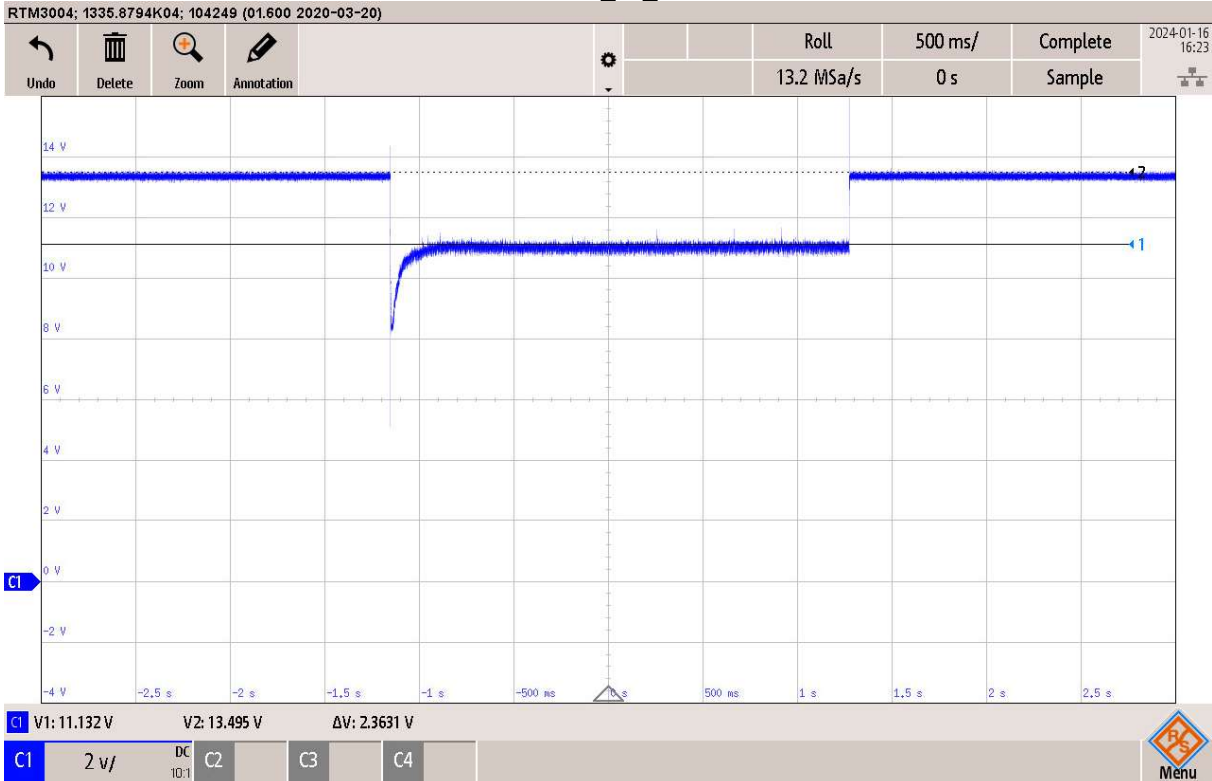
240038\_01\_107



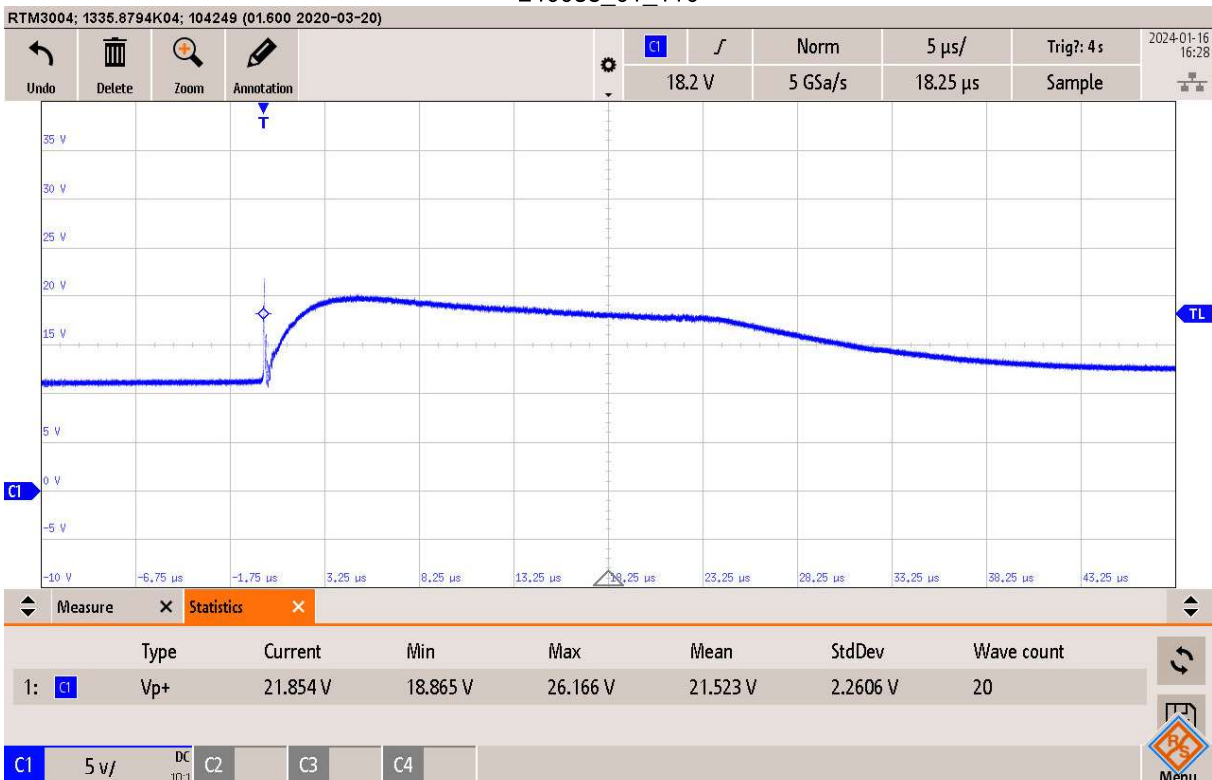
240038\_01\_108



240038\_01\_109



240038\_01\_110



**10 Immunity**

**10.1 General information**

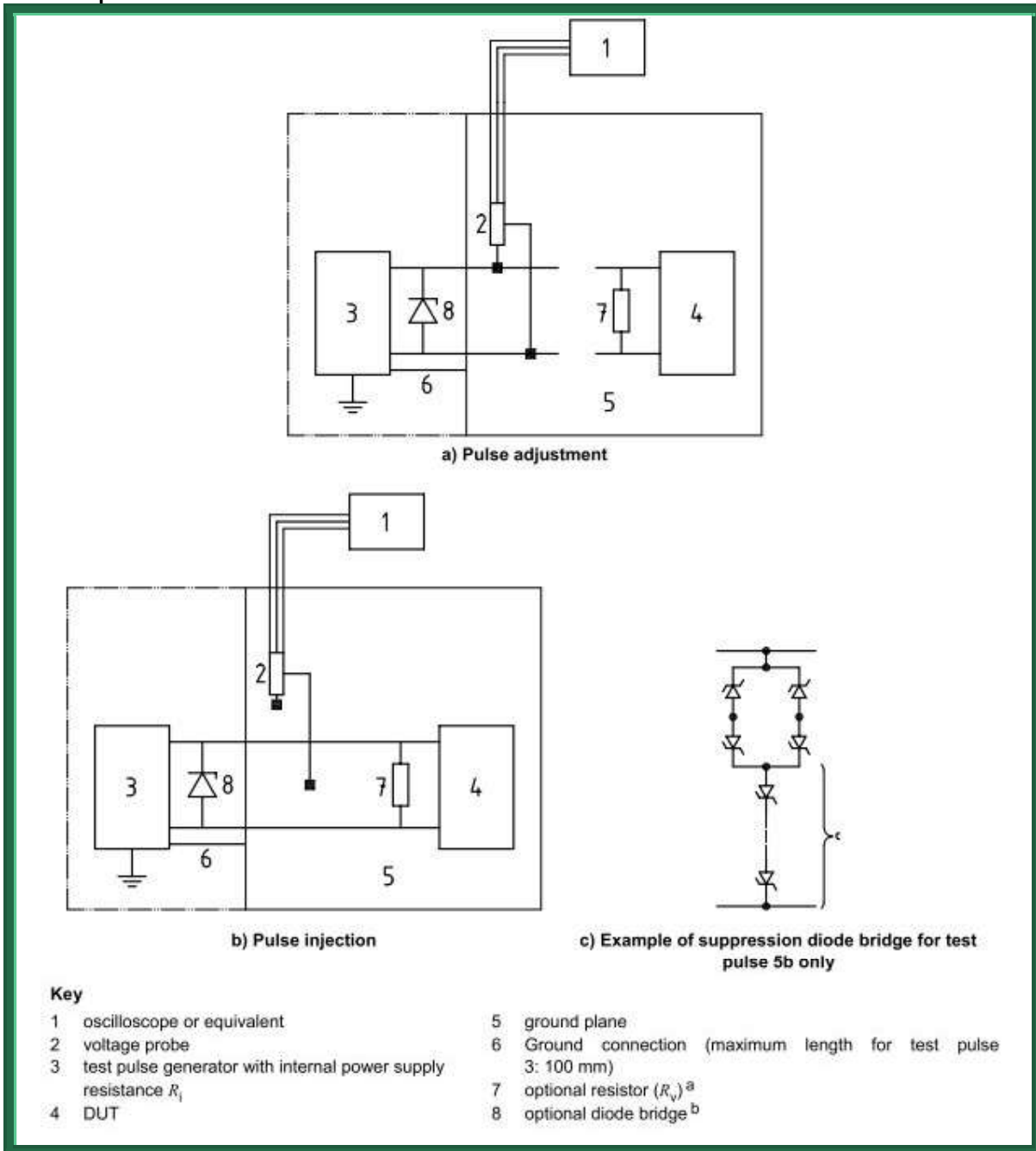
Performance criteria as defined by the standard	
Criterion	Description from standard
<b>Criterion A</b>	All functions of a devices/system perform as designed during and after exposure to disturbance
<b>Criterion B</b>	All functions of a devices/system perform as designed during exposure. However, one or more of them can go beyond specified tolerance. All functions return automatically to within normal limits after exposure is removed. Memory functions shall remain class A.
<b>Criterion C</b>	One or more functions of a devices/system do not perform as designed exposure but return automatically to normal operation after exposure is removed.
<b>Criterion D</b>	One or more functions of a devices/system do not perform as designed during exposure and do not return to normal operation until exposure is removed and the device/system is reset by simple "operator/use" action.
<b>Criterion E</b>	One or more functions of a devices/system do not perform as designed during and after exposure and cannot be return to proper operation without repairing or replacing the devices/system.

The ESA representative of its type shall be considered as complying with immunity requirements if, during the tests performed in accordance with Annex 9, there shall be no degradation of performance of "immunity related functions.

Manufacturer defined performance criteria .....	Control of correct enabling of auxiliary load pump during the "Before use" phase (start of blinking of LED ON). Control of correct enabling of auxiliary load pump and correct 2 enabling of discharging pump during the "After use" phase (stop of blinking of LED ON). Control of keypad indications
---	--

**10.2 Immunity to transients of electrical/electronic sub-assemblies**

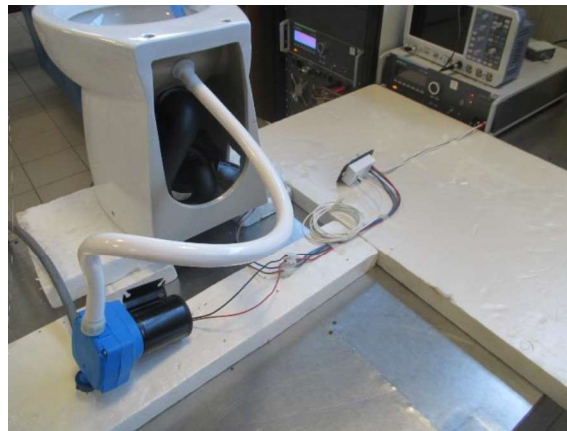
Tested by .....		A. Bertezolo			
Test date .....		15.01.2024			
Test location (stand) .....		Laboratory			
Reference standards.....		Regulation ECE R10-06 cl. 6.9 and Annex 10 ISO 7637-2			
Measurement uncertainty .....		See attachment 1			
Internal procedure .....		PM001			
<i>Pulse</i>	<i>Level for 12 V system (V)</i>	<i>Level for 24 V system (V)</i>	<i>Min. number of pulses or test time</i>	<i>Functional status for</i>	
				<i>Related to immunity related functions</i>	<i>Not related to immunity related functions</i>
1	-75	-450	5000 pulses	C	D
2a	+37	+37	5000 pulses	B	D
2b	+10	+20	10 pulses	C	D
3a	-112	-150	1 h	A	D
3b	+75	+150	1 h	A	D
4	-6	-12	> 1 pulse	B (for ESA which shall be operational during engine start phases) C (for other ESA)	D

**Test setup**


Test setup PA101\_01

Nr.	Id. Number	Manufacturer	Model	Serial number	Description
1+2	CMC S214	EM TEST	VDS200N10	V1150111222	Voltage drop simulator
3	CMC S197	EM TEST	UCS 200N	V0825103901	Pulse generator

**Photograph(s) of setup**



**Results**

<i>Operating mode</i>	<i>Pulse</i>	<i>Level (V)</i>	<i>Min. number of pulses or test time</i>	<i>Criterion</i>	<i>Result</i>	<i>Verdict</i>
Cycle mode	1	-75	5000 pulses	D	C*	P
Cycle mode	2a	+37	5000 pulses	D	A	P
Cycle mode	2b	+10	10 pulses	D	C*	P
Cycle mode	3a	-112	1 h	D	A	P
Cycle mode	3b	+75	1 h	D	A	P
Cycle mode	4	-6	10 pulses	D	B	P

C\*: if the cycle is in progress it is interrupted. There is no obvious change in the status of the keypad LEDs. At the end of the entire test, it responds correctly to a new command by correctly executing the cycle.  
 B\*: no interruption of the cycle in progress, but reduction of the flow rates of both the auxiliary loading pump and the drain pump.

**Attachment 1**
**Measurement uncertainty**

<i>Test</i>	<i>Test Setup</i>	<i>Expanded uncertainty</i>	<i>Note</i>
Conducted Emission CISPR 25 LISN 5uH 0.15 -108.0 MHz	PA001_01	2,7 dB	1
Conducted Emission CISPR 25 Current Probe 0.15-108 MHz	PA002_01	2,7 dB	1
Radiated Emission CISPR 25 Monopole 0.15-30 MHz	PA003_01	4,1 dB	1
Radiated Emission CISPR 25 Bicon. Ant. 30-300 MHz	PA003_02	4,6 dB	1
Radiated Emission CISPR 25 LogP. Ant. 300-1000 MHz	PA003_03	4,6 dB	1
Radiated Emission CISPR 25 LogP. 1-6 GHz	PA003_05	4,0 dB	1
Radiated Emission CISPR 12 Bicon. Ant. 30-300 MHz	PA004_01	4,6 dB	1
Radiated Emission CISPR 12 LogP. Ant. 300-1000 MHz	PA004_02	4,5 dB	1
Radiated Emission CISPR 12 LogP. Ant. 30-1000 MHz	PA004_03	4,0 dB	2
Conducted transient emission	PA005_01	2,0 %	1
Radiated Immunity 200 MHz - 6 GHz	PA104_XX PA109_XX	2,25 dB    29,5 V/m a 100V/m	1
Radiated Immunity Vehicle 20 MHz - 2 GHz	PA105_XX	2,25 dB    8,9 V/m a 30V/m	1
Bulk current injection 1 - 400 MHz	PA106_XX	0,61 dB    4,4 mA a 60mA	1
Pulse immunity	PA101_01		2
Transient immunity signal lines	PA102_01		2
Electric tests	PA103_01		2
Electrostatic discharge immunity test	PA107_01		2

Rev\_23\_01 date 20/03/2023

**Note 1:**

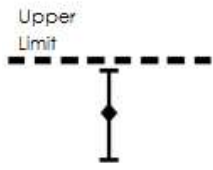
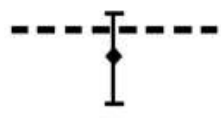
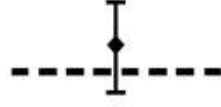
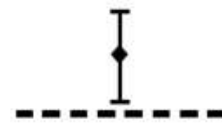
The expanded uncertainty reported according to the document EA-4-02 is based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of  $p = 95\%$

**Note 2:**

It has been demonstrated that the used test equipment meets the specified requirements in the standard with at least a 95% confidence, covering factor  $k=2$

### Attachment 1

#### Judgement of compliance

Case 1	Case 2	Case 3	Case 4
 <p>The sample complies with the requirements.</p> <p>The measurement results is within the specification limit when the measurement uncertainty is taken into account.</p>	 <p>The sample complies with the requirements.</p> <p>It is not possible to state compliance using a 95% coverage probability for the expanded uncertainty although the measurement result is below the limit.</p>	 <p>The sample does not comply with the requirements.</p> <p>It is not possible to state compliance using a 95% coverage probability for the expanded uncertainty also the measurement result is upper the limit.</p>	 <p>The sample does not comply with the requirements.</p> <p>The measurement results is outside the specification limit when the measurement uncertainty is taken into account.</p>

In agreement with ILAC-G8:09/2019 cl.4.2.1 Guidelines on Decision Rules and Statements of Conformity

#### Quality manual references – Internal procedure

Internal Procedure PM001 rev. 4.0 (Quality Manual) .....	Measure procedure
Internal Procedure INC_M rev. 10.0 (Quality Manual) .....	Measurement uncertainty calculation

## Attachment 2


## Components list by the customer

## Esplosione Completa

Ditta : MATROMARINE

Distinta: [6500003212] TOILET ELECTRIC SILENT DELUXE 12V. HIGH - Valida al 17-01-24

Ciclo: Standard (in vigore dal 11-01-15)

 = Fuori Validità

Fasi/Materiali	Descrizione	L	F	Consumo		Totale	Data	
				Consumo	UM Princ.		Inizio	Fine
IMBALLAGGIO	Imballaggio prodotto finito	0						
1255019812	LAV. KIT HYDRO DELUXE 12V.	0		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	10-01-15	
ASEMMLAGGIO	Assemblaggio prodotto finito	1		6,00 <sub>m</sub>	6,00 <sub>m</sub>			
6000019012	MOTORE LAGUNA/DELUXE HYDRO 12V.	1		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
ASS.MOTORE	Assemblaggio 2 Motore	2		4,50 <sub>m</sub>	4,50 <sub>m</sub>			
0000119712	ROTORE LAGUNA HYDRO 12V.							
	MOD.19712	2		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
0000101712	PORTASPAZZOLE MOT. WC LAGUNA							
	HYDRO Mod.1712	2		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
MS77000080	Cilindro 77x80 mm. verniciato nero	2		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
TR00004093	Tirante FeZn M4x97 mm. rullato 20x12 mm.	2		2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	01-01-05	
DAA200004A	Dado M4 Atb. basso DIN 985 inox A2	2		2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	05-02-15	
RDA2000400	Rondella inox A2 4 mm. DIN 125	2		2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	05-02-15	
MS7700MGN50	Magnete fer.anis.rad.71.1x57x49.5 mm.							
	Nord F5093BL50-N	2		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
MS7700MGS50	Magnete fer.anis.rad.71.1x57x49.5 mm. Sud							
	F5093BL50-S	2		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
MS7700ML050	Molla per magnete H50	2		2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	01-01-05	
PL000PR004	Basetta 152 / Laguna in PA 66	2		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
VTA20412TC	Vite A2 piast. senza punta 4x12 mm. TCC							
	UNI 11545	2		4,0000 <sub>kg</sub>	4,0000 <sub>kg</sub>	4,0000 <sub>kg</sub>	01-01-05	
PL000WL001	Stamp.Base/C. pom inf. Laguna ABS fv.17%	2		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
AEFEDRA007	Anello RA7 dim.7 mm. DIN 6799 in C70	2		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
GM000WM004	Rondella in gomma 8x20x2 mm.	2		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
GM000R2012	OR 2012 2.9x1.78 mm. NBR 70SH	2		2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	01-01-05	
GM000WL001	Guam. Pompa md.19112 in termogomma							
	45sh	2		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
PL000WL003	Stp. Elica pompa Laguna PA6 fv. 30%	2		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
GM000WL005	Tenuta Meccanica 91028 FA 8-18-11 PFF1	2		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	11-10-13	
GM000WL006	Controflaccia/Tenuta 96008 LE 10-22-4 VP	2		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	11-10-13	
C50006082R5	Cuscinetto 608 2R5 8x22x7 mm.							
	608DDSD25	2		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	05-05-14	
GM000WL002	Raccordo EPDM 60 Sh.Laguna Toilet ver.5	1		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	05-09-16	
PL000WL002	Stamp.Corpo Pompa sup.Laguna ABS							
	fv.17%	1		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
MN000WL003	Fascetta tutta Al/Si 304 32/50 Lg. 9 mm.	1		2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	01-01-05	
PL000WL008	Stafra fissaggio motore in PA6 cv.15%							
	Bianco	1		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
PL000BL018	Distanziale corto blower grande in ABS	1		2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	10-01-15	
RDA2000412	Rondella DIN 9021 4x12 mm. inox A2	1		2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	07-06-14	
MNP00WL004	Rondella M4 in PA6 4.3x9x0.8 mm.	1		2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	07-06-14	
VTA2440TCC	Vite croce M4x40 DIN 7985 inox A2 TC	1		2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	23-03-16	
GM000MM002	Stp.Valvola n/r maceratore in EPDM 65 Sh.	1		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-04-12	
DAA200004A	Dado M4 Atb. basso DIN 985 inox A2	1		2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	10-01-15	
PL000MM011	Stp. ghiera fil. mac.in PA6 fv.15% nero	1		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	28-11-12	
VTA20514TC	Vite A2 piast. senza punta 5x14 mm. TCC	1		9,0000 <sub>kg</sub>	9,0000 <sub>kg</sub>	9,0000 <sub>kg</sub>	20-04-16	
PL000MM007	Stp. bocchettone 38 mac. ABS fv.17% Nero	1		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
PL000MM010	Stp.anello fil. mac.in ABS fv.17% nero	1		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	26-02-19	
PL000MM015	Stp.distanziale 38 mac.in ABS fv.17%	1		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	26-02-19	
GM000WV003	Manicotto T038A grande carico HydroDelux	0		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	10-01-15	
MN000WL002	Fascetta tutta Al/Si 304 60/80 Lg. 9 mm.	0		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	10-01-15	
MN000ST004	Fascetta tutta Al/Si 304 40/60 Lg. 9 mm.	0		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	10-01-15	
DAA200005A	Dado M5 Atb. basso DIN 985 inox A2	0		2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	10-01-15	
RDA2000500	Rondella piana DIN 125 inox A2 5 mm.	0		2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	10-01-15	
RDA2000515	Rondella inox 5x15 mm. DIN 9021	0		2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	19-03-20	

## Attachment 2

Distinta: [6500003212] TOILET ELECTRIC SILENT DELUXE 12V. HIGH - Valida al 17-01-24

Ciclo: Standard (in vigore dal 11-01-15)

 = Fuori Validità

Fasi/Materiali	Descrizione	L	F	Consumo			Data	
				Consumo	UM Princ.	Totale	Inizio	Fine
VTA2525TCB	Vite M5x25 mm. DIN 912 A2 TCEI	0		2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	10-01-15	
PL000MM016	Stp. bocchettone 25 mac. ABS fv.17% Ner	0		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	06-02-18	
PL000WV012	Gomito scarico Wc idrovacuum 1" PA fv30% bianco	0		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	06-02-18	
PL000MM013	Gomito scar.mac.membr. 1 1/2" PP 30%nero	0		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	10-01-15	
IM000WC001	Profilo L75 adesivo su 1 lato con adesivo removibile per ceramica tag. 35 mm.	0		3,0000 <sub>kg</sub>	3,0000 <sub>kg</sub>	3,0000 <sub>kg</sub>	01-01-05	
6500000542	TAZZA DELUXE STANDARD NEW BT15A	0		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
PL000TZ012	Frontale raccordo lavaggio tazza in ABS	0		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	19-05-15	
PL000TZ001	Raccordo post. lavaggio con fletto e portagomma	0		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	19-05-15	
PL000TZ002	Diado esagonale tazza in PA 6 Bianco	0		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	19-05-15	
GM000TZ003	Rondella in gomma bianca 24x35x1.5 mm	0		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	19-05-15	
6500000008	Tavoletta WC DELUXE	0		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	14-09-16	
COMINOTTI	COMINOTTI	1						
6500000009	Cerniera mod. CONCA "Matromarine"	1		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	10-10-05	
6500000519	Busta WB 5N Fissaggio Sanitari	0		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
6500002003	COMANDO HYDROVACUUM 12/24 V. 3 Pos.	0		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
MONTEL	Montel assemblaggio	1						
ME000WV004	Scheda idrovacuum Sanitario 2 comp.3 tasti	1		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
MONTEL	Montel assemblaggio	2						
ME000WV003	Circuito Stampato sanitario 2 idrovacuum	2		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
ME000FR009	Relè doppio 12V. Faro / Hydrovacuum	2		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
PL000WV010	Piastrina tastini Hydrovacuum ABS	1		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
ME000ID011	Supporto 3M MOSAIC45 LG72843 Ind.Liv.	1		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
ME000WV006	Placca Antracite 3M Vela LEG682616 Hidro	1		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
VTFE2965TC	Vite 2.9x6.5 mm. DIN 7981 Zn.	1		4,0000 <sub>kg</sub>	4,0000 <sub>kg</sub>	4,0000 <sub>kg</sub>	01-01-05	
PL000WV013	Stmp. corpo comando hydrovac. ABS grigio	1		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
VTA23513T5	Vite 3.5x13 mm. UNI 6955 A2 TSP	1		2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	06-11-15	
ET000WV003	Poly. 0.25 T.O. + 3/468 45x68 mm.3 tasti	0		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
PL000TZ010	Tappo foro 50 rid. tazza idrov. ABS B.co	0		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
CT000WVA01	Cartone BCKSCSK/54245 482x382x475 mm. bianco scritte azzurre logo Ocean	0		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
CT000WC001	Vassoio Fus. BCKSCSK/34243 410x335x70	0		1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	1,0000 <sub>kg</sub>	01-01-05	
CT000WC003	Vassoio BCKSCSK/34243 460x370x80 mm.	0		2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	01-01-05	
CT000WC002	Interno Fus.: 371x378 mm. B/TFT/222	0		2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	2,0000 <sub>kg</sub>	01-01-05	

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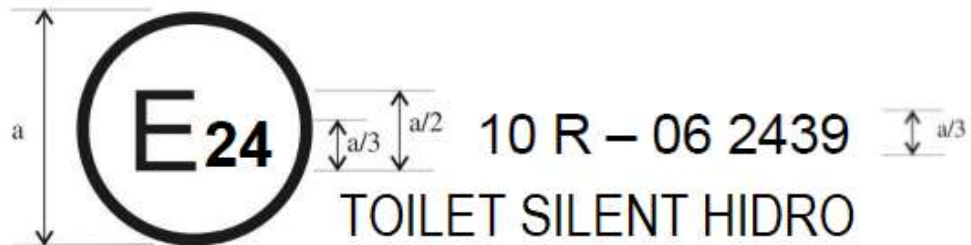
## Annex 2B

### INFORMATION DOCUMENT

DATE OF ISSUE 17/01/2024

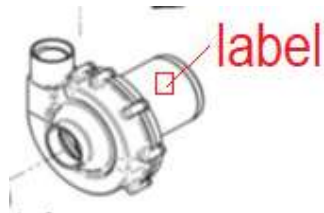
### FOR TYPE APPROVAL OF AN ELECTRIC/ELECTRONIC SUB-ASSEMBLY WITH RESPECT TO ELECTROMAGNETIC COMPATIBILITY AGAINST ECE REGULATION NO. 10/06

- 1. Make (trade name of manufacturer):**  
MATROMARINE PRODUCTS SRL
- 2. Type and general commercial description(s):**  
Toilet Silent Hidro  
Variants: 6500002242,6500002042,6600200912,6500003212
- 3. Means of identification of type, if marked on the component/separate technical**  
AN ADDITIONAL LABEL ON THE PUMP



a = 6 mm

- 3.1. Location of that marking:**  
ON THE MOTOR CILINDER



- 4. Name and address of manufacturer:**  
MATROMARINE PRODUCTS SRL VIA SEREGHE' 1 16017 ISOLA DEL CANTONE (GE) ITALY

**5. In the case of components and separate technical units, location and method of affixing of the approval mark:**

the approval mark is present on an adhesive label

**6. Address(es) of assembly plant(s):**

VIA SEREGHE' 1 16017 ISOLA DEL CANTONE (GE) ITALY

**Annex 2B**

**INFORMATION DOCUMENT**

**DATE OF ISSUE: 02 December 2019**

**7. This ESA shall be approved as a component / STU COMPONENT**

**8. Any restrictions of use and conditions for fitting:**

No restriction but is strictly recommended install after the full reading and comprehensive of the manual instruction

**9. Electrical system rated voltage:**

12 volt battery low tension. no ground.

**Only for electric vehicles**

**10. Charger:** on board / external

Not applicable

**11. Charging current:** direct current / alternating current (number of phases/frequency)

Not applicable

**12. Maximal nominal current:**

Not applicable

**13. Nominal charging voltage:**

Not applicable

**14. Basic ESA interface functions:**

Not applicable

**15. Minimum  $R_{sce}$  value (see chapter 7.11):**

Not applicable

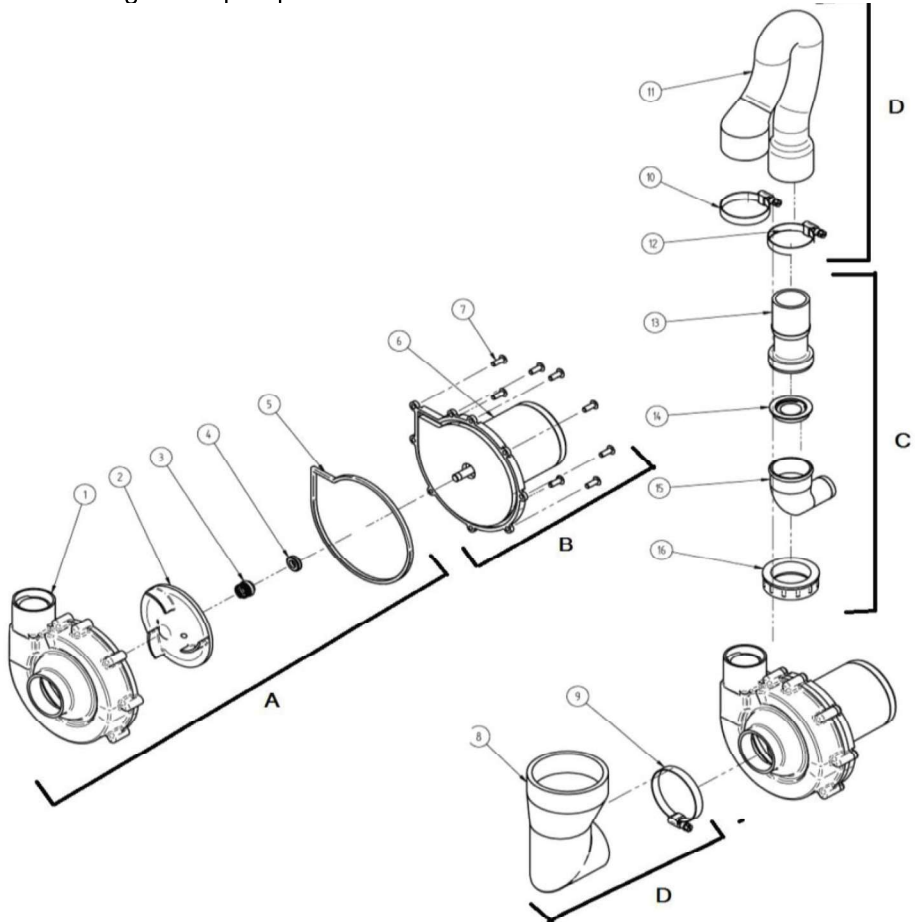
**Appendix 1**

**Description of the ESA chosen to represent the type (electronic block diagram and list of main component constituting the ESA (e.g. make and type of microprocessor, crystal, etc.).**

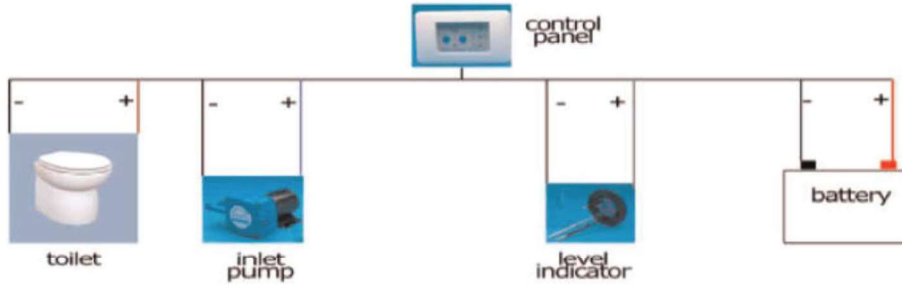
#provide a general description and/or a block diagram

**1. General Mechanical Drawing**

Technical drawing of the pump



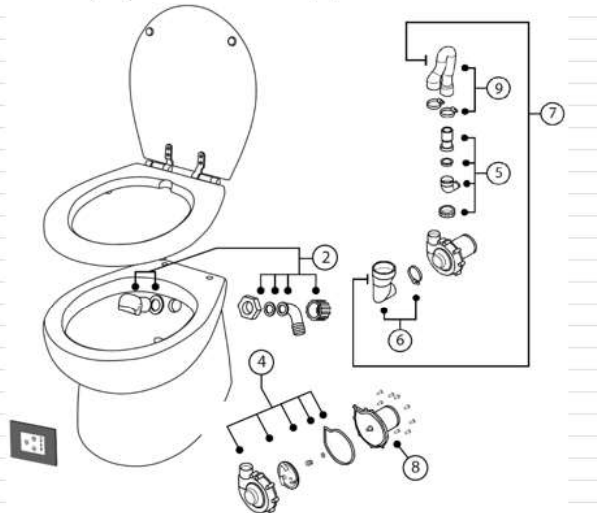
## 2. Electrical Schematics



1. White wire to the battery positive wire
2. Brown wire to the positive (brown) wire of the water outlet pump p
3. Blue wire to the negative (blue) wire of the water outlet pump
4. Grey wire to the battery negative wire
5. Black wire to the negative wire of the water inlet pump p or electrovalve
6. Red wire to the positive wire of the water inlet pump p or electrovalve

## 3. Components Placement

ELECTRIC SILENT DELUXE/LUXURY SPARE VALID FOR MODELS		COMMON SPARES	
6500003212	HYDRO-VACUUM TOILET 12V. "Deluxe" STD	5500019708	4 PLASTIC BASELUXURY DELUXE STD/LOW
6500000008	SEAT FOR DELUXE colbam	6000019012	8 ELECTRIC MOTOR 12V. LAGUNA AND DELUXE STD/LOW
6500000542	NEW DELUXE TOILET BOWL STD	6000019024	8 ELECTRIC MOTOR 24V. LAGUNA AND DELUXE STD/LOW
5500019812	COMPLETE PUMP KIT 12V.	6500000551	2 intake elbow laguna/deluxe/luxury straight port
6500003224	HYDRO-VACUUM TOILET 24V. "Deluxe" STD	5500019706	C OUTLET ELBOW LAGUNA AND DELUXE STD/LOW
6500000008	SEAT FOR DELUXE colbam	5500019805	9&6 HOSES KIT FOR DELUXE/LUXURY
6500000542	NEW DELUXE TOILET BOWL STD	5500019100	ALL GASKET IN THE 5,8,4 SET
5500019824	COMPLETE PUMP KIT 24V.		
6500002042	HYDRO-VACUUM TOILET 12V. "Luxury" LOW		
6500000007	SEAT FOR LUXURY SOFT CLOSE		
6500000545	NEW LUXURY TOILET BOWL LOW		
5500019812L	COMPLETE PUMP KIT 12V.(LOW)		
6500002044	HYDRO-VACUUM TOILET 24V."Luxury" LOW		
6500000007	SEAT FOR LUXURY SOFT CLOSE		
6500000545	NEW LUXURY TOILET BOWL LOW		
5500019824L	COMPLETE PUMP KIT 24 V. (LOW)		
6500002242	HYDRO-VACUUM TOILET 12V. "Luxury" STD		
6500000007	SEAT FOR LUXURY SOFT CLOSE		
6500000547	NEW LUXURY TOILET BOWL STD		
5500019812	COMPLETE PUMP KIT 12V.		
6500002244	HYDRO-VACUUM TOILET 24V."Luxury" STD		
6500000007	SEAT FOR LUXURY SOFT CLOSE		
6500000547	NEW LUXURY TOILET BOWL STD		
5500019824	COMPLETE PUMP KIT 24 V.		



#### 4. Bills of Material

I include by separate files all relevant version equipped with the same pump

Esplosione Completa							Ditta : MATROMARINE	
Distinta: [650002242] TOILET ELECTRIC SILENT LUXURY 12V. HIGH - Valida al 17-01-24								
Ciclo: Standard (in vigore dal 11-01-15)							= Fuori Validità	
Fasi/Materiali	Descrizione	L	F	Consumo	Consumo UM Princ.	Totale	Data Inizio	Data Fine
IMBALLAGGIO	Imballaggio prodotto finito	0		9,00 <sub>gr</sub>	9,00 <sub>gr</sub>			
1255019812	LAV. KIT HYDRO DELUXE 12V.	0		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	10-01-15	
ASEMBLAGGIO	Assemblaggio prodotto finito	1		6,00 <sub>gr</sub>	6,00 <sub>gr</sub>			
6000019012	MOTORE LAGUNA DELUXE HYDRO 12V.	1		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	01-01-05	
ASS.MOTORE	Assemblaggio 2 Motore	2		4,50 <sub>gr</sub>	4,50 <sub>gr</sub>			
0000119712	ROTORE LAGUNA HYDRO 12V.							
	MOD.19712	2		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	01-01-05	
0000101712	PORTASPAZZOLE MOT. WC LAGUNA							
	HYDRO Mod.1712	2		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	01-01-05	
MS77000080	Cilindro 77x80 mm. verniciato nero	2		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	01-01-05	
TR00004093	Tirante FeZn M4x97 mm. rullato 20x12 mm.	2		2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	01-01-05	
DAA200004A	Dado M4 Atb. basso DIN 985 inox A2	2		2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	05-02-15	
RDA2000400	Rondella inox A2 4 mm. DIN 125	2		2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	05-02-15	
MS7700MGNS50	Magnete fer.anis.rad.71.1x57x49.5 mm.							
	Nord F5093BL50-N	2		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	01-01-05	
MS7700MGSS50	Magnete fer.anis.rad.71.1x57x49.5 mm. Sud							
	F5093BL50-S	2		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	01-01-05	
MS7700ML050	Molla per magnete H50	2		2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	01-01-05	
PL000PR004	Basetta 152 / Laguna in PA 66	2		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	01-01-05	
VTA20412TC	Vite A2 plast. senza punta 4x12 mm. TCC							
	UNI 11545	2		4,0000 <sub>gr</sub>	4,0000 <sub>gr</sub>	4,0000 <sub>gr</sub>	01-01-05	
PL000WL001	Stamp.Base/C. pom inf. Laguna ABS fv.17%	2		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	01-01-05	
AEFE0RA007	Anello RA7 dim.7 mm. DIN 6799 in C70	2		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	01-01-05	
GM000WM004	Rondella in gomma 8x20x2 mm.	2		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	01-01-05	
GM000CR2012	OR 2012 2.9x1.78 mm. NBR 70SH	2		2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	01-01-05	
GM000WL001	Guarn. Pompa md.19112 in termogomma							
	45sh	2		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	01-01-05	
PL000WL003	Stp. Elica pompa Laguna PA6 fv. 30%	2		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	01-01-05	
GM000WL005	Tenuta Meccanica 91028 FA 8-18-11 PFF1	2		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	11-10-13	
GM000WL006	Controfaccia/Tenuta 96008 LE 10-22-4 VP	2		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	11-10-13	
C50006082RS	Cuscinetto 608 2RS 8x22x7 mm.							
	608DDSD25	2		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	05-05-14	
GM000WL002	Raccordo EPDM 60 Sh.Laguna Toilet ver.5	1		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	05-09-16	
PL000WL002	Stamp.Corpo Pompa sup.Laguna ABS							
	fv.17%	1		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	01-01-05	
MN000WL003	Fascetta tutta AISI 304 32/50 Lg. 9 mm.	1		2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	01-01-05	
PL000WL008	StaRa fissaggio motore in PA6 cv.15%							
	Bianco	1		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	01-01-05	
PL000BL018	Distanziale corto blower grande in ABS	1		2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	10-01-15	
RDA2000412	Rondella DIN 9021 4x12 mm. inox A2	1		2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	07-06-14	
MNP00WL004	Rondella M4 in PA6 4.3x9x0.8 mm.	1		2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	07-06-14	
VTA2440TCC	Vite croce M4x40 DIN 7985 inox A2 TC	1		2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	23-03-16	
GM000MM002	Stp.Valvola n/r maceratore in EPDM 55 Sh.	1		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	01-04-12	
DAA200004A	Dado M4 Atb. basso DIN 985 inox A2	1		2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	10-01-15	
PL000MM011	Stp. ghiera fil. mac.in PA6 fv.15% nero	1		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	28-11-12	
VTA20514TC	Vite A2 plast. senza punta 5x14 mm. TCC	1		9,0000 <sub>gr</sub>	9,0000 <sub>gr</sub>	9,0000 <sub>gr</sub>	20-04-16	
PL000MM007	Stp. bocchettone 38 mac. ABS fv.17% Nero	1		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	01-01-05	
PL000MM010	Stp.anello fil. mac.in ABS fv.17% nero	1		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	26-02-19	
PL000MM015	Stp.distanziale 38 mac.in ABS fv.17%	1		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	26-02-19	
GM000VV003	Manicotto T038A grande carico HydroDelux	0		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	10-01-15	
MN000WL002	Fascetta tutta AISI 304 60/80 Lg. 9 mm.	0		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	10-01-15	
MN000ST004	Fascetta tutta AISI 304 40/60 Lg. 9 mm.	0		1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	1,0000 <sub>gr</sub>	10-01-15	
DAA200005A	Dado M5 Atb. basso DIN 985 inox A2	0		2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	10-01-15	
RDA2000500	Rondella piana DIN 125 inox A2 5 mm.	0		2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	10-01-15	
RDA2000515	Rondella inox 5x15 mm. DIN 9021	0		2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	2,0000 <sub>gr</sub>	19-03-20	

Eseguito da G.amato il 17-01-24 15:29:59

Pagina 1

Distinta: [6500002242] TOILET ELECTRIC SILENT LUXURY 12V. HIGH - Valida al 17-01-24

Ciclo: Standard (in vigore dal 11-01-15)

= Fuori Validità

Fasi/Materiali	Descrizione	L	F	Consumo			Data	
				Consumo	UM Princ.	Totale	Inizio	Fine
VTA2525TCB	Vite M5x25 mm. DIN 912 A2 TCEI	0		2,0000 <sub>nit</sub>	2,0000 <sub>nit</sub>	2,0000 <sub>nit</sub>	10-01-15	
PL000MM013	Gomito scar.mac.membr. 1 1/2" PP 30%Inero	0		1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	10-01-15	
PL000MM016	Stp. bocchettone 25 mac. ABS fv.17% Ner	0		1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	06-02-18	
PL000WV012	Gomito scarico Wc idrovacuum 1" PA R30%							
	bianco	0		1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	06-02-18	
6500002003	COMANDO HYDROVACUUM 12/24 V. 3							
	Pos.	0		1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	01-01-05	
MON7EL	Montel assemblaggio	1						
ME000WV004	Scheda idrovacuum Sanitario 2 comp.3 tasti	1		1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	01-01-05	
MON7EL	Montel assemblaggio	2						
ME000WV003	Circuito Stampato sanitario 2 idrovacuum	2		1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	01-01-05	
ME000FR009	Relé doppio 12V. Faro / Hydrovacuum	2		1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	01-01-05	
PL000WV010	Plastrina tastini Hidrovacuum ABS	1		1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	01-01-05	
ME000ID011	Supporto 3M MOSAIC45 LG72843 Ind.Liv.	1		1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	01-01-05	
ME000WV006	Placca Antracite 3M Vela LEG682616 Hidro	1		1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	01-01-05	
VTPE2965TC	Vite 2.9x6.5 mm. DIN 7981 Zn.	1		4,0000 <sub>nit</sub>	4,0000 <sub>nit</sub>	4,0000 <sub>nit</sub>	01-01-05	
PL000WV013	Stmp. corpo comando hydrovac. ABS grigio	1		1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	01-01-05	
VTA23513TS	Vite 3.5x13 mm. UNI 6955 A2 TSP	1		2,0000 <sub>nit</sub>	2,0000 <sub>nit</sub>	2,0000 <sub>nit</sub>	06-11-15	
ET000WV003	Poly. 0.25 T.O. + 3/468 45x68 mm.3 tasti	0		1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	01-01-05	
IM000WC001	Profilo L75 adesivo su 1 lato con adesivo removibile per ceramica tag. 35 mm.	0		5,0000 <sub>nit</sub>	5,0000 <sub>nit</sub>	5,0000 <sub>nit</sub>	01-02-16	
6500000547	TAZZA LUXURY STANDARD BT11A new	0		1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	01-01-05	
PL000TZ002	Dado esagonale tazza in PA 6 Bianco	0		1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	01-01-05	
PL000TZ001	Raccordo post. lavaggio con flettto e portagomma	0		1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	17-10-19	
PL000TZ012	Frontale raccordo lavaggio tazza in ABS	0		1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	17-10-19	
GM000TZ003	Rondella in gomma bianca 24x35x1.5 mm	0		1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	17-10-19	
6500000007	Tavoletta duroplast soft close WC Luxury	0		1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	01-01-05	
6500000519	Busta WB SN Fissaggio Sanitari	0		1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	01-01-05	
PL000TZ010	Tappo foro 50 rid. tazza idrov. ABS B.co	0		1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	01-01-05	
CT000WVA01	Cartone BC/KSCSK/54245 482x382x475							
	mm. bianco scritte azzurre logo Ocean	0		1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	1,0000 <sub>nit</sub>	01-01-05	
CT000WC003	Vassoio BC/KSCSK/34243 460x370x80 mm.	0		2,0000 <sub>nit</sub>	2,0000 <sub>nit</sub>	2,0000 <sub>nit</sub>	01-01-05	

Distinta: [6500002042] TOILET ELECTRIC SILENT LUXURY LOW 12V. - Valida al 17-01-24

Ciclo: Standard (in vigore dal 11-01-15)

= Fuori Validità


Fasi/Materiali	Descrizione	L	F	Consumo		Totale	Data	
							Consumo UM Princ.	Inizio
IMBALLAGGIO	Imballaggio prodotto finito	0		9,00		9,00		
1255019812L	LAV. KIT HYDRO DELUXE LOW 12V.	0		1,000		1,000	28-10-15	
ASEMMLAGGIO	Assemblaggio prodotto finito	1		6,00		6,00		
6000019012	MOTORE LAGUNA DELUXE HYDRO 12V.	1		1,000		1,000	01-01-05	
ASS.MOTORE	Assemblaggio 2 Motore	2		4,50		4,50		
0000119712	ROTORE LAGUNA HYDRO 12V.							
	MOD.19712	2		1,000		1,000	01-01-05	
0000101712	PORTASPAZZOLE MOT. WC LAGUNA							
	HYDRO Mod.1712	2		1,000		1,000	01-01-05	
MS77000080	Cilindro 77x80 mm. verniciato nero	2		1,000		1,000	01-01-05	
TR00004093	Tirante FeZn M4x97 mm. rullato 20x12 mm.	2		2,000		2,000	01-01-05	
DAA200004A	Dado M4 Atb. basso DIN 985 inox A2	2		2,000		2,000	05-02-15	
RDA2000400	Rondella inox A2 4 mm. DIN 125	2		2,000		2,000	05-02-15	
MS770MGN50	Magnete fer.anis.rad.71.1x57x49.5 mm.							
	Nord F5093BL50-N	2		1,000		1,000	01-01-05	
MS770MGS50	Magnete fer.anis.rad.71.1x57x49.5 mm. Sud							
	F5093BL50-S	2		1,000		1,000	01-01-05	
MS770ML050	Molla per magnete H50	2		2,000		2,000	01-01-05	
PL000PR004	Basetta 152 / Laguna in PA 66	2		1,000		1,000	01-01-05	
VTA20412TC	Vite A2 plast. senza punta 4x12 mm. TCC							
	UNI 11545	2		4,000		4,000	01-01-05	
PL000WL001	Stamp.Base/C. pom inf. Laguna ABS fv.17%	2		1,000		1,000	01-01-05	
AEFE0RA007	Anello RA7 dim.7 mm. DIN 6799 in C70	2		1,000		1,000	01-01-05	
GM000WM004	Rondella in gomma 8x20x2 mm.	2		1,000		1,000	01-01-05	
GM000R2012	OR 2012 2.9x1.78 mm. NBR 70SH	2		2,000		2,000	01-01-05	
GM000WL001	Guarn. Pompa md.19112 in termogomma							
	45sh	2		1,000		1,000	01-01-05	
PL000WL003	Stp. Elica pompa Laguna PA6 fv. 30%	2		1,000		1,000	01-01-05	
GM000WL005	Tenuta Meccanica 91028 FA 8-18-11 PFF1	2		1,000		1,000	11-10-13	
GM000WL006	Controaccia/Tenuta 96008 LE 10-22-4 VP	2		1,000		1,000	11-10-13	
CS0006082RS	Cusinetto 608 2RS 8x22x7 mm.							
	608D05D2S	2		1,000		1,000	05-05-14	
GM000WL002	Raccordo EPDM 60 Sh.Laguna Toilet ver.5	1		1,000		1,000	05-09-15	
PL000WL002	Stamp.Corpo Pompa sup.Laguna ABS							
	fv.17%	1		1,000		1,000	01-01-05	
PL000WL005	Portagomma elctric toilet Laguna NERO	1		1,000		1,000	28-10-15	
MIN000WL005	Fascetta tutta Al/Si 304 25/40 Lg. 9 mm	1		1,000		1,000	28-10-15	
MIN000WL003	Fascetta tutta Al/Si 304 32/50 Lg. 9 mm.	1		1,000		1,000	28-10-15	
PL000VW007	Anello filettato pompa idrov. ABS cv.10%							
	bianco	1		1,000		1,000	01-01-05	
PL000WL008	Staffa fissaggio motore in PA6 cv.15%							
	Bianco	1		2,000		2,000	01-01-05	
PL000BL018	Distanziale corto blower grande in ABS	1		1,000		1,000	10-01-15	
RDA2000412	Rondella DIN 9021 4x12 mm. inox A2	1		1,000		1,000	07-06-14	
MNP000WL004	Rondella M4 in PA6 4.3x9x0.8 mm.	1		1,000		1,000	07-06-14	
VTA2440TCC	Vite croce M4x40 DIN 7985 inox A2 TC	1		1,000		1,000	23-03-15	
GM000MM002	Stp.Valvola n/r maceratore in EPDM 55 Sh.	1		1,000		1,000	01-04-12	
DAA200004A	Dado M4 Atb. basso DIN 985 inox A2	1		1,000		1,000	10-01-15	
PL000MM011	Stp. ghiera fil. mac.in PA6 fv.15% nero	1		1,000		1,000	28-11-12	
VTA20514TC	Vite A2 plast. senza punta 5x14 mm. TCC	1		9,000		9,000	20-04-16	
PL000MM007	Stp. bocchettone 38 mac. ABS fv.17% Nero	1		1,000		1,000	01-01-05	
GM000WG002	Manicotto tazza/pompa Eleg. gomma 64 Sh.	0		1,000		1,000	28-10-15	
MIN000WL002	Fascetta tutta Al/Si 304 60/80 Lg. 9 mm.	0		1,000		1,000	10-01-15	
MIN000ST004	Fascetta tutta Al/Si 304 40/60 Lg. 9 mm.	0		1,000		1,000	10-01-15	
DAA200005A	Dado M5 Atb. basso DIN 985 inox A2	0		2,000		2,000	10-01-15	

Eseguito da G.amato il 17-01-24 15:30:36

Pagina 1

Distinta: [6500002042] TOILET ELECTRIC SILENT LUXURY LOW 12V. - Valida al 17-01-24

Ciclo: Standard (in vigore dal 11-01-15)

 = Fuori validità

Fasi/Materiali	Descrizione	L	F	Consumo		Totale	Data	
				Consumo	UM Princ.		Inizio	Fine
RDA2000500	Rondella piana DIN 125 inox A2 5 mm.	0		2,000 <sup>/_</sup>	2,000 <sup>/_</sup>	2,000 <sup>/_</sup>	10-01-15	
RDA2000515	Rondella inox 5x15 mm. DIN 9021	0		2,000 <sup>/_</sup>	2,000 <sup>/_</sup>	2,000 <sup>/_</sup>	19-03-20	
VTA2525TCB	Vite M5x25 mm. DIN 912 A2 TCEI	0		2,000 <sup>/_</sup>	2,000 <sup>/_</sup>	2,000 <sup>/_</sup>	10-01-15	
PL000MM016	Stp. bocchettone 25 mac. ABS fv.17% Ner	0		1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	06-02-18	
PL000WV012	Gomito scarico Wc idrovacuum 1" PA fv30% bianco	0		1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	06-02-18	
PL000MM013	Gomito scar.mac.membr. 1 1/2" PP 30%nero	0		1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	10-01-15	
6500002003	COMANDO HYDROVACUUM 12/24 V. 3 Pos.	0		1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	01-01-05	
MONTEL	Montel assemblaggio	1						
ME000WV004	Scheda idrovacuum Sanitario 2 comp.3 tasti	1		1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	01-01-05	
MONTEL	Montel assemblaggio	2						
ME000WV003	Circuito Stampato sanitario 2 idrovacuum	2		1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	01-01-05	
ME000FR009	Relè doppio 12V. Faro / Hydrovacuum	2		1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	01-01-05	
PL000WV010	Piastrina tastini Hydrovacuum ABS	1		1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	01-01-05	
ME000ID011	Supporto 3M MOSAIC45 LG72843 Ind.Liv.	1		1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	01-01-05	
ME000WV006	Placca Antracite 3M Vela LE6682616 Hidro	1		1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	01-01-05	
VTFE2965TC	Vite 2.9x5.5 mm. DIN 7981 Zn.	1		4,000 <sup>/_</sup>	4,000 <sup>/_</sup>	4,000 <sup>/_</sup>	01-01-05	
PL000WV013	Strip. corpo comando hydrovac. ABS grigio	1		1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	01-01-05	
VTA23513T5	Vite 3.5x13 mm. UNI 6955 A2 TSP	1		2,000 <sup>/_</sup>	2,000 <sup>/_</sup>	2,000 <sup>/_</sup>	06-11-15	
ET000WV003	Poly. 0.25 T.O. + 3/468 45x68 mm.3 tasti	0		1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	01-01-05	
IM000WC001	Profilo L75 adesivo su 1 lato con adesivo rimovibile per ceramica tag. 35 mm.	0		5,000 <sup>/_</sup>	5,000 <sup>/_</sup>	5,000 <sup>/_</sup>	01-02-16	
6500000545	TAZZA LUXURY LOW BT11B new	0		1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	01-01-05	
6500000007	Tavoletta duroplasti soft close WC Luxury	0		1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	01-01-05	
6500000519	Busta WB 5N Fissaggio Sanitari	0		1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	01-01-05	
PL000TZ002	Dado esagonale tazza in PA 6 Bianco	0		1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	01-01-05	
PL000TZ010	Tappo foro 50 rid. tazza idrov. ABS B.co	0		1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	01-01-05	
PL000TZ001	Raccordo post. lavaggio con flettto e portagomma	0		1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	01-04-14	
PL000TZ012	Frontale raccordo lavaggio tazza in ABS	0		1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	01-04-14	
GM000TZ003	Rondella in gomma bianca 24x35x1.5 mm	0		1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	17-10-19	
CT000WL001	Cartone BCKSCSK/54245 482 X382x435 mm. bianco scritte azzurre logo Ocean	0		1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	1,000 <sup>/_</sup>	11-09-17	
CT000WC003	Vassoio BCKSCSK/34243 460x370x80 mm.	0		2,000 <sup>/_</sup>	2,000 <sup>/_</sup>	2,000 <sup>/_</sup>	01-01-05	


Distinta: [6600200912] TOILET EL. SILENT LAGUNA 12V. SOFT CLOSE - Valida al 17-01-24

Ciclo: Standard (in vigore dal 02-02-15)

= Fuori Validità

FasiMateriali	Descrizione	L	F	Consumo		Data	
				Consumo	UM Princ.	Totale	Inizio
MBALLAGGIO	Imballaggio prodotto finito	0		13,00 <sub>gr</sub>	13,00 <sub>gr</sub>		
1255019712	LAV. KIT HYDRO LAGUNA 12V.	0		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	10-01-15
ASSEMBLAGGIO	Assemblaggio prodotto finito	1		6,00 <sub>gr</sub>	6,00 <sub>gr</sub>		
6000019012	MOTORE LAGUNA/DELUXE HYDRO 12V.	1		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	01-01-05
ASS.MOTORE	Assemblaggio 2 Motore	2		4,50 <sub>gr</sub>	4,50 <sub>gr</sub>		
0000119712	ROTORE LAGUNA HYDRO 12V.						
	MOD.19712	2		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	01-01-05
0000101712	PORTASPAZZOLE MOT. WC LAGUNA						
	HYDRO Mod.1712	2		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	01-01-05
M577000080	Cilindro 77x80 mm. verniciato nero	2		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	01-01-05
TR00004093	Tirante FeZn M4x97 mm. rullato 20x12 mm.	2		2,000 <sub>gr</sub>	2,000 <sub>gr</sub>	2,000 <sub>gr</sub>	01-01-05
DAA200004A	Dado M4 Atb. basso DIN 985 inox A2	2		2,000 <sub>gr</sub>	2,000 <sub>gr</sub>	2,000 <sub>gr</sub>	05-02-15
RDA2000400	Rondella inox A2 4 mm. DIN 125	2		2,000 <sub>gr</sub>	2,000 <sub>gr</sub>	2,000 <sub>gr</sub>	05-02-15
M5770MGN50	Magnete fer.anis.rad.71.1x57x49.5 mm.						
	Nord F5093BL50-N	2		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	01-01-05
M5770MGS50	Magnete fer.anis.rad.71.1x57x49.5 mm. Sud						
	F5093BL50-S	2		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	01-01-05
M5770ML050	Molla per magnete H50	2		2,000 <sub>gr</sub>	2,000 <sub>gr</sub>	2,000 <sub>gr</sub>	01-01-05
PL000PR004	Basetta 152 / Laguna in PA 66	2		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	01-01-05
VTA20412TC	Vite A2 plast. senza punta 4x12 mm. TCC						
	UNI 11545	2		4,000 <sub>gr</sub>	4,000 <sub>gr</sub>	4,000 <sub>gr</sub>	01-01-05
PL000WL001	Stamp.Base/C. pom inf. Laguna ABS fv.17%	2		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	01-01-05
AEFE0RA007	Anello RA7 dim.7 mm. DIN 6799 in C70	2		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	01-01-05
GM000WM004	Rondella in gomma 8x20x2 mm.	2		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	01-01-05
GM000OR2012	OR 2012 2.9x1.78 mm. NBR 70SH	2		2,000 <sub>gr</sub>	2,000 <sub>gr</sub>	2,000 <sub>gr</sub>	01-01-05
GM000WL001	Guarn. Pompa md.19112 in termogomma						
	45sh	2		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	01-01-05
PL000WL003	Stp. Elica pompa Laguna PA6 fv. 30%	2		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	01-01-05
GM000WL005	Tenuta Meccanica 91028 FA 8-18-11 PFF1	2		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	11-10-13
GM000WL006	Controfaccia/Tenuta 96008 LE 10-22-4 VP	2		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	11-10-13
C50006082R5	Cuscinetto 608 2RS 8x22x7 mm.						
	608DDSD2S	2		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	05-05-14
PL000WL002	Stamp.Corpo Pompa sup.Laguna ABS						
	fv.17%	1		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	01-01-05
GM000WL002	Raccordo EPDM 60 Sh.Laguna Toilet ver.5	1		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	01-01-05
PL000WV007	Anello filettato pompa idrov. ABS cv.10%						
	bianco	1		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	01-01-05
PL000WL005	Portagomma elctric toilet Laguna NERO	1		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	01-01-05
MN000WL003	Fascetta tutta Al/Si 304 32/50 Lg. 9 mm.	1		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	01-01-05
MN000WL005	Fascetta tutta Al/Si 304 25/40 Lg. 9 mm	1		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	01-01-05
GM000MM002	Stp.Valvola n/r maceratore in EPDM 55 Sh.	1		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	01-04-12
PL000MM011	Stp. ghiera fil. mac.in PA6 fv.15% nero	1		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	28-11-12
VTA20514TC	Vite A2 plast. senza punta 5x14 mm. TCC						
		1		9,000 <sub>gr</sub>	9,000 <sub>gr</sub>	9,000 <sub>gr</sub>	20-04-16
PL000MM007	Stp. bocchettone 38 mac. ABS fv.17% Nero	1		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	01-01-05
GM000WL003	Manicotto tazza/pompa Lagu. gomma 64 sh.	0		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	10-01-15
MN000WL002	Fascetta tutta Al/Si 304 60/80 Lg. 9 mm.	0		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	10-01-15
MN000ST004	Fascetta tutta Al/Si 304 40/60 Lg. 9 mm.	0		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	10-01-15
IM000WC001	Profilo L75 adesivo su 1 lato con adesivo						
	removibile per ceramica tag. 35 mm.	0		4,000 <sub>gr</sub>	4,000 <sub>gr</sub>	4,000 <sub>gr</sub>	01-02-16
650000512	TAZZA BT5 LAGUNA	0		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	01-01-05
MNP00WM002	Clip stringitubo in PA66 Dim.25 mm. art.						
	6674GA00	0		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	28-06-23
650000551	RACCORDO LAVAGGIO FLUSH NEW	0		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	19-05-15
MBALLAGGIO	Imballaggio prodotto finito	1					
PL000T2012	Frontale raccordo lavaggio tazza in ABS	1		1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	1,000 <sub>gr</sub>	01-01-05

Distinta: [6600200912] TOILET EL. SILENT LAGUNA 12V. SOFT CLOSE - Valida al 17-01-24  
 Ciclo: Standard (in vigore dal 11-01-15)

 = Fuori validità

Fasi/Materiali	Descrizione	L	F	Consumo		Totale	Data	
							Consumo UM Princ.	Inizio
PL000T2001	Raccordo post. lavaggio con filetto e portagomma	1		1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	01-01-05	
GM00CR4093	OR 4093 131 23.40x3.53 mm. NBR 70SH non lubrificato	1		1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	01-01-05	
PL000T2002	Dado esagonale tazza in PA 6 Bianco	1		1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	01-01-05	
6500000002	Tavoletta soft close per WC Compact/Laguna/Space Saver	0		1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	02-02-15	
6500002003	COMANDO HYDROVACUUM 12/24 V. 3 Pos.	0		1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	01-01-05	
MONTEL	Montel assemblaggio	1						
ME000W004	Scheda Idrovacuum Sanitario 2 comp.3 tasti	1		1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	01-01-05	
MONTEL	Montel assemblaggio	2						
ME000W003	Circuito Stampato sanitario 2 idrovacuum	2		1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	01-01-05	
ME000FR009	Relé doppio 12V. Faro / Hydrovacuum	2		1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	01-01-05	
PL000W010	Piastrina tastini Hidrovacuum ABS	1		1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	01-01-05	
ME000ID011	Supporto 3M MOSAIC45 LG72843 Ind.Liv.	1		1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	01-01-05	
ME000W006	Placca Antracite 3M Veia LEG682616 Hidro	1		1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	01-01-05	
VTFE2965TC	Vite 2.9x6.5 mm. DIN 7981 Zn.	1		4,0000 <sub>1000</sub>	4,0000 <sub>1000</sub>	4,0000 <sub>1000</sub>	01-01-05	
PL000W013	Stmp. corpo comando hydrovac. ABS grigio	1		1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	01-01-05	
VTA23513TS	Vite 3.5x13 mm. UNI 6955 A2 TSP	1		2,0000 <sub>1000</sub>	2,0000 <sub>1000</sub>	2,0000 <sub>1000</sub>	06-11-15	
ET000W003	Poly. 0.25 T.O. + 3/468 45x68 mm.3 tasti	0		1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	01-01-05	
6500000519	Busta WB 5N Fissaggio Sanitari	0		1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	01-01-05	
MNP00WL002	Fascetta 450 x 7.8 mm. nero	0		1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	01-01-05	
MNP00T2001	COD. 800/M6-BI DES. CAPPELLOTTI ESAGONALI DA 10	0		2,0000 <sub>1000</sub>	2,0000 <sub>1000</sub>	2,0000 <sub>1000</sub>	01-01-05	
ASSEMBLAGGIO1	Assemblaggio prodotto finito	1						
MNP00T2002	Rondella ovale dim.6 mm. nylon bianco	0		2,0000 <sub>1000</sub>	2,0000 <sub>1000</sub>	2,0000 <sub>1000</sub>	01-01-05	
MNP00T2003	WASHER 6.4x10x2.8 Art 031060000001	0		2,0000 <sub>1000</sub>	2,0000 <sub>1000</sub>	2,0000 <sub>1000</sub>	01-01-05	
PL000MM016	Stp. bocchettone 25 mac. ABS fv.17% Ner	0		1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	06-02-18	
PL000WV012	Gomito scarico Wc idrovacuum 1" PA 630% bianco	0		1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	06-02-18	
PL000MM013	Gomito scar.mac.membr. 1 1/2" PP 30%nero	0		1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	26-05-15	
CT000WC001	Vassoio Fus. BC/KSCSK/34243 410x336x70	0		1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	01-01-05	
CT000WL001	Cartone BC/KSCSK/54245 482 X382x435 mm. bianco scritte azzurre logo Ocean	0		1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	01-01-05	
CT000WC002	Interno Fus. 371x378 mm. B/TFT/222	0		1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	01-01-05	
CT000WC003	Vassoio BC/KSCSK/34243 460x370x80 mm.	0		1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	1,0000 <sub>1000</sub>	01-01-05	

Dietinta: [6500003212] TOILET ELECTRIC SILENT DELUXE 12V. HIGH - Valida al 17-01-24

Ciclo: Standard (in vigore dal 11-01-15)

= Fuori Validità

FasiMateriali	Descrizione	L F	Consumo	Consumo UM Princ.	Totale	Data	
						Inizio	Fine
MBALLAGGIO	Imballaggio prodotto finito	0					
1255019812	LAV. KIT HYDRO DELUXE 12V.	0	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	10-01-15	
ASEMBLAGGIO	Assemblaggio prodotto finito	1	6,00 <sup>1</sup>	6,00 <sup>1</sup>			
6000019012	MOTORE LAGUNA/DELUXE HYDRO 12V.	1	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	01-01-05	
ASS.MOTORE	Assemblaggio 2 Motore	2	4,50 <sup>1</sup>	4,50 <sup>1</sup>			
0000119712	ROTORE LAGUNA HYDRO 12V.						
	MOD.19712	2	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	01-01-05	
0000101712	PORTASPAZZOLE MOT. WC LAGUNA						
	HYDRO Mod.1712	2	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	01-01-05	
MS77000080	Cilindro 77x80 mm. verniciato nero	2	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	01-01-05	
TR00004093	Tirante FeZn M4x97 mm. rullato 20x12 mm.	2	2,000 <sup>1</sup>	2,000 <sup>1</sup>	2,000 <sup>1</sup>	01-01-05	
DIA200004A	Dado M4 Atb. basso DIN 985 inox A2	2	2,000 <sup>1</sup>	2,000 <sup>1</sup>	2,000 <sup>1</sup>	05-02-15	
RDA2000400	Rondella inox A2 4 mm. DIN 125	2	2,000 <sup>1</sup>	2,000 <sup>1</sup>	2,000 <sup>1</sup>	05-02-15	
MS770MGN50	Magnete fer.anis.rad.71.1x57x49.5 mm.						
	Nord F5093BL50-N	2	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	01-01-05	
MS770MGS50	Magnete fer.anis.rad.71.1x57x49.5 mm. Sud						
	F5093BL50-S	2	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	01-01-05	
MS770ML050	Molla per magnete H50	2	2,000 <sup>1</sup>	2,000 <sup>1</sup>	2,000 <sup>1</sup>	01-01-05	
PL000PR004	Basetta 152 / Laguna in PA 66	2	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	01-01-05	
VTA20412TC	Vite A2 plast. senza punta 4x12 mm. TCC						
	UNI 11545	2	4,000 <sup>1</sup>	4,000 <sup>1</sup>	4,000 <sup>1</sup>	01-01-05	
PL000WL001	Stamp.Base/C. pom inf. Laguna ABS fv.17%	2	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	01-01-05	
AEFE0RA007	Anello RA7 dim.7 mm. DIN 6799 in C70	2	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	01-01-05	
GM000WM004	Rondella in gomma 8x20x2 mm.	2	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	01-01-05	
GM000CR2012	OR 2012 2.9x1.78 mm. NBR 70SH	2	2,000 <sup>1</sup>	2,000 <sup>1</sup>	2,000 <sup>1</sup>	01-01-05	
GM000WL001	Guam. Pompa md.19112 in termogomma						
	45sh	2	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	01-01-05	
PL000WL003	Stp. Elica pompa Laguna PA6 fv. 30%	2	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	01-01-05	
GM000WL005	Tenuta Meccanica 91028 FA 8-18-11 PFF1	2	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	11-10-13	
GM000WL006	Controbaccia/Tenuta 96008 LE 10-22-4 VP	2	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	11-10-13	
C50006082R5	Cuscinetto 608 2RS 8x22x7 mm.						
	608DDSD25	2	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	05-05-14	
GM000WL002	Raccordo EPDM 60 Sh.Laguna Toilet ver.5	1	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	05-09-16	
PL000WL002	Stamp.Corpo Pompa sup.Laguna ABS						
	fv.17%	1	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	01-01-05	
MN000WL003	Fascetta tutta AISI 304 32/50 Lg. 9 mm.	1	2,000 <sup>1</sup>	2,000 <sup>1</sup>	2,000 <sup>1</sup>	01-01-05	
PL000WL008	StaRa fissaggio motore in PA6 cv.15%						
	Bianco	1	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	01-01-05	
PL000BL018	Distanziale corto blower grande in ABS	1	2,000 <sup>1</sup>	2,000 <sup>1</sup>	2,000 <sup>1</sup>	10-01-15	
RDA2000412	Rondella DIN 9021 4x12 mm. inox A2	1	2,000 <sup>1</sup>	2,000 <sup>1</sup>	2,000 <sup>1</sup>	07-06-14	
MNP00WL004	Rondella M4 in PA6 4.3x9x0.8 mm.	1	2,000 <sup>1</sup>	2,000 <sup>1</sup>	2,000 <sup>1</sup>	07-06-14	
VTA24407CC	Vite croce M4x40 DIN 7985 inox A2 TC	1	2,000 <sup>1</sup>	2,000 <sup>1</sup>	2,000 <sup>1</sup>	23-03-16	
GM000MM002	Stp.Valvola n/r maceratore in EPDM 55 Sh.	1	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	01-04-12	
DIA200004A	Dado M4 Atb. basso DIN 985 inox A2	1	2,000 <sup>1</sup>	2,000 <sup>1</sup>	2,000 <sup>1</sup>	10-01-15	
PL000MM011	Stp. ghiera fil. mac.in PA6 fv.15% nero	1	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	28-11-12	
VTA20514TC	Vite A2 plast. senza punta 5x14 mm. TCC	1	9,000 <sup>1</sup>	9,000 <sup>1</sup>	9,000 <sup>1</sup>	20-04-16	
PL000MM007	Stp. bocchettone 38 mac. ABS fv.17% Nero	1	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	01-01-05	
PL000MM010	Stp.anello fil. mac.in ABS fv.17% nero	1	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	26-02-19	
PL000MM015	Stp.distanziale 38 mac.in ABS fv.17%	1	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	26-02-19	
GM000VV003	Manicotto T038A grande carico HydroDelux	0	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	10-01-15	
MN000WL002	Fascetta tutta AISI 304 60/80 Lg. 9 mm.	0	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	10-01-15	
MN000ST004	Fascetta tutta AISI 304 40/60 Lg. 9 mm.	0	1,000 <sup>1</sup>	1,000 <sup>1</sup>	1,000 <sup>1</sup>	10-01-15	
DIA200005A	Dado M5 Atb. basso DIN 985 inox A2	0	2,000 <sup>1</sup>	2,000 <sup>1</sup>	2,000 <sup>1</sup>	10-01-15	
RDA2000500	Rondella piana DIN 125 inox A2 5 mm.	0	2,000 <sup>1</sup>	2,000 <sup>1</sup>	2,000 <sup>1</sup>	10-01-15	
RDA2000515	Rondella inox 5x15 mm. DIN 9021	0	2,000 <sup>1</sup>	2,000 <sup>1</sup>	2,000 <sup>1</sup>	19-03-20	

Distinta: [6500003212] TOILET ELECTRIC SILENT DELUXE 12V. HIGH - Valida al 17-01-24

Ciclo: Standard (in vigore dal 11-01-15)

= Fuori Validità

Fasi/Materiali	Descrizione	L	F	Consumo			Data	
				Consumo	UM Princ.	Totale	Inizio	Fine
VTA2525TCB	Vite M5x25 mm. DIN 912 A2 TCEI	0		2,0000/	2,0000/	2,0000/	10-01-15	
PL000MM016	Stp. bocchettone 25 mac. ABS fv.17% Ner	0		1,0000/	1,0000/	1,0000/	06-02-18	
PL000WV012	Gomito scarico Wc idrovacuum 1" PA 6/30% bianco	0		1,0000/	1,0000/	1,0000/	06-02-18	
PL000MM013	Gomito scar.mac.membr. 1 1/2" PP 30%nero	0		1,0000/	1,0000/	1,0000/	10-01-15	
IM000WC001	Profilo L75 adesivo su 1 lato con adesivo rimovibile per ceramica tag. 35 mm.	0		3,0000/	3,0000/	3,0000/	01-01-05	
6500000542	TAZZA DELUXE STANDARD NEW BT15A	0		1,0000/	1,0000/	1,0000/	01-01-05	
PL000TZ012	Frontale raccordo lavaggio tazza in ABS	0		1,0000/	1,0000/	1,0000/	19-05-15	
PL000TZ001	Raccordo post. lavaggio con fletto e portagomma	0		1,0000/	1,0000/	1,0000/	19-05-15	
PL000TZ002	Diado esagonale tazza in PA 6 Bianco	0		1,0000/	1,0000/	1,0000/	19-05-15	
GM000TZ003	Rondella in gomma bianca 24x35x1.5 mm	0		1,0000/	1,0000/	1,0000/	19-05-15	
6500000008	Tavoletta WC DELUXE	0		1,0000/	1,0000/	1,0000/	14-09-16	
COMINOTTI	COMINOTTI	1						
6500000009	Cerniera mod. CONCA "Matromarine"	1		1,0000/	1,0000/	1,0000/	10-10-05	
6500000519	Busta WB SN Fissaggio Sanitari	0		1,0000/	1,0000/	1,0000/	01-01-05	
6500002003	COMANDO HYDROVACUUM 12/24 V. 3 Pos.	0		1,0000/	1,0000/	1,0000/	01-01-05	
MONTEL	Montel assemblaggio	1						
ME000WV004	Scheda idrovacuum Sanitario 2 comp.3 tasti	1		1,0000/	1,0000/	1,0000/	01-01-05	
MONTEL	Montel assemblaggio	2						
ME000WV003	Circuito Stampato sanitario 2 idrovacuum	2		1,0000/	1,0000/	1,0000/	01-01-05	
ME000FR009	Relè doppio 12V. Fano / Hydrovacuum	2		1,0000/	1,0000/	1,0000/	01-01-05	
PL000WV010	Piastrina tastini Hidrovacuum ABS	1		1,0000/	1,0000/	1,0000/	01-01-05	
ME000ID011	Supporto 3M MOSAIC45 LG72843 Ind.Liv.	1		1,0000/	1,0000/	1,0000/	01-01-05	
ME000WV006	Placca Antracite 3M Vela LEG682616 Hidro	1		1,0000/	1,0000/	1,0000/	01-01-05	
VTFE2965TC	Vite 2.9x6.5 mm. DIN 7981 Zn.	1		4,0000/	4,0000/	4,0000/	01-01-05	
PL000WV013	Stmp. corpo comando hydrovac. ABS grigio	1		1,0000/	1,0000/	1,0000/	01-01-05	
VTA23513T5	Vite 3.5x13 mm. UNI 6955 A2 TSP	1		2,0000/	2,0000/	2,0000/	06-11-15	
ET000WV003	Poly. 0.25 T.O. -> 3/468 45x68 mm.3 tasti	0		1,0000/	1,0000/	1,0000/	01-01-05	
PL000TZ010	Tappo foro 50 rid. tazza idrov. ABS B.co	0		1,0000/	1,0000/	1,0000/	01-01-05	
CT000WVA01	Cartone BC/KSCSK/54245 482x382x475 mm. bianco scritte azzurre logo Ocean	0		1,0000/	1,0000/	1,0000/	01-01-05	
CT000WC001	Vassoio Fus. BC/KSCSK/34243 410x339x70	0		1,0000/	1,0000/	1,0000/	01-01-05	
CT000WC003	Vassoio BC/KSCSK/34243 460x370x80 mm.	0		2,0000/	2,0000/	2,0000/	01-01-05	
CT000WC002	Interno Fus. 371x378 mm. B/TFT/222	0		2,0000/	2,0000/	2,0000/	01-01-05	

## Appendix 2

Relevant test report(s) supplied by the manufacturer from a test laboratory accredited to ISO 17025 and recognized by the Approval Authority for the purpose of drawing up the type approval certificate.