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## Test Report No. P50-15-0191\_1-en-Rev-02 Environmental Tests

Order No.: 50-15-0191  
Date: 18/08/2015  
Test engineer: Mr. Litzba  
Documentation: la/hb

This report includes  
11 pages + 1 attachment.

phone: 03302 49982 50

**Delivery date specimen:** 05/05/2015

**Test date:** 06/05/2015 until 31/07/2015

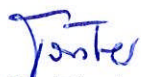
**Specimen:** Siprotec 5 Platform (selected EUT's, 3 devices non-modular (light) and 4 devices modular, manufacturer: Siemens AG (for details see page 2))

**Relevant specification:**

- Test Bb: Dry heat for non heat-dissipating specimen with gradual change of temperature according to DIN EN 60068-2-2 (edition 2008-05)
- Test Ab: Cold for non heat-dissipating specimen with gradual change of temperature according to DIN EN 60068-2-1 (edition 2008-01)
- Test Nb: Change of temperature with specified rate of change according to DIN EN 60068-2-14 (edition 2010-02)
- Test Cab: Damp heat, steady state according to DIN EN 60068-2-78 (edition 2014-02)
- Test Db: Damp heat, cyclic (12 + 12-hour cycle), variant 1 according to DIN EN 60068-2-30 (edition 2006-06)
- Visual inspection (for details see page 2)

**Objective:** Proof of the climate stability and operability of the specimens at the conditions mentioned in the relevant specification.

**Results:** The devices were tested according to the relevant specification. The operability of the tested devices was ensured before, during and after each exposure. No significant changes were detected in comparison with the initial state of the specimens (for details see page 8).



Rita Förster  
Environmental Lab

The results refer only to the specimens above mentioned.

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## 1 Specimens

Siprotec 5 Platform; selected EUT's, 3 devices non-modular (light) and 4 devices modular, manufacturer: Siemens AG (for details see Table 1).

Table 1: Specimen

Specimen No. 50-15-0191-... [Device Type]	Long Code	Serial No.	HW-MODULES	Serial No.	PCBA Part No.
<i>non-modular (light)</i>					
EUT-3 [7SJ82]	7SJ82-DAAA-AA0-0AAAAA0-A90311-13111A-CAB000-000AB0-HB1BD3-JA0	BM1410001134	CP100 IO102 PS101 IO110 USART-AC-2EL USART-AB-1EL	BF1409069556 BF1409056801 BF1409034923 BF1409025734 BF1408038095 BF1405083559	C53207A 601B271 2 C53207A 601B520 1 C53207A 601B101 1 C53207A 601B610 1 C53207A 602B150 1 C53207A 602B160 1
EUT-5 [7SJ82]	7SJ82-DAAA-AA0-0AAAAA0-A90211-13111A-EAE000-000AB0-HB1BD2-JA0	BM1410001136	CP100 IO102 PS101 IO110 USART-AE-2FO USART-AE-2FO	BF1409045566 BF1410055082 BF1408084668 BF1410004022 BF1407054446 BF1407054453	C53207A 601B271 2 C53207A 601B520 1 C53207A 601B100 1 C53207A 601B610 1 C53207A 602B180 2 C53207A 602B180 2
EUT-17 [7UT82]	7UT82-DAAA-AA0-0AAAAA0-A50411-13111A-AAA000-000AB0-HC1BD4-JZ0	BM1503002955	CP100 IO103 PS101	BF1503029524 BF1406036822 BF1503028928	C53207A 601B271 2 C53207A 601B530 1 C53207A 601B101 1
<i>modular</i>					
EUT-7 [7SL87]	7SL87-DAAA-AA0-0AAAAA0-A91211-13111A-DBACAC-DACAA0-CH1BA2-EA0CLO-CJ0BB2	BM1410002158	CP200 IO208 PS201 IO230 IO211 IO209 CB202 USART-AD-1FO ETH-BA-2EL ARC-CD-3FO USART-AC-2EL ANAI-CA-4EL	BF1410039223 BF1409021505 BF1408020577 BF1408030093 BF1409021537 BF1406020870 BF1302587697 BF1409022515 BF1409069923 BF1409036336 BF1410021352 BF1409059620	C53207A 601B211 4 C53207A 601B380 4 C53207A 601B110 4 C53207A 601B620 1 C53207A 601B410 2 C53207A 601B390 4 C53207A 601B120 3 C53207A 602B190 2 C53207A 602B100 1 C53207A 602B342 2 C53207A 602B150 1 C53207A 602B300 2
EUT-9 [6MD86]	6MD86-DAAA-AA0-0AAAAA0-A90111-13111B-AAYCAA-GAVAA0-CB3BA1-CE0CD0-CG0BB1	BM1410001763	CP200 IO202 PS201 IO205 IO204 IO207 CB202 ETH-BA-2EL USART-AY-2LDFO USART-AG-1LDFO USART-AV-2LDFO	BF1409069474 BF1409069596 BF1409069392 BF1409056651 BF1409007513 BF1409069783 BF1406037544 BF1409069910 BF1410025921 BF1409021790 BF1410025551 BF1410021384	C53207A 601B211 4 C53207A 601B320 4 C53207A 601B111 4 C53207A 601B350 4 C53207A 601B340 2 C53207A 601B370 4 C53207A 601B121 3 C53207A 602B100 1 C53207A 602B110 1 C53207A 602B230 1 C53207A 602B110 1 C53207A 602B300 2

Specimen No. 50-15-0191-... [Device Type]	Long Code	Serial No.	HW-MODULES	Serial No.	PCBA Part No.
			ANAI-CA-4EL		
EUT-11 [7UT85]	7UT85-DAAA- AA0-0AAAA0- A90111- 12111A- WAE000- 000AA0- CC1BA1- CF0CQ1	BM1410002174	CP200 IO203 PS201 IO206 IO215 USART-AW- 2LDFO USART-AE-2FO	BF1410039183 BF1410021068 BF1409069390 BF1409069725 BF1304019218 BF1410039654 BF1407054457	C53207A 601B211 4 C53207A 601B330 4 C53207A 601B111 4 C53207A 601B360 4 C53207A 601B450 3 C53207A 602B110 1 C53207A 602B180 2
EUT-13 [7KE85]	7KE85-DAAA- AA0-0AAAA0- A94212- 23112B- ABACAA- CABAA1- CLOBA2-BB2	BM1410001321	CP200 IO211 PS201 CB202 ETH-BA-2EL ETH-BA-2EL USART-AC-2EL USART-AB-1EL ANAI-CA-4EL	BF1409069462 BF1409021542 BF1408020569 BF1302587694 BF1409069915 BF1409069897 BF1410021355 BF1405083526 BF1409059584	C53207A 601B211 4 C53207A 601B410 2 C53207A 601B110 4 C53207A 601B120 3 C53207A 602B100 1 C53207A 602B100 1 C53207A 602B150 1 C53207A 602B160 1 C53207A 602B300 2

## 2 Relevant Specification

### 2.1 Exposures

#### 2.1.1 Test Bb: Dry heat for non heat-dissipating specimen with gradual change of temperature according to DIN EN 60068-2-2 (edition 2008-05)

temperature: (+85 ± 2) °C  
duration of the test: 16 hours  
operation state: on

#### 2.1.2 Test Bb: Dry heat for non heat-dissipating specimen with gradual change of temperature according to DIN EN 60068-2-2 (edition 2008-05)

temperature: (+70 ± 2) °C  
duration of the test: 96 hours  
operation state: on

#### 2.1.3 Test Ab: Cold for non heat-dissipating specimen with gradual change of temperature according to DIN EN 60068-2-1 (edition 2008-01)

temperature: (-25 ± 3) °C  
duration of the test: 96 hours  
operation state: on

#### 2.1.4 Test Ab: Cold for non heat-dissipating specimen with gradual change of temperature according to DIN EN 60068-2-1 (edition 2008-01)

temperature: (-40 ± 3) °C  
duration of the test: 16 hours  
operation state: on

**2.1.5 Test Nb: Change of temperature with specified rate of change according to DIN EN 60068-2-14 (edition 2010-02)**

lower temperature: (-25 ± 3) °C  
 higher temperature: (+75 ± 2) °C  
 exposure time: 3 hours at lower / higher temperature  
 rate of temperature change: 0,33 K / min  
 number of cycles: 5 cycles (each 16 hours)  
 duration of the test (total): 80 h  
 operation state: on

**2.1.6 Test Db: Damp heat, cyclic (12 + 12-hour cycle), variant 1 according to DIN EN 60068-2-30 (edition 2006-06)**

lower temperature: (25 ± 3) °C relative humidity: 95 % ... 100 %  
 higher temperature: (55 ± 2) °C relative humidity: 90 % ... 96 %  
 number of cycles: 6 cycles (each 24 h)  
 duration of the test (total): 144 h  
 operation state: on

**2.1.7 Test Cab: Damp heat, steady state according to DIN EN 60068-2-78 (edition 2014-02)**

temperature: (40 ± 2) °C  
 relative humidity: (95 ± 3)%  
 duration of the test: 56 d  
 operation state: off

**2.2 Evaluations**

**2.2.1 Visual inspection**

Examination of changes in relation to the initial state of the specimens.

**2.2.2 Performance tests**

The operability of the devices before, during and after the tests will be checked by the customer. The life contacts of all devices must be monitored to detect possible switching operations.

**3 Test procedure**

**3.1 Test equipment**

The test and measuring instruments as well as the calibration status were checked before using.

Test equipment	Inv. No.
Climate test chamber CW-60/15 CTS-15	7993 1292
Climate test chamber CW-60/13 CTS-13	7992 8235
Climate test chamber C-70/1000/S CTS-1	7993 0770
Multimeter Fluke 79	7050 9300

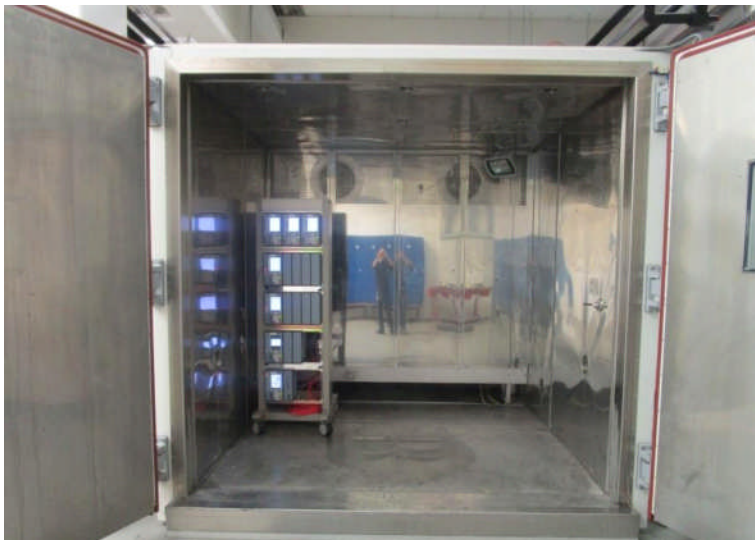
### 3.2 Test sequence

The tests were carried out in the following sequence:

Pos.	Exposure	Test chamber
1.	Test Bb (Dry heat) acc. to clause 2.1.1	CTS-15
2.	Test Bb (Dry heat) acc. to clause 2.1.2	CTS-15
3.	Test Ab (Cold) acc. to clause 2.1.3	CTS-15
4.	Test Ab (Cold) acc. to clause 2.1.4	CTS-15
5.	Test Nb (Change of temperature) acc. to clause 2.1.5	CTS-15
6.	Test Db (Damp heat, cyclic) acc. to clause 2.1.6	CTS-13
7.	Test Cab (Damp heat, steady state) acc. to clause 2.1.7	CTS-1

### 3.3 Test setup

The test setup of the climate and tests is shown in the following figures.



RST/9E5WQ89D\_F00011633

fig. 1

test setup:  
specimens in the climate test chamber (CTS-15)



RST/9E5WQ89D\_F00011639

fig. 2

test setup:  
specimens in the climate test chamber (CTS-1)



RST/9E5WQ89D\_F00011635

fig. 3

test setup:  
monitoring of the life contacts

### 3.4 Exposure diagrams

The stress sequences of the climate tests are shown in the following diagrams.

*Note: the abrupt temperature rises at the end of some exposures were caused by opening the chamber door while performing functional tests.*



Diagram 1: Stress sequence of the climate tests according to clause 2.1.1 and clause 2.1.2 (test Bb: Dry heat)



Diagram 2: Stress sequence of the climate tests according to clause 2.1.3 and clause 2.1.4 (test Ab: Cold)

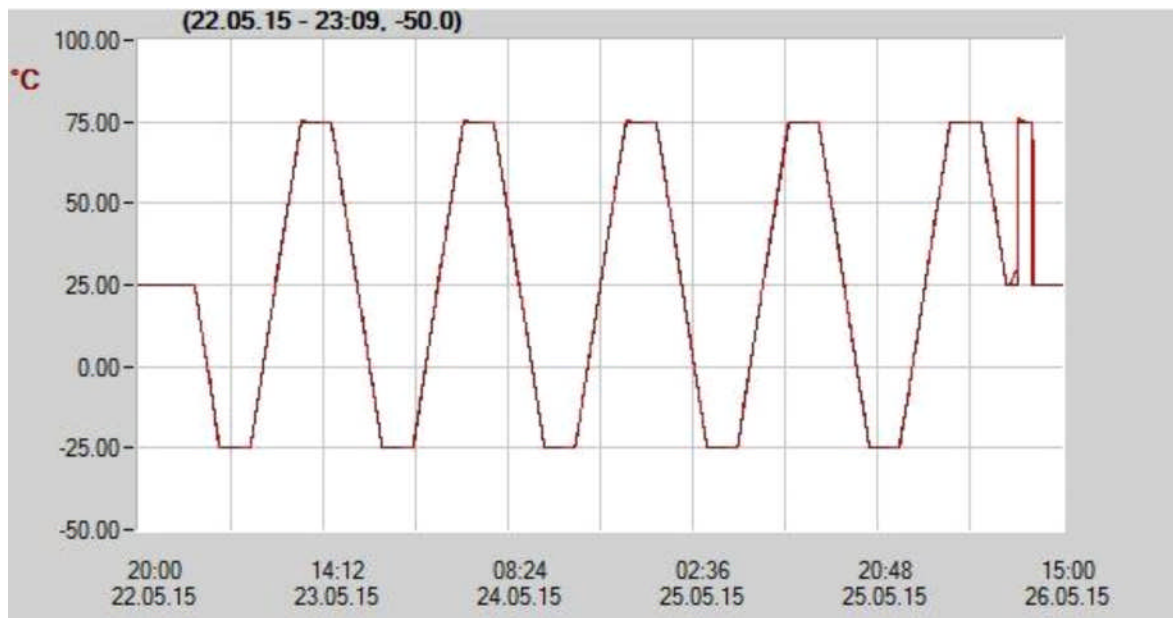


Diagram 3: Stress sequence of the climate test according to clause 2.1.5 (Test Nb: Change of temperature)

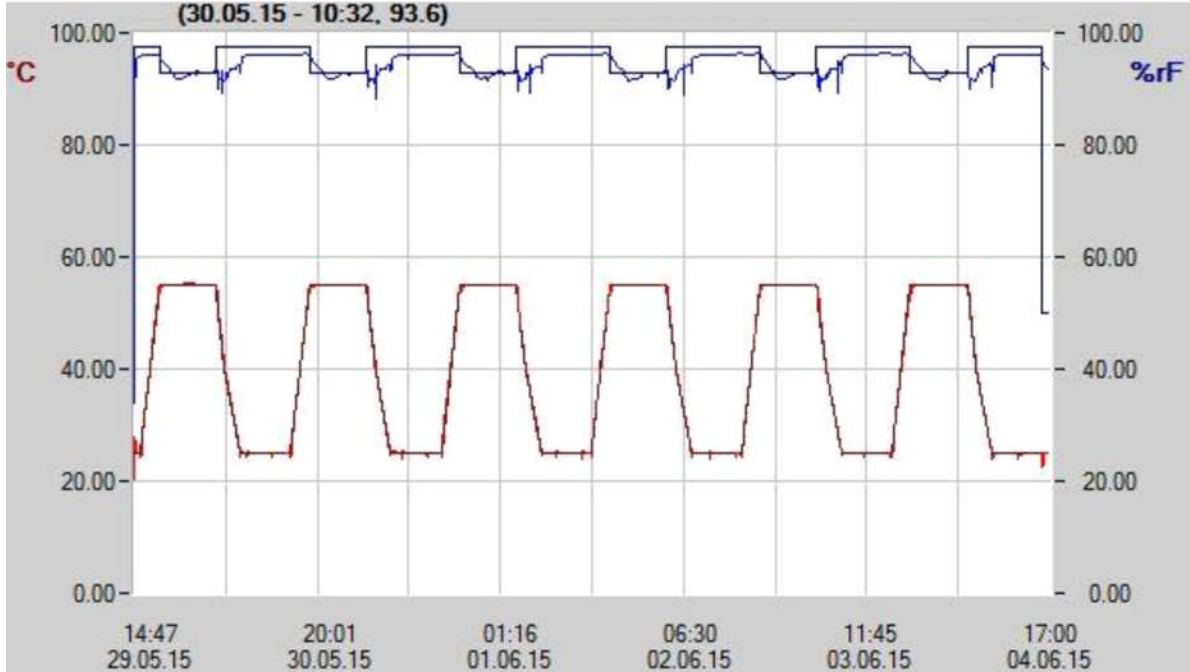


Diagram 4: Stress sequence of the climate test according to clause 2.1.6 (Test Db: Damp heat, cyclic)

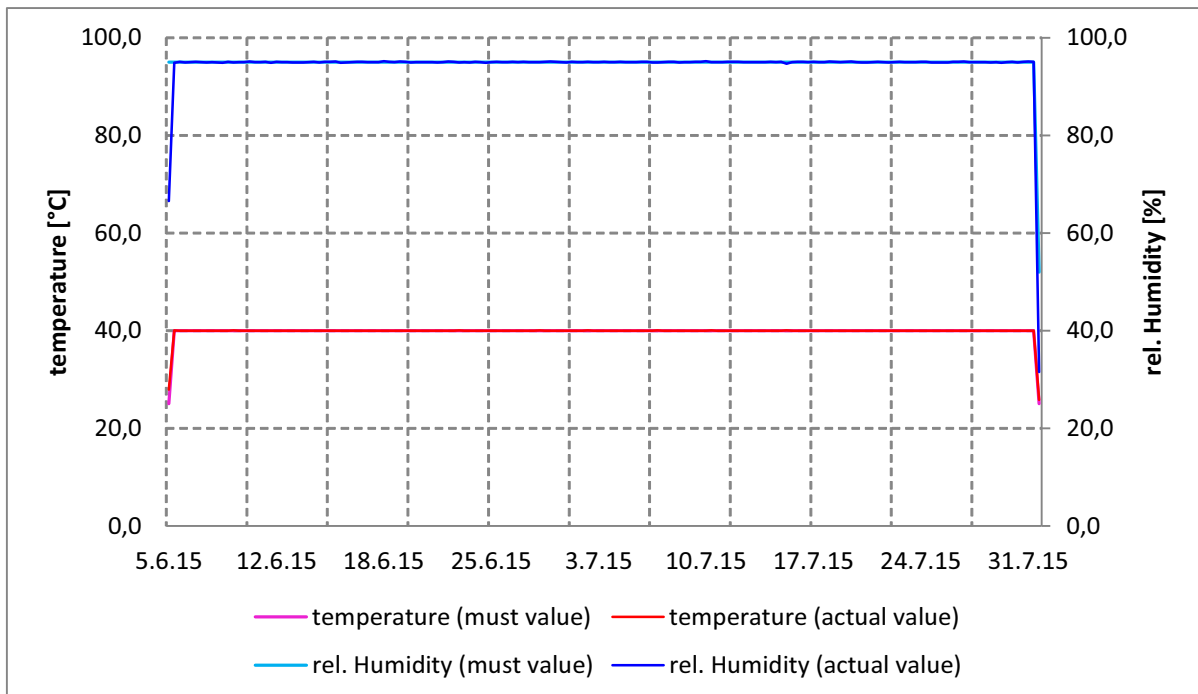


Diagram 5: Stress sequence of the climate test according to clause 2.1.7 (Test Cab: Damp heat, steady state)



## 4 Results

### 4.1 Visual inspection

No significant changes were detected in comparison with the initial state of the specimens at the inspections after the individual tests.

### 4.2 Performance tests

#### Operating Modes:

1. All Protection functions (trip at  $\pm 5\%$ ) were continuously active on all devices.
2. Between the devices EUT-9 and EUT-7 a gose communication (IEC 61850) was continuously active. The max. monitoring time here was 2000 ms.
3. On device EUT-13 (KE85) the continues fault recorder function (1 second interval) was permanent active.

#### Functional test:

1. Before and after each test case a functional test was realized by the client for each device.
2. Before and after each test the operational log of every device were checked.
3. During all tests in operating mode the life contacts of all devices were monitored (see Diagram 6 to Diagram 9). The voltage curves of each device are shown as blue lines (superimposed). No peaks (switching operations) were detected.

For details see attachment 1.

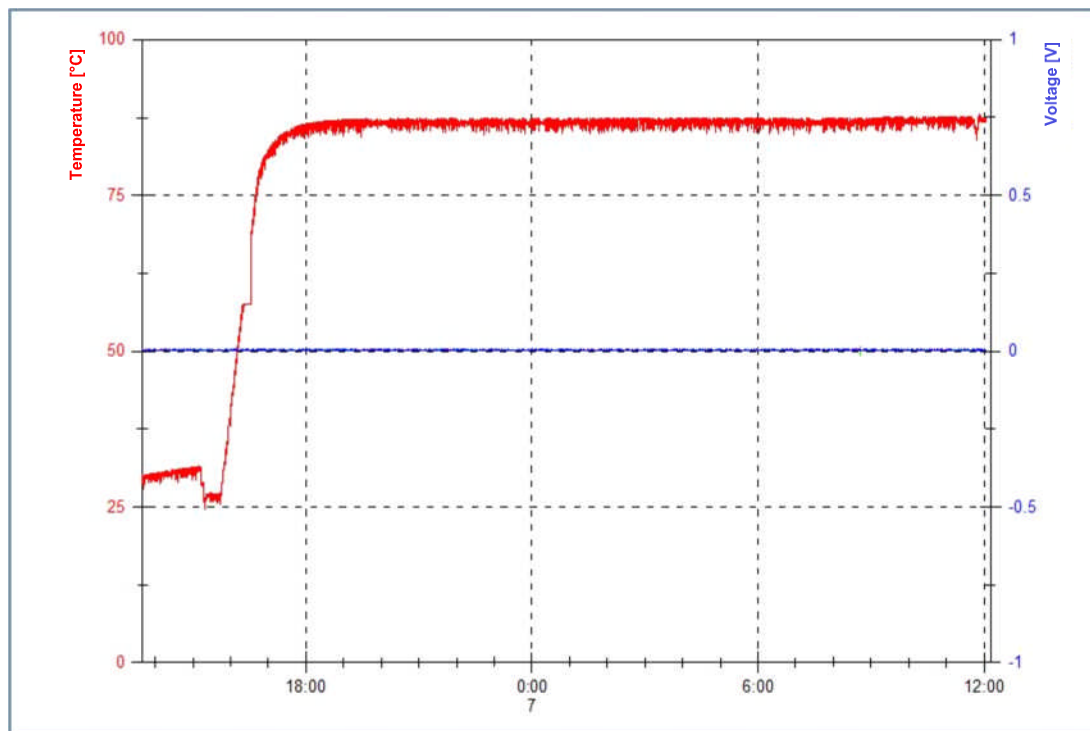


Diagram 6: Monitoring of life contacts during the climatic test according to clause 2.1.1 (test Bb (85 °C))

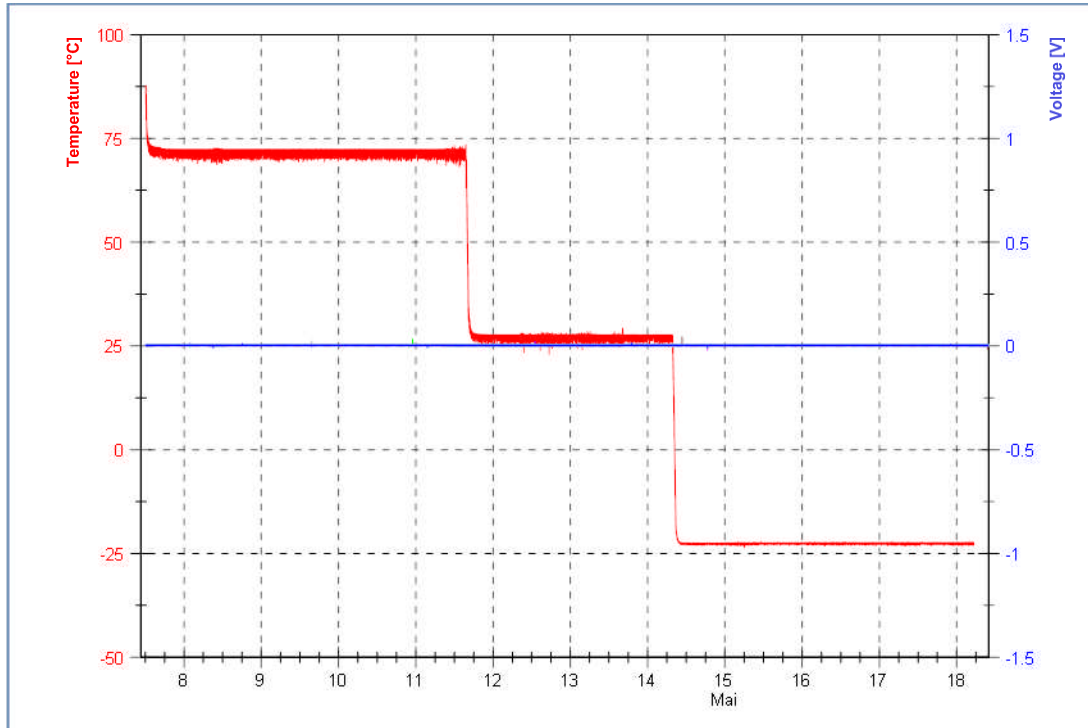


Diagram 7: Monitoring of life contacts during the climatic test according to clause 2.1.2 and clause 2.1.3 (test Bb 70 °C / test Ab -25 °C)

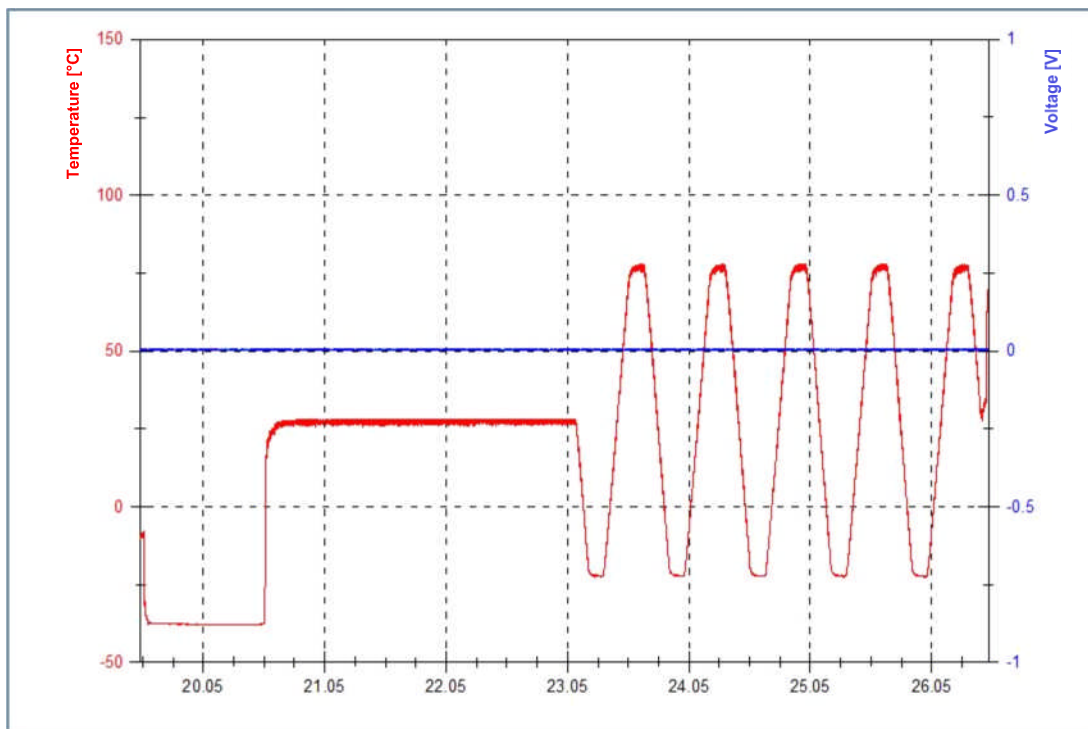


Diagram 8: Monitoring of life contacts during the climatic test according to clause 2.1.4 and clause 2.1.5 (test Ab -40 °C / test Nb)

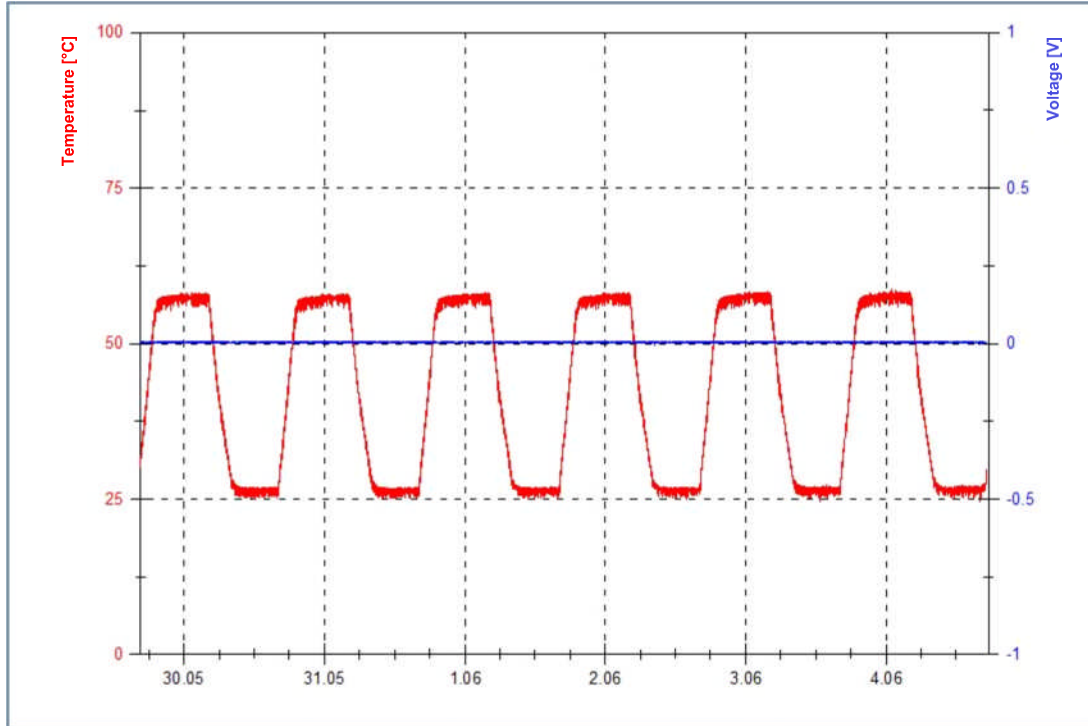


Diagram 9: Monitoring of life contacts during the climatic test according to clause 2.1.6 (test Db55)



## Test Settings

### Ramped Quantities

I L1; L2; L3 / Magnitude

### Ramp States

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 07-Mai-2015 11:36:01 Test End: 07-Mai-2015 11:36:13  
 User Name: Manager:  
 Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	954,0 mA	10,00 mA	10,00 mA	4,000 mA	+	42,80 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Test Object - Device Settings

### Device:

Name/description: EUT\_03 Manufacturer: SIEMENS  
 Device type: 7SJ82 Device address: 172.16.60.17  
 Serial/model number: BM1410001134

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
07.05.2015 11:28:09	Passed	

### Overcurrent Protection:

## Test Settings

functional test / dry heat +85°C

## Ramped Quantities

I L1; L2; L3 / Magnitude

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 07-Mai-2015 11:36:20 Test End: 07-Mai-2015 11:36:31  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,056 A	10,00 mA	10,00 mA	6,000 mA	+	11,70 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Undercurrent protection:

## Test Settings

### Ramped Quantities

I L1; L2; L3 / Magnitude

## Ramp States

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 07-Mai-2015 11:36:37 Test End: 07-Mai-2015 11:36:50  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	955,5 mA	10,00 mA	10,00 mA	5,500 mA	+	40,10 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

functional test / dry heat +85°C

**Test passed**

## Overvoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 07-Mai-2015 11:36:56 Test End: 07-Mai-2015 11:37:03  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	61,00 V	1,000 V	1,000 V	400,0 mV	+	25,20 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

**Test passed**

## Undervoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Ramp States

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 07-Mai-2015 11:37:10 Test End: 07-Mai-2015 11:37:18  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	55,10 V	1,000 V	1,000 V	300,0 mV	+	22,90 ms

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:**  
**Test passed**

## Test Object - Device Settings

### Device:

Name/description: EUT\_05

Manufacturer: SIEMENS

Device type: 7SJ82

Device address: 172.16.60.5

Serial/model number: BM1410001136

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
07.05.2015 11:35:20	Passed	

## Overcurrent Protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Test Module

Name: OMICRON Ramping

Version: 3.00 SR 1

Test Start: 07-Mai-2015 11:37:24

Test End: 07-Mai-2015 11:37:36

User Name:

Manager:

Company:



functional test / dry heat +85°C

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,056 A	10,00 mA	10,00 mA	5,500 mA	+	19,20 ms

Assess: + .. Passed x .. Failed o .. Not assessed

Test State:

Test passed

## Undercurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

#### Ramp

#### States

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 07-Mai-2015 11:37:42 Test End: 07-Mai-2015 11:37:55  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	955,0 mA	10,00 mA	10,00 mA	5,000 mA	+	21,90 ms

Assess: + .. Passed x .. Failed o .. Not assessed

Test State:

Test passed

## Overvoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

functional test / dry heat +85°C

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 07-Mai-2015 11:38:01 Test End: 07-Mai-2015 11:38:08  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	61,00 V	1,000 V	1,000 V	400,0 mV	+	27,50 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Undervoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Ramp States

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 07-Mai-2015 11:38:14 Test End: 07-Mai-2015 11:38:23  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	55,10 V	1,000 V	1,000 V	300,0 mV	+	16,90 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed





functional test / dry heat +85°C

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Tact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	61,00 V	1,000 V	1,000 V	400,0 mV	+	17,10 ms

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:**  
**Test passed**

## Undervoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

#### Ramp States

### Test Module

Name: OMICRON Ramping  
Test Start: 07-Mai-2015 11:39:18  
User Name:  
Company:

Version: 3.00 SR 1  
Test End: 07-Mai-2015 11:39:27  
Manager:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Tact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	55,10 V	1,000 V	1,000 V	300,0 mV	+	16,50 ms

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:**  
**Test passed**

## Test Object - Device Settings

Device:

functional test / dry heat +85°C

Name/description: EUT\_09  
Device type: 6MD86  
Serial/model number: BM1410001763

Manufacturer: SIEMENS  
Device address: 172.16.60.9

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
07.05.2015 11:35:26	Passed	

## Overcurrent Protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Test Module

Name: OMICRON Ramping      Version: 3.00 SR 1  
Test Start: 07-Mai-2015 11:39:33      Test End: 07-Mai-2015 11:39:45  
User Name:      Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,054 A	10,00 mA	10,00 mA	4,000 mA	+	29,50 ms

Assess: + .. Passed    x .. Failed    o .. Not assessed

### Test State:

Test passed

## Overvoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Test Module

Name: OMICRON Ramping      Version: 3.00 SR 1

functional test / dry heat +85°C

Test Start: 07-Mai-2015 11:42:02  
User Name:  
Company:

Test End: 07-Mai-2015 11:42:10  
Manager:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	61,00 V	1,000 V	1,000 V	400,0 mV	+	20,20 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Undervoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Ramp States

### Test Module

Name: OMICRON Ramping  
Test Start: 07-Mai-2015 11:40:15  
User Name:  
Company:

Version: 3.00 SR 1  
Test End: 07-Mai-2015 11:40:24  
Manager:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	55,10 V	1,000 V	1,000 V	300,0 mV	+	29,00 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed







## Test Object - Device Settings

### Device:

Name/description: EUT\_17  
 Device type: 7UT82  
 Serial/model number: BM1503002955

Manufacturer: SIEMENS  
 Device address: 172.16.60.17

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
11.05.2015 15:07:50	Passed	

## Overcurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Test Module

Name: OMICRON Ramping                      Version: 3.00 SR 1  
 Test Start: 11-Mai-2015 15:08:16            Test End: 11-Mai-2015 15:08:28  
 User Name:  
 Company:    Manager:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Tact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,053 A	10,00 mA	10,00 mA	2,500 mA	+	29,00 ms

Assess: + .. Passed    x .. Failed    o .. Not assessed

### Test State:

Test passed

## Undercurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

## Ramp States

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 11-Mai-2015 15:08:34 Test End: 11-Mai-2015 15:08:47  
 User Name: Manager:  
 Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	I L1; L2; L3	950,0 mA	953,5 mA	10,00 mA	10,00 mA	3,500 mA	+	28,30 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Test Object - Device Settings

### Device:

Name/description: EUT\_03 Manufacturer: SIEMENS  
 Device type: 7SJ82 Device address: 172.16.60.3  
 Serial/model number: BM1410001134

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
07.05.2015 11:28:09	Passed	

## Overcurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

**Test Module**

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 11-Mai-2015 15:08:53 Test End: 11-Mai-2015 15:09:04  
 User Name: Manager:  
 Company:

**Test Results****Assessment Results**

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,055 A	10,00 mA	10,00 mA	5,000 mA	+	19,20 ms

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:**

Test passed

**Undercurrent protection:****Test Settings****Ramped Quantities**

I L1; L2; L3 / Magnitude

**Ramp States****Test Module**

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 11-Mai-2015 15:09:10 Test End: 11-Mai-2015 15:09:23  
 User Name: Manager:  
 Company:

**Test Results****Assessment Results**

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	954,5 mA	10,00 mA	10,00 mA	4,500 mA	+	24,30 ms

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:**

Test passed

**Overvoltage protection:****Test Settings****Ramped Quantities**

V L1-E; L2-E; L3-E / Magnitude

**Test Module**

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 11-Mai-2015 15:09:29 Test End: 11-Mai-2015 15:09:37  
 User Name: Manager:  
 Company:

**Test Results****Assessment Results**

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	60,90 V	1,000 V	1,000 V	300,0 mV	+	29,50 ms

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:****Test passed****Undervoltage protection:****Test Settings****Ramped Quantities**

V L1-E; L2-E; L3-E / Magnitude

**Ramp States****Test Module**

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 11-Mai-2015 15:09:43 Test End: 11-Mai-2015 15:09:52  
 User Name: Manager:  
 Company:

**Test Results****Assessment Results**

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E;	54,80 V	55,00 V	1,000 V	1,000 V	200,0 mV	+	16,10 ms

functional test / Dry Heat +70°C

			L3-E							
Assess:	+ .. Passed	x .. Failed	o .. Not assessed							

**Test State:**  
**Test passed**

## Test Object - Device Settings

### Device:

Name/description: EUT\_05  
Device type: 7SJ82  
Serial/model number: BM1410001136

Manufacturer: SIEMENS  
Device address: 172.16.60.5

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
11.05.2015 15:07:56	Passed	

## Overcurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Test Module

Name: OMICRON Ramping  
Test Start: 11-Mai-2015 15:09:58  
User Name:  
Company:

Version: 3.00 SR 1  
Test End: 11-Mai-2015 15:10:09  
Manager:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Tact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,055 A	10,00 mA	10,00 mA	4,500 mA	+	21,20 ms

Assess: + .. Passed x .. Failed o .. Not assessed



## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	60,90 V	1,000 V	1,000 V	300,0 mV	+	36,70 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Undervoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Ramp States

### Test Module

Name:	OMICRON Ramping	Version:	3.00 SR 1
Test Start:	11-Mai-2015 15:10:47	Test End:	11-Mai-2015 15:10:56
User Name:		Manager:	
Company:			

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	55,10 V	1,000 V	1,000 V	300,0 mV	+	37,40 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Test Object - Device Settings



functional test / Dry Heat +70°C

### Device:

Name/description: EUT\_07  
Device type: 7SJ87  
Serial/model number: BM1410002158

Manufacturer: SIEMENS  
Device address: 172.16.60.7

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
11.05.2015 15:07:59	Passed	

### Overcurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Test Module

Name: OMICRON Ramping      Version: 3.00 SR 1  
Test Start: 11-Mai-2015 15:11:02      Test End: 11-Mai-2015 15:11:14  
User Name:      Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,055 A	10,00 mA	10,00 mA	5,000 mA	+	22,10 ms

Assess: + .. Passed    x .. Failed    o .. Not assessed

### Test State:

Test passed

### Undercurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Ramp

## States

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 11-Mai-2015 15:11:20 Test End: 11-Mai-2015 15:11:32  
 User Name: Manager:  
 Company:

### Test Results

#### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	I L1; L2; L3	950,0 mA	955,5 mA	10,00 mA	10,00 mA	5,500 mA	+	25,50 ms

Assess: + .. Passed x .. Failed o .. Not assessed

#### Test State:

Test passed

### Overvoltage protection:

#### Test Settings

##### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 11-Mai-2015 15:11:38 Test End: 11-Mai-2015 15:11:46  
 User Name: Manager:  
 Company:

### Test Results

#### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	60,90 V	1,000 V	1,000 V	300,0 mV	+	31,00 ms

Assess: + .. Passed x .. Failed o .. Not assessed

#### Test State:

Test passed

### Undervoltage protection:

## Test Settings

### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Ramp States

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 11-Mai-2015 15:11:52 Test End: 11-Mai-2015 15:12:00  
 User Name: Manager:  
 Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	55,10 V	1,000 V	1,000 V	300,0 mV	+	26,50 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Test Object - Device Settings

### Device:

Name/description: EUT\_09 Manufacturer: SIEMENS  
 Device type: 6MD86 Device address: 172.16.60.9  
 Serial/model number: BM1410001763

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
07.05.2015 11:35:26	Passed	

### Overcurrent protection:

## Test Settings

### Ramped Quantities

I L1; L2; L3 / Magnitude

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 11-Mai-2015 15:12:06 Test End: 11-Mai-2015 15:12:18  
 User Name: Manager:  
 Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	I L1; L2; L3	1,050 A	1,054 A	10,00 mA	10,00 mA	4,000 mA	+	15,20 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Overvoltage protection:

## Test Settings

### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 11-Mai-2015 15:12:24 Test End: 11-Mai-2015 15:12:31  
 User Name: Manager:  
 Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	60,90 V	1,000 V	1,000 V	300,0 mV	+	28,00 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Test Settings

### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Ramp States

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 11-Mai-2015 15:12:37 Test End: 11-Mai-2015 15:12:46  
 User Name: Manager:  
 Company:

### Test Results

#### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	55,10 V	1,000 V	1,000 V	300,0 mV	+	29,10 ms

Assess: + .. Passed x .. Failed o .. Not assessed

#### Test State:

Test passed

### Test Object - Device Settings

#### Device:

Name/description: EUT\_11 Manufacturer: SIEMENS  
 Device type: 7UT85 Device address: 172.16.60.11  
 Serial/model number: BM1410002174

### Hardware Configuration

#### Test Equipment

Type	Serial Number
CMC256plus	QF467R

#### Hardware Check

---

Performed At	Result	Details
11.05.2015 15:08:06	Passed	

## Overcurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 11-Mai-2015 15:12:52 Test End: 11-Mai-2015 15:13:04  
 User Name: Manager:  
 Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,055 A	10,00 mA	10,00 mA	4,500 mA	+	23,40 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Undercurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Ramp States

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 11-Mai-2015 15:13:10 Test End: 11-Mai-2015 15:13:22  
 User Name: Manager:  
 Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	955,5 mA	10,00 mA	10,00 mA	5,500 mA	+	21,40 ms

Assess: + .. Passed x .. Failed o .. Not assessed

functional test / Dry Heat +70°C

**Test State:**  
**Test passed**

functional test / dry cold -25°C

## Test Object - Device Settings

### Device:

Name/description: EUT\_17  
Device type: 7UT82  
Serial/model number: BM1503002955

Manufacturer: SIEMENS  
Device address: 172.16.60.17

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
18.05.2015 10:50:33	Passed	

## Undercurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Ramp States

### Test Module

Name: OMICRON Ramping  
Test Start: 18-Mai-2015 10:50:59  
User Name:  
Company:

Version: 3.00 SR 1  
Test End: 18-Mai-2015 10:51:12  
Manager:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Tact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	946,5 mA	10,00 mA	10,00 mA	-3,500 mA	+	19,80 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Overcurrent Protection:



functional test / dry cold -25°C

## Test Settings

### Ramped Quantities

I L1; L2; L3 / Magnitude

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 18-Mai-2015 10:51:18 Test End: 18-Mai-2015 10:51:30  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,046 A	10,00 mA	10,00 mA	-4,500 mA	+	30,70 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Test Object - Device Settings

### Device:

Name/description: EUT\_03 Manufacturer: SIEMENS  
Device type: 7SJ82 Device address: 172.16.60.3  
Serial/model number: BM1410001134

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
07.05.2015 10:35:04	Passed	

## Overcurrent Protection:

## Test Settings

### Ramped Quantities

I L1; L2; L3 / Magnitude

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1

functional test / dry cold -25°C

Test Start: 18-Mai-2015 10:51:36  
User Name:  
Company:

Test End: 18-Mai-2015 10:51:48  
Manager:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,047 A	10,00 mA	10,00 mA	-3,000 mA	+	20,20 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Undercurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Ramp States

### Test Module

Name: OMICRON Ramping  
Test Start: 18-Mai-2015 10:51:54  
User Name:  
Company:

Version: 3.00 SR 1  
Test End: 18-Mai-2015 10:52:06  
Manager:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	947,5 mA	10,00 mA	10,00 mA	-2,500 mA	+	14,90 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Overvoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

functional test / dry cold -25°C

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 18-Mai-2015 10:52:12 Test End: 18-Mai-2015 10:52:20  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Tact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	60,50 V	1,000 V	1,000 V	-100,0 mV	+	21,90 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Undervoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Ramp States

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 18-Mai-2015 10:52:26 Test End: 18-Mai-2015 10:52:34  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Tact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	54,60 V	1,000 V	1,000 V	-200,0 mV	+	20,60 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

functional test / dry cold -25°C

**Test passed**

## Test Object - Device Settings

### Device:

Name/description: EUT\_05  
Device type: 7SJ82  
Serial/model number: BM1410001136

Manufacturer: SIEMENS  
Device address: 172.16.60.5

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
4/30/2015 10:26:00 AM	Passed	

## Overcurrent Protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

## Test Module

Name: OMICRON Ramping  
Test Start: 18-Mai-2015 10:52:40  
User Name:  
Company:

Version: 3.00 SR 1  
Test End: 18-Mai-2015 10:52:52  
Manager:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Tact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,047 A	10,00 mA	10,00 mA	-3,500 mA	+	25,90 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

**Test passed**

## Undercurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

#### Ramp States

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 18-Mai-2015 10:52:58 Test End: 18-Mai-2015 10:53:11  
 User Name: Manager:  
 Company:

### Test Results

#### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	947,0 mA	10,00 mA	10,00 mA	-3,000 mA	+	27,20 ms

Assess: + .. Passed x .. Failed o .. Not assessed

#### Test State:

Test passed

## Overvoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 18-Mai-2015 10:53:17 Test End: 18-Mai-2015 10:53:25  
 User Name: Manager:  
 Company:

### Test Results

#### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	60,50 V	1,000 V	1,000 V	-100,0 mV	+	18,60 ms

Assess: + .. Passed x .. Failed o .. Not assessed

functional test / dry cold -25°C

**Test State:**  
**Test passed**

## Undervoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

#### Ramp States

### Test Module

Name: OMICRON Ramping                      Version: 3.00 SR 1  
Test Start: 18-Mai-2015 10:53:31              Test End: 18-Mai-2015 10:53:39  
User Name:    Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	54,60 V	1,000 V	1,000 V	-200,0 mV	+	17,70 ms

Assess: + .. Passed    x .. Failed    o .. Not assessed

**Test State:**  
**Test passed**

## Test Object - Device Settings

### Device:

Name/description: EUT\_07                                      Manufacturer: SIEMENS  
Device type: 7SJ87    Device address: 172.16.60.7  
Serial/model number: BM1410002158

## Hardware Configuration

functional test / dry cold -25°C

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
4/30/2015 10:26:03 AM	Passed	

### Overcurrent Protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 18-Mai-2015 10:53:45 Test End: 18-Mai-2015 10:53:57  
User Name: Manager:  
Company:

### Test Results

#### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Tact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,048 A	10,00 mA	10,00 mA	-2,000 mA	+	12,00 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

### Undercurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Ramp States

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 18-Mai-2015 10:54:03 Test End: 18-Mai-2015 10:54:15  
User Name: Manager:  
Company:

### Test Results

functional test / dry cold -25°C

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	948,0 mA	10,00 mA	10,00 mA	-2,000 mA	+	16,30 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

### Overvoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Test Module

Name: OMICRON Ramping  
Test Start: 18-Mai-2015 10:54:21  
User Name:  
Company:

Version: 3.00 SR 1  
Test End: 18-Mai-2015 10:54:29  
Manager:

### Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	60,50 V	1,000 V	1,000 V	-100,0 mV	+	25,20 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

### Undervoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Ramp States



functional test / dry cold -25°C

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 18-Mai-2015 10:54:35 Test End: 18-Mai-2015 10:54:43  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	54,70 V	1,000 V	1,000 V	-100,0 mV	+	30,80 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Test Object - Device Settings

### Device:

Name/description: EUT\_09 Manufacturer: SIEMENS  
Device type: 6MD86 Device address: 172.16.60.9  
Serial/model number: BM1410001763

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
4/30/2015 10:26:06 AM	Passed	

## Overcurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 18-Mai-2015 10:54:49 Test End: 18-Mai-2015 10:55:01

functional test / dry cold -25°C

User Name:  
Company:

Manager:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,048 A	10,00 mA	10,00 mA	-2,000 mA	+	27,50 ms

Assess: + .. Passed x .. Failed o .. Not assessed

Test State:

Test passed

## Overvoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

## Test Module

Name: OMICRON Ramping  
Test Start: 18-Mai-2015 10:55:07  
User Name:  
Company:

Version: 3.00 SR 1  
Test End: 18-Mai-2015 10:55:15  
Manager:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	60,50 V	1,000 V	1,000 V	-100,0 mV	+	23,80 ms

Assess: + .. Passed x .. Failed o .. Not assessed

Test State:

Test passed

## Undervoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

functional test / dry cold -25°C

## Ramp States

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 18-Mai-2015 10:55:21 Test End: 18-Mai-2015 10:55:30  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	54,70 V	1,000 V	1,000 V	-100,0 mV	+	31,30 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Test Object - Device Settings

### Device:

Name/description: EUT\_11 Manufacturer: SIEMENS  
Device type: 7UT85 Device address: 172.16.60.11  
Serial/model number: BM1410002174

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
18.05.2015 10:50:48	Passed	

## Overcurrent protection:

## Test Settings

### Ramped Quantities

I L1; L2; L3 / Magnitude

functional test / dry cold -25°C

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 18-Mai-2015 10:55:35 Test End: 18-Mai-2015 10:55:47  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,047 A	10,00 mA	10,00 mA	-3,500 mA	+	34,20 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Undercurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Ramp States

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 18-Mai-2015 10:55:53 Test End: 18-Mai-2015 10:56:05  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	948,0 mA	10,00 mA	10,00 mA	-2,000 mA	+	18,90 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

functional test / dry cold -25°C

functional test / dry cold -40°C

## Test Object - Device Settings

### Device:

Name/description: EUT\_17  
Device type: 7UT82  
Serial/model number: BM1503002955

Manufacturer: SIEMENS  
Device address: 172.16.60.17

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
18.05.2015 10:50:33	Passed	

## Undercurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Ramp States

### Test Module

Name: OMICRON Ramping  
Test Start: 20-Mai-2015 11:27:22  
User Name:  
Company:

Version: 3.00 SR 1  
Test End: 20-Mai-2015 11:27:35  
Manager:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	945,0 mA	10,00 mA	10,00 mA	-5,000 mA	+	28,40 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Overcurrent protection:

functional test / dry cold -40°C

## Test Settings

### Ramped Quantities

I L1; L2; L3 / Magnitude

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 20-Mai-2015 11:27:41 Test End: 20-Mai-2015 11:27:52  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,044 A	10,00 mA	10,00 mA	-6,000 mA	+	24,70 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Test Object - Device Settings

### Device:

Name/description: EUT\_03 Manufacturer: SIEMENS  
Device type: 7SJ82 Device address: 172.16.60.3  
Serial/model number: BM1410001134

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
07.05.2015 10:35:04	Passed	

## Overcurrent protection:

## Test Settings

### Ramped Quantities

I L1; L2; L3 / Magnitude

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1

functional test / dry cold -40°C

Test Start: 20-Mai-2015 11:27:58  
User Name:  
Company:

Test End: 20-Mai-2015 11:28:09  
Manager:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,045 A	10,00 mA	10,00 mA	-5,000 mA	+	26,10 ms

Assess: + .. Passed x .. Failed o .. Not assessed

Test State:  
Test passed

## Undercurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

#### Ramp States

### Test Module

Name: OMICRON Ramping  
Test Start: 20-Mai-2015 11:28:15  
User Name:  
Company:

Version: 3.00 SR 1  
Test End: 20-Mai-2015 11:28:28  
Manager:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	946,0 mA	10,00 mA	10,00 mA	-4,000 mA	+	18,80 ms

Assess: + .. Passed x .. Failed o .. Not assessed

Test State:  
Test passed



functional test / dry cold -40°C

## Overvoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 20-Mai-2015 11:28:33 Test End: 20-Mai-2015 11:28:41  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	60,40 V	1,000 V	1,000 V	-200,0 mV	+	19,90 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Undervoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Ramp States

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 20-Mai-2015 11:28:47 Test End: 20-Mai-2015 11:28:55  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	54,60 V	1,000 V	1,000 V	-200,0 mV	+	35,80 ms



functional test / dry cold -40°C

**Test State:**  
Test passed

### Undercurrent protection:

#### Test Settings

##### Ramped Quantities

I L1; L2; L3 / Magnitude

#### Ramp States

#### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 20-Mai-2015 11:29:18 Test End: 20-Mai-2015 11:29:31  
User Name: Manager:  
Company:

### Test Results

#### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	945,5 mA	10,00 mA	10,00 mA	-4,500 mA	+	28,00 ms

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:**  
Test passed

### Overvoltage protection:

#### Test Settings

##### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

#### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 20-Mai-2015 11:29:37 Test End: 20-Mai-2015 11:29:44  
User Name: Manager:  
Company:

### Test Results

functional test / dry cold -40°C

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Tact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	60,40 V	1,000 V	1,000 V	-200,0 mV	+	24,00 ms

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:**  
Test passed

### Undervoltage protection:

#### Test Settings

##### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

#### Ramp States

#### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 20-Mai-2015 11:29:50 Test End: 20-Mai-2015 11:29:58  
User Name: Manager:  
Company:

### Test Results

#### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Tact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	54,60 V	1,000 V	1,000 V	-200,0 mV	+	56,50 ms

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:**  
Test passed

### Test Object - Device Settings

#### Device:

Name/description: EUT\_07 Manufacturer: SIEMENS

functional test / dry cold -40°C

Device type: 7SJ87  
Serial/model number: BM1410002158

Device address: 172.16.60.7

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
4/30/2015 10:26:03 AM	Passed	

## Overcurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Test Module

Name: OMICRON Ramping      Version: 3.00 SR 1  
Test Start: 20-Mai-2015 11:30:04      Test End: 20-Mai-2015 11:30:16  
User Name:      Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	I L1; L2; L3	1,050 A	1,046 A	10,00 mA	10,00 mA	-4,000 mA	+	16,20 ms

Assess: + .. Passed    x .. Failed    o .. Not assessed

### Test State:

Test passed

## Undercurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Ramp States

functional test / dry cold -40°C

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 20-Mai-2015 11:30:22 Test End: 20-Mai-2015 11:30:34  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	946,5 mA	10,00 mA	10,00 mA	-3,500 mA	+	1,300 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Overvoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 20-Mai-2015 11:30:40 Test End: 20-Mai-2015 11:30:48  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	60,40 V	1,000 V	1,000 V	-200,0 mV	+	23,10 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Undervoltage protection:

functional test / dry cold -40°C

## Test Settings

### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Ramp States

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 20-Mai-2015 11:30:53 Test End: 20-Mai-2015 11:31:02  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	54,60 V	1,000 V	1,000 V	-200,0 mV	+	25,10 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Test Object - Device Settings

### Device:

Name/description: EUT\_09 Manufacturer: SIEMENS  
Device type: 6MD86 Device address: 172.16.60.9  
Serial/model number: BM1410001763

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
4/30/2015 10:26:06 AM	Passed	

### Overcurrent protection:

## Test Settings

### Ramped Quantities

functional test / dry cold -40°C

I L1; L2; L3 / Magnitude

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 20-Mai-2015 11:31:07 Test End: 20-Mai-2015 11:31:19  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	I L1; L2; L3	1,050 A	1,047 A	10,00 mA	10,00 mA	-3,500 mA	+	25,90 ms

Assess: + .. Passed x .. Failed o .. Not assessed

Test State:

Test passed

## Overvoltage protection:

## Test Settings

### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 20-Mai-2015 11:31:25 Test End: 20-Mai-2015 11:31:33  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	60,40 V	1,000 V	1,000 V	-200,0 mV	+	29,50 ms

Assess: + .. Passed x .. Failed o .. Not assessed

Test State:

Test passed



functional test / dry cold -40°C

## Undervoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

#### Ramp States

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 20-Mai-2015 11:31:38 Test End: 20-Mai-2015 11:31:47  
User Name: Manager:  
Company:

### Test Results

#### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	54,60 V	1,000 V	1,000 V	-200,0 mV	+	27,80 ms

Assess: + .. Passed x .. Failed o .. Not assessed

Test State:  
Test passed

### Test Object - Device Settings

#### Device:

Name/description: EUT\_11 Manufacturer: SIEMENS  
Device type: 7UT85 Device address: 172.16.60.11  
Serial/model number: BM1410002174

### Hardware Configuration

#### Test Equipment

Type	Serial Number
CMC256plus	QF467R

#### Hardware Check

Performed At	Result	Details
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18.05.2015 10:50:48 | Passed

**Overcurrent protection:****Test Settings****Ramped Quantities**

I L1; L2; L3 / Magnitude

**Test Module**

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 20-Mai-2015 11:31:53 Test End: 20-Mai-2015 11:32:04  
 User Name: Manager:  
 Company:

**Test Results****Assessment Results**

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,045 A	10,00 mA	10,00 mA	-5,000 mA	+	23,70 ms

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:**

Test passed

**Undercurrent protection:****Test Settings****Ramped Quantities**

I L1; L2; L3 / Magnitude

**Ramp States****Test Module**

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 20-Mai-2015 11:32:10 Test End: 20-Mai-2015 11:32:22  
 User Name: Manager:  
 Company:

**Test Results****Assessment Results**

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	946,5 mA	10,00 mA	10,00 mA	-3,500 mA	+	25,10 ms

Assess: + .. Passed x .. Failed o .. Not assessed

functional test / dry cold -40°C

**Test State:**  
**Test passed**

functional test / during ramp -25°C to +75°C

## Test Object - Device Settings

### Device:

Name/description: EUT\_17  
Device type: 7UT82  
Serial/model number: BM1503002955

Manufacturer: SIEMENS  
Device address: 172.16.60.17

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
26.05.2015 10:47:40	Passed	

## Undercurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Ramp States

## Test Module

Name: OMICRON Ramping  
Test Start: 29-Mai-2015 14:35:06  
User Name:  
Company:

Version: 3.00 SR 1  
Test End: 29-Mai-2015 14:35:19  
Manager:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	950,5 mA	10,00 mA	10,00 mA	500,0 µA	+	28,90 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Overcurrent protection:

functional test / during ramp -25°C to +75°C

## Test Settings

### Ramped Quantities

I L1; L2; L3 / Magnitude

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 29-Mai-2015 14:35:25 Test End: 29-Mai-2015 14:35:37  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,050 A	10,00 mA	10,00 mA	0,000 A	+	15,60 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Test Object - Device Settings

### Device:

Name/description: EUT\_03 Manufacturer: SIEMENS  
Device type: 7SJ82 Device address: 172.16.60.3  
Serial/model number: BM1410001134

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
07.05.2015 10:35:04	Passed	

## Overcurrent protection:

## Test Settings

### Ramped Quantities

I L1; L2; L3 / Magnitude

## Test Module

functional test / during ramp -25°C to +75°C

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 29-Mai-2015 14:35:43 Test End: 29-Mai-2015 14:35:56  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,052 A	10,00 mA	10,00 mA	1,500 mA	+	28,00 ms

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:**  
**Test passed**

## Undercurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Ramp States

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 29-Mai-2015 14:36:02 Test End: 29-Mai-2015 14:36:13  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	951,5 mA	10,00 mA	10,00 mA	1,500 mA	+	14,40 ms

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:**  
**Test passed**

functional test / during ramp -25°C to +75°C

## Overvoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 29-Mai-2015 14:36:19 Test End: 29-Mai-2015 14:36:27  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	60,80 V	1,000 V	1,000 V	200,0 mV	+	14,20 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Undervoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Ramp States

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 29-Mai-2015 14:36:34 Test End: 29-Mai-2015 14:36:42  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	54,90 V	1,000 V	1,000 V	100,0 mV	+	24,10 ms

Assess: + .. Passed x .. Failed o .. Not assessed

functional test / during ramp -25°C to +75°C

**Test State:**  
**Test passed**

## Test Object - Device Settings

### Device:

Name/description: EUT\_05  
Device type: 7SJ82  
Serial/model number: BM1410001136  
Manufacturer: SIEMENS  
Device address: 172.16.60.5

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
4/30/2015 10:26:00 AM	Passed	

## Overcurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Test Module

Name: OMICRON Ramping  
Version: 3.00 SR 1  
Test Start: 29-Mai-2015 14:36:48  
Test End: 29-Mai-2015 14:37:00  
User Name:  
Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,052 A	10,00 mA	10,00 mA	1,500 mA	+	21,50 ms

Assess: + .. Passed x .. Failed o .. Not assessed



functional test / during ramp -25°C to +75°C

**Test State:**  
Test passed

### Undercurrent protection:

#### Test Settings

##### Ramped Quantities

I L1; L2; L3 / Magnitude

#### Ramp States

#### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 29-Mai-2015 14:37:06 Test End: 29-Mai-2015 14:37:18  
User Name: Manager:  
Company:

### Test Results

#### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	951,5 mA	10,00 mA	10,00 mA	1,500 mA	+	17,60 ms

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:**  
Test passed

### Overvoltage protection:

#### Test Settings

##### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

#### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 29-Mai-2015 14:37:25 Test End: 29-Mai-2015 14:37:33  
User Name: Manager:  
Company:

### Test Results

#### Assessment Results

functional test / during ramp -25°C to +75°C

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	60,80 V	1,000 V	1,000 V	200,0 mV	+	16,90 ms

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:**  
**Test passed**

## Undervoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

#### Ramp States

### Test Module

Name: OMICRON Ramping  
Test Start: 29-Mai-2015 14:37:39  
User Name:  
Company:

Version: 3.00 SR 1  
Test End: 29-Mai-2015 14:37:47  
Manager:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	54,90 V	1,000 V	1,000 V	100,0 mV	+	31,30 ms

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:**  
**Test passed**

## Test Object - Device Settings

functional test / during ramp -25°C to +75°C

**Device:**

Name/description: EUT\_07  
Device type: 7SJ87  
Serial/model number: BM1410002158

Manufacturer: SIEMENS  
Device address: 172.16.60.7

**Hardware Configuration**

**Test Equipment**

Type	Serial Number
CMC256plus	QF467R

**Hardware Check**

Performed At	Result	Details
4/30/2015 10:26:03 AM	Passed	

**Overcurrent protection:**

**Test Settings**

**Ramped Quantities**

I L1; L2; L3 / Magnitude

**Test Module**

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 29-Mai-2015 14:37:53 Test End: 29-Mai-2015 14:38:06  
User Name: Manager:  
Company:

**Test Results**

**Assessment Results**

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,052 A	10,00 mA	10,00 mA	2,000 mA	+	29,30 ms

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:**

Test passed

**Undercurrent protection:**

**Test Settings**

**Ramped Quantities**

I L1; L2; L3 / Magnitude

**Ramp States**

functional test / during ramp -25°C to +75°C

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 29-Mai-2015 14:38:12 Test End: 29-Mai-2015 14:38:24  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	952,0 mA	10,00 mA	10,00 mA	2,000 mA	+	22,20 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Overvoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 29-Mai-2015 14:38:29 Test End: 29-Mai-2015 14:38:37  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	60,80 V	1,000 V	1,000 V	200,0 mV	+	20,10 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Undervoltage protection:

functional test / during ramp -25°C to +75°C

## Test Settings

### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Ramp States

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 29-Mai-2015 14:38:44 Test End: 29-Mai-2015 14:38:52  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	54,90 V	1,000 V	1,000 V	100,0 mV	+	18,90 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Test Object - Device Settings

### Device:

Name/description: EUT\_09 Manufacturer: SIEMENS  
Device type: 6MD86 Device address: 172.16.60.9  
Serial/model number: BM1410001763

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
4/30/2015 10:26:06 AM	Passed	

## Overcurrent protection:

## Test Settings

### Ramped Quantities

functional test / during ramp -25°C to +75°C

I L1; L2; L3 / Magnitude

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 29-Mai-2015 14:38:58 Test End: 29-Mai-2015 14:39:10  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	I L1; L2; L3	1,050 A	1,052 A	10,00 mA	10,00 mA	2,000 mA	+	27,50 ms

Assess: + .. Passed x .. Failed o .. Not assessed

Test State:

Test passed

## Overvoltage protection:

## Test Settings

### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 29-Mai-2015 14:39:16 Test End: 29-Mai-2015 14:39:25  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	60,80 V	1,000 V	1,000 V	200,0 mV	+	16,00 ms

Assess: + .. Passed x .. Failed o .. Not assessed

Test State:

Test passed

## Undervoltage protection:

functional test / during ramp -25°C to +75°C

## Test Settings

### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Ramp States

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 29-Mai-2015 14:39:31 Test End: 29-Mai-2015 14:39:39  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	54,90 V	1,000 V	1,000 V	100,0 mV	+	20,90 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Test Object - Device Settings

### Device:

Name/description: EUT\_11 Manufacturer: SIEMENS  
Device type: 7UT85 Device address: 172.16.60.11  
Serial/model number: BM1410002174

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
18.05.2015 10:50:48	Passed	

functional test / during ramp -25°C to +75°C

## Overcurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 29-Mai-2015 14:39:45 Test End: 29-Mai-2015 14:39:57  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,051 A	10,00 mA	10,00 mA	1,000 mA	+	33,80 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Undercurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Ramp States

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 29-Mai-2015 14:40:03 Test End: 29-Mai-2015 14:40:15  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	952,5 mA	10,00 mA	10,00 mA	2,500 mA	+	27,10 ms

Assess: + .. Passed x .. Failed o .. Not assessed



functional test / during ramp -25°C to +75°C

**Test State:**  
**Test passed**

functional test / end of ramp -25°C to +75°C

## Test Object - Device Settings

### Device:

Name/description: EUT\_17  
Device type: 7UT82  
Serial/model number: BM1503002955

Manufacturer: SIEMENS  
Device address: 172.16.60.17

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
26.05.2015 10:47:40	Passed	

## Undercurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Ramp States

### Test Module

Name: OMICRON Ramping  
Test Start: 04-Jun-2015 10:41:09  
User Name:  
Company:

Version: 3.00 SR 1  
Test End: 04-Jun-2015 10:41:21  
Manager:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	950,0 mA	10,00 mA	10,00 mA	0,000 A	+	22,70 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

functional test / end of ramp -25°C to +75°C

## Overcurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Test Module

Name: OMICRON Ramping                      Version: 3.00 SR 1  
Test Start: 04-Jun-2015 10:41:27              Test End: 04-Jun-2015 10:41:39  
User Name:    Manager:  
Company:

### Test Results

#### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,050 A	10,00 mA	10,00 mA	-500,0 µA	+	40,70 ms

Assess: + .. Passed    x .. Failed    o .. Not assessed

#### Test State:

Test passed

### Test Object - Device Settings

#### Device:

Name/description: EUT\_03                      Manufacturer: SIEMENS  
Device type: 7SJ82                              Device address: 172.16.60.3  
Serial/model number: BM1410001134

### Hardware Configuration

#### Test Equipment

Type	Serial Number
CMC256plus	QF467R

#### Hardware Check

Performed At	Result	Details
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07.05.2015 10:35:04 | Passed |

### Overcurrent protection:

#### Test Settings

##### Ramped Quantities

| L1; L2; L3 / Magnitude

#### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 04-Jun-2015 10:41:45 Test End: 04-Jun-2015 10:41:58  
 User Name: Manager:  
 Company:

### Test Results

#### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,052 A	10,00 mA	10,00 mA	1,500 mA	+	21,50 ms

Assess: + .. Passed x .. Failed o .. Not assessed

#### Test State:

Test passed

### Undercurrent protection:

#### Test Settings

##### Ramped Quantities

| L1; L2; L3 / Magnitude

#### Ramp States

#### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 04-Jun-2015 10:42:04 Test End: 04-Jun-2015 10:42:16  
 User Name: Manager:  
 Company:

### Test Results

#### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2;	950,0 mA	951,5 mA	10,00 mA	10,00 mA	1,500 mA	+	18,60 ms

functional test / end of ramp -25°C to +75°C

			L3							
Assess:	+ .. Passed	x .. Failed	o .. Not assessed							

**Test State:**  
Test passed

### Overvoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 04-Jun-2015 10:42:22 Test End: 04-Jun-2015 10:42:30  
User Name: Manager:  
Company:

### Test Results

#### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	60,70 V	1,000 V	1,000 V	100,0 mV	+	37,20 ms

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:**  
Test passed

### Undervoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

**Ramp  
States**

functional test / end of ramp -25°C to +75°C

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 04-Jun-2015 10:42:36 Test End: 04-Jun-2015 10:42:44  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	54,90 V	1,000 V	1,000 V	100,0 mV	+	28,20 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Test Object - Device Settings

### Device:

Name/description: EUT\_05 Manufacturer: SIEMENS  
Device type: 7SJ82 Device address: 172.16.60.5  
Serial/model number: BM1410001136

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
4/30/2015 10:26:00 AM	Passed	

## Overcurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

functional test / end of ramp -25°C to +75°C

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 04-Jun-2015 10:42:50 Test End: 04-Jun-2015 10:43:03  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,052 A	10,00 mA	10,00 mA	1,500 mA	+	21,20 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Undercurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Ramp States

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 04-Jun-2015 10:43:09 Test End: 04-Jun-2015 10:43:21  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	951,5 mA	10,00 mA	10,00 mA	1,500 mA	+	32,30 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

functional test / end of ramp -25°C to +75°C

## Overvoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 04-Jun-2015 10:43:27 Test End: 04-Jun-2015 10:43:35  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	60,80 V	1,000 V	1,000 V	200,0 mV	+	17,50 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Undervoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Ramp States

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 04-Jun-2015 10:43:41 Test End: 04-Jun-2015 10:43:49  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	54,90 V	1,000 V	1,000 V	100,0 mV	+	34,20 ms



functional test / end of ramp -25°C to +75°C

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:**  
**Test passed**

## Test Object - Device Settings

### Device:

Name/description: EUT\_07  
Device type: 7SJ87  
Serial/model number: BM1410002158

Manufacturer: SIEMENS  
Device address: 172.16.60.7

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
4/30/2015 10:26:03 AM	Passed	

## Overcurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 04-Jun-2015 10:43:55 Test End: 04-Jun-2015 10:44:07  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,052 A	10,00 mA	10,00 mA	2,000 mA	+	28,20 ms

Assess: + .. Passed x .. Failed o .. Not assessed



functional test / end of ramp -25°C to +75°C

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	60,80 V	1,000 V	1,000 V	200,0 mV	+	16,80 ms

Assess: + .. Passed x .. Failed o .. Not assessed

Test State:

Test passed

## Undervoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

#### Ramp States

### Test Module

Name: OMICRON Ramping  
Test Start: 04-Jun-2015 10:44:45  
User Name:  
Company:

Version: 3.00 SR 1  
Test End: 04-Jun-2015 10:44:53  
Manager:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	54,90 V	1,000 V	1,000 V	100,0 mV	+	19,90 ms

Assess: + .. Passed x .. Failed o .. Not assessed

Test State:

Test passed

functional test / end of ramp -25°C to +75°C

## Test Object - Device Settings

### Device:

Name/description: EUT\_09  
Device type: 6MD86  
Serial/model number: BM1410001763

Manufacturer: SIEMENS  
Device address: 172.16.60.9

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
4/30/2015 10:26:06 AM	Passed	

## Overcurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Test Module

Name: OMICRON Ramping  
Test Start: 04-Jun-2015 10:44:59  
User Name:  
Company:

Version: 3.00 SR 1  
Test End: 04-Jun-2015 10:45:12  
Manager:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,052 A	10,00 mA	10,00 mA	2,000 mA	+	19,40 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Overvoltage protection:

### Test Settings

functional test / end of ramp -25°C to +75°C

## Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 04-Jun-2015 10:45:18 Test End: 04-Jun-2015 10:45:26  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	60,80 V	1,000 V	1,000 V	200,0 mV	+	14,40 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Undervoltage protection:

## Test Settings

### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

## Ramp States

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 04-Jun-2015 10:45:32 Test End: 04-Jun-2015 10:45:40  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	54,90 V	1,000 V	1,000 V	100,0 mV	+	27,10 ms

Assess: + .. Passed x .. Failed o .. Not assessed

functional test / end of ramp -25°C to +75°C

**Test State:**  
**Test passed**

## Test Object - Device Settings

### Device:

Name/description: EUT\_11  
Device type: 7UT85  
Serial/model number: BM1410002174

Manufacturer: SIEMENS  
Device address: 172.16.60.11

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
18.05.2015 10:50:48	Passed	

## Overcurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Test Module

Name: OMICRON Ramping      Version: 3.00 SR 1  
Test Start: 04-Jun-2015 10:45:46      Test End: 04-Jun-2015 10:45:58  
User Name:      Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Tact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,051 A	10,00 mA	10,00 mA	1,000 mA	+	22,00 ms

Assess: + .. Passed    x .. Failed    o .. Not assessed

functional test / end of ramp -25°C to +75°C

**Test State:**  
**Test passed**

## Undercurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Ramp States

### Test Module

Name:	OMICRON Ramping	Version:	3.00 SR 1
Test Start:	04-Jun-2015 10:46:04	Test End:	04-Jun-2015 10:46:16
User Name:		Manager:	
Company:			

### Test Results

#### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	952,5 mA	10,00 mA	10,00 mA	2,500 mA	+	37,50 ms

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:**  
**Test passed**

functional test / after damp heat cyclic

## Test Object - Device Settings

Name/description: EUT\_17  
Device type: 7UT82  
Serial/model number: BM1503002955

Manufacturer: SIEMENS  
Device address: 172.16.60.17

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
28.05.2015 10:35:47	Passed	

## Overcurrent Protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Test Module

Name: OMICRON Ramping      Version: 3.00 SR 1  
Test Start: 28-Mai-2015 10:36:12      Test End: 28-Mai-2015 10:36:23  
User Name:      Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,052 A	10,00 mA	10,00 mA	1,500 mA	+	48,30 ms

Assess: + .. Passed    x .. Failed    o .. Not assessed

### Test State:

Test passed

## Undercurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude



functional test / after damp heat cyclic

## Ramp States

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 28-Mai-2015 10:36:29 Test End: 28-Mai-2015 10:36:41  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	952,5 mA	10,00 mA	10,00 mA	2,500 mA	+	35,90 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Test Object - Device Settings

### Device

Name/description: EUT\_03 Manufacturer: SIEMENS  
Device type: 7SJ82 Device address: 172.16.60.3  
Serial/model number: BM1410001134

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
07.05.2015 11:28:09	Passed	

**Overcurrent Protection:****Test Settings****Ramped Quantities**

I L1; L2; L3 / Magnitude

**Test Module**

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 28-Mai-2015 10:36:47 Test End: 28-Mai-2015 10:36:59  
 User Name: Manager:  
 Company:

**Test Results****Assessment Results**

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,054 A	10,00 mA	10,00 mA	4,000 mA	+	20,20 ms

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:**

Test passed

**Undercurrent protection:****Test Settings****Ramped Quantities**

I L1; L2; L3 / Magnitude

**Ramp States****Test Module**

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 28-Mai-2015 10:37:04 Test End: 28-Mai-2015 10:37:17  
 User Name: Manager:  
 Company:

**Test Results****Assessment Results**

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	953,5 mA	10,00 mA	10,00 mA	3,500 mA	+	37,90 ms

Assess: + .. Passed x .. Failed o .. Not assessed

functional test / after damp heat cyclic

**Test State:**  
Test passed

### Overvoltage protection:

#### Test Settings

##### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

#### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 28-Mai-2015 10:37:23 Test End: 28-Mai-2015 10:37:30  
User Name: Manager:  
Company:

### Test Results

#### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	60,90 V	1,000 V	1,000 V	300,0 mV	+	21,80 ms

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:**  
Test passed

### Undervoltage protection:

#### Test Settings

##### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

#### Ramp States

#### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 28-Mai-2015 10:37:36 Test End: 28-Mai-2015 10:37:45  
User Name: Manager:  
Company:

functional test / after damp heat cyclic

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	55,00 V	1,000 V	1,000 V	200,0 mV	+	21,90 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Test Object - Device Settings

### Device:

Name/description: EUT\_05

Manufacturer: SIEMENS

Device type: 7SJ82

Device address: 172.16.60.5

Serial/model number: BM1410001136

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
28.05.2015 10:35:52	Passed	

## Overcurrent Protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Test Module

Name: OMICRON Ramping

Version: 3.00 SR 1

Test Start: 28-Mai-2015 10:37:51

Test End: 28-Mai-2015 10:38:02

User Name:

Manager:

Company:

functional test / after damp heat cyclic

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,054 A	10,00 mA	10,00 mA	3,500 mA	+	27,00 ms

Assess: + .. Passed x .. Failed o .. Not assessed

Test State:

Test passed

## Undercurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

#### Ramp States

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 28-Mai-2015 10:38:08 Test End: 28-Mai-2015 10:38:21  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	953,5 mA	10,00 mA	10,00 mA	3,500 mA	+	32,70 ms

Assess: + .. Passed x .. Failed o .. Not assessed

Test State:

Test passed

## Overvoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

functional test / after damp heat cyclic

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 28-Mai-2015 10:38:27 Test End: 28-Mai-2015 10:38:34  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	60,90 V	1,000 V	1,000 V	300,0 mV	+	23,20 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Undervoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Ramp States

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 28-Mai-2015 10:38:40 Test End: 28-Mai-2015 10:38:49  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	55,00 V	1,000 V	1,000 V	200,0 mV	+	23,20 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

functional test / after damp heat cyclic

## Test Object - Device Settings

### Device:

Name/description: EUT\_07  
Device type: 7SJ87  
Serial/model number: BM1410002158

Manufacturer: SIEMENS  
Device address: 172.16.60.7

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
11.05.2015 15:07:59	Passed	

## Overcurrent Protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Test Module

Name: OMICRON Ramping      Version: 3.00 SR 1  
Test Start: 28-Mai-2015 10:38:54      Test End: 28-Mai-2015 10:39:06  
User Name:      Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,054 A	10,00 mA	10,00 mA	4,000 mA	+	26,80 ms

Assess: + .. Passed    x .. Failed    o .. Not assessed

### Test State:

Test passed

## Undercurrent protection:

functional test / after damp heat cyclic

## Test Settings

### Ramped Quantities

I L1; L2; L3 / Magnitude

### Ramp

### States

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 28-Mai-2015 10:39:12 Test End: 28-Mai-2015 10:39:24  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	I L1; L2; L3	950,0 mA	954,0 mA	10,00 mA	10,00 mA	4,000 mA	+	17,60 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Overvoltage protection:

## Test Settings

### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 28-Mai-2015 10:39:30 Test End: 28-Mai-2015 10:39:37  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	60,60 V	60,90 V	1,000 V	1,000 V	300,0 mV	+	25,30 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:



functional test / after damp heat cyclic

**Test passed**

## Undervoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

#### Ramp States

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 28-Mai-2015 10:39:43 Test End: 28-Mai-2015 10:39:52  
User Name: Manager:  
Company:

### Test Results

#### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E; L2-E; L3-E	54,80 V	55,00 V	1,000 V	1,000 V	200,0 mV	+	22,60 ms

Assess: + .. Passed x .. Failed o .. Not assessed

#### Test State:

**Test passed**

### Test Object - Device Settings

#### Device:

Name/description: EUT\_09 Manufacturer: SIEMENS  
Device type: 6MD86 Device address: 172.16.60.9  
Serial/model number: BM1410001763

### Hardware Configuration

functional test / after damp heat cyclic

## Test Equipment

Type	Serial Number
CMC256plus	QF467R

## Hardware Check

Performed At	Result	Details
07.05.2015 11:35:26	Passed	

## Overcurrent Protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 28-Mai-2015 10:39:58 Test End: 28-Mai-2015 10:40:09  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	I L1; L2; L3	1,050 A	1,053 A	10,00 mA	10,00 mA	3,000 mA	+	32,90 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Overvoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E; L2-E; L3-E / Magnitude

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 28-Mai-2015 10:40:15 Test End: 28-Mai-2015 10:40:22  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E;	60,60 V	60,90 V	1,000 V	1,000 V	300,0 mV	+	21,80 ms



functional test / after damp heat cyclic

Name/description: EUT\_11  
Device type: 7UT85  
Serial/model number: BM1410002174

Manufacturer: SIEMENS  
Device address: 172.16.60.11

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
11.05.2015 15:08:06	Passed	

## Overcurrent Protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

### Test Module

Name: OMICRON Ramping      Version: 3.00 SR 1  
Test Start: 28-Mai-2015 10:40:43      Test End: 28-Mai-2015 10:40:54  
User Name:      Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Tact
Pick-up	Ramp 2	Start 0->1	L1; L2; L3	1,050 A	1,054 A	10,00 mA	10,00 mA	3,500 mA	+	12,30 ms

Assess: + .. Passed    x .. Failed    o .. Not assessed

### Test State:

Test passed

## Undercurrent protection:

### Test Settings

#### Ramped Quantities

I L1; L2; L3 / Magnitude

Ramp  
States

functional test / after damp heat cyclic

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 28-Mai-2015 10:41:00 Test End: 28-Mai-2015 10:41:13  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1; L2; L3	950,0 mA	954,5 mA	10,00 mA	10,00 mA	4,500 mA	+	41,40 ms

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:**  
**Test passed**

functional test / after damp heat 56 days

## Test Object - Device Settings

### Device:

Name/description: EUT\_17  
Device type: 7UT82  
Serial/model number: BM1503002955

Manufacturer: SIEMENS  
Device address: 172.16.60.17

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
7/31/2015 2:41:03 PM	Passed	

## Overcurrent protection:

### Test Settings

#### Ramped Quantities

I L1, L2, L3 / Magnitude

### Test Module

Name: OMICRON Ramping  
Test Start: 31-Jul-2015 15:00:37  
User Name:  
Company:

Version: 3.00 SR 1  
Test End: 31-Jul-2015 15:00:48  
Manager:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1, L2, L3	1.050 A	1.050 A	10.00 mA	10.00 mA	0.000 A	+	13.20 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Undercurrent protection:

### Test Settings

#### Ramped Quantities

I L1, L2, L3 / Magnitude

functional test / after damp heat 56 days

## Ramp States

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 31-Jul-2015 15:00:54 Test End: 31-Jul-2015 15:01:07  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	I L1, L2, L3	950.0 mA	950.5 mA	10.00 mA	10.00 mA	500.0 µA	+	27.90 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Test Object - Device Settings

### Device:

Name/description: EUT\_03 Manufacturer: SIEMENS  
Device type: 7SJ82 Device address: 172.16.60.3  
Serial/model number: BM1410001134

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
07.05.2015 11:28:09	Passed	

## Overcurrent protection:

## Test Settings

### Ramped Quantities

I L1, L2, L3 / Magnitude

functional test / after damp heat 56 days

## Test Module

Name: OMICRON Ramping      Version: 3.00 SR 1  
Test Start: 31-Jul-2015 15:01:14      Test End: 31-Jul-2015 15:01:25  
User Name:      Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1, L2, L3	1.050 A	1.052 A	10.00 mA	10.00 mA	1.500 mA	+	27.50 ms

Assess: + .. Passed    x .. Failed    o .. Not assessed

### Test State:

Test passed

## Undercurrent protection:

## Test Settings

### Ramped Quantities

I L1, L2, L3 / Magnitude

## Ramp States

## Test Module

Name: OMICRON Ramping      Version: 3.00 SR 1  
Test Start: 31-Jul-2015 15:01:32      Test End: 31-Jul-2015 15:01:45  
User Name:      Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1, L2, L3	950.0 mA	951.5 mA	10.00 mA	10.00 mA	1.500 mA	+	21.30 ms

Assess: + .. Passed    x .. Failed    o .. Not assessed

### Test State:

Test passed



## Overvoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E, L2-E, L3-E / Magnitude

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 31-Jul-2015 15:01:51 Test End: 31-Jul-2015 15:01:58  
 User Name: Manager:  
 Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E, L2-E, L3-E	60.60 V	60.80 V	1.000 V	1.000 V	200.0 mV	+	16.70 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Undervoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E, L2-E, L3-E / Magnitude

### Ramp States

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 31-Jul-2015 15:02:05 Test End: 31-Jul-2015 15:02:14  
 User Name: Manager:  
 Company:

## Test Results

### Assessment Results

functional test / after damp heat 56 days

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E, L2-E, L3-E	54.80 V	54.90 V	1.000 V	1.000 V	100.0 mV	+	27.10 ms

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:**  
**Test passed**

## Test Object - Device Settings

### Device:

Name/description: EUT\_05  
Device type: 7SJ82  
Serial/model number: BM1410001136

Manufacturer: SIEMENS  
Device address: 172.16.60.5

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
11.05.2015 15:07:56	Passed	

## Overcurrent protection:

### Test Settings

#### Ramped Quantities

I L1, L2, L3 / Magnitude

### Test Module

Name: OMICRON Ramping  
Test Start: 31-Jul-2015 15:02:21  
User Name:  
Company:

Version: 3.00 SR 1  
Test End: 31-Jul-2015 15:02:32  
Manager:

## Test Results

### Assessment Results

functional test / after damp heat 56 days

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1, L2, L3	1.050 A	1.052 A	10.00 mA	10.00 mA	1.500 mA	+	16.60 ms

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:**  
Test passed

## Undercurrent protection:

### Test Settings

#### Ramped Quantities

I L1, L2, L3 / Magnitude

#### Ramp States

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 31-Jul-2015 15:02:39 Test End: 31-Jul-2015 15:02:52  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1, L2, L3	950.0 mA	951.5 mA	10.00 mA	10.00 mA	1.500 mA	+	25.40 ms

Assess: + .. Passed x .. Failed o .. Not assessed

**Test State:**  
Test passed

## Overvoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E, L2-E, L3-E / Magnitude

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 31-Jul-2015 15:02:58 Test End: 31-Jul-2015 15:03:05  
User Name: Manager:

functional test / after damp heat 56 days

Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E, L2-E, L3-E	60.60 V	60.80 V	1.000 V	1.000 V	200.0 mV	+	20.80 ms

Assess: + .. Passed x .. Failed o .. Not assessed

Test State:

Test passed

## Undervoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E, L2-E, L3-E / Magnitude

#### Ramp States

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 31-Jul-2015 15:03:12 Test End: 31-Jul-2015 15:03:21  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E, L2-E, L3-E	54.80 V	54.90 V	1.000 V	1.000 V	100.0 mV	+	27.10 ms

Assess: + .. Passed x .. Failed o .. Not assessed

Test State:

Test passed

## Test Object - Device Settings

Device:

functional test / after damp heat 56 days

Name/description: EUT\_07  
Device type: 7SJ87  
Serial/model number: BM1410002158

Manufacturer: SIEMENS  
Device address: 172.16.60.7

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
11.05.2015 15:07:59	Passed	

## Overcurrent protection:

### Test Settings

#### Ramped Quantities

I L1, L2, L3 / Magnitude

### Test Module

Name: OMICRON Ramping      Version: 3.00 SR 1  
Test Start: 31-Jul-2015 15:03:28      Test End: 31-Jul-2015 15:03:39  
User Name:      Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1, L2, L3	1.050 A	1.053 A	10.00 mA	10.00 mA	2.500 mA	+	13.40 ms

Assess: + .. Passed    x .. Failed    o .. Not assessed

### Test State:

Test passed

## Undercurrent protection:

### Test Settings

#### Ramped Quantities

I L1, L2, L3 / Magnitude

### Ramp

#### States

functional test / after damp heat 56 days

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 31-Jul-2015 15:03:45 Test End: 31-Jul-2015 15:03:58  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Meas. 2	Ramp 2	Start 0->1	L1, L2, L3	950.0 mA	952.0 mA	10.00 mA	10.00 mA	2.000 mA	+	28.50 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Overvoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E, L2-E, L3-E / Magnitude

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 31-Jul-2015 15:04:05 Test End: 31-Jul-2015 15:04:12  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E, L2-E, L3-E	60.60 V	60.80 V	1.000 V	1.000 V	200.0 mV	+	22.20 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Undervoltage protection:

functional test / after damp heat 56 days

## Test Settings

### Ramped Quantities

V L1-E, L2-E, L3-E / Magnitude

### Ramp States

## Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 31-Jul-2015 15:04:19 Test End: 31-Jul-2015 15:04:28  
User Name: Manager:  
Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E, L2-E, L3-E	54.80 V	54.90 V	1.000 V	1.000 V	100.0 mV	+	16.30 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Test Object - Device Settings

### Device:

Name/description: EUT\_09 Manufacturer: SIEMENS  
Device type: 6MD86 Device address: 172.16.60.9  
Serial/model number: BM1410001763

## Hardware Configuration

### Test Equipment

Type	Serial Number
CMC256plus	QF467R

### Hardware Check

Performed At	Result	Details
7/31/2015 2:59:00 PM	Passed	

## Overcurrent protection:

### Test Settings

#### Ramped Quantities

I L1, L2, L3 / Magnitude

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 31-Jul-2015 15:04:34 Test End: 31-Jul-2015 15:04:45  
 User Name: Manager:  
 Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	I L1, L2, L3	1.050 A	1.052 A	10.00 mA	10.00 mA	2.000 mA	+	23.20 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed

## Overvoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E, L2-E, L3-E / Magnitude

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
 Test Start: 31-Jul-2015 15:04:52 Test End: 31-Jul-2015 15:04:59  
 User Name: Manager:  
 Company:

## Test Results

### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E, L2-E, L3-E	60.60 V	60.80 V	1.000 V	1.000 V	200.0 mV	+	18.00 ms

Assess: + .. Passed x .. Failed o .. Not assessed

### Test State:

Test passed



## Undervoltage protection:

### Test Settings

#### Ramped Quantities

V L1-E, L2-E, L3-E / Magnitude

#### Ramp States

### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 31-Jul-2015 15:05:06 Test End: 31-Jul-2015 15:05:15  
User Name: Manager:  
Company:

### Test Results

#### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	V L1-E, L2-E, L3-E	54.80 V	54.90 V	1.000 V	1.000 V	100.0 mV	+	22.10 ms

Assess: + .. Passed x .. Failed o .. Not assessed

#### Test State:

Test passed

### Test Object - Device Settings

#### Device:

Name/description: EUT\_11 Manufacturer: SIEMENS  
Device type: 7UT85 Device address: 172.16.60.11  
Serial/model number: BM1410002174

### Hardware Configuration

#### Test Equipment

Type	Serial Number
CMC256plus	QF467R

functional test / after damp heat 56 days

### Hardware Check

Performed At	Result	Details
7/31/2015 2:41:18 PM	Passed	

### Overcurrent protection:

#### Test Settings

##### Ramped Quantities

I L1, L2, L3 / Magnitude

#### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 31-Jul-2015 15:05:21 Test End: 31-Jul-2015 15:05:33  
User Name: Manager:  
Company:

### Test Results

#### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
Pick-up	Ramp 2	Start 0->1	L1, L2, L3	1.050 A	1.052 A	10.00 mA	10.00 mA	1.500 mA	+	17.90 ms

Assess: + .. Passed x .. Failed o .. Not assessed

#### Test State:

Test passed

### Undercurrent protection:

#### Test Settings

##### Ramped Quantities

I L1, L2, L3 / Magnitude

#### Ramp States

#### Test Module

Name: OMICRON Ramping Version: 3.00 SR 1  
Test Start: 31-Jul-2015 15:05:39 Test End: 31-Jul-2015 15:05:52  
User Name: Manager:  
Company:

### Test Results

#### Assessment Results

Name/ Exec.	Ramp	Condition	Sig	Nom.	Act.	Tol.-	Tol.+	Dev.	Assess	Fact
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functional test / after damp heat 56 days

Meas. 2	Ramp 2	Start 0->1	L1, L2, L3	950.0 mA	952.5 mA	10.00 mA	10.00 mA	2.500 mA	+	20.10 ms
Assess:	+ .. Passed	x .. Failed	o .. Not assessed							

**Test State:**  
**Test passed**