



ZERTIFIKAT TYPPRÜFUNG

TYPE TEST CERTIFICATE

Gerät <i>Tested equipment</i>	Power-Quality-Interface PQI-D Data Acquisition Unit for / Power Quality Instrument / Disturbance Recorder / Bushing Monitor
Angewendete Vorschriften <i>Tests are according to:</i>	IEC 60529, IEC 61000-6-4, IEC 61000-6-2, IEC 61326-1 IEC 61010-1, IEC 61010-2-030, IEC 61000-4-30
Durchgeführte Prüfungen <i>Performed tests</i>	1. Eigenschaften bei Referenzbedingungen <i>Properties at reference conditions</i> 2. Zustand nach Beanspruchung <i>Performance after stress</i> 3. Zusatzabweichung durch Einflußgrößen <i>Additional deviations by influencing quantities</i>
Prüfergebnisse <i>Test results</i>	Das Gerät erfüllt seine bestimmungsgemäße Aufgabe. Nach Abschluß der Prüfungen waren die Eigenschaften unverändert und das Gerät war nach wie vor voll funktionsfähig. <i>The equipment was seen to operate according to its specification. The equipment did not show any changes and was fully in order subsequent to these tests</i>

Nürnberg, 01.02.2019

A. Eberle GmbH & Co. KG
Frankenstraße 160
D-90461 Nürnberg

Technische Leitung /
Technical Management

Qualitätssicherung/
Quality Assurance

Typprüfung / *TYPE TEST*

Ausgabe Edition 5

Datum *Date* 01.02.2019

Power Quality Interface PQI-D

Blatt *Sheet* 2 (20)

Prüfbericht
Test report

Ausgabedatum: 01.02.2019
Date of issue:

Thema/ Subject:

Typprüfung Power Quality Interface PQI-D
Type test of Power Quality Interface PQI-D

Die Prüfungen wurden durchgeführt von:
The tests were performed by (testing laboratory)

A. Eberle GmbH & Co. KG
QS- Abteilung
Frankenstraße 160
90461 Nürnberg

Unteraufträge/ *Subcontracting*
Siehe Seite 5 / *see page 5*

Senton
Fujitsu Technology Solutions
Power Standards Lab

Die Prüfungen wurden durchgeführt für:
(Auftraggeber)
The tests were performed for (client):

A. Eberle GmbH & Co. KG
Frankenstraße 160
D-90461 Nürnberg

ältere Firmenanschrift / *older adress*

Aalener Straße 30/32
D-90441 Nürnberg

Typprüfung / *TYPE TEST*

Ausgabe Edition 5

Datum *Date* 01.02.2019

Power Quality Interface PQI-D

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Protokollgliederung

Scope of protocol

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Typprüfung / *TYPE TEST*

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Datum *Date* 01.02.2019

Power Quality Interface PQI-D

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Gültigkeitsbereich, Prüfdaten
Range of validity, Test data

Das Typenprüfprotokoll gilt für die Produktversion
The test report covers the product versions

- EMV-Prüfung / *Tests of the electromagnetic compatibility:*
PQI-D H2 C21 E1 M92, Art.-Nr. 111.7128 und / *and*
PQI-D H1 C10 E1 M91, Art.-Nr. 111.7130
- Sicherheitsprüfung, Mechanische Prüfung, Klimaprüfung /
Tests of electrical safety, the climatic tests and the mechanical tests:
PQI-D H1 C30 E1 M92, Art.-Nr. 111.7171 und / *and*
PQI-D H2 C30 E1 M98.1, Art.-Nr. 111.7235
- IEC 61000-4-30 *Power Quality Measurement Methods Compliance:*
PQI-D-System Art.-Nr. 118.7172 (incl. PQI-D H1 C30 E2 M00, Art.-Nr. 111.7136)

Typprüfung / *TYPE TEST*

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Datum *Date* 01.02.2019

Power Quality Interface PQI-D

Blatt *Sheet* 5 (20)

Unteraufträge
Subcontracting

Die Prüfung der Elektromagnetischen
Verträglichkeit (EMV) wurden durchgeführt von:
*The tests of the electromagnetic compatibility
(EMC) have been performed by:*

Prüfzeitraum / *Testperiode*
Prüfbericht Nr. / *Test Report No*

Senton GmbH
EMV- Prüfczentrum
Äußere Frühlingsstr. 45
D-94315 Straubing
11/2003 - 09/2005
50524-30712

Prüfung der elektrischen Sicherheit wurde
durchgeführt von:
*The tests of electrical safety, the climatic tests and
the mechanical tests have been performed by:*

Prüfzeitraum / *Testperiode*
Prüfbericht Nr. / *Test Report No*

Fujitsu Technology Solutions GmbH
Product Compliance Center
Bürgermeister-Ulrich-Str. 100
D-86199 Augsburg
03/2013 – 06/2013
CER+AEB12-0001+S01
CLI+AEB12-0001+K01a
MEC+AEB12-0001+M01a

Prüfung der Power-Quality-Messmethoden
nach IEC 61000-4-30 Edition 2 durchgeführt von:
*The IEC 61000-4-30 Edition 2 Compliance
Report have been performed by:*

Prüfzeitraum / *Testperiode*

PSL Power Standards Lab
1201 Marina Village Parkway #101
Alameda,
CA 94501 USA
11/2009 – 03/2010

Typprüfung / *TYPE TEST*

Ausgabe Edition 5

Datum *Date* 01.02.2019

Power Quality Interface PQI-D

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Informationsunterlagen
Technical information

Handbuch Manual

Ausgabe Edition

Betriebsanleitung PQI-D
Power-Quality-Interface PQI-D
Ausgabe 01.07.2013

deutsch

Operating manual
Power-Quality-Interface PQI-D
Issue 03/07/2013

english

Technische Daten Technical data

Ausgabe Edition

Technische Daten
Power-Quality-Interface PQI-D
Ausgabe 01/2013

deutsch

Technical data
Power-Quality-Interface PQI-D
Issue 01/2013

english

Bestellort / *available from:*

A. Eberle GmbH & Co. KG
Frankenstr. 160
D-90461 Nürnberg
www.a-eberle.de

Zusammenfassung/Summery**Inhaltsverzeichnis***Table of contents*

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Pos. Item	Prüfung Test	Prüfbed. Arbeitsber. Vorschriften Test conditions Operative Range Standards	Prüfwerte Test values	Zul. Grenzwerte Permissive limiting values	Prüfergebnis Testresult
1	Leistungsaufnahme Power input				
1.1	Hilfsspannung aux. Power	Referenzbedingungen Reference conditions Merkmal / Feature H1 Merkmal / Feature H2	85 V _{AC} ... 264 V _{AC} 88 V _{DC} ... 280 V _{DC} 18 V _{DC} ... 72 V _{DC}	< 33VA < 15W	9,03VA bei 112 V 8,52 W bei 104 V
1.2	Spannungsmesseingänge Voltage measuring Inputs	Referenzbedingungen Reference conditions	100 V, 50 Hz	< 0,1VA	0,01386 VA ... 0,01389 VA
1.3	Strommesseingänge Current measuring Inputs	Referenzbedingungen Reference conditions	1A, 50Hz 5A, 50Hz	< 0,1VA < 0,5VA	0,01VA 0,24VA
1.4	E1 ... E16 (M91)	Referenzbedingungen Reference conditions	230VDC	< 5mA	0,489 mW
2	Genauigkeiten Accuracy Betriebsmeßwerte Operational value measurement	gemäß Datenblatt according to technical data			
2.1	Spannungsmessung Voltage measuring	Referenzbedingungen Reference conditions	100 V, 50 Hz	≤ 0,1 %	+ 0,001 % ... + 0,026 %
2.2	Strommessung Current measuring	Referenzbedingungen Reference conditions	1 A 5 A	≤ 0,1% ≤ 0,1%	-0,006 ... +0,004 % -0,03 ... + 0,02 %
2.3	Frequenz / Frequency	Referenzbedingungen Reference conditions	50 Hz, 60 Hz	≤ 0,01%	< 0,006 %
3	Schnittstellen/Interfaces				
3.1	PC-Schnittstelle COM 1 PC- Interface COM1				
3.1.1	Übertragungs-geschwindigkeit Transmission rate		Betrieb mit / Service at: 1200Bd 2400Bd 4800Bd 9600Bd 19200Bd 38400Bd 57600Bd 76800Bd 115200Bd		Funktion korrekt bei allen Baudraten Transmission correct for all baud rates
4	Uhrzeit-/Datum Real time clock				Funktion in Ordnung Function correct

5	Elektromagnetische Verträglichkeit <i>Electromagnetic compatibility (EMC)</i>				
5.1	Störemission <i>RFI- Emissions</i>	EN 61000-6-4 EN 61326	Industiean-wendung <i>Industrial application</i> Klasse A / <i>Class A</i>		Prüfung bestanden <i>Passed</i>
5.2	Störfestigkeit <i>Immunity</i>				
	ESD	EN 61000-4-2 IEC 60255-22-2	Luft / <i>air</i> : 16 kV Kontakt / <i>contact</i> : 8 kV		Siehe Prüfzertifikat / <i>see test certificate</i>
	Elektromagnetische Felder <i>Electromagnetic field</i>	EN 61000-4-3 IEC 60255-22-3	80 ... 2 GHz: 10 V/m pulsmoduliert <i>with pulsmodulation</i>		Siehe Prüfzertifikat / <i>see test certificate</i>
	Burst test	EN 61000-4-4 IEC 60255-22-4	Versorgung AC 230V: 2 kV <i>Aux. AC 230V: 2 kV</i> Datenleitungen: 1 kV <i>control inputs and COMs:</i> 1 kV		Prüfung bestanden <i>Passed</i>
	Surge immunity test	EN 61000-4-5	Leitung/Erde: 4 kV <i>Line/earth: 4 kV</i> Zwischen Leitungen: 2 kV <i>Between lines: 2 kV</i>		Siehe Prüfzertifikat / <i>see test certificate</i>
	Gedämpfte Schwingungen und 1MHz Burst test <i>Oscillatory waves and 1MHz Burst</i>	EN 61000-4-12 IEC 60255-22-1	2,5 kV, Klasse 3 / <i>class 3</i>		Siehe Prüfzertifikat / <i>see test certificate</i>
	Leitungsgeführte Störungen <i>Conducted disturbances</i>	EN 61000-4-6	0,15 .. 80 MHz: 10 Veff		Siehe Prüfzertifikat / <i>see test certificate</i>
	Störfestigkeit gegen Magnetfelder <i>Power frequency magnetic fields</i>	EN 61000-4-8	100 A/m dauernd <i>/permanent</i> 1000 A/m 1s		Siehe Prüfzertifikat / <i>see test certificate</i>
	Spannungseinbrüche <i>Voltage dips</i>	EN 61000-4-11	UN 110V DC UN 220V DC UN 230V AC 30 % 0,02s, 60% 1s		Siehe Prüfzertifikat / <i>see test certificate</i>
	Spannungsunter-brechungen <i>Voltage interruptions</i>	EN 61000-4-11	100 % 5s		Siehe Prüfzertifikat / <i>see test certificate</i>

6	Mechanische Beanspruchung <i>mechanical stress</i>				
6.1	Falltest <i>Drop test</i>	IEC 60068-2-31 Test EC Procedure 1	50mm Fallhöhe <i>50mm height of fall</i>		Funktion nach der Prüfung korrekt <i>Function after test still correct</i>
6.2	Schwingprüfung <i>Vibration test</i>	IEC 60068-2-6 Test Fc			Funktion nach der Prüfung korrekt <i>Function after test still correct</i>
6.3	Schockprüfung <i>Shock and bump test</i>	IEC 60068-2-27 Test Ea			Funktion nach der Prüfung korrekt <i>Function after test still correct</i>
7	Hochspannungsprüfung <i>Insulation test</i>	IEC61010 / EN61010 Teile 1 IEC601010 / EN61010 Part 1			
			<i>Line to Neutral</i>	CAT III 1500V / 1 min 2210V / 5 sec	Siehe Prüfzertifikat / <i>see test certificate</i>
			<i>Mains to PE/GND</i>	CAT III 1500V / 1 min 2210V / 5 sec	Siehe Prüfzertifikat / <i>see test certificate</i>
			<i>Measuring circuit to PE/GND</i>	CAT III 1500V / 1 min 2210V / 5 sec	Siehe Prüfzertifikat / <i>see test certificate</i>
			<i>Mains to secondary circuits</i>	CAT III 3000V / 1 min 3510V / 5 sec	Siehe Prüfzertifikat / <i>see test certificate</i>
			<i>Measuring circuits to secondary circuits</i>	CAT III 3000V / 1 min 3510V / 5 sec	Siehe Prüfzertifikat / <i>see test certificate</i>

Typprüfung / *TYPE TEST*

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Power Quality Interface PQI-D

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8	Klimaprüfungen <i>Climatic tests</i>				
	Trockene Kälte (in Betrieb) / <i>dry cold (operating)</i>	IEC 60068-2-1, Test A	-25 °C / 96 h		Siehe Prüfzertifikat / <i>see test certificate</i>
	Trockene Kälte (Lagerung) / <i>dry cold (non-operating)</i>		-40 °C / 96 h		Siehe Prüfzertifikat / <i>see test certificate</i>
	Trockene Wärme (in Betrieb) / <i>dry heat (operating)</i>	IEC 60068-2-2, Test B	+55 °C / 96 h		Siehe Prüfzertifikat / <i>see test certificate</i>
	Trockene Wärme (Lagerung) / <i>dry heat (operating)</i>		+70 °C / 96 h		Siehe Prüfzertifikat / <i>see test certificate</i>
	Temperatur Wechsel (in Betrieb) / <i>Change of temperature (operating)</i>	IEC 60068-2-14, Test Nb	0 °C / +55 °C (5 cycles)		Siehe Prüfzertifikat / <i>see test certificate</i>
	Temperatur Wechsel (Lagerung) / <i>Change of temperature (non operating)</i>		-40 °C / +70 °C (5 cycles)		Siehe Prüfzertifikat / <i>see test certificate</i>
	Feuchte Wärme konstant <i>Damp heat</i>	IEC 60068-2-78, Test Cb	+40°C / 93% r.H. / 96 h		Siehe Prüfzertifikat / <i>see test certificate</i>

IEC 61000-4-30 Power Quality Measurement Methods Compliance Report

Parameter <i>parameter</i>	Abschnitt <i>Section</i>	Anforderung Klasse A <i>Requirements Class A</i>	Anforderung Klasse B <i>Requirements Class B</i>	Klasse <i>Class</i>
Measurement aggregation intervals	4.4	Basic measurement time : 10/12 cycles for 50/60Hz Aggregation time intervals : 3s,10min, 2h	The manufacturer shall indicate the method, number and duration of aggregation intervals	A
Time-clock uncertainty	4.6	$\leq \pm 20/16.7\text{ms}$ for 50/60Hz	The manufacturer shall specify the method to determine 10-min intervals	A
Flagging concept	4.7	Avoids counting a single event more than once in different parameters	No requirements	A
Power frequency	5.1	Fundamental frequency output = number of integral cycles counted during 10-s time clock interval / cumulative duration if the integer cycles. Prefiltering in zerocrossing detector Other techniques that provide equivalent results, are acceptable. The measurement uncertainty shall not exceed $\pm 0.01\text{Hz}$ The frequency measurement shall be made on the reference channel.	The manufacturer shall indicate the process used for frequency measurement and specify the uncertainty	A
Magnitude of supply voltage	5.2	r.m.s. value over 10/12 cycles for 50/60Hz, contiguous, non overlapping The measurement uncertainty shall not exceed $\pm 0.1\%$ of U_{din}	The measurement shall be the r.m.s. value over a period specified by the manufacturer. The manufacturer shall specify the uncertainty In all cases the measurement uncertainty must not exceed $\pm 0.5\%$ of U_{din}	A
Flicker	5.3	IEC 61000-4-15 Dips, swells and interruptions shall cause PST and PLT output values as well as output 4 and 5 values to be flagged	No requirements	A
Supply voltage dips and swells	5.4	The cycle duration of $U_{\text{rms}(1/2)}$ depends on the fundamental frequency Residual voltage and swell voltage magnitude measurement uncertainty $\leq \pm 0.2\%$ of U_{din}	The manufacturer shall specify the uncertainty. Residual voltage and swell voltage magnitude measurement uncertainty $\leq \pm 1.0\%$ of U_{din}	A
Voltage interruptions	5.5	The cycle duration of $U_{\text{rms}(1/2)}$ depends on the fundamental frequency	No requirements	A
Supply voltage unbalance	5.7	u_2 = neg. sequence / pos. sequence u_0 = zero sequence / pos. sequence uncertainty $\leq \pm 0.15\%$	The manufacturer shall specify the algorithms and methods used to calculate Unbalance and specify the uncertainty	A

Typprüfung / *TYPE TEST*

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Datum *Date* 01.02.2019

Power Quality Interface PQI-D

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Parameter <i>parameter</i>	Abschnitt <i>Section</i>	Anforderung Klasse A <i>Requirements Class A</i>	Anforderung Klasse B <i>Requirements Class B</i>	Klasse <i>Class</i>
Voltage harmonics	5.8	IEC 61000-4-7:2002	The manufacturer shall specify measurement uncertainty and aggregation methods	A
Voltage interharmonics	5.9	IEC 61000-4-7:2002	The manufacturer shall specify measurement uncertainty and aggregation methods	A
Mains signaling voltage	5.10		The manufacturer shall specify measurement uncertainty and aggregation methods	A
Underdeviation and overdeviation	5.12		The manufacturer shall specify measurement uncertainty and aggregation methods	A
Transient influence quantities	6.1		The manufacturer shall specify measurement uncertainty and aggregation methods	A

SENTON

CERTIFICATE
to the Electromagnetic Compatibility
to Test Report No. 50524-30712

EUT: Power Quality Interface PQI-D
Applicant: A. Eberle GmbH & Co. KG
Regulations: EN 61326:1997 + A1:1998 + A2:2001
EN 61000-6-4:2001
EN 61000-3-2:2001
EN 61000-3-3:2001
EN 61000-6-2:2001

Test result:

The tested sample is in compliance with the RFI requirements and the immunity requirements according to above referenced regulations.

The following severity levels have been achieved:

RFI-Emissions: Harmonic current emission according to EN 61000-3-2:2000
Voltage fluctuations and flicker according to EN 61000-3-3:1995

Immunity: Immunity requirements according to EN 61326:1997 table A.1 and EN 61000-6-2:2001

Electrostatic discharge according to IEC 61000-4-2:1995
contact discharge: 8 kV
air discharge: 16 kV

RF electromagnetic fields according to IEC 61000-4-3:1995
80 - 2000 MHz: 10 V/m

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Immunity:

Surges according to IEC 61000-4-5:1995
differential mode (line to line): 2 kV
common mode (line to ground): 4 kV


Conducted disturbances induced by RF fields according to IEC 61000-4-6:1996
150 kHz – 80 MHz: 10 V rms

Power frequency magnetic field according to IEC 61000-4-8:1993
100 A/m (50 Hz), permanent
1000 A/m (50 Hz), 1 s

Voltage dips according to IEC 61000-4-11:1994
reduction: 30 %, interruption time: 1 period (20 ms)
reduction: 60 %, interruption time: 50 periods (1 s)

Voltage interruption according to IEC 61000-4-11:1994
reduction: 100 %, interruption time: 250 periods (5 s)


Oscillatory waves and 1 MHz burst according to IEC 61000-4-12:2001
class 3, 2.5 kV

 Johann Roidt
Straubing
2005.09.27
11:20:12 +02'00'

September 27, 2005

Johann Roidt
Senton GmbH

Date

 Deutscher
Akkreditierungs
Rat

DAR-Registration-No. TTI-P-G 062/94-01

SENTON GmbH - EMC-Test Center - Äußere Frühlingsstrasse 45 - D-94315 Straubing - phone: +49 94 21 55 22-0
Certificate to Test Report No. 50524-30713 Page 2 of 2 Pages



Product Compliance Center

Mechanical Test Report

Equipment under Test (EUT): **Data Acquisition Unit Type PQI-D**
with Option "H1": 85...264VAC (HV)
and Option "H2": 18...72VDC (LV)
tested in modul rack with BIN-D plug-in module

Applicant: A. Eberle GmbH & Co. KG

Frankenstraße 160
90461 Nürnberg

Document No.: MEC+AEB12-0001+M01a
This document replaced the report MEC+AEB12+0001+M01

Test date: June 18, until June 21, 2013
Issue date: September 17, 2013

Result: Passed

Prepared by: Michael Röthinger
Technician


Signature

Reviewed by: Alexander Gerum
Deputy Head of LAB E


Signature

The results in this report apply only to the tested sample(s).
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Fujitsu Technology Solutions GmbH, Product Compliance Center, D-86199 Augsburg,
Buergermeister-Ulrich-Str. 100, Germany, Phone (+49-821) 804-3692, Fax (+49-821) 804-2675.



Report No.

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CER+AEB12-0001+S01

TEST REPORT IEC 61010-1 Safety requirements for electrical equipment for measurement, control, and laboratory use Part 1: General requirements	
Report Reference No.	196628
Date of issue	05 July 2013
Total number of pages	117
Testing Laboratory Name	Fujitsu Technology Solutions GmbH Phone: (+49) 821 Product Compliance Center 804 2908
Address	Buergermeister Ulrich Str.100, 86199 Augsburg, Germany
Applicant's name	A. Eberle GmbH & Co. KG
Address	Frankenstrasse 160 90461 Nürnberg, Germany
Manufacturer's name	A. Eberle GmbH & Co. KG
Address	Frankenstrasse 160 90461 Nürnberg, Germany
Factory's name	See page 7
Address	-
Test specification:	
Standard	See page 4
Test procedure	CB
Non-standard test method	N/A
Test Report Form No.	IEC61010_1F
Test Report Form(s) Originator	VDE Testing and Certification Institute
Master TRF	2011-03
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This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.	
Test item description	Power Quality Interface
Trade Mark	
Manufacturer	See above.
Model/Type reference	PQI-D <small>(The model designation may be followed by additional letters and numbers or blanks denoting differences in SELV secondary circuits or minor mechanical differences.)</small>
Ratings	Input variant H1: AC 85V-110V-264V, max. 33VA, 50-60Hz or DC 88V-220V-280V Input variant H2: DC 18V-60V-72V, max. 15W



Report No.

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CER+AEB12-0001+S01

Testing procedure and testing location:	
<input checked="" type="checkbox"/> Test laboratory accredited by:	  Deutsche Akkreditierungsstelle D-PL-12108-01-01
Testing location/ address	Fujitsu Technology Solutions GmbH Product Compliance Center Buergermeister-Ulrich-Str. 100, 86199 Augsburg, Germany
Tested by (printed name, title and signature)	Erfried Rösner Test Engineer 
Approved by (printed name, title and signature)	Andreas Kripahle Head of LAB SE 



Product Compliance Center

Climatic Test Report

Equipment under Test (EUT): **Data Acquisition Unit Type PQI-D**
With Option "H1": 85...264VAC (HV)
and Option "H2": 18...72VDC (LV)
tested in modul rack with BIN-D plug-in module

Applicant: A. Eberle GmbH & Co. KG

Frankenstraße 160
90461 Nürnberg

Document No.: CLI+AEB12-0001+K01a
This document replaced the report CLI+AEB12-0001+K01

Test date: March 19, until April 17, 2013
Issue date: September 16, 2013

Prepared by: Matthias Härle
Technician


Signature

Reviewed by: Alexander Gerum
Deputy Head of LAB E


Signature

The results in this report apply only to the tested sample(s).
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Fujitsu Technology Solutions GmbH, Product Compliance Center,
D-86199 Augsburg, Bürgermeister - Ulrich - Str. 100, Germany Phone +49 (821) 804-2109, Fax +49 (821) 8044753.

PSL Document: PSL 61000-4-30 Ed2 Test Report - Final - PQI-DA and PQI-D.doc Last update: 3/31/2010

Summary of Results
A-Eberle PQI-DA and PQI-D
61000-4-30 compliance

when equipped with the following accessories or options:
 GPS Receiver

Table 1: Summary of Results – PQI-DA and PQI-D
 at 230 V L-N U_{din} (equivalent to 400 L-L V_{rms}), 50/60 Hz
 when equipped with the following accessories:
 GPS Receiver

61000-4-30 Section	Power Quality Parameter	Class A Compliance	Class S Compliance	Class B Compliance	Remarks
5.1	Power frequency	Yes	Yes	Yes	
5.2	Magnitude of the supply voltage	Yes	Yes	Yes	
5.3	Flicker	Yes	Yes	(N/A)	
5.4	Supply voltage dips and swells	Yes	Yes	Yes	
5.5	Voltage interruptions	Yes	Yes	Yes	
5.7	Supply voltage unbalance	Yes	Yes	Yes	
5.8	Voltage harmonics	Yes	Yes	Yes	
5.9	Voltage interharmonics	Yes	Yes	Yes	
5.10	Mains signaling voltage	Yes	Yes	Yes	
5.12	Underdeviation and overdeviation	Yes	Yes	Yes	
4.4	Measurement aggregation intervals	Yes	Yes	Yes	
4.6	Time-clock uncertainty	Yes	Yes	Yes	
4.7	Flagging	Yes	Yes	(N/A)	
6.1	Transient influence quantities	Yes	(N/A)	(N/A)	

(N/A) – Not Applicable. There is no requirement in the Standard.

Signed: 


Alex McEachern
 President, Power Standards Lab
 31 March 2010

Signed: 

Thomas Pua
 Test Engineer, Power Standards Lab
 31 March 2010

Mess- und Regeltechnik

Konformitätserklärung
Declaration of Conformity


A. Eberle GmbH & Co. KG Frankenstraße 160 D-90461 Nürnberg erklärt, dass das genannte Produkt mit den Vorschriften nebenstehender Europäischer Richtlinien übereinstimmt:	Produkt: <i>Product:</i>	Power Quality System <i>Power Quality System</i>
	Typenbezeichnung: <i>Type:</i>	PQSys
	Artikel-Nr.: <i>Part-No.:</i>	100.0070.xxx
	Beschreibung: <i>Description:</i>	Optional eingebaut in: <i>Optional installed in:</i> Ebenso als System: <i>as well as system:</i>
A. Eberle GmbH & Co. KG Frankenstraße 160 D-90461 Nürnberg Germany <i>declares that the mentioned product complies with the requirements of the adjoining European Directives:</i>	Weitere Angaben: <i>Further information:</i>	Keine <i>None</i>
	Angewandte Europäische Richtlinien: <i>Applied European Directives:</i>	
	Richtlinie 2014/35/EU <i>Directive 2014/35/EU</i>	Niederspannungsrichtlinie <i>Low Voltage Directive</i>
Diese Erklärung beinhaltet keine Zusicherung von Eigenschaften im rechtlichen Sinne. Sie bescheinigt nur die Übereinstimmung mit den genannten Richtlinien.	Richtlinie 2014/30/EU <i>Directive 2014/30/EU</i>	EMV-Richtlinie <i>EMC Directive</i>
	Anmerkungen: <i>Remarks:</i>	Keine <i>None</i>
<i>This declaration does not include affirmation of attributes in a legal sense. It certifies only conformance with the mentioned Directives.</i>	Hersteller-Unterschrift: <i>Signature of manufacturer:</i>	
	 Harald Staußberger Geschäftsführer/ <i>Managing Director</i> Stempel/ <i>Stamp</i>	
Die Sicherheitshinweise in der Produktdokumentation sind zu beachten.	Nürnberg, 29.08.2018	
<i>The safety instructions given in the product documentation have to be considered.</i>		