



INTERBUS Conformance Test

Appendix Noise Immunity Test Measuring Protocols

Table of Contents

Measuring Protocol 0	
<u>Noise Immunity</u> <i>Reference Test</i>	3
Measuring Protocol A1 (< 60 V)	
<u>Noise Immunity</u> <i>Voltage Inputs</i>	5
Measuring Protocol A2 (> 60 V)	
<u>Noise Immunity</u> <i>Voltage Inputs</i>	7
Measuring Protocol B	
<u>Noise Immunity</u> <i>Bus Input/Bus Output</i>	9
Measuring Protocol C	
<u>Noise Immunity</u> <i>Input/Output for I/O Devices</i>	11
Measuring Protocol D	
<u>Noise Immunity</u> <i>Long-Term External Noise Immunity Test</i>	13



Measuring Protocol 0

Test report number: _____

Noise Immunity

Reference test

No test object

Page _____ of _____

Information on the test object: Type: _____

Designation, serial number: _____

Manufacturer: _____

Information about the test:

1st/2nd person carrying out the test: _____

Tests: Date: _____ Time: _____

Date: _____ Time: _____

Test Voltage	Polarity	System Cycles		Remarks *)
		Total	Single Error	
0.2 kV	+			
0.2 kV	-			
0.4 kV	+			
0.4 kV	-			
0.6 kV	+			
0.6 kV	-			
0.8 kV	+			
0.8 kV	-			
1.0 kV	+			
1.0 kV	-			
1.2 kV	+			
1.2 kV	-			
1.4 kV	+			
1.4 kV	-			
1.6 kV	+			
1.6 kV	-			
1.8 kV	+			
1.8 kV	-			
2.0 kV	+			
2.0 kV	-			
2.2 kV	+			
2.2 kV	-			

*) Please write additional remarks on the back

[illegible]



Measuring Protocol A1 (< 60 V)

Test report number: _____

Noise Immunity

Voltage inputs

Page _____ of _____

L1, (+), L2, L3, N, (-), FE Please delete as necessary

Information on the test object: Type: _____

Designation, serial number: _____

Manufacturer: _____

Information about the test:

1st/2nd person carrying out the test _____

Tests: Date: _____ Time: _____

Date: _____ Time: _____

Test Voltage	Polarity	System Cycles		Remarks *)
		Total	Single Error	
0.2 kV	+			
0.2 kV	-			
0.4 kV	+			
0.4 kV	-			
0.6 kV	+			
0.6 kV	-			
0.8 kV	+			
0.8 kV	-			
1.0 kV	+			
1.0 kV	-			
1.2 kV	+			
1.2 kV	-			
1.4 kV	+			
1.4 kV	-			
1.6 kV	+			
1.6 kV	-			
1.8 kV	+			
1.8 kV	-			
2.0 kV	+			
2.0 kV	-			
2.2 kV	+			
2.2 kV	-			

*) Please write additional remarks on the back

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Measuring Protocol A2 (> 60 V)

Test report number: _____

Noise Immunity

Voltage input

L1, (+), L2, L3, N, (-), FE Please delete as necessary

Page _____ of _____

Information on the test object: Type: _____

Designation, serial number: _____

Manufacturer: _____

Information about the test:

1st/2nd person carrying out the test _____

Tests: Date: _____ Time: _____

Date: _____ Time: _____

Test Voltage	Polarity	System Cycles		Remarks *)
		Total	Single Error	
0.4 kV	+			
0.4 kV	-			
0.8 kV	+			
0.8 kV	-			
1.2 kV	+			
1.2 kV	-			
1.6 kV	+			
1.6 kV	-			
2.0 kV	+			
2.0 kV	-			
2.4 kV	+			
2.4 kV	-			
2.8 kV	+			
2.8 kV	-			
3.2 kV	+			
3.2 kV	-			
3.6 kV	+			
3.6 kV	-			
4.0 kV	+			
4.0 kV	-			
4.4 kV	+			
4.4 kV	-			

*) Please write additional remarks on the back

[illegible]



Measuring Protocol B

Test report number: _____

Noise Immunity

Bus input

Page _____ of _____

Bus output (1)

Bus output (2) Please delete as necessary

Information on the test object: Type: _____

Designation, serial number: _____

Manufacturer: _____

Information about the test:

1st/2nd person carrying out the test _____

Tests: Date: _____ Time: _____

Date: _____ Time: _____

Test Voltage	Polarity	System Cycles		Remarks *)
		Total	Single Error	
0.2 kV	+			
0.2 kV	-			
0.4 kV	+			
0.4 kV	-			
0.6 kV	+			
0.6 kV	-			
0.8 kV	+			
0.8 kV	-			
1.0 kV	+			
1.0 kV	-			
1.2 kV	+			
1.2 kV	-			
1.4 kV	+			
1.4 kV	-			
1.6 kV	+			
1.6 kV	-			
1.8 kV	+			
1.8 kV	-			
2.0 kV	+			
2.0 kV	-			
2.2 kV	+			
2.2 kV	-			

*) Please write additional remarks on the back

[illegible]



Measuring Protocol C

Test report number: _____

Noise Immunity

Inputs/outputs for I/O devices

Page _____ of _____

Input ... Output ... Please enter

Information on the test object: Type: _____

Designation, serial number: _____

Manufacturer: _____

Information about the test:

1st/2nd person carrying out the test _____

Tests: Date: _____ Time: _____

Date: _____ Time: _____

Test Voltage	Polarity	System Cycles		Remarks *)
		Total	Single Error	
0.2 kV	+			
0.2 kV	-			
0.4 kV	+			
0.4 kV	-			
0.6 kV	+			
0.6 kV	-			
0.8 kV	+			
0.8 kV	-			
1.0 kV	+			
1.0 kV	-			
1.2 kV	+			
1.2 kV	-			
1.4 kV	+			
1.4 kV	-			
1.6 kV	+			
1.6 kV	-			
1.8 kV	+			
1.8 kV	-			
2.0 kV	+			
2.0 kV	-			
2.2 kV	+			
2.2 kV	-			

*) Please write additional remarks on the back

[illegible]

Measuring Protocol D

Test report number: _____

Noise Immunity *Long-term*

Page _____ of _____

Information on the test object: Type: _____

Designation, serial number: _____

Manufacturer: _____

Information about the test:

1st/2nd person carrying out the test: _____

Tests: Date: _____ Time: _____
Date: _____ Time: _____

1. Test

Operating state: _____ Operating state in the network: _____
Test duration: _____ At least 300,000 system cycles

Test Voltage	Polarity	System Cycles		Remarks ²⁾
		Total	Single Error	
1 kV (2 kV) ⁵⁾	+			
1 kV (2 kV) ⁵⁾	-			

2. Test

Operating state: _____ Operating state in the network: _____
Test duration: _____ At least 300,000 system cycles

Test Voltage	Polarity	System Cycles		Remarks ²⁾
		Total	Single Error	
2 kV (4 kV) ⁵⁾	+			
2 kV (4 kV) ⁵⁾	-			

Operating state in the network

Test duration:

At least 100,000 system cycles

Test Voltage	Test Frequency	Polarity ¹⁾	System Cycles		Remarks ²⁾
			Total	Single Error	
KV ³⁾	5.0 kHz	+ / -			
KV ⁴⁾	5.0 kHz	+ / -			
3.0 kV	5.0 kHz	+ / -			
4.0 kV	5.0 kHz	+ / -			

1. Circle selected polarity
2. Please write additional remarks on the back
3. With basic interference pin 0.1 kV beneath the error limit
4. With basic interference pin 0.1 kV over the error limit
5. The number in parenthesis applies when a supply line is interrupted with a nominal voltage higher than 60 V.

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