PHOENIX TESTLAB

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Test Report

No.: U60108d

Designation of equipment under test: Screw Connection Terminal Blocks

Test Laboratory

for
"Safety of Electrical Equipment and Industrial Low-Voltage Devices as well as Environmental Tests"

accredited by
DATech e.V.
in compliance with DIN EN ISO/IEC 17025
under
Reg. No. DAT-P-105/00-11

Testing body:	PHOENIX TESTLAB GmbH Königswinkel 10 D-32825 Blomberg
Applicant:	Phoenix Contact GmbH & Co. KG Flachsmarktstraße 8-28 D-32825 Blomberg
Order number:	60108
Type of test:	Environmental Test - Vibration, random - Shock
Method of measure-ment to:	EN 50155 reference to: - EN 60068-2-64 - EN 60068-2-27 - EN 61373
Manufacturer:	Phoenix Contact GmbH & Co. KG
Place of test:	PHOENIX TESTLAB GmbH, Blomberg

Equipment under test (EUT): Screw Connection Terminal Blocks

Type identification:

Type	Bridge / Plug Type	Article- No.	Cross section	Test Specification	Date of test / Original Test-Report No.
UT 2,5	---	3044076	2,5 mm² rigid	EN 50155 : 2001 / EN 61373 : 1999 according to EN 60068-2-64 : 1994 and EN 60068-2-27 : 1993	21 January 2004 to 27 January 2004 S40028_eng
	FBS 2,5	3030161			
	FBS 5-5	3030190			
UT 4	---	3044102	2,5 mm² rigid		
	FBS 2-6	3030336			
	FBS 5-6	3030349			
UT 6	---	3044131	2,5 mm² rigid		
	FBS 2-8	3030284			
	FBS 5-8	3030310			
UT 10	---	3044160	2,5 mm² rigid		
	FBS 2-10	3005947			
UT 2,5-PE	---	3044092	2,5 mm² rigid		
UT 4-PE	---	3044128	4 mm² rigid		
UT 6-PE	---	3044157	6 mm² rigid		
UT 10-PE	---	3044173	10 mm² rigid		
UT 4-HEDI	---	3046249	4 mm² rigid		
UT 4-HESI (5x20)	---	3046032	1 mm² rigid		
UT 4-MT	---	3044076	4 mm² rigid	EN 50155 : 2001 / EN 61373 : 1999 according to EN 60068-2-64 : 1994 and EN 60068-2-27 : 1993	06 March 2004 to 11 March 2004 S40202_eng_rev2
	FBS 2-6	3030336			
	FBS 5-6	3030349			
UT 4-MTD	---	3046184	4 mm² rigid		
	FBS 2-6	3030336			
	FBS 5-6	3030349			
UT 4-MTD-DIO/LR	---	3046210	4 mm² rigid		
UT 4-MTD-PE	---	3046223	4 mm² rigid		
UT 4-MTD-PE/S	---	3046207	4 mm² rigid		
UT 4-TG	---	3046124	4 mm² rigid		
	P-DI	3036783			
	P-CO	3036796			

Test result: The complete test results are present in the following.
The requirements made in the test documents were **fulfilled** by the equipment under test.

Note: This test report contains the results of two single vibration tests.
The measured values were taken from the test reports S40028_eng and S40402_eng_rev2.

Blomberg, 09 August 2006

Examiner: D. Töberich

Reviewed by: U. Sauerländer

Contents: **Page**

1 Test specifications and test conditions

1.1 Vibration, broad-band random

Test Fh: Vibration, broad-band random / EN 60068-2-64

This standard is applicable to specimens which may be subjected to vibration of a stochastic nature resulting from transport or operational environments, for example in aircraft, space vehicles and land vehicles.

Severity, Category 2:

Test specification:	EN 50155 : 2001 / EN 61373 : 1999
Frequency range:	5 Hz to 250 Hz
ASD-Level: - 10 Hz – 100 Hz - 5 Hz – 10 Hz - 100 Hz – 250 Hz	11,83 $(m/s^2)^2/Hz$ -9 dB/Oct -6 dB/Oct
rms value 5 Hz – 250 Hz	42,5 m/s^2
Axis:	X, Y, Z
Test duration:	5 h in each axis

1.2 Shock

Test Ea: Shock / EN 60068-2-27

This test is applicable to components, equipment and other electrotechnical products which, during transportation or in use, may be subjected to conditions involving relatively infrequent non-repetitive shocks.

Severity, Category 2

Test specification:	EN 50155 : 2001 / EN 61373 : 1999
Pulse shape:	Half-sine
Peak acceleration:	300 m/s²
Corresponding duration of the nominal pulse:	18 ms
Number of shocks in each of six directions:	3
Axis:	X, Y, Z (pos. and neg.)

1.3 Operating states and test setup

Definition of the functions of the monitoring and their tolerances:

- Optical test for mechanical stability
- Monitoring for contact breaks
- Measuring of contact resistance

The terminals and a 80 Ohm resistor became connected in series and were supplied with a 10 V_{DC} power supply.

During the test the terminals were monitored over the 80 Ohm resistor with an oscilloscope for contact breaks t > 1 µs.

The value of the current was 125 mA.

Note: The contact resistance is measured by the applicant!

2 Test performance and test results

2.1 Test performance

The test samples are mounted on a mounting rail NS 35/7,5.

The tests are performed in three mutually perpendicular axes (X ,Y ,Z).

Sequence of tests:

EN 50155 : 2001 / EN 61373 : 1999

1. Vibration, random
2. Shock

Before and after each test the contact resistance is measured.

Note: The contact resistance is measured by the applicant!

2.2 Test results

2.2.1 Vibration, random (EN 50155 : 2001 / EN 61373 : 1999)

Requirements fulfilled:

Severity	Type	Pass
Category 2 5 Hz to 250 Hz rms value 42,5 m/s²	UT 2,5	yes
	UT 4	yes
	UT 6	yes
	UT 10	yes
	UT 2,5-PE	yes
	UT 4-PE	yes
	UT 6-PE	yes
	UT 10-PE	yes
	UT 4-MTD	yes
	UT 4-HEDI	yes
	UT 4-HESI (5x20)	yes
	UT 4-MT	yes
	UT 4-MTD	yes
	UT 4-MTD-DIO/LR	yes
	UT 4-MTD-PE	yes
	UT 4-MTD-PE/S	yes
	UT 4-TG	yes

2.2.2 Shock (EN 50155 : 2001 / EN 61373 : 1999)

Requirements fulfilled:

Severity	Type	Pass
Category 2 300 m/s² 18 ms	UT 2,5	yes
	UT 4	yes
	UT 6	yes
	UT 10	yes
	UT 2,5-PE	yes
	UT 4-PE	yes
	UT 6-PE	yes
	UT 10-PE	yes
	UT 4-MTD	yes
	UT 4-HEDI	yes
	UT 4-HESI (5x20)	yes
	UT 4-MT	yes
	UT 4-MTD	yes
	UT 4-MTD-DIO/LR	yes
	UT 4-MTD-PE	yes
	UT 4-MTD-PE/S	yes
	UT 4-TG	yes

2.2.3 Contact resistance

Legend: **P** ⇒ Pass
F ⇒ Fail

Requirement:

Contact resistance --- $R_2 \leq 1{,}5 \times R_1$

R_1 – Contact resistance before test
R_2 – Contact resistance after test

Contact breaks --- no $> 1\ \mu s$
(Only Feed-Through Terminal Blocks)

2.2.3.1 Terminal blocks UT 2,5…

UT 2,5 / A = 2,5 mm² rigid

	contact resistance [mΩ]		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,39	0,39	0,40
2	0,40	0,40	0,40
3	0,41	0,40	0,41
4	0,39	0,38	0,39
5	0,38	0,37	0,37
average	0,394	0,388	0,394
maximum	0,41	0,40	0,41
result	P	P	P

UT 2,5 with FBS 2-5 / A = 2,5 mm² rigid

	contact resistance [mΩ] (with / without terminal)		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,81 / 0,45	0,69 / 0,34	0,77 / 0,41
2	0,71 / 0,35	0,67 / 0,32	0,69 / 0,33
3	0,74 / 0,36	0,69 / 0,33	0,74 / 0,37
4	0,74 / 0,39	0,70 / 0,35	0,72 / 0,37
5	0,69 / 0,34	0,66 / 0,32	0,71 / 0,37
average	0,738 / 0,378	0,682 / 0,332	0,726 / 0,370
maximum	0,81 / 0,45	0,70 / 0,35	0,77 / 0,41
result	P	P	P

UT 2,5 with FBS 5-5 / A = 2,5 mm² rigid

	contact resistance [mΩ] (with / without terminal)		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,77 / 0,42	0,73 / 0,40	0,78 / 0,43
2	0,81 / 0,46	0,73 / 0,40	0,80 / 0,44
average	0,790 / 0,440	0,730 / 0,400	0,790 / 0,435
maximum	0,81 / 0,46	0,73 / 0,40	0,80 / 0,44
result	P	P	P

UT 2,5-PE / A = 2,5 mm² rigid

	contact resistance [mΩ] (terminal to terminal)		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,39	0,38	0,39
2	0,40	0,39	0,40
3	0,40	0,40	0,39
4	0,41	0,40	0,41
5	0,40	0,40	0,39
average	0,400	0,394	0,396
maximum	0,41	0,40	0,41
result	P	P	P

	contact resistance [mΩ] (terminal to mounting rail)		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,60	0,59	0,63
2	0,60	0,60	0,61
3	0,59	0,58	0,59
4	0,60	0,60	0,61
5	0,60	0,59	0,59
average	0,598	0,592	0,606
maximum	0,60	0,60	0,63
result	P	P	P

2.2.3.2 Terminal blocks UT 4…

UT 4 / A = 4 mm² rigid

test sample	contact resistance [mΩ]		
	before test	after vibration, random	after shock 30 g/18 ms
1	0,26	0,26	0,26
2	0,26	0,25	0,25
3	0,26	0,25	0,26
4	0,26	0,25	0,26
5	0,26	0,25	0,25
average	0,260	0,252	0,256
maximum	0,26	0,26	0,26
result	P	P	P

UT 4 with FBS 2-6 / A = 4 mm² rigid

test sample	contact resistance [mΩ] (with / without terminal)		
	before test	after vibration, random	after shock 30 g/18 ms
1	0,56 / 0,32	0,54 / 0,31	0,68 / 0,45
2	0,52 / 0,31	0,50 / 0,28	0,53 / 0,32
3	0,53 / 0,30	0,50 / 0,27	0,51 / 0,29
4	0,52 / 0,28	0,50 / 0,27	0,53 / 0,30
5	0,58 / 0,34	0,56 / 0,29	0,55 / 0,31
average	0,542 / 0,310	0,520 / 0,284	0,560 / 0,334
maximum	0,58 / 0,34	0,56 / 0,31	0,68 / 0,45
result	P	P	P

UT 4 with FBS 5-6 / A = 4 mm² rigid

test sample	contact resistance [mΩ] (with / without terminal)		
	before test	after vibration, random	after shock 30 g/18 ms
1	0,63 / 0,39	0,59 / 0,37	0,68 / 0,45
2	0,69 / 0,45	0,73 / 0,50	0,80 / 0,57
average	0,660 / 0,420	0,660 / 0,435	0,740 / 0,510
maximum	0,69 / 0,45	0,73 / 0,50	0,80 / 0,57
result	P	P	P

UT 4-MT / A = 4 mm² rigid

	contact resistance [mΩ]		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,90	0,90	0,90
2	0,87	0,88	0,88
3	0,89	0,89	0,89
4	0,88	0,88	0,88
5	0,90	0,91	0,91
average	0,88	0,89	0,89
maximum	0,90	0,91	0,91
result	P	P	P

UT 4-MT with FBS 2-6 / A = 4 mm² rigid

	contact resistance [mΩ]		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	1,71	1,76	1,77
2	1,73	1,77	1,77
3	1,71	1,70	1,72
average	1,717	1,743	1,753
maximum	1,73	1,77	1,77
result	P	P	P

UT 4-MT with FBS 5-6 / A = 4 mm² rigid

	contact resistance [mΩ]		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	1,78	1,81	1,80
2	1,80	1,87	1,85
average	1,790	1,840	1,825
maximum	1,80	1,87	1,85
result	P	P	P

UT 4-MTD with FBS 2-6 / A = 4 mm² rigid

	contact resistance [mΩ]		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,56	0,60	0,66
2	0,55	0,53	0,54
3	0,52	0,53	0,65
average	0,543	0,553	0,617
maximum	0,56	0,60	0,66
result	P	P	P

UT 4-MTD with FBS 5-6 / A = 4 mm² rigid

	contact resistance [mΩ]		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,63	0,61	0,65
2	0,65	0,61	0,65
average	0,640	0,610	0,650
maximum	0,65	0,61	0,65
result	P	P	P

UT 4-MTD-DIO/LR / A = 4 mm² rigid

	contact resistance [mΩ]		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,90	0,90	0,90
2	0,87	0,88	0,88
3	0,89	0,89	0,89
4	0,88	0,88	0,88
5	0,90	0,91	0,91
average	0,888	0,892	0,892
maximum	0,90	0,91	0,91
result	P	P	P

UT 4-TG with P-DI / A = 4 mm² rigid

	contact resistance [mΩ]		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,94	0,95	0,99
2	0,90	0,91	0,91
3	0,86	0,88	0,87
4	0,87	0,88	0,90
5	0,86	0,87	0,90
average	0,886	0,898	0,914
maximum	0,94	0,95	0,99
result	P	P	P

UT 4-TG with P-CO / A = 4 mm² rigid

	contact resistance [mΩ]		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	2,08	2,12	2,12
2	2,23	2,35	2,36
3	1,98	2,02	2,01
4	2,07	2,14	2,13
5	1,98	2,03	2,02
average	2,068	2,132	2,128
maximum	2,23	2,35	2,36
result	P	P	P

UT 4-HEDI / A = 4 mm² rigid

	contact resistance [mΩ]		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	1,24	1,25	1,27
2	1,25	1,27	1,30
3	1,25	1,27	1,29
4	1,24	1,26	1,28
5	1,24	1,25	1,27
average	1,244	1,260	1,282
maximum	1,25	1,27	1,30
result	P	P	P

UT 4-HESI (5x20) / A = 1 mm² rigid

	contact resistance [mΩ]		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	2,61	3,74	3,91
2	2,49	2,70	2,75
3	2,48	2,67	2,72
4	2,52	2,81	2,87
5	2,48	2,56	2,60
average	2,516	2,896	2,970
maximum	2,61	3,74	3,91
result	P	P	P

UT 4-PE / A = 4 mm² rigid

	contact resistance [mΩ] (terminal to terminal)		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,25	0,25	0,25
2	0,26	0,26	0,26
3	0,26	0,25	0,26
4	0,25	0,25	0,25
5	0,25	0,25	0,25
average	0,254	0,252	0,254
maximum	0,26	0,26	0,26
result	P	P	P

	contact resistance [mΩ] (terminal to mounting rail)		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,52	0,50	0,50
2	0,54	0,50	0,52
3	0,52	0,50	0,50
4	0,53	0,50	0,52
5	0,53	0,50	0,52
average	0,528	0,500	0,512
maximum	0,54	0,50	0,52
result	P	P	P

UT 4-MTD-PE / A = 4 mm² rigid

	contact resistance [mΩ] (terminal to terminal)		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,29	0,29	0,29
2	0,26	0,30	0,29
3	0,30	0,30	0,29
4	0,29	0,29	0,29
5	0,31	0,30	0,30
average	0,290	0,296	0,292
maximum	0,31	0,30	0,30
result	P	P	P

	contact resistance [mΩ] (terminal to mounting rail)		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,54	0,55	0,54
2	0,55	0,56	0,55
3	0,55	0,56	0,56
4	0,56	0,56	0,56
5	0,52	0,53	0,53
average	0,544	0,552	0,548
maximum	0,56	0,56	0,56
result	P	P	P

UT 4-MTD-PE/S / A = 4 mm² rigid

	contact resistance [mΩ] (terminal to terminal)		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,29	0,29	0,29
2	0,30	0,30	0,30
3	0,30	0,31	0,31
4	0,29	0,30	0,29
5	0,29	0,28	0,28
average	0,294	0,296	0,294
maximum	0,30	0,31	0,31
result	P	P	P

	contact resistance [mΩ] (terminal to mounting rail)		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,48	0,50	0,52
2	0,45	0,46	0,47
3	0,47	0,48	0,49
4	0,50	0,52	0,53
5	0,47	0,46	0,48
average	0,474	0,484	0,498
maximum	0,50	0,52	0,53
result	P	P	P

2.2.3.3 Terminal blocks UT 6…

UT 6 / A = 6 mm² rigid

	contact resistance [mΩ]		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,20	0,20	0,20
2	0,19	0,19	0,19
3	0,20	0,20	0,20
4	0,20	0,20	0,20
5	0,19	0,19	0,20
average	0,196	0,196	0,198
maximum	0,20	0,20	0,20
result	P	P	P

UT 6 with FBS 2-8 / A = 6 mm² rigid

	contact resistance [mΩ] (with / without terminal)		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,37 / 0,19	0,36 / 0,18	0,37 / 0,18
2	0,37 / 0,18	0,35 / 0,17	0,35 / 0,18
3	0,36 / 0,18	0,35 / 0,17	0,36 / 0,18
4	0,37 / 0,18	0,36 / 0,18	0,37 / 0,18
5	0,35 / 0,18	0,35 / 0,17	0,35 / 0,18
average	0,364 / 0,182	0,354 / 0,174	0,360 / 0,180
maximum	0,37 / 0,19	0,36 / 0,18	0,37 / 0,18
result	P	P	P

UT 6 with FBS 5-8 / A = 6 mm² rigid

	contact resistance [mΩ] (with / without terminal)		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,47 / 0,29	0,43 / 0,25	0,46 / 0,28
2	0,48 / 0,28	0,43 / 0,24	0,44 / 0,24
average	0,475 / 0,285	0,430 / 0,245	0,450 / 0,260
maximum	0,48 / 0,29	0,43 / 0,25	0,46 / 0,28
result	P	P	P

UT 6-PE / A = 6 mm² rigid

	contact resistance [mΩ] (terminal to terminal)		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,19	0,19	0,19
2	0,19	0,19	0,19
3	0,19	0,19	0,19
4	0,20	0,20	0,20
5	0,20	0,19	0,19
average	0,194	0,192	0,192
maximum	0,20	0,20	0,20
result	P	P	P

	contact resistance [mΩ] (terminal to mounting rail)		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,33	0,30	0,31
2	0,33	0,30	0,31
3	0,34	0,32	0,32
4	0,34	0,31	0,32
5	0,31	0,30	0,30
average	0,330	0,306	0,312
maximum	0,34	0,32	0,32
result	P	P	P

2.2.3.4 Terminal blocks UT 10…

UT 10 / A = 10 mm² rigid

	contact resistance [mΩ]		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,13	0,13	0,13
2	0,14	0,14	0,14
3	0,14	0,14	0,14
4	0,14	0,14	0,14
5	0,14	0,14	0,14
average	0,138	0,138	0,138
maximum	0,14	0,14	0,14
result	P	P	P

UT 10 with FBS 2-10 / A = 10 mm² rigid

	contact resistance [mΩ] (with / without terminal)		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,21 / 0,11	0,21 / 0,11	0,21 / 0,11
2	0,21 / 0,11	0,21 / 0,11	0,21 / 0,11
3	0,21 / 0,11	0,21 / 0,11	0,21 / 0,11
4	0,20 / 0,11	0,20 / 0,11	0,20 / 0,11
5	0,22 / 0,11	0,22 / 0,11	0,22 / 0,11
average	0,210 / 0,110	0,210 / 0,110	0,210 / 0,110
maximum	0,22 / 0,11	0,22 / 0,11	0,22 / 0,11
result	P	P	P

UT 10-PE / A = 10 mm² rigid

	contact resistance [mΩ] (terminal to terminal)		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,14	0,14	0,14
2	0,14	0,13	0,14
3	0,14	0,14	0,14
4	0,15	0,14	0,14
5	0,13	0,13	0,14
average	0,140	0,136	0,140
maximum	0,15	0,14	0,14
result	P	P	P

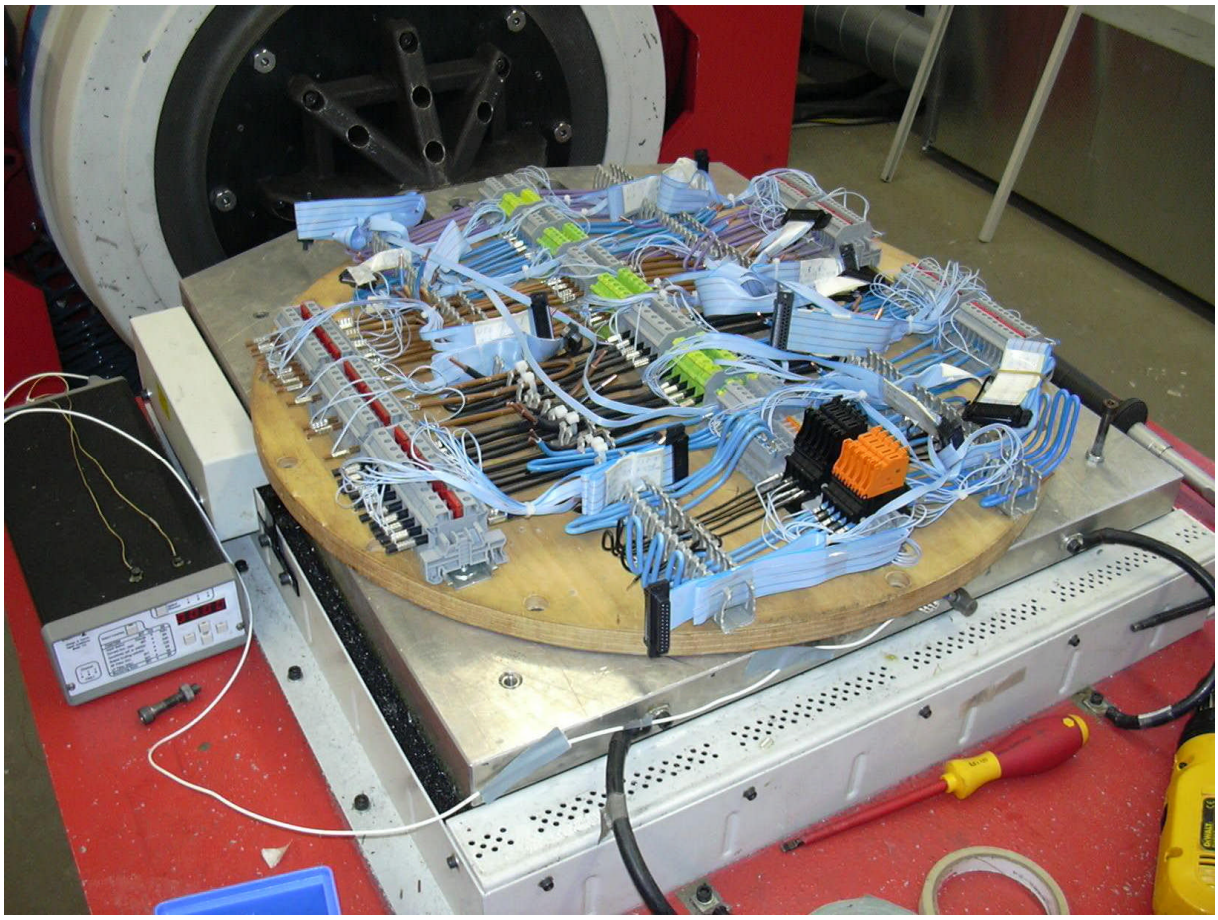
	contact resistance [mΩ] (terminal to mounting rail)		
test sample	before test	after vibration, random	after shock 30 g/18 ms
1	0,23	0,24	0,24
2	0,25	0,26	0,26
3	0,26	0,26	0,28
4	0,27	0,30	0,30
5	0,27	0,27	0,27
average	0,256	0,266	0,270
maximum	0,27	0,30	0,30
result	P	P	P

3 List of measuring instruments

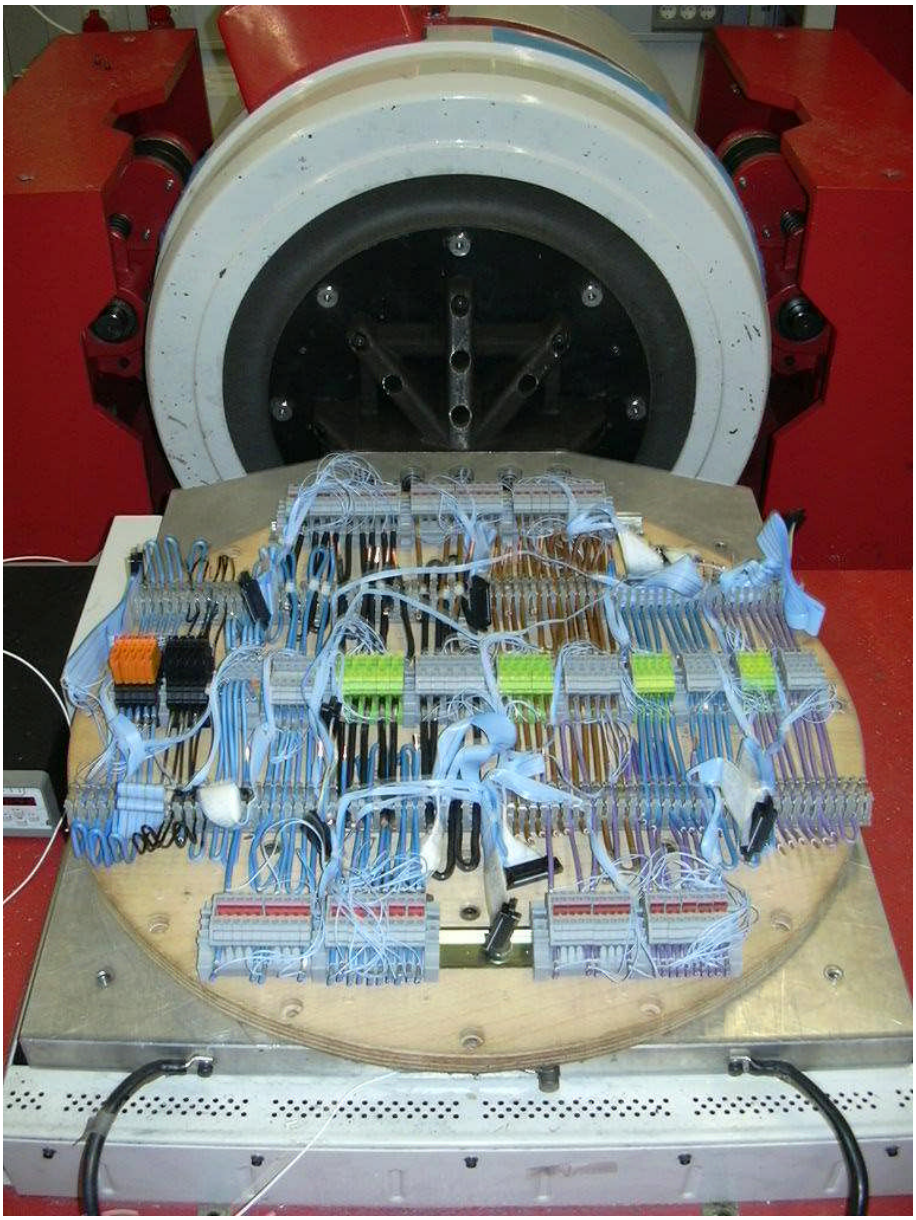
Measuring instrument	Type	PM-No.
Vibration test system	LDS V 850-440 LPT 600	490082
Vibration test system	LDS V 895-640 LPT 900	490101
Oscilloscope	HP 54645A	490028
DC-supply	TOE 8852 / 51706	490001
Milliohmmeter	MR 1012P	Phoenix Contact
Measuring point switch	HP 34970A	Phoenix Contact

4 Photos

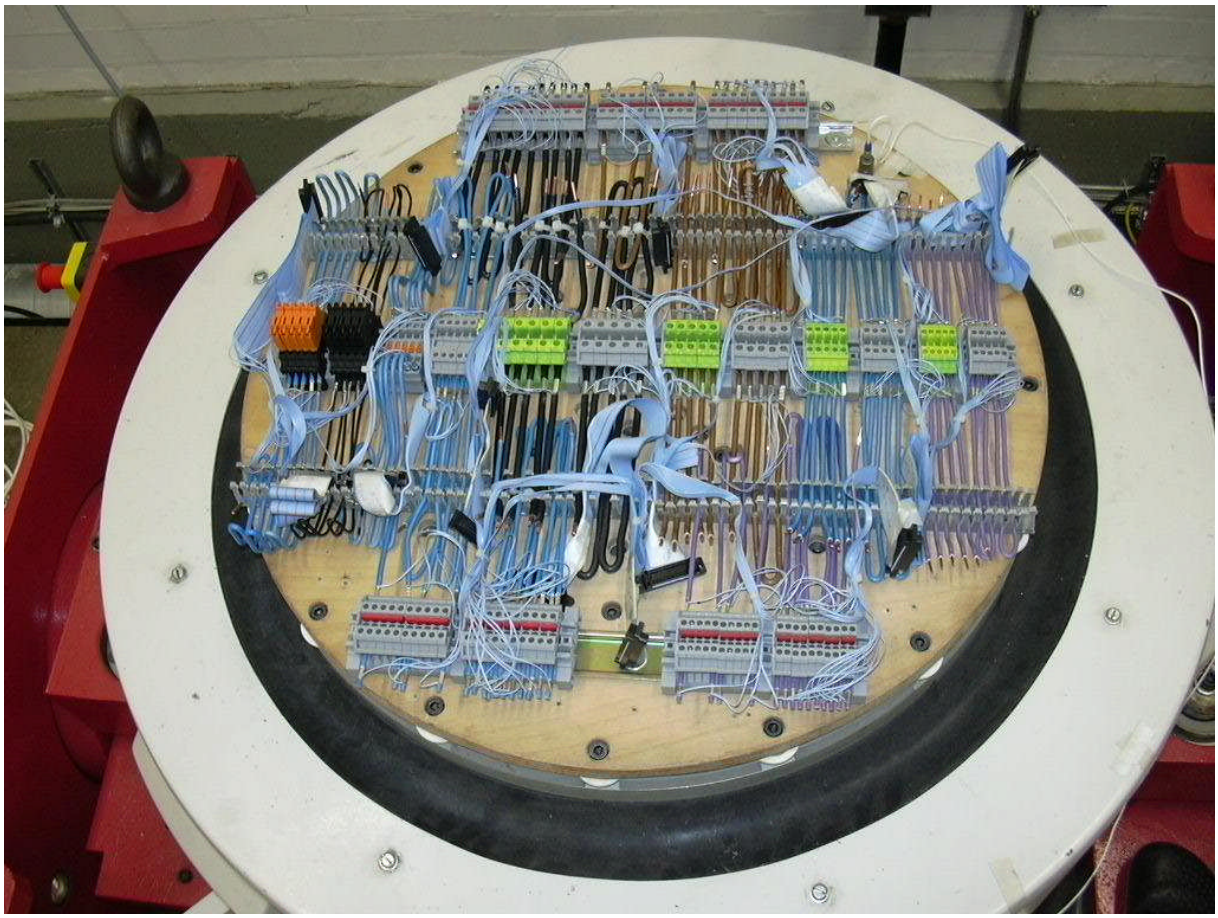
4.1 Test set-up, x-axis (exemplary)



4.2 Test set-up, y-axis (exemplary)



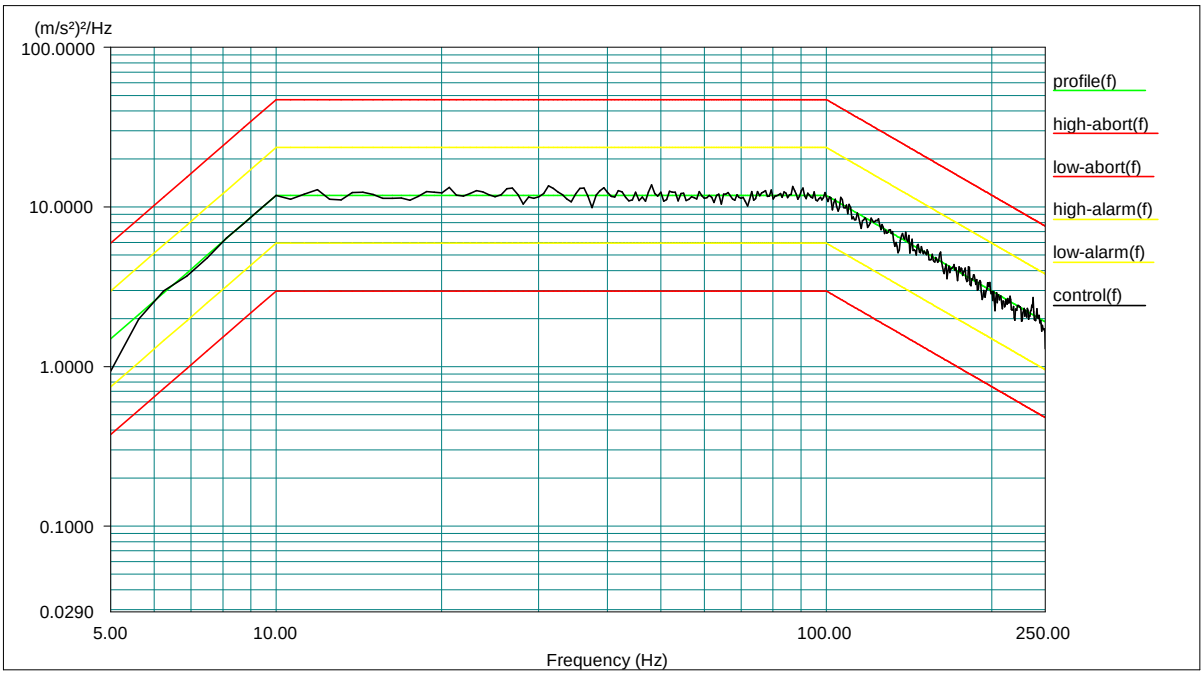
4.3 Test set-up, z-axis (exemplary)



5 Oscillation profiles

5.1 Vibration, random (EN 50155 : 2001 / Category 2), exemplary

Project File Name: 5-250Hz.prj
Profile Name: Random 5-250 Hz Test Type: Random Run Folder: .\RunDefault Mar 06,2004 07-36-20

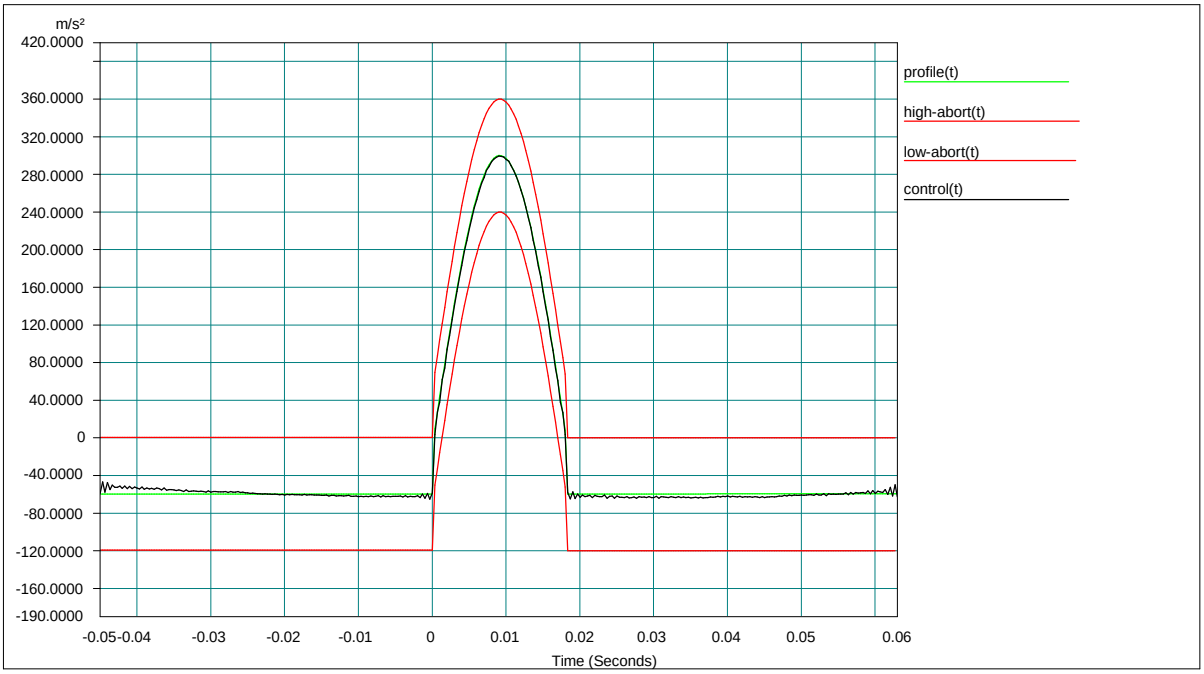


Level: 100 %
Control RMS: 42.260045 m/s² Full Level Elapsed Time: 05:00:00 Lines: 400 Frame Time: 1.600000 Seconds
Demand RMS: 42.474408 m/s² Remaining Time: 00:00:00 DOF: 154 dF: 0.625000 Hz

Data saved at 12:39:40 PM, Saturday, March 06, 2004 Report created at 12:44:10 , Samstag, März 6, 2004

5.2 Positive shock (EN 50155 : 2001 / Category 2), exemplary

Project File Name: 30g_18ms.prj
Profile Name: 300m/s² 18mSec Test Type: Classical Shock Run Folder: .\RunDefault Mar 11,2004 14-04-44

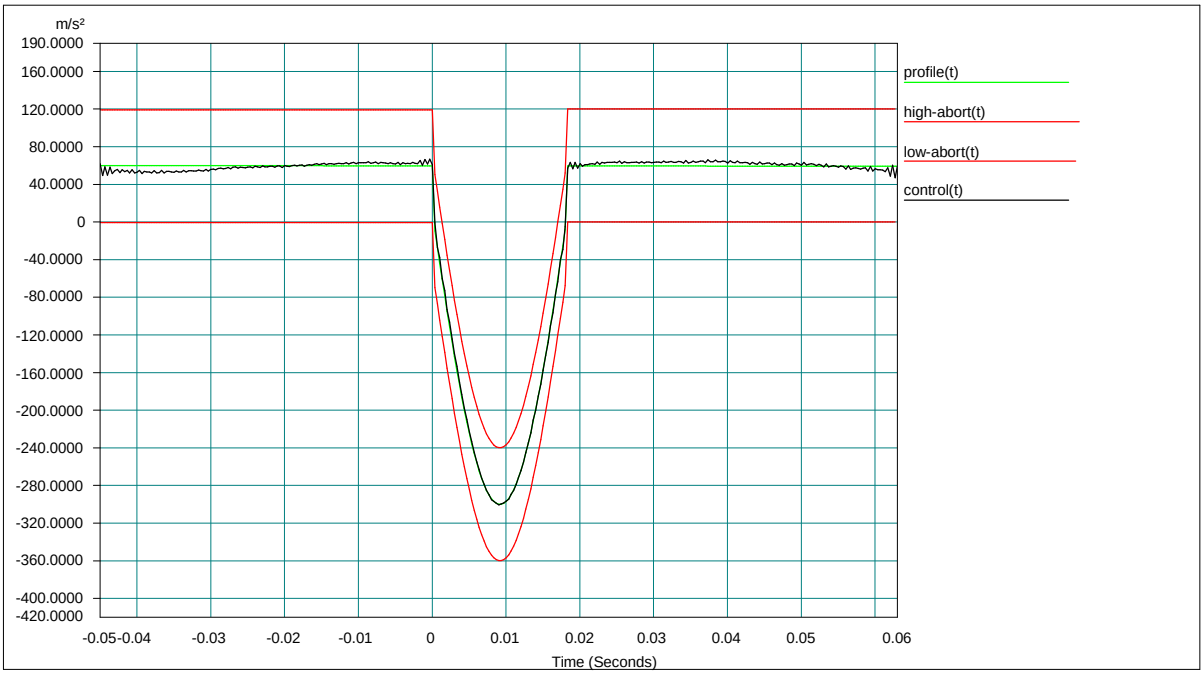


Level:	100 %	Block Size:	1024			Elapsed Pulses:	16
Frame Time:	0.341333 Seconds	Control Peak:	299.509399 m/s²	Control RMS:	60.909451 m/s²	Full Level Elapsed Pulses:	3
dT:	0.000333 Seconds	Demand Peak:	300.000000 m/s²	Demand RMS:	60.667191 m/s²	Remaining Pulses:	9
Pulse Type:	Half Sine	Amplitude:	300.000000 m/s²				

Data saved at 02:05:13 PM, Thursday, March 11, 2004

5.3 Negative shock (EN 50155 : 2001 / Category 2), exemplary

Project File Name: 30g_18ms.prj
Profile Name: 300m/s² 18mSec Test Type: Classical Shock Run Folder: .\RunDefault Mar 11,2004 14-04-44



Level:	100 %			Block Size:	1024	Elapsed Pulses:	25
Frame Time:	0.341333 Seconds	Control Peak:	300.677002 m/s²	Control RMS:	60.912910 m/s²	Full Level Elapsed Pulses:	6
dT:	0.000333 Seconds	Demand Peak:	300.000000 m/s²	Demand RMS:	60.667191 m/s²	Remaining Pulses:	0
Pulse Type:	Half Sine	Amplitude:	300.000000 m/s²				

Data saved at 02:05:26 PM, Thursday, March 11, 2004