

CE-LAB



CE-LAB GmbH

Prüfzentrum

Am Hammergrund 1

D-98693 Ilmenau

Telefon: 03677-647980

Fax: 03677-647989

Mail to: info@ce-lab.de

Homepage: <http://www.ce-lab.de/>

Durch die DAkkS nach DIN EN ISO/IEC 17025 akkreditiertes Prüflaboratorium und von der Benennungsstelle des Kraftfahrt-Bundesamtes (KBA) benannter Technischer Dienst der Kategorien A und D. Die Akkreditierung und Benennung gelten für die in den jeweiligen Urkunden aufgeführten Prüfverfahren.

EMV-Testbericht

/EMC Test report

PB EMV 290323-1 Pulsares [4598]

Prüfobjekt

/Equipment under Test (EUT)

PULSARES PulCharge EV-Ladesystem

Auftraggeber

/Customer

Pulsares GmbH

EMV-Prüfbericht / EMC Testreport

Prüfobjekt <i>/Equipment under Test (EUT)</i>	EV EasyCharge, Schaltunit und Differenzstromsensor	
Bezeichnung <i>/Name</i>	PulCharge EV-Ladesystem	
Seriennummer <i>/Serial Number</i>	-	
Hersteller <i>/Manufacturer</i>	Pulsares GmbH	
Auftraggeber <i>/Customer</i>	Pulsares GmbH	
Adresse des Auftraggebers <i>/Address of the Customer</i>	D- 31688 Nienstädt Steinbreite 3	
Prüfziel <i>/Test Target</i>	Erfüllung der in den Prüfverfahren genannten Normen <i>/Compliance with Test Specification</i>	
Prüfverfahren <i>/Test Specification</i>	Störaussendung <i>/Emission</i>	EN IEC 61000-6-4:2019 mit den Grenzwerten IEC 61851-21-2:2018*
	Störfestigkeit <i>/Susceptibility</i>	EN IEC 61000-6-2:2019 mit den Prüfpegeln IEC 61851-21-2:2018*
Verfahrensabweichungen <i>/Deviation from test specification</i>	EN 61000-4-3, jeweils nur eine Position	
Prüfergebnis <i>/Test Result</i>	Forderungen erfüllt, Prüfung bestanden <i>/Requirements fulfilled, tests passed</i> Einzelergebnisse sind den Seiten 4 bis 7 zu entnehmen!	
Einschränkungen <i>/Restrictions to the test result</i>	keine	

Dieser Bericht gibt nur Aufschluss über die zur Prüfung eingereichten Prüfmuster und ist kein Nachweis über die Qualität der serienmäßigen Fertigung. Das Gesamtergebnis der Prüfung wurde aus den durchgeführten Teilprüfungen bestimmt. Mit * gekennzeichnete Verfahren wurden außerhalb der Akkreditierung durchgeführt. Für die Richtigkeit der Herstellerangaben trägt der Auftraggeber die Verantwortung. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. Der Bericht darf Dritten nur im vollen Wortlaut zur Kenntnis gegeben werden. Jede Veröffentlichung oder Vervielfältigung, auch in Kürzung oder Auszug, bedarf der vorherigen Genehmigung des Laboratoriums.

*/This test report applies to the tested EUT only and is not a certificate about the quality of the series production. With * marked procedures were performed outside of accreditation. This test report does not authorise to use any test marks. This report may not be published or changed in content without the express prior written consent of the lab. Without permission of the lab this report is not permitted to be duplicated in extracts.*

Stempel <i>/Seal</i>	Datum <i>/Date</i>	Prüfbericht erstellt von: <i>/Report prepared by:</i>	Prüfbericht freigegeben von: <i>/Report approved by:</i>
-------------------------	-----------------------	--	---

CE-LAB GmbH
Am Hammergrund 1
98693 Ilmenau
Tel. 03677/64 79 80 • Fax 03677/64 79 89




31.03.2023

Herr Andreas Reh

Dr.-Ing. Michael Naß

Änderungshistorie /Document History

Nr.	Änderung	Begründung	Bearbeiter	Datum
0	-	Erstausgabe	Herr Andreas Reh	31.03.2023
1				
2				
3				
4				

Getestete Betriebsarten

/Tested operating modes

Nr.	Betriebsart /Operating mode	Anwendung für	
		Emission	Immunity
BA1	Lademodus (Spannung geschaltet) mittels Simulationsbox oder Simulations-Stifte, die in CP und PE des Typ2-Ladesteckers gesteckt werden und Ladevorgang schalten.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Aufstellung der Teilprüfungen
/Detailed record of the partial tests

Hinweis: + - Bei datierten normativen Verweisungen gilt nur die in Bezug genommene Ausgabe. Bei undatierten Verweisungen gilt die letzte Ausgabe des in Bezug genommenen Dokuments (einschließlich aller Änderungen).

Störaussendung nach EN IEC 61000-6-4:2019
/Emission according to EN IEC 61000-6-4:2019

Störaussendungsmessungen / Emission measurements						
Nr. /No	Schnittstelle /Interface	Normen /Test specifications	Frequenzbereich /Frequency range	Verfahren /Method	Bemerkung /Remark	Prüfergebnis /Test Result
3.1	Gehäuse /Case	Störfeldstärke EN 55016-2-3	30 MHz - 1000 MHz	OATS oder SAC	/	PASS
3.2			30 MHz - 1000 MHz	TEM	/	N/A
3.3			30 MHz - 1000 MHz	FAC	/	N/A
3.4			1 GHz - 6 GHz	OATS oder SAC oder FAC	1)	PASS
4.5	Wechselstrom-Netzanschluss /AC-Power-Input	Störspannung EN 55016-2-1	150 kHz - 30 MHz	LISN	/	PASS
5.1	TK-Anschluss /Telecommunication Port	Störstrom EN 55032	150 kHz - 30 MHz	ISN CP	/	N/A

Anmerkung 1: Anwendung in Anhängigkeit von der höchsten internen Frequenz gemäß Tabelle 1 der EN 61000-6-4. Kundenvorgabe, deshalb wurde diese Messung zusätzlich durchgeführt.

$F_x=$	höchste interne Frequenz F_x	höchste Messfrequenz
<input checked="" type="checkbox"/>	$F_x \leq 108 \text{ MHz}$	1 GHz
<input type="checkbox"/>	$108 \text{ MHz} < F_x \leq 500 \text{ MHz}$	2 GHz
<input type="checkbox"/>	$500 \text{ MHz} < F_x \leq 1 \text{ GHz}$	5 GHz
<input type="checkbox"/>	$F_x > 1 \text{ GHz}$	6 GHz

Oberschwingungen und Spannungsschwankungen
/Harmonics and Flicker

Oberschwingungen und Spannungsschwankungen / Harmonics and Flicker					
Schnittstelle /Interface	Normen /Test specifications	Frequenzbereich /Frequency range	Verfahren /Method	Bemerkung /Remark	Prüfergebnis /Test Result
Wechselstrom-Netzanschluss /AC-Power-Input	Oberschwingung <input type="checkbox"/> EN 61000-3-2 <input type="checkbox"/> EN 61000-3-12	bis 2 kHz	EN 61000-4-7	2)	N/A
	Flicker <input type="checkbox"/> EN 61000-3-3 <input type="checkbox"/> EN 61000-3-11	/	EN 61000-4-15	3)	N/A

Anmerkung 2: Entfällt bei geringer Leistungsaufnahme < 75 W.

Anmerkung 3: Entfällt, wenn aufgrund der Leistungsaufnahme keine signifikanten Schwankungen oder Flicker erzeugt werden.

Störfestigkeit nach EN IEC 61000-6-2:2019
/Susceptibility according to EN IEC 61000-6-2:2019

Störfestigkeitsprüfung auf Gehäuse / Susceptibility on case						
Nr. /No	Normen /Test Specifications	Prüfstörgröße /Test Level	Einheiten /Units	Bewertung /Valuation	Bemerkung /Remark	Prüfergebnis /Test Result
1.1	Magnetfeld EN 61000-4-8	50 / 60 30	Hz A/m (Effektivwert)	A	1)	N/A
1.2	HF-Feld EN 61000-4-3	80 – 1000 10 80	MHz V/m % AM (1kHz)	A	2)	PASS
1.3	HF-Feld EN 61000-4-3	1.4 (1.0) -6.0 3 80	GHz V/m % AM (1kHz)	A	2)	PASS
1.4	ESD EN 61000-4-2	± 4	kV (Kontaktentladung)	B	/	PASS
		± 8	kV (Luftentladung)			

Anmerkung 1: Prüfung entfällt, wenn keine magnetfeldempfindlichen Bauteile vorhanden sind.

Anmerkung 2: Für kleine Prüflinge kann EN 61000-4-20 verwendet werden., Kundenvorgabe von 1 bis 6 GHz mit 3 V/m

Störfestigkeit von Signalanschlüssen / Susceptibility of signal connections

Nr. /No	Normen /Test Specifications	Prüfstörgröße /Test Level	Einheiten /Units	Bewertung /Valuation	Bemerkung /Remark	Prüfergebnis /Test Result
2.1	Hochfrequenz EN 61000-4-6	0.15-80	MHz	A	/	PASS
		10	V (unmoduliert)			
		80	% AM (1kHz)			
		± 1	kV (Spitze)			
2.2	Stoßspannung EN 61000-4-5	± 1	kV (Spitze)	B	2)	N/A
		1.2/50	µs (T _r /T _h)			
2.3	Transienten EN 61000-4-4 (kap. Koppelzange)	± 1(2)	kV (Spitze)	B	1)	PASS
		5/50	ns (T _r /T _h)			
		5	kHz (Wiederholfrequ.)			

Anmerkung 1: Gilt nur für Anschlüsse, deren Gesamtlänge nach Herstellerangaben größer als 3 m sein darf. Kundenvorgabe mit höheren Prüflevel.

Anmerkung 2: Gilt nur für Anschlüsse, deren Gesamtlänge nach Herstellerangaben größer als 30 m sein darf.

Störfestigkeit von Gleichstrom Netzein- und ausgänge / Susceptibility of DC-power in- and outputs

Nr. /No	Normen /Test Specifications	Prüfstörgröße /Test Level	Einheiten /Units	Bewertung /Valuation	Bemerkung /Remark	Prüfergebnis /Test Result
3.1	Hochfrequenz EN 61000-4-6	0.15-80	MHz	A		N/A
		10	V (unmoduliert)			
		80	% AM (1kHz)			
3.2	Stoßspannung EN 61000-4-5	± 0.5	kV (symmetrisch)	B	1)	N/A
		± 1.0	kV (unsym.)			
		1.2/50 (8/20)	µs (T _r /T _h)			
3.3	Transienten EN 61000-4-4	± 2.0	kV (Spitze)	B	2)	N/A
		5/50	ns (T _r /T _h)			
		5	kHz (Wiederholfrequ.)			

Anmerkung 1: Nicht anzuwenden auf Eingangsanschlüsse, die vorgesehen sind für eine Verbindung mit einer Batterie. Geräte, die zur Verwendung mit einem AC/DC-Netzteil vorgesehen sind, müssen am Eingang des Netzteils geprüft werden. Gleichstrom-Netzanschlüsse, die nicht zum Anschluss an ein DC-Versorgungsnetz vorgesehen sind, sind als Signalanschlüsse zu behandeln.

Anmerkung 2: Nicht anzuwenden auf Eingangsanschlüsse, die vorgesehen sind für eine Verbindung mit einer Batterie. Geräte, die zur Verwendung mit einem AC/DC-Netzteil vorgesehen sind, müssen am Eingang des Netzteils geprüft werden. Die Prüfung ist auf Gleichstrom-Netzanschlüsse anzuwenden, die dafür vorgesehen sind, die nicht zum Anschluss an ein DC-Versorgungsnetz vorgesehen sind, dauerhaft mit Leitungen verbunden zu werden, deren Länge größer als 3 m ist.

Störfestigkeit von Wechselstrom-Netzanschlüssen / Susceptibility of AC-power connections

Nr. /No	Normen /Test Specifications	Prüfstörgröße /Test Level	Einheiten /Units	Bewertung /Valuation	Bemerkung /Remark	Prüfergebnis /Test Result
4.1	Hochfrequenz EN 61000-4-6	0.15-80 10 80	MHz V (unmoduliert) % AM (1kHz)	A		PASS
4.2	DIPS EN 61000-4-11	100%	Absenkung Perioden	B	1)	PASS
		60%	Absenkung Perioden (50/60 Hz)	C		PASS
		30%	Absenkung Perioden (50/60 Hz)	C		PASS
4.3	DROP EN 61000-4-11	100% 250/300	Absenkung Perioden (50/60 Hz)	C	1)	PASS
4.4	Stoßspannung EN 61000-4-5	± 0.5/1.0/ 2.0 ± 0.5/1.0/2.0/ 4.0 1.2/50 (8/20)	kV (symmetrisch) kV (unsym.) µs (T _r /T _h)	B	2)	PASS
4.5	Transienten EN 61000-4-4	± 2.0 4.0 5/50 5 oder 100	kV (Spitze) ns (T _r /T _h) kHz (Pulsfrequenz)	B	2)	PASS

Anmerkung 1: Gilt nur für Eingänge.

Anmerkung 2: Kundenvorgabe mit höheren Prüflevel.

Normative Verweisungen gemäß Anhang ZA /Normative References according to Annex ZA

Bei datierten Verweisungen gilt nur die in Bezug genommene Ausgabe. Bei undatierten Verweisungen gilt die letzte Ausgabe des in Bezug genommenen Dokuments.

EN IEC 61000-6-4:2019		
CISPR 16-1-1:2015	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-1: Radio disturbance and immunity measuring apparatus – Measuring apparatus	EN 55016-1-1:2019
CISPR 16-1-2:2014	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-2: Radio disturbance and immunity measuring apparatus – Ancillary equipment – Conducted disturbances	EN 55016-1-2:2014
CISPR 16-1-4:2010 +A1:2012 +A2:2017	Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-4: Radio disturbance and immunity measuring apparatus – Antennas and test sites for radiated disturbance measurements	EN 55016-1-4:2010 +A1:2012 +A2:2017
CISPR 16-2-1:2014 +A1:2017	Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-1: Methods of measurement of disturbances and immunity – Conducted disturbance measurements	EN 55016-2-1:2014 +A1:2017
CISPR 16-2-3:2016	Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-1: Methods of measurement of disturbances and immunity – Radiated disturbance measurements	EN 55016-2-3:2017
CISPR 16-4-2:2011+ A1:2014	Specification for radio disturbance and immunity measuring apparatus and methods - Part 4-2: Uncertainties, statistics and limit modelling – Measurement instrumentation uncertainty	EN 55016-4-2:2011+ A2:2014
IEC 61000-4-20:2010	Electromagnetic compatibility (EMC) – part 4-20: Testing and measurement techniques – Emission and Immunity in transversal electromagnetic (TEM) waveguides	EN 61000-4-20:2010
CISPR 32:2015	Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement	EN 55032:2015
EN IEC 61000-6-2:2019		
IEC 61000-4-2:2008	Electromagnetic compatibility (EMC) – part 4-2: Testing and measurement techniques – Electrostatic discharge immunity test	EN 61000-4-2:2009
IEC 61000-4-3:2006 +A1:2007 +A2:2010	Electromagnetic compatibility (EMC) – part 4-3: Testing and measurement techniques – Radiated, radio-frequency, electromagnetic field immunity test	EN 61000-4-3:2006 +A1:2008 +A2:2010
IEC 61000-4-4:2012	Electromagnetic compatibility (EMC) – part 4-4: Testing and measurement techniques – Electrical fast transients/burst immunity test	EN 61000-4-4:2012
IEC 61000-4-5:2014	Electromagnetic compatibility (EMC) – part 4-5: Testing and measurement techniques – Surge immunity test	EN 61000-4-5:2014
IEC 61000-4-6:2013	Electromagnetic compatibility (EMC) – part 4-6: Testing and measurement techniques – Immunity to conducted disturbances, induced by radio-frequency fields	EN 61000-4-6:2014
IEC 61000-4-8:2009	Electromagnetic compatibility (EMC) – part 4-8: Testing and measurement techniques – Power frequency magnetic field immunity test	EN 61000-4-8:2010
IEC 61000-4-11:2004	Electromagnetic compatibility (EMC) – part 4-11: Testing and measurement techniques – Voltage dips, short interruptions and voltage variations immunity tests	EN 61000-4-11:2004
IEC 61000-4-20:2010	Electromagnetic compatibility (EMC) – part 4-20: Testing and measurement techniques – Emission and Immunity in transversal electromagnetic (TEM) waveguides	EN 61000-4-20:2010
IEC 61000-4-21:2011	Electromagnetic compatibility (EMC) – part 4-21: Testing and measurement techniques – Reverberation chamber test method	EN 61000-4-21:2011
IEC 61000-4-22:2010	Electromagnetic compatibility (EMC) – part 4-22: Testing and measurement techniques – Radiated emissions and immunity in fully anechoic rooms (FARs)	EN 61000-4-22:2010
IEC 61000-4-34:2005 +A1:2009	Electromagnetic compatibility (EMC) – part 4-11: Testing and measurement techniques – Voltage dips, short interruptions and voltage variations immunity tests for input currents more than 16 A per phase	EN 61000-4-34:2009 +A1:2009

Fachbereich EMV

Department EMC



EN 61000-3-2:2014

IEC 61000-4-7	Electromagnetic compatibility (EMC) – Part 4-7: Testing and measurement techniques – General guide on harmonics and interharmonics measurements and instrumentation, for power supply systems and equipment connected thereto	EN 61000-4-7
---------------	---	--------------

EN 61000-3-3:2013

IEC 61000-4-15:2010 + Cor. März 2012	Electromagnetic compatibility (EMC) – Part 4-15: Testing and measurement techniques – Flickermeter – Functional and design specifications	EN 61000-4-15:2011
---	---	--------------------

Gegenstand / *Object*
Prüfbericht / *Test report No.*
Auftraggeber / *Customer*
Seite / *Page*

Schaltunit
PB EMV 290323-1 Pulsares [4598]
Pulsares GmbH
9 von 117

Bewertungskriterien Störfestigkeit
/Performance Criteria Susceptibility

BK	Beschreibung /Description
A	<p>Der Prüfling muss <u>während und nach</u> der Prüfung weiterhin bestimmungsgemäß ohne Eingriff der Bedienperson arbeiten. Es darf keine Beeinträchtigung der Funktion bzw. des Betriebsverhaltens oder kein Funktionsausfall unterhalb einer vom Hersteller beschriebenen minimalen Betriebsqualität auftreten, wenn der Prüfling bestimmungsgemäß betrieben wird. Die minimale Betriebsqualität darf durch einen zulässigen Verlust der Betriebsqualität ersetzt werden. Falls die minimale Betriebsqualität oder der zulässige Verlust der Betriebsqualität vom Hersteller nicht angegeben ist, darf jede dieser beiden Angaben aus der Produktbeschreibung und den -unterlagen abgeleitet werden sowie aus dem, was der Benutzer bei bestimmungsgemäßem Gebrauch vernünftigerweise vom Prüfling erwarten kann.</p> <p><u>Vom Hersteller festgelegt und angewendet:</u></p> <p>Keine Unterbrechung oder Beenden des Ladevorgangs. Das Relais der Schaltunit bleibt dauerhaft geschlossen. AC-Spannung liegt am Typ2-Stecker dauerhaft an.</p>
B	<p>Der Prüfling muss <u>nach</u> der Prüfung weiterhin bestimmungsgemäß ohne Eingriff der Bedienperson arbeiten. Nach der Anwendung der Prüfstörgröße darf keine Beeinträchtigung der Funktion bzw. des Betriebsverhaltens oder kein Funktionsausfall unterhalb einer vom Hersteller beschriebenen minimalen Betriebsqualität auftreten, wenn der Prüfling bestimmungsgemäß betrieben wird. Die minimale Betriebsqualität darf durch einen zulässigen Verlust der Betriebsqualität ersetzt werden. Während der Prüfung ist jedoch eine Beeinträchtigung des Betriebsverhaltens erlaubt. Eine Änderung der eingestellten Betriebsart oder ein Verlust von gespeicherten Daten nach der Prüfung ist jedoch nicht erlaubt. Falls die minimale Betriebsqualität oder der zulässige Verlust der Betriebsqualität vom Hersteller nicht angegeben ist, darf jede dieser beiden Angaben aus der Produktbeschreibung und den -unterlagen abgeleitet werden sowie aus dem, was der Benutzer bei bestimmungsgemäßem Gebrauch vernünftigerweise vom Prüfling erwarten kann.</p> <p><u>Vom Hersteller festgelegt und angewendet:</u></p> <p>Kurzzeitige Unterbrechung des Ladevorgangs. Das System führt selbstständig (mehrere) Wiederanläufe durch und schaltet ohne Eingriffe Dritter erneut frei (wenn kein Fehler aktiv).</p>
C	<p>Ein zeitweiliger Funktionsausfall ist während und nach der Prüfung erlaubt, wenn die Funktion von selbst wiederherstellbar ist oder durch Bestätigung der Einstell-/Bedienelemente oder durch zyklisches Durchfahren der Leistung des Prüflings durch den Benutzer in Übereinstimmung mit den Anweisungen des Herstellers wiederhergestellt werden kann. Funktionen und/oder Informationen, die in nicht temporären Speichern gespeichert sind oder durch die Versorgung über eine Hintergrundbatterie geschützt werden, dürfen nicht verloren gehen.</p> <p><u>Vom Hersteller festgelegt und angewendet:</u></p> <p>Beenden des Ladevorgangs mit Fehlerausgabe. RGBW-LEDs blinken rot in Anzahl des Fehlercodes. Rücksetzung nach Trennung des Typ2-Ladesteckers oder Versorgung Aus/ An.</p>

Abweichungen von der Prüfnorm / Deviations

Kundenvorgabe: EN 61000-4-3 Prüfungen jeweils nur in einer Position, da PulCharge EV-Lademodul für den Test in einem Kunststoff-Industriegehäuse (<30cm) verbaut wurde.

Messunsicherheiten / Uncertainty of Measurement

Das Labor hat die Messunsicherheiten für alle relevanten EMV-Prüfverfahren analysiert und in einem Technischen Bericht TB3 dokumentiert. Für die Störaussendungsmessungen wurde nachgewiesen, dass die erweiterte Messunsicherheiten (k=2) kleiner ist als die in EN 55016-4-2:2011+A1:2014 aufgeführten Werte für Ucispr. Bei den Störfestigkeitsprüfungen werden die in den Prüfnormen aufgeführten zulässigen Messunsicherheiten eingehalten. Beim Einpegeln der Prüfstörgrößen mit der Software BAT-EMC werden die Grenzabweichungen eingehalten. Bei Messungen zum EUT-Monitoring werden Messunsicherheiten auf Kundenwunsch berücksichtigt.

Entscheidungsregeln / Decision Rules

Bei Störaussendungsmessungen gilt die Prüfung als bestanden, wenn der Messwert den Grenzwert nicht überschreitet. Die Unsicherheit Ucispr ist bei der Festlegung der normativen Grenzwerte berücksichtigt worden. Bei den Störfestigkeitsprüfungen erfolgt die Entscheidung auf Basis der vom Hersteller festgelegten Bewertungskriterien. Wenn Messungen zum EUT-Monitoring durchgeführt werden, gelten die Prüfung als bestanden, wenn die Messwerte die Herstellergrenzwerte einhalten. Auf Kundenwunsch müssen die Messunsicherheiten dabei durch angepasste Grenzwerte berücksichtigt werden.

EUT-Monitoring / EUT-Monitoring

Nr.	Messgröße	Grenzwert	Beschreibung	BAT-EMC Easy Monitoring
1	visuelle Beobachtung		Beobachtung von: Prüfingenieur	manuell CE-CAM
2				
3				
4				
5				

Allgemeine Projektangaben
/Project Information

Auftrags-Nr. <i>/Project No.</i>	[4598]
Prüfplan <i>/Test Plan</i>	Kundenvorgabe, Fachgrundnorm Industrie, teilweise mit höheren Prüfpegeln.
Herstellerfestlegungen <i>/Manufacturer Definitions</i>	Durchführung von Teilprüfungen mit höheren Prüflevel. Betriebsspannung 230V AC/ 50 Hz
Ansprechpartner des Auftraggebers <i>/Test Manager – Customer</i>	Herr Manuel Hupe
Eingang der Prüfmuster <i>/Date of Receipt of EUT</i>	08.03.2023
Durchführung der Prüfung <i>/Date of Measurement</i>	08.03.2023 bis 28.03.2023
verantwortlicher Prüflingenieur <i>/Responsible Test Engineer</i>	Herr Andreas Reh
Prüfbericht von <i>/Test Report by</i>	Herr Andreas Reh
Ort der Prüfungen <i>/Place of Testing</i>	CE-LAB GmbH

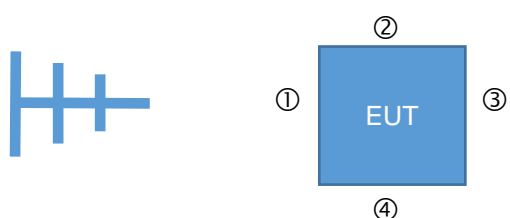
Allgemeine Bemerkungen und Erläuterungen */Remarks and comments*

<input checked="" type="checkbox"/>	Das Kreuz bedeutet die Anwendung dieser Option
<input type="checkbox"/>	Das Quadrat bedeutet die Nichtanwendung dieser Option
N/A	Dieser Testschritt ist für den Prüfling nicht anwendbar
P (PASS)	Die Anforderung wurde erfüllt
F (FAIL)	Die Anforderung wurde nicht erfüllt

Verwendung des Dezimaltrennzeichens in diesem Bericht */Use of decimal separator*

<input type="checkbox"/>	Komma (,)
<input checked="" type="checkbox"/>	Punkt (.)

Festlegung der Prüflingspositionen */Definition of test positions*



- ① Frontseite (Hauptbedienseite) oder 0°
① *Front side (main access side) or 0°*
- ② linke Seite oder 90°
② *left Side or 90°*
- ③ Rückseite oder 180°
③ *rear side or 180°*
- ④ rechte Seite oder 270°
④ *right side or 270°*

Beschreibung des Prüfgegenstandes gemäß Kundenangaben
/Description of the EUT

Funktionsbeschreibung <i>/Functional Description</i>	PulCharge EV-Lademodul ist ein vollmodulares Mode-3 Ladesystem für die Elektromobilität mit DC-Fehlerstromschutz.			
Abmessungen (LxBxH)/ <i>/Dimensions (LxBxH)</i>	200 mm x 150 mm x 93 mm (Gehäuse), 12 m Ladeleitung (blau) fest installiert			
Gewicht <i>/Weight</i>	ca. 1.2 kg (Gehäuse)			
höchste interne Frequenz <i>/Highest internal clock frequency</i>	<input checked="" type="checkbox"/> ≤ 400 MHz	96 MHz		
	<input type="checkbox"/> >400 MHz			
Umgebungsklasse <i>/Environment Class</i>	Industriebereich, sowie auch Wohn- und Gewerbebereich			
Betriebsspannung <i>/Supply Voltage</i>	Spannung: 230V AC Frequenz: 50 Hz			
Betriebstemperatur <i>/Operating Temperature</i>	-25 bis 40 °C			
Stromaufnahme / Leistung <i>/Operating Current / Power</i>	3W (geprüfte Betriebsart, geschaltete Ladespannung)			
Netzanschluss <i>/Mains connections</i>	L1/ L2/ L3/ N/ PE			
Konfiguration des Prüflings <i>/Configuration of the EUT</i>	EV EasyCharge / Schaltunit / Diffsensor Hardware-Version: v1.05/ v1.06/ v1.10 Software-Version: v1.00/ v1.00/ v1.00			
Anzeige <i>/Display</i>	RGB- LED und intern 2-stellige 7-Segment anzeige			
Schnittstellen <i>/Interfaces</i>	Bezeichnung	Länge / m	verwendet	geschirmt
	CPT	>3<30 m	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>
	Signal-/Steueranschluss		<input type="checkbox"/>	<input type="checkbox"/>
	sonstiges		<input type="checkbox"/>	<input type="checkbox"/>

Testposition <i>/Test position</i>	<input checked="" type="checkbox"/>	Tischgerät <i>/Table top equipment</i>
	<input type="checkbox"/>	Wandmontage <i>/Wall mounted equipment</i>
	<input type="checkbox"/>	Standgerät <i>/Floor standing equipment</i>
	<input type="checkbox"/>	Handgerät <i>/Hand-held equipment</i>
	<input type="checkbox"/>	Sonstiges <i>/Other</i>

Komponenten (Teil des Prüflings) /Components part of EUT

Nr.	Model	Hersteller	Serien-Nummer	Kommentar
1	Schaltunit	Pulsares	-	v.105
2	EasyCharge	Pulsares	-	v.106

Zubehör (nicht Teil des Prüflings) /Accessories not part of EUT

Nr.	Model	Hersteller	Serien-Nummer	Kommentar
1	Testbox- CE-LAB	Pulsares	keine	Fahrzeugsimulation angelehnt an EN ISO 15118-3:2016 und EN IEC 61851-1:2019
2	Simulationsstifte für Typ2-Ladestecker (CP nach PE)	Pulsares	keine	Fahrzeugsimulation bestehend aus Widerstandsnetzwerk, Diode und 1nF Kondensator (CP nach PE)

Am Prüfling durchgeführte Modifikationen /Modifications

keine

Darstellung des Prüfobjektes /View of the EUT



Foto 1: Gesamtansicht des Prüfobjektes

Kennzeichnung /Identification plate

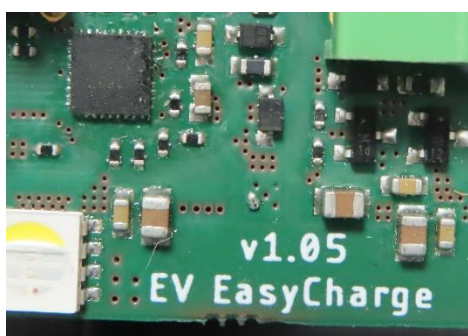


Foto 2: Leiterplattenkennzeichnungen

EN IEC 61000-6-4:2019 Störspannung am Wechselstrom-Netzanschluss (Tabelle 2.1)
/EN IEC 61000-6-4:2019 Disturbance Voltage on AC-Mains (Table 2.1)

Prüfaufbau <i>/Test set-up description</i>	<input checked="" type="checkbox"/>	Aufbautyp A (Abstand 40 cm zur vertikalen Bezugsmasse) <i>/Set-up Type A (40 cm distance to vertical ground plane, 80 cm over ground plane)</i>			
	<input type="checkbox"/>	Aufbautyp B (Abstand 40 cm zur horizontalen Bezugsmasse) <i>/Set-up Type B (40 cm distance to horizontal ground plane)</i>			
	<input type="checkbox"/>	Standgerät (10 cm über Bezugsmasse) <i>/Floor standing equipment set-up (10 cm over ground plane)</i>			
	<input type="checkbox"/>	Handnachbildung angewendet <i>/Artificial hand applied</i>			
	<input type="checkbox"/>	Sonstiges <i>/Other</i>			
Prüfmethode <i>/Test method applied</i>	<input checked="" type="checkbox"/>	Netznachbildung für den Stromversorgungsanschluss (AMN) <i>/Artificial main network (AMN)</i>			
	<input type="checkbox"/>	Netznachbildung als Spannungssensor <i>/Artificial main network used as voltage probe</i>			
	<input type="checkbox"/>	Sonstiges <i>/Other</i>			
Prüfverfahren <i>/Test Specification</i>	EN 55016-2-1 Abschnitt 7 <i>/EN 55016-2-1 part 7</i>				
Prüfmerkmale <i>/Test Characteristic</i>	Am Prüfling müssen die QP- und AV-Grenzwerte unterschritten werden. <i>/The measurement results may not exceed the QP and AV limit lines.</i>				
Grenzwerte <i>/Limit Lines</i>	IEC 61851-21-2 Klasse B statt EN 61000-6-4 Tabelle 2.1				
Betriebsarten <i>/Operation modes</i>	<input checked="" type="checkbox"/> BA 1	<input type="checkbox"/> BA 2	<input type="checkbox"/> BA 3	<input type="checkbox"/> BA 4	<input type="checkbox"/> BA 5
Prüfergebnis <i>/Test result</i>	<input checked="" type="checkbox"/> Test bestanden / PASSED			<input type="checkbox"/> Test nicht bestanden / FAILED	

Tabellenabschnitt	Frequenzbereich MHz	Koppeleinrichtung (Tabelle A.7)	Detektorart/ Bandbreite	Grenzwert dBµV
2.1	0.15 bis 0.5	AMN	Quasispitzenwert/ 9 kHz	79
	0.5 bis 30			73
	0.15 bis 0.5	AMN	Mittelwert/ 9 kHz	66
	0.5 bis 30			60

Messunsicherheit

/Uncertainty of Measurement

Das Labor hat in seinem Technischen Bericht TB3 Rev.1.7 nachgewiesen, dass die erweiterten Messunsicherheiten (k=2) der Störspannungsmessung kleiner sind, als die in EN 55016-4-2+A1:2014 aufgeführten Werte für U_{CISPR} .

Messverfahren	Frequenzbereich	U_{CISPR}
Messung mit einer Stromversorgungs-Netznachbildung	9 kHz bis 150 kHz	3.8 dB
Messung mit einer Stromversorgungs-Netznachbildung	150 kHz bis 30 MHz	3.4 dB

Prüfergebnis

/Test Result

Die Ergebnisse sind den folgenden Protokollen zu entnehmen.

/The results are in the following protocols.

Messergebnisse

/Results

Test	Status	Result
09.03.2023 Störspannung AC In IEC 61851-21-2 Klasse B	Finished	Passed
Störspannung AC In IEC 61851-21-2 Klasse B- CPT Port	Finished	Passed

Test Information (Start):

Conducted Voltage Emission

09.03.2023 Störspannung AC EN IEC 61000-6-4 Klasse B

Test-Nr.: 675

BAT-EMC Vers.-Nr.: 2022.0.27.0

Datum: 09.03.2023 13:52:35

Prüfer: AR

Grenzwert/Limit

IEC 61851-21-2:2018/IEC 61851-21-2 Kl. B
AC-In

Limit Definition Version

V.369 07.03.2023

Klasse/Class

B

Status/Status

Finished

Ergebnis/Result

PASS

Ansicht des Prüfaufbaus:

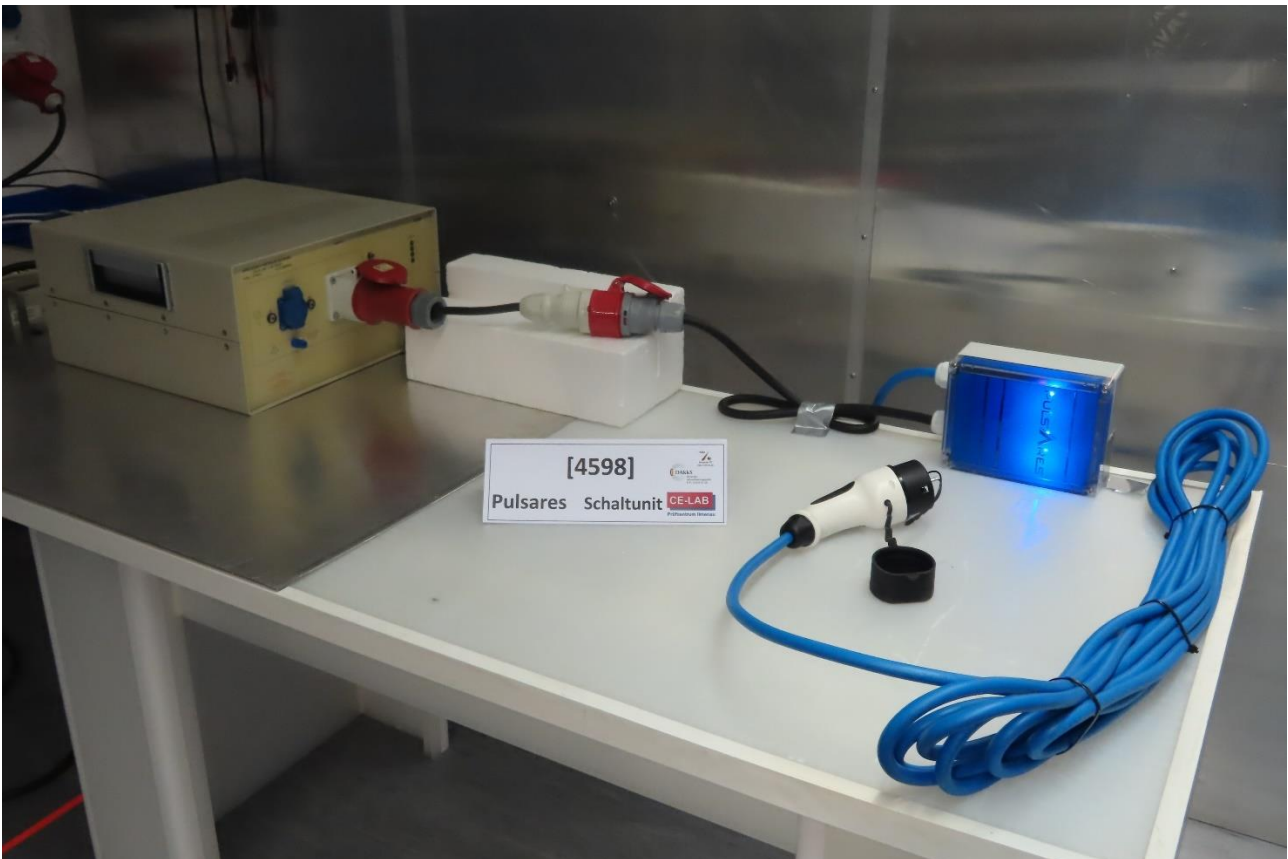


Foto 3: Prüfaufbau Störspannungsmessung, AC Eingang

Sub-Range Test(s): **SR 1, N**

Start Frequency: **150 kHz** Stop Frequency: **30 MHz** Frequency Step: **5 kHz**

Setup	Störspannung HP 3phasig	Setup (Final)	Störspannung HP 3phasig
Mode	Linear scan	Position	Neutral N
Vormessung	Prescan		
Endmessung	Advanced finals		
Reference Level	80 dBµV	Sweep Number	1
Dynamic	100 dB	RF Attenuation	0 dB
Span	100 kHz	Min Attenuation	
RBW	9 kHz	Preamplifier	OFF
VBW	Auto	Preselector	ON
Sweep Time	20 ms/Step	Preselector Attenuation	0 dB

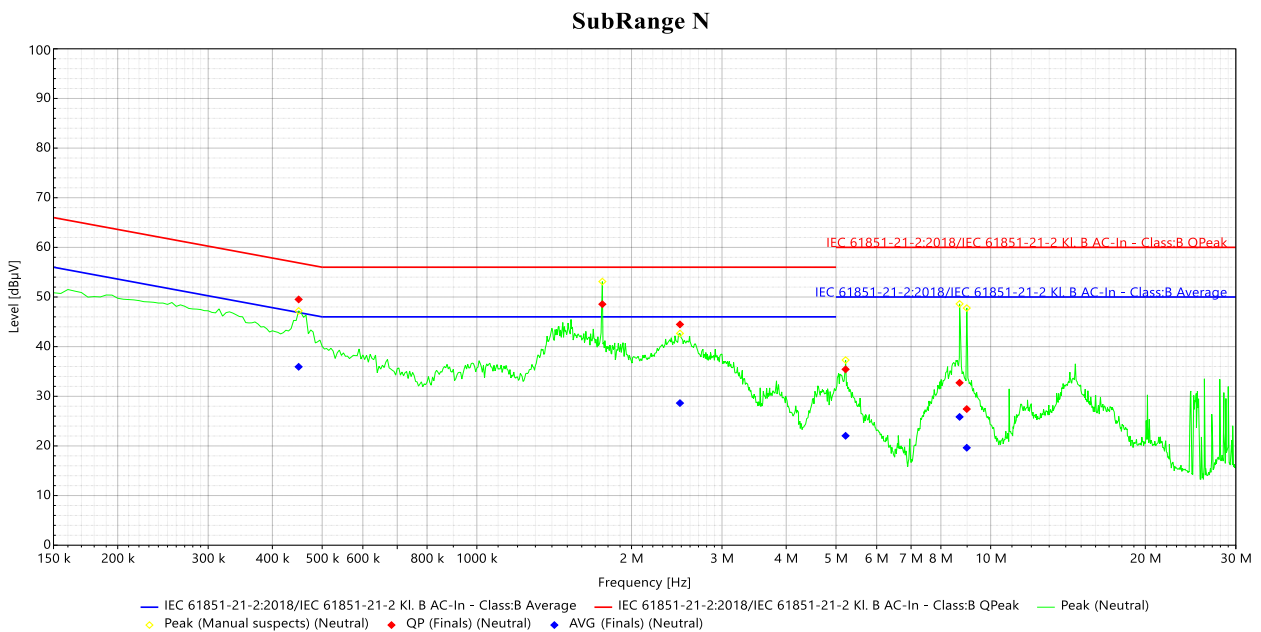


Diagramm 1: Störspannung N

Die Subrange-Nummer (SR1) verweist auf die entsprechenden Abschnitte in der Tabelle der Endmesswerte.

Sub-Range Test(s): **SR 2, L1**

Start Frequency: **150 kHz** Stop Frequency: **30 MHz** Frequency Step: **5 kHz**

Setup	Störspannung HP 3phasig	Setup (Final)	Störspannung HP 3phasig
Mode	Linear scan	Position	Phase 1 L1
Vormessung	Prescan		
Endmessung	Advanced finals		
Reference Level	80 dBµV	Sweep Number	1
Dynamic	100 dB	RF Attenuation	0 dB
Span	100 kHz	Min Attenuation	
RBW	9 kHz	Preamplifier	OFF
VBW	Auto	Preselector	ON
Sweep Time	20 ms/Step	Preselector Attenuation	0 dB

SubRange L1

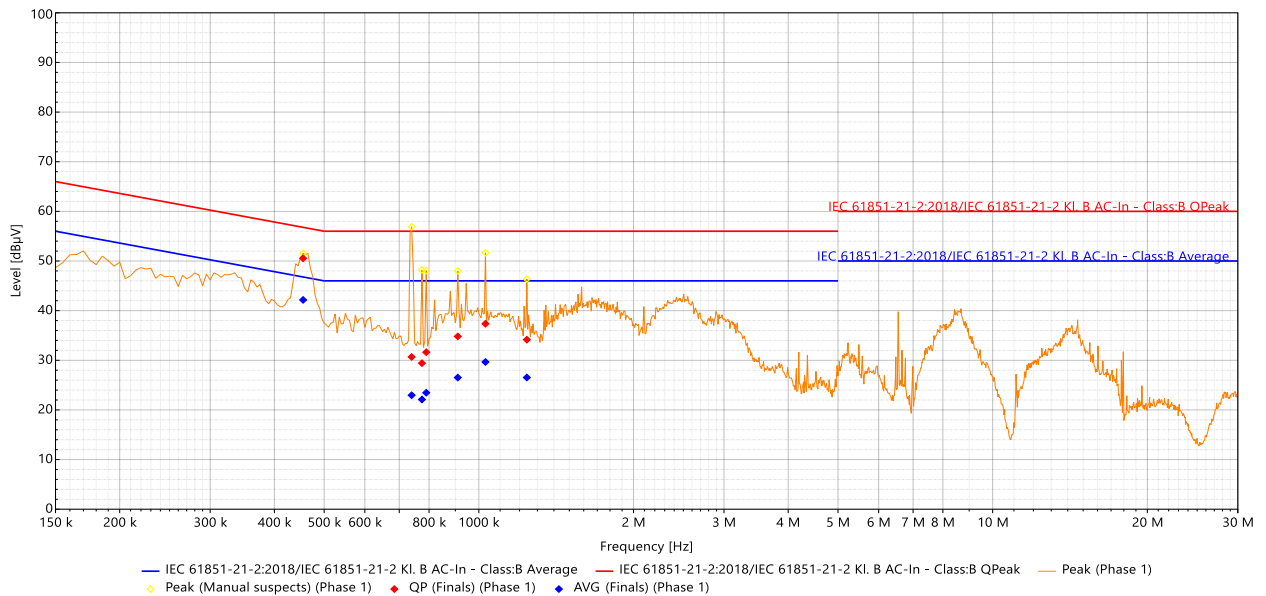


Diagramm 2: Störspannung L1

Die Subrange-Nummer (SR2) verweist auf die entsprechenden Abschnitte in der Tabelle der Endmesswerte.

Sub-Range Test(s): **SR 3, L2**

Start Frequency: **150 kHz** Stop Frequency: **30 MHz** Frequency Step: **5 kHz**

Setup	Störspannung HP 3phasig	Setup (Final)	Störspannung HP 3phasig
Mode	Linear scan	Position	Phase 2 L2
Vormessung	Prescan		
Endmessung	Advanced finals		
Reference Level	80 dBµV	Sweep Number	1
Dynamic	100 dB	RF Attenuation	0 dB
Span	100 kHz	Min Attenuation	
RBW	9 kHz	Preamplifier	OFF
VBW	Auto	Preselector	ON
Sweep Time	20 ms/Step	Preselector Attenuation	0 dB

SubRange L2

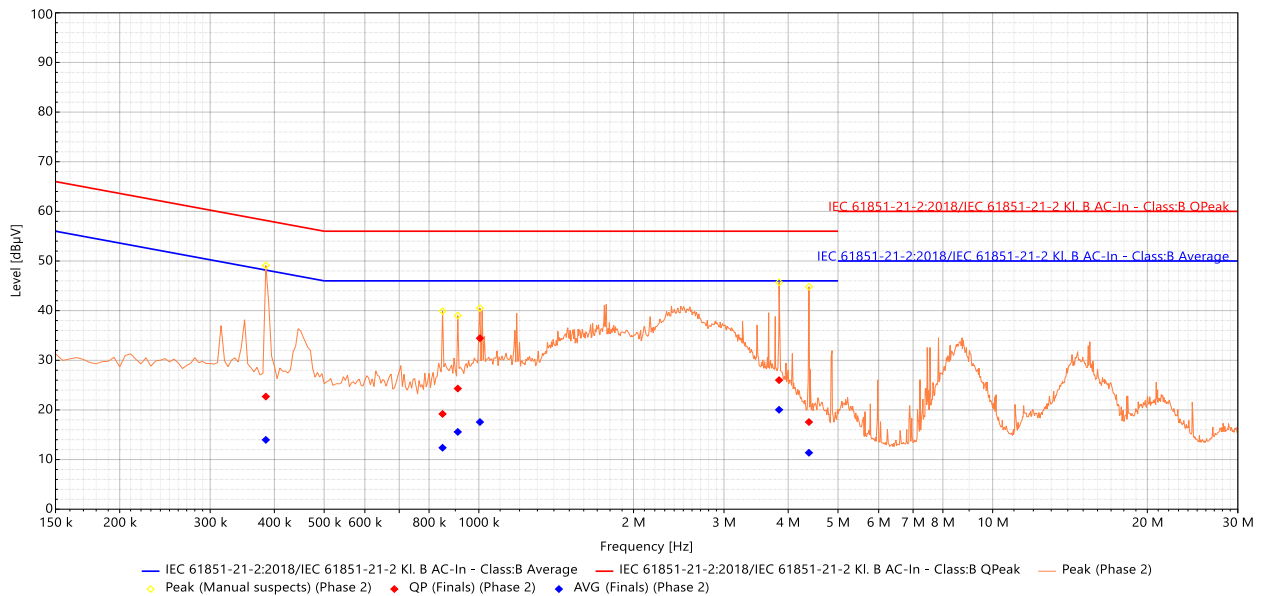


Diagramm 3: Störspannung L2

Die Subrange-Nummer (SR3) verweist auf die entsprechenden Abschnitte in der Tabelle der Endmesswerte.

Sub-Range Test(s): SR 4, L3

Start Frequency: **150 kHz** Stop Frequency: **30 MHz** Frequency Step: **5 kHz**

Setup	Störspannung HP 3phasig	Setup (Final)	Störspannung HP 3phasig
Mode	Linear scan	Position	Phase 3 L3
Vormessung	Prescan		
Endmessung	Advanced finals		
Reference Level	80 dBµV	Sweep Number	1
Dynamic	100 dB	RF Attenuation	0 dB
Span	100 kHz	Min Attenuation	
RBW	9 kHz	Preamplifier	OFF
VBW	Auto	Preselector	ON
Sweep Time	20 ms/Step	Preselector Attenuation	0 dB

SubRange L3

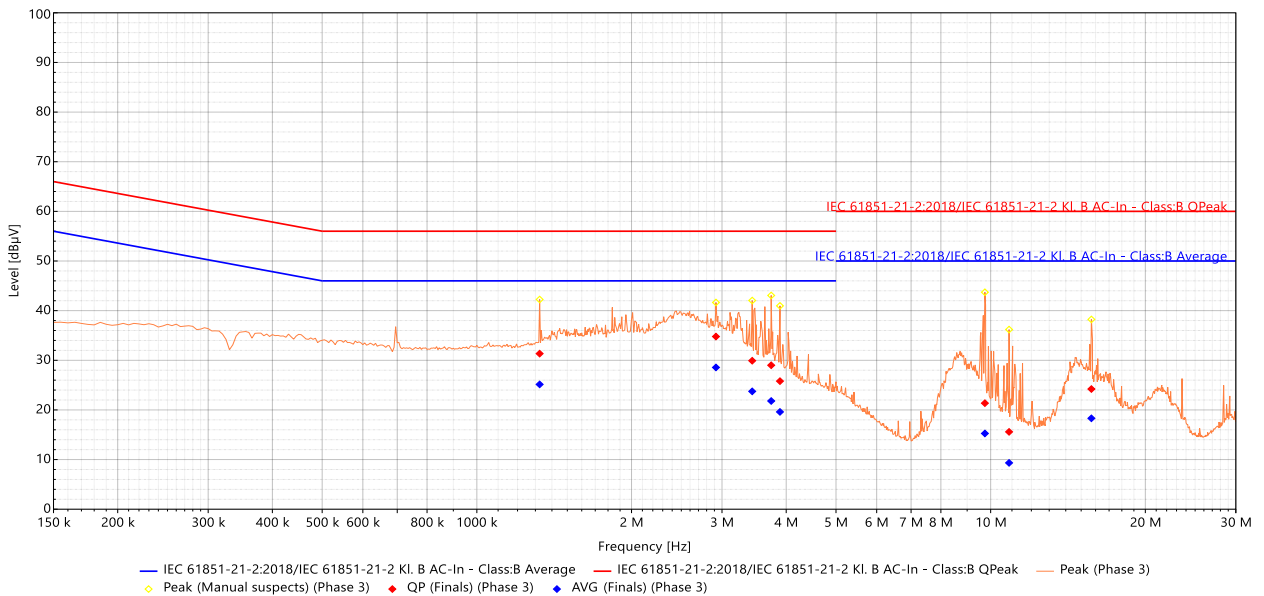


Diagramm 4: Störspannung L3

Die Subrange-Nummer (SR4) verweist auf die entsprechenden Abschnitte in der Tabelle der Endmesswerte.

Höchste Messergebnisse für: 09.03.2023 Störspannung AC EN IEC 61000-6-4 Klasse B

Freq.	SR	MeasQP dBµV	Limit QP dBµV	ΔQP dB	MeasAV dBµV	Limit AVG dBµV	ΔAVG dB	Corr. dB
450 kHz	1	49,51	56,88	-7,36	35,94	46,88	-10,93	10,21
1,755 MHz	1	48,55	56	-7,45	-49,75	46	-95,75	10,24
2,485 MHz	1	44,48	56	-11,52	28,63	46	-17,37	10,25
5,22 MHz	1	35,43	60	-24,57	22,04	50	-27,96	10,3
8,7 MHz	1	32,72	60	-27,28	25,85	50	-24,15	10,36
8,985 MHz	1	27,43	60	-32,57	19,63	50	-30,37	10,36
455 kHz	2	50,55	56,78	-6,23	42,16	46,78	-4,62	10,21
740 kHz	2	30,68	56	-25,32	22,96	46	-23,04	10,23
775 kHz	2	29,42	56	-26,58	22,1	46	-23,9	10,23
790 kHz	2	31,63	56	-24,37	23,46	46	-22,54	10,23
910 kHz	2	34,81	56	-21,19	26,52	46	-19,48	10,24
1,03 MHz	2	37,36	56	-18,64	29,66	46	-16,34	10,24
1,24 MHz	2	34,15	56	-21,85	26,53	46	-19,47	10,24
385 kHz	3	22,69	58,17	-35,48	13,97	48,17	-34,2	10,2
850 kHz	3	19,19	56	-36,81	12,38	46	-33,62	10,22
910 kHz	3	24,31	56	-31,69	15,57	46	-30,43	10,23
1,005 MHz	3	34,45	56	-21,55	17,56	46	-28,44	10,23
3,84 MHz	3	26	56	-30	20,03	46	-25,97	10,27
4,39 MHz	3	17,56	56	-38,44	11,37	46	-34,63	10,28
1,325 MHz	4	31,34	56	-24,66	25,14	46	-20,86	10,21
2,92 MHz	4	34,78	56	-21,22	28,56	46	-17,44	10,24
3,435 MHz	4	29,91	56	-26,09	23,74	46	-22,26	10,25
3,74 MHz	4	29	56	-27	21,8	46	-24,2	10,25
3,89 MHz	4	25,8	56	-30,2	19,6	46	-26,4	10,25
9,745 MHz	4	21,36	60	-38,64	15,26	50	-34,74	10,35
10,86 MHz	4	15,58	60	-44,42	9,33	50	-40,67	10,38
15,705 MHz	4	24,21	60	-35,79	18,31	50	-31,69	10,46

Tabelle 1: Höchste Messergebnisse 09.03.2023 Störspannung AC In IEC 61851-21-2 Klasse B

Hinweis: Bei einem Abstand von ≥ 10 dB zur Grenzwertlinie sind keine Nachmessungen erforderlich und die Anzahl der aufgeführten höchsten Messwerte kann kleiner als 6 sein.
Rot markierte Werte überschreiten den vorgegebenen Grenzwert.

Verwendete Mess- und Prüftechnik:				
Bezeichnung	Model	Type	Kalibrierung, letzte / nächste	Inventar-Nr. Serien-Nr.
HP8546A	HP	Receiver	12.11.2020 08:58:11 12.11.2023 08:58:11	10001288 3617A00323
K3015	RG58	Cable	06.11.2022 14:08:44 06.01.2024 14:08:44	
K8006	RG214	Cable	19.10.2021 11:25:55 19.10.2023 11:25:55	
MSS 15WDG-N30	Mantelstromsperren	Filter	19.10.2021 13:40:26 19.10.2023 13:40:26	
NNB42	Teseq	LISN	23.03.2021 10:44:46 23.09.2023 10:44:46	1000 0083 96003

Test Information (Ende):	
Conducted Voltage Emission	
09.03.2023 Störspannung AC EN IEC 61000-6-4 Klasse B	
Test-Nr.: 675	BAT-EMC Vers.-Nr.: 2022.0.27.0
Datum: 09.03.2023 13:52:35	Prüfer: AR

Test Information (Start):

Conducted Voltage Emission

Störspannung AC EN IEC 61000-6-4 Klasse B - CPT Port

Test-Nr.: 676

BAT-EMC Vers.-Nr.: 2022.0.27.0

Datum: 10.03.2023 09:00:56

Prüfer: AR

Grenzwert/Limit

IEC 61851-21-2:2018/IEC 61851-21-2 Kl. B
AC-CPT

Limit Definition Version

V.369 07.03.2023

Klasse/Class

B

Status/Status

Finished

Ergebnis/Result

PASS

Ansicht des Prüfaufbaus:



Foto 4: Prüfaufbau Störspannungsmessung- CPT Port

Sub-Range Test(s): **SR 1, N**

Start Frequency: **150 kHz** Stop Frequency: **30 MHz** Frequency Step: **5 kHz**

Setup	Störspannung HP + K3015	Setup (Final)	Störspannung HP + K3015 mit
Mode	Linear scan	Position	Neutral N
Vormessung	Prescan		
Endmessung	Advanced finals		
Reference Level	80 dBµV	Sweep Number	1
Dynamic	100 dB	RF Attenuation	0 dB
Span	100 kHz	Min Attenuation	
RBW	9 kHz	Preamplifier	OFF
VBW	Auto	Preselector	ON
Sweep Time	20 ms/Step	Preselector Attenuation	0 dB

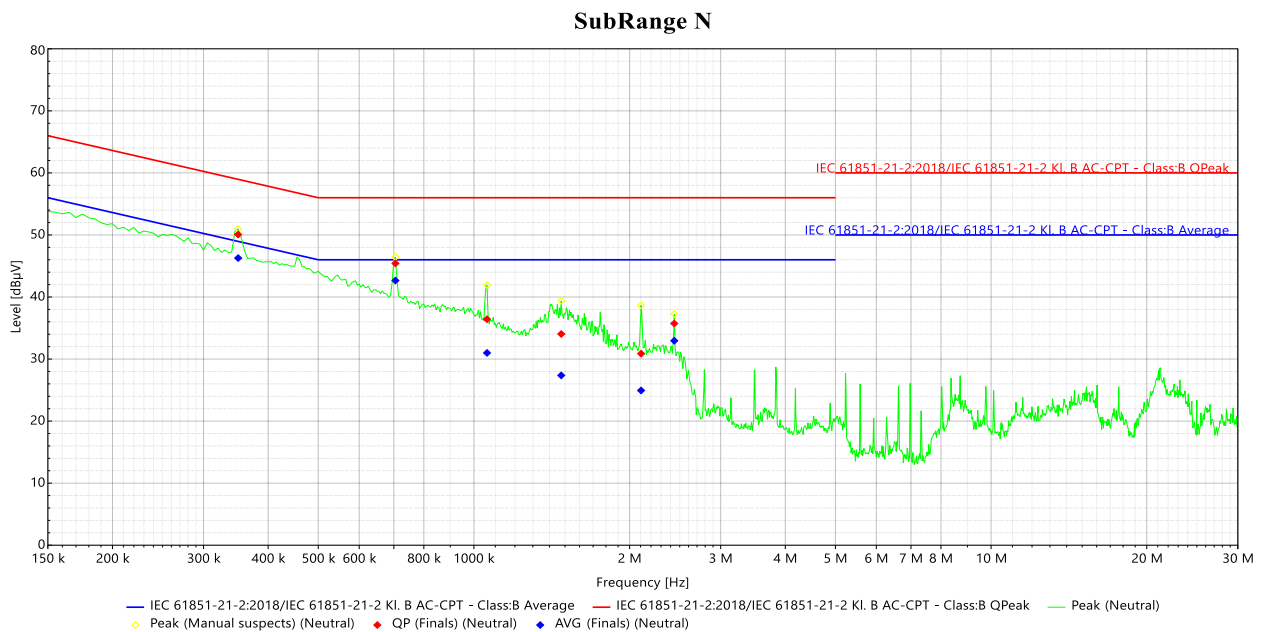


Diagramm 5: Störspannung N, CPT- Port

Die Subrange-Nummer (SR1) verweist auf die entsprechenden Abschnitte in der Tabelle der Endmesswerte.

Sub-Range Test(s): **SR 2, L1**

Start Frequency: **150 kHz** Stop Frequency: **30 MHz** Frequency Step: **5 kHz**

Setup	Störspannung HP + K3015	Setup (Final)	Störspannung HP + K3015 mit
Mode	Linear scan	Position	Phase 1 L1
Vormessung	Prescan		
Endmessung	Advanced finals		
Reference Level	80 dBµV	Sweep Number	1
Dynamic	100 dB	RF Attenuation	0 dB
Span	100 kHz	Min Attenuation	
RBW	9 kHz	Preamplifier	OFF
VBW	Auto	Preselector	ON
Sweep Time	20 ms/Step	Preselector Attenuation	0 dB

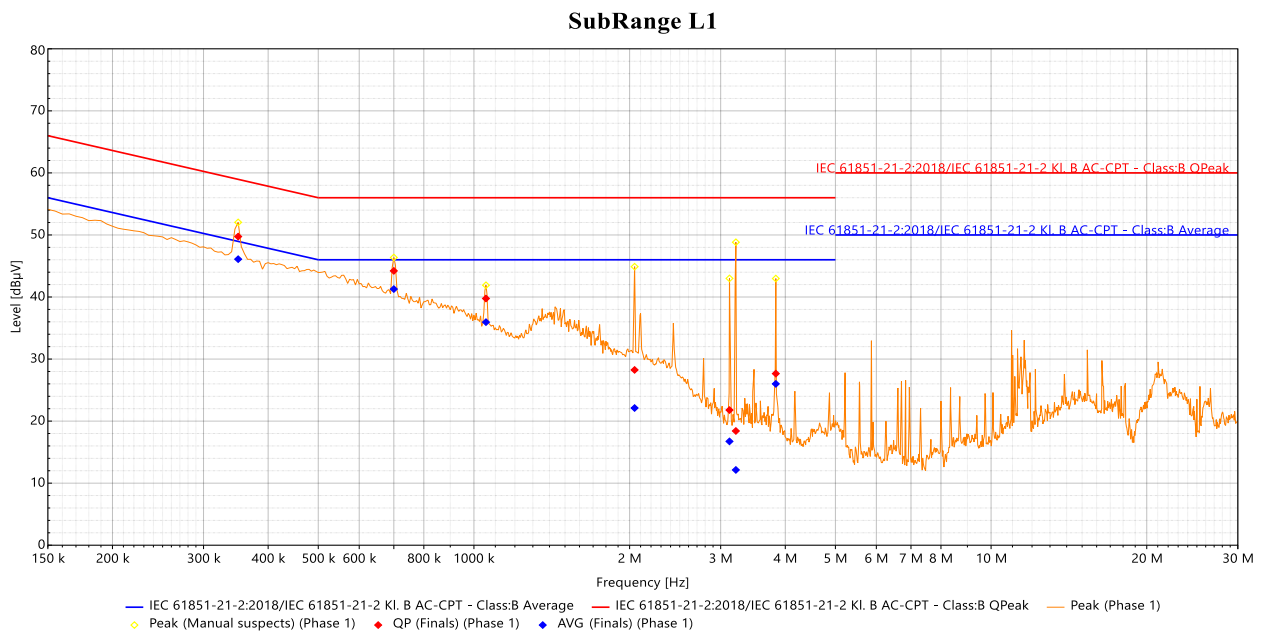


Diagramm 6: Störspannung L1, CPT- Port

Die Subrange-Nummer (SR2) verweist auf die entsprechenden Abschnitte in der Tabelle der Endmesswerte.

Sub-Range Test(s): **SR 3, L2**

Start Frequency: **150 kHz** Stop Frequency: **30 MHz** Frequency Step: **5 kHz**

Setup	Störspannung HP + K3015	Setup (Final)	Störspannung HP + K3015 mit
Mode	Linear scan	Position	Phase 2 L2
Vormessung	Prescan		
Endmessung	Advanced finals		
Reference Level	80 dBµV	Sweep Number	1
Dynamic	100 dB	RF Attenuation	0 dB
Span	100 kHz	Min Attenuation	
RBW	9 kHz	Preamplifier	OFF
VBW	Auto	Preselector	ON
Sweep Time	20 ms/Step	Preselector Attenuation	0 dB

SubRange L2

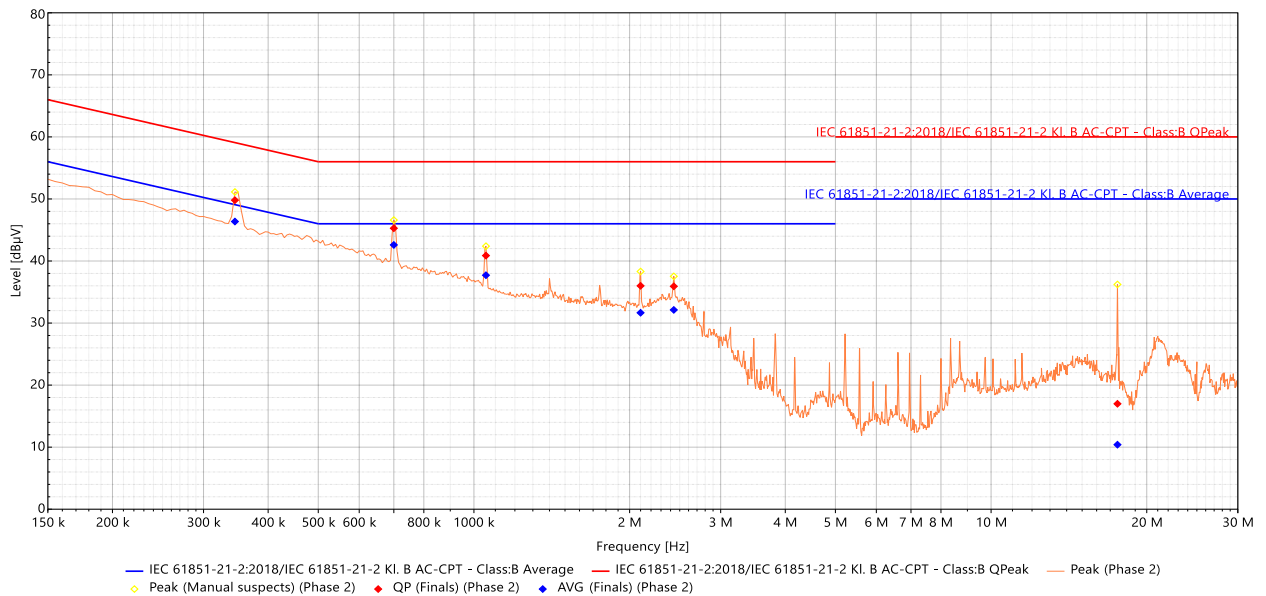


Diagramm 7: Störspannung L2, CPT- Port

Die Subrange-Nummer (SR3) verweist auf die entsprechenden Abschnitte in der Tabelle der Endmesswerte.

Sub-Range Test(s): **SR 4, L3**

Start Frequency: **150 kHz** Stop Frequency: **30 MHz** Frequency Step: **5 kHz**

Setup	Störspannung HP + K3015	Setup (Final)	Störspannung HP + K3015 mit
Mode	Linear scan	Position	Phase 3 L3
Vormessung	Prescan		
Endmessung	Advanced finals		
Reference Level	80 dBµV	Sweep Number	1
Dynamic	100 dB	RF Attenuation	0 dB
Span	100 kHz	Min Attenuation	
RBW	9 kHz	Preamplifier	OFF
VBW	Auto	Preselector	ON
Sweep Time	20 ms/Step	Preselector Attenuation	0 dB

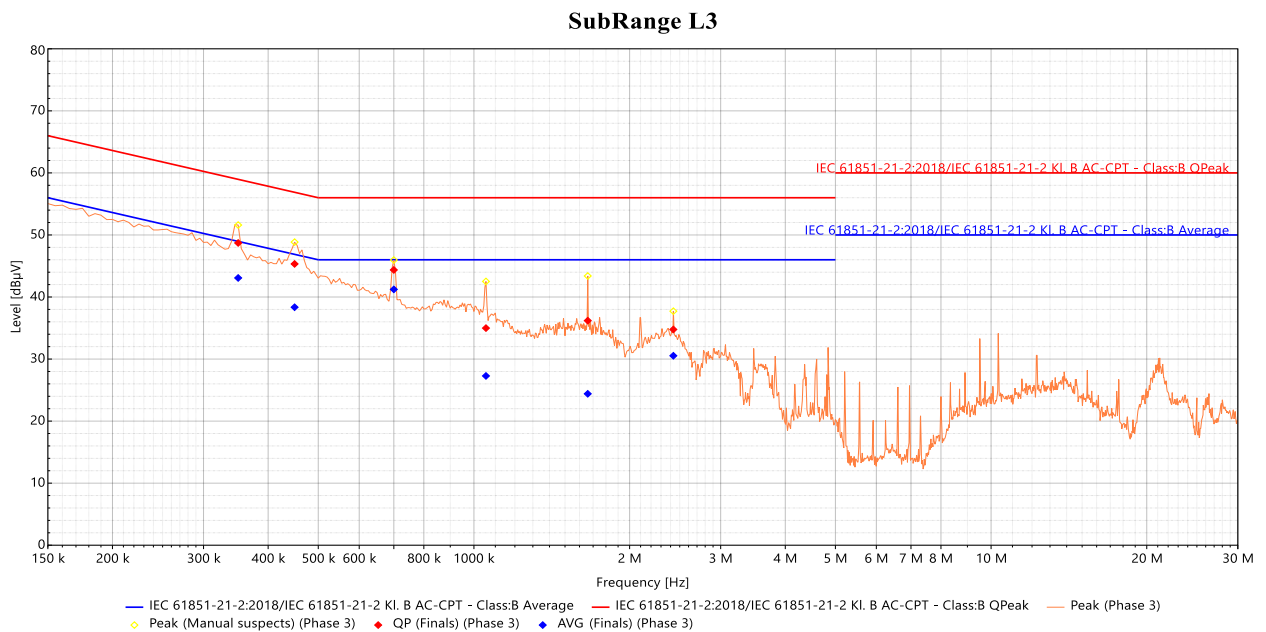


Diagramm 8: Störspannung L3, CPT- Port

Die Subrange-Nummer (SR4) verweist auf die entsprechenden Abschnitte in der Tabelle der Endmesswerte.

Höchste Messergebnisse für: Störspannung AC EN IEC 61000-6-4 Klasse B - CPT Port

Freq.	SR	MeasQP dBµV	Limit QP dBµV	ΔQP dB	MeasAV dBµV	Limit AVG dBµV	ΔAVG dB	Corr. dB
350 kHz	1	50,07	58,96	-8,9	46,28	48,96	-2,69	0,12
705 kHz	1	45,42	56	-10,58	42,66	46	-3,34	0,12
1,06 MHz	1	36,43	56	-19,57	30,99	46	-15,01	0,12
1,475 MHz	1	34,04	56	-21,96	27,37	46	-18,63	0,12
2,105 MHz	1	30,87	56	-25,13	24,94	46	-21,06	0,12
2,44 MHz	1	35,73	56	-20,27	32,95	46	-13,05	0,12
350 kHz	2	49,74	58,96	-9,23	46,1	48,96	-2,87	0,12
700 kHz	2	44,21	56	-11,79	41,28	46	-4,72	0,12
1,055 MHz	2	39,76	56	-16,24	35,95	46	-10,05	0,12
2,045 MHz	2	28,25	56	-27,75	22,11	46	-23,89	0,12
3,12 MHz	2	21,78	56	-34,22	16,73	46	-29,27	0,13
3,21 MHz	2	18,41	56	-37,59	12,13	46	-33,87	0,13
3,835 MHz	2	27,65	56	-28,35	26	46	-20	0,13
345 kHz	3	49,8	59,08	-9,29	46,36	49,08	-2,73	0,12
700 kHz	3	45,28	56	-10,72	42,59	46	-3,41	0,12
1,055 MHz	3	40,87	56	-15,13	37,71	46	-8,29	0,12
2,1 MHz	3	36	56	-20	31,66	46	-14,34	0,12
2,435 MHz	3	35,92	56	-20,08	32,12	46	-13,88	0,12
17,555 MHz	3	16,99	60	-43,01	10,4	50	-39,6	0,18
350 kHz	4	48,71	58,96	-10,26	43,07	48,96	-5,9	0,12
450 kHz	4	45,33	56,88	-11,55	38,35	46,88	-8,53	0,12
700 kHz	4	44,36	56	-11,64	41,23	46	-4,77	0,12
1,055 MHz	4	34,99	56	-21,01	27,28	46	-18,72	0,12
1,66 MHz	4	36,19	56	-19,81	24,4	46	-21,6	0,12
2,43 MHz	4	34,77	56	-21,23	30,53	46	-15,47	0,12

Tabelle 2: Höchste Messergebnisse Störspannung AC In IEC 61851-21-2 Klasse B- CPT Port

Hinweis: Bei einem Abstand von ≥ 10 dB zur Grenzwertlinie sind keine Nachmessungen erforderlich und die Anzahl der aufgeführten höchsten Messwerte kann kleiner als 6 sein.
Rot markierte Werte überschreiten den vorgegebenen Grenzwert.

Verwendete Mess- und Prüftechnik:

Bezeichnung	Model	Type	Kalibrierung, letzte / nächste	Inventar-Nr. Serien-Nr.
CDN-M2/M3 (A) als M2	Dr. Hubert	CDN	19.03.2020 11:25:55 19.03.2023 11:25:55	1000 1615 A2210230/2013
HP8546A	HP	Receiver	12.11.2020 08:58:11 12.11.2023 08:58:11	10001288 3617A00323
K3015	RG58	Cable	06.11.2022 14:08:44 06.01.2024 14:08:44	
K8006	RG214	Cable	19.10.2021 11:25:55 19.10.2023 11:25:55	
MSS 15WDG-N30	Mantelstromsperrren	Filter	19.10.2021 13:40:26 19.10.2023 13:40:26	

Test Information (Ende):

Conducted Voltage Emission

Störspannung AC EN IEC 61000-6-4 Klasse B - CPT Port

Test-Nr.: 676	BAT-EMC Vers.-Nr.: 2022.0.27.0
Datum: 10.03.2023 09:00:56	Prüfer: AR

EN IEC 61000-6-4:2019 Störfeldstärke (Tabelle 1)
/EN IEC 61000-6-4:2019 Radiated E-field emission (Table 1)

EUT-Position <i>/EUT-position</i>	<input checked="" type="checkbox"/>	EUT steht auf 80 cm hohem Tisch <i>/EUT placed on a table of 80 cm height</i>		
	<input type="checkbox"/>	EUT steht auf dem Boden (isoliert von der Bezugsmassefläche) <i>/EUT placed on the floor (insulated from ground plane)</i>		
Prüfmethode <i>/Test method</i>	<input checked="" type="checkbox"/>	Freifeld oder Halbabsorberkammer (3 m) <i>/OATS or SAC</i>		
	<input type="checkbox"/>	Freifeld oder Halbabsorberkammer (10 m) <i>/OATS or SAC</i>		
	<input checked="" type="checkbox"/>	Freiraum-Freifeld oder Vollabsorberraum (3 m) <i>/FSOATS or FAC</i>		
Grenzwert <i>/Applied Limit</i>	<input checked="" type="checkbox"/>	Tabelle 1.1 30 – 1000 MHz (OATS/SAC) <i>/ Table 1.1 30 – 1000 MHz (OATS/SAC)</i>		
	<input type="checkbox"/>	Tabelle 1.2 30 – 1000 MHz (FAC) <i>/ Table 1.1 30 – 1000 MHz (FAC)</i>		
	<input type="checkbox"/>	Tabelle 1.3 30 – 1000 MHz (TEM) <i>/ Table 1.3 30 – 1000 MHz (TEM)</i>		
	<input type="checkbox"/>	Tabelle 1.4 1000 – 6000 MHz (FSOATS/FAC) <i>/ Table 1.4 1000 – 6000 MHz (FSOATS/FAC)</i>		
Prüfmerkmale <i>/Test Characteristic</i>	Am Prüfling müssen die Grenzwerte unterschritten werden. <i>/The measurement results may not exceed the limit lines.</i>			
Betriebsarten <i>/Operation modes</i>	<input checked="" type="checkbox"/> BA 1	<input type="checkbox"/> BA 2	<input type="checkbox"/> BA 3	<input type="checkbox"/> BA 4 <input type="checkbox"/> BA 5
Prüfergebnis <i>/Test result</i>	<input checked="" type="checkbox"/> Test bestanden / PASSED		<input type="checkbox"/> Test nicht bestanden / FAILED	

Tabellenabschnitt	Frequenzbereich MHz	Entfernung m	Detektorart/ Bandbreite	Grenzwert dBµV/m
1.1	30 bis 230	10	Quasispitzenwert/ 120 kHz	40
	230 bis 1000			47
	30 bis 230	3		50
	230 bis 1000			57
1.2	30 bis 230	3	Quasispitzenwert/ 120 kHz	52 auf 45
	230 bis 1000			52
1.3	30 bis 230	10	Quasispitzenwert/ 120 kHz	40
	230 bis 1000			30
1.4	1000 bis 3000	3	Mittelwert/ 1 MHz	56
	3000 bis 6000			60
	1000 bis 3000		Spitzenwert/ 1 MHz	76
	3000 bis 6000			80

Messunsicherheit

/Uncertainty of Measurements

Das Labor hat in seinem Technischen Bericht TB3 Rev.1.7 nachgewiesen, dass die erweiterte Messunsicherheiten (k=2) der Störfeldstärkemessung kleiner sind, als die in EN 55016-4-2+A1:2014 aufgeführten Werte für U_{CISPR} .

Messverfahren	Frequenzbereich	U_{CISPR}
Messung auf einem Freifeld oder in einer Halbabsorberkammer	30 MHz bis 1000 MHz	6.3 dB
Messung in einem Freiraum-Freifeld	1000 MHz bis 6000 MHz	6.3 dB

Messergebnisse

/Results

Test	Status	Result
Störfeldstärke (B) 30MHz - 1GHz nach Tabelle 18/19 EN 55011	Finished	Passed

Test Information (Start):

Radiated Electric Emission

Störfeldstärke (B) 30MHz - 1GHz nach Tabelle 18/19 EN 55011

Test-Nr.: 677

BAT-EMC Vers.-Nr.: 2022.0.27.0

Datum: 10.03.2023 12:37:26

Prüfer: AR

Grenzwert/Limit	EN 55011:2016/EN 55011 G1 B 3m
Limit Definition Version	V.369 07.03.2023
Klasse/Class	B
Status/Status	Finished
Ergebnis/Result	PASS

Ansicht des Prüfaufbaus:

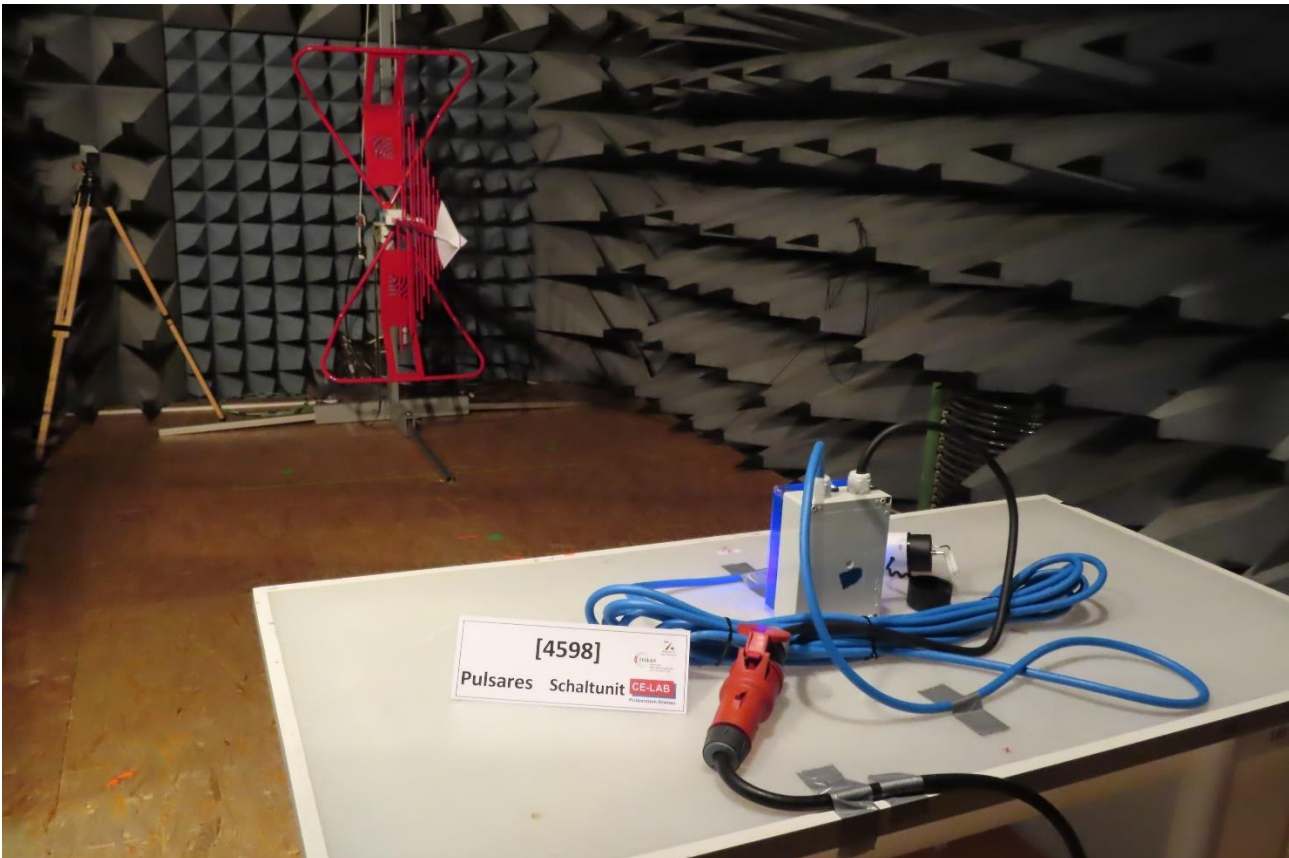


Foto 5: Prüfaufbau Störfeldstärkemessung, 30 MHz bis 1 GHz

Sub-Range Test(s): SR 1, Vertikal

Start Frequency: **30 MHz** Stop Frequency: **1 GHz** Frequency Step: **19400 Pts**

Setup	Störfeldstärke ESRP AK	Setup (Final)	Störfeldstärke ESRP AK
Mode	Analyzer	Position	Vertical
Vormessung	Advanced prescan		
Endmessung	Advanced finals		
Reference Level	80 dBµV	Sweep Number	1
Dynamic	100 dB	RF Attenuation	0 dB
Span	100 kHz	Min Attenuation	
RBW	120 kHz	Preamplifier	ON
VBW	Auto	Preselector	ON
Sweep Time	50 ms/MHz	Preselector Attenuation	0 dB

SubRange Vertikal

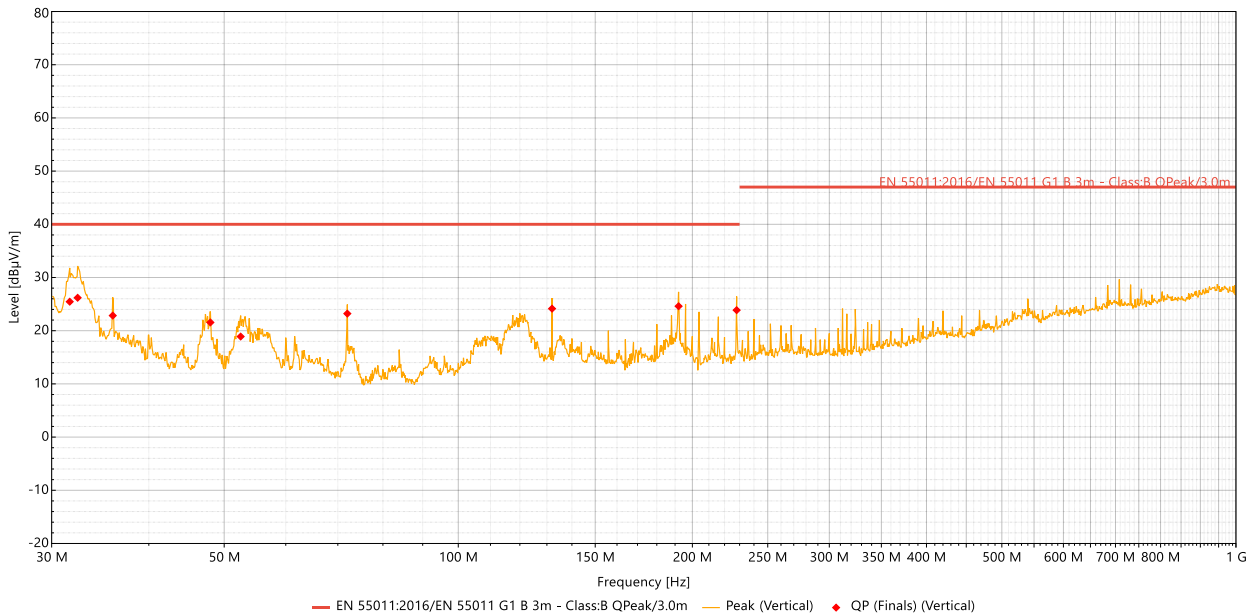


Diagramm 9: Störfeldstärke, 30 MHz - 1 GHz, Vertical

Die Subrange-Nummer (SR1) verweist auf die entsprechenden Abschnitte in der Tabelle der Endmesswerte.

Sub-Range Test(s): SR 2, Horizontal

Start Frequency: **30 MHz** Stop Frequency: **1 GHz** Frequency Step: **19400 Pts**

Setup	Störfeldstärke ESRP AK	Setup (Final)	Störfeldstärke ESRP AK
Mode	Analyzer	Position	Horizontal
Vormessung	Advanced prescan		
Endmessung	Advanced finals		
Reference Level	80 dBµV	Sweep Number	1
Dynamic	100 dB	RF Attenuation	0 dB
Span	100 kHz	Min Attenuation	
RBW	120 kHz	Preamplifier	ON
VBW	Auto	Preselector	ON
Sweep Time	50 ms/MHz	Preselector Attenuation	0 dB

SubRange Horizontal

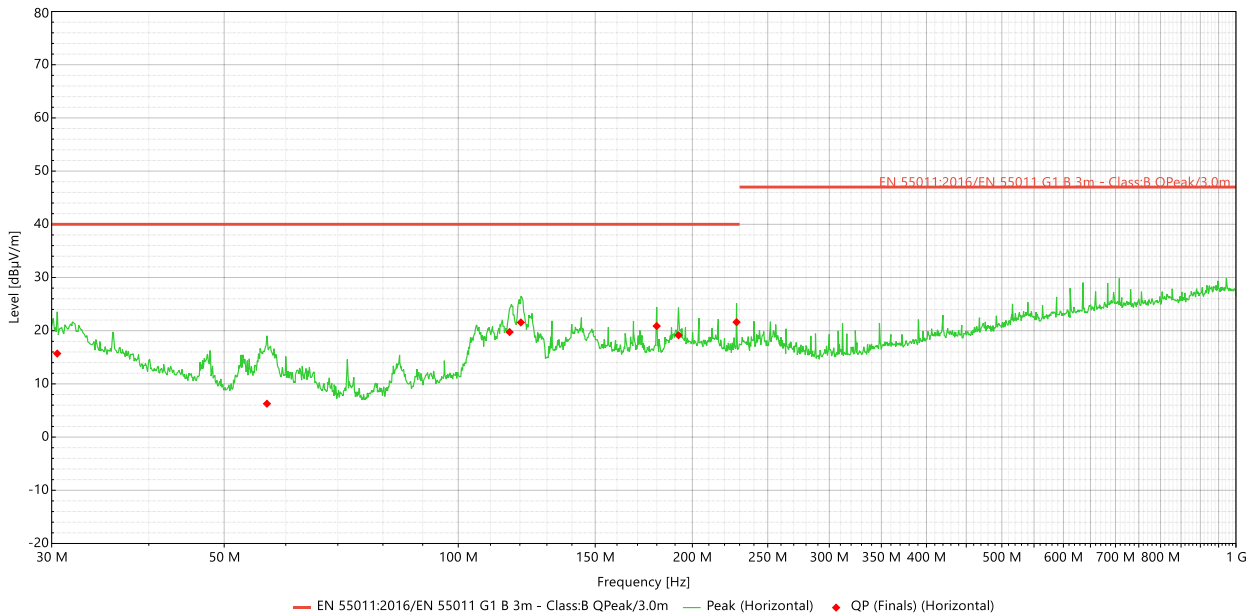


Diagramm 10: Störfeldstärke, 30 MHz - 1 GHz, Horizontal

Die Subrange-Nummer (SR2) verweist auf die entsprechenden Abschnitte in der Tabelle der Endmesswerte.

Höchste Messergebnisse für: Störfeldstärke (B) 30MHz - 1GHz nach Tabelle 18/19 EN 55011

Freq. MHz	SR	MeasQP dBµV/m	Limit QP dBµV/m	ΔQP dB	Height m	Angle °	Corr. dB
31,650085056 MHz	1	25,45	40	-14,55	1	180	19,34
32,400123718 MHz	1	26,19	40	-13,81	1	180	18,88
35,950306717 MHz	1	22,84	40	-17,16	1	180	16,86
48,000927883 MHz	1	21,55	40	-18,45	1	45	10,56
52,501159854 MHz	1	18,9	40	-21,1	1	0	9,63
72,00216506 MHz	1	23,21	40	-16,79	1	180	8,17
132,005258003 MHz	1	24,14	40	-15,86	1	0	9,82
192,008350946 MHz	1	24,6	40	-15,4	1	0	11,76
228,010206712 MHz	1	23,86	40	-16,14	1	90	13,35
30,500025775 MHz	2	15,7	40	-24,3	1,8	315	20,09
56,751378937 MHz	2	6,27	40	-33,73	1	0	9,53
116,404453838 MHz	2	19,75	40	-20,25	1,8	225	9,43
120,354657457 MHz	2	21,55	40	-18,45	1,8	225	9,31
179,95772978 MHz	2	20,87	40	-19,13	1,8	180	12,06
191,958348368 MHz	2	19,14	40	-20,86	1,4	180	11,76
227,960204134 MHz	2	21,6	40	-18,4	1,4	270	13,35

Tabelle 3: Messergebnisse Störfeldstärke, (B) 30MHz - 1GHz, Tabelle 18/19 EN 55011

Hinweis: Bei einem Abstand von ≥ 10 dB zur Grenzwertlinie sind keine Nachmessungen erforderlich und die Anzahl der aufgeführten höchsten Messwerte kann kleiner als 6 sein.
Rot markierte Werte überschreiten den vorgegebenen Grenzwert.

Verwendete Mess- und Prüftechnik:

Bezeichnung	Model	Type	Kalibrierung, letzte / nächste	Inventar-Nr. Serien-Nr.
EMCO 3142E	LOGPER	Antenna	13.02.2020 12:41:14 13.12.2023 12:41:14	10001462 00142434
ESRP7	ESR	Receiver	29.09.2022 08:55:50 29.09.2024 08:55:50	1000 2056 101056
K7005	Ecoflex 10	Cable	16.11.2015 14:35:55 16.05.2023 14:35:55	
K8003	RG214	Cable	16.11.2021 11:25:55 16.09.2023 11:25:55	
K8005	RG214	Cable	16.11.2021 11:25:55 16.11.2023 11:25:55	
Mast manuell	MA	Antenna mast/Slide bar		
PSU EMI-AK	PSU EMI RAD AK Pfad 1S auf ESRP	Commutation relay	13.11.2021 12:04:52 13.07.2023 12:04:52	1000 2124 879168/032
TT_AK	TT	Turntable		

Test Information (Ende):

Radiated Electric Emission

Störfeldstärke (B) 30MHz - 1GHz nach Tabelle 18/19 EN 55011

Test-Nr.: 677	BAT-EMC Vers.-Nr.: 2022.0.27.0
Datum: 10.03.2023 12:37:26	Prüfer: AR

Messung der Oberschwingungen (EN 61000-3-2 / EN 61000-3-12)
/Harmonics (EN 61000-3-2 / EN 61000-3-12)

Durchführung
/Performance

Grenzwertklasse <i>/Limit classification</i>	<input type="checkbox"/>	EN 61000-3-2, Klasse A (Anforderung nach Tabelle 1) <i>/Class A</i>			
	<input type="checkbox"/>	EN 61000-3-2, Klasse B (Anforderung nach Tabelle 1 * Faktor 1.5) <i>/Class B</i>			
	<input type="checkbox"/>	EN 61000-3-2, Klasse C (Anforderung nach Tabelle 2) <i>/Class C</i>			
	<input type="checkbox"/>	EN 61000-3-2, Klasse D (Anforderung nach Tabelle 3) <i>/Class D</i>			
	<input type="checkbox"/>	EN 61000-3-12, Geräte mit 16 A - 75 A Stromaufnahme <i>/Equipment with current consumption 16 ...75 A</i>			
Beobachtungszeit <i>/Observation time</i>	Beschreibung des Geräteverhaltens <i>/Description of equipment behavior</i>		ausgewählte Zeit T_{obs} <i>selected Time T_{obs}</i>		
	<input type="checkbox"/>	Quasistationär <i>/Quasi stationary</i>	2.5 min		
	<input type="checkbox"/>	kurzzeitig ($T_{cycle} \leq 2.5$ min) <i>/Short-term cyclic</i>	$T_{obs} \geq 10$ Zyklen =		
	<input type="checkbox"/>	zufällig <i>/Random</i>	$T_{obs} =$		
Messinstrument <i>/Measurement instrument</i>	<input type="checkbox"/>	IEC 61000-4-7 (Ed. 1)			
	<input checked="" type="checkbox"/>	IEC 61000-4-7 (Ed. 2)+am1			
Steuerprinzip EUT <i>/Control principle EUT</i>	<input type="checkbox"/>	unsymmetrische Steuerungen			
	<input type="checkbox"/>	Halbschwingungsgleichrichtung			
	<input checked="" type="checkbox"/>	symmetrische Steuerung			
Nichtanwendung für <i>/Reason for no testing</i>	<input checked="" type="checkbox"/>	Bemessungsleistung < 75 W und keine Beleuchtungseinrichtung			
	<input type="checkbox"/>	professionell genutztes Gerät mit Bemessungsleistung > 1000 W			
	<input type="checkbox"/>	symmetrisch gesteuertes Heizelement, Bemessungsleistung ≤ 200 W			
	<input type="checkbox"/>	unabhängiger Beleuchtungsregler, Bemessungsleistung ≤ 1000 W			
Betriebsarten <i>/Operation modes</i>	<input type="checkbox"/> BA 1	<input type="checkbox"/> BA 2	<input type="checkbox"/> BA 3	<input type="checkbox"/> BA 4	<input type="checkbox"/> BA 5
Prüfergebnis <i>/Test result</i>	<input type="checkbox"/> Test bestanden / PASSED			<input type="checkbox"/> Test nicht bestanden / FAILED	

Prüfmerkmale
/Test Passed by Result

Der Prüfling darf die Grenzwerte der zutreffenden Klasse B nicht überschreiten.
/The EUT may not exceed the limits of the valid class.

Messunsicherheit
/Uncertainty of Measurements

Die Messunsicherheit wurde gemäß CISPR 16-4-2 ermittelt und im Technischen Bericht TB 3 der CE-LAB GmbH dokumentiert. Die ermittelte Unsicherheit U_{LAB} ist kleiner als die normativ zulässige Unsicherheit U_{CISPR} .
/Measurement uncertainty according to CISPR 16-4-2 and Technical Report TB 3 of CE-LAB GmbH.



Foto 6: Messplatz für Oberschwingungen und Spannungsschwankungen

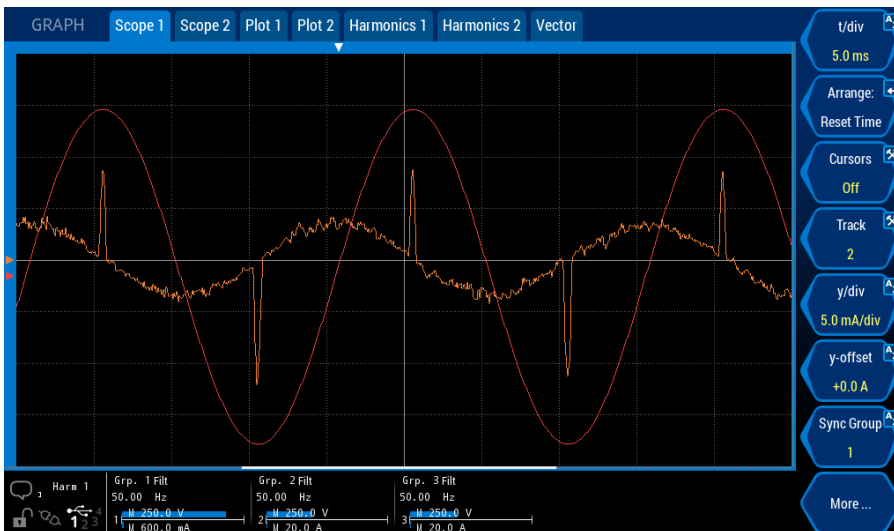


Diagramm 6: Strom-/Spannungsszillogramm zum Nachweis der Symmetrie

Bewertung der Symmetrie	Visuelle Bewertung des Strom-/Spannungsszillogramms	<input checked="" type="checkbox"/> bestanden / PASSED
	$I_{DC} \leq 1\% I_{pp}$:	<input type="checkbox"/> nicht bestanden / FAILED
		<input type="checkbox"/> bestanden / PASSED
		<input type="checkbox"/> nicht bestanden / FAILED

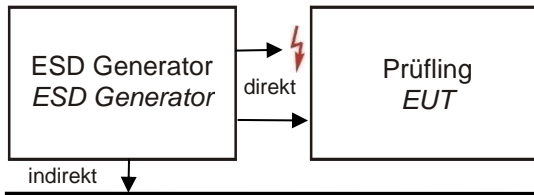
EN 61000-6-2:2005 Störfestigkeit ESD (Tabelle 1.5)
/EN 61000-6-2:2005 Immunity ESD (Table 1.5)

Durchführung
/Performance

EUT-Position <i>/EUT-Position</i>	<input checked="" type="checkbox"/>	EUT auf einem Tisch (80 cm hoch) <i>/EUT on a table (80 cm height)</i>			
	<input type="checkbox"/>	EUT auf dem Boden (5 bis 15 cm hoch) <i>/EUT on floor (5 to 15 cm height)</i>			
	<input type="checkbox"/>	EUT am Aufstellort <i>/EUT on fixed installation place</i>			
EUT-Erdung <i>/EUT grounding</i>	<input type="checkbox"/>	EUT ist ungeerdet (Schutzklasse II oder Batteriebetrieb) <i>/EUT is not grounded (protection class II or battery powered)</i>			
	<input checked="" type="checkbox"/>	EUT ist geerdet (Schutzklasse I) <i>/EUT is grounded (protection class I)</i>			
Betriebsspannung <i>/AC Mains voltage</i>					
Betriebsarten <i>/Operation modes</i>	<input checked="" type="checkbox"/> BA 1	<input type="checkbox"/> BA 2	<input type="checkbox"/> BA 3	<input type="checkbox"/> BA 4	<input type="checkbox"/> BA 5
EUT-Monitoring <i>/EUT-Monitoring</i>	Visuelle Beobachtung der LED- Anzeigen.				
Test parameter <i>/Test-Parameter</i>	getestet als <i>/Tested as</i>	<input checked="" type="checkbox"/>	Tischgerät <i>/Table top equipment</i>		
		<input type="checkbox"/>	Standgerät <i>/Floor standing equipment</i>		
		<input type="checkbox"/>	Wand-/ Deckenmontage (geprüft als Tischgerät) <i>/Mounted on wall or ceiling (tested as table top equipment)</i>		
		Kontaktentladung (EUT) <i>/contact discharge (EUT)</i>	4 kV		
		Kontaktentladung (HCP) <i>/contact discharge (HCP)</i>	4 kV		
		Kontaktentladung (VCP) <i>/contact discharge (VCP)</i>	4 kV		
		Luftentladung (EUT) <i>/air discharge (EUT)</i>	8 kV		
		Polarität <i>/polarity</i>	positiv und negativ		
		Anzahl der Entladungen <i>/number of discharges</i>	10 je Polarität und Position		
	Entladenetzwerk <i>/discharge network</i>	150 pF / 330 Ohm			
Bewertungskriterium <i>/Performance criteria</i>	B				
Messunsicherheit <i>/Uncertainty</i>	Bestimmung nach TB3 Messunsicherheitsanalysen: <i>/Determination in accordance with TB3 measurement uncertainty:</i>				7 %
Prüfergebnis <i>/Test result</i>	<input checked="" type="checkbox"/> Test bestanden / PASSED		<input type="checkbox"/> Test nicht bestanden / FAILED		

Testaufbau und Prüfdurchführung

/Test Setup and Test Operation



Abstand Hallenwand – EUT $\geq 1\text{ m}$
/Distance Shielded Room – EUT

Der ESD-Test erfolgt nur an solchen Punkten bzw. Oberflächen des Prüflings, welche bei üblicher Bedienung zugänglich sind.

/The ESD-Test shall be applied only those points and surfaces which are accessible by normal use.



Foto 7: Prüfaufbau am ESD-Messplatz

Messunsicherheit

/Uncertainty of Measurement

Bestimmung gemäß TB3 Rev.1.7 Messunsicherheitsanalysen bei EMV-Prüfungen.

/Determination in accordance with TB3 Rev.1.7 measurement uncertainty for EMC tests

Messverfahren	U_{CISPR}
DC Ausgangsspannung <i>/DC output voltage</i>	U_{DC} $U_{LAB} = 1.5\%$
Spitzenstrom <i>/Peak current</i>	I_P $U_{LAB} = 5.1\%$
Strom bei 30 ns <i>/Current at 30 ns</i>	I_{30} $U_{LAB} = 5.0\%$
Strom bei 60 ns <i>/Current at 60 ns</i>	I_{60} $U_{LAB} = 6.5\%$
Anstiegszeit <i>/rise time</i>	t_r $U_{LAB} = 7.6\%$

Test Information (Start):	
ESD IEC	
max Level Contact 4 kV	
Test-Nr.: 678	BAT-EMC Vers.-Nr.: 2022.0.27.0
Datum: 28.03.2023 10:30:45	Prüfer: AR

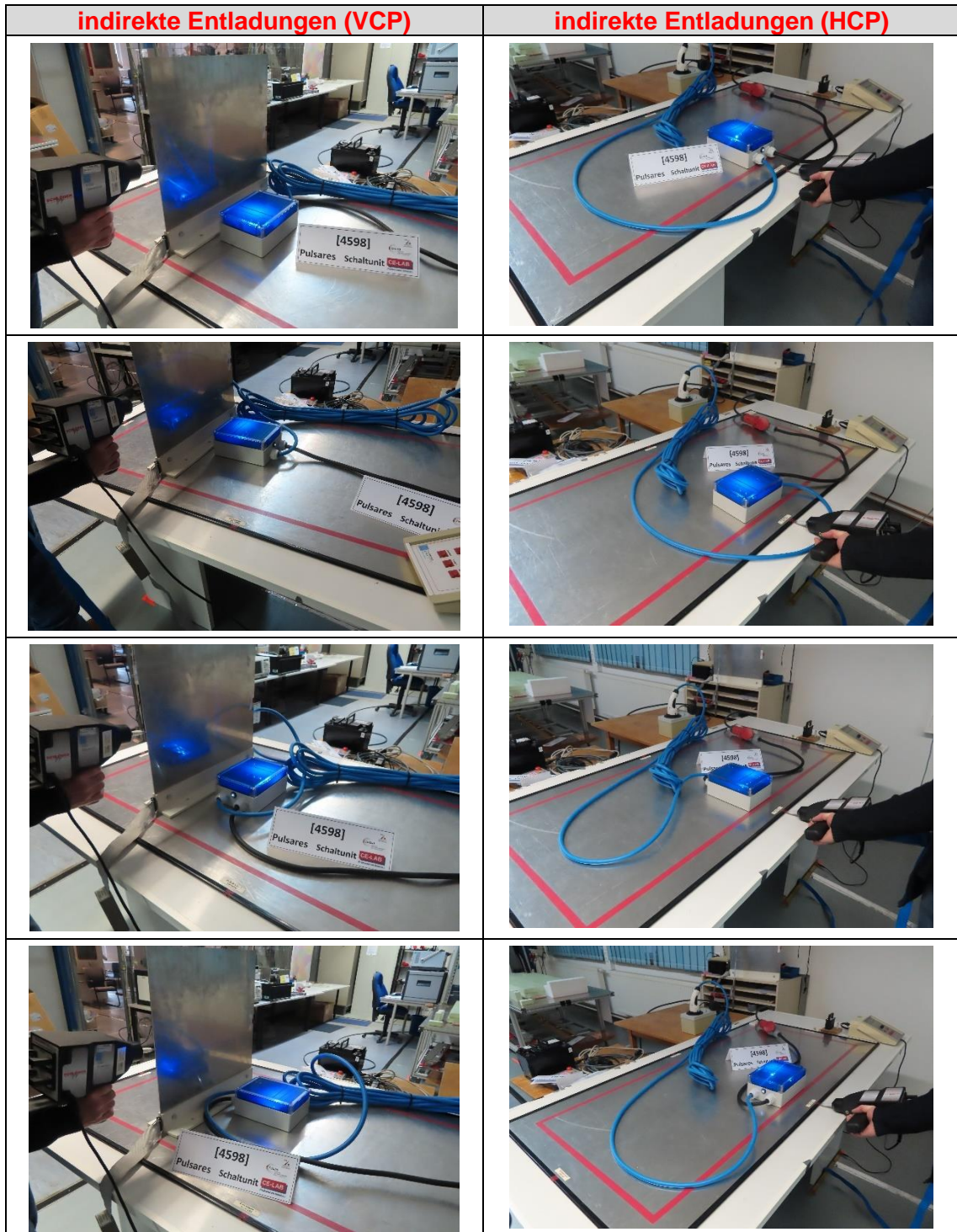


Foto 8: Durchführung der indirekten ESD-Entladungen

Fachbereich EMV

Department EMC



Umgebungsbedingungen <i>/Environmental conditions</i>	Temperatur (15 - 35°C) <i>/Temperature</i>	20.7 °C
	Luftdruck (860 – 1060 mbar) <i>/Atmospheric Pressure</i>	966.5 hPa
	Luftfeuchte (30-60%) <i>/Relative Humidity</i>	31%
Teststatus <i>/Test status</i>	Finished	
Testergebnis <i>/Test result</i>	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL
Kommentar <i>/Comments</i>	Keine Beeinflussung festgestellt.	

Test Information (Stop):	
ESD	
max Level Contact 4 kV	
Test-Nr.: 678	BAT-EMC Vers.-Nr.: 2022.0.27.0
Datum: 28.03.2023 10:30:45	Prüfer: AR

Gegenstand / *Object*
Prüfbericht / *Test report No.*
Auftraggeber / *Customer*
Seite / *Page*

Schaltunit
PB EMV 290323-1 Pulsares [4598]
Pulsares GmbH
43 von 117

Test Information (Start):	
ESD IEC	
max Level Air 8 kV	
Test-Nr.: 679	BAT-EMC Vers.-Nr.: 2022.0.27.0
Datum: 28.03.2023 10:33:01	Prüfer: AR

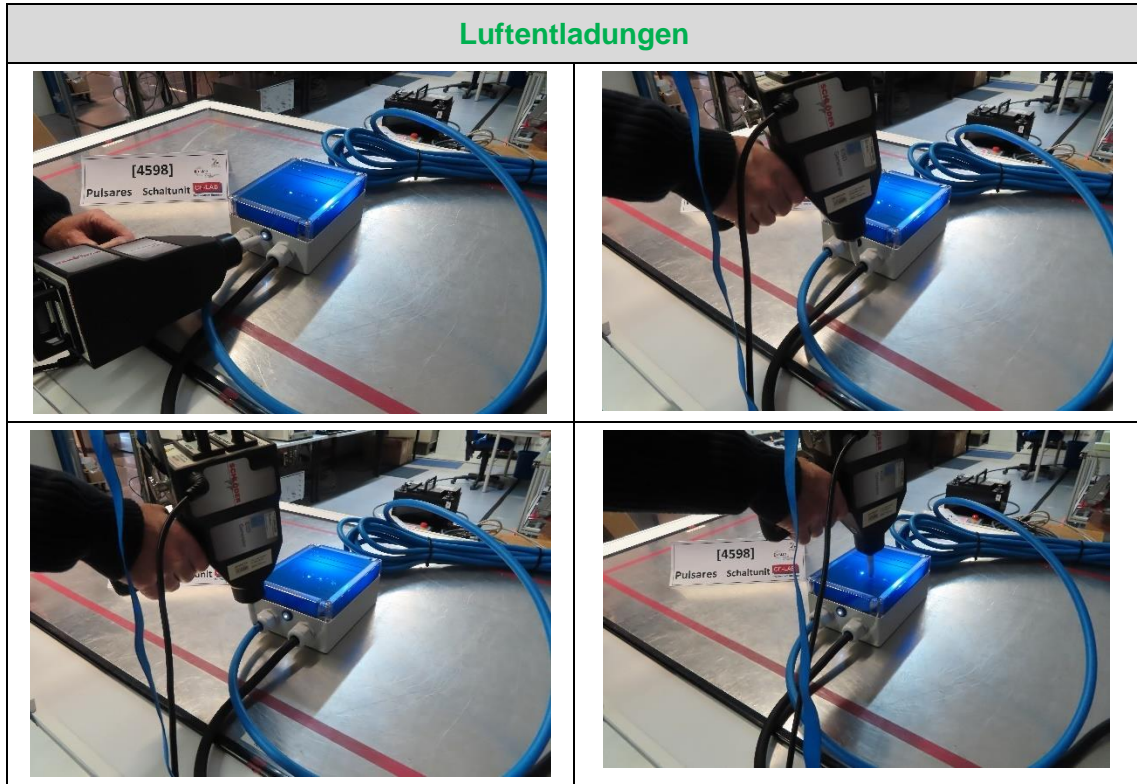


Foto 9: Durchführung der ESD-Luftentladungen

Umgebungsbedingungen <i>/Environmental conditions</i>	Temperatur (15 - 35°C) <i>/Temperature</i>	21.7°C
	Luftdruck (860 – 1060 mbar) <i>/Atmospheric Pressure</i>	966.5 hPa
	Luftfeuchte (30-60%) <i>/Relative Humidity</i>	31.0 %
Teststatus <i>/Test status</i>	Finished	
Testergebnis <i>/Test result</i>	<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL
Kommentar <i>/Comments</i>	Keine Beeinflussung festgestellt.	

Test Information (Stop):	
ESD	
max Level Air 8 kV	
Test-Nr.: 679	BAT-EMC Vers.-Nr.: 2022.0.27.0
Datum: 28.03.2023 10:33:01	Prüfer: AR

Gegenstand / <i>Object</i>	Schaltunit
Prüfbericht / <i>Test report No.</i>	PB EMV 290323-1 Pulsares [4598]
Auftraggeber / <i>Customer</i>	Pulsares GmbH
Seite / <i>Page</i>	44 von 117

EN IEC 61000-6-2:2019 Störfestigkeit Elektromagnetisches HF-Feld (Tabelle 1.2-1.4)
/EN IEC 61000-6-2:2019 Immunity Radiated Field (Table 1.2-1.4)

Durchführung
/Performance

EUT-Position <i>/EUT-Position</i>	<input checked="" type="checkbox"/>	EUT auf einem Tisch (80 cm hoch) <i>/EUT on a table (80 cm height)</i>			
	<input type="checkbox"/>	EUT auf dem Boden (5 bis 15 cm hoch) <i>/EUT on floor (5 to 15 cm height)</i>			
bestrahlte Seiten <i>/Exposed sides</i>	<input checked="" type="checkbox"/>	0° Frontseite <i>/0° front side</i>			
	<input type="checkbox"/>	90° rechte Seite <i>/90° right side</i>			
	<input type="checkbox"/>	180° Rückseite <i>/180° rear side</i>			
	<input type="checkbox"/>	270° linke Seite <i>/270° left side</i>			
	Begründung, falls nicht alle Seiten beaufschlagt wurden <i>/Reason for not exposing all EUT sides</i>				
Steuerung befindet sich in einem Plastikgehäuse.					
Betriebsspannung <i>/AC Mains voltage</i>	230V AC/ 50 Hz				
Betriebsarten <i>/Operation modes</i>	<input checked="" type="checkbox"/> BA 1	<input type="checkbox"/> BA 2	<input type="checkbox"/> BA 3	<input type="checkbox"/> BA 4	<input type="checkbox"/> BA 5
EUT-Monitoring <i>/EUT-Monitoring</i>	Visuelle Beobachtung der LED- Anzeigen.				
Test parameter <i>/Test-Parameter</i>	Frequenzbereich <i>/Frequency range</i>		80 MHz – 1 GHz	1.0 GHz – 2.0 GHz	2.0 GHz – 6.0 GHz
	Pegel <i>/Level</i>	1 V/m	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		3 V/m	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		10 V/m	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Antennen- entfernung <i>/Antenna distance</i>	1 m	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		2.6 m	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Modulation <i>/Modulation</i>		AM, 1 kHz, 80 %		
Schrittweite <i>/Frequency step</i>		1 %			
Verweildauer <i>/Dwell time</i>		1 s			
Bewertungskriterium <i>/Performance criteria</i>	A				
Messunsicherheit <i>/Uncertainty</i>	0 – 6 dB				
Prüfergebnis <i>/Test result</i>	<input checked="" type="checkbox"/> Test bestanden / PASSED		<input type="checkbox"/> Test nicht bestanden / FAILED		

Test Information (Start):

Radiated Electric Immunity

EN 61000-6-2 nach Tabelle 1 80MHz-1GHz Position 0°

Test-Nr.: 673

BAT-EMC Vers.-Nr.: 2022.0.27.0

Datum: 13.03.2023 08:46:27

Prüfer: AR

Startfrequenz	80 MHz	Stopfrequenz	1 GHz
Einheit	V/m	Typ	Radiated Electric Immunity

Ansicht des Prüfaufbaus:

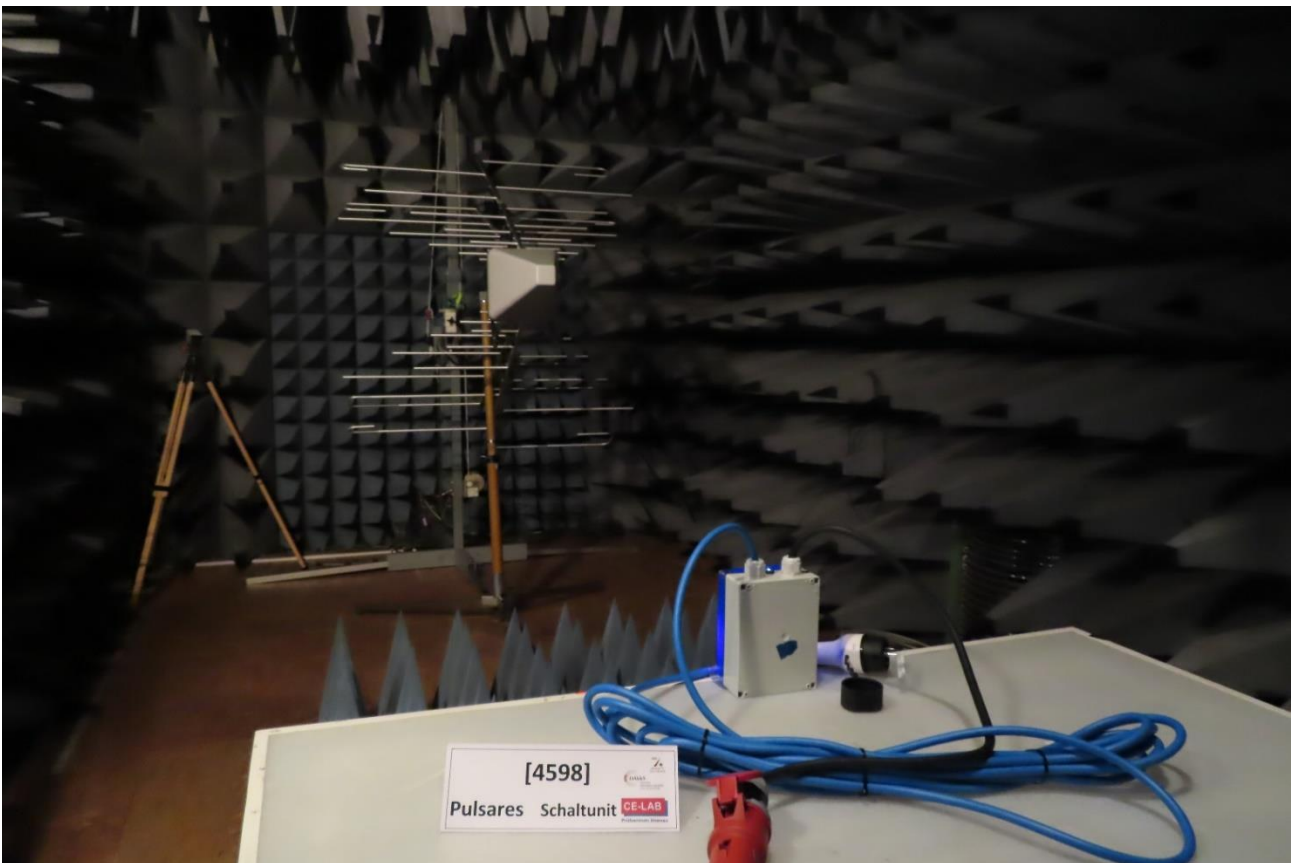


Foto 10: Prüfaufbau Störfestigkeit gegen HF-Felder, 80 MHz - 1 GHz, Position 0°

Sub-Rang Test(s): **SR 1, Horizontal**

Start Frequency	80 MHz	Stop Frequency	1 GHz	Frequency Step:	1 %
-----------------	---------------	----------------	--------------	-----------------	------------

Setup	RAD AK EN 61000-4-3 80-1000 MHz		
Antennenpolarisation	Horizontal		
Antennenabstand	2,6 m		
Target	PASS Calibration EN 61000-4-3 80-1000 MHz 18		
Einheit	V/m	Increase sweep	True
Peak Level Conservation	False	Regulation parameters	Test EN 61000-4-3
Regulation	Open loop	Dwell Time	1000 ms
Specification	10 V/m	Mode parameters	AM (80%, 1kHz)
Included Freq. List		Excluded Freq. List	

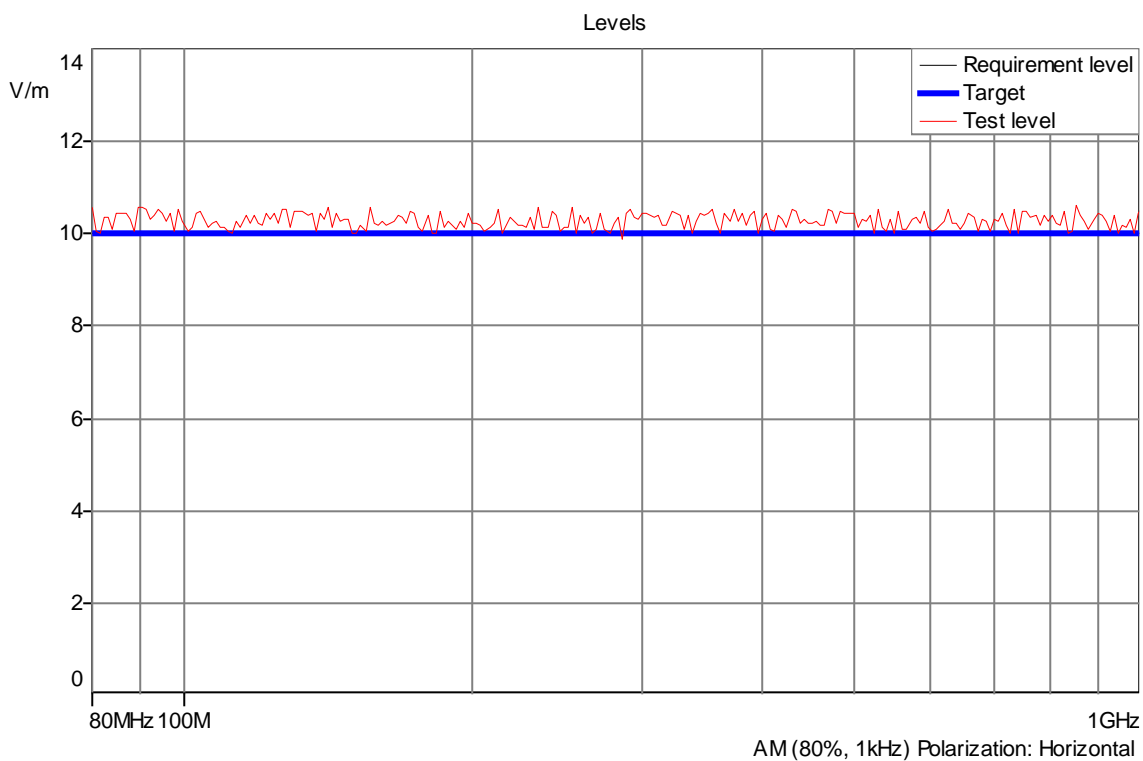


Diagramm 11: Störfestigkeit HF-Feld, 80 MHz - 1 GHz, Position 0°, 10 V/m, Horizontal

EUT-Monitoring:

Sub-Rang Test(s): **SR 2, Vertikal**

Start Frequency	80 MHz	Stop Frequency	1 GHz	Frequency Step:	1 %
-----------------	---------------	----------------	--------------	-----------------	------------

Setup	RAD AK EN 61000-4-3 80-1000 MHz		
Antennenpolarisation	Vertical		
Antennenabstand	2,6 m		
Target	PASS Calibration EN 61000-4-3 80-1000 MHz 18		
Einheit	V/m	Increase sweep	True
Peak Level Conservation	False	Regulation parameters	Test EN 61000-4-3
Regulation	Open loop	Dwell Time	1000 ms
Specification	10 V/m	Mode parameters	AM (80%, 1kHz)
Included Freq. List		Excluded Freq. List	

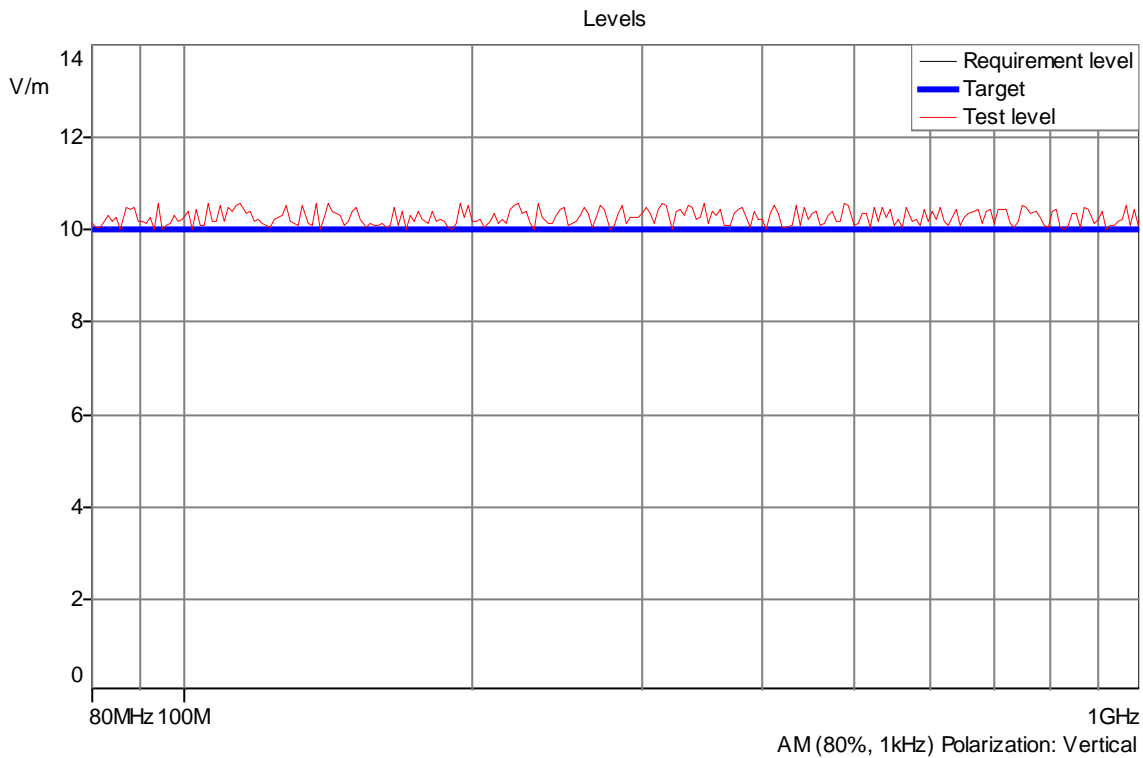


Diagramm 12: Störfestigkeit HF-Feld, 80 MHz - 1 GHz, Position 0°, 10 V/m, Vertical

Verwendete Mess- und Prüftechnik:

Bezeichnung	Model	Type	Kalibrierung, letzte / nächste	Inventar-Nr. Serien-Nr.
01- EA11 mit Ferritte	EA11	Cable		
Agilent 33521B	Agilent / HP	Function generator	20.11.2022 09:53:41 20.03.2024 09:53:41	
BLWA 0810-250/200	BONN	Amplifier	07.01.2022 08:13:50 07.01.2024 08:13:50	L-2027626
BLWA 0810-250/200 int.	BONN	Coupler	07.02.2022 11:41:47 07.02.2024 11:41:47	L-2027626
HP 11713A	HP 11713A Power Switch BLWA 0810-250	Commutation relay		871489/014
IFR 2025 SN374	IFR / Marconi	Signal generator	11.09.2021 13:38:50 11.09.2023 13:38:50	1000 2100 202306/374
K7015	Ecoflex 10	Cable	27.02.2022 09:42:33 27.02.2024 09:42:33	100001396
K7016	Ecoflex 10	Cable	27.02.2022 09:42:33 27.02.2024 09:42:33	100001395
K7017	Ecoflex 10	Cable	27.02.2022 09:42:33 27.02.2024 09:42:33	100001394
K8008	RG214	Cable	16.11.2021 11:25:55 16.09.2023 11:25:55	
NRVD AK	R&S xRVD	Two input Powermeter	21.10.2021 11:36:50 21.10.2023 11:36:50	1000 0069 845634/064
PSU BLWA 0810-250	PSU BONN BLWA 0810-250	Commutation relay		
STLP 9129s	LOGPER	Antenna	07.09.2022 12:24:02 07.09.2024 12:24:02	00009
SUC 1	Fremdkabel	Cable		41471/4A

Test Information (Ende):

Radiated Electric Immunity

EN 61000-6-2 nach Tabelle 1 80MHz-1GHz Position 0°

Test-Nr.: 673

BAT-EMC Vers.-Nr.: 2022.0.27.0

Datum: 13.03.2023 08:46:27

Prüfer: AR

Test Information (Start):

Radiated Electric Immunity

EN 61000-6-2 nach Tabelle 1 1GHz-6 GHz Position 0°

Test-Nr.: 674

BAT-EMC Vers.-Nr.: 2022.0.27.0

Datum: 10.03.2023 15:35:07

Prüfer: AR

Startfrequenz	1 GHz	Stopfrequenz	6 GHz
Einheit	V/m	Typ	Radiated Electric Immunity

Ansicht des Prüfaufbaus:

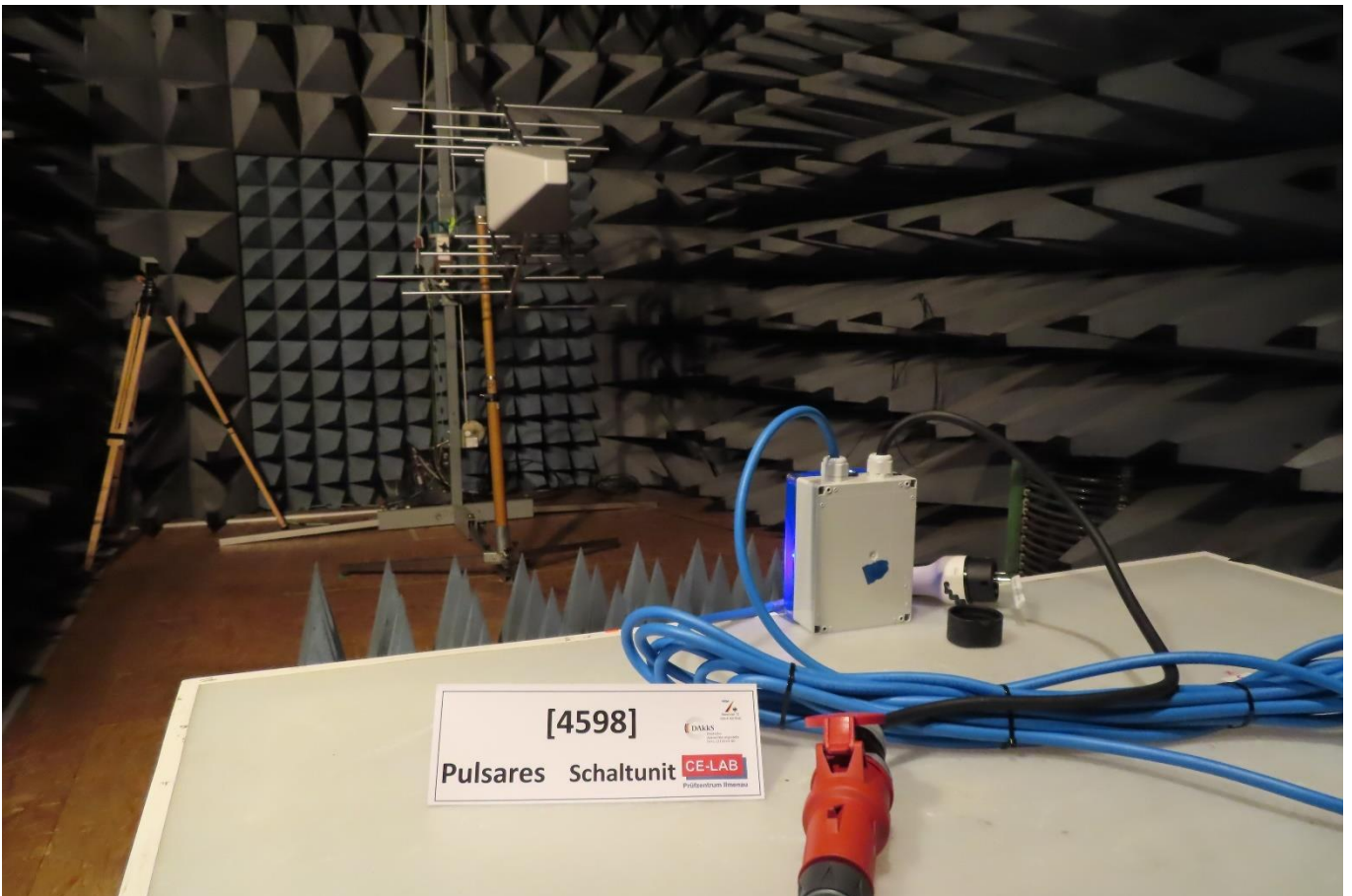


Foto 11: Prüfaufbau Störfestigkeit gegen HF-Felder, 1 GHz - 6 GHz, Position 0°

Sub-Rang Test(s): **SR 1, Horizontal**

Start Frequency	1 GHz	Stop Frequency	6 GHz	Frequency Step:	1 %
-----------------	--------------	----------------	--------------	-----------------	------------

Setup	RAD AK EN 61000-4-3 1-6 GHz		
Antennenpolarisation	Horizontal		
Antennenabstand	2,6 m		
Target	PASS EN 61000-4-3 1GHz- 6GHz 18 Vm		
Einheit	V/m	Increase sweep	True
Peak Level Conservation	False	Regulation parameters	Test EN 61000-4-3
Regulation	Open loop	Dwell Time	1000 ms
Specification	3 V/m	Mode parameters	AM (80%, 1kHz)
Included Freq. List		Excluded Freq. List	

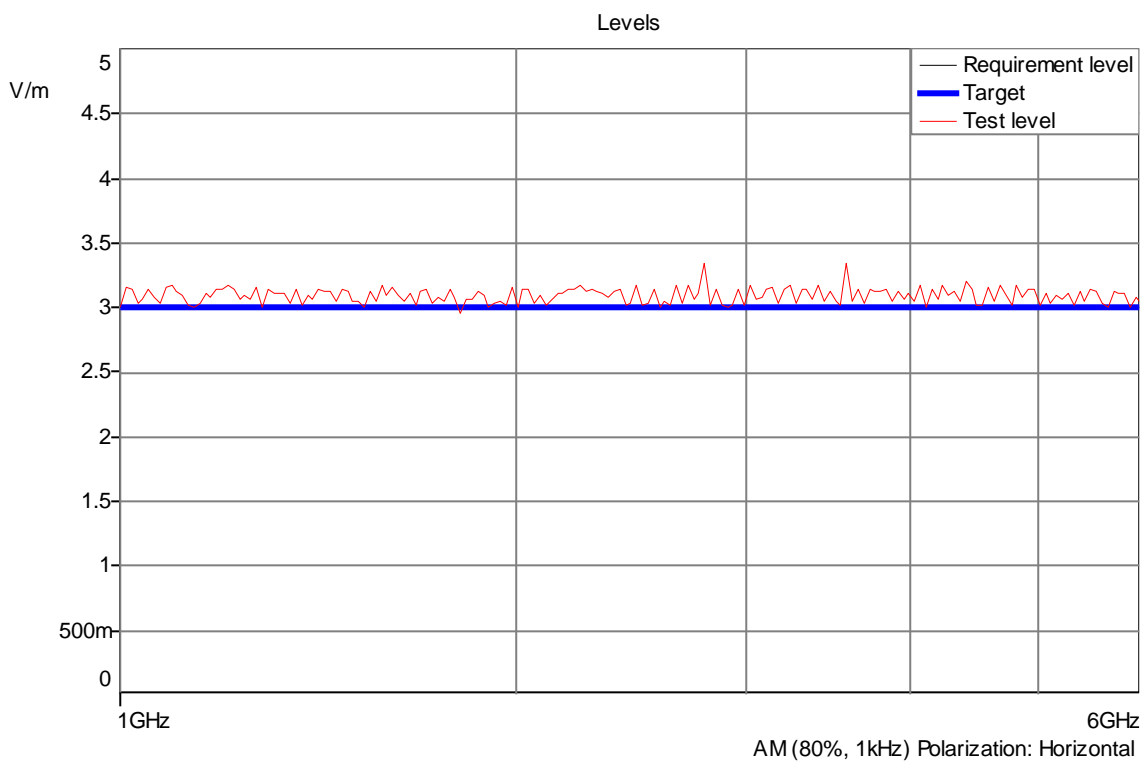


Diagramm 13: Störfestigkeit HF-Feld, 1 GHz - 6 GHz, Position 0°, 3 V/m, Horizontal

Sub-Rang Test(s): **SR 2, Vertikal**

Start Frequency	1 GHz	Stop Frequency	6 GHz	Frequency Step:	1 %
-----------------	--------------	----------------	--------------	-----------------	------------

Setup	RAD AK EN 61000-4-3 1-6 GHz		
Antennenpolarisation	Vertical		
Antennenabstand	2,6 m		
Target	PASS EN 61000-4-3 1GHz- 6GHz 18 Vm		
Einheit	V/m	Increase sweep	True
Peak Level Conservation	False	Regulation parameters	Test EN 61000-4-3
Regulation	Open loop	Dwell Time	1000 ms
Specification	3 V/m	Mode parameters	AM (80%, 1kHz)
Included Freq. List		Excluded Freq. List	

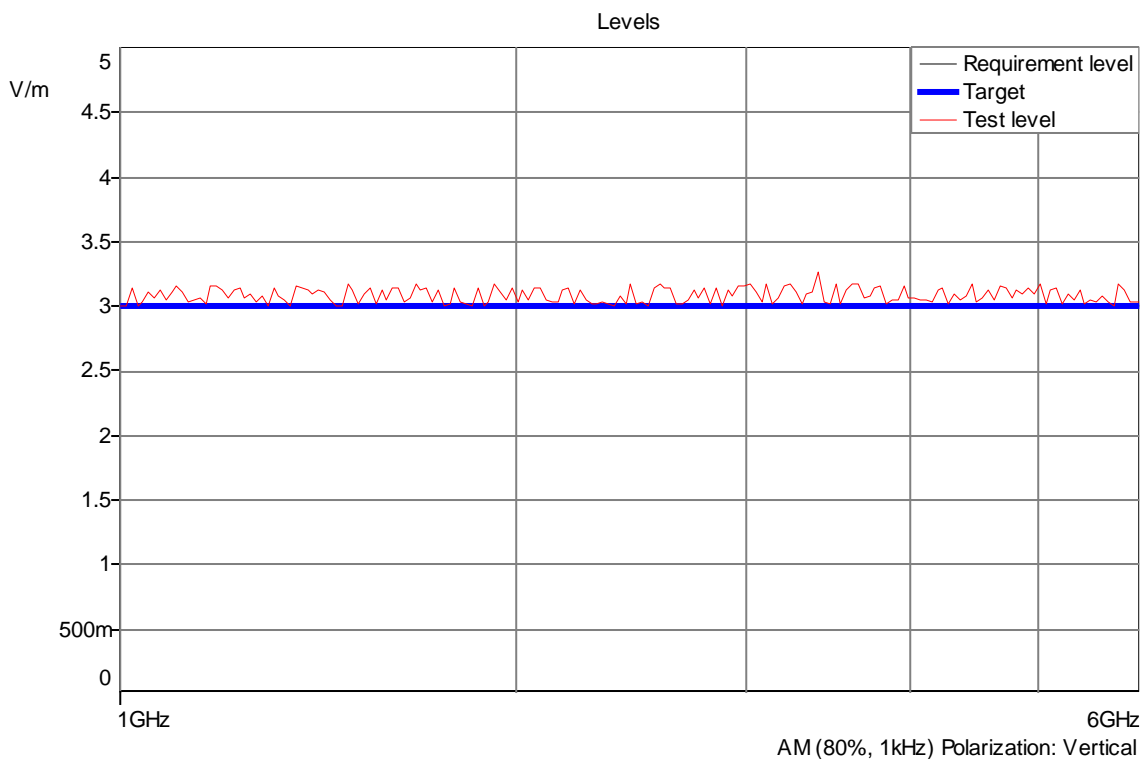


Diagramm 14: Störfestigkeit HF-Feld, 1 GHz - 6 GHz, Position 0°, 3 V/m, Vertikal

EUT-Monitoring:

Ergebnis für: EN 61000-6-2 nach Tabelle 1 1GHz-6 GHz Position 0°:

PASS **FAIL**

Verwendete Mess- und Prüftechnik:

Bezeichnung	Model	Type	Kalibrierung, letzte / nächste	Inventar-Nr. Serien-Nr.
01- EA11 mit Ferritte	EA11	Cable		
Agilent 33521B	Agilent / HP	Function generator	20.11.2021 09:53:41 20.03.2024 09:53:41	
BLMA 1060-50	BONN	Amplifier	13.06.2018 11:39:13 13.06.2023 11:39:13	1723886
BLMA 1060-50 int.	BONN	Coupler	13.06.2018 11:41:47 13.06.2023 11:41:47	1723886
HP 11713A	HP 11713A Power Switch BLMA 1060-50 SMR-3dB	Commutation relay		871489/014
K3020	RG142	Cable	29.01.2022 09:14:20 29.01.2024 09:14:20	R284C0351025
K7020	Ecoflex 10	Cable	27.02.2022 09:42:33 27.02.2024 09:42:33	100001396
K7021	Ecoflex 10	Cable	27.02.2022 09:42:33 27.02.2024 09:42:33	100001395
K7022	Ecoflex 10	Cable	27.02.2022 09:42:33 27.02.2024 09:42:33	100001394
K7023	Ecoflex 10	Cable	27.02.2022 09:42:33 27.02.2024 09:42:33	100001393
NRVD AK	R&S xRVD	Two input Powermeter	21.10.2021 11:36:50 21.10.2023 11:36:50	1000 0069 845634/064
PSU BLMA 1060-50	PSU BONN BLMA 1060-50	Commutation relay		
SMR20	Rohde&Schwarz	Signal generator	26.10.2020 15:48:10 26.10.2023 15:48:10	1000 0571 100752
STLP 9129s	LOGPER	Antenna	07.09.2022 12:24:02 07.09.2024 12:24:02	00009
SUC 2	Fremdkabel	Cable		41471/4A

Test Information (Ende):

Radiated Electric Immunity

EN 61000-6-2 nach Tabelle 1 1GHz-6 GHz Position 0°

Test-Nr.: 674

BAT-EMC Vers.-Nr.: 2022.0.27.0

Datum: 10.03.2023 15:35:07

Prüfer: AR

EN IEC 61000-6-2:2019 Störfestigkeit Schnelle Transienten (Tabelle 2.2/3.3/4.5)
/EN IEC 61000-6-2:2019 Immunity against fast transients (Table 2.2/3.3/4.5)

Durchführung
/Performance

EUT-Position /EUT-Position	<input checked="" type="checkbox"/>	EUT auf einem Tisch (10 ± 1 cm oberhalb Bezugsmasseplatte) /EUT on a table (10 ± 1 cm above ground plane)			
	<input type="checkbox"/>	EUT auf dem Boden (10 ± 1 cm oberhalb Bezugsmasseplatte) /EUT on floor (10 ± 1 cm above ground plane)			
	<input type="checkbox"/>	Anwendung der Handnachbildung gemäß Foto /Artificial hand applied. Location see photo			
Betriebsspannung /AC Mains voltage	230V AC/ 50 Hz				
Betriebsarten /Operation modes	<input checked="" type="checkbox"/> BA 1	<input type="checkbox"/> BA 2	<input type="checkbox"/> BA 3	<input type="checkbox"/> BA 4	<input type="checkbox"/> BA 5
EUT-Monitoring /EUT-Monitoring	Visuelle Beobachtung der LED- Anzeigen.				
Test Parameter /Test-Parameter	Pulsfolgefrequenz /Pulse frequency	<input checked="" type="checkbox"/> 5 kHz <input type="checkbox"/> 100 kHz <input type="checkbox"/> 1 MHz			
	Testzeit /Test Time	120 s			
Bewertungskriterium /Performance criteria	B				
Messunsicherheit /Uncertainty	Bestimmung gemäß TB3 Messunsicherheitsanalysen bei EMV-Prüfungen. /Determination in accordance with TB3 measurement uncertainty for EMC tests				
Prüfergebnis /Test result	<input checked="" type="checkbox"/> Test bestanden / PASSED			<input type="checkbox"/> Test nicht bestanden / FAILED	

Test Information (Start):

Burst_3Ph

EN 61000-4-4 (BURST) SV AC Eingang

Test-Nr.: 666

BAT-EMC Vers.-Nr.: 2022.0.27.0

Datum: 21.03.2023 09:51:02

Prüfer: AR

Ansicht des Prüfaufbaus:

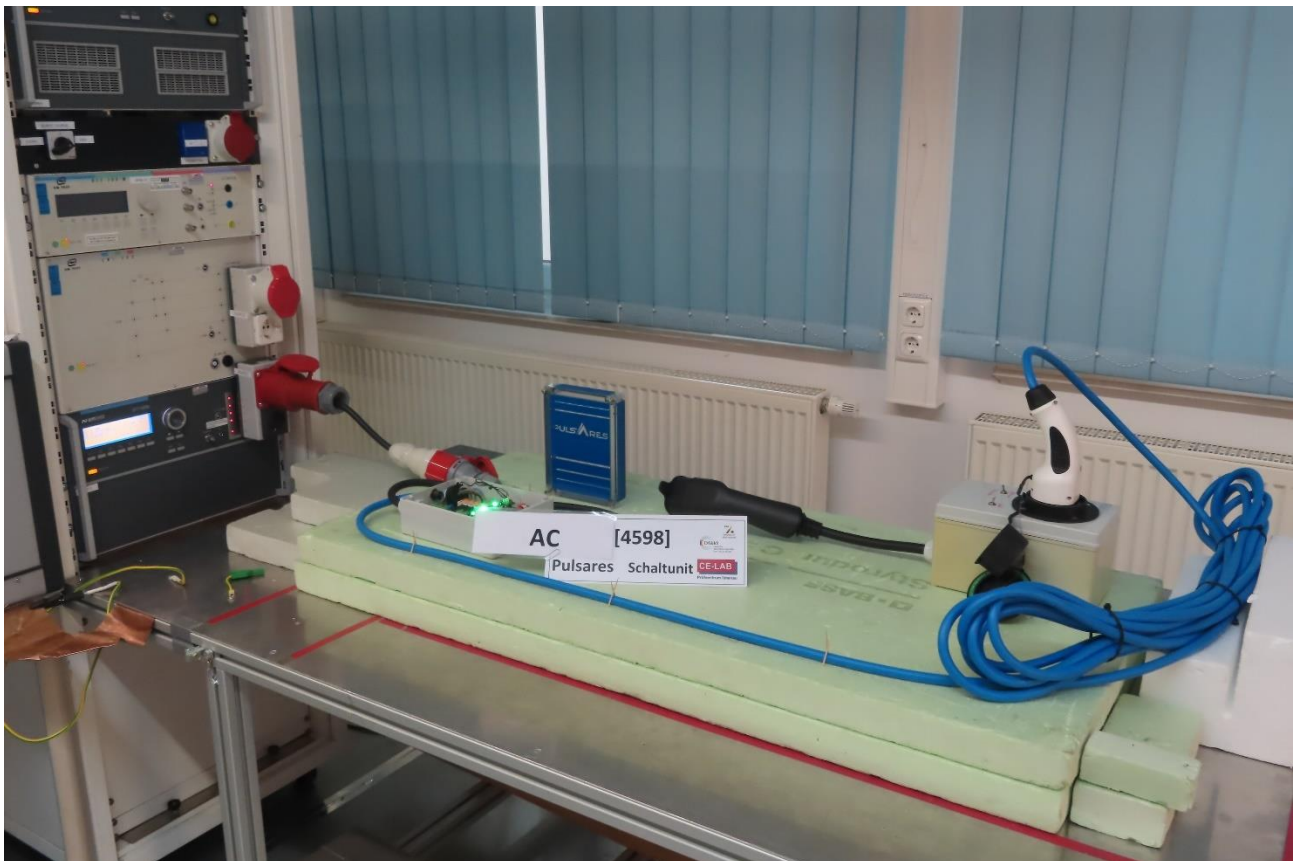
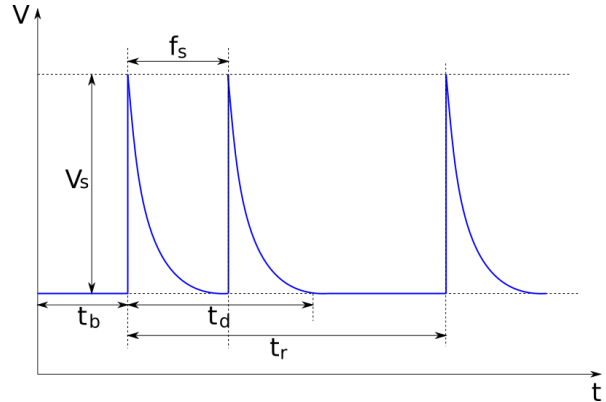


Foto 12: Prüfaufbau, EN 61000-4-4 (BURST) SV AC Eingang Tabelle 1 IEC 61851-21-2

Pulsparameter (Nicht ausgefüllte Felder sind für die jeweilige Prüffunktion nicht relevant!)
/test parameter (the empty panels are not relevant for the tested function)

Testschritt (n) /test step	1
Prüfpegel (Vs) /immunity test level	500V 1000V 2000V
Polarität (Pol) /polarity	Positive Negative
Paketdauer (td) /impulse duration	15 ms
Periodendauer (tr) /cycle duration	300 ms
Pulsfrequenz (fs) /frequency	5 kHz
Beaufschlagungsdauer (d) /susceptibility duration	120 s
Phase /phase	Asynchron
Koppelart /type of coupling	IEC
Kopplung /coupling	L1+L2+L3+N+PE
Frontwartezeit /duration before test	1 s
Verzugszeit /test time	2 s
Trigger /trigger	Auto
Netzspannung /power supply voltage	230 V

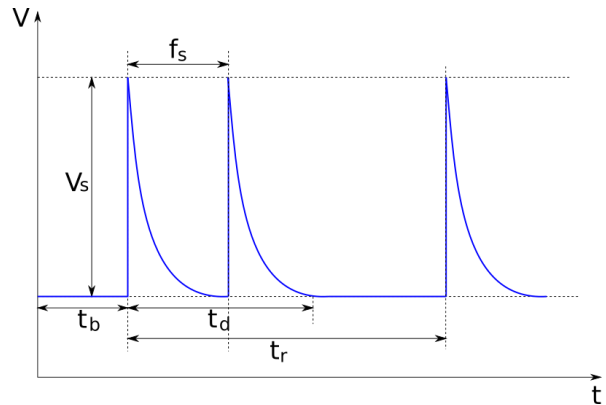


Prüfablauf:

Relative Time	Type	Origin	Message
00:00:00	INFO	TEST	21.03.2023 09:51 : Started 500 V - Positive - 5 kHz - L1+L2+L3+N+PE
00:02:01	INFO	TEST	Finished
00:02:03	INFO	TEST	21.03.2023 09:53 : Started 1000 V - Positive - 5 kHz - L1+L2+L3+N+PE
00:04:05	INFO	TEST	Finished
00:04:07	INFO	TEST	21.03.2023 09:55 : Started 2000 V - Positive - 5 kHz - L1+L2+L3+N+PE
00:06:09	INFO	TEST	Finished
00:06:12	INFO	TEST	21.03.2023 09:57 : Started 500 V - Negative - 5 kHz - L1+L2+L3+N+PE
00:08:13	INFO	TEST	Finished
00:08:15	INFO	TEST	21.03.2023 09:59 : Started 1000 V - Negative - 5 kHz - L1+L2+L3+N+PE
00:10:17	INFO	TEST	Finished
00:10:19	INFO	TEST	21.03.2023 10:01 : Started 2000 V - Negative - 5 kHz - L1+L2+L3+N+PE
00:12:22	INFO	TEST	Finished

Pulsparameter (Nicht ausgefüllte Felder sind für die jeweilige Prüffunktion nicht relevant!)
/test parameter (the empty panels are not relevant for the tested function)

Testschritt (n) /test step	2
Prüfpegel (Vs) /immunity test level	4000 V
Polarität (Pol) /polarity	Positive Negative
Paketdauer (td) /impulse duration	15 ms
Periodendauer (tr) /cycle duration	300 ms
Pulsfrequenz (fs) /frequency	5 kHz
Beaufschlagungsdauer (d) /susceptibility duration	120 s
Phase /phase	Asynchron
Koppelart /type of coupling	IEC
Kopplung /coupling	L1+L2+L3+N+PE
Frontwartezeit /duration before test	1 s
Verzugszeit /test time	2 s
Trigger /trigger	Auto
Netzspannung /power supply voltage	230 V



Prüfablauf:

Relative Time	Type	Origin	Message
00:00:00	INFO	TEST	21.03.2023 10:23 : Started 4000 V - Positive - 5 kHz - L1+L2+L3+N+PE
00:02:02	INFO	TEST	Finished
00:02:04	INFO	TEST	21.03.2023 10:25 : Started 4000 V - Negative - 5 kHz - L1+L2+L3+N+PE
00:04:07	INFO	TEST	Finished

Prüfergebnis:

BK	Beschreibung	Bemerkung	Ergebnis
SURGE	keine Fehler in Zusammenhang mit der Sicherheit, Ladevorgang wird abgebrochen kann nach der Prüfung wieder ordnungsgemäß durchgeführt werden	Unterbrechung laden, nach Störgröße, wieder selbstständig in Lademodus.	PASS

Verwendete Mess- und Prüftechnik:

Bezeichnung	Model	Type	Kalibrierung, letzte / nächste	Inventar-Nr. Serien-Nr.
EFT500N	Burst	Transient generator		

Test Information (Ende):

Burst_3Ph	
EN 61000-4-4 (BURST) SV AC Eingang	
Test-Nr.: 666	BAT-EMC Vers.-Nr.: 2022.0.27.0
Datum: 21.03.2023 09:51:02	Prüfer: AR

Test Information (Start):

Burst_50Ohm

EN 61000-4-4 (BURST) CPT

Test-Nr.: 667

BAT-EMC Vers.-Nr.: 2022.0.27.0

Datum: 21.03.2023 10:34:56

Prüfer: AR

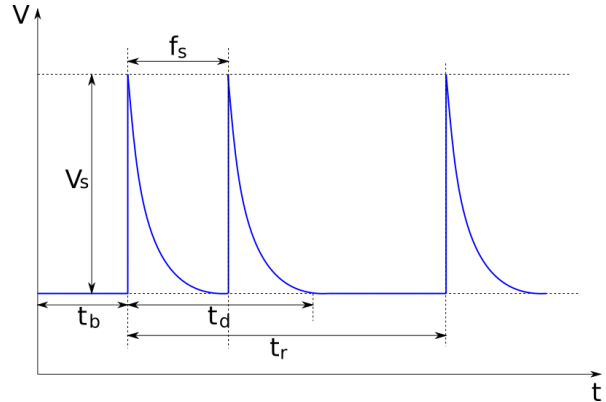
Ansicht des Prüfaufbaus:



Foto 13: Prüfaufbau Störfestigkeit, EN 61000-4-4 (BURST) CPT, Tabelle 1 IEC 61851-21-2

Pulsparameter (Nicht ausgefüllte Felder sind für die jeweilige Prüffunktion nicht relevant!)
/test parameter (the empty panels are not relevant for the tested function)

Testschritt (n) /test step	1
Prüfpegel (Vs) /immunity test level	500V 1000V 2000V
Polarität (Pol) /polarity	Positive Negative
Paketdauer (td) /impulse duration	15 ms
Periodendauer (tr) /cycle duration	300 ms
Pulsfrequenz (fs) /frequency	5 kHz
Beaufschlagungsdauer (d) /susceptibility duration	120 s
Phase /phase	Asynchron
Koppelart /type of coupling	50 Ohm
Kopplung /coupling	
Frontwartezeit /duration before test	1 s
Verzugszeit /test time	2 s
Trigger /trigger	Auto
Netzspannung /power supply voltage	230 V



Prüfablauf:

Relative Time	Type	Origin	Message
00:00:00	INFO	TEST	21.03.2023 10:35 : Started 500 V - Positive - 5 kHz
00:02:01	INFO	TEST	Finished
00:02:03	INFO	TEST	21.03.2023 10:37 : Started 1000 V - Positive - 5 kHz
00:04:05	INFO	TEST	Finished
00:04:07	INFO	TEST	21.03.2023 10:39 : Started 2000 V - Positive - 5 kHz
00:06:09	INFO	TEST	Finished
00:06:12	INFO	TEST	21.03.2023 10:41 : Started 500 V - Negative - 5 kHz
00:08:13	INFO	TEST	Finished
00:08:15	INFO	TEST	21.03.2023 10:43 : Started 1000 V - Negative - 5 kHz
00:10:17	INFO	TEST	Finished
00:10:19	INFO	TEST	21.03.2023 10:45 : Started 2000 V - Negative - 5 kHz
00:12:21	INFO	TEST	Finished

Prüfergebnis:

BK	Beschreibung	Bemerkung	Ergebnis
BURST	keine Fehler in Zusammenhang mit der Sicherheit, Ladevorgang wird abgebrochen kann nach der Prüfung wieder ordnungsgemäß durchgeführt werden	Unterbrechung laden, nach Störgröße, wieder selbstständig in Lademodus.	PASS

Test Information (Ende):

Burst_50Ohm	
EN 61000-4-4 (BURST) CPT	
Test-Nr.: 667	BAT-EMC Vers.-Nr.: 2022.0.27.0
Datum: 21.03.2023 10:34:56	Prüfer: AR

EN IEC 61000-6-2:2019 Störfestigkeit Stoßspannungen (Tabelle 2.3/3.2/4.4)

/EN IEC 61000-6-2:2019 Immunity against Surge Voltage (Table 2.3/3.2/4.4 EN 61000-6-2)

Durchführung

/Performance

Test Parameter <i>/Test-Parameter</i>	Pulsperiode <i>/Pulse period</i>	60 s			
	Pulsanzahl je Kopplung <i>/Number of pulses per coupling</i>	5			
Betriebsspannung <i>/AC Mains voltage</i>	230V AC/ 50 Hz				
Betriebsarten <i>/Operation modes</i>	<input checked="" type="checkbox"/> BA 1	<input type="checkbox"/> BA 2	<input type="checkbox"/> BA 3	<input type="checkbox"/> BA 4	<input type="checkbox"/> BA 5
EUT-Monitoring <i>/EUT-Monitoring</i>	Visuelle Beobachtung der LED- Anzeigen.				
Bewertungskriterium <i>/Performance criteria</i>	B				
Messunsicherheit <i>/Uncertainty</i>	Bestimmung gemäß TB3 Messunsicherheitsanalysen bei EMV-Prüfungen. <i>/Determination in accordance with TB3 measurement uncertainty for EMC tests</i>				
Prüfergebnis <i>/Test result</i>	<input checked="" type="checkbox"/> Test bestanden / PASSED		<input type="checkbox"/> Test nicht bestanden / FAILED		

Prüfübersicht

/Test Overview

Test	Anschluss	Ergebnis
EN 61000-4-5 (SURGE) SV AC- Eingang Tabelle 1 IEC 61851-21-2	Stromversorgungsanschluss	PASS

Test Information (Start):

Surge_3Ph

EN 61000-4-5 (SURGE) SV AC-Eingang

Test-Nr.: 668

BAT-EMC Vers.-Nr.: 2022.0.27.0

Datum: 21.03.2023 11:01:26

Prüfer: AR

Ansicht des Prüfaufbaus:

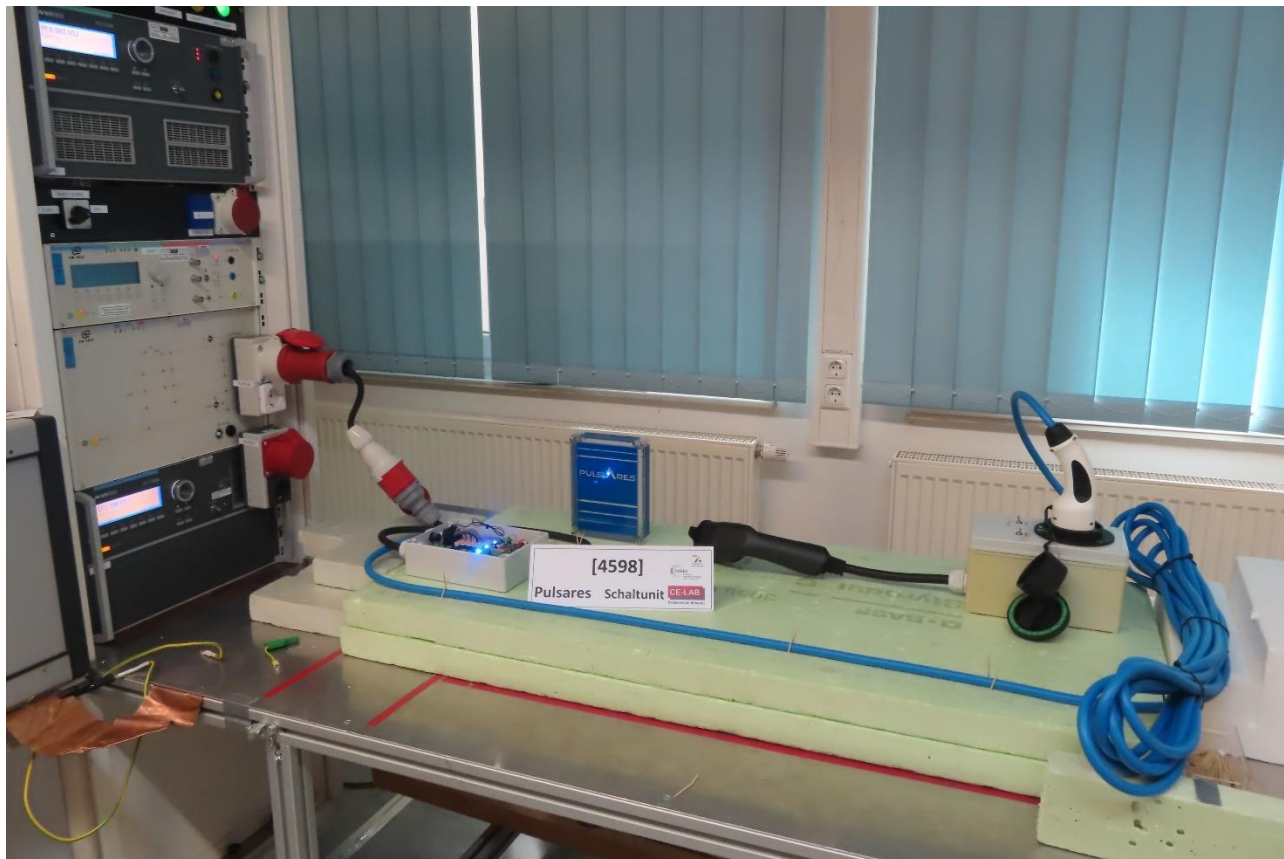
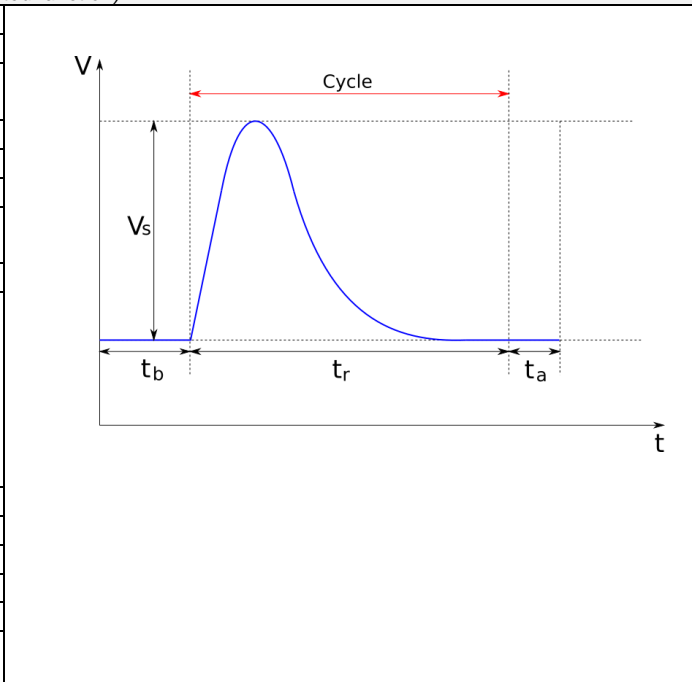


Foto 14: Prüfaufbau, EN 61000-4-5 (SURGE) SV AC-Eingang Tabelle 1 IEC 61851-21-2

Pulsparameter (Nicht ausgefüllte Felder sind für die jeweilige Prüffunktion nicht relevant!)
/test parameter (the empty panels are not relevant for the tested function)

Testschritt (n) /test step	1
Prüfpegel (Vs) /immunity test level	500 V
Polarität (Pol) /polarity	Positive Negative
Paketdauer (td) /impulse duration	
Periodendauer (tr) /cycle duration	20 s
Phase /phase	Synchron
Phasenwinkel /phase angle	0° - 270° Step 90° Lin
Koppelart /type of coupling	IEC
Kopplung /coupling	L1-N L2-N L3-N L1-PE L2-PE L3-PE N-PE
Frontwartezeit /duration before test	1 s
Endwartezeit /duration after test	1 s
Anzahl /number	5
Verzugszeit /test time	2 s
Trigger /trigger	Auto
Netzspannung /power supply voltage	230 V



Prüfablauf:

Relative Time	Type	Origin	Message
00:00:00	INFO	TEST	21.03.2023 11:01 : Started Positive - 0° - L1-N - 500 V
00:00:11	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:00:11	MEASUREMENT	EQUIPMENT	1 / 5 570 V 0 A
00:00:31	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:00:31	MEASUREMENT	EQUIPMENT	2 / 5 570 V 0 A
00:00:51	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:00:51	MEASUREMENT	EQUIPMENT	3 / 5 560 V 0 A
00:01:11	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:01:11	MEASUREMENT	EQUIPMENT	4 / 5 560 V 0 A
00:01:31	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:01:31	MEASUREMENT	EQUIPMENT	5 / 5 560 V 0 A
00:01:32	INFO	TEST	Finished
00:01:37	INFO	TEST	21.03.2023 11:03 : Started Negative - 0° - L1-N - 500 V
00:01:49	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:01:49	MEASUREMENT	EQUIPMENT	1 / 5 -600 V 0 A
00:02:09	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:02:09	MEASUREMENT	EQUIPMENT	2 / 5 -590 V 0 A
00:02:29	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:02:29	MEASUREMENT	EQUIPMENT	3 / 5 -590 V 0 A
00:02:49	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:02:49	MEASUREMENT	EQUIPMENT	4 / 5 -590 V 0 A
00:03:09	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:03:09	MEASUREMENT	EQUIPMENT	5 / 5 -580 V 0 A
00:03:10	INFO	TEST	Finished
00:03:14	INFO	TEST	21.03.2023 11:04 : Started Positive - 90° - L1-N - 500 V
00:03:26	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:03:26	MEASUREMENT	EQUIPMENT	1 / 5 550 V 0 A
00:03:46	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:03:46	MEASUREMENT	EQUIPMENT	2 / 5 560 V 0 A
00:04:06	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:04:06	MEASUREMENT	EQUIPMENT	3 / 5 570 V 0 A
00:04:26	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:04:26	MEASUREMENT	EQUIPMENT	4 / 5 570 V 0 A
00:04:46	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:04:46	MEASUREMENT	EQUIPMENT	5 / 5 560 V 0 A

00:04:47	INFO	TEST	Finished
00:04:52	INFO	TEST	21.03.2023 11:06 : Started Negative - 90 ° - L1-N - 500 V
00:05:03	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:05:03	MEASUREMENT	EQUIPMENT	1 / 5 -590 V 0 A
00:05:23	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:05:23	MEASUREMENT	EQUIPMENT	2 / 5 -590 V 0 A
00:05:43	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:05:43	MEASUREMENT	EQUIPMENT	3 / 5 -590 V 0 A
00:06:03	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:06:03	MEASUREMENT	EQUIPMENT	4 / 5 -580 V 0 A
00:06:23	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:06:23	MEASUREMENT	EQUIPMENT	5 / 5 -570 V 0 A
00:06:25	INFO	TEST	Finished
00:06:29	INFO	TEST	21.03.2023 11:08 : Started Positive - 180 ° - L1-N - 500 V
00:06:41	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:06:41	MEASUREMENT	EQUIPMENT	1 / 5 590 V 0 A
00:07:01	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:07:01	MEASUREMENT	EQUIPMENT	2 / 5 590 V 0 A
00:07:21	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:07:21	MEASUREMENT	EQUIPMENT	3 / 5 590 V 0 A
00:07:41	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:07:41	MEASUREMENT	EQUIPMENT	4 / 5 590 V 0 A
00:08:01	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:08:01	MEASUREMENT	EQUIPMENT	5 / 5 590 V 0 A
00:08:02	INFO	TEST	Finished
00:08:06	INFO	TEST	21.03.2023 11:09 : Started Negative - 180 ° - L1-N - 500 V
00:08:18	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:08:18	MEASUREMENT	EQUIPMENT	1 / 5 -580 V 0 A
00:08:38	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:08:38	MEASUREMENT	EQUIPMENT	2 / 5 -580 V 0 A
00:08:58	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:08:58	MEASUREMENT	EQUIPMENT	3 / 5 -560 V 0 A
00:09:18	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:09:18	MEASUREMENT	EQUIPMENT	4 / 5 -580 V 0 A
00:09:38	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:09:38	MEASUREMENT	EQUIPMENT	5 / 5 -570 V 0 A
00:09:39	INFO	TEST	Finished
00:09:44	INFO	TEST	21.03.2023 11:11 : Started Positive - 270 ° - L1-N - 500 V
00:09:55	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:09:56	MEASUREMENT	EQUIPMENT	1 / 5 580 V 0 A
00:10:15	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:10:15	MEASUREMENT	EQUIPMENT	2 / 5 580 V 0 A
00:10:35	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:10:36	MEASUREMENT	EQUIPMENT	3 / 5 580 V 0 A
00:10:55	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:10:55	MEASUREMENT	EQUIPMENT	4 / 5 620 V 0 A
00:11:15	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:11:15	MEASUREMENT	EQUIPMENT	5 / 5 600 V 0 A
00:11:17	INFO	TEST	Finished
00:11:21	INFO	TEST	21.03.2023 11:12 : Started Negative - 270 ° - L1-N - 500 V
00:11:33	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:11:33	MEASUREMENT	EQUIPMENT	1 / 5 -580 V 0 A
00:11:53	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:11:53	MEASUREMENT	EQUIPMENT	2 / 5 -570 V 0 A
00:12:13	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:12:13	MEASUREMENT	EQUIPMENT	3 / 5 -580 V 0 A
00:12:33	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:12:33	MEASUREMENT	EQUIPMENT	4 / 5 -570 V 0 A
00:12:53	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:12:53	MEASUREMENT	EQUIPMENT	5 / 5 -580 V 0 A
00:12:54	INFO	TEST	Finished
00:12:59	INFO	TEST	21.03.2023 11:14 : Started Positive - 0 ° - L2-N - 500 V
00:13:10	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:13:10	MEASUREMENT	EQUIPMENT	1 / 5 600 V 0 A
00:13:30	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:13:30	MEASUREMENT	EQUIPMENT	2 / 5 590 V 0 A
00:13:50	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.

00:13:50	MEASUREMENT	EQUIPMENT	3 / 5 590 V 0 A
00:14:10	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:14:10	MEASUREMENT	EQUIPMENT	4 / 5 590 V 0 A
00:14:30	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:14:30	MEASUREMENT	EQUIPMENT	5 / 5 580 V 0 A
00:14:31	INFO	TEST	Finished
00:14:36	INFO	TEST	21.03.2023 11:16 : Started Negative - 0 ° - L2-N - 500 V
00:14:48	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:14:48	MEASUREMENT	EQUIPMENT	1 / 5 -570 V 0 A
00:15:08	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:15:08	MEASUREMENT	EQUIPMENT	2 / 5 -560 V 0 A
00:15:28	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:15:28	MEASUREMENT	EQUIPMENT	3 / 5 -560 V 0 A
00:15:48	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:15:48	MEASUREMENT	EQUIPMENT	4 / 5 -560 V 0 A
00:16:08	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:16:08	MEASUREMENT	EQUIPMENT	5 / 5 -570 V 0 A
00:16:09	INFO	TEST	Finished
00:16:13	INFO	TEST	21.03.2023 11:17 : Started Positive - 90 ° - L2-N - 500 V
00:16:25	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:16:25	MEASUREMENT	EQUIPMENT	1 / 5 560 V 0 A
00:16:45	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:16:45	MEASUREMENT	EQUIPMENT	2 / 5 580 V 0 A
00:17:05	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:17:05	MEASUREMENT	EQUIPMENT	3 / 5 560 V 0 A
00:17:25	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:17:25	MEASUREMENT	EQUIPMENT	4 / 5 510 V 0 A
00:17:45	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:17:45	MEASUREMENT	EQUIPMENT	5 / 5 560 V 0 A
00:17:46	INFO	TEST	Finished
00:17:51	INFO	TEST	21.03.2023 11:19 : Started Negative - 90 ° - L2-N - 500 V
00:18:02	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:18:02	MEASUREMENT	EQUIPMENT	1 / 5 -590 V 0 A
00:18:22	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:18:22	MEASUREMENT	EQUIPMENT	2 / 5 -590 V 0 A
00:18:42	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:18:42	MEASUREMENT	EQUIPMENT	3 / 5 -590 V 0 A
00:19:02	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:19:02	MEASUREMENT	EQUIPMENT	4 / 5 -590 V 0 A
00:19:22	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:19:22	MEASUREMENT	EQUIPMENT	5 / 5 -590 V 0 A
00:19:24	INFO	TEST	Finished
00:19:28	INFO	TEST	21.03.2023 11:21 : Started Positive - 180 ° - L2-N - 500 V
00:19:40	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:19:40	MEASUREMENT	EQUIPMENT	1 / 5 560 V 0 A
00:20:00	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:20:00	MEASUREMENT	EQUIPMENT	2 / 5 560 V 0 A
00:20:20	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:20:20	MEASUREMENT	EQUIPMENT	3 / 5 540 V 0 A
00:20:40	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:20:40	MEASUREMENT	EQUIPMENT	4 / 5 560 V 0 A
00:21:00	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:21:00	MEASUREMENT	EQUIPMENT	5 / 5 550 V 0 A
00:21:01	INFO	TEST	Finished
00:21:05	INFO	TEST	21.03.2023 11:22 : Started Negative - 180 ° - L2-N - 500 V
00:21:17	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:21:17	MEASUREMENT	EQUIPMENT	1 / 5 -590 V 0 A
00:21:37	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:21:37	MEASUREMENT	EQUIPMENT	2 / 5 -590 V 0 A
00:21:57	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:21:57	MEASUREMENT	EQUIPMENT	3 / 5 -600 V 0 A
00:22:17	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:22:17	MEASUREMENT	EQUIPMENT	4 / 5 -590 V 0 A
00:22:37	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:22:37	MEASUREMENT	EQUIPMENT	5 / 5 -590 V 0 A
00:22:38	INFO	TEST	Finished
00:22:43	INFO	TEST	21.03.2023 11:24 : Started Positive - 270 ° - L2-N - 500 V

00:22:55	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:22:55	MEASUREMENT	EQUIPMENT	1 / 5 580 V 0 A
00:23:15	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:23:15	MEASUREMENT	EQUIPMENT	2 / 5 580 V 0 A
00:23:35	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:23:35	MEASUREMENT	EQUIPMENT	3 / 5 580 V 0 A
00:23:55	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:23:55	MEASUREMENT	EQUIPMENT	4 / 5 590 V 0 A
00:24:14	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:24:15	MEASUREMENT	EQUIPMENT	5 / 5 580 V 0 A
00:24:16	INFO	TEST	Finished
00:24:20	INFO	TEST	21.03.2023 11:25 : Started Negative - 270 ° - L2-N - 500 V
00:24:32	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:24:32	MEASUREMENT	EQUIPMENT	1 / 5 -570 V 0 A
00:24:52	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:24:52	MEASUREMENT	EQUIPMENT	2 / 5 -570 V 0 A
00:25:12	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:25:12	MEASUREMENT	EQUIPMENT	3 / 5 -580 V 0 A
00:25:32	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:25:32	MEASUREMENT	EQUIPMENT	4 / 5 -580 V 0 A
00:25:52	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:25:52	MEASUREMENT	EQUIPMENT	5 / 5 -580 V 0 A
00:25:53	INFO	TEST	Finished
00:25:58	INFO	TEST	21.03.2023 11:27 : Started Positive - 0 ° - L3-N - 500 V
00:26:09	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:26:09	MEASUREMENT	EQUIPMENT	1 / 5 580 V 0 A
00:26:29	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:26:29	MEASUREMENT	EQUIPMENT	2 / 5 570 V 0 A
00:26:49	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:26:49	MEASUREMENT	EQUIPMENT	3 / 5 580 V 0 A
00:27:09	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:27:09	MEASUREMENT	EQUIPMENT	4 / 5 580 V 0 A
00:27:29	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:27:29	MEASUREMENT	EQUIPMENT	5 / 5 580 V 0 A
00:27:30	INFO	TEST	Finished
00:27:35	INFO	TEST	21.03.2023 11:29 : Started Negative - 0 ° - L3-N - 500 V
00:27:47	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:27:47	MEASUREMENT	EQUIPMENT	1 / 5 -580 V 0 A
00:28:07	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:28:07	MEASUREMENT	EQUIPMENT	2 / 5 -580 V 0 A
00:28:27	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:28:27	MEASUREMENT	EQUIPMENT	3 / 5 -580 V 0 A
00:28:47	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:28:47	MEASUREMENT	EQUIPMENT	4 / 5 -580 V 0 A
00:29:07	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:29:07	MEASUREMENT	EQUIPMENT	5 / 5 -580 V 0 A
00:29:08	INFO	TEST	Finished
00:29:12	INFO	TEST	21.03.2023 11:30 : Started Positive - 90 ° - L3-N - 500 V
00:29:24	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:29:24	MEASUREMENT	EQUIPMENT	1 / 5 590 V 0 A
00:29:44	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:29:44	MEASUREMENT	EQUIPMENT	2 / 5 580 V 0 A
00:30:04	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:30:04	MEASUREMENT	EQUIPMENT	3 / 5 580 V 0 A
00:30:24	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:30:24	MEASUREMENT	EQUIPMENT	4 / 5 590 V 0 A
00:30:44	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:30:44	MEASUREMENT	EQUIPMENT	5 / 5 590 V 0 A
00:30:45	INFO	TEST	Finished
00:30:50	INFO	TEST	21.03.2023 11:32 : Started Negative - 90 ° - L3-N - 500 V
00:31:01	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:31:01	MEASUREMENT	EQUIPMENT	1 / 5 -570 V 0 A
00:31:21	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:31:21	MEASUREMENT	EQUIPMENT	2 / 5 -560 V 0 A
00:31:41	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:31:41	MEASUREMENT	EQUIPMENT	3 / 5 -560 V 0 A
00:32:01	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.

00:32:01	MEASUREMENT	EQUIPMENT	4 / 5 -570 V 0 A
00:32:21	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:32:21	MEASUREMENT	EQUIPMENT	5 / 5 -570 V 0 A
00:32:23	INFO	TEST	Finished
00:32:27	INFO	TEST	21.03.2023 11:34 : Started Positive - 180 ° - L3-N - 500 V
00:32:39	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:32:39	MEASUREMENT	EQUIPMENT	1 / 5 570 V 0 A
00:32:59	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:32:59	MEASUREMENT	EQUIPMENT	2 / 5 570 V 0 A
00:33:19	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:33:19	MEASUREMENT	EQUIPMENT	3 / 5 580 V 0 A
00:33:39	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:33:39	MEASUREMENT	EQUIPMENT	4 / 5 580 V 0 A
00:33:59	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:33:59	MEASUREMENT	EQUIPMENT	5 / 5 580 V 0 A
00:34:00	INFO	TEST	Finished
00:34:04	INFO	TEST	21.03.2023 11:35 : Started Negative - 180 ° - L3-N - 500 V
00:34:16	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:34:16	MEASUREMENT	EQUIPMENT	1 / 5 -580 V 0 A
00:34:36	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:34:36	MEASUREMENT	EQUIPMENT	2 / 5 -590 V 0 A
00:34:56	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:34:56	MEASUREMENT	EQUIPMENT	3 / 5 -580 V 0 A
00:35:16	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:35:16	MEASUREMENT	EQUIPMENT	4 / 5 -580 V 0 A
00:35:36	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:35:36	MEASUREMENT	EQUIPMENT	5 / 5 -570 V 0 A
00:35:37	INFO	TEST	Finished
00:35:42	INFO	TEST	21.03.2023 11:37 : Started Positive - 270 ° - L3-N - 500 V
00:35:53	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:35:54	MEASUREMENT	EQUIPMENT	1 / 5 560 V 0 A
00:36:13	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:36:14	MEASUREMENT	EQUIPMENT	2 / 5 550 V 0 A
00:36:33	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:36:34	MEASUREMENT	EQUIPMENT	3 / 5 560 V 0 A
00:36:53	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:36:53	MEASUREMENT	EQUIPMENT	4 / 5 550 V 0 A
00:37:13	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:37:13	MEASUREMENT	EQUIPMENT	5 / 5 560 V 0 A
00:37:15	INFO	TEST	Finished
00:37:19	INFO	TEST	21.03.2023 11:38 : Started Negative - 270 ° - L3-N - 500 V
00:37:31	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:37:31	MEASUREMENT	EQUIPMENT	1 / 5 -590 V 0 A
00:37:51	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:37:51	MEASUREMENT	EQUIPMENT	2 / 5 -590 V 0 A
00:38:11	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:38:11	MEASUREMENT	EQUIPMENT	3 / 5 -590 V 0 A
00:38:31	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:38:31	MEASUREMENT	EQUIPMENT	4 / 5 -590 V 0 A
00:38:51	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:38:51	MEASUREMENT	EQUIPMENT	5 / 5 -600 V 0 A
00:38:52	INFO	TEST	Finished
00:38:56	INFO	TEST	21.03.2023 11:40 : Started Positive - 0 ° - L1-PE - 500 V
00:39:08	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:39:08	MEASUREMENT	EQUIPMENT	1 / 5 540 V 0 A
00:39:28	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:39:28	MEASUREMENT	EQUIPMENT	2 / 5 560 V 0 A
00:39:48	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:39:48	MEASUREMENT	EQUIPMENT	3 / 5 550 V 0 A
00:40:08	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:40:08	MEASUREMENT	EQUIPMENT	4 / 5 550 V 0 A
00:40:28	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:40:28	MEASUREMENT	EQUIPMENT	5 / 5 540 V 0 A
00:40:29	INFO	TEST	Finished
00:40:34	INFO	TEST	21.03.2023 11:42 : Started Negative - 0 ° - L1-PE - 500 V
00:40:46	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:40:46	MEASUREMENT	EQUIPMENT	1 / 5 -570 V 0 A

00:41:06	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:41:06	MEASUREMENT	EQUIPMENT	2 / 5 -570 V 0 A
00:41:25	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:41:26	MEASUREMENT	EQUIPMENT	3 / 5 -560 V 0 A
00:41:45	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:41:46	MEASUREMENT	EQUIPMENT	4 / 5 -560 V 0 A
00:42:05	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:42:06	MEASUREMENT	EQUIPMENT	5 / 5 -570 V 0 A
00:42:07	INFO	TEST	Finished
00:42:11	INFO	TEST	21.03.2023 11:43 : Started Positive - 90 ° - L1-PE - 500 V
00:42:23	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:42:23	MEASUREMENT	EQUIPMENT	1 / 5 550 V 0 A
00:42:43	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:42:43	MEASUREMENT	EQUIPMENT	2 / 5 540 V 0 A
00:43:03	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:43:03	MEASUREMENT	EQUIPMENT	3 / 5 530 V 0 A
00:43:23	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:43:23	MEASUREMENT	EQUIPMENT	4 / 5 510 V 0 A
00:43:43	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:43:43	MEASUREMENT	EQUIPMENT	5 / 5 500 V 0 A
00:43:44	INFO	TEST	Finished
00:43:49	INFO	TEST	21.03.2023 11:45 : Started Negative - 90 ° - L1-PE - 500 V
00:44:00	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:44:00	MEASUREMENT	EQUIPMENT	1 / 5 -560 V 0 A
00:44:20	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:44:20	MEASUREMENT	EQUIPMENT	2 / 5 -560 V 0 A
00:44:40	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:44:40	MEASUREMENT	EQUIPMENT	3 / 5 -560 V 0 A
00:45:00	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:45:00	MEASUREMENT	EQUIPMENT	4 / 5 -560 V 0 A
00:45:20	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:45:20	MEASUREMENT	EQUIPMENT	5 / 5 -570 V 0 A
00:45:21	INFO	TEST	Finished
00:45:26	INFO	TEST	21.03.2023 11:47 : Started Positive - 180 ° - L1-PE - 500 V
00:45:38	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:45:38	MEASUREMENT	EQUIPMENT	1 / 5 560 V 0 A
00:45:58	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:45:58	MEASUREMENT	EQUIPMENT	2 / 5 550 V 0 A
00:46:18	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:46:18	MEASUREMENT	EQUIPMENT	3 / 5 550 V 0 A
00:46:38	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:46:38	MEASUREMENT	EQUIPMENT	4 / 5 550 V 0 A
00:46:58	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:46:58	MEASUREMENT	EQUIPMENT	5 / 5 560 V 0 A
00:46:59	INFO	TEST	Finished
00:47:03	INFO	TEST	21.03.2023 11:48 : Started Negative - 180 ° - L1-PE - 500 V
00:47:15	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:47:15	MEASUREMENT	EQUIPMENT	1 / 5 -560 V 0 A
00:47:35	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:47:35	MEASUREMENT	EQUIPMENT	2 / 5 -550 V 0 A
00:47:55	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:47:55	MEASUREMENT	EQUIPMENT	3 / 5 -550 V 0 A
00:48:15	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:48:15	MEASUREMENT	EQUIPMENT	4 / 5 -540 V 0 A
00:48:35	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:48:35	MEASUREMENT	EQUIPMENT	5 / 5 -550 V 0 A
00:48:36	INFO	TEST	Finished
00:48:41	INFO	TEST	21.03.2023 11:50 : Started Positive - 270 ° - L1-PE - 500 V
00:48:52	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:48:52	MEASUREMENT	EQUIPMENT	1 / 5 560 V 0 A
00:49:12	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:49:12	MEASUREMENT	EQUIPMENT	2 / 5 560 V 0 A
00:49:32	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:49:32	MEASUREMENT	EQUIPMENT	3 / 5 550 V 0 A
00:49:52	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:49:52	MEASUREMENT	EQUIPMENT	4 / 5 560 V 0 A
00:50:12	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.

00:50:12	MEASUREMENT	EQUIPMENT	5 / 5 550 V 0 A
00:50:14	INFO	TEST	Finished
00:50:18	INFO	TEST	21.03.2023 11:51 : Started Negative - 270 ° - L1-PE - 500 V
00:50:30	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:50:30	MEASUREMENT	EQUIPMENT	1 / 5 -560 V 0 A
00:50:50	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:50:50	MEASUREMENT	EQUIPMENT	2 / 5 -540 V 0 A
00:51:10	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:51:10	MEASUREMENT	EQUIPMENT	3 / 5 -530 V 0 A
00:51:30	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:51:30	MEASUREMENT	EQUIPMENT	4 / 5 -500 V 0 A
00:51:50	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:51:50	MEASUREMENT	EQUIPMENT	5 / 5 -510 V 0 A
00:51:51	INFO	TEST	Finished
00:51:55	INFO	TEST	21.03.2023 11:53 : Started Positive - 0 ° - L2-PE - 500 V
00:52:07	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:52:07	MEASUREMENT	EQUIPMENT	1 / 5 560 V 0 A
00:52:27	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:52:27	MEASUREMENT	EQUIPMENT	2 / 5 560 V 0 A
00:52:47	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:52:47	MEASUREMENT	EQUIPMENT	3 / 5 570 V 0 A
00:53:07	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:53:07	MEASUREMENT	EQUIPMENT	4 / 5 560 V 0 A
00:53:27	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:53:27	MEASUREMENT	EQUIPMENT	5 / 5 560 V 0 A
00:53:28	INFO	TEST	Finished
00:53:33	INFO	TEST	21.03.2023 11:55 : Started Negative - 0 ° - L2-PE - 500 V
00:53:44	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:53:44	MEASUREMENT	EQUIPMENT	1 / 5 -510 V 0 A
00:54:04	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:54:04	MEASUREMENT	EQUIPMENT	2 / 5 -510 V 0 A
00:54:24	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:54:24	MEASUREMENT	EQUIPMENT	3 / 5 -520 V 0 A
00:54:44	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:54:44	MEASUREMENT	EQUIPMENT	4 / 5 -520 V 0 A
00:55:04	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:55:04	MEASUREMENT	EQUIPMENT	5 / 5 -510 V 0 A
00:55:06	INFO	TEST	Finished
00:55:10	INFO	TEST	21.03.2023 11:56 : Started Positive - 90 ° - L2-PE - 500 V
00:55:22	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:55:22	MEASUREMENT	EQUIPMENT	1 / 5 560 V 0 A
00:55:42	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:55:42	MEASUREMENT	EQUIPMENT	2 / 5 560 V 0 A
00:56:02	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:56:02	MEASUREMENT	EQUIPMENT	3 / 5 560 V 0 A
00:56:22	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:56:22	MEASUREMENT	EQUIPMENT	4 / 5 560 V 0 A
00:56:42	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:56:42	MEASUREMENT	EQUIPMENT	5 / 5 560 V 0 A
00:56:43	INFO	TEST	Finished
00:56:47	INFO	TEST	21.03.2023 11:58 : Started Negative - 90 ° - L2-PE - 500 V
00:56:59	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:56:59	MEASUREMENT	EQUIPMENT	1 / 5 -550 V 0 A
00:57:19	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:57:19	MEASUREMENT	EQUIPMENT	2 / 5 -550 V 0 A
00:57:39	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:57:39	MEASUREMENT	EQUIPMENT	3 / 5 -550 V 0 A
00:57:59	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:57:59	MEASUREMENT	EQUIPMENT	4 / 5 -550 V 0 A
00:58:19	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:58:19	MEASUREMENT	EQUIPMENT	5 / 5 -560 V 0 A
00:58:20	INFO	TEST	Finished
00:58:25	INFO	TEST	21.03.2023 12:00 : Started Positive - 180 ° - L2-PE - 500 V
00:58:37	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:58:37	MEASUREMENT	EQUIPMENT	1 / 5 510 V 0 A
00:58:57	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:58:57	MEASUREMENT	EQUIPMENT	2 / 5 510 V 0 A

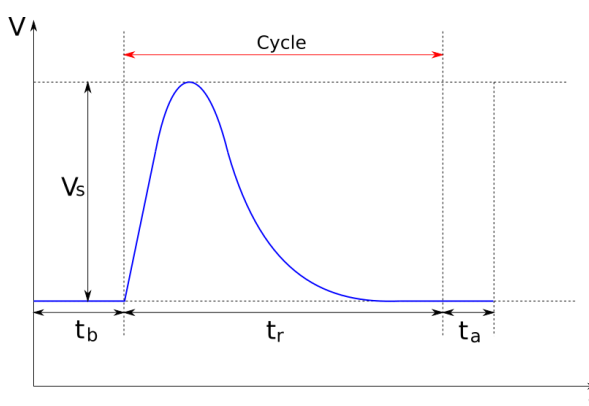
00:59:17	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:59:17	MEASUREMENT	EQUIPMENT	3 / 5 510 V 0 A
00:59:36	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:59:37	MEASUREMENT	EQUIPMENT	4 / 5 510 V 0 A
00:59:56	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:59:57	MEASUREMENT	EQUIPMENT	5 / 5 500 V 0 A
00:59:58	INFO	TEST	Finished
01:00:02	INFO	TEST	21.03.2023 12:01 : Started Negative - 180 ° - L2-PE - 500 V
01:00:14	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:00:14	MEASUREMENT	EQUIPMENT	1 / 5 -570 V 0 A
01:00:34	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:00:34	MEASUREMENT	EQUIPMENT	2 / 5 -570 V 0 A
01:00:54	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:00:54	MEASUREMENT	EQUIPMENT	3 / 5 -570 V 0 A
01:01:14	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:01:14	MEASUREMENT	EQUIPMENT	4 / 5 -570 V 0 A
01:01:34	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:01:34	MEASUREMENT	EQUIPMENT	5 / 5 -570 V 0 A
01:01:35	INFO	TEST	Finished
01:01:40	INFO	TEST	21.03.2023 12:03 : Started Positive - 270 ° - L2-PE - 500 V
01:01:51	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:01:51	MEASUREMENT	EQUIPMENT	1 / 5 540 V 0 A
01:02:11	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:02:11	MEASUREMENT	EQUIPMENT	2 / 5 540 V 0 A
01:02:31	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:02:31	MEASUREMENT	EQUIPMENT	3 / 5 540 V 0 A
01:02:51	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:02:51	MEASUREMENT	EQUIPMENT	4 / 5 540 V 0 A
01:03:11	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:03:11	MEASUREMENT	EQUIPMENT	5 / 5 550 V 0 A
01:03:13	INFO	TEST	Finished
01:03:17	INFO	TEST	21.03.2023 12:04 : Started Negative - 270 ° - L2-PE - 500 V
01:03:29	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:03:29	MEASUREMENT	EQUIPMENT	1 / 5 -560 V 0 A
01:03:49	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:03:49	MEASUREMENT	EQUIPMENT	2 / 5 -560 V 0 A
01:04:09	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:04:09	MEASUREMENT	EQUIPMENT	3 / 5 -570 V 0 A
01:04:29	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:04:29	MEASUREMENT	EQUIPMENT	4 / 5 -570 V 0 A
01:04:49	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:04:49	MEASUREMENT	EQUIPMENT	5 / 5 -570 V 0 A
01:04:50	INFO	TEST	Finished
01:04:54	INFO	TEST	21.03.2023 12:06 : Started Positive - 0 ° - L3-PE - 500 V
01:05:06	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:05:06	MEASUREMENT	EQUIPMENT	1 / 5 560 V 0 A
01:05:26	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:05:26	MEASUREMENT	EQUIPMENT	2 / 5 530 V 0 A
01:05:46	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:05:46	MEASUREMENT	EQUIPMENT	3 / 5 540 V 0 A
01:06:06	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:06:06	MEASUREMENT	EQUIPMENT	4 / 5 500 V 0 A
01:06:26	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:06:26	MEASUREMENT	EQUIPMENT	5 / 5 500 V 0 A
01:06:27	INFO	TEST	Finished
01:06:32	INFO	TEST	21.03.2023 12:08 : Started Negative - 0 ° - L3-PE - 500 V
01:06:43	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:06:43	MEASUREMENT	EQUIPMENT	1 / 5 -570 V 0 A
01:07:03	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:07:03	MEASUREMENT	EQUIPMENT	2 / 5 -570 V 0 A
01:07:23	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:07:23	MEASUREMENT	EQUIPMENT	3 / 5 -580 V 0 A
01:07:43	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:07:43	MEASUREMENT	EQUIPMENT	4 / 5 -580 V 0 A
01:08:03	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:08:03	MEASUREMENT	EQUIPMENT	5 / 5 -580 V 0 A
01:08:05	INFO	TEST	Finished

01:08:09	INFO	TEST	21.03.2023 12:09 : Started Positive - 90 ° - L3-PE - 500 V
01:08:21	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:08:21	MEASUREMENT	EQUIPMENT	1 / 5 580 V 0 A
01:08:41	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:08:41	MEASUREMENT	EQUIPMENT	2 / 5 580 V 0 A
01:09:01	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:09:01	MEASUREMENT	EQUIPMENT	3 / 5 570 V 0 A
01:09:21	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:09:21	MEASUREMENT	EQUIPMENT	4 / 5 580 V 0 A
01:09:41	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:09:41	MEASUREMENT	EQUIPMENT	5 / 5 570 V 0 A
01:09:43	INFO	TEST	Finished
01:09:47	INFO	TEST	21.03.2023 12:11 : Started Negative - 90 ° - L3-PE - 500 V
01:09:59	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:09:59	MEASUREMENT	EQUIPMENT	1 / 5 -560 V 0 A
01:10:19	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:10:19	MEASUREMENT	EQUIPMENT	2 / 5 -530 V 0 A
01:10:39	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:10:39	MEASUREMENT	EQUIPMENT	3 / 5 -560 V 0 A
01:10:59	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:10:59	MEASUREMENT	EQUIPMENT	4 / 5 -570 V 0 A
01:11:19	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:11:19	MEASUREMENT	EQUIPMENT	5 / 5 -570 V 0 A
01:11:20	INFO	TEST	Finished
01:11:24	INFO	TEST	21.03.2023 12:13 : Started Positive - 180 ° - L3-PE - 500 V
01:11:36	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:11:36	MEASUREMENT	EQUIPMENT	1 / 5 570 V 0 A
01:11:56	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:11:56	MEASUREMENT	EQUIPMENT	2 / 5 570 V 0 A
01:12:16	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:12:16	MEASUREMENT	EQUIPMENT	3 / 5 570 V 0 A
01:12:36	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:12:36	MEASUREMENT	EQUIPMENT	4 / 5 570 V 0 A
01:12:56	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:12:56	MEASUREMENT	EQUIPMENT	5 / 5 560 V 0 A
01:12:57	INFO	TEST	Finished
01:13:02	INFO	TEST	21.03.2023 12:14 : Started Negative - 180 ° - L3-PE - 500 V
01:13:14	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:13:14	MEASUREMENT	EQUIPMENT	1 / 5 -530 V 0 A
01:13:34	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:13:34	MEASUREMENT	EQUIPMENT	2 / 5 -510 V 0 A
01:13:54	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:13:54	MEASUREMENT	EQUIPMENT	3 / 5 -510 V 0 A
01:14:14	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:14:14	MEASUREMENT	EQUIPMENT	4 / 5 -520 V 0 A
01:14:33	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:14:34	MEASUREMENT	EQUIPMENT	5 / 5 -520 V 0 A
01:14:35	INFO	TEST	Finished
01:14:39	INFO	TEST	21.03.2023 12:16 : Started Positive - 270 ° - L3-PE - 500 V
01:14:51	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:14:51	MEASUREMENT	EQUIPMENT	1 / 5 560 V 0 A
01:15:11	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:15:11	MEASUREMENT	EQUIPMENT	2 / 5 550 V 0 A
01:15:31	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:15:31	MEASUREMENT	EQUIPMENT	3 / 5 540 V 0 A
01:15:51	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:15:51	MEASUREMENT	EQUIPMENT	4 / 5 530 V 0 A
01:16:11	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:16:11	MEASUREMENT	EQUIPMENT	5 / 5 510 V 0 A
01:16:12	INFO	TEST	Finished
01:16:17	INFO	TEST	21.03.2023 12:17 : Started Negative - 270 ° - L3-PE - 500 V
01:16:28	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:16:28	MEASUREMENT	EQUIPMENT	1 / 5 -580 V 0 A
01:16:48	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:16:48	MEASUREMENT	EQUIPMENT	2 / 5 -570 V 0 A
01:17:08	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:17:08	MEASUREMENT	EQUIPMENT	3 / 5 -570 V 0 A

01:17:28	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:17:28	MEASUREMENT	EQUIPMENT	4 / 5 -570 V 0 A
01:17:48	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:17:48	MEASUREMENT	EQUIPMENT	5 / 5 -580 V 0 A
01:17:49	INFO	TEST	Finished
01:17:54	INFO	TEST	21.03.2023 12:19 : Started Positive - 0 ° - N-PE - 500 V
01:18:06	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:18:06	MEASUREMENT	EQUIPMENT	1 / 5 550 V 0 A
01:18:26	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:18:26	MEASUREMENT	EQUIPMENT	2 / 5 540 V 0 A
01:18:46	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:18:46	MEASUREMENT	EQUIPMENT	3 / 5 540 V 0 A
01:19:06	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:19:06	MEASUREMENT	EQUIPMENT	4 / 5 550 V 0 A
01:19:26	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:19:26	MEASUREMENT	EQUIPMENT	5 / 5 550 V 0 A
01:19:27	INFO	TEST	Finished
01:19:31	INFO	TEST	21.03.2023 12:21 : Started Negative - 0 ° - N-PE - 500 V
01:19:43	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:19:43	MEASUREMENT	EQUIPMENT	1 / 5 -550 V 0 A
01:20:03	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:20:03	MEASUREMENT	EQUIPMENT	2 / 5 -550 V 0 A
01:20:23	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:20:23	MEASUREMENT	EQUIPMENT	3 / 5 -560 V 0 A
01:20:43	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:20:43	MEASUREMENT	EQUIPMENT	4 / 5 -560 V 0 A
01:21:03	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:21:03	MEASUREMENT	EQUIPMENT	5 / 5 -560 V 0 A
01:21:04	INFO	TEST	Finished
01:21:09	INFO	TEST	21.03.2023 12:22 : Started Positive - 90 ° - N-PE - 500 V
01:21:20	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:21:20	MEASUREMENT	EQUIPMENT	1 / 5 550 V 0 A
01:21:40	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:21:40	MEASUREMENT	EQUIPMENT	2 / 5 540 V 0 A
01:22:00	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:22:00	MEASUREMENT	EQUIPMENT	3 / 5 540 V 0 A
01:22:20	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:22:20	MEASUREMENT	EQUIPMENT	4 / 5 550 V 0 A
01:22:40	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:22:40	MEASUREMENT	EQUIPMENT	5 / 5 560 V 0 A
01:22:42	INFO	TEST	Finished
01:22:46	INFO	TEST	21.03.2023 12:24 : Started Negative - 90 ° - N-PE - 500 V
01:22:58	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:22:58	MEASUREMENT	EQUIPMENT	1 / 5 -560 V 0 A
01:23:18	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:23:18	MEASUREMENT	EQUIPMENT	2 / 5 -570 V 0 A
01:23:38	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:23:38	MEASUREMENT	EQUIPMENT	3 / 5 -560 V 0 A
01:23:58	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:23:58	MEASUREMENT	EQUIPMENT	4 / 5 -560 V 0 A
01:24:18	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:24:18	MEASUREMENT	EQUIPMENT	5 / 5 -550 V 0 A
01:24:19	INFO	TEST	Finished
01:24:23	INFO	TEST	21.03.2023 12:26 : Started Positive - 180 ° - N-PE - 500 V
01:24:35	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:24:35	MEASUREMENT	EQUIPMENT	1 / 5 550 V 0 A
01:24:55	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:24:55	MEASUREMENT	EQUIPMENT	2 / 5 550 V 0 A
01:25:15	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:25:15	MEASUREMENT	EQUIPMENT	3 / 5 550 V 0 A
01:25:35	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:25:35	MEASUREMENT	EQUIPMENT	4 / 5 560 V 0 A
01:25:55	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:25:55	MEASUREMENT	EQUIPMENT	5 / 5 560 V 0 A
01:25:56	INFO	TEST	Finished
01:26:01	INFO	TEST	21.03.2023 12:27 : Started Negative - 180 ° - N-PE - 500 V
01:26:12	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.

01:26:12	MEASUREMENT	EQUIPMENT	1 / 5 -560 V 0 A
01:26:32	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:26:32	MEASUREMENT	EQUIPMENT	2 / 5 -550 V 0 A
01:26:52	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:26:52	MEASUREMENT	EQUIPMENT	3 / 5 -560 V 0 A
01:27:12	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:27:12	MEASUREMENT	EQUIPMENT	4 / 5 -550 V 0 A
01:27:32	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:27:32	MEASUREMENT	EQUIPMENT	5 / 5 -570 V 0 A
01:27:34	INFO	TEST	Finished
01:27:38	INFO	TEST	21.03.2023 12:29 : Started Positive - 270 ° - N-PE - 500 V
01:27:50	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:27:50	MEASUREMENT	EQUIPMENT	1 / 5 550 V 0 A
01:28:10	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:28:10	MEASUREMENT	EQUIPMENT	2 / 5 560 V 0 A
01:28:30	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:28:30	MEASUREMENT	EQUIPMENT	3 / 5 550 V 0 A
01:28:50	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:28:50	MEASUREMENT	EQUIPMENT	4 / 5 550 V 0 A
01:29:10	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:29:10	MEASUREMENT	EQUIPMENT	5 / 5 550 V 0 A
01:29:11	INFO	TEST	Finished
01:29:15	INFO	TEST	21.03.2023 12:30 : Started Negative - 270 ° - N-PE - 500 V
01:29:27	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:29:27	MEASUREMENT	EQUIPMENT	1 / 5 -550 V 0 A
01:29:47	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:29:47	MEASUREMENT	EQUIPMENT	2 / 5 -560 V 0 A
01:30:07	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:30:07	MEASUREMENT	EQUIPMENT	3 / 5 -560 V 0 A
01:30:27	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:30:27	MEASUREMENT	EQUIPMENT	4 / 5 -560 V 0 A
01:30:47	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:30:47	MEASUREMENT	EQUIPMENT	5 / 5 -570 V 0 A
01:30:48	INFO	TEST	Finished

Pulsparameter (Nicht ausgefüllte Felder sind für die jeweilige Prüffunktion nicht relevant!) <i>/test parameter (the empty panels are not relevant for the tested function)</i>	
Testschritt (n) /test step	2
Prüfpegel (Vs) /immunity test level	1000 V
Polarität (Pol) /polarity	Positive Negative
Paketdauer (td) /impulse duration	
Periodendauer (tr) /cycle duration	20 s
Phase /phase	Synchron
Phasenwinkel /phase angle	0° - 270° Step 90° Lin
Koppelart /type of coupling	IEC
Kopplung /coupling	L1-N L2-N L3-N L1-PE L2-PE L3-PE N-PE
Frontwartezeit /duration before test	1 s
Endwartezeit /duration after test	1 s
Anzahl /number	5
Verzugszeit /test time	2 s
Trigger /trigger	Auto
Netzspannung /power supply voltage	230 V



Prüfablauf:

Relative Time	Type	Origin	Message
00:00:00	INFO	TEST	21.03.2023 12:36 : Started Positive - 0° - L1-N - 1000 V
00:00:11	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:00:11	MEASUREMENT	EQUIPMENT	1 / 5 1200 V 0 A
00:00:31	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:00:31	MEASUREMENT	EQUIPMENT	2 / 5 1180 V 0 A
00:00:51	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:00:51	MEASUREMENT	EQUIPMENT	3 / 5 1190 V 0 A
00:01:11	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:01:11	MEASUREMENT	EQUIPMENT	4 / 5 1200 V 0 A
00:01:31	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:01:31	MEASUREMENT	EQUIPMENT	5 / 5 1200 V 0 A
00:01:32	INFO	TEST	Finished
00:01:37	INFO	TEST	21.03.2023 12:38 : Started Negative - 0° - L1-N - 1000 V
00:01:49	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:01:49	MEASUREMENT	EQUIPMENT	1 / 5 -1210 V-5 A
00:02:09	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:02:09	MEASUREMENT	EQUIPMENT	2 / 5 -1200 V-10 A
00:02:29	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:02:29	MEASUREMENT	EQUIPMENT	3 / 5 -1210 V-5 A
00:02:49	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:02:49	MEASUREMENT	EQUIPMENT	4 / 5 -1210 V-10 A
00:03:09	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:03:09	MEASUREMENT	EQUIPMENT	5 / 5 -1200 V-5 A
00:03:10	INFO	TEST	Finished
00:03:14	INFO	TEST	21.03.2023 12:39 : Started Positive - 90° - L1-N - 1000 V
00:03:26	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:03:26	MEASUREMENT	EQUIPMENT	1 / 5 1020 V 35 A
00:03:46	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:03:46	MEASUREMENT	EQUIPMENT	2 / 5 1010 V 35 A
00:04:06	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:04:06	MEASUREMENT	EQUIPMENT	3 / 5 1010 V 35 A
00:04:26	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:04:26	MEASUREMENT	EQUIPMENT	4 / 5 1020 V 35 A
00:04:46	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.

00:04:46	MEASUREMENT	EQUIPMENT	5 / 5 1020 V 35 A
00:04:47	INFO	TEST	Finished
00:04:52	INFO	TEST	21.03.2023 12:41 : Started Negative - 90 ° - L1-N - 1000 V
00:05:03	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:05:03	MEASUREMENT	EQUIPMENT	1 / 5 -1210 V 0 A
00:05:23	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:05:23	MEASUREMENT	EQUIPMENT	2 / 5 -1210 V 0 A
00:05:43	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:05:43	MEASUREMENT	EQUIPMENT	3 / 5 -1220 V 0 A
00:06:03	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:06:03	MEASUREMENT	EQUIPMENT	4 / 5 -1200 V 0 A
00:06:23	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:06:23	MEASUREMENT	EQUIPMENT	5 / 5 -1210 V 0 A
00:06:25	INFO	TEST	Finished
00:06:29	INFO	TEST	21.03.2023 12:42 : Started Positive - 180 ° - L1-N - 1000 V
00:06:41	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:06:41	MEASUREMENT	EQUIPMENT	1 / 5 1170 V 10 A
00:07:01	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:07:01	MEASUREMENT	EQUIPMENT	2 / 5 1180 V 5 A
00:07:21	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:07:21	MEASUREMENT	EQUIPMENT	3 / 5 1200 V 10 A
00:07:41	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:07:41	MEASUREMENT	EQUIPMENT	4 / 5 1190 V 10 A
00:08:01	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:08:01	MEASUREMENT	EQUIPMENT	5 / 5 1180 V 10 A
00:08:02	INFO	TEST	Finished
00:08:06	INFO	TEST	21.03.2023 12:44 : Started Negative - 180 ° - L1-N - 1000 V
00:08:18	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:08:18	MEASUREMENT	EQUIPMENT	1 / 5 -1190 V 0 A
00:08:38	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:08:38	MEASUREMENT	EQUIPMENT	2 / 5 -1190 V 0 A
00:08:58	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:08:58	MEASUREMENT	EQUIPMENT	3 / 5 -1190 V 0 A
00:09:18	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:09:18	MEASUREMENT	EQUIPMENT	4 / 5 -1190 V 0 A
00:09:38	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:09:38	MEASUREMENT	EQUIPMENT	5 / 5 -1180 V 0 A
00:09:39	INFO	TEST	Finished
00:09:44	INFO	TEST	21.03.2023 12:46 : Started Positive - 270 ° - L1-N - 1000 V
00:09:56	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:09:56	MEASUREMENT	EQUIPMENT	1 / 5 1210 V 0 A
00:10:16	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:10:16	MEASUREMENT	EQUIPMENT	2 / 5 1210 V 0 A
00:10:36	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:10:36	MEASUREMENT	EQUIPMENT	3 / 5 1210 V 0 A
00:10:55	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:10:55	MEASUREMENT	EQUIPMENT	4 / 5 1210 V 0 A
00:11:15	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:11:15	MEASUREMENT	EQUIPMENT	5 / 5 1210 V 0 A
00:11:17	INFO	TEST	Finished
00:11:21	INFO	TEST	21.03.2023 12:47 : Started Negative - 270 ° - L1-N - 1000 V
00:11:33	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:11:33	MEASUREMENT	EQUIPMENT	1 / 5 -1030 V-30 A
00:11:53	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:11:53	MEASUREMENT	EQUIPMENT	2 / 5 -1030 V-35 A
00:12:13	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:12:13	MEASUREMENT	EQUIPMENT	3 / 5 -1020 V-35 A
00:12:33	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:12:33	MEASUREMENT	EQUIPMENT	4 / 5 -1030 V-35 A
00:12:53	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:12:53	MEASUREMENT	EQUIPMENT	5 / 5 -1030 V-35 A
00:12:54	INFO	TEST	Finished
00:12:59	INFO	TEST	21.03.2023 12:49 : Started Positive - 0 ° - L2-N - 1000 V
00:13:10	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:13:10	MEASUREMENT	EQUIPMENT	1 / 5 1200 V 0 A
00:13:30	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:13:30	MEASUREMENT	EQUIPMENT	2 / 5 1210 V 0 A

00:13:50	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:13:50	MEASUREMENT	EQUIPMENT	3 / 5 1200 V 0 A
00:14:10	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:14:10	MEASUREMENT	EQUIPMENT	4 / 5 1190 V 0 A
00:14:30	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:14:30	MEASUREMENT	EQUIPMENT	5 / 5 1200 V 0 A
00:14:31	INFO	TEST	Finished
00:14:36	INFO	TEST	21.03.2023 12:51 : Started Negative - 0 ° - L2-N - 1000 V
00:14:48	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:14:48	MEASUREMENT	EQUIPMENT	1 / 5 -1060 V-5 A
00:15:08	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:15:08	MEASUREMENT	EQUIPMENT	2 / 5 -1060 V0 A
00:15:28	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:15:28	MEASUREMENT	EQUIPMENT	3 / 5 -1070 V0 A
00:15:48	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:15:48	MEASUREMENT	EQUIPMENT	4 / 5 -1070 V0 A
00:16:08	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:16:08	MEASUREMENT	EQUIPMENT	5 / 5 -1060 V0 A
00:16:09	INFO	TEST	Finished
00:16:13	INFO	TEST	21.03.2023 12:52 : Started Positive - 90 ° - L2-N - 1000 V
00:16:25	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:16:25	MEASUREMENT	EQUIPMENT	1 / 5 1180 V 0 A
00:16:45	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:16:45	MEASUREMENT	EQUIPMENT	2 / 5 1180 V 0 A
00:17:05	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:17:05	MEASUREMENT	EQUIPMENT	3 / 5 1170 V 0 A
00:17:25	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:17:25	MEASUREMENT	EQUIPMENT	4 / 5 1180 V 0 A
00:17:45	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:17:45	MEASUREMENT	EQUIPMENT	5 / 5 1170 V 0 A
00:17:46	INFO	TEST	Finished
00:17:51	INFO	TEST	21.03.2023 12:54 : Started Negative - 90 ° - L2-N - 1000 V
00:18:02	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:18:02	MEASUREMENT	EQUIPMENT	1 / 5 -1130 V-5 A
00:18:22	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:18:22	MEASUREMENT	EQUIPMENT	2 / 5 -1140 V-5 A
00:18:42	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:18:42	MEASUREMENT	EQUIPMENT	3 / 5 -1130 V-5 A
00:19:02	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:19:02	MEASUREMENT	EQUIPMENT	4 / 5 -1140 V-5 A
00:19:22	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:19:22	MEASUREMENT	EQUIPMENT	5 / 5 -1120 V-5 A
00:19:24	INFO	TEST	Finished
00:19:28	INFO	TEST	21.03.2023 12:55 : Started Positive - 180 ° - L2-N - 1000 V
00:19:40	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:19:40	MEASUREMENT	EQUIPMENT	1 / 5 1050 V 0 A
00:20:00	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:20:00	MEASUREMENT	EQUIPMENT	2 / 5 1060 V 0 A
00:20:20	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:20:20	MEASUREMENT	EQUIPMENT	3 / 5 1060 V 0 A
00:20:40	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:20:40	MEASUREMENT	EQUIPMENT	4 / 5 1060 V 0 A
00:21:00	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:21:00	MEASUREMENT	EQUIPMENT	5 / 5 1060 V 0 A
00:21:01	INFO	TEST	Finished
00:21:05	INFO	TEST	21.03.2023 12:57 : Started Negative - 180 ° - L2-N - 1000 V
00:21:17	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:21:17	MEASUREMENT	EQUIPMENT	1 / 5 -1200 V0 A
00:21:37	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:21:37	MEASUREMENT	EQUIPMENT	2 / 5 -1190 V-5 A
00:21:57	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:21:57	MEASUREMENT	EQUIPMENT	3 / 5 -1200 V0 A
00:22:17	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:22:17	MEASUREMENT	EQUIPMENT	4 / 5 -1190 V-5 A
00:22:37	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:22:37	MEASUREMENT	EQUIPMENT	5 / 5 -1190 V0 A
00:22:38	INFO	TEST	Finished

00:22:43	INFO	TEST	21.03.2023 12:59 : Started Positive - 270 ° - L2-N - 1000 V
00:22:54	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:22:55	MEASUREMENT	EQUIPMENT	1 / 5 1120 V 0 A
00:23:14	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:23:15	MEASUREMENT	EQUIPMENT	2 / 5 1120 V 0 A
00:23:34	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:23:35	MEASUREMENT	EQUIPMENT	3 / 5 1120 V 0 A
00:23:54	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:23:55	MEASUREMENT	EQUIPMENT	4 / 5 1120 V 0 A
00:24:14	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:24:14	MEASUREMENT	EQUIPMENT	5 / 5 1130 V 0 A
00:24:16	INFO	TEST	Finished
00:24:20	INFO	TEST	21.03.2023 13:00 : Started Negative - 270 ° - L2-N - 1000 V
00:24:32	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:24:32	MEASUREMENT	EQUIPMENT	1 / 5 -1170 V 0 A
00:24:52	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:24:52	MEASUREMENT	EQUIPMENT	2 / 5 -1170 V 0 A
00:25:12	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:25:12	MEASUREMENT	EQUIPMENT	3 / 5 -1170 V 0 A
00:25:32	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:25:32	MEASUREMENT	EQUIPMENT	4 / 5 -1170 V 0 A
00:25:52	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:25:52	MEASUREMENT	EQUIPMENT	5 / 5 -1170 V 0 A
00:25:53	INFO	TEST	Finished
00:25:58	INFO	TEST	21.03.2023 13:02 : Started Positive - 0 ° - L3-N - 1000 V
00:26:09	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:26:09	MEASUREMENT	EQUIPMENT	1 / 5 1040 V 20 A
00:26:29	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:26:29	MEASUREMENT	EQUIPMENT	2 / 5 1010 V 10 A
00:26:49	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:26:49	MEASUREMENT	EQUIPMENT	3 / 5 1050 V 20 A
00:27:09	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:27:09	MEASUREMENT	EQUIPMENT	4 / 5 1050 V 20 A
00:27:29	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:27:29	MEASUREMENT	EQUIPMENT	5 / 5 1040 V 20 A
00:27:30	INFO	TEST	Finished
00:27:35	INFO	TEST	21.03.2023 13:04 : Started Negative - 0 ° - L3-N - 1000 V
00:27:47	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:27:47	MEASUREMENT	EQUIPMENT	1 / 5 -1190 V 0 A
00:28:07	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:28:07	MEASUREMENT	EQUIPMENT	2 / 5 -1190 V 0 A
00:28:27	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:28:27	MEASUREMENT	EQUIPMENT	3 / 5 -1180 V 0 A
00:28:47	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:28:47	MEASUREMENT	EQUIPMENT	4 / 5 -1190 V 0 A
00:29:07	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:29:07	MEASUREMENT	EQUIPMENT	5 / 5 -1190 V 0 A
00:29:08	INFO	TEST	Finished
00:29:12	INFO	TEST	21.03.2023 13:05 : Started Positive - 90 ° - L3-N - 1000 V
00:29:24	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:29:24	MEASUREMENT	EQUIPMENT	1 / 5 1200 V 5 A
00:29:44	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:29:44	MEASUREMENT	EQUIPMENT	2 / 5 1200 V 5 A
00:30:04	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:30:04	MEASUREMENT	EQUIPMENT	3 / 5 1210 V 5 A
00:30:24	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:30:24	MEASUREMENT	EQUIPMENT	4 / 5 1210 V 5 A
00:30:44	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:30:44	MEASUREMENT	EQUIPMENT	5 / 5 1200 V 5 A
00:30:45	INFO	TEST	Finished
00:30:50	INFO	TEST	21.03.2023 13:07 : Started Negative - 90 ° - L3-N - 1000 V
00:31:01	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:31:01	MEASUREMENT	EQUIPMENT	1 / 5 -1110 V 0 A
00:31:21	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:31:21	MEASUREMENT	EQUIPMENT	2 / 5 -1050 V 0 A
00:31:41	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:31:41	MEASUREMENT	EQUIPMENT	3 / 5 -1130 V 0 A

00:32:01	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:32:01	MEASUREMENT	EQUIPMENT	4 / 5 -1040 V 0 A
00:32:21	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:32:21	MEASUREMENT	EQUIPMENT	5 / 5 -1040 V 0 A
00:32:22	INFO	TEST	Finished
00:32:27	INFO	TEST	21.03.2023 13:08 : Started Positive - 180 ° - L3-N - 1000 V
00:32:39	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:32:39	MEASUREMENT	EQUIPMENT	1 / 5 1170 V 0 A
00:32:59	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:32:59	MEASUREMENT	EQUIPMENT	2 / 5 1190 V 0 A
00:33:19	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:33:19	MEASUREMENT	EQUIPMENT	3 / 5 1200 V 0 A
00:33:39	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:33:39	MEASUREMENT	EQUIPMENT	4 / 5 1190 V 0 A
00:33:59	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:33:59	MEASUREMENT	EQUIPMENT	5 / 5 1190 V 0 A
00:34:00	INFO	TEST	Finished
00:34:04	INFO	TEST	21.03.2023 13:10 : Started Negative - 180 ° - L3-N - 1000 V
00:34:16	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:34:16	MEASUREMENT	EQUIPMENT	1 / 5 -1060 V-15 A
00:34:36	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:34:36	MEASUREMENT	EQUIPMENT	2 / 5 -1050 V-15 A
00:34:56	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:34:56	MEASUREMENT	EQUIPMENT	3 / 5 -1050 V-15 A
00:35:16	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:35:16	MEASUREMENT	EQUIPMENT	4 / 5 -1060 V-15 A
00:35:36	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:35:36	MEASUREMENT	EQUIPMENT	5 / 5 -1050 V-10 A
00:35:37	INFO	TEST	Finished
00:35:42	INFO	TEST	21.03.2023 13:12 : Started Positive - 270 ° - L3-N - 1000 V
00:35:53	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:35:53	MEASUREMENT	EQUIPMENT	1 / 5 1100 V 0 A
00:36:13	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:36:13	MEASUREMENT	EQUIPMENT	2 / 5 1100 V 0 A
00:36:33	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:36:33	MEASUREMENT	EQUIPMENT	3 / 5 1100 V 0 A
00:36:53	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:36:53	MEASUREMENT	EQUIPMENT	4 / 5 1120 V 0 A
00:37:13	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:37:13	MEASUREMENT	EQUIPMENT	5 / 5 1100 V 0 A
00:37:15	INFO	TEST	Finished
00:37:19	INFO	TEST	21.03.2023 13:13 : Started Negative - 270 ° - L3-N - 1000 V
00:37:31	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:37:31	MEASUREMENT	EQUIPMENT	1 / 5 -1190 V-5 A
00:37:51	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:37:51	MEASUREMENT	EQUIPMENT	2 / 5 -1200 V-5 A
00:38:11	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:38:11	MEASUREMENT	EQUIPMENT	3 / 5 -1180 V-5 A
00:38:31	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:38:31	MEASUREMENT	EQUIPMENT	4 / 5 -1190 V-5 A
00:38:51	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:38:51	MEASUREMENT	EQUIPMENT	5 / 5 -1190 V-5 A
00:38:52	INFO	TEST	Finished
00:38:56	INFO	TEST	21.03.2023 13:15 : Started Positive - 0 ° - L1-PE - 1000 V
00:39:08	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:39:08	MEASUREMENT	EQUIPMENT	1 / 5 1020 V 15 A
00:39:28	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:39:28	MEASUREMENT	EQUIPMENT	2 / 5 1020 V 20 A
00:39:48	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:39:48	MEASUREMENT	EQUIPMENT	3 / 5 1010 V 20 A
00:40:08	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:40:08	MEASUREMENT	EQUIPMENT	4 / 5 1010 V 15 A
00:40:28	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:40:28	MEASUREMENT	EQUIPMENT	5 / 5 1010 V 15 A
00:40:29	INFO	TEST	Finished
00:40:34	INFO	TEST	21.03.2023 13:17 : Started Negative - 0 ° - L1-PE - 1000 V
00:40:46	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.

00:40:46	MEASUREMENT	EQUIPMENT	1 / 5 -1030 V-20 A
00:41:06	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:41:06	MEASUREMENT	EQUIPMENT	2 / 5 -1030 V-20 A
00:41:26	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:41:26	MEASUREMENT	EQUIPMENT	3 / 5 -1030 V-20 A
00:41:46	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:41:46	MEASUREMENT	EQUIPMENT	4 / 5 -1020 V-20 A
00:42:06	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:42:06	MEASUREMENT	EQUIPMENT	5 / 5 -1030 V-20 A
00:42:07	INFO	TEST	Finished
00:42:11	INFO	TEST	21.03.2023 13:18 : Started Positive - 90 ° - L1-PE - 1000 V
00:42:23	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:42:23	MEASUREMENT	EQUIPMENT	1 / 5 960 V 55 A
00:42:43	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:42:43	MEASUREMENT	EQUIPMENT	2 / 5 950 V 55 A
00:43:03	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:43:03	MEASUREMENT	EQUIPMENT	3 / 5 960 V 55 A
00:43:23	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:43:23	MEASUREMENT	EQUIPMENT	4 / 5 960 V 55 A
00:43:43	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:43:43	MEASUREMENT	EQUIPMENT	5 / 5 960 V 55 A
00:43:44	INFO	TEST	Finished
00:43:49	INFO	TEST	21.03.2023 13:20 : Started Negative - 90 ° - L1-PE - 1000 V
00:44:00	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:44:00	MEASUREMENT	EQUIPMENT	1 / 5 -1130 V 0 A
00:44:20	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:44:20	MEASUREMENT	EQUIPMENT	2 / 5 -1120 V-5 A
00:44:40	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:44:40	MEASUREMENT	EQUIPMENT	3 / 5 -1130 V-5 A
00:45:00	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:45:00	MEASUREMENT	EQUIPMENT	4 / 5 -1130 V-5 A
00:45:20	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:45:20	MEASUREMENT	EQUIPMENT	5 / 5 -1120 V 0 A
00:45:22	INFO	TEST	Finished
00:45:26	INFO	TEST	21.03.2023 13:21 : Started Positive - 180 ° - L1-PE - 1000 V
00:45:38	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:45:38	MEASUREMENT	EQUIPMENT	1 / 5 1020 V 25 A
00:45:58	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:45:58	MEASUREMENT	EQUIPMENT	2 / 5 1020 V 25 A
00:46:18	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:46:18	MEASUREMENT	EQUIPMENT	3 / 5 1010 V 20 A
00:46:38	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:46:38	MEASUREMENT	EQUIPMENT	4 / 5 1030 V 25 A
00:46:58	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:46:58	MEASUREMENT	EQUIPMENT	5 / 5 1020 V 25 A
00:46:59	INFO	TEST	Finished
00:47:03	INFO	TEST	21.03.2023 13:23 : Started Negative - 180 ° - L1-PE - 1000 V
00:47:15	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:47:15	MEASUREMENT	EQUIPMENT	1 / 5 -1020 V-15 A
00:47:35	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:47:35	MEASUREMENT	EQUIPMENT	2 / 5 -1020 V-15 A
00:47:55	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:47:55	MEASUREMENT	EQUIPMENT	3 / 5 -1020 V-15 A
00:48:15	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:48:15	MEASUREMENT	EQUIPMENT	4 / 5 -1020 V-15 A
00:48:35	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:48:35	MEASUREMENT	EQUIPMENT	5 / 5 -1020 V-15 A
00:48:36	INFO	TEST	Finished
00:48:41	INFO	TEST	21.03.2023 13:25 : Started Positive - 270 ° - L1-PE - 1000 V
00:48:52	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:48:53	MEASUREMENT	EQUIPMENT	1 / 5 1120 V 5 A
00:49:12	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:49:13	MEASUREMENT	EQUIPMENT	2 / 5 1130 V 0 A
00:49:32	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:49:33	MEASUREMENT	EQUIPMENT	3 / 5 1130 V 0 A
00:49:52	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:49:53	MEASUREMENT	EQUIPMENT	4 / 5 1140 V 0 A

00:50:12	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:50:13	MEASUREMENT	EQUIPMENT	5 / 5 1130 V 0 A
00:50:14	INFO	TEST	Finished
00:50:18	INFO	TEST	21.03.2023 13:26 : Started Negative - 270 ° - L1-PE - 1000 V
00:50:30	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:50:30	MEASUREMENT	EQUIPMENT	1 / 5 -960 V -50 A
00:50:50	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:50:50	MEASUREMENT	EQUIPMENT	2 / 5 -970 V -50 A
00:51:10	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:51:10	MEASUREMENT	EQUIPMENT	3 / 5 -970 V -50 A
00:51:30	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:51:30	MEASUREMENT	EQUIPMENT	4 / 5 -960 V -50 A
00:51:50	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:51:50	MEASUREMENT	EQUIPMENT	5 / 5 -970 V -50 A
00:51:51	INFO	TEST	Finished
00:51:56	INFO	TEST	21.03.2023 13:28 : Started Positive - 0 ° - L2-PE - 1000 V
00:52:07	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:52:07	MEASUREMENT	EQUIPMENT	1 / 5 1100 V 0 A
00:52:27	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:52:27	MEASUREMENT	EQUIPMENT	2 / 5 1090 V 0 A
00:52:47	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:52:47	MEASUREMENT	EQUIPMENT	3 / 5 1100 V 5 A
00:53:07	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:53:07	MEASUREMENT	EQUIPMENT	4 / 5 1100 V 0 A
00:53:27	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:53:27	MEASUREMENT	EQUIPMENT	5 / 5 1100 V 0 A
00:53:28	INFO	TEST	Finished
00:53:33	INFO	TEST	21.03.2023 13:30 : Started Negative - 0 ° - L2-PE - 1000 V
00:53:45	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:53:45	MEASUREMENT	EQUIPMENT	1 / 5 -970 V -45 A
00:54:05	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:54:05	MEASUREMENT	EQUIPMENT	2 / 5 -970 V -40 A
00:54:25	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:54:25	MEASUREMENT	EQUIPMENT	3 / 5 -960 V -45 A
00:54:45	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:54:45	MEASUREMENT	EQUIPMENT	4 / 5 -970 V -45 A
00:55:05	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:55:05	MEASUREMENT	EQUIPMENT	5 / 5 -980 V -45 A
00:55:06	INFO	TEST	Finished
00:55:10	INFO	TEST	21.03.2023 13:31 : Started Positive - 90 ° - L2-PE - 1000 V
00:55:22	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:55:22	MEASUREMENT	EQUIPMENT	1 / 5 1060 V 10 A
00:55:42	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:55:42	MEASUREMENT	EQUIPMENT	2 / 5 1060 V 5 A
00:56:02	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:56:02	MEASUREMENT	EQUIPMENT	3 / 5 1070 V 0 A
00:56:22	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:56:22	MEASUREMENT	EQUIPMENT	4 / 5 1070 V 5 A
00:56:42	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:56:42	MEASUREMENT	EQUIPMENT	5 / 5 1070 V 5 A
00:56:43	INFO	TEST	Finished
00:56:48	INFO	TEST	21.03.2023 13:33 : Started Negative - 90 ° - L2-PE - 1000 V
00:56:59	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:56:59	MEASUREMENT	EQUIPMENT	1 / 5 -1000 V-35 A
00:57:19	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:57:19	MEASUREMENT	EQUIPMENT	2 / 5 -1000 V-35 A
00:57:39	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:57:39	MEASUREMENT	EQUIPMENT	3 / 5 -990 V -40 A
00:57:59	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:57:59	MEASUREMENT	EQUIPMENT	4 / 5 -1000 V-35 A
00:58:19	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:58:19	MEASUREMENT	EQUIPMENT	5 / 5 -990 V -40 A
00:58:21	INFO	TEST	Finished
00:58:25	INFO	TEST	21.03.2023 13:34 : Started Positive - 180 ° - L2-PE - 1000 V
00:58:37	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:58:37	MEASUREMENT	EQUIPMENT	1 / 5 960 V 50 A
00:58:57	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.

00:58:57	MEASUREMENT	EQUIPMENT	2 / 5 970 V 50 A
00:59:17	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:59:17	MEASUREMENT	EQUIPMENT	3 / 5 970 V 45 A
00:59:37	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:59:37	MEASUREMENT	EQUIPMENT	4 / 5 960 V 50 A
00:59:57	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:59:57	MEASUREMENT	EQUIPMENT	5 / 5 950 V 45 A
00:59:58	INFO	TEST	Finished
01:00:02	INFO	TEST	21.03.2023 13:36 : Started Negative - 180 ° - L2-PE - 1000 V
01:00:14	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:00:14	MEASUREMENT	EQUIPMENT	1 / 5 -1100 V0 A
01:00:34	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:00:34	MEASUREMENT	EQUIPMENT	2 / 5 -1100 V0 A
01:00:54	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:00:54	MEASUREMENT	EQUIPMENT	3 / 5 -1110 V0 A
01:01:14	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:01:14	MEASUREMENT	EQUIPMENT	4 / 5 -1100 V0 A
01:01:34	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:01:34	MEASUREMENT	EQUIPMENT	5 / 5 -1090 V0 A
01:01:35	INFO	TEST	Finished
01:01:40	INFO	TEST	21.03.2023 13:38 : Started Positive - 270 ° - L2-PE - 1000 V
01:01:51	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:01:52	MEASUREMENT	EQUIPMENT	1 / 5 990 V 40 A
01:02:11	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:02:12	MEASUREMENT	EQUIPMENT	2 / 5 980 V 35 A
01:02:31	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:02:32	MEASUREMENT	EQUIPMENT	3 / 5 980 V 40 A
01:02:51	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:02:52	MEASUREMENT	EQUIPMENT	4 / 5 1000 V 40 A
01:03:11	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:03:12	MEASUREMENT	EQUIPMENT	5 / 5 980 V 35 A
01:03:13	INFO	TEST	Finished
01:03:17	INFO	TEST	21.03.2023 13:39 : Started Negative - 270 ° - L2-PE - 1000 V
01:03:29	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:03:29	MEASUREMENT	EQUIPMENT	1 / 5 -1070 V0 A
01:03:49	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:03:49	MEASUREMENT	EQUIPMENT	2 / 5 -1070 V0 A
01:04:09	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:04:09	MEASUREMENT	EQUIPMENT	3 / 5 -1060 V0 A
01:04:29	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:04:29	MEASUREMENT	EQUIPMENT	4 / 5 -1060 V0 A
01:04:49	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:04:49	MEASUREMENT	EQUIPMENT	5 / 5 -1070 V0 A
01:04:50	INFO	TEST	Finished
01:04:55	INFO	TEST	21.03.2023 13:41 : Started Positive - 0 ° - L3-PE - 1000 V
01:05:06	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:05:06	MEASUREMENT	EQUIPMENT	1 / 5 950 V 50 A
01:05:26	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:05:26	MEASUREMENT	EQUIPMENT	2 / 5 960 V 50 A
01:05:46	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:05:46	MEASUREMENT	EQUIPMENT	3 / 5 960 V 50 A
01:06:06	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:06:06	MEASUREMENT	EQUIPMENT	4 / 5 950 V 50 A
01:06:26	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:06:26	MEASUREMENT	EQUIPMENT	5 / 5 950 V 50 A
01:06:27	INFO	TEST	Finished
01:06:32	INFO	TEST	21.03.2023 13:43 : Started Negative - 0 ° - L3-PE - 1000 V
01:06:44	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:06:44	MEASUREMENT	EQUIPMENT	1 / 5 -1100 V0 A
01:07:04	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:07:04	MEASUREMENT	EQUIPMENT	2 / 5 -1140 V0 A
01:07:24	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:07:24	MEASUREMENT	EQUIPMENT	3 / 5 -1120 V0 A
01:07:44	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:07:44	MEASUREMENT	EQUIPMENT	4 / 5 -1100 V0 A
01:08:04	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:08:04	MEASUREMENT	EQUIPMENT	5 / 5 -1110 V0 A

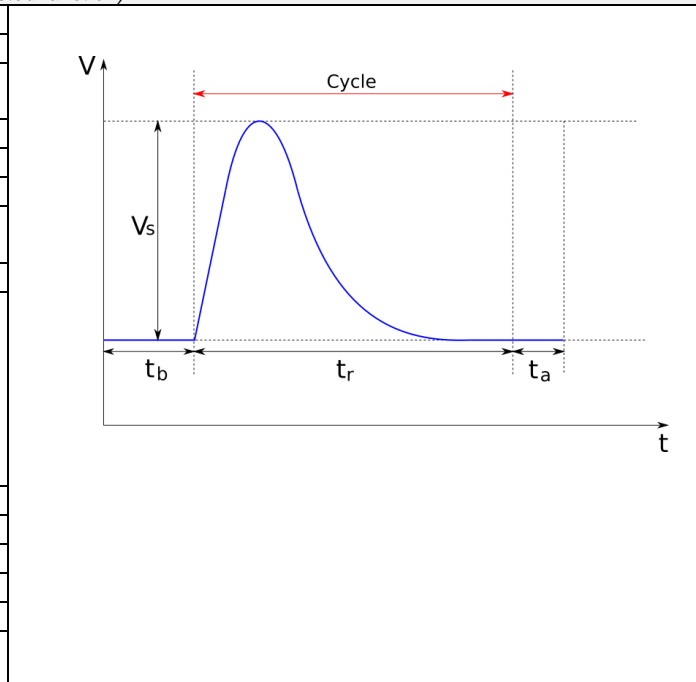
01:08:05	INFO	TEST	Finished
01:08:09	INFO	TEST	21.03.2023 13:44 : Started Positive - 90 ° - L3-PE - 1000 V
01:08:21	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:08:21	MEASUREMENT	EQUIPMENT	1 / 5 1050 V 10 A
01:08:41	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:08:41	MEASUREMENT	EQUIPMENT	2 / 5 1060 V 10 A
01:09:01	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:09:01	MEASUREMENT	EQUIPMENT	3 / 5 1060 V 10 A
01:09:21	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:09:21	MEASUREMENT	EQUIPMENT	4 / 5 1060 V 10 A
01:09:41	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:09:41	MEASUREMENT	EQUIPMENT	5 / 5 1060 V 5 A
01:09:42	INFO	TEST	Finished
01:09:47	INFO	TEST	21.03.2023 13:46 : Started Negative - 90 ° - L3-PE - 1000 V
01:09:58	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:09:58	MEASUREMENT	EQUIPMENT	1 / 5 -970 V -35 A
01:10:18	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:10:18	MEASUREMENT	EQUIPMENT	2 / 5 -970 V -35 A
01:10:38	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:10:38	MEASUREMENT	EQUIPMENT	3 / 5 -970 V -35 A
01:10:58	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:10:58	MEASUREMENT	EQUIPMENT	4 / 5 -980 V -35 A
01:11:18	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:11:18	MEASUREMENT	EQUIPMENT	5 / 5 -980 V -35 A
01:11:20	INFO	TEST	Finished
01:11:24	INFO	TEST	21.03.2023 13:47 : Started Positive - 180 ° - L3-PE - 1000 V
01:11:36	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:11:36	MEASUREMENT	EQUIPMENT	1 / 5 1140 V 0 A
01:11:56	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:11:56	MEASUREMENT	EQUIPMENT	2 / 5 1140 V 0 A
01:12:16	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:12:16	MEASUREMENT	EQUIPMENT	3 / 5 1120 V 0 A
01:12:36	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:12:36	MEASUREMENT	EQUIPMENT	4 / 5 1150 V 0 A
01:12:56	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:12:56	MEASUREMENT	EQUIPMENT	5 / 5 1120 V 0 A
01:12:57	INFO	TEST	Finished
01:13:01	INFO	TEST	21.03.2023 13:49 : Started Negative - 180 ° - L3-PE - 1000 V
01:13:13	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:13:13	MEASUREMENT	EQUIPMENT	1 / 5 -960 V -45 A
01:13:33	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:13:33	MEASUREMENT	EQUIPMENT	2 / 5 -960 V -50 A
01:13:53	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:13:53	MEASUREMENT	EQUIPMENT	3 / 5 -960 V -50 A
01:14:13	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:14:13	MEASUREMENT	EQUIPMENT	4 / 5 -960 V -50 A
01:14:33	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:14:33	MEASUREMENT	EQUIPMENT	5 / 5 -960 V -50 A
01:14:34	INFO	TEST	Finished
01:14:39	INFO	TEST	21.03.2023 13:51 : Started Positive - 270 ° - L3-PE - 1000 V
01:14:50	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:14:51	MEASUREMENT	EQUIPMENT	1 / 5 960 V 35 A
01:15:10	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:15:11	MEASUREMENT	EQUIPMENT	2 / 5 960 V 35 A
01:15:30	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:15:31	MEASUREMENT	EQUIPMENT	3 / 5 960 V 35 A
01:15:50	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:15:51	MEASUREMENT	EQUIPMENT	4 / 5 970 V 35 A
01:16:10	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:16:10	MEASUREMENT	EQUIPMENT	5 / 5 970 V 35 A
01:16:12	INFO	TEST	Finished
01:16:16	INFO	TEST	21.03.2023 13:52 : Started Negative - 270 ° - L3-PE - 1000 V
01:16:28	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:16:28	MEASUREMENT	EQUIPMENT	1 / 5 -1060 V-5 A
01:16:48	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:16:48	MEASUREMENT	EQUIPMENT	2 / 5 -1060 V-5 A
01:17:08	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.

01:17:08	MEASUREMENT	EQUIPMENT	3 / 5 -1080 V-5 A
01:17:28	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:17:28	MEASUREMENT	EQUIPMENT	4 / 5 -1060 V-5 A
01:17:48	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:17:48	MEASUREMENT	EQUIPMENT	5 / 5 -1070 V-5 A
01:17:49	INFO	TEST	Finished
01:17:54	INFO	TEST	21.03.2023 13:54 : Started Positive - 0 ° - N-PE - 1000 V
01:18:05	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:18:05	MEASUREMENT	EQUIPMENT	1 / 5 1040 V 20 A
01:18:25	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:18:25	MEASUREMENT	EQUIPMENT	2 / 5 1020 V 20 A
01:18:45	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:18:45	MEASUREMENT	EQUIPMENT	3 / 5 1020 V 20 A
01:19:05	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:19:05	MEASUREMENT	EQUIPMENT	4 / 5 1030 V 15 A
01:19:25	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:19:25	MEASUREMENT	EQUIPMENT	5 / 5 1030 V 20 A
01:19:26	INFO	TEST	Finished
01:19:31	INFO	TEST	21.03.2023 13:56 : Started Negative - 0 ° - N-PE - 1000 V
01:19:43	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:19:43	MEASUREMENT	EQUIPMENT	1 / 5 -1030 V-15 A
01:20:03	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:20:03	MEASUREMENT	EQUIPMENT	2 / 5 -1030 V-20 A
01:20:23	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:20:23	MEASUREMENT	EQUIPMENT	3 / 5 -1030 V-15 A
01:20:43	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:20:43	MEASUREMENT	EQUIPMENT	4 / 5 -1020 V-15 A
01:21:03	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:21:03	MEASUREMENT	EQUIPMENT	5 / 5 -1030 V-15 A
01:21:04	INFO	TEST	Finished
01:21:08	INFO	TEST	21.03.2023 13:57 : Started Positive - 90 ° - N-PE - 1000 V
01:21:20	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:21:20	MEASUREMENT	EQUIPMENT	1 / 5 1030 V 25 A
01:21:40	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:21:40	MEASUREMENT	EQUIPMENT	2 / 5 1040 V 20 A
01:22:00	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:22:00	MEASUREMENT	EQUIPMENT	3 / 5 1030 V 20 A
01:22:20	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:22:20	MEASUREMENT	EQUIPMENT	4 / 5 1040 V 20 A
01:22:40	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:22:40	MEASUREMENT	EQUIPMENT	5 / 5 1020 V 25 A
01:22:41	INFO	TEST	Finished
01:22:46	INFO	TEST	21.03.2023 13:59 : Started Negative - 90 ° - N-PE - 1000 V
01:22:57	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:22:57	MEASUREMENT	EQUIPMENT	1 / 5 -1030 V-20 A
01:23:17	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:23:17	MEASUREMENT	EQUIPMENT	2 / 5 -1040 V-20 A
01:23:37	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:23:37	MEASUREMENT	EQUIPMENT	3 / 5 -1030 V-20 A
01:23:57	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:23:57	MEASUREMENT	EQUIPMENT	4 / 5 -1030 V-15 A
01:24:17	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:24:17	MEASUREMENT	EQUIPMENT	5 / 5 -1030 V-15 A
01:24:19	INFO	TEST	Finished
01:24:23	INFO	TEST	21.03.2023 14:00 : Started Positive - 180 ° - N-PE - 1000 V
01:24:35	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:24:35	MEASUREMENT	EQUIPMENT	1 / 5 1030 V 20 A
01:24:55	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:24:55	MEASUREMENT	EQUIPMENT	2 / 5 1020 V 20 A
01:25:15	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:25:15	MEASUREMENT	EQUIPMENT	3 / 5 1030 V 20 A
01:25:35	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:25:35	MEASUREMENT	EQUIPMENT	4 / 5 1030 V 20 A
01:25:55	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:25:55	MEASUREMENT	EQUIPMENT	5 / 5 1030 V 20 A
01:25:56	INFO	TEST	Finished
01:26:00	INFO	TEST	21.03.2023 14:02 : Started Negative - 180 ° - N-PE - 1000 V

01:26:12	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:26:12	MEASUREMENT	EQUIPMENT	1 / 5 -1040 V-15 A
01:26:32	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:26:32	MEASUREMENT	EQUIPMENT	2 / 5 -1030 V-10 A
01:26:52	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:26:52	MEASUREMENT	EQUIPMENT	3 / 5 -1030 V-15 A
01:27:12	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:27:12	MEASUREMENT	EQUIPMENT	4 / 5 -1030 V-15 A
01:27:32	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:27:32	MEASUREMENT	EQUIPMENT	5 / 5 -1030 V-15 A
01:27:33	INFO	TEST	Finished
01:27:38	INFO	TEST	21.03.2023 14:04 : Started Positive - 270 ° - N-PE - 1000 V
01:27:50	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:27:50	MEASUREMENT	EQUIPMENT	1 / 5 1030 V 20 A
01:28:09	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:28:10	MEASUREMENT	EQUIPMENT	2 / 5 1030 V 20 A
01:28:29	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:28:30	MEASUREMENT	EQUIPMENT	3 / 5 1020 V 20 A
01:28:49	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:28:50	MEASUREMENT	EQUIPMENT	4 / 5 1030 V 20 A
01:29:09	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:29:10	MEASUREMENT	EQUIPMENT	5 / 5 1020 V 20 A
01:29:11	INFO	TEST	Finished
01:29:15	INFO	TEST	21.03.2023 14:05 : Started Negative - 270 ° - N-PE - 1000 V
01:29:27	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:29:27	MEASUREMENT	EQUIPMENT	1 / 5 -1040 V-15 A
01:29:47	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:29:47	MEASUREMENT	EQUIPMENT	2 / 5 -1030 V-15 A
01:30:07	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:30:07	MEASUREMENT	EQUIPMENT	3 / 5 -1040 V-15 A
01:30:27	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:30:27	MEASUREMENT	EQUIPMENT	4 / 5 -1030 V-15 A
01:30:47	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:30:47	MEASUREMENT	EQUIPMENT	5 / 5 -1030 V-15 A
01:30:48	INFO	TEST	Finished

Pulsparameter (Nicht ausgefüllte Felder sind für die jeweilige Prüffunktion nicht relevant!)
/test parameter (the empty panels are not relevant for the tested function)

Testschritt (n) /test step	3
Prüfpegel (Vs) /immunity test level	2000 V
Polarität (Pol) /polarity	Positive Negative
Paketdauer (td) /impulse duration	
Periodendauer (tr) /cycle duration	30 s
Phase /phase	Synchron
Phasenwinkel /phase angle	0° - 270° Step 90° Lin
Koppelart /type of coupling	IEC
Kopplung /coupling	L1-N L2-N L3-N L1-PE L2-PE L3-PE N-PE
Frontwartezeit /duration before test	1 s
Endwartezeit /duration after test	1 s
Anzahl /number	5
Verzugszeit /test time	2 s
Trigger /trigger	Auto
Netzspannung /power supply voltage	230 V



Prüfablauf:

Relative Time	Type	Origin	Message
00:00:00	INFO	TEST	21.03.2023 14:08 : Started Positive - 0° - L1-N - 2000 V
00:00:21	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:00:21	MEASUREMENT	EQUIPMENT	1 / 5 1660 V 250 A
00:00:51	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:00:51	MEASUREMENT	EQUIPMENT	2 / 5 1650 V 255 A
00:01:21	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:01:21	MEASUREMENT	EQUIPMENT	3 / 5 1650 V 250 A
00:01:51	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:01:51	MEASUREMENT	EQUIPMENT	4 / 5 1670 V 250 A
00:02:21	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:02:21	MEASUREMENT	EQUIPMENT	5 / 5 1650 V 255 A
00:02:22	INFO	TEST	Finished
00:02:27	INFO	TEST	21.03.2023 14:11 : Started Negative - 0° - L1-N - 2000 V
00:02:48	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:02:48	MEASUREMENT	EQUIPMENT	1 / 5 -1660 V-265 A
00:03:18	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:03:18	MEASUREMENT	EQUIPMENT	2 / 5 -1650 V-275 A
00:03:48	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:03:48	MEASUREMENT	EQUIPMENT	3 / 5 -1670 V-270 A
00:04:18	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:04:18	MEASUREMENT	EQUIPMENT	4 / 5 -1660 V-270 A
00:04:48	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:04:48	MEASUREMENT	EQUIPMENT	5 / 5 -1660 V-265 A
00:04:50	INFO	TEST	Finished
00:04:54	INFO	TEST	21.03.2023 14:13 : Started Positive - 90° - L1-N - 2000 V
00:05:16	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:05:16	MEASUREMENT	EQUIPMENT	1 / 5 1480 V 390 A
00:05:46	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:05:46	MEASUREMENT	EQUIPMENT	2 / 5 1440 V 395 A
00:06:16	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:06:16	MEASUREMENT	EQUIPMENT	3 / 5 1430 V 395 A
00:06:46	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:06:46	MEASUREMENT	EQUIPMENT	4 / 5 1440 V 390 A
00:07:16	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.

00:07:16	MEASUREMENT	EQUIPMENT	5 / 5 1440 V 390 A
00:07:17	INFO	TEST	Finished
00:07:21	INFO	TEST	21.03.2023 14:16 : Started Negative - 90 ° - L1-N - 2000 V
00:07:43	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:07:43	MEASUREMENT	EQUIPMENT	1 / 5 -1880 V-150 A
00:08:13	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:08:13	MEASUREMENT	EQUIPMENT	2 / 5 -1870 V-150 A
00:08:43	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:08:43	MEASUREMENT	EQUIPMENT	3 / 5 -1870 V-150 A
00:09:13	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:09:13	MEASUREMENT	EQUIPMENT	4 / 5 -1890 V-150 A
00:09:43	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:09:43	MEASUREMENT	EQUIPMENT	5 / 5 -1880 V-150 A
00:09:44	INFO	TEST	Finished
00:09:48	INFO	TEST	21.03.2023 14:18 : Started Positive - 180 ° - L1-N - 2000 V
00:10:10	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:10:10	MEASUREMENT	EQUIPMENT	1 / 5 1650 V 265 A
00:10:40	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:10:40	MEASUREMENT	EQUIPMENT	2 / 5 1660 V 270 A
00:11:10	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:11:10	MEASUREMENT	EQUIPMENT	3 / 5 1650 V 265 A
00:11:40	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:11:40	MEASUREMENT	EQUIPMENT	4 / 5 1650 V 270 A
00:12:10	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:12:10	MEASUREMENT	EQUIPMENT	5 / 5 1650 V 275 A
00:12:11	INFO	TEST	Finished
00:12:16	INFO	TEST	21.03.2023 14:21 : Started Negative - 180 ° - L1-N - 2000 V
00:12:37	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:12:37	MEASUREMENT	EQUIPMENT	1 / 5 -1670 V-250 A
00:13:07	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:13:07	MEASUREMENT	EQUIPMENT	2 / 5 -1660 V-250 A
00:13:37	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:13:37	MEASUREMENT	EQUIPMENT	3 / 5 -1650 V-255 A
00:14:07	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:14:07	MEASUREMENT	EQUIPMENT	4 / 5 -1670 V-250 A
00:14:37	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:14:37	MEASUREMENT	EQUIPMENT	5 / 5 -1660 V-250 A
00:14:38	INFO	TEST	Finished
00:14:43	INFO	TEST	21.03.2023 14:23 : Started Positive - 270 ° - L1-N - 2000 V
00:15:04	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:15:05	MEASUREMENT	EQUIPMENT	1 / 5 1870 V 155 A
00:15:34	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:15:35	MEASUREMENT	EQUIPMENT	2 / 5 1860 V 155 A
00:16:04	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:16:05	MEASUREMENT	EQUIPMENT	3 / 5 1880 V 150 A
00:16:34	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:16:34	MEASUREMENT	EQUIPMENT	4 / 5 1870 V 150 A
00:17:04	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:17:04	MEASUREMENT	EQUIPMENT	5 / 5 1860 V 155 A
00:17:06	INFO	TEST	Finished
00:17:10	INFO	TEST	21.03.2023 14:26 : Started Negative - 270 ° - L1-N - 2000 V
00:17:32	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:17:32	MEASUREMENT	EQUIPMENT	1 / 5 -1470 V-390 A
00:18:02	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:18:02	MEASUREMENT	EQUIPMENT	2 / 5 -1450 V-390 A
00:18:32	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:18:32	MEASUREMENT	EQUIPMENT	3 / 5 -1430 V-390 A
00:19:02	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:19:02	MEASUREMENT	EQUIPMENT	4 / 5 -1450 V-390 A
00:19:32	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:19:32	MEASUREMENT	EQUIPMENT	5 / 5 -1450 V-395 A
00:19:33	INFO	TEST	Finished
00:19:37	INFO	TEST	21.03.2023 14:28 : Started Positive - 0 ° - L2-N - 2000 V
00:19:59	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:19:59	MEASUREMENT	EQUIPMENT	1 / 5 1840 V 145 A
00:20:29	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:20:29	MEASUREMENT	EQUIPMENT	2 / 5 1860 V 155 A

00:20:59	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:20:59	MEASUREMENT	EQUIPMENT	3 / 5 1860 V 155 A
00:21:29	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:21:29	MEASUREMENT	EQUIPMENT	4 / 5 1860 V 155 A
00:21:59	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:21:59	MEASUREMENT	EQUIPMENT	5 / 5 1870 V 155 A
00:22:00	INFO	TEST	Finished
00:22:05	INFO	TEST	21.03.2023 14:30 : Started Negative - 0 ° - L2-N - 2000 V
00:22:26	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:22:26	MEASUREMENT	EQUIPMENT	1 / 5 -1510 V-355 A
00:22:56	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:22:56	MEASUREMENT	EQUIPMENT	2 / 5 -1500 V-360 A
00:23:26	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:23:26	MEASUREMENT	EQUIPMENT	3 / 5 -1500 V-360 A
00:23:56	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:23:56	MEASUREMENT	EQUIPMENT	4 / 5 -1500 V-360 A
00:24:26	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:24:26	MEASUREMENT	EQUIPMENT	5 / 5 -1490 V-360 A
00:24:27	INFO	TEST	Finished
00:24:32	INFO	TEST	21.03.2023 14:33 : Started Positive - 90 ° - L2-N - 2000 V
00:24:53	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:24:53	MEASUREMENT	EQUIPMENT	1 / 5 1780 V 185 A
00:25:23	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:25:23	MEASUREMENT	EQUIPMENT	2 / 5 1780 V 190 A
00:25:53	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:25:53	MEASUREMENT	EQUIPMENT	3 / 5 1770 V 185 A
00:26:23	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:26:23	MEASUREMENT	EQUIPMENT	4 / 5 1790 V 185 A
00:26:53	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:26:53	MEASUREMENT	EQUIPMENT	5 / 5 1790 V 185 A
00:26:55	INFO	TEST	Finished
00:26:59	INFO	TEST	21.03.2023 14:35 : Started Negative - 90 ° - L2-N - 2000 V
00:27:21	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:27:21	MEASUREMENT	EQUIPMENT	1 / 5 -1580 V-320 A
00:27:51	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:27:51	MEASUREMENT	EQUIPMENT	2 / 5 -1580 V-325 A
00:28:21	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:28:21	MEASUREMENT	EQUIPMENT	3 / 5 -1580 V-320 A
00:28:51	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:28:51	MEASUREMENT	EQUIPMENT	4 / 5 -1580 V-320 A
00:29:21	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:29:21	MEASUREMENT	EQUIPMENT	5 / 5 -1590 V-325 A
00:29:22	INFO	TEST	Finished
00:29:26	INFO	TEST	21.03.2023 14:38 : Started Positive - 180 ° - L2-N - 2000 V
00:29:48	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:29:48	MEASUREMENT	EQUIPMENT	1 / 5 1500 V 355 A
00:30:18	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:30:18	MEASUREMENT	EQUIPMENT	2 / 5 1500 V 360 A
00:30:48	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:30:48	MEASUREMENT	EQUIPMENT	3 / 5 1490 V 360 A
00:31:18	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:31:18	MEASUREMENT	EQUIPMENT	4 / 5 1490 V 360 A
00:31:48	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:31:48	MEASUREMENT	EQUIPMENT	5 / 5 1490 V 360 A
00:31:49	INFO	TEST	Finished
00:31:54	INFO	TEST	21.03.2023 14:40 : Started Negative - 180 ° - L2-N - 2000 V
00:32:15	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:32:15	MEASUREMENT	EQUIPMENT	1 / 5 -1870 V-150 A
00:32:45	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:32:45	MEASUREMENT	EQUIPMENT	2 / 5 -1860 V-150 A
00:33:15	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:33:15	MEASUREMENT	EQUIPMENT	3 / 5 -1860 V-150 A
00:33:45	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:33:45	MEASUREMENT	EQUIPMENT	4 / 5 -1860 V-150 A
00:34:15	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:34:15	MEASUREMENT	EQUIPMENT	5 / 5 -1870 V-150 A
00:34:16	INFO	TEST	Finished

00:34:21	INFO	TEST	21.03.2023 14:43 : Started Positive - 270 ° - L2-N - 2000 V
00:34:42	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:34:42	MEASUREMENT	EQUIPMENT	1 / 5 1580 V 320 A
00:35:12	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:35:12	MEASUREMENT	EQUIPMENT	2 / 5 1580 V 325 A
00:35:42	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:35:42	MEASUREMENT	EQUIPMENT	3 / 5 1570 V 320 A
00:36:12	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:36:12	MEASUREMENT	EQUIPMENT	4 / 5 1570 V 320 A
00:36:42	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:36:42	MEASUREMENT	EQUIPMENT	5 / 5 1570 V 320 A
00:36:44	INFO	TEST	Finished
00:36:48	INFO	TEST	21.03.2023 14:45 : Started Negative - 270 ° - L2-N - 2000 V
00:37:10	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:37:10	MEASUREMENT	EQUIPMENT	1 / 5 -1790 V-180 A
00:37:40	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:37:40	MEASUREMENT	EQUIPMENT	2 / 5 -1790 V-185 A
00:38:10	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:38:10	MEASUREMENT	EQUIPMENT	3 / 5 -1790 V-185 A
00:38:40	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:38:40	MEASUREMENT	EQUIPMENT	4 / 5 -1790 V-185 A
00:39:10	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:39:10	MEASUREMENT	EQUIPMENT	5 / 5 -1780 V-180 A
00:39:11	INFO	TEST	Finished
00:39:15	INFO	TEST	21.03.2023 14:48 : Started Positive - 0 ° - L3-N - 2000 V
00:39:37	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:39:37	MEASUREMENT	EQUIPMENT	1 / 5 1480 V 385 A
00:40:07	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:40:07	MEASUREMENT	EQUIPMENT	2 / 5 1470 V 390 A
00:40:37	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:40:37	MEASUREMENT	EQUIPMENT	3 / 5 1470 V 385 A
00:41:07	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:41:07	MEASUREMENT	EQUIPMENT	4 / 5 1460 V 385 A
00:41:37	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:41:37	MEASUREMENT	EQUIPMENT	5 / 5 1480 V 380 A
00:41:38	INFO	TEST	Finished
00:41:42	INFO	TEST	21.03.2023 14:50 : Started Negative - 0 ° - L3-N - 2000 V
00:42:04	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:42:04	MEASUREMENT	EQUIPMENT	1 / 5 -1860 V-150 A
00:42:34	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:42:34	MEASUREMENT	EQUIPMENT	2 / 5 -1870 V-155 A
00:43:04	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:43:04	MEASUREMENT	EQUIPMENT	3 / 5 -1860 V-155 A
00:43:34	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:43:34	MEASUREMENT	EQUIPMENT	4 / 5 -1860 V-155 A
00:44:04	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:44:04	MEASUREMENT	EQUIPMENT	5 / 5 -1860 V-155 A
00:44:05	INFO	TEST	Finished
00:44:10	INFO	TEST	21.03.2023 14:53 : Started Positive - 90 ° - L3-N - 2000 V
00:44:31	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:44:31	MEASUREMENT	EQUIPMENT	1 / 5 1760 V 205 A
00:45:01	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:45:01	MEASUREMENT	EQUIPMENT	2 / 5 1760 V 210 A
00:45:31	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:45:31	MEASUREMENT	EQUIPMENT	3 / 5 1780 V 205 A
00:46:01	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:46:01	MEASUREMENT	EQUIPMENT	4 / 5 1770 V 205 A
00:46:31	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:46:31	MEASUREMENT	EQUIPMENT	5 / 5 1770 V 210 A
00:46:32	INFO	TEST	Finished
00:46:37	INFO	TEST	21.03.2023 14:55 : Started Negative - 90 ° - L3-N - 2000 V
00:46:59	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:46:59	MEASUREMENT	EQUIPMENT	1 / 5 -1560 V-320 A
00:47:29	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:47:29	MEASUREMENT	EQUIPMENT	2 / 5 -1560 V-320 A
00:47:59	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:47:59	MEASUREMENT	EQUIPMENT	3 / 5 -1550 V-320 A

00:48:29	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:48:29	MEASUREMENT	EQUIPMENT	4 / 5 -1550 V-320 A
00:48:59	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:48:59	MEASUREMENT	EQUIPMENT	5 / 5 -1560 V-325 A
00:49:00	INFO	TEST	Finished
00:49:04	INFO	TEST	21.03.2023 14:57 : Started Positive - 180 ° - L3-N - 2000 V
00:49:26	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:49:26	MEASUREMENT	EQUIPMENT	1 / 5 1870 V 160 A
00:49:56	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:49:56	MEASUREMENT	EQUIPMENT	2 / 5 1850 V 160 A
00:50:26	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:50:26	MEASUREMENT	EQUIPMENT	3 / 5 1850 V 155 A
00:50:56	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:50:56	MEASUREMENT	EQUIPMENT	4 / 5 1870 V 155 A
00:51:26	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:51:26	MEASUREMENT	EQUIPMENT	5 / 5 1850 V 160 A
00:51:27	INFO	TEST	Finished
00:51:31	INFO	TEST	21.03.2023 15:00 : Started Negative - 180 ° - L3-N - 2000 V
00:51:53	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:51:53	MEASUREMENT	EQUIPMENT	1 / 5 -1490 V-380 A
00:52:23	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:52:23	MEASUREMENT	EQUIPMENT	2 / 5 -1470 V-385 A
00:52:53	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:52:53	MEASUREMENT	EQUIPMENT	3 / 5 -1470 V-385 A
00:53:23	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:53:23	MEASUREMENT	EQUIPMENT	4 / 5 -1480 V-380 A
00:53:53	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:53:53	MEASUREMENT	EQUIPMENT	5 / 5 -1480 V-385 A
00:53:54	INFO	TEST	Finished
00:53:59	INFO	TEST	21.03.2023 15:02 : Started Positive - 270 ° - L3-N - 2000 V
00:54:20	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:54:20	MEASUREMENT	EQUIPMENT	1 / 5 1550 V 320 A
00:54:50	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:54:50	MEASUREMENT	EQUIPMENT	2 / 5 1540 V 320 A
00:55:20	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:55:20	MEASUREMENT	EQUIPMENT	3 / 5 1540 V 320 A
00:55:50	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:55:50	MEASUREMENT	EQUIPMENT	4 / 5 1550 V 320 A
00:56:20	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:56:20	MEASUREMENT	EQUIPMENT	5 / 5 1540 V 320 A
00:56:21	INFO	TEST	Finished
00:56:26	INFO	TEST	21.03.2023 15:05 : Started Negative - 270 ° - L3-N - 2000 V
00:56:47	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:56:48	MEASUREMENT	EQUIPMENT	1 / 5 -1770 V-210 A
00:57:17	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:57:18	MEASUREMENT	EQUIPMENT	2 / 5 -1780 V-210 A
00:57:47	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:57:47	MEASUREMENT	EQUIPMENT	3 / 5 -1770 V-210 A
00:58:17	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:58:17	MEASUREMENT	EQUIPMENT	4 / 5 -1770 V-210 A
00:58:47	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:58:47	MEASUREMENT	EQUIPMENT	5 / 5 -1780 V-210 A
00:58:49	INFO	TEST	Finished
00:58:53	INFO	TEST	21.03.2023 15:07 : Started Positive - 0 ° - L1-PE - 2000 V
00:59:15	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:59:15	MEASUREMENT	EQUIPMENT	1 / 5 1900 V 120 A
00:59:45	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:59:45	MEASUREMENT	EQUIPMENT	2 / 5 1900 V 120 A
01:00:15	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:00:15	MEASUREMENT	EQUIPMENT	3 / 5 1890 V 120 A
01:00:45	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:00:45	MEASUREMENT	EQUIPMENT	4 / 5 1910 V 120 A
01:01:15	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:01:15	MEASUREMENT	EQUIPMENT	5 / 5 1900 V 125 A
01:01:16	INFO	TEST	Finished
01:01:20	INFO	TEST	21.03.2023 15:10 : Started Negative - 0 ° - L1-PE - 2000 V
01:01:42	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.

01:01:42	MEASUREMENT	EQUIPMENT	1 / 5 -1920 V-120 A
01:02:12	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:02:12	MEASUREMENT	EQUIPMENT	2 / 5 -1920 V-120 A
01:02:42	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:02:42	MEASUREMENT	EQUIPMENT	3 / 5 -1930 V-115 A
01:03:12	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:03:12	MEASUREMENT	EQUIPMENT	4 / 5 -1920 V-115 A
01:03:42	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:03:42	MEASUREMENT	EQUIPMENT	5 / 5 -1900 V-115 A
01:03:43	INFO	TEST	Finished
01:03:48	INFO	TEST	21.03.2023 15:12 : Started Positive - 90 ° - L1-PE - 2000 V
01:04:09	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:04:09	MEASUREMENT	EQUIPMENT	1 / 5 1880 V 150 A
01:04:39	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:04:39	MEASUREMENT	EQUIPMENT	2 / 5 1870 V 150 A
01:05:09	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:05:09	MEASUREMENT	EQUIPMENT	3 / 5 1880 V 150 A
01:05:39	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:05:39	MEASUREMENT	EQUIPMENT	4 / 5 1880 V 150 A
01:06:09	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:06:09	MEASUREMENT	EQUIPMENT	5 / 5 1880 V 150 A
01:06:10	INFO	TEST	Finished
01:06:15	INFO	TEST	21.03.2023 15:15 : Started Negative - 90 ° - L1-PE - 2000 V
01:06:36	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:06:36	MEASUREMENT	EQUIPMENT	1 / 5 -1970 V-85 A
01:07:06	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:07:06	MEASUREMENT	EQUIPMENT	2 / 5 -1970 V-85 A
01:07:36	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:07:36	MEASUREMENT	EQUIPMENT	3 / 5 -1970 V-85 A
01:08:06	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:08:06	MEASUREMENT	EQUIPMENT	4 / 5 -1960 V-85 A
01:08:36	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:08:36	MEASUREMENT	EQUIPMENT	5 / 5 -1970 V-85 A
01:08:38	INFO	TEST	Finished
01:08:42	INFO	TEST	21.03.2023 15:17 : Started Positive - 180 ° - L1-PE - 2000 V
01:09:04	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:09:04	MEASUREMENT	EQUIPMENT	1 / 5 1910 V 125 A
01:09:34	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:09:34	MEASUREMENT	EQUIPMENT	2 / 5 1900 V 125 A
01:10:04	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:10:04	MEASUREMENT	EQUIPMENT	3 / 5 1910 V 125 A
01:10:34	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:10:34	MEASUREMENT	EQUIPMENT	4 / 5 1910 V 125 A
01:11:04	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:11:04	MEASUREMENT	EQUIPMENT	5 / 5 1900 V 125 A
01:11:05	INFO	TEST	Finished
01:11:09	INFO	TEST	21.03.2023 15:20 : Started Negative - 180 ° - L1-PE - 2000 V
01:11:31	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:11:31	MEASUREMENT	EQUIPMENT	1 / 5 -1910 V-115 A
01:12:01	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:12:01	MEASUREMENT	EQUIPMENT	2 / 5 -1910 V-115 A
01:12:31	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:12:31	MEASUREMENT	EQUIPMENT	3 / 5 -1900 V-115 A
01:13:01	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:13:01	MEASUREMENT	EQUIPMENT	4 / 5 -1910 V-115 A
01:13:31	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:13:31	MEASUREMENT	EQUIPMENT	5 / 5 -1900 V-115 A
01:13:32	INFO	TEST	Finished
01:13:36	INFO	TEST	21.03.2023 15:22 : Started Positive - 270 ° - L1-PE - 2000 V
01:13:58	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:13:58	MEASUREMENT	EQUIPMENT	1 / 5 1960 V 90 A
01:14:28	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:14:28	MEASUREMENT	EQUIPMENT	2 / 5 1950 V 95 A
01:14:58	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:14:58	MEASUREMENT	EQUIPMENT	3 / 5 1960 V 95 A
01:15:28	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:15:28	MEASUREMENT	EQUIPMENT	4 / 5 1960 V 90 A

01:15:58	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:15:58	MEASUREMENT	EQUIPMENT	5 / 5 1960 V 90 A
01:15:59	INFO	TEST	Finished
01:16:04	INFO	TEST	21.03.2023 15:24 : Started Negative - 270 ° - L1-PE - 2000 V
01:16:25	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:16:25	MEASUREMENT	EQUIPMENT	1 / 5 -1870 V-145 A
01:16:55	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:16:55	MEASUREMENT	EQUIPMENT	2 / 5 -1870 V-145 A
01:17:25	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:17:25	MEASUREMENT	EQUIPMENT	3 / 5 -1860 V-145 A
01:17:55	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:17:55	MEASUREMENT	EQUIPMENT	4 / 5 -1880 V-145 A
01:18:25	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:18:25	MEASUREMENT	EQUIPMENT	5 / 5 -1870 V-145 A
01:18:26	INFO	TEST	Finished
01:18:31	INFO	TEST	21.03.2023 15:27 : Started Positive - 0 ° - L2-PE - 2000 V
01:18:53	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:18:53	MEASUREMENT	EQUIPMENT	1 / 5 1940 V 95 A
01:19:23	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:19:23	MEASUREMENT	EQUIPMENT	2 / 5 1950 V 95 A
01:19:52	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:19:53	MEASUREMENT	EQUIPMENT	3 / 5 1950 V 95 A
01:20:22	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:20:23	MEASUREMENT	EQUIPMENT	4 / 5 1950 V 95 A
01:20:52	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:20:53	MEASUREMENT	EQUIPMENT	5 / 5 1970 V 90 A
01:20:54	INFO	TEST	Finished
01:20:58	INFO	TEST	21.03.2023 15:29 : Started Negative - 0 ° - L2-PE - 2000 V
01:21:20	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:21:20	MEASUREMENT	EQUIPMENT	1 / 5 -1880 V-140 A
01:21:50	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:21:50	MEASUREMENT	EQUIPMENT	2 / 5 -1880 V-140 A
01:22:20	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:22:20	MEASUREMENT	EQUIPMENT	3 / 5 -1880 V-140 A
01:22:50	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:22:50	MEASUREMENT	EQUIPMENT	4 / 5 -1870 V-140 A
01:23:20	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:23:20	MEASUREMENT	EQUIPMENT	5 / 5 -1870 V-140 A
01:23:21	INFO	TEST	Finished
01:23:25	INFO	TEST	21.03.2023 15:32 : Started Positive - 90 ° - L2-PE - 2000 V
01:23:47	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:23:47	MEASUREMENT	EQUIPMENT	1 / 5 1920 V 105 A
01:24:17	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:24:17	MEASUREMENT	EQUIPMENT	2 / 5 1930 V 105 A
01:24:47	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:24:47	MEASUREMENT	EQUIPMENT	3 / 5 1930 V 105 A
01:25:17	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:25:17	MEASUREMENT	EQUIPMENT	4 / 5 1930 V 105 A
01:25:47	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:25:47	MEASUREMENT	EQUIPMENT	5 / 5 1930 V 105 A
01:25:48	INFO	TEST	Finished
01:25:53	INFO	TEST	21.03.2023 15:34 : Started Negative - 90 ° - L2-PE - 2000 V
01:26:14	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:26:14	MEASUREMENT	EQUIPMENT	1 / 5 -1900 V-130 A
01:26:44	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:26:44	MEASUREMENT	EQUIPMENT	2 / 5 -1900 V-130 A
01:27:14	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:27:14	MEASUREMENT	EQUIPMENT	3 / 5 -1890 V-130 A
01:27:44	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:27:44	MEASUREMENT	EQUIPMENT	4 / 5 -1900 V-135 A
01:28:14	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:28:14	MEASUREMENT	EQUIPMENT	5 / 5 -1890 V-130 A
01:28:15	INFO	TEST	Finished
01:28:20	INFO	TEST	21.03.2023 15:37 : Started Positive - 180 ° - L2-PE - 2000 V
01:28:41	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:28:41	MEASUREMENT	EQUIPMENT	1 / 5 1870 V 145 A
01:29:11	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.

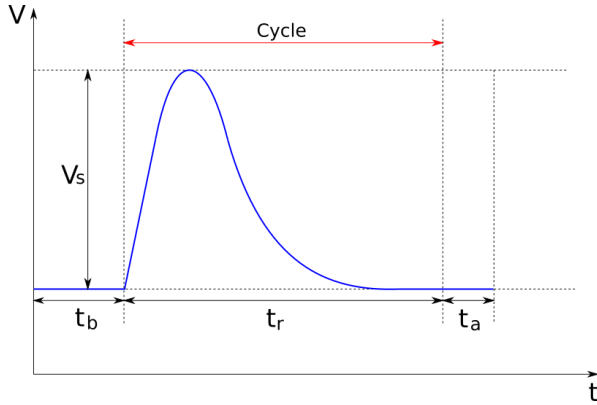
01:29:11	MEASUREMENT	EQUIPMENT	2 / 5 1860 V 145 A
01:29:41	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:29:41	MEASUREMENT	EQUIPMENT	3 / 5 1870 V 145 A
01:30:11	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:30:11	MEASUREMENT	EQUIPMENT	4 / 5 1870 V 145 A
01:30:41	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:30:41	MEASUREMENT	EQUIPMENT	5 / 5 1880 V 145 A
01:30:42	INFO	TEST	Finished
01:30:47	INFO	TEST	21.03.2023 15:39 : Started Negative - 180 ° - L2-PE - 2000 V
01:31:09	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:31:09	MEASUREMENT	EQUIPMENT	1 / 5 -1960 V-85 A
01:31:39	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:31:39	MEASUREMENT	EQUIPMENT	2 / 5 -1960 V-85 A
01:32:09	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:32:09	MEASUREMENT	EQUIPMENT	3 / 5 -1960 V-85 A
01:32:39	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:32:39	MEASUREMENT	EQUIPMENT	4 / 5 -1960 V-90 A
01:33:09	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:33:09	MEASUREMENT	EQUIPMENT	5 / 5 -1960 V-85 A
01:33:10	INFO	TEST	Finished
01:33:14	INFO	TEST	21.03.2023 15:42 : Started Positive - 270 ° - L2-PE - 2000 V
01:33:36	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:33:36	MEASUREMENT	EQUIPMENT	1 / 5 1900 V 135 A
01:34:06	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:34:06	MEASUREMENT	EQUIPMENT	2 / 5 1900 V 135 A
01:34:36	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:34:36	MEASUREMENT	EQUIPMENT	3 / 5 1900 V 135 A
01:35:06	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:35:06	MEASUREMENT	EQUIPMENT	4 / 5 1900 V 135 A
01:35:36	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:35:36	MEASUREMENT	EQUIPMENT	5 / 5 1890 V 135 A
01:35:37	INFO	TEST	Finished
01:35:41	INFO	TEST	21.03.2023 15:44 : Started Negative - 270 ° - L2-PE - 2000 V
01:36:03	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:36:03	MEASUREMENT	EQUIPMENT	1 / 5 -1940 V-95 A
01:36:33	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:36:33	MEASUREMENT	EQUIPMENT	2 / 5 -1930 V-100 A
01:37:03	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:37:03	MEASUREMENT	EQUIPMENT	3 / 5 -1940 V-95 A
01:37:33	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:37:33	MEASUREMENT	EQUIPMENT	4 / 5 -1940 V-95 A
01:38:03	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:38:03	MEASUREMENT	EQUIPMENT	5 / 5 -1930 V-95 A
01:38:04	INFO	TEST	Finished
01:38:09	INFO	TEST	21.03.2023 15:47 : Started Positive - 0 ° - L3-PE - 2000 V
01:38:30	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:38:30	MEASUREMENT	EQUIPMENT	1 / 5 1860 V 150 A
01:39:00	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:39:00	MEASUREMENT	EQUIPMENT	2 / 5 1870 V 150 A
01:39:30	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:39:30	MEASUREMENT	EQUIPMENT	3 / 5 1880 V 150 A
01:40:00	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:40:00	MEASUREMENT	EQUIPMENT	4 / 5 1880 V 150 A
01:40:30	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:40:30	MEASUREMENT	EQUIPMENT	5 / 5 1880 V 150 A
01:40:31	INFO	TEST	Finished
01:40:36	INFO	TEST	21.03.2023 15:49 : Started Negative - 0 ° - L3-PE - 2000 V
01:40:57	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:40:57	MEASUREMENT	EQUIPMENT	1 / 5 -1940 V-85 A
01:41:27	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:41:27	MEASUREMENT	EQUIPMENT	2 / 5 -1950 V-85 A
01:41:57	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:41:57	MEASUREMENT	EQUIPMENT	3 / 5 -1950 V-90 A
01:42:27	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:42:27	MEASUREMENT	EQUIPMENT	4 / 5 -1950 V-90 A
01:42:57	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:42:57	MEASUREMENT	EQUIPMENT	5 / 5 -1940 V-85 A

01:42:59	INFO	TEST	Finished
01:43:03	INFO	TEST	21.03.2023 15:51 : Started Positive - 90 ° - L3-PE - 2000 V
01:43:25	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:43:25	MEASUREMENT	EQUIPMENT	1 / 5 1930 V 110 A
01:43:55	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:43:55	MEASUREMENT	EQUIPMENT	2 / 5 1930 V 110 A
01:44:25	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:44:25	MEASUREMENT	EQUIPMENT	3 / 5 1930 V 110 A
01:44:55	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:44:55	MEASUREMENT	EQUIPMENT	4 / 5 1930 V 110 A
01:45:25	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:45:25	MEASUREMENT	EQUIPMENT	5 / 5 1920 V 110 A
01:45:26	INFO	TEST	Finished
01:45:30	INFO	TEST	21.03.2023 15:54 : Started Negative - 90 ° - L3-PE - 2000 V
01:45:52	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:45:52	MEASUREMENT	EQUIPMENT	1 / 5 -1880 V-130 A
01:46:22	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:46:22	MEASUREMENT	EQUIPMENT	2 / 5 -1880 V-130 A
01:46:52	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:46:52	MEASUREMENT	EQUIPMENT	3 / 5 -1880 V-135 A
01:47:22	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:47:22	MEASUREMENT	EQUIPMENT	4 / 5 -1880 V-130 A
01:47:52	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:47:52	MEASUREMENT	EQUIPMENT	5 / 5 -1880 V-130 A
01:47:53	INFO	TEST	Finished
01:47:57	INFO	TEST	21.03.2023 15:56 : Started Positive - 180 ° - L3-PE - 2000 V
01:48:19	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:48:19	MEASUREMENT	EQUIPMENT	1 / 5 1940 V 95 A
01:48:49	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:48:49	MEASUREMENT	EQUIPMENT	2 / 5 1940 V 95 A
01:49:19	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:49:19	MEASUREMENT	EQUIPMENT	3 / 5 1940 V 95 A
01:49:49	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:49:49	MEASUREMENT	EQUIPMENT	4 / 5 1940 V 95 A
01:50:19	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:50:19	MEASUREMENT	EQUIPMENT	5 / 5 1940 V 95 A
01:50:20	INFO	TEST	Finished
01:50:25	INFO	TEST	21.03.2023 15:59 : Started Negative - 180 ° - L3-PE - 2000 V
01:50:46	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:50:46	MEASUREMENT	EQUIPMENT	1 / 5 -1880 V-140 A
01:51:16	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:51:16	MEASUREMENT	EQUIPMENT	2 / 5 -1870 V-145 A
01:51:46	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:51:46	MEASUREMENT	EQUIPMENT	3 / 5 -1870 V-145 A
01:52:16	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:52:16	MEASUREMENT	EQUIPMENT	4 / 5 -1870 V-145 A
01:52:46	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:52:46	MEASUREMENT	EQUIPMENT	5 / 5 -1880 V-140 A
01:52:47	INFO	TEST	Finished
01:52:52	INFO	TEST	21.03.2023 16:01 : Started Positive - 270 ° - L3-PE - 2000 V
01:53:13	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:53:13	MEASUREMENT	EQUIPMENT	1 / 5 1880 V 135 A
01:53:43	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:53:43	MEASUREMENT	EQUIPMENT	2 / 5 1890 V 140 A
01:54:13	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:54:13	MEASUREMENT	EQUIPMENT	3 / 5 1880 V 135 A
01:54:43	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:54:43	MEASUREMENT	EQUIPMENT	4 / 5 1890 V 135 A
01:55:13	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:55:13	MEASUREMENT	EQUIPMENT	5 / 5 1880 V 135 A
01:55:15	INFO	TEST	Finished
01:55:19	INFO	TEST	21.03.2023 16:04 : Started Negative - 270 ° - L3-PE - 2000 V
01:55:41	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:55:41	MEASUREMENT	EQUIPMENT	1 / 5 -1930 V-105 A
01:56:11	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:56:11	MEASUREMENT	EQUIPMENT	2 / 5 -1940 V-105 A
01:56:41	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.

01:56:41	MEASUREMENT	EQUIPMENT	3 / 5 -1930 V-105 A
01:57:11	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:57:11	MEASUREMENT	EQUIPMENT	4 / 5 -1930 V-105 A
01:57:41	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:57:41	MEASUREMENT	EQUIPMENT	5 / 5 -1930 V-105 A
01:57:42	INFO	TEST	Finished
01:57:46	INFO	TEST	21.03.2023 16:06 : Started Positive - 0 ° - N-PE - 2000 V
01:58:08	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:58:08	MEASUREMENT	EQUIPMENT	1 / 5 1900 V 120 A
01:58:38	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:58:38	MEASUREMENT	EQUIPMENT	2 / 5 1910 V 120 A
01:59:08	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:59:08	MEASUREMENT	EQUIPMENT	3 / 5 1910 V 120 A
01:59:38	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:59:38	MEASUREMENT	EQUIPMENT	4 / 5 1910 V 120 A
02:00:08	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
02:00:08	MEASUREMENT	EQUIPMENT	5 / 5 1910 V 120 A
02:00:09	INFO	TEST	Finished
02:00:14	INFO	TEST	21.03.2023 16:09 : Started Negative - 0 ° - N-PE - 2000 V
02:00:35	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
02:00:35	MEASUREMENT	EQUIPMENT	1 / 5 -1920 V-115 A
02:01:05	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
02:01:05	MEASUREMENT	EQUIPMENT	2 / 5 -1920 V-115 A
02:01:35	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
02:01:35	MEASUREMENT	EQUIPMENT	3 / 5 -1920 V-115 A
02:02:05	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
02:02:05	MEASUREMENT	EQUIPMENT	4 / 5 -1900 V-115 A
02:02:35	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
02:02:35	MEASUREMENT	EQUIPMENT	5 / 5 -1910 V-115 A
02:02:36	INFO	TEST	Finished
02:02:41	INFO	TEST	21.03.2023 16:11 : Started Positive - 90 ° - N-PE - 2000 V
02:03:02	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
02:03:02	MEASUREMENT	EQUIPMENT	1 / 5 1910 V 120 A
02:03:32	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
02:03:32	MEASUREMENT	EQUIPMENT	2 / 5 1910 V 120 A
02:04:02	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
02:04:02	MEASUREMENT	EQUIPMENT	3 / 5 1910 V 120 A
02:04:32	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
02:04:32	MEASUREMENT	EQUIPMENT	4 / 5 1910 V 120 A
02:05:02	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
02:05:02	MEASUREMENT	EQUIPMENT	5 / 5 1910 V 120 A
02:05:04	INFO	TEST	Finished
02:05:08	INFO	TEST	21.03.2023 16:14 : Started Negative - 90 ° - N-PE - 2000 V
02:05:30	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
02:05:30	MEASUREMENT	EQUIPMENT	1 / 5 -1920 V-115 A
02:06:00	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
02:06:00	MEASUREMENT	EQUIPMENT	2 / 5 -1920 V-115 A
02:06:30	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
02:06:30	MEASUREMENT	EQUIPMENT	3 / 5 -1920 V-115 A
02:07:00	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
02:07:00	MEASUREMENT	EQUIPMENT	4 / 5 -1920 V-115 A
02:07:30	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
02:07:30	MEASUREMENT	EQUIPMENT	5 / 5 -1910 V-115 A
02:07:31	INFO	TEST	Finished
02:07:35	INFO	TEST	21.03.2023 16:16 : Started Positive - 180 ° - N-PE - 2000 V
02:07:57	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
02:07:57	MEASUREMENT	EQUIPMENT	1 / 5 1900 V 120 A
02:08:27	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
02:08:27	MEASUREMENT	EQUIPMENT	2 / 5 1910 V 120 A
02:08:57	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
02:08:57	MEASUREMENT	EQUIPMENT	3 / 5 1920 V 120 A
02:09:27	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
02:09:27	MEASUREMENT	EQUIPMENT	4 / 5 1900 V 115 A
02:09:57	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
02:09:57	MEASUREMENT	EQUIPMENT	5 / 5 1910 V 120 A
02:09:58	INFO	TEST	Finished
02:10:02	INFO	TEST	21.03.2023 16:18 : Started Negative - 180 ° - N-PE - 2000 V

02:10:24	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
02:10:24	MEASUREMENT	EQUIPMENT	1 / 5 -1910 V-115 A
02:10:54	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
02:10:54	MEASUREMENT	EQUIPMENT	2 / 5 -1910 V-115 A
02:11:24	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
02:11:24	MEASUREMENT	EQUIPMENT	3 / 5 -1910 V-115 A
02:11:54	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
02:11:54	MEASUREMENT	EQUIPMENT	4 / 5 -1910 V-115 A
02:12:24	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
02:12:24	MEASUREMENT	EQUIPMENT	5 / 5 -1910 V-110 A
02:12:25	INFO	TEST	Finished
02:12:30	INFO	TEST	21.03.2023 16:21 : Started Positive - 270 ° - N-PE - 2000 V
02:12:51	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
02:12:51	MEASUREMENT	EQUIPMENT	1 / 5 1920 V 120 A
02:13:21	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
02:13:21	MEASUREMENT	EQUIPMENT	2 / 5 1900 V 120 A
02:13:51	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
02:13:51	MEASUREMENT	EQUIPMENT	3 / 5 1910 V 120 A
02:14:21	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
02:14:21	MEASUREMENT	EQUIPMENT	4 / 5 1910 V 120 A
02:14:51	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
02:14:51	MEASUREMENT	EQUIPMENT	5 / 5 1920 V 120 A
02:14:52	INFO	TEST	Finished
02:14:57	INFO	TEST	21.03.2023 16:23 : Started Negative - 270 ° - N-PE - 2000 V
02:15:18	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
02:15:18	MEASUREMENT	EQUIPMENT	1 / 5 -1910 V-115 A
02:15:48	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
02:15:48	MEASUREMENT	EQUIPMENT	2 / 5 -1920 V-115 A
02:16:18	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
02:16:18	MEASUREMENT	EQUIPMENT	3 / 5 -1920 V-115 A
02:16:48	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
02:16:48	MEASUREMENT	EQUIPMENT	4 / 5 -1920 V-115 A
02:17:18	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
02:17:18	MEASUREMENT	EQUIPMENT	5 / 5 -1910 V-115 A
02:17:20	INFO	TEST	Finished

Pulsparameter (Nicht ausgefüllte Felder sind für die jeweilige Prüffunktion nicht relevant!) <i>/test parameter (the empty panels are not relevant for the tested function)</i>	
Testschritt (n) /test step	4
Prüfpegel (Vs) /immunity test level	4000 V
Polarität (Pol) /polarity	Positive Negative
Paketdauer (td) /impulse duration	
Periodendauer (tr) /cycle duration	30 s
Phase /phase	Synchron
Phasenwinkel /phase angle	0° - 270° Step 90° Lin
Koppelart /type of coupling	IEC
Kopplung /coupling	L1-PE L2-PE L3-PE N-PE
Frontwartezeit /duration before test	1 s
Endwartezeit /duration after test	1 s
Anzahl /number	5
Verzugszeit /test time	2 s
Trigger /trigger	Auto
Netzspannung /power supply voltage	230 V



Prüfablauf:

Relative Time	Type	Origin	Message
00:00:00	INFO	TEST	22.03.2023 12:46 : Started Positive - 0° - L1-PE - 4000 V
00:00:21	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:00:21	MEASUREMENT	EQUIPMENT	1 / 5 3760 V 290 A
00:00:51	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:00:51	MEASUREMENT	EQUIPMENT	2 / 5 3750 V 285 A
00:01:21	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:01:21	MEASUREMENT	EQUIPMENT	3 / 5 3750 V 285 A
00:01:51	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:01:51	MEASUREMENT	EQUIPMENT	4 / 5 3750 V 285 A
00:02:21	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:02:21	MEASUREMENT	EQUIPMENT	5 / 5 3740 V 285 A
00:02:22	INFO	TEST	Finished
00:02:27	INFO	TEST	22.03.2023 12:49 : Started Negative - 0° - L1-PE - 4000 V
00:02:48	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:02:48	MEASUREMENT	EQUIPMENT	1 / 5 -3800 V-285 A
00:03:18	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:03:18	MEASUREMENT	EQUIPMENT	2 / 5 -3810 V-285 A
00:03:48	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:03:48	MEASUREMENT	EQUIPMENT	3 / 5 -3800 V-285 A
00:04:18	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:04:18	MEASUREMENT	EQUIPMENT	4 / 5 -3800 V-285 A
00:04:48	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:04:48	MEASUREMENT	EQUIPMENT	5 / 5 -3800 V-285 A
00:04:50	INFO	TEST	Finished
00:04:54	INFO	TEST	22.03.2023 12:51 : Started Positive - 90° - L1-PE - 4000 V
00:05:16	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:05:16	MEASUREMENT	EQUIPMENT	1 / 5 3720 V 315 A
00:05:46	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:05:46	MEASUREMENT	EQUIPMENT	2 / 5 3710 V 315 A
00:06:16	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:06:16	MEASUREMENT	EQUIPMENT	3 / 5 3730 V 320 A
00:06:46	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:06:46	MEASUREMENT	EQUIPMENT	4 / 5 3720 V 320 A
00:07:16	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:07:16	MEASUREMENT	EQUIPMENT	5 / 5 3710 V 315 A
00:07:17	INFO	TEST	Finished
00:07:21	INFO	TEST	22.03.2023 12:54 : Started Negative - 90° - L1-PE - 4000 V

00:07:43	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:07:43	MEASUREMENT	EQUIPMENT	1 / 5 -3840 V-255 A
00:08:13	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:08:13	MEASUREMENT	EQUIPMENT	2 / 5 -3840 V-255 A
00:08:43	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:08:43	MEASUREMENT	EQUIPMENT	3 / 5 -3830 V-255 A
00:09:13	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:09:13	MEASUREMENT	EQUIPMENT	4 / 5 -3830 V-255 A
00:09:43	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:09:43	MEASUREMENT	EQUIPMENT	5 / 5 -3840 V-260 A
00:09:44	INFO	TEST	Finished
00:09:48	INFO	TEST	22.03.2023 12:56 : Started Positive - 180 ° - L1-PE - 4000 V
00:10:10	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:10:10	MEASUREMENT	EQUIPMENT	1 / 5 3760 V 290 A
00:10:40	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:10:40	MEASUREMENT	EQUIPMENT	2 / 5 3760 V 290 A
00:11:10	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:11:10	MEASUREMENT	EQUIPMENT	3 / 5 3760 V 290 A
00:11:40	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:11:40	MEASUREMENT	EQUIPMENT	4 / 5 3770 V 290 A
00:12:10	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:12:10	MEASUREMENT	EQUIPMENT	5 / 5 3750 V 290 A
00:12:11	INFO	TEST	Finished
00:12:16	INFO	TEST	22.03.2023 12:59 : Started Negative - 180 ° - L1-PE - 4000 V
00:12:37	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:12:37	MEASUREMENT	EQUIPMENT	1 / 5 -3800 V-280 A
00:13:07	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:13:07	MEASUREMENT	EQUIPMENT	2 / 5 -3800 V-280 A
00:13:37	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:13:37	MEASUREMENT	EQUIPMENT	3 / 5 -3790 V-280 A
00:14:07	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:14:07	MEASUREMENT	EQUIPMENT	4 / 5 -3790 V-280 A
00:14:37	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:14:37	MEASUREMENT	EQUIPMENT	5 / 5 -3790 V-280 A
00:14:38	INFO	TEST	Finished
00:14:43	INFO	TEST	22.03.2023 13:01 : Started Positive - 270 ° - L1-PE - 4000 V
00:15:04	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:15:04	MEASUREMENT	EQUIPMENT	1 / 5 3790 V 260 A
00:15:34	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:15:34	MEASUREMENT	EQUIPMENT	2 / 5 3790 V 260 A
00:16:04	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:16:04	MEASUREMENT	EQUIPMENT	3 / 5 3790 V 260 A
00:16:34	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:16:34	MEASUREMENT	EQUIPMENT	4 / 5 3790 V 260 A
00:17:04	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:17:04	MEASUREMENT	EQUIPMENT	5 / 5 3800 V 260 A
00:17:06	INFO	TEST	Finished
00:17:10	INFO	TEST	22.03.2023 13:04 : Started Negative - 270 ° - L1-PE - 4000 V
00:17:32	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:17:32	MEASUREMENT	EQUIPMENT	1 / 5 -3760 V-310 A
00:18:02	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:18:02	MEASUREMENT	EQUIPMENT	2 / 5 -3770 V-310 A
00:18:32	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:18:32	MEASUREMENT	EQUIPMENT	3 / 5 -3760 V-310 A
00:19:01	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:19:02	MEASUREMENT	EQUIPMENT	4 / 5 -3760 V-310 A
00:19:31	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:19:32	MEASUREMENT	EQUIPMENT	5 / 5 -3760 V-310 A
00:19:33	INFO	TEST	Finished
00:19:37	INFO	TEST	22.03.2023 13:06 : Started Positive - 0 ° - L2-PE - 4000 V
00:19:59	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:19:59	MEASUREMENT	EQUIPMENT	1 / 5 3790 V 265 A
00:20:29	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:20:29	MEASUREMENT	EQUIPMENT	2 / 5 3790 V 265 A
00:20:59	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:20:59	MEASUREMENT	EQUIPMENT	3 / 5 3790 V 265 A
00:21:29	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.

00:21:29	MEASUREMENT	EQUIPMENT	4 / 5 3790 V 265 A
00:21:59	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:21:59	MEASUREMENT	EQUIPMENT	5 / 5 3790 V 265 A
00:22:00	INFO	TEST	Finished
00:22:04	INFO	TEST	22.03.2023 13:08 : Started Negative - 0 ° - L2-PE - 4000 V
00:22:26	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:22:26	MEASUREMENT	EQUIPMENT	1 / 5 -3770 V-305 A
00:22:56	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:22:56	MEASUREMENT	EQUIPMENT	2 / 5 -3770 V-305 A
00:23:26	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:23:26	MEASUREMENT	EQUIPMENT	3 / 5 -3760 V-305 A
00:23:56	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:23:56	MEASUREMENT	EQUIPMENT	4 / 5 -3760 V-305 A
00:24:26	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:24:26	MEASUREMENT	EQUIPMENT	5 / 5 -3750 V-305 A
00:24:27	INFO	TEST	Finished
00:24:32	INFO	TEST	22.03.2023 13:11 : Started Positive - 90 ° - L2-PE - 4000 V
00:24:53	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:24:53	MEASUREMENT	EQUIPMENT	1 / 5 3770 V 270 A
00:25:23	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:25:23	MEASUREMENT	EQUIPMENT	2 / 5 3770 V 270 A
00:25:53	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:25:53	MEASUREMENT	EQUIPMENT	3 / 5 3770 V 275 A
00:26:23	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:26:23	MEASUREMENT	EQUIPMENT	4 / 5 3760 V 275 A
00:26:53	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:26:53	MEASUREMENT	EQUIPMENT	5 / 5 3770 V 275 A
00:26:54	INFO	TEST	Finished
00:26:59	INFO	TEST	22.03.2023 13:13 : Started Negative - 90 ° - L2-PE - 4000 V
00:27:20	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:27:20	MEASUREMENT	EQUIPMENT	1 / 5 -3780 V-300 A
00:27:50	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:27:50	MEASUREMENT	EQUIPMENT	2 / 5 -3790 V-300 A
00:28:20	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:28:20	MEASUREMENT	EQUIPMENT	3 / 5 -3780 V-300 A
00:28:50	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:28:50	MEASUREMENT	EQUIPMENT	4 / 5 -3790 V-295 A
00:29:20	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:29:20	MEASUREMENT	EQUIPMENT	5 / 5 -3790 V-295 A
00:29:22	INFO	TEST	Finished
00:29:26	INFO	TEST	22.03.2023 13:16 : Started Positive - 180 ° - L2-PE - 4000 V
00:29:48	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:29:48	MEASUREMENT	EQUIPMENT	1 / 5 3730 V 310 A
00:30:18	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:30:18	MEASUREMENT	EQUIPMENT	2 / 5 3720 V 310 A
00:30:48	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:30:48	MEASUREMENT	EQUIPMENT	3 / 5 3730 V 310 A
00:31:18	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:31:18	MEASUREMENT	EQUIPMENT	4 / 5 3720 V 310 A
00:31:48	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:31:48	MEASUREMENT	EQUIPMENT	5 / 5 3710 V 310 A
00:31:49	INFO	TEST	Finished
00:31:53	INFO	TEST	22.03.2023 13:18 : Started Negative - 180 ° - L2-PE - 4000 V
00:32:15	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:32:15	MEASUREMENT	EQUIPMENT	1 / 5 -3840 V-260 A
00:32:45	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:32:45	MEASUREMENT	EQUIPMENT	2 / 5 -3840 V-260 A
00:33:15	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:33:15	MEASUREMENT	EQUIPMENT	3 / 5 -3840 V-260 A
00:33:45	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:33:45	MEASUREMENT	EQUIPMENT	4 / 5 -3840 V-260 A
00:34:15	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:34:15	MEASUREMENT	EQUIPMENT	5 / 5 -3830 V-255 A
00:34:16	INFO	TEST	Finished
00:34:21	INFO	TEST	22.03.2023 13:21 : Started Positive - 270 ° - L2-PE - 4000 V
00:34:42	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:34:42	MEASUREMENT	EQUIPMENT	1 / 5 3750 V 305 A

00:35:12	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:35:12	MEASUREMENT	EQUIPMENT	2 / 5 3750 V 305 A
00:35:42	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:35:42	MEASUREMENT	EQUIPMENT	3 / 5 3750 V 305 A
00:36:12	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:36:12	MEASUREMENT	EQUIPMENT	4 / 5 3750 V 305 A
00:36:42	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:36:42	MEASUREMENT	EQUIPMENT	5 / 5 3740 V 305 A
00:36:43	INFO	TEST	Finished
00:36:48	INFO	TEST	22.03.2023 13:23 : Started Negative - 270 ° - L2-PE - 4000 V
00:37:09	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:37:09	MEASUREMENT	EQUIPMENT	1 / 5 -3820 V-265 A
00:37:39	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:37:39	MEASUREMENT	EQUIPMENT	2 / 5 -3820 V-270 A
00:38:09	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:38:09	MEASUREMENT	EQUIPMENT	3 / 5 -3820 V-270 A
00:38:39	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:38:39	MEASUREMENT	EQUIPMENT	4 / 5 -3820 V-270 A
00:39:09	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:39:09	MEASUREMENT	EQUIPMENT	5 / 5 -3820 V-270 A
00:39:11	INFO	TEST	Finished
00:39:15	INFO	TEST	22.03.2023 13:26 : Started Positive - 0 ° - L3-PE - 4000 V
00:39:37	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:39:37	MEASUREMENT	EQUIPMENT	1 / 5 3720 V 315 A
00:40:07	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:40:07	MEASUREMENT	EQUIPMENT	2 / 5 3730 V 315 A
00:40:37	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:40:37	MEASUREMENT	EQUIPMENT	3 / 5 3730 V 315 A
00:41:06	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:41:07	MEASUREMENT	EQUIPMENT	4 / 5 3730 V 315 A
00:41:36	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:41:37	MEASUREMENT	EQUIPMENT	5 / 5 3720 V 315 A
00:41:38	INFO	TEST	Finished
00:41:42	INFO	TEST	22.03.2023 13:28 : Started Negative - 0 ° - L3-PE - 4000 V
00:42:04	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:42:04	MEASUREMENT	EQUIPMENT	1 / 5 -3830 V-255 A
00:42:34	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:42:34	MEASUREMENT	EQUIPMENT	2 / 5 -3830 V-260 A
00:43:04	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:43:04	MEASUREMENT	EQUIPMENT	3 / 5 -3830 V-260 A
00:43:34	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:43:34	MEASUREMENT	EQUIPMENT	4 / 5 -3840 V-260 A
00:44:04	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:44:04	MEASUREMENT	EQUIPMENT	5 / 5 -3830 V-260 A
00:44:05	INFO	TEST	Finished
00:44:09	INFO	TEST	22.03.2023 13:30 : Started Positive - 90 ° - L3-PE - 4000 V
00:44:31	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:44:31	MEASUREMENT	EQUIPMENT	1 / 5 3760 V 280 A
00:45:01	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:45:01	MEASUREMENT	EQUIPMENT	2 / 5 3770 V 280 A
00:45:31	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:45:31	MEASUREMENT	EQUIPMENT	3 / 5 3780 V 280 A
00:46:01	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:46:01	MEASUREMENT	EQUIPMENT	4 / 5 3780 V 275 A
00:46:31	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:46:31	MEASUREMENT	EQUIPMENT	5 / 5 3780 V 280 A
00:46:32	INFO	TEST	Finished
00:46:37	INFO	TEST	22.03.2023 13:33 : Started Negative - 90 ° - L3-PE - 4000 V
00:46:58	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:46:58	MEASUREMENT	EQUIPMENT	1 / 5 -3770 V-295 A
00:47:28	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:47:28	MEASUREMENT	EQUIPMENT	2 / 5 -3770 V-300 A
00:47:58	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:47:58	MEASUREMENT	EQUIPMENT	3 / 5 -3770 V-295 A
00:48:28	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:48:28	MEASUREMENT	EQUIPMENT	4 / 5 -3770 V-300 A
00:48:58	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.

00:48:58	MEASUREMENT	EQUIPMENT	5 / 5 -3770 V-300 A
00:49:00	INFO	TEST	Finished
00:49:04	INFO	TEST	22.03.2023 13:35 : Started Positive - 180 ° - L3-PE - 4000 V
00:49:26	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:49:26	MEASUREMENT	EQUIPMENT	1 / 5 3780 V 265 A
00:49:56	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:49:56	MEASUREMENT	EQUIPMENT	2 / 5 3780 V 265 A
00:50:26	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:50:26	MEASUREMENT	EQUIPMENT	3 / 5 3790 V 265 A
00:50:56	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:50:56	MEASUREMENT	EQUIPMENT	4 / 5 3800 V 265 A
00:51:25	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:51:26	MEASUREMENT	EQUIPMENT	5 / 5 3800 V 265 A
00:51:27	INFO	TEST	Finished
00:51:31	INFO	TEST	22.03.2023 13:38 : Started Negative - 180 ° - L3-PE - 4000 V
00:51:53	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:51:53	MEASUREMENT	EQUIPMENT	1 / 5 -3760 V-310 A
00:52:23	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:52:23	MEASUREMENT	EQUIPMENT	2 / 5 -3770 V-310 A
00:52:53	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:52:53	MEASUREMENT	EQUIPMENT	3 / 5 -3770 V-310 A
00:53:23	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:53:23	MEASUREMENT	EQUIPMENT	4 / 5 -3770 V-310 A
00:53:53	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:53:53	MEASUREMENT	EQUIPMENT	5 / 5 -3760 V-310 A
00:53:54	INFO	TEST	Finished
00:53:58	INFO	TEST	22.03.2023 13:40 : Started Positive - 270 ° - L3-PE - 4000 V
00:54:20	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:54:20	MEASUREMENT	EQUIPMENT	1 / 5 3720 V 300 A
00:54:50	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:54:50	MEASUREMENT	EQUIPMENT	2 / 5 3730 V 305 A
00:55:20	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:55:20	MEASUREMENT	EQUIPMENT	3 / 5 3720 V 305 A
00:55:50	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:55:50	MEASUREMENT	EQUIPMENT	4 / 5 3730 V 300 A
00:56:20	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:56:20	MEASUREMENT	EQUIPMENT	5 / 5 3730 V 305 A
00:56:21	INFO	TEST	Finished
00:56:26	INFO	TEST	22.03.2023 13:43 : Started Negative - 270 ° - L3-PE - 4000 V
00:56:47	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:56:47	MEASUREMENT	EQUIPMENT	1 / 5 -3820 V-270 A
00:57:17	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:57:17	MEASUREMENT	EQUIPMENT	2 / 5 -3820 V-270 A
00:57:47	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
00:57:47	MEASUREMENT	EQUIPMENT	3 / 5 -3820 V-275 A
00:58:17	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
00:58:17	MEASUREMENT	EQUIPMENT	4 / 5 -3820 V-275 A
00:58:47	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
00:58:47	MEASUREMENT	EQUIPMENT	5 / 5 -3800 V-270 A
00:58:49	INFO	TEST	Finished
00:58:53	INFO	TEST	22.03.2023 13:45 : Started Positive - 0 ° - N-PE - 4000 V
00:59:15	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
00:59:15	MEASUREMENT	EQUIPMENT	1 / 5 3750 V 285 A
00:59:45	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
00:59:45	MEASUREMENT	EQUIPMENT	2 / 5 3760 V 285 A
01:00:15	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:00:15	MEASUREMENT	EQUIPMENT	3 / 5 3760 V 285 A
01:00:45	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:00:45	MEASUREMENT	EQUIPMENT	4 / 5 3750 V 285 A
01:01:15	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:01:15	MEASUREMENT	EQUIPMENT	5 / 5 3760 V 285 A
01:01:16	INFO	TEST	Finished
01:01:20	INFO	TEST	22.03.2023 13:48 : Started Negative - 0 ° - N-PE - 4000 V
01:01:42	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:01:42	MEASUREMENT	EQUIPMENT	1 / 5 -3800 V-280 A
01:02:12	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:02:12	MEASUREMENT	EQUIPMENT	2 / 5 -3800 V-280 A

01:02:42	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:02:42	MEASUREMENT	EQUIPMENT	3 / 5 -3800 V-280 A
01:03:12	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:03:12	MEASUREMENT	EQUIPMENT	4 / 5 -3800 V-280 A
01:03:42	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:03:42	MEASUREMENT	EQUIPMENT	5 / 5 -3800 V-280 A
01:03:43	INFO	TEST	Finished
01:03:47	INFO	TEST	22.03.2023 13:50 : Started Positive - 90 ° - N-PE - 4000 V
01:04:09	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:04:09	MEASUREMENT	EQUIPMENT	1 / 5 3750 V 285 A
01:04:39	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:04:39	MEASUREMENT	EQUIPMENT	2 / 5 3750 V 290 A
01:05:09	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:05:09	MEASUREMENT	EQUIPMENT	3 / 5 3740 V 285 A
01:05:39	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:05:39	MEASUREMENT	EQUIPMENT	4 / 5 3760 V 290 A
01:06:09	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:06:09	MEASUREMENT	EQUIPMENT	5 / 5 3750 V 285 A
01:06:10	INFO	TEST	Finished
01:06:15	INFO	TEST	22.03.2023 13:53 : Started Negative - 90 ° - N-PE - 4000 V
01:06:36	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:06:36	MEASUREMENT	EQUIPMENT	1 / 5 -3810 V-280 A
01:07:06	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:07:06	MEASUREMENT	EQUIPMENT	2 / 5 -3800 V-285 A
01:07:36	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:07:36	MEASUREMENT	EQUIPMENT	3 / 5 -3800 V-280 A
01:08:06	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:08:06	MEASUREMENT	EQUIPMENT	4 / 5 -3800 V-280 A
01:08:36	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:08:36	MEASUREMENT	EQUIPMENT	5 / 5 -3800 V-280 A
01:08:38	INFO	TEST	Finished
01:08:42	INFO	TEST	22.03.2023 13:55 : Started Positive - 180 ° - N-PE - 4000 V
01:09:04	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:09:04	MEASUREMENT	EQUIPMENT	1 / 5 3770 V 285 A
01:09:34	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:09:34	MEASUREMENT	EQUIPMENT	2 / 5 3760 V 285 A
01:10:04	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:10:04	MEASUREMENT	EQUIPMENT	3 / 5 3750 V 285 A
01:10:34	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:10:34	MEASUREMENT	EQUIPMENT	4 / 5 3760 V 285 A
01:11:04	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:11:04	MEASUREMENT	EQUIPMENT	5 / 5 3770 V 290 A
01:11:05	INFO	TEST	Finished
01:11:09	INFO	TEST	22.03.2023 13:57 : Started Negative - 180 ° - N-PE - 4000 V
01:11:31	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:11:31	MEASUREMENT	EQUIPMENT	1 / 5 -3800 V-280 A
01:12:01	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:12:01	MEASUREMENT	EQUIPMENT	2 / 5 -3800 V-280 A
01:12:31	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:12:31	MEASUREMENT	EQUIPMENT	3 / 5 -3800 V-280 A
01:13:01	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:13:01	MEASUREMENT	EQUIPMENT	4 / 5 -3800 V-280 A
01:13:31	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:13:31	MEASUREMENT	EQUIPMENT	5 / 5 -3790 V-280 A
01:13:32	INFO	TEST	Finished
01:13:36	INFO	TEST	22.03.2023 14:00 : Started Positive - 270 ° - N-PE - 4000 V
01:13:58	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:13:58	MEASUREMENT	EQUIPMENT	1 / 5 3770 V 285 A
01:14:28	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:14:28	MEASUREMENT	EQUIPMENT	2 / 5 3760 V 290 A
01:14:58	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:14:58	MEASUREMENT	EQUIPMENT	3 / 5 3760 V 290 A
01:15:28	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:15:28	MEASUREMENT	EQUIPMENT	4 / 5 3760 V 290 A
01:15:58	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:15:58	MEASUREMENT	EQUIPMENT	5 / 5 3760 V 285 A
01:15:59	INFO	TEST	Finished

01:16:04	INFO	TEST	22.03.2023 14:02 : Started Negative - 270 ° - N-PE - 4000 V
01:16:25	INFO	EQUIPMENT	UCS50M : 1 triggered pulse.
01:16:25	MEASUREMENT	EQUIPMENT	1 / 5 -3810 V-285 A
01:16:55	INFO	EQUIPMENT	UCS50M : 2 triggered pulse.
01:16:55	MEASUREMENT	EQUIPMENT	2 / 5 -3800 V-285 A
01:17:25	INFO	EQUIPMENT	UCS50M : 3 triggered pulse.
01:17:25	MEASUREMENT	EQUIPMENT	3 / 5 -3800 V-280 A
01:17:55	INFO	EQUIPMENT	UCS50M : 4 triggered pulse.
01:17:55	MEASUREMENT	EQUIPMENT	4 / 5 -3800 V-280 A
01:18:25	INFO	EQUIPMENT	UCS50M : 5 triggered pulse.
01:18:25	MEASUREMENT	EQUIPMENT	5 / 5 -3800 V-280 A
01:18:26	INFO	TEST	Finished

Prüfergebnis:

BK	Beschreibung	Bemerkung	Ergebnis
SURGE			
SURGE	keine Fehler in Zusammenhang mit der Sicherheit, Ladevorgang wird abgebrochen kann nach der Prüfung wieder ordnungsgemäß durchgeführt werden	Während Störgröße Wechsel zwischen Ladebetrieb und Ladebereitschaft. Nach Beaufschlagung selbstständig in Ladebetrieb.	PASS

Verwendete Mess- und Prüftechnik:

Bezeichnung	Model	Type	Kalibrierung, letzte / nächste	Inventar-Nr. Serien-Nr.
UCS500M4	Surge	Transient generator		

Test Information (Ende):

Surge_3Ph

EN 61000-4-5 (SURGE) SV AC-Eingang

Test-Nr.: 668

BAT-EMC Vers.-Nr.: 2022.0.27.0

Datum: 21.03.2023 11:01:26

Prüfer: AR

EN IEC 61000-6-2:2019 Störfestigkeit Hochfrequenz, asymmetrisch (Tabelle 2.1/3.1/4.1)
 /EN IEC 61000-6-2:2019 Immunity against Conducted Currents (Table 2.1/3.1/4.1)

Durchführung
 /Performance

EUT-Position /EUT-Position	<input checked="" type="checkbox"/>	EUT auf einem Tisch (10 ± 5 cm oberhalb Bezugsmasseplatte) /EUT on a table (10 ± 5 cm above ground plane)			
	<input type="checkbox"/>	EUT auf dem Boden (10 ± 5 cm oberhalb Bezugsmasseplatte) /EUT on floor (10 ± 5 cm above ground plane)			
	<input type="checkbox"/>	Anwendung der Handnachbildung gemäß Foto /Artificial hand applied. Location see photo			
getestet als /Tested as	<input checked="" type="checkbox"/>	Einzelgerät /Single device			
	<input type="checkbox"/>	System (Verbindungsleitungen < 1m) /System			
Betriebsspannung /AC Mains voltage	230V AC/ 50 Hz				
Betriebsarten /Operation modes	<input checked="" type="checkbox"/> BA1	<input type="checkbox"/> BA2	<input type="checkbox"/> BA3	<input type="checkbox"/> BA4	<input type="checkbox"/> BA5
EUT-Monitoring /EUT-Monitoring	Visuelle Beobachtung der LED- Anzeigen.				
Test Parameter /Test-Parameter	Prüfpegel U_0 /Test Level V_0		10 V		
	Modulation /Modulation		AM, 1 kHz, 80 %		
	Testzeit /test time		1 s		
Bewertungskriterium /Performance criteria	A				
Messunsicherheit /Uncertainty	CDN 0-6 dB / Koppelzange 0-3.1 dB				
Prüfergebnis /Test result	<input checked="" type="checkbox"/> Test bestanden / PASSED		<input type="checkbox"/> Test nicht bestanden / FAILED		

Prüfungen
 /Tests

Test	Anschluss	Einkopplung	Entkopplung
EN 61000-4-6 AC Ein- und Ausgänge Tabelle 10 EN 55014-2	AC	AC über CDN M5	PE über CDN M1
EN 61000-4-6 Ein- und Ausgänge Tabelle 10 EN 55014-2 CPT- Port	CPT- Port	Koppelzange	PE über CDN M1

Test Information (Start):	
Conducted Voltage Immunity	
EN 61000-4-6 AC Ein- und Ausgänge	
Test-Nr.: 671	BAT-EMC Vers.-Nr.: 2022.0.27.0
Datum: 17.03.2023 11:58:09	Prüfer: AR

Startfrequenz	150 kHz	Stopfrequenz	80 MHz
Einheit	V	Typ	Conducted Voltage Immunity

Ansicht des Prüfaufbaus:

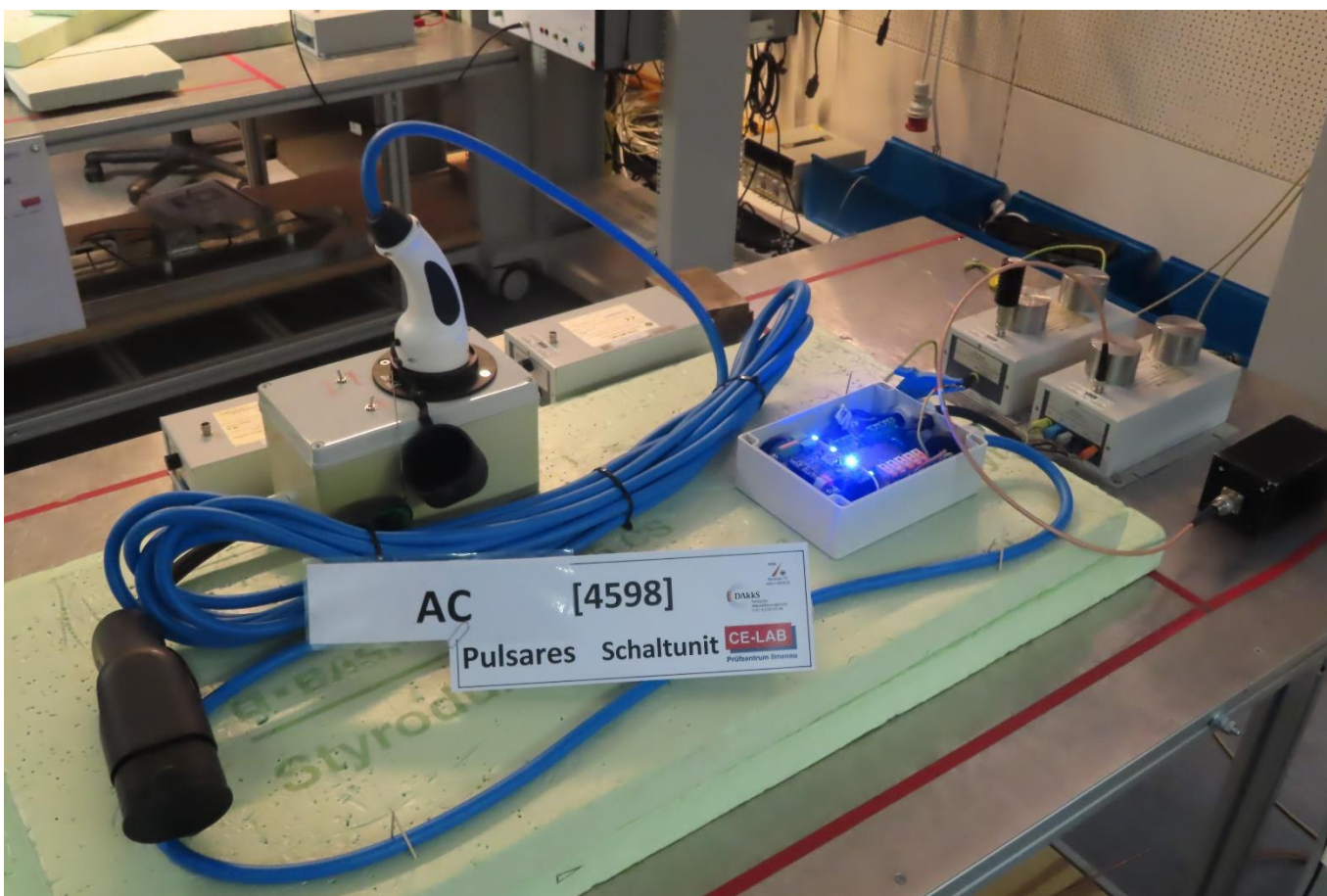


Foto 15: Prüfaufbau Störfestigkeit gegen geleitete HF an AC- Eingang

Sub-Rang Test(s): **SR 1, 150kHz-80MHz**

Start Frequency	150 kHz	Stop Frequency	80 MHz	Frequency Step:	1 %
-----------------	----------------	----------------	---------------	-----------------	------------

Setup	Prüfplatz 4-6 mit CDN		
Einkopplung auf:	AC über CDN M5		
Entkopplung auf:	PE über CDN M1		
Easy-Monitoring Konfiguration			
Einheit	V	Increase sweep	True
Peak Level		Offset	Offset => Req. Level
Included Freq. List		Excluded Freq. List	
Regulation	Open loop	Target	4-6_M5_Hubert
Specification	EN 61000-4-6 10V	Sweep Time	1000 ms
Regulation	Test	Mode	AM (80%, 1kHz)

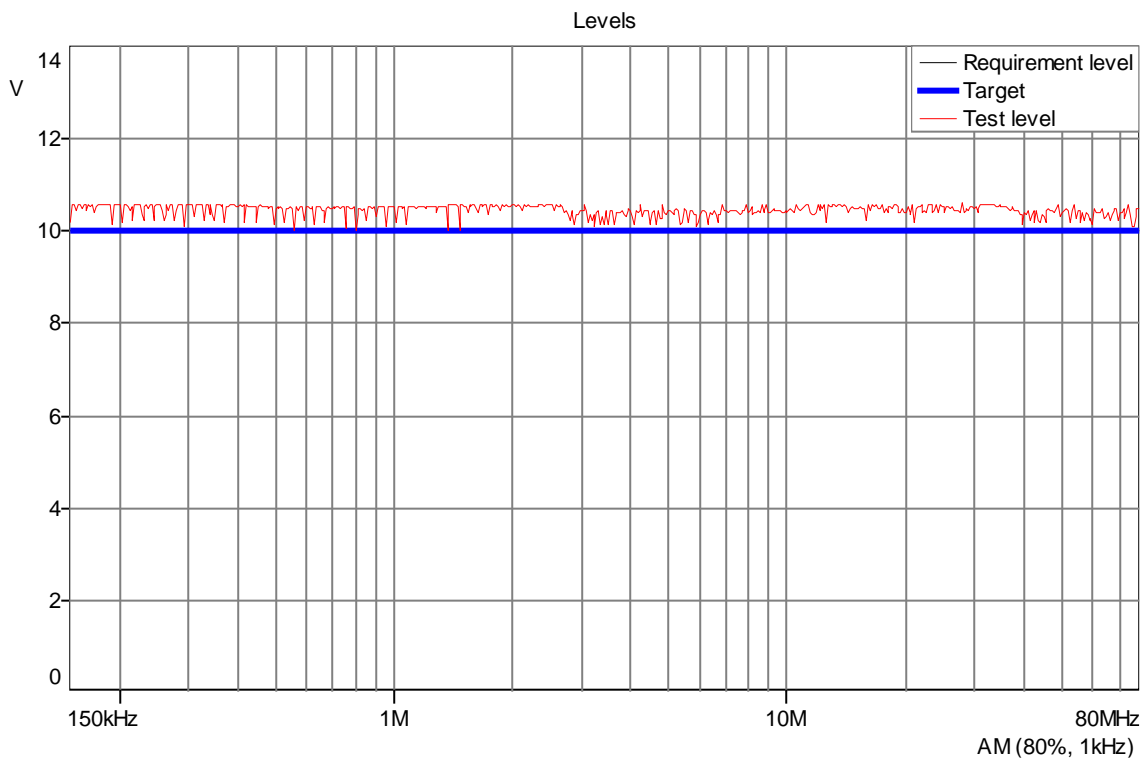


Diagramm 15: Störfestigkeit gegen geleitete HF an AC über CDN M5

Ergebnis für: EN 61000-4-6 AC Ein- und Ausgänge Tabelle 10 EN 55014-2, 150 kHz - 80 MHz:

PASS **FAIL**

Verwendete Mess- und Prüftechnik:

Bezeichnung	Model	Type	Kalibrierung, letzte / nächste	Inventar-Nr. Serien-Nr.
6 dB 4-6	Dämpfungsglied	Attenuator		1000 0076 20000066
ALPHA 250/75A	Dressler	Amplifier	17.03.2020 16:07:33 17.03.2024 16:07:33	1000 0052 9612020
C3948	Werlatone	Coupler	11.10.2021 14:56:46 11.10.2023 14:56:46	1000 0045 5322
CDN-M5	Dr. Hubert	CDN	18.03.2020 12:12:15 18.03.2023 12:12:15	1000 1639 A2510018/2013
K2010	RG214	Cable	15.08.2021 14:15:38 15.08.2023 14:15:38	
K3008	RG142	Cable	29.01.2019 09:14:20 29.01.2024 09:14:20	R284C0351025
K3016	RG142	Cable	29.01.2019 09:14:20 29.01.2024 09:14:20	
K4008	RG58	Cable	17.03.2020 14:56:23 17.03.2024 14:56:23	
K7002	Ecoflex 10	Cable	29.01.2019 09:42:33 29.01.2024 09:42:33	
Marconi 2024 SN072	IFR / Marconi	Signal generator	18.01.2021 13:38:50 18.01.2024 13:38:50	1000 0113 112227/072
URVD	R&S xRVD	Two input Powermeter	29.09.2022 13:27:51 29.09.2024 13:27:51	1000 1783 833300/080

Test Information (Ende):

Conducted Voltage Immunity

EN 61000-4-6 AC Ein- und Ausgänge

Test-Nr.: 671	BAT-EMC Vers.-Nr.: 2022.0.27.0
Datum: 17.03.2023 11:58:09	Prüfer: AR

Test Information (Start):

Conducted Voltage Immunity

EN 61000-4-6 Ein- und Ausgänge CPT Port

Test-Nr.: 672

BAT-EMC Vers.-Nr.: 2022.0.27.0

Datum: 17.03.2023 12:41:25

Prüfer: AR

Startfrequenz	150 kHz	Stopfrequenz	80 MHz
Einheit	V	Typ	Conducted Voltage Immunity

Ansicht des Prüfaufbaus:

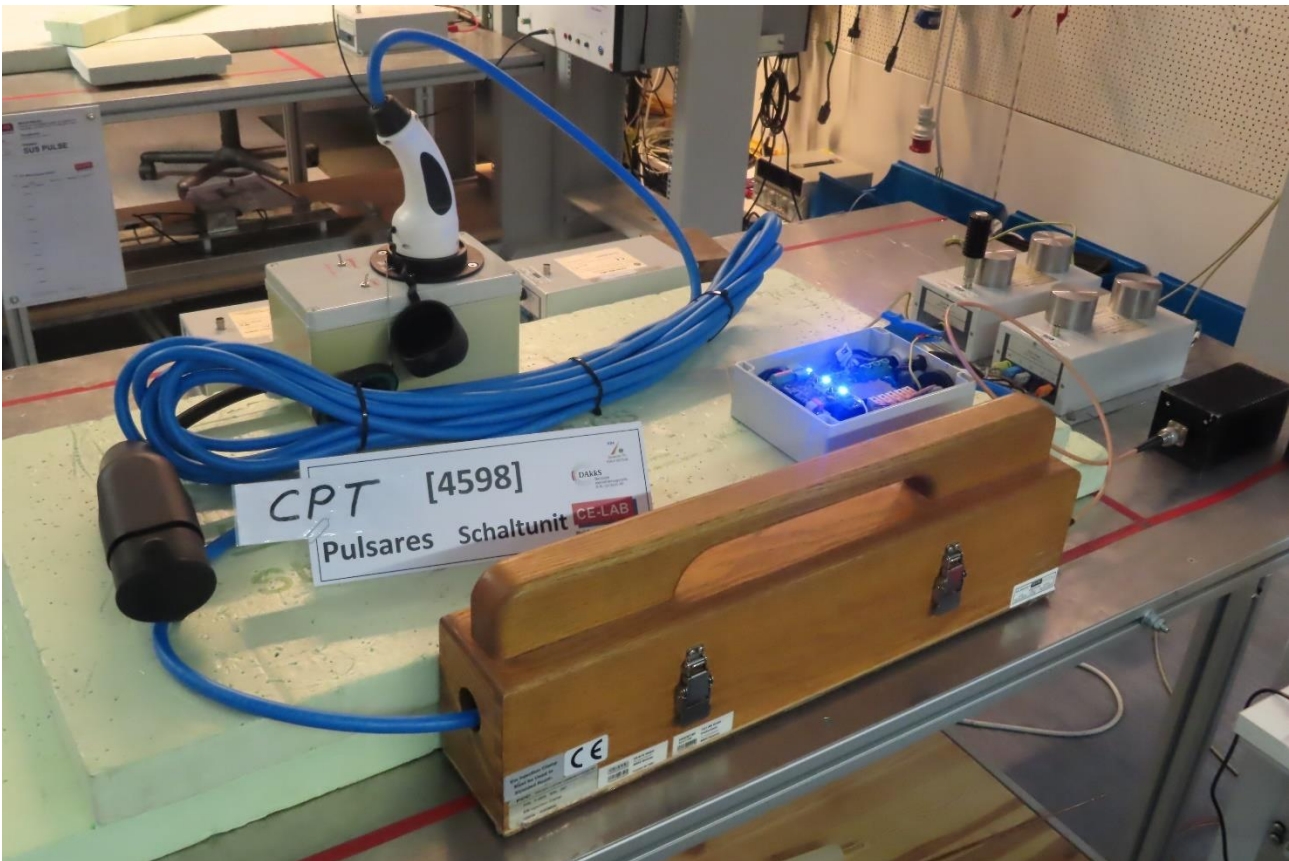


Foto 16: Prüfaufbau Störfestigkeit gegen geleitete HF an CPT- Port

Sub-Rang Test(s): **SR 1, 150kHz-80MHz**

Start Frequency	150 kHz	Stop Frequency	80 MHz	Frequency Step:	1 %
-----------------	----------------	----------------	---------------	-----------------	------------

Setup		Prüfplatz 4-6 mit FCC F203I	
Einkopplung auf:			
Entkopplung auf:			
Easy-Monitoring Konfiguration			
Einheit	V	Increase sweep	True
Peak Level		Offset	Offset => Req. Level
Included Freq. List		Excluded Freq. List	
Regulation	Open loop	Target	4-6_FCC_F203I Draht
Specification	EN 61000-4-6 10V	Sweep Time	1000 ms
Regulation	TEST EN 61000-4-6	Mode	AM (80%, 1kHz)

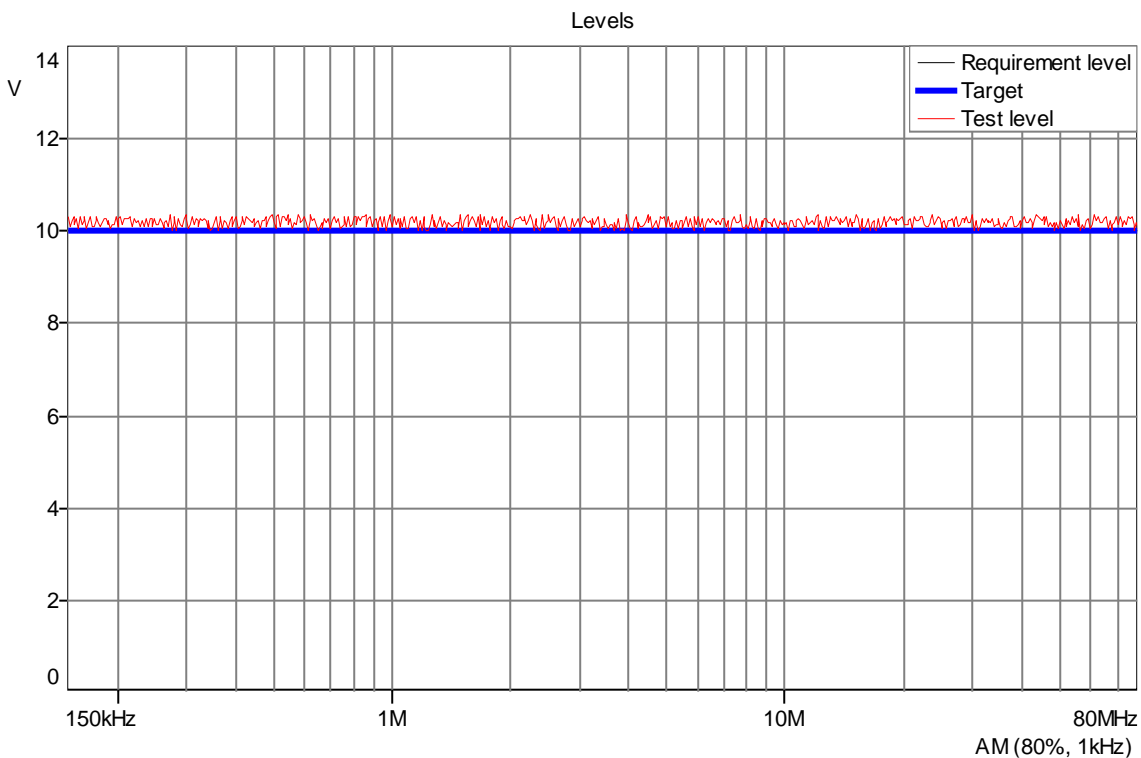


Diagramm 16: Störfestigkeit gegen geleitete HF an CP- Port

**Ergebnis für: EN 61000-4-6 Ein- und Ausgänge Tabelle 10 EN 55014-2 CPT- Port,
150 kHz - 80 MHz:**

PASS **FAIL**

Verwendete Mess- und Prüftechnik:

Bezeichnung	Model	Type	Kalibrierung, letzte / nächste	Inventar-Nr. Serien-Nr.
6 dB 4-6	Dämpfungsglied	Attenuator		1000 0076 20000066
ALPHA 250/75A	Dressler	Amplifier	17.03.2020 16:07:33 17.03.2024 16:07:33	1000 0052 9612020
C3948	Werlatone	Coupler	11.10.2021 14:56:46 11.10.2023 14:56:46	1000 0045 5322
F203I	FCC	Injection clamp	20.03.2020 08:14:04 20.03.2024 08:14:04	1000 0229 267
K3008	RG142	Cable	29.01.2021 09:14:20 29.01.2024 09:14:20	R284C0351025
K3016	RG142	Cable	29.01.2021 09:14:20 29.01.2024 09:14:20	
K4008	RG58	Cable	17.03.2020 14:56:23 17.03.2024 14:56:23	
K7001	Ecoflex 10	Cable	29.01.2021 09:42:33 29.01.2024 09:42:33	
K7002	Ecoflex 10	Cable	29.01.2021 09:42:33 29.01.2024 09:42:33	
Marconi 2024 SN072	IFR / Marconi	Signal generator	18.01.2021 13:38:50 18.01.2024 13:38:50	1000 0113 112227/072
URVD	R&S xRVD	Two input Powermeter	29.09.2022 13:27:51 29.09.2024 13:27:51	1000 1783 833300/080

Test Information (Ende):

Conducted Voltage Immunity

EN 61000-4-6 Ein- und Ausgänge CPT Port

Test-Nr.: 672	BAT-EMC Vers.-Nr.: 2022.0.27.0
Datum: 17.03.2023 12:41:25	Prüfer: AR

EN IEC 61000-6-2:2019 Störfestigkeit Spannungseinbrüche (Tabelle 4.2)

/EN IEC 61000-6-2:2019 Immunity against voltage dips (Table 4.2)

Durchführung

/Performance

Einbrüche <i>/Fluctuations</i>	0% Restspannung		70% Restspannung		
Bewertungskriterium <i>/Performance criteria</i>	B		C		
Betriebsspannung <i>/AC Mains voltage</i>	230V AC/ 50 Hz				
Betriebsarten <i>/Operation modes</i>	<input checked="" type="checkbox"/> BA 1	<input type="checkbox"/> BA 2	<input type="checkbox"/> BA 3	<input type="checkbox"/> BA 4	<input type="checkbox"/> BA 5
EUT-Monitoring <i>/EUT-Monitoring</i>	Visuelle Beobachtung der LED- Anzeigen.				
Messunsicherheit <i>/Uncertainty</i>	Bestimmung gemäß TB3 Messunsicherheitsanalysen bei EMV-Prüfungen. <i>/Determination in accordance with TB3 measurement uncertainty for EMC tests</i>				
Prüfergebnis <i>/Test result</i>	<input checked="" type="checkbox"/> Test bestanden / PASSED		<input type="checkbox"/> Test nicht bestanden / FAILED		

Test Information (Start):

Dips_3Ph

EN 61000-4-11 (DIPS) SV AC-Eingang

Test-Nr.: 669

BAT-EMC Vers.-Nr.: 2022.0.27.0

Datum: 22.03.2023 14:14:06

Prüfer: AR

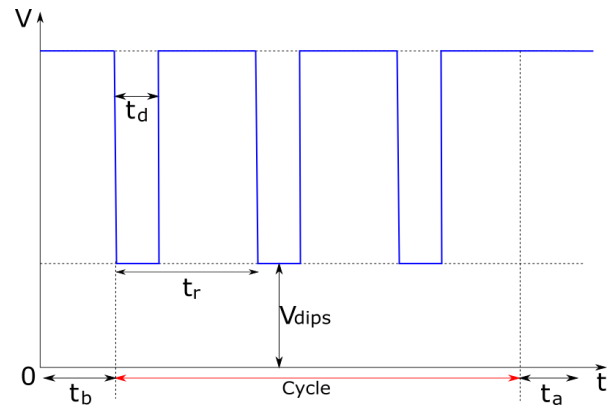
Ansicht des Prüfaufbaus:



Foto 17: Prüfaufbau, EN 61000-4-11 (DIPS) SV AC-Eingang Tabelle 4 EN 61000-6-2

Pulsparameter (Nicht ausgefüllte Felder sind für die jeweilige Prüffunktion nicht relevant!)
/test parameter (the empty panels are not relevant for the tested function)

Testschritt (n) <i>/test step</i>	1
Prüfpegel (VDips) <i>/test level</i>	0 %
Dauer (t_d) <i>/impulse duration</i>	20 ms
Periodendauer (t_r) <i>/cycle duration</i>	10 s
Phase /phase	L1/2/3
Phasenwinkel <i>/phase angle</i>	0 °
Frontwartezeit <i>/duration before test</i>	1 s
Endwartezeit <i>/duration after test</i>	1 s
Anzahl /number	3
Trigger /trigger	Auto
Netzspannung <i>/power supply voltage</i>	230 V

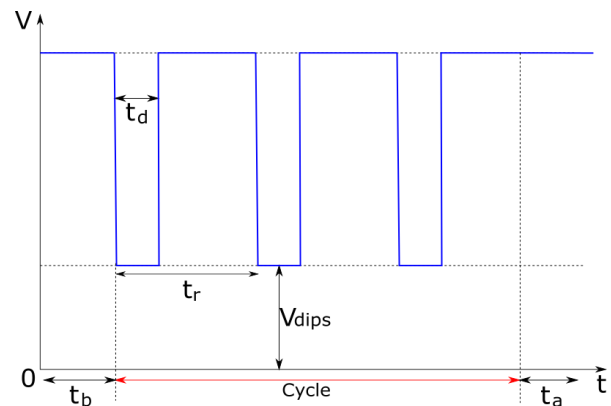


Prüfablauf:

Relative Time	Type	Origin	Message
00:00:00	INFO	TEST	22.03.2023 14:14 : Started 0 °
00:00:27	INFO	TEST	Finished

Pulsparameter (Nicht ausgefüllte Felder sind für die jeweilige Prüffunktion nicht relevant!)
/test parameter (the empty panels are not relevant for the tested function)

Testschritt (n) <i>/test step</i>	2
Prüfpegel (VDips) <i>/test level</i>	40 %
Dauer (t_d) <i>/impulse duration</i>	200 ms
Periodendauer (t_r) <i>/cycle duration</i>	10 s
Phase /phase	L1/2/3
Phasenwinkel <i>/phase angle</i>	0 °
Frontwartezeit <i>/duration before test</i>	1 s
Endwartezeit <i>/duration after test</i>	1 s
Anzahl /number	3
Trigger /trigger	Auto
Netzspannung <i>/power supply voltage</i>	230 V

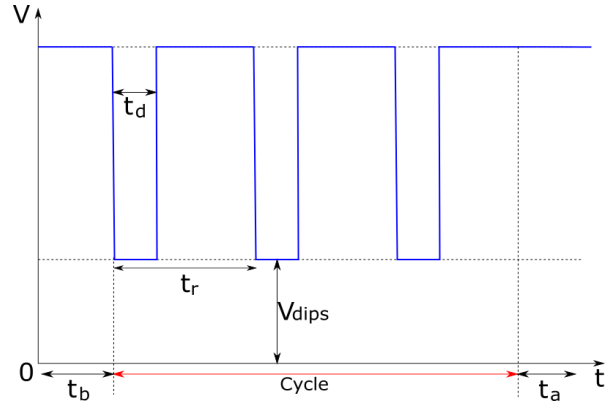


Prüfablauf:

Relative Time	Type	Origin	Message
00:00:00	INFO	TEST	22.03.2023 14:16 : Started 0 °
00:00:26	INFO	TEST	Finished

Pulsparameter (Nicht ausgefüllte Felder sind für die jeweilige Prüffunktion nicht relevant!)
/test parameter (the empty panels are not relevant for the tested function)

Testschritt (n) /test step	3
Prüfpegel (VDips) /test level	70 %
Dauer (t _d) /impulse duration	500 ms
Periodendauer (t _r) /cycle duration	10 s
Phase /phase	L1/2/3
Phasenwinkel /phase angle	0 °
Frontwartezeit /duration before test	1 s
Endwartezeit /duration after test	1 s
Anzahl /number	3
Trigger /trigger	Auto
Netzspannung /power supply voltage	230 V



Prüfablauf:

Relative Time	Type	Origin	Message
00:00:00	INFO	TEST	22.03.2023 14:17 : Started 0 °
00:00:26	INFO	TEST	Finished

Prüfergebnis:

BK	Beschreibung	Bemerkung	Ergebnis
DIPS	keine Fehler in Zusammenhang mit der Sicherheit, Ladevorgang wird abgebrochen kann nach der Prüfung wieder ordnungsgemäß durchgeführt werden	Keine Beeinflussung festgestellt.	PASS

Test Information (Ende):

Dips_3Ph	
EN 61000-4-11 (DIPS) SV AC-Eingang	
Test-Nr.: 669	BAT-EMC Vers.-Nr.: 2022.0.27.0
Datum: 22.03.2023 14:14:06	Prüfer: AR

Fachbereich EMV

Department EMC



EN IEC 61000-6-2:2019 Störfestigkeit Spannungsunterbrechungen (Tabelle 4.3)
/EN IEC 61000-6-2:2019 Immunity against voltage interruptions (Table 4.3)

Einbrüche <i>/Fluctuations</i>	0 % Restspannung / 250 Zyklen @ 50 Hz				
Bewertungskriterium <i>/Performance criteria</i>	C				
Betriebsspannung <i>/AC Mains voltage</i>	230V AC/ 50 Hz				
Betriebsarten <i>/Operation modes</i>	<input checked="" type="checkbox"/> BA 1	<input type="checkbox"/> BA 2	<input type="checkbox"/> BA 3	<input type="checkbox"/> BA 4	<input type="checkbox"/> BA 5
EUT-Monitoring <i>/EUT-Monitoring</i>	Visuelle Beobachtung der LED- Anzeigen.				
Messunsicherheit <i>/Uncertainty</i>	Bestimmung gemäß TB3 Messunsicherheitsanalysen bei EMV-Prüfungen. <i>/Determination in accordance with TB3 measurement uncertainty for EMC tests</i>				
Prüfergebnis <i>/Test result</i>	<input checked="" type="checkbox"/> Test bestanden / PASSED		<input type="checkbox"/> Test nicht bestanden / FAILED		

Gegenstand / *Object*
Prüfbericht / *Test report No.*
Auftraggeber / *Customer*
Seite / *Page*

Schaltunit
PB EMV 290323-1 Pulsares [4598]
Pulsares GmbH
113 von 117

Test Information (Start):

Drops_3Ph

EN 61000-4-11 (DROPS) SV AC-Eingang

Test-Nr.: 670

BAT-EMC Vers.-Nr.: 2022.0.27.0

Datum: 22.03.2023 14:19:48

Prüfer: AR

Ansicht des Prüfaufbaus:

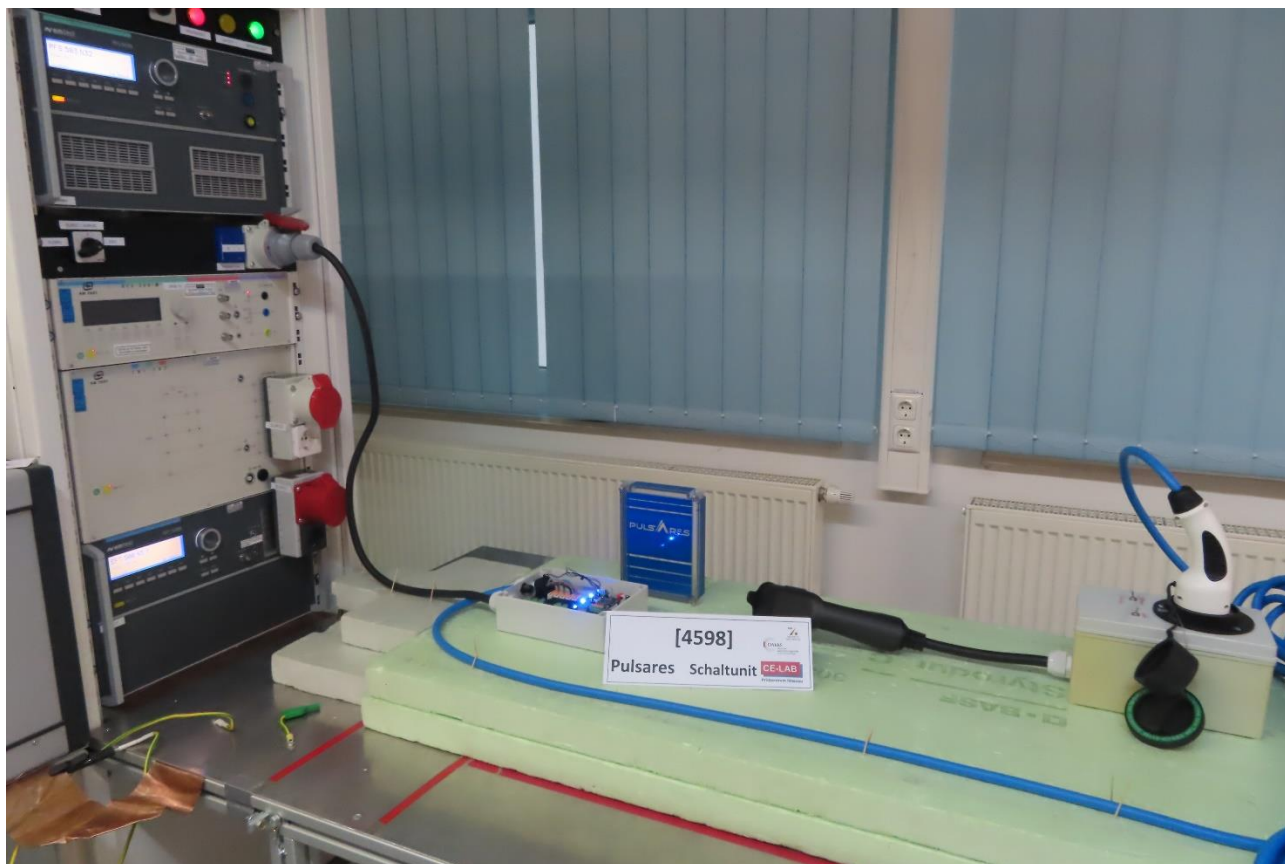
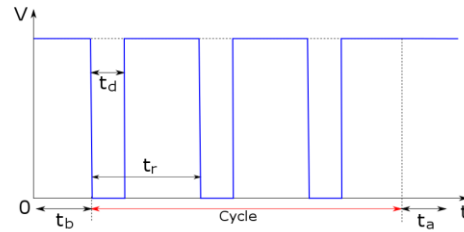


Foto 18: Prüfaufbau, EN 61000-4-11 (DROPS) SV AC-Eingang Tabelle 3 EN 61000-6-2

Pulsparameter (Nicht ausgefüllte Felder sind für die jeweilige Prüffunktion nicht relevant!)

/test parameter (the empty panels are not relevant for the tested function)

Testschritt (n) <i>/test step</i>	1
Paketdauer (t _d) <i>/impulse duration</i>	5000 ms
Periodendauer (t _r) <i>/cycle duration</i>	10 s
Phase /phase	L1/2/3
Phasenwinkel <i>/phase angle</i>	0 °
Frontwartezeit <i>/duration before test</i>	1 s
Endwartezeit <i>/duration after test</i>	1 s
Anzahl /number	3
Trigger /trigger	Auto
Netzspannung <i>/power supply voltage</i>	230 V



Prüfablauf:

Relative Time	Type	Origin	Message
00:00:00	INFO	TEST	22.03.2023 14:19 : Started 0 °
00:00:41	INFO	TEST	Finished

Prüfergebnis:

BK	Beschreibung	Bemerkung	Ergebnis
DROPS	keine Fehler in Zusammenhang mit der Sicherheit, Ladevorgang wird abgebrochen kann nach der Prüfung wieder ordnungsgemäß durchgeführt werden	Nach Störgröße wieder selbstständig in Ladebetrieb.	PASS

Test Information (Ende):

Drops_3Ph

EN 61000-4-11 (DROPS) SV AC-Eingang

Test-Nr.: 670

BAT-EMC Vers.-Nr.: 2022.0.27.0

Datum: 22.03.2023 14:19:48

Prüfer: AR

Inhaltsverzeichnis

/Content

EN 61000-6-4:2007+A1:2011 Störspannung am Wechselstrom-Netzanschluss (Tabelle 2.1)	16
<i>/EN 61000-6-4:2007+A1:2011 Disturbance Voltage on AC-Mains (Table 2.1)</i>	<i>16</i>
EN 61000-6-4:2007+A1:2011 Störfeldstärke (Tabelle 1)	32
<i>/EN 61000-6-4:2007+A1:2011 Radiated E-field emission (Table 1)</i>	<i>32</i>
Messung der Oberschwingungen (EN 61000-3-2 / EN 61000-3-12).....	38
<i>/Harmonics (EN 61000-3-2 / EN 61000-3-12)</i>	<i>38</i>
EN 61000-6-2:2005 Störfestigkeit ESD (Tabelle 1.5)	40
<i>/EN 61000-6-2:2005 Immunity ESD (Table 1.5)</i>	<i>40</i>
EN 61000-6-2:2005 Störfestigkeit Elektromagnetisches HF-Feld (Tabelle 1.2-1.4)	45
<i>/EN 61000-6-2:2005 Immunity Radiated Field (Table 1.2-1.4)</i>	<i>45</i>
EN 61000-6-2:2005 Störfestigkeit Schnelle Transienten (Tabelle 2.2/3.3/4.5).....	54
<i>/EN 61000-6-2:2005 Immunity against fast transients (Table 2.2/3.3/4.5)</i>	<i>54</i>
EN 61000-6-2:2005 Störfestigkeit Stoßspannungen (Tabelle 2.3/3.2/4.4).....	60
<i>/EN 61000-6-2:2005 Immunity against Surge Voltage (Table 2.3/3.2/4.4 EN 61000-6-2).....</i>	<i>60</i>
EN 61000-6-2:2005 Störfestigkeit Hochfrequenz, asymmetrisch (Tabelle 2.1/3.1/4.1)	102
<i>/EN 61000-6-2:2005 Immunity against Conducted Currents (Table 2.1/3.1/4.1).....</i>	<i>102</i>
EN 61000-6-2:2005 Störfestigkeit Spannungseinbrüche (Tabelle 4.2)	109
<i>/EN 61000-6-2:2005 Immunity against voltage dips (Table 4.2)</i>	<i>109</i>
EN 61000-6-2:2005 Störfestigkeit Spannungsunterbrechungen (Tabelle 4.3)	113
<i>/EN 61000-6-2:2005 Immunity against voltage interruptions (Table 4.3)</i>	<i>113</i>

Abbildungsverzeichnis

/Figures

Diagramm 1: Störspannung N	19
Diagramm 2: Störspannung L1	20
Diagramm 3: Störspannung L2	21
Diagramm 4: Störspannung L3	22
Diagramm 5: Störspannung N, CPT- Port.....	26
Diagramm 6: Störspannung L1, CPT- Port	27
Diagramm 7: Störspannung L2, CPT- Port	28
Diagramm 8: Störspannung L3, CPT- Port	29
Diagramm 9: Störfeldstärke, 30 MHz - 1 GHz, Vertical	35
Diagramm 10: Störfeldstärke, 30 MHz - 1 GHz, Horizontal.....	36
Diagramm 11: Störfestigkeit HF-Feld, 80 MHz - 1 GHz, Position 0°, 10 V/m, Horizontal.....	47
Diagramm 12: Störfestigkeit HF-Feld, 80 MHz - 1 GHz, Position 0°, 10 V/m, Vertical.....	48
Diagramm 13: Störfestigkeit HF-Feld, 1 GHz - 6 GHz, Position 0°, 3 V/m, Horizontal.....	51
Diagramm 14: Störfestigkeit HF-Feld, 1 GHz - 6 GHz, Position 0°, 3 V/m, Vertical.....	52
Diagramm 15: Störfestigkeit gegen geleitete HF an AC über CDN M5	104
Diagramm 16: Störfestigkeit gegen geleitete HF an CP- Port	107

Tabellenverzeichnis

/Index of tables

Tabelle 1: Messergebnisse 09.03.2023 Störspannung AC In IEC 61851-21-2 Klasse B	23
Tabelle 2: Messergebnisse Störspannung AC In IEC 61851-21-2 Klasse B- CPT Port	30
Tabelle 3: Messergebnisse Störfeldstärke, (B) 30MHz - 1GHz nach Tabelle 18/19 EN 55011	37

Fotoverzeichnis

/Index of photos

Foto 1: Gesamtansicht des Prüfobjektes.....	15
Foto 2: Leiterplattenkennzeichnungen	15
Foto 3: Prüfaufbau Störspannungsmessung, AC Eingang	18
Foto 4: Prüfaufbau Störspannungsmessung- CPT Port	25
Foto 5: Prüfaufbau Störfeldstärkemessung, 30 MHz bis 1 GHz	34
Foto 6: Messplatz für Oberschwingungen und Spannungsschwankungen.....	39
Foto 7: Prüfaufbau am ESD-Messplatz	41
Foto 8: Durchführung der indirekten ESD-Entladungen	42
Foto 9: Durchführung der ESD-Luftentladungen	44
Foto 10: Prüfaufbau Störfestigkeit gegen HF-Felder, 80 MHz - 1 GHz, Position 0°	46
Foto 11: Prüfaufbau Störfestigkeit gegen HF-Felder, 1 GHz - 6 GHz, Position 0°	50
Foto 12: Prüfaufbau, EN 61000-4-4 (BURST) SV AC Eingang Tabell 1 IEC 61851-21-2.....	55
Foto 13: Prüfaufbau Störfestigkeit, EN 61000-4-4 (BURST) CPT, Tabelle 1 IEC 61851-21-2.....	58
Foto 14: Prüfaufbau, EN 61000-4-5 (SURGE) SV AC-Eingang Tabelle 1 IEC 61851-21-2	61
Foto 15: Prüfaufbau Störfestigkeit gegen geleitete HF an AC- Eingang.....	103
Foto 16: Prüfaufbau Störfestigkeit gegen geleitete HF an CPT- Port	106
Foto 17: Prüfaufbau, EN 61000-4-11 (DIPS) SV AC-Eingang Tabelle 4 EN 61000-6-2	110
Foto 18: Prüfaufbau, EN 61000-4-11 (DROPS) SV AC-Eingang Tabelle 3 EN 61000-6-2.....	114