SIEMENS

RC-AT EM DG PRO D

Typprüfung - Type Test

Prüfurkunde - Test Certificate

PS-8620 Stromversorgung 24-60VDC 12W **6MF28620AA00BB**

PS-8620 Power Supply 24-60VDC 12W **6MF28620AA00BB**

Elektrische Sicherheit / Isolation - Electrical safety / Isolation

Prüfung - Test:	Isol. Wechselspg. - Dielectric test	Datum - Date:	08.06.16
Norm - Standard:	IEC 61010-1:2010	Protokoll - Protocol:	PS8620BB_TÜV16-154
Prüfung - Test:	Isol. Stoßspg. - Impulse voltage test	Datum - Date:	08.06.16
Norm - Standard:	IEC 60255-27:2013	Protokoll - Protocol:	PS8620BB_TÜV16-154

Elektromagnetische Verträglichkeit - Electromagnetic compatibility

Prüfung - Test:	Voltage var. on DC - Voltage var. on DC	Datum - Date:	08.06.16
Norm - Standard:	IEC 61000-4-29:2000	Protokoll - Protocol:	PS8620BB_TÜV16-154
Prüfung - Test:	Starting Current DC -	Datum - Date:	08.06.16
Norm - Standard:	IEC 60870-4:1990	Protokoll - Protocol:	PS8620BB_TÜV16-154
Prüfung - Test:	Imm. Ripple on DC - Imm. Ripple on DC	Datum - Date:	08.06.16
Norm - Standard:	IEC 61000-4-17:1999	Protokoll - Protocol:	PS8620BB_TÜV16-154
Prüfung - Test:	Voltage var. on DC - Voltage var. on DC	Datum - Date:	08.06.16
Norm - Standard:	IEC 60870-2-1:1995	Protokoll - Protocol:	PS8620BB_TÜV16-154
Prüfung - Test:	Imm. ged.Sinus Schw. - Imm. Ring waves	Datum - Date:	08.06.16
Norm - Standard:	IEC 61000-4-12:2006	Protokoll - Protocol:	PS8620BB_TÜV16-154
Prüfung - Test:	Störfeldstärke - Emission	Datum - Date:	08.06.16
Norm - Standard:	CISPR 22:2008	Protokoll - Protocol:	PS8620BB_TÜV16-154
Prüfung - Test:	Imm. ESD - ESD immunity	Datum - Date:	08.06.16
Norm - Standard:	ÎEC 61000-4-2:2008	Protokoll - Protocol:	PS8620BB_TÜV16-154
Prüfung - Test:	Imm. HF-Feld - EM field immunity	Datum - Date:	08.06.16
Norm - Standard:	IEC 61000-4-3:2006	Protokoll - Protocol:	PS8620BB_TÜV16-154
Prüfung - Test:	Imm. Burst - Burst immunity	Datum - Date:	08.06.16
Norm - Standard:	IEEE C 37.90.1:2012	Protokoll - Protocol:	PS8620BB_TÜV16-154
Prüfung - Test:	Imm. Burst - Burst immunity	Datum - Date:	08.06.16
Norm - Standard:	IEC 61000-4-4:2012	Protokoll - Protocol:	PS8620BB_TÜV16-154
Prüfung - Test:	Imm. Surge 1,2/50 - Surge imm. 1,2/50µs	Datum - Date:	08.06.16
Norm - Standard:	IEC 61000-4-5:2005	Protokoll - Protocol:	PS8620BB_TÜV16-154
Prüfung - Test:	Imm. HF induziert - Cond. dist. immunity	Datum - Date:	08.06.16
Norm - Standard:	IEC 61000-4-6:2013	Protokoll - Protocol:	PS8620BB_TÜV16-154
Prüfung - Test:	Imm. Magnetfeld 50Hz - HF 50Hz immunity	Datum - Date:	08.06.16
Norm - Standard:	IEC 61000-4-8:2009	Protokoll - Protocol:	PS8620BB_TÜV16-154
Prüfung - Test:	Imm. Magnetfeld Puls - Magn. pulse immunity	Datum - Date:	08.06.16
Norm - Standard:	IEC 61000-4-9:1993	Protokoll - Protocol:	PS8620BB_TÜV16-154
Prüfung - Test:	Imm. H-Feld gedämpft - Damped oscill. MF	Datum - Date:	08.06.16
Norm - Standard:	IEC 61000-4-10:1993	Protokoll - Protocol:	PS8620BB_TÜV16-154

Typprüfung - Type Test

Prüfurkunde - Test Certificate

PS-8620 Stromversorgung 24-60VDC 12W **6MF28620AA00BB**

PS-8620 Power Supply 24-60VDC 12W **6MF28620AA00BB**

Prüfung - Test:	Imm. 1MHz gedämpft - Oscillatory waves	Datum - Date:	08.06.16
Norm - Standard:	IEC 61000-4-18:2006	Protokoll - Protocol:	PS8620BB_TÜV16-154
Prüfung - Test:	Imm. comm mode dist - Imm. comm mode dist	Datum - Date:	08.06.16
Norm - Standard:	IEC 61000-4-16:1998	Protokoll - Protocol:	PS8620BB_TÜV16-154

Umweltprüfungen - Environmental testing

Prüfung - Test:	Klima - Climatic test	Datum - Date:	13.10.16
Norm - Standard:	IEC 60068-2-x:	Protokoll - Protocol:	PS-8620-S30_00
Prüfung - Test:	Fc: Schwingen - Vibrations	Datum - Date:	12.10.16
Norm - Standard:	IEC 60068-2-6:2007	Protokoll - Protocol:	PS-8620_22-S68_00
Prüfung - Test:	Fc: Schwingen - Vibrations	Datum - Date:	12.10.16
Norm - Standard:	IEC 60068-3-3:1991	Protokoll - Protocol:	PS-8620_22-S68_00
Prüfung - Test:	Ea: Schock - Shock	Datum - Date:	12.10.16
Norm - Standard:	IEC 60068-2-27:2008	Protokoll - Protocol:	PS-8620_22-S68_00
Prüfung - Test:	Eb: Dauerschock - Bump	Datum - Date:	12.10.16
Norm - Standard:	IEC 60068-2-27:2008	Protokoll - Protocol:	PS-8620_22-S68_00

Der Prüfgegenstand hat die Prüfungen bestanden. Nach Abschluss der Prüfungen waren die Eigenschaften unverändert und der Prüfgegenstand voll funktionsfähig.
The equipment has successfully passed the type test. The equipment did not show any changes and was fully in order subsequent to these tests.

Prüfer - Tested by:
Schachinger Michael
Digitally signed by Schachinger Michael
DN: serialNumber=Z001V63N, givenName=Michael, sn=Schachinger, o=Siemens, cn=Schachinger Michael
Date: 2016.10.24 11:07:03 +02'00'
Name / Unterschrift - Signature

Geprüft - Reviewed by:
i.A. Stern Peter
Digitally signed by Stern Peter
DN: serialNumber=Z001MUXE, givenName=Peter, sn=Stern, o=Siemens, cn=Stern Peter
Date: 2016.10.21 15:16:40 +02'00'
Name / Unterschrift - Signature

TEST REPORT

of the accredited test laboratory

TÜV Nr.:M/EMV-16/154

about

the following EMC - test/- research

Applicant: Siemens AG Österreich
Ruthnergasse 3
A-1210 Vienna

Product: PS-8620 6MF28620AA00

Serial Numbers: PS-8620 → #34 (Insulation)
PS-8620 → #26 (EMC)

Standard: Manufacturer Specifications: TTS_A8000_PS862x.doc

File: PS8620BB_TÜV16-154.pdf

TÜV AUSTRIA SERVICES GMBH
Test laboratory for EMC

Deputy
Supervisor of EMC-laboratory

Ing. Michael Emminger

Official seal

08.06.2016

Checked by

Ing. Andreas Malek

Copy Nbr.: 1/1

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Industry & Energy

Department:
Testing Body for
Communication
Technology/ EMC

TÜV ®

Summary

Clause	Test	Severities	Result
4.1	Radiated Emissions	CISPR 11: 30 MHz –2 GHz; Class B	OK
4.2	Electrostatic discharge requirements (ESD)	IEC 61000-4-2: 6kV contact, 8 kV air – 10 discharges pos/neg	OK
4.3	Radiated electromagnetic field requirements	IEC 61000-4-3: 80MHz – 6GHz; 10V/m; 80% AM	OK
4.4	Induced RF-field requirements	IEC 61000-4-6: 150kHz – 80MHz; 10Vrms; 80% AM	OK
4.5	Electrical fast transients/burst requirements	IEC 61000-4-4: 4 kV Test level – 5/50 ns t_r/t_h 5kHz Burst frequency; 15 ms Burst time 3 Hz Repetition frequency; Polarity: positive/negative	OK
4.6	Surge requirements	IEC 61000-4-5: 4 kV Test level – 1,2/50 µs t_r/t_h Polarity: positive/negative	OK
4.7	Oscillatory wave requirements	IEC 61000-4-18: 2,5 kV Test level Frequency: 1 MHz; Repetition: 400/s Burst duration: 2 seconds; Polarity: positive/negative	OK
4.8	Ring wave requirements	IEC 61000-4-12: 2 kV Test level common and normal Frequency: 100 kHz; Repetition: 1/s Polarity: 5 positive / 5 negative	OK
4.9	Magnetic field strength at power frequency	IEC 61000-4-8: 100 A/m; 16,7/50/60 Hz for 60 seconds 1000 A/m; 16,7/50/60 Hz; for 3 second	OK
4.10	Magnetic field strength – pulsed	IEC 61000-4-9: 1000 A/m; 8/20µs	OK
4.11	Induced common mode requirements	IEC 61000-4-16: 15Hz – 150kHz; 30Vrms DC/16,67/50/60/150/180Hz; 30Vrms for 1 minute / 300Vrms for 1 second	OK
4.12	Surge withstand capability (SWC) Fast Transient	IEEE C37.90.1 4 kV .) Burst filter direct (>100µH,33nF) .) line bal. Transformer coupling filter (>100µH, 66nF)	OK
4.13	Surge withstand capability (SWC) Oscillatory test 1 MHz damped oscill. wave	IEEE C37.90.1 2,5 kV .) coup. Dev. (1,5 mH, 0,5 µF)	OK
4.14	Voltage dips, voltage interruption, voltage variation	IEC 61000-4-29 : 70% of U_{nom} for 100 ms ; 40% of U_{nom} for 100 ms ; Delta U_{nom} =100% for 10 ; 50 and 100 ms	OK
4.15	Ripple on DC input power ports	IEC 61000-4-17: 10% ripple of U_{nom} for 10 minutes	OK
4.16	Starting current DC	IEC 60870-4: Class S1	OK
4.17	Supply voltage variation	IEC 60870-2-1: -25% / +30% of U_{nom}	OK
4.18	Insulation Test	IEC 61010-1: Steady State Test: 3,8kV 50Hz sinus for 1 minute Impulse Test: 5kV; 1,2µs/ 50µs; 500 Ω output impedance; 5 impulses pos/neg	OK
OK EUT passed NOK EUT failed			

EUT: PS-8620 6MF28620AA00

Serial Number:
PS-8620 → #34 (Insulation)
PS-8620 → #26 (EMC)

Manufacturer:
Siemens AG Österreich
Ruthnergasse 3
A-1210 Wien

Operating mode: The measurements were carried out at the following running states:

continuous observation for checking the proper functioning of the EUT

Auxiliary equipment:

Module	Serial Number	MLFB number	Description
CP-8050	BF1602018316	6MF28050AA00	SICAM-A8000 CPU module CP-8050
DO-8212	GF1602501332	6MF28212AA00	DO-8212 BIN OUTPUT REL 8X24-220VDC/230VAC
load-module			Active power load (switchable from 1-16W)

Technical data EUT: Power supply: 2x 12V Accus 12Ah or
power supply MANSON SSP-7080 (NGU4)

Climatic conditions in the emc laboratory:
Relative humidity: 38 %
Temperature: 22 °C

Applicant: Siemens AG Österreich

Department: EM DG PRO D

Address:
A-1210 WIEN, Ruthnergasse 3

Contact person: Mr. Herbert STEFL

EUT received on: 17.05.2016

Tests were performed on: 17. until 19.05.2016

Department: EM DG PRO D	**TEST REPORT**	SIEMENS
Tested by / on: A. Kainz / 2016-09-02	Re: **Environmental Testing Vibration (sinusoidal), Shock**	Report no.: **PS-8620_22-S68_00**
Released by / on: M. Schachinger / 2016-10-12 Schachinger Michael Digitally signed by Schachinger Michael DN: serialNumber=Z001V63N, givenName=Michael, sn=Schachinger, o=Siemens, cn=Schachinger Michael Date: 2016.10.21 10:28:23 +02'00'		Account / Request no.: **S.61742**
File: PS-8620_22-S68_00.docx		Issued in / on.: Vienna, **2016-10-13**
	Product: SICAM A-8000 PS-8620/22	Sheet: 1 / Sheets: 4

1. Requirements and Standards Applied

Test requirement acc. to: Product requirements SICAM A-8000

Test setup and execution were to comply with the following test standard:

IEC 60068-2-6 (2007-12)	Environmental testing Part 2: Tests - Test Fc: Vibration (sinusoidal) (= EN 60068-2-6:2008-02)
IEC 60068-2-27 (2008-02)	Environmental testing Part 2: Tests. Test Ea and guidance: Shock (= EN 60068-2-27:2009-05)
IEC 60068-3-3 (1991-02)	Environmental testing Part 3: Guidance. Seismic Test Methods for equipments (= EN 60068-3-3:1993-04)

2. Summary of Test Result

The modules **SICAM A-8000 PS-8620/22**

have **passed** the Environmental test "Vibration (sinusoidal), Shock and Seismic" according to the test requirements with
1g/1,5g by the **Vibration** testing,
10g/15g by the **Shock** testing,
2g hor/1g ver by the **Seismic** testing.

Department: RC-AT EM DG PRO D	**TEST REPORT**	SIEMENS
Tested by / on: M. Striz 2016-10-07 to 13	Re: **Environmental Testing**	Report no.: **PS-8620-S30_00**
Released by / on: M. Schachinger 2016-10-13	Schachinger Michael Digitally signed by Schachinger Michael DN: serialNumber=Z001V63N, givenName=Michael, sn=Schachinger, o=Siemens, cn=Schachinger Michael Date: 2016.10.13 14:02:51 +02'00' **Cold / Dry Heat**	Account / Request no.: 361742
File: PS-8620-S30_00.doc		Issued in / on.: Vienna, **2016-10-13**
	Product: PS-8620	Sheet: 1 / Sheets: 5

1. Requirements and Standards Applied

Test requirement acc. to: **TTS_A8000_PS862x.doc**

Test setup and execution were to comply with the following test standard:

IEC 60068-2-1 (2007-03)	Environmental testing - Part 2: Tests; Tests A: Cold (EN 60068-2-1:2007-04)
IEC 60068-2-2 (2007-07)	Basic environmental testing procedures - Part 2: Tests; Tests B: Dry heat (= EN 60068-2-2:2007-09)

2. Summary of Test Result

The module **PS-8620** has **passed** the environmental test according to the test requirement when subjected to dry heat (70°C/10%rh) and cold (-40°C).