



develop

PSU test report

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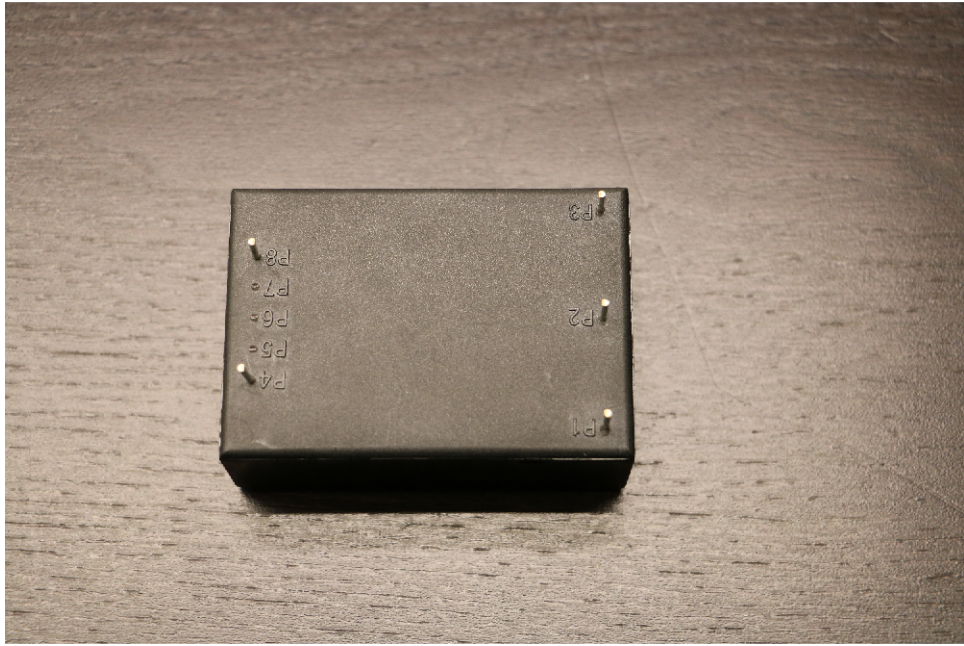
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2 General information

Testing the following device

Manufacturer: Vigortronix
Device name: VTX-214-030-112
Serial number: 1
Nominal voltage: 12.000V
Nominal current: 2.500A
Tester: Bernhard Woerndl-Aichriedler <bwa@xdevelop.at>
Start time: 13-Jul-2016 13:41:48



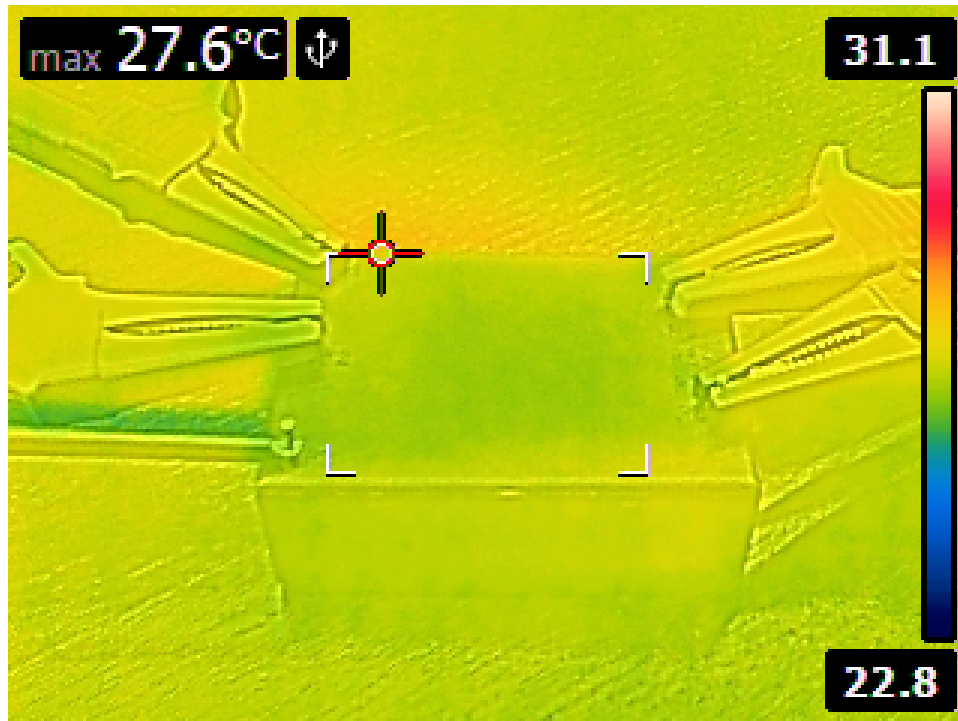


3 Point of operation

The test has been conducted with the following conditions

Voltage/Frequency: 230V-50Hz

Ambient Temperature: 29.75C





4 Standby power consumption

Voltage: 230.65V

Frequency: 50Hz

Current: 0.010561A

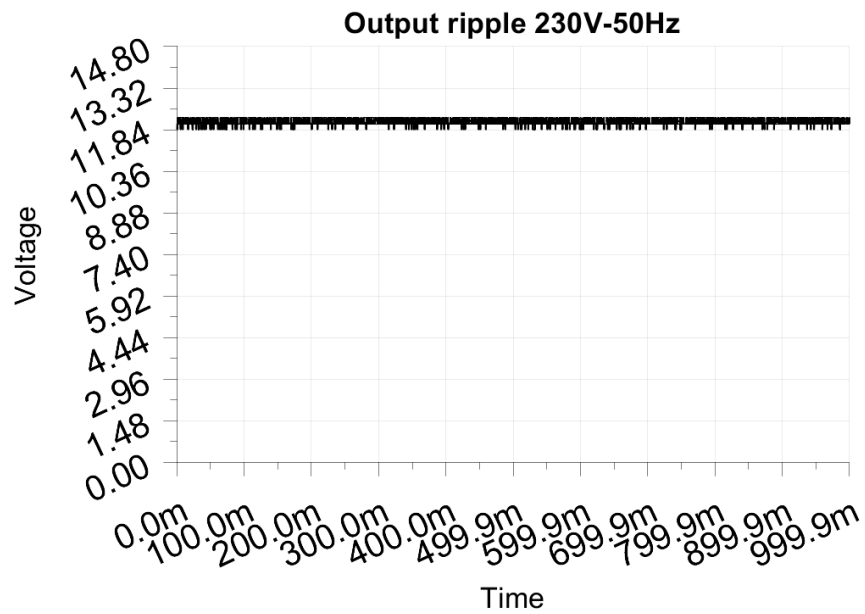
P active: 0.397W

P apparent: 2.436VA

P reactive: 2.403VAR

P factor: 0.163

Output voltage: 12.142V



5 Load testing

Characteristics

Voltage: 230.64V

Frequency: 50Hz

Loads: 0.000A to 2.500A

Minimum output voltage: 12.080V

Maximum output voltage: 12.141V

Regulation error absolute: -0.080V/+0.141V

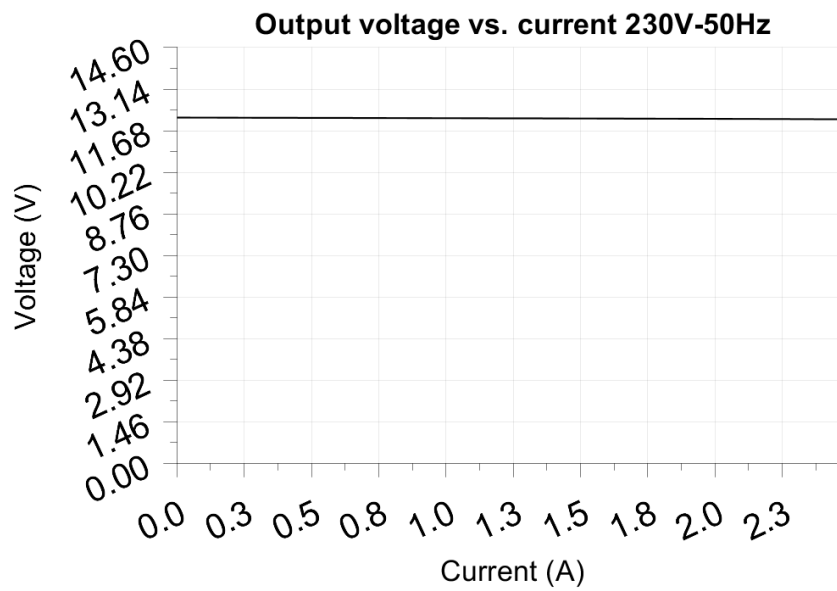
Regulation error relative: -0.7%/+1.2%

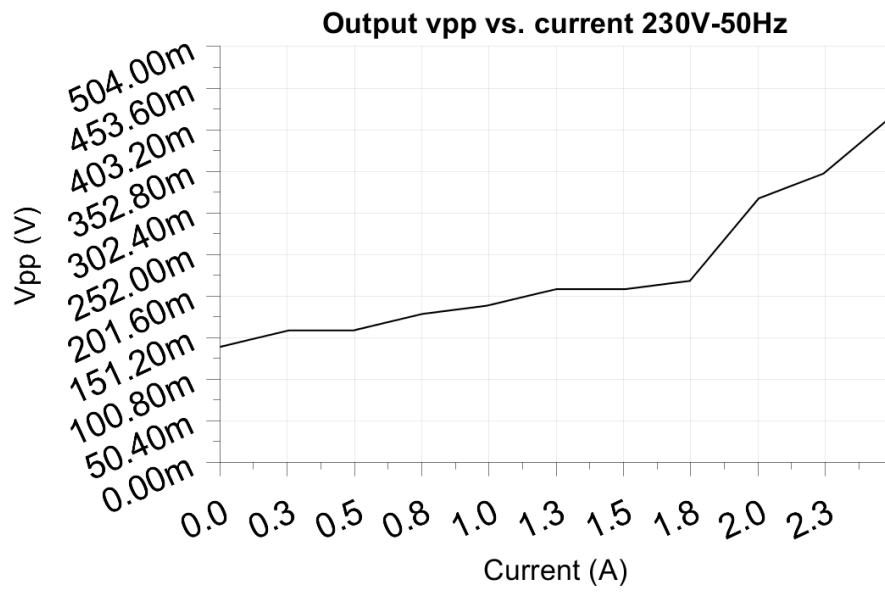
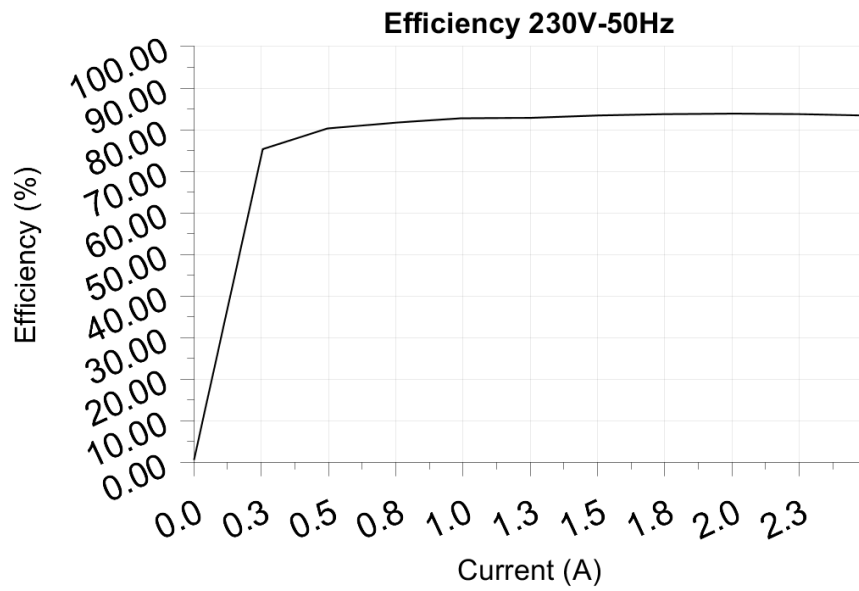
Vpp ripple&noise absolute: 0.420V

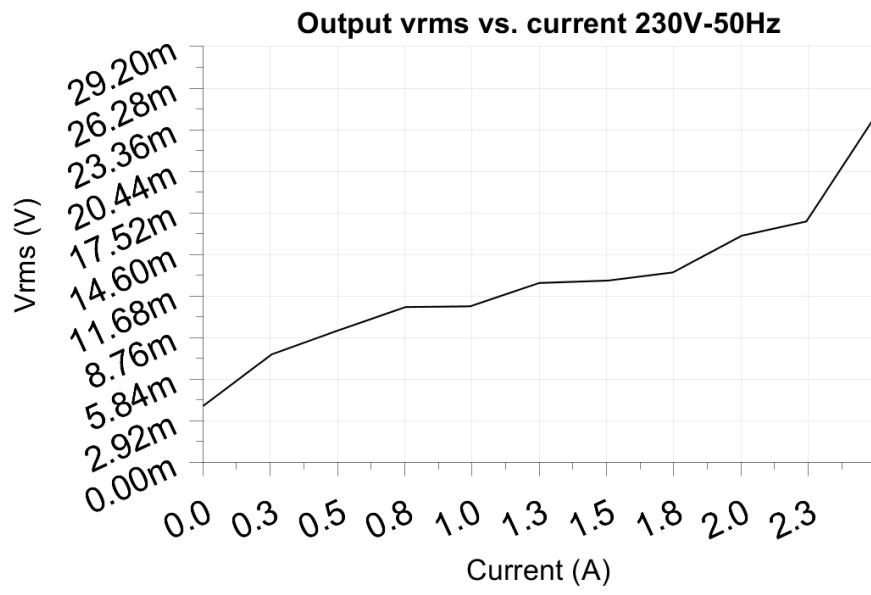
Vpp ripple&noise relative: 3.5%

RMS ripple&noise absolute: 0.024V

RMS ripple&noise relative: 0.2%







6 Turn on voltage

Testing when the PSU enables it's output

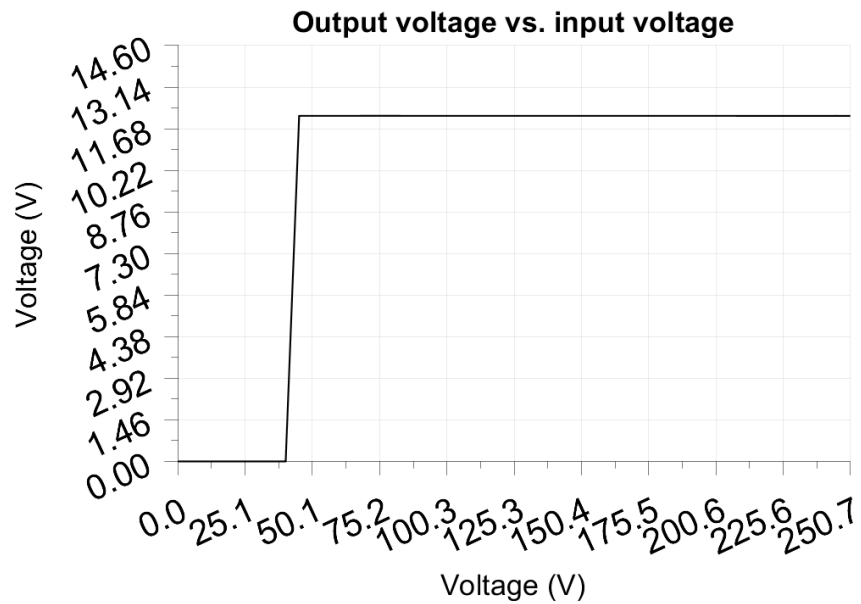
Test load: 0.250A

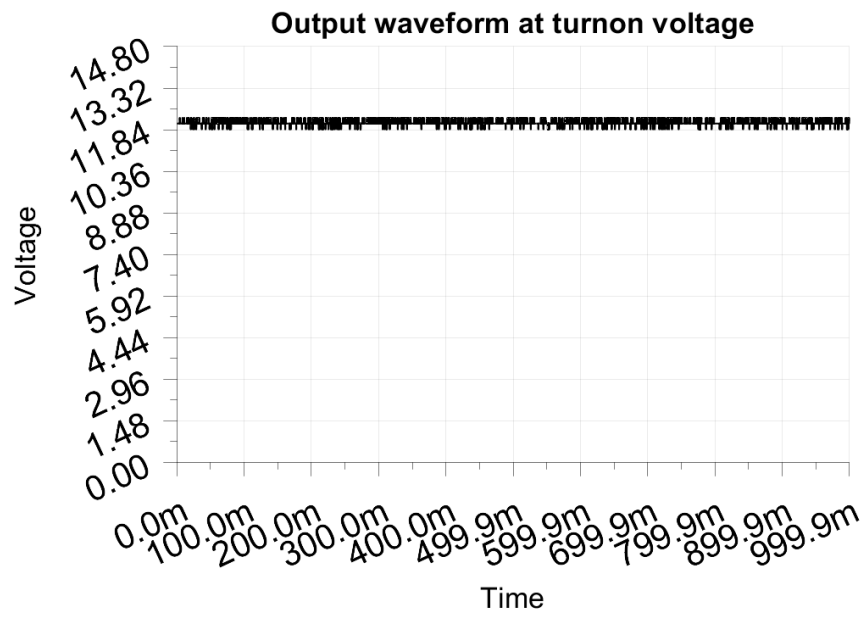
Test Frequency: 50Hz

Threshold: 9.000V

Turn-on voltage: 45.00V

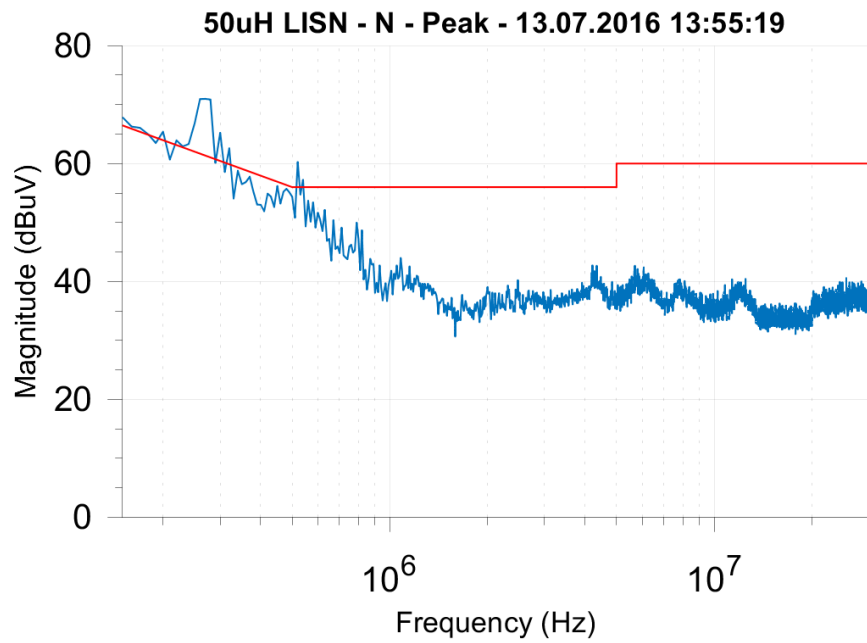
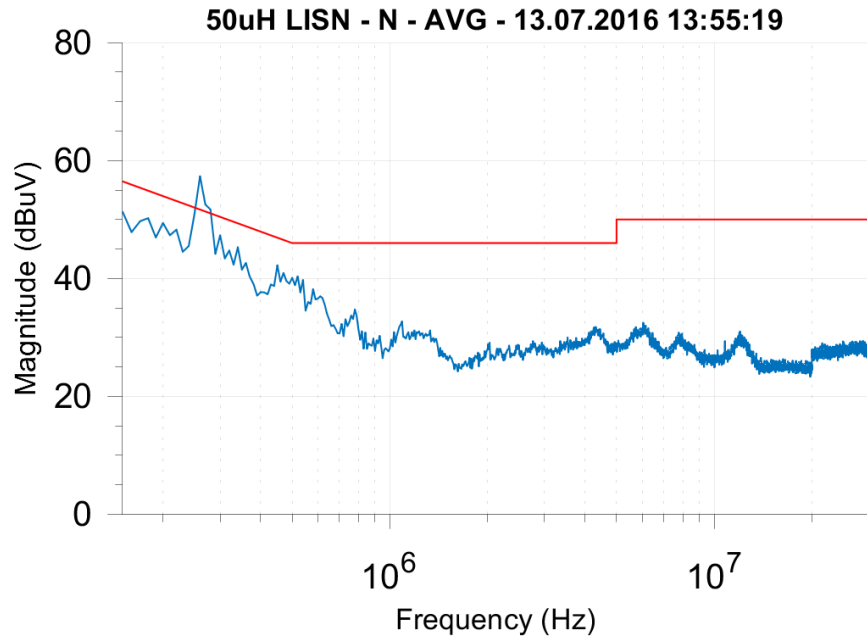
Output voltage: 12.133V

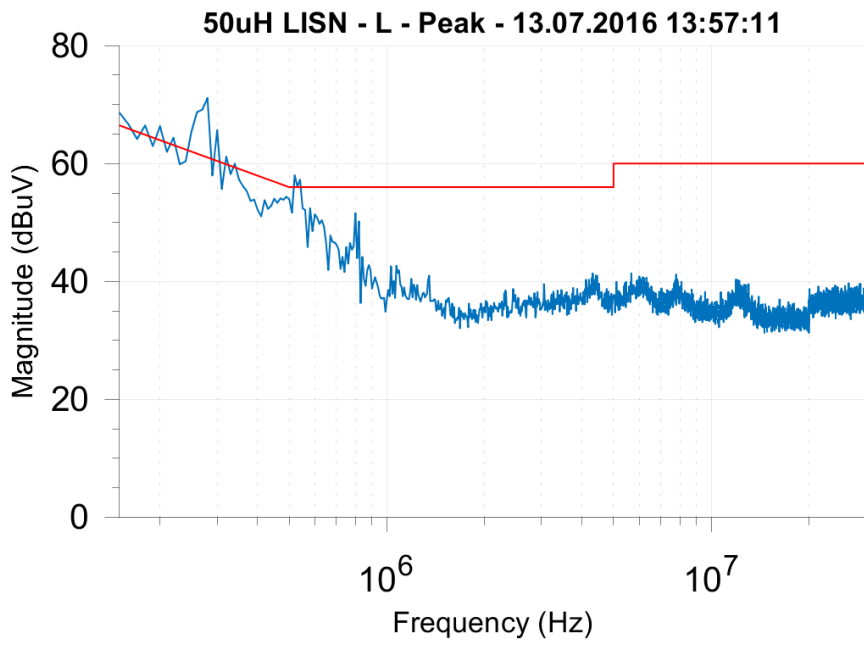
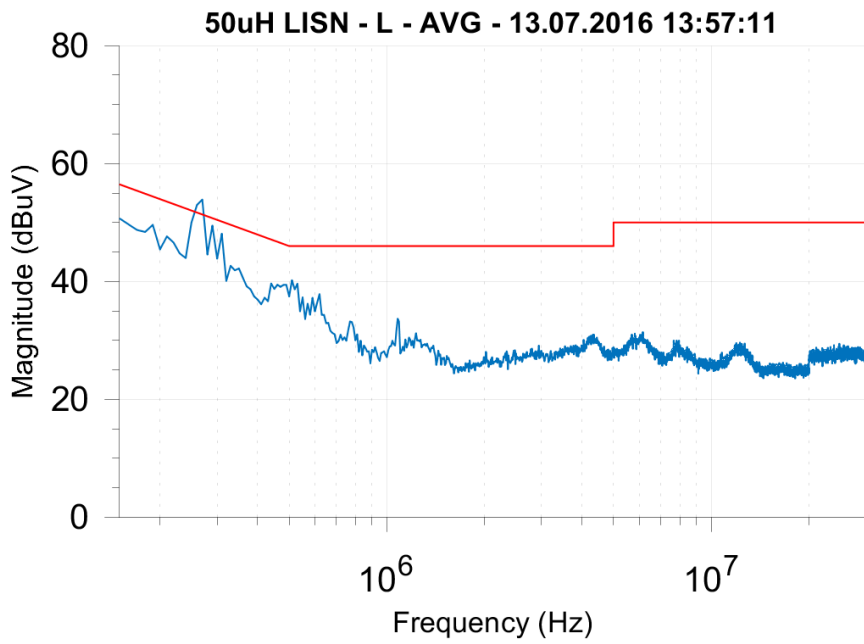




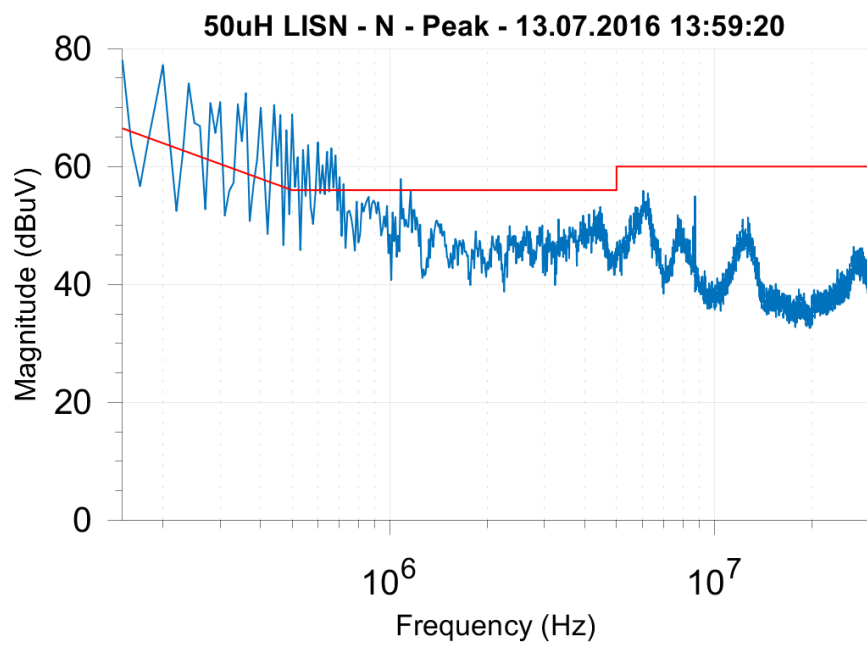
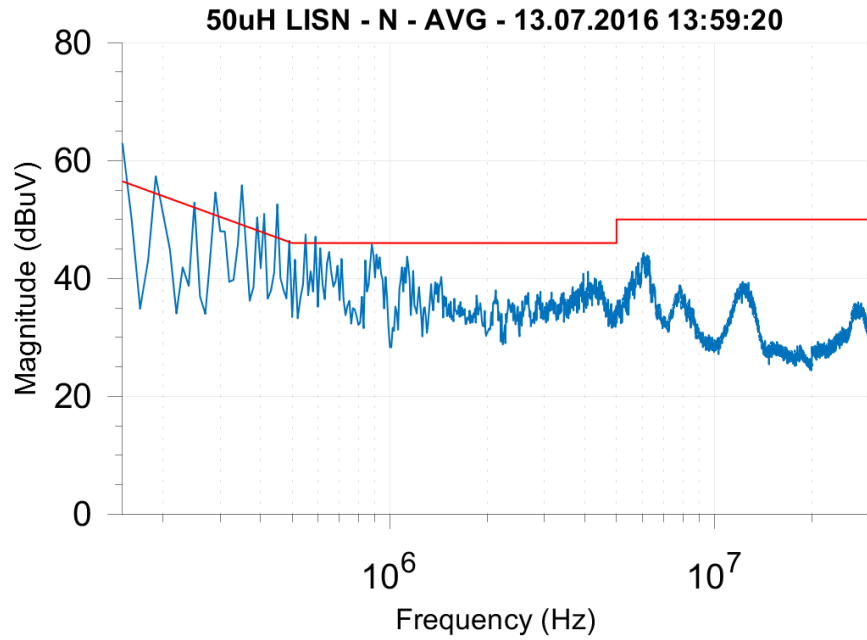
7 Conducted EMI

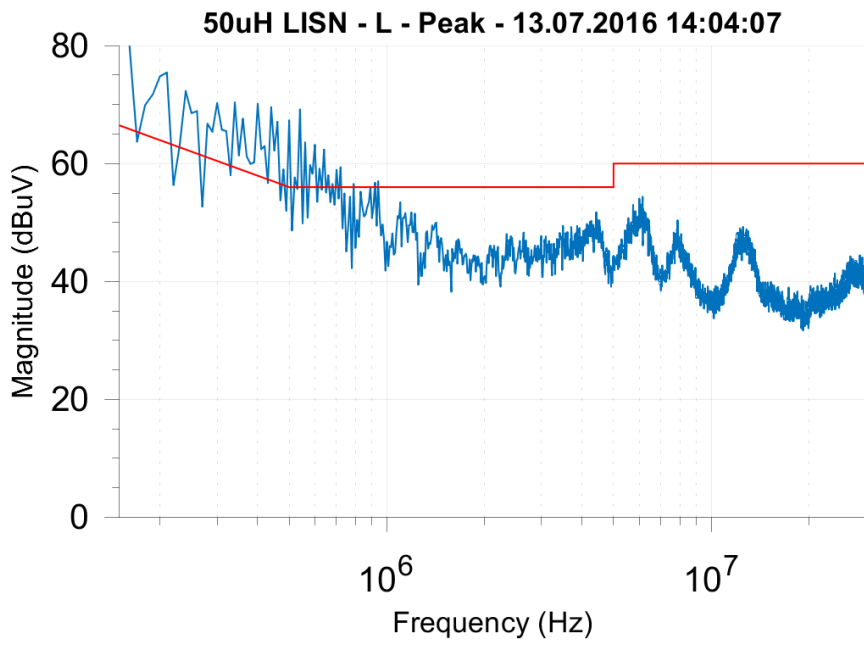
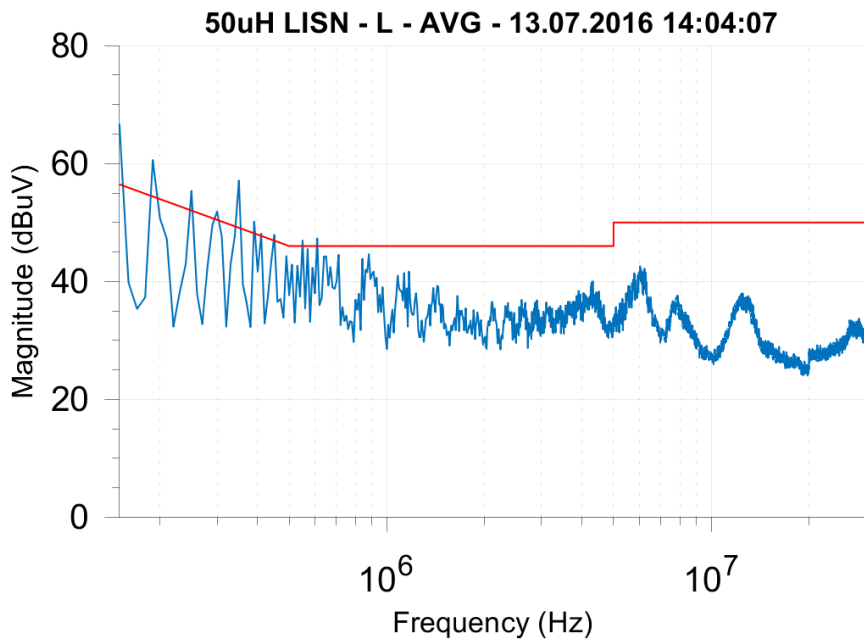
7.1 Output load 0.000A



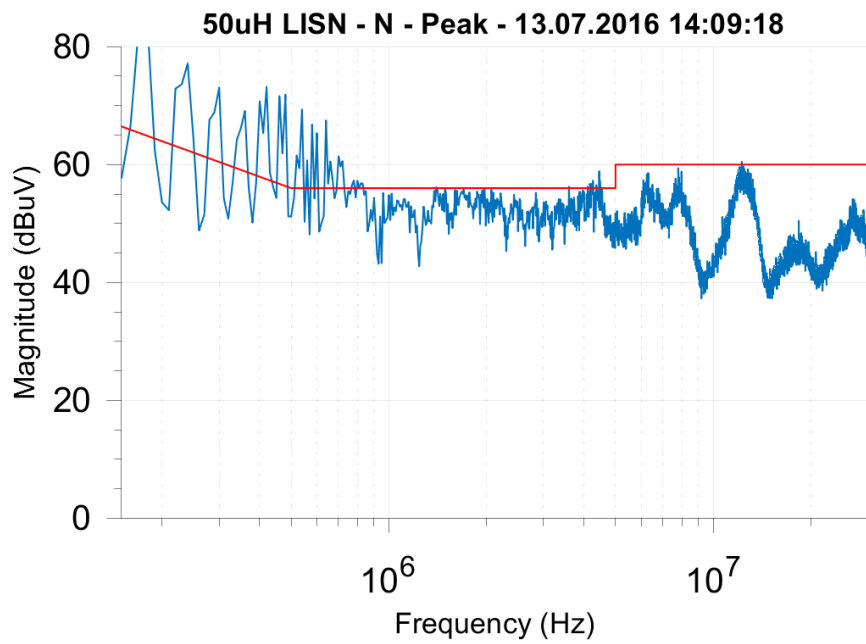
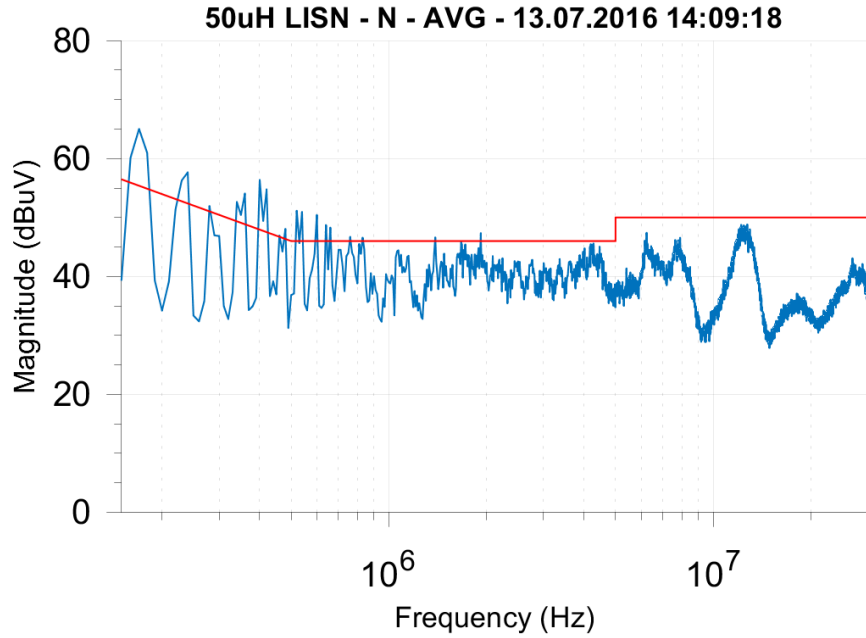


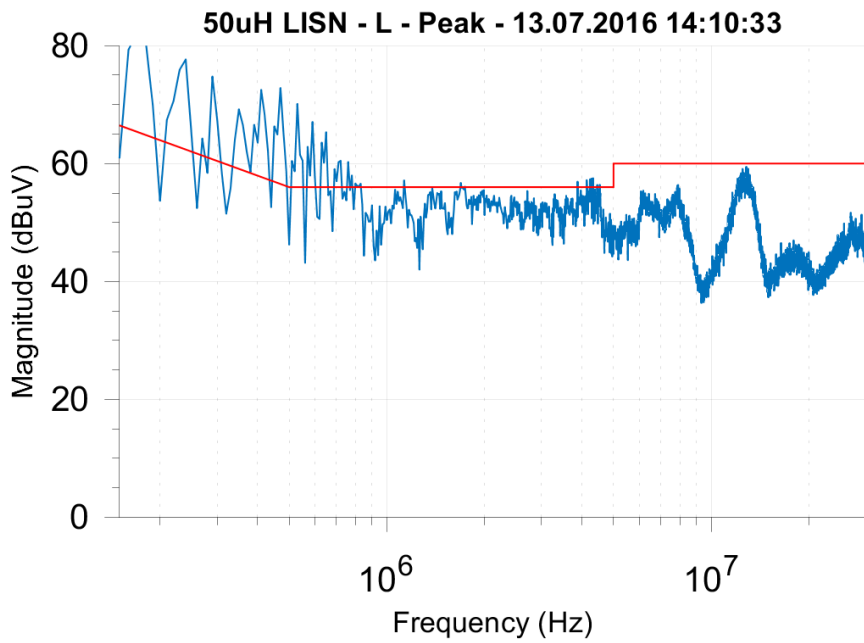
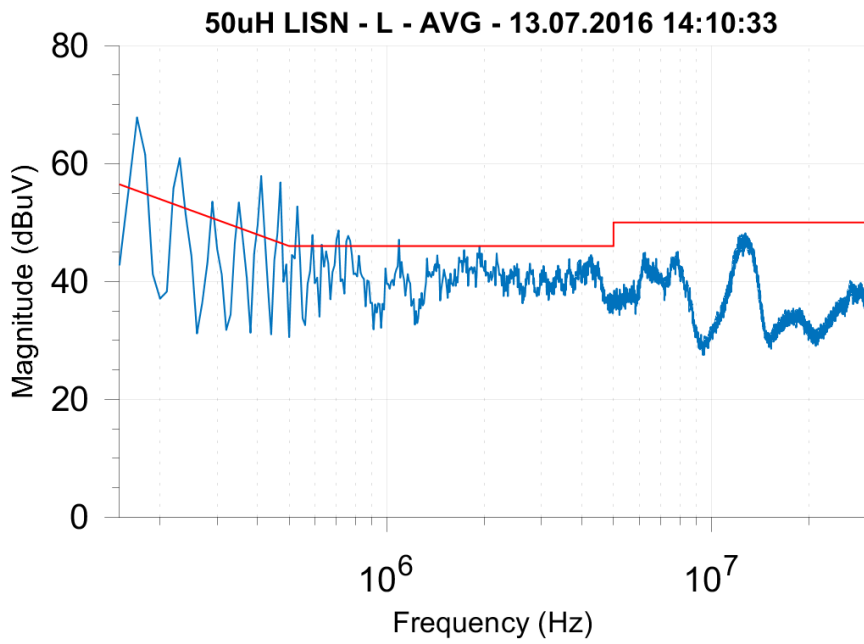
7.2 Output load 1.250A





7.3 Output load 2.500A





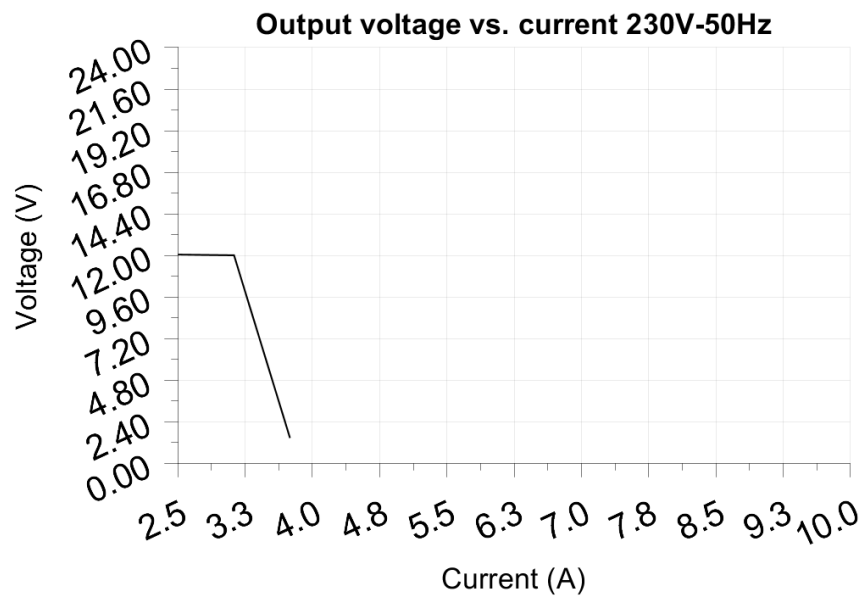
8 Overload testing

Test voltage: 230.00V

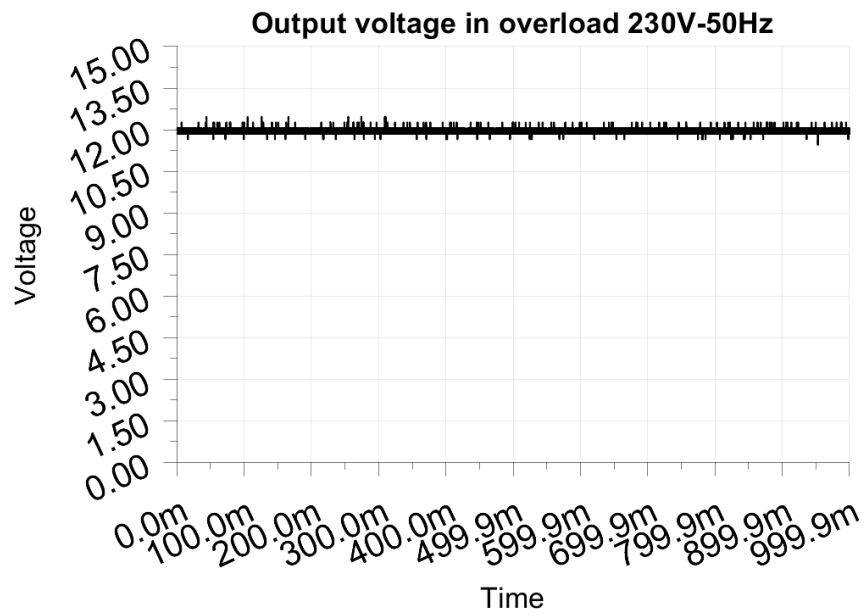
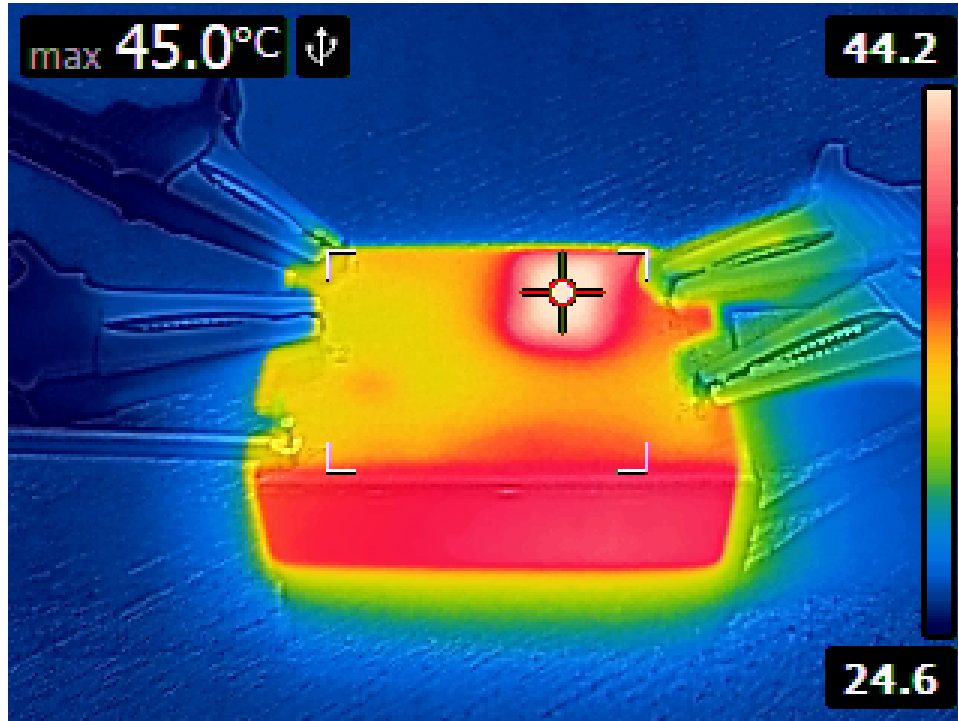
Test Frequency: 50Hz

Threshold: <6.000V

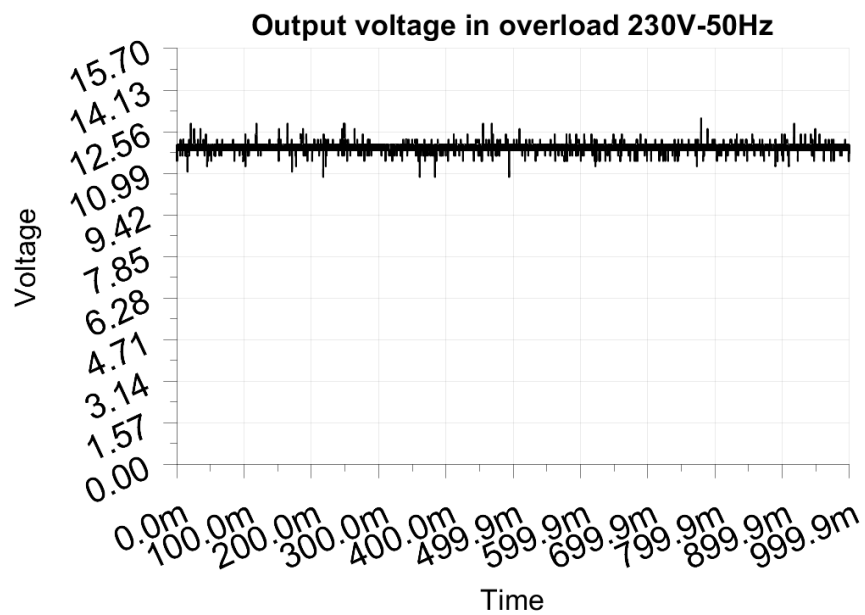
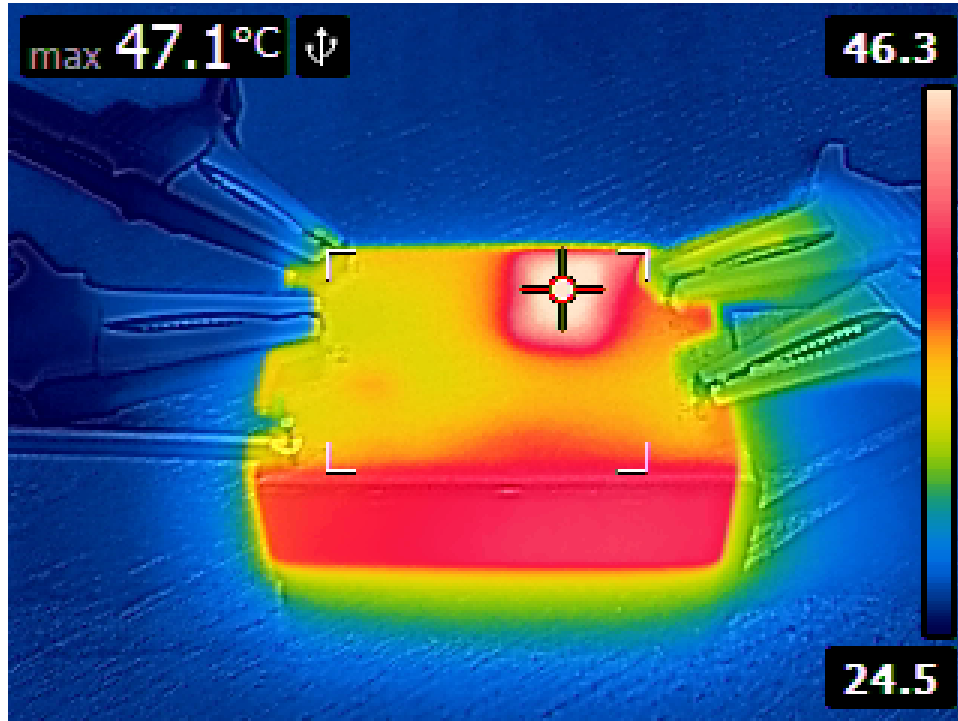
Maximum output current before shutdown: 3.750A



8.1 Output load 2.500A or 100%



8.2 Output load 3.125A or 125%



8.3 Output load 3.750A or 150%

