

Prüfurkunde - Test Certificate

PE-6410 Peripheriekoppl. Ax-Bus elektr.
PE-6410 Peripheral Contr. Ax-Bus electr.

GC6-410-E

6MF11130GE100AF0

Funktionsprüfungen - Functional testing

Prüfung - Test: Funktion - Functional test
Norm - Norm: ---:

Datum - Date: 05-11-2007
Protokoll - Protocol: 6221_S00_00

Elektromagnetische Verträglichkeit - Electromagnetic compatibility

Prüfung - Test: Störfeldstärke - Emission
Norm - Norm: CISPR 22:2005

Datum - Date: 30-10-2007
Protokoll - Protocol: 6221-S22_00

Prüfung - Test: Imm. ESD - ESD immunity
Norm - Norm: IEC 61000-4-2:1995

Datum - Date: 23-10-2007
Protokoll - Protocol: 6221-S02_00

Prüfung - Test: Imm. HF-Feld - EM field immunity
Norm - Norm: IEC 61000-4-3:2006

Datum - Date: 19-06-2008
Protokoll - Protocol: 6221-S03_00

Prüfung - Test: Imm. Burst - Burst immunity
Norm - Norm: IEC 61000-4-4:2004

Datum - Date: 29-10-2007
Protokoll - Protocol: 6621-S04_00

Prüfung - Test: Imm. Magnetfeld 50Hz - HF 50Hz immunity
Norm - Norm: IEC 61000-4-8:1993

Datum - Date: 31-10-2007
Protokoll - Protocol: 6221-S08_00

Prüfung - Test: Imm. Magnetfeld Puls - Magn. pulse immunity
Norm - Norm: IEC 61000-4-9:1993

Datum - Date: 31-10-2007
Protokoll - Protocol: 6221-S09_00

Umweltprüfungen - Environmental testing

Prüfung - Test: Klima - Climatic test
Norm - Norm: IEC 60068-2-x:

Datum - Date: 05-11-2007
Protokoll - Protocol: 6221-S00_00

Prüfung - Test: Fc: Schwingen - Vibrations
Norm - Norm: IEC 60068-2-6:2007

Datum - Date: 18-06-2008
Protokoll - Protocol: 6221_S68_00

Prüfung - Test: Ea: Schock - Shock
Norm - Norm: IEC 60068-2-27:2008

Datum - Date: 18-06-2008
Protokoll - Protocol: 6221_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.

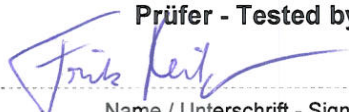
Siemens AG Österreich

Energy Automation Development
E A D TC2

Wien - Vienna, 12-02-2009

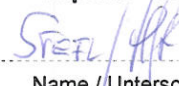
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Prüfer - Tested by:




Name / Unterschrift - Signature

Geprüft - Reviewed by:



Name / Unterschrift - Signature

Department: PTD EA D TC2-3	TEST REPORT		
Tested by / on: F. Reitgruber 05.11.2007	Re: TYPE TESTING Functional and Temperature test Product: PE-6410, PE-6412, DO-6221, DO-6230	Report no.: 6221-S00_00	
Released by / on: H. Stefl /2008-09-02		Account / Request no.: S.71605.01.50.09.50	
File: 6221-S00_00.doc		Issued in / on.: Vienna, 19.11.2007	
		Sheet: 1	Sheets: 3

1. Requirements and Standards Applied

Test requirement acc. to:


GC6-xxx--.xx/42-5.06 TM1703 general functional specification for terminal modules

2. Summary of Test Result

The modules:

PE-6410
PE-6412
DO-6221
DO-6230

passed the functional and temperature test's according to the test requirement.

Department: PTD EA D TC2-3	TEST REPORT		
Tested by / on: V. Krenyitzk 23.10.2007	Re: EMC TYPE TESTING Electrostatic discharge immunity test	Report no.: 6221-S02_00	
Released by / on: H. Stefl /2008-09-02		Account / Request no.: S.71605.01.50.09.50	
File: 6221-S02_00.doc		Issued in / on.: Vienna, 12.11.2007	
		Products: PE-6410, DO-6221, DO-6230	
		Sheet: 1	Sheets: 8

1. Requirements and Standards Applied

Test requirement acc. to:

GC6-xxx--.xx/42-5.06 TM1703 general functional specification for terminal modules

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


IEC 61000-4-2 (1995-01) Electromagnetic compatibility (EMC)
+ A1 (1998-01) Part 4-2: Testing and measurement techniques -
+ A2 (2000-11) Electrostatic discharge immunity test - Basic EMC
publication
(= EN 61000-4-2/1995 + A1/1998 + A2/2001)

2. Summary of Test Result

The modules:

PE-6410
DO-6221
DO-6230

have **passed** electrostatic discharge immunity test according to the test requirement when subjected to a disturbance voltage of **± 6 KV** (contact discharge) and **± 8 KV** (air discharge).

Department: PTD EA D TC2-3	TEST REPORT		
Tested by / on: H. Stefl / 2008-06-19	Re: EMC TYPE TESTING Electromagnetic field immunity test	Report no.: 6221-S03_00	
Released by / on: Lichtnekert J./ 2008-09-02		Account / Request no.: S.71605.01.50.09.50	
File: 6221-S03_00.doc		Issued in / on: Vienna, 20.06.2008	
		Product: PE-6410, DO-6221, DO-6230	Sheet: 1

1. Requirements and Standards Applied

Test requirement acc. to:


GC6-xxx--.xx/42-5.06 TM1703 general functional specification for terminal modules

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

EN 61000-4-3 (2006-05) Electromagnetic compatibility (EMC)
Part 4-3: Testing and measurement techniques -
Radiated, radio-frequency, electromagnetic field
immunity test
(= IEC 61000-4-3/2006-02)

2. Summary of Test Result

The module **PE-6410, DO-6221** and **DO-6230** has **passed** the radio interference immunity test according to the test requirement when subjected to an interference-field strength of .10V/m.

Department: PTD EA D TC2-3	TEST REPORT		
Tested by / on: F. Reitgruber 29.10.2007	Re: EMC TYPE TESTING Electrical fast transient/burst immunity test Products: PE-6410, DO-6221, DO-6230	Report no.: 6621-S04_00	
Released by / on: H. Stefl /2008-09-02		Account / Request no.: S.71605.01.50.09.50	
File: 6221-S04_00.doc		Issued in / on.: Vienna, 12.11.2007	
		Sheet: 1	Sheets: 8

1. Requirements and Standards Applied

Test requirement acc. to:

GC6-xxx--.xx/42-5.06

TM1703 general functional specification for terminal modules

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

IEC 61000-4-4 (2004-07)
+ Corrig. 1 (2006-08)


Electromagnetic compatibility (EMC)
Part 4-4: Testing and measurement techniques -
Electrical fast transient/burst immunity test
(= EN 61000-4-4/2004-12)

2. Summary of Test Result

The modules:

PE-6410
DO-6221
DO-6230

have **passed** the electrical fast transient/burst immunity test according to the test requirement when subjected to a disturbance voltage of $\pm 2KV$

Department: PTD EA D TC23	TEST REPORT		
Tested by / on: F. Reitgruber 31.10.2007	Re: EMC TYPE TESTING Power frequency magnetic field immunity test	Report no.: 6221-S08_00	
Released by / on: H. Stefl /2008-09-02		Account / Request no.: S.71605.01.50.09.50	
File: 6221-S08_00.doc		Issued in / on.: Vienna, 13.11.2007	
		Product: PE-6410, DO-6221, DO-6230	Sheet: 1

1. Requirements and Standards Applied

Test requirement acc. to:

GC6-xxx--.xx/42-5.06 TM1703 general functional specification for terminal modules

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


IEC 61000-4-8 (1993-06) Electromagnetic compatibility (EMC)
+ A1 (2000-11) Part 4-8: Testing and measurement techniques -
Power frequency magnetic field immunity test -
Basic EMC publication
(= EN 61000-4-8/1993 + A1/2001)

2. Summary of Test Result

The modules:

PE-6410
DO-6221
DO-6230

passed the Power frequency magnetic field immunity test according to the test requirement when subjected to a field strength of 100 A/m permanently and 1000 A/m temporary.

Department: PTD EA D TC23	TEST REPORT		
Tested by / on: F. Reitgruber 31.10.2007	Re: EMC TYPE TESTING Pulse magnetic field immunity test	Report no.: 6221-S09_00	
Released by / on: H. Stefl /2008-09-02		Account / Request no. S.71605.01.50.09.50	
File: 6221-S09_00.doc		Issued in / on.: Vienna, 12.11.2007	
		Product: PE-6410, DO-6221, DO-6230	Sheet: 1

1. 1Requirements and Standards Applied

Test requirement acc. to:

GC6-xxx--.xx/42-5.06 TM1703 general functional specification for terminal modules

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


IEC 61000-4-9 (1993-06) Electromagnetic compatibility (EMC)
+ A1 (2000-11) Part 4-9: Testing and measurement techniques -
Pulse magnetic field immunity test
(= EN 61000-4-9/1993 + A1/2001)

2. Summary of Test Result

The modules:

PE-6410
DO-6221
DO-6230

passed the Power frequency pulse magnetic field immunity test according to the test requirement when subjected to a field strength of 1000 A/m.

Department: PTD EA D TC2-3	TEST REPORT		
Tested by / on: F. Reitgruber 30.10.2007	Re: EMC TYPE TESTING Radio-Interference-Field Strength Product: PE-6410, PE-6412, DO-6221, DO-6230	Report no.: 6221-S22_00	
Released by / on: H. Stefl /2008-09-02		Account / Request no.: S.71605.01.50.09.50	
File: 6221-S22_00.doc		Issued in / on.: Vienna, 13.11.2007	
		Sheet: 1	Sheets: 15

1. Requirements and Standards Applied

Test requirement acc. to:

GC6-xxx--.xx/42-5.06 TM1703 general functional specification for terminal modules

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


CISPR 22 (2005-04) mod. Information technology equipment -
+ AMD 1 (2005-07) Radio disturbance characteristics –
+ AMD 2 (2006-01) Limits and methods of measurement
(= EN 55022/2006-09)

2. Summary of Test Result

The modules:

PE-6410
PE-6412
DO-6221
DO-6230

passed the radio-interference-field strength test (class A) according to the test requirement.

Department: PTD EA D TC23	TEST REPORT		
Tested by / on: H. Stefl / 2008-06-18	Re: Environmental Testing Vibration (sinusoidal), Shock	Report no.: 6221_S68_00	
Released by / on: J. Lichtnekert / 2008-09-02		Account / Request no.: S.71605.01.50.09.50	
File: 6221-S68_00.doc		Issued in / on.: Vienna, 20.06.2008	
		Product: MX-6410, DO-6221, DO-6230	Sheet: 1

1. Requirements and Standards Applied

Test requirement acc. to:

GC6-xxx--.xx/42-5.06 TM1703 general functional specification for terminal modules

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

IEC 60068-2-6 (1995-03) + Corrig. (1995)	Environmental testing Part 2: Tests - Test Fc: Vibration (sinusoidal) (= EN 60068-2-6/1995-04)
IEC 60068-2-27 (1987)	Environmental testing Part 2: Tests. Test Ea and guidance: Shock (= EN 60068-2-27/1993-03)
IEC 60068-2-29 (1987)	Basic environmental testing procedures Part 2 : Tests. Test Eb and guidance: Bump (= EN 60068-2-29/1993-04)

2. Summary of Test Result

The modules **MX-6410, DO-6221** and **DO-6230** **passed** the Environmental test "Vibration (sinusoidal) and Shock" according to the test requirement with 1g/1,5g by the Vibration testing and 10g/15g by the Shock testing.
according to: PE-6410