

- Issued by : NMI Certin B.V.,
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The Netherlands
- Applicant : Iskra, d.d.
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- Submitted : **A meter embedding IEC 61000-4-30 Power Quality functions**
Manufacturer : Iskra, d.d.
Type : MC784 / iMC784
- Characteristics : See page 2 and further
- In accordance with : **IEC 61000-4-30 Ed. 3 (2015)**
"Electromagnetic Compatibility (EMC) – Part 4-30: Testing and measurement techniques – Power quality measurement methods"
IEC 62586-2 Ed. 2 (2017)
"Power quality measurement in power supply systems - Part 2: Functional tests and uncertainty requirements"
- Measurement class : IEC 61000-4-30 class A

The undersigned declares that the described product is tested according to the above mentioned standard and meet their requirements, based on a non-recurrent examination. The appertaining test data is presented in type evaluation report number NMI-16200171-01b, granted by NMI Certin B.V.

NMI Certin B.V.
6 November 2017



C. Oosterman
Head Certification Board

IEC 61000-4-30 Power Quality functions tested

The following IEC 61000-4-30 measurement methods have been tested

Table 1 IEC 61000-4-30 Power Quality functions tested

IEC 62586-2 Clause	IEC 61000-4-30 parameter (clause)	IEC 61000-4-30 class	Comments
6.1	Power frequency (5.1)	A	50 Hz and 60 Hz
6.2	Magnitude of the supply voltage (5.2)	A	
6.3	Flicker (5.3)	A	IEC 61000-4-15 Class F1
6.4	Supply voltage interruptions, dips and swells (5.4 / 5.5)	A	50 Hz and 60 Hz
6.5	Supply voltage unbalance (5.7)	A	
6.6	Voltage harmonics (5.8)	A	
6.7	Voltage inter-harmonics (5.9)	A	
6.8	Mains signalling voltages on the voltage supply (5.10)	A	Method 1 + Method 2
6.9	Measurement of underdeviation and overdeviation parameters (Annex D)	A	
6.10	Flagging (4.7)	A	
6.11	Clock uncertainty (4.6)	A	
6.12	Variation of external influence quantities	A	Temperature: -10°C .. +55°C Power supply: 80 – 276 VAC 70 – 300 VDC
6.13	Rapid Voltage Changes (RVC) (5.11)	A	
6.14	Current Magnitude (5.13.2)	A	
6.15	Current Harmonics (5.13.4)	A	
6.16	Current Interharmonics (5.13.5)	A	
6.17	Current unbalance (5.13.6)	A	
8	Measurement uncertainty and operating uncertainty	A	

A : compliance with class A
 S : compliance with class S
 --- : Not implemented

The tests are performed in accordance with IEC 62586-2 edition 2 (2017).

Characteristics of the measuring instrument

In Table 2 the general characteristics of the measuring instrument are presented.

Table 2 General characteristics

U_{din}	230 V
I_{nom}	5 A (Nominal current used for testing)
f_{nom}	50 Hz and 60 Hz
Temperature	Rated range of operation: -10°C to +55°C
Power supply range	80 ... 276 VAC 70 ... 300 VDC
Software version	FW : 1.08 (measuring software) TFT : 1.08 (display software) OS : 1.07 (system software - Linux)
Hardware version	A
Environmental application	Fixed (F), Indoor (I)