



develop

PSU test report

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1 Contents

- General information
- Point of operation
- Standby power consumption
- Load testing
- Turn on voltage
- Conducted EMI
- Overload testing

2 General information

Testing the following device

Manufacturer: Vigortronix
Device name: VTX-214-015-112
Serial number: 1
Nominal voltage: 12.000V
Nominal current: 1.250A
Tester: Bernhard Woerndl-Aichriedler <bwa@xdevelop.at>
Start time: 13-Jul-2016 14:39:04



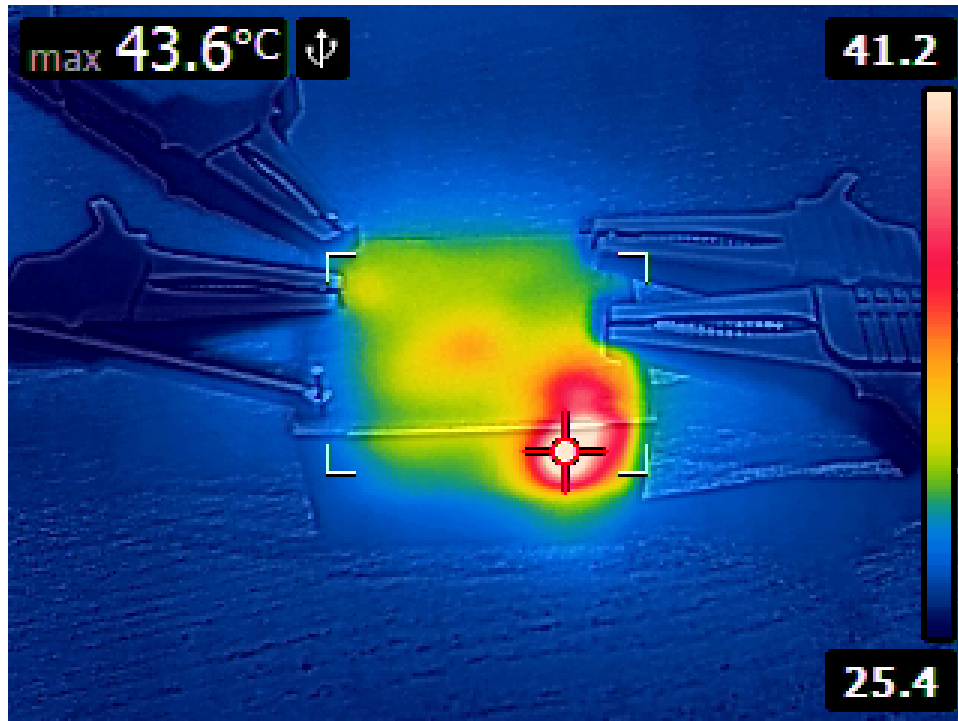


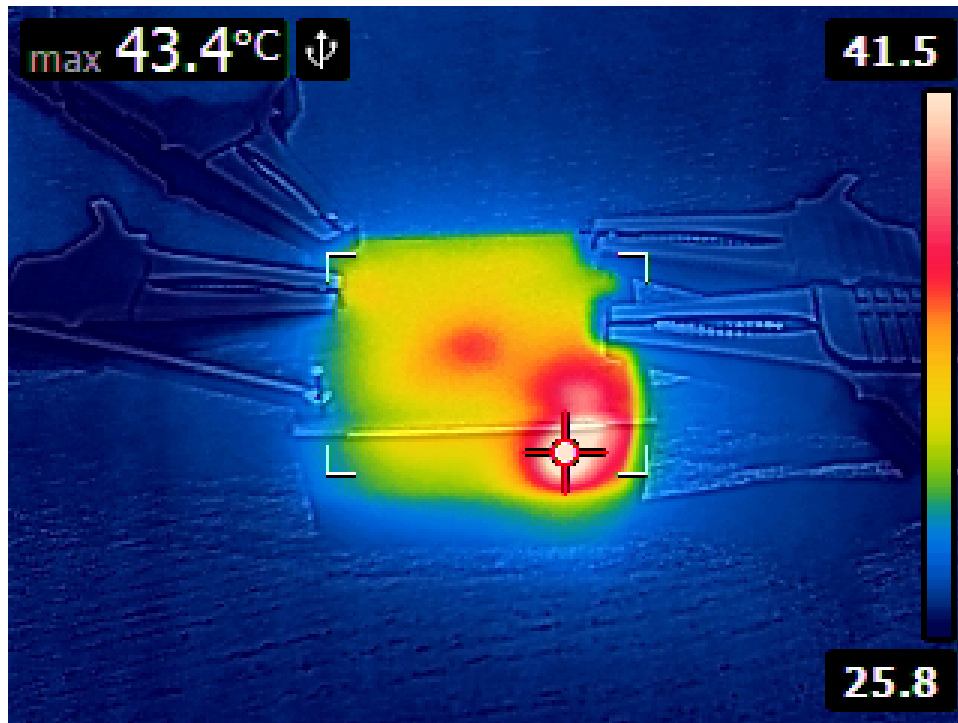
3 Point of operation

The test has been conducted with the following conditions

Voltage/Frequency: 230V-50Hz

Ambient Temperature: 29.64C





4 Standby power consumption

Voltage: 230.63V

Frequency: 50Hz

Current: 0.024493A

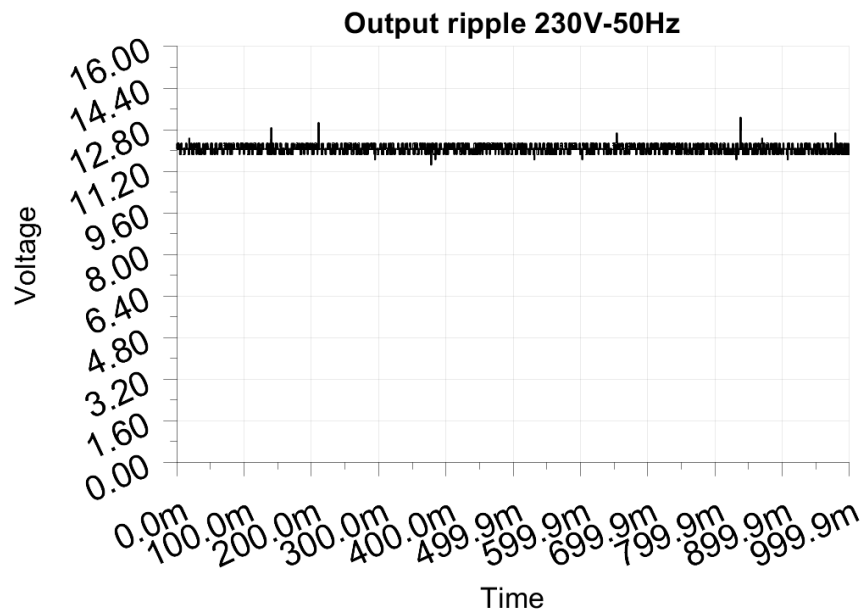
P active: 0.247W

P apparent: 5.649VA

P reactive: 5.643VAR

P factor: 0.044

Output voltage: 12.112V



5 Load testing

Characteristics

Voltage: 230.61V

Frequency: 50Hz

Loads: 0.000A to 1.250A

Minimum output voltage: 11.843V

Maximum output voltage: 12.111V

Regulation error absolute: -0.157V/+0.111V

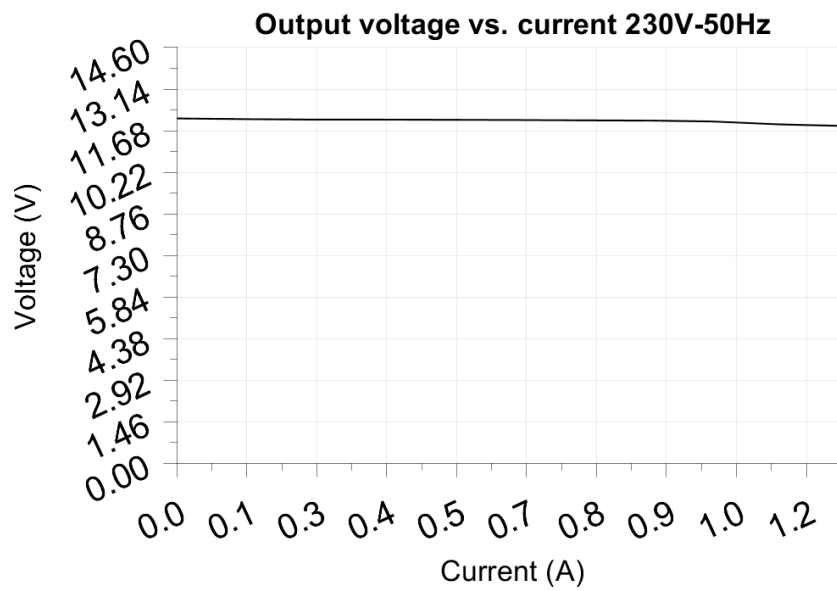
Regulation error relative: -1.3%/+0.9%

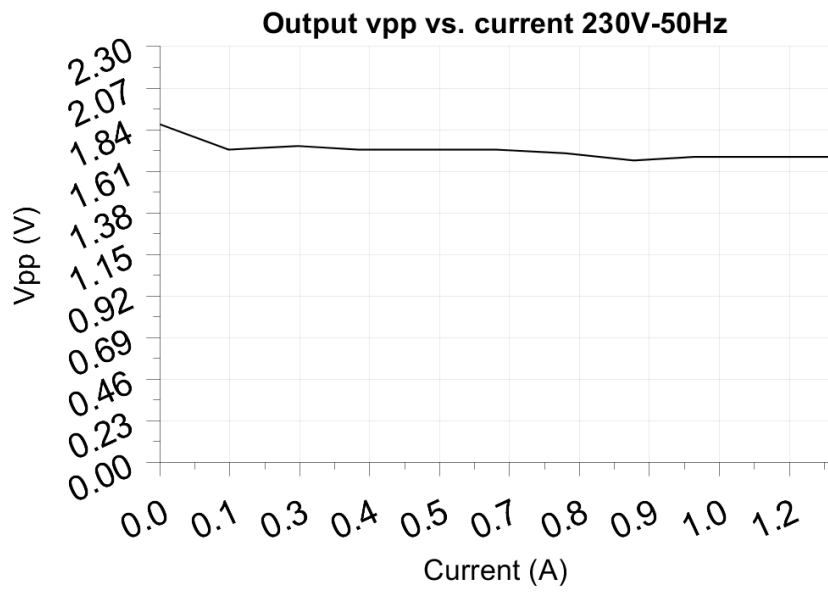
Vpp ripple&noise absolute: 1.870V

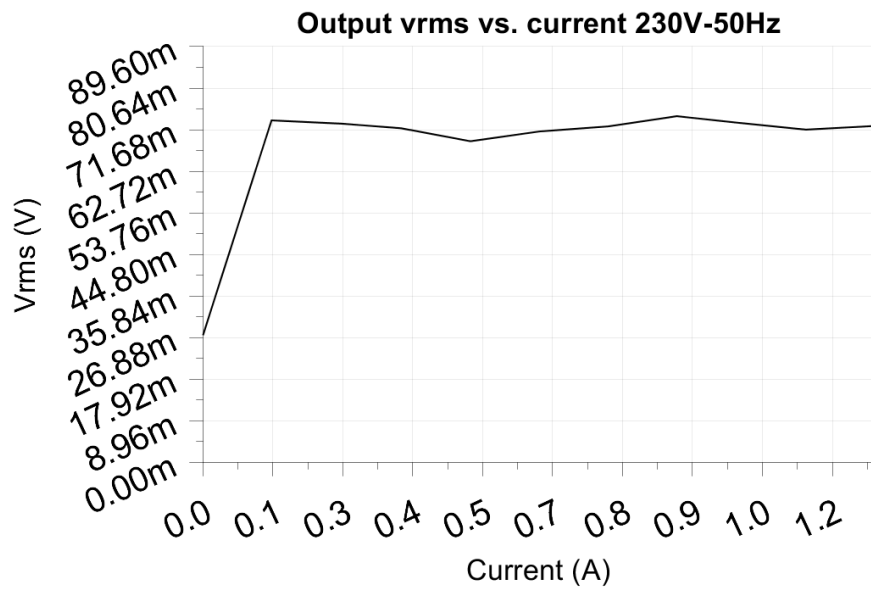
Vpp ripple&noise relative: 15.6%

RMS ripple&noise absolute: 0.075V

RMS ripple&noise relative: 0.6%







6 Turn on voltage

Testing when the PSU enables it's output

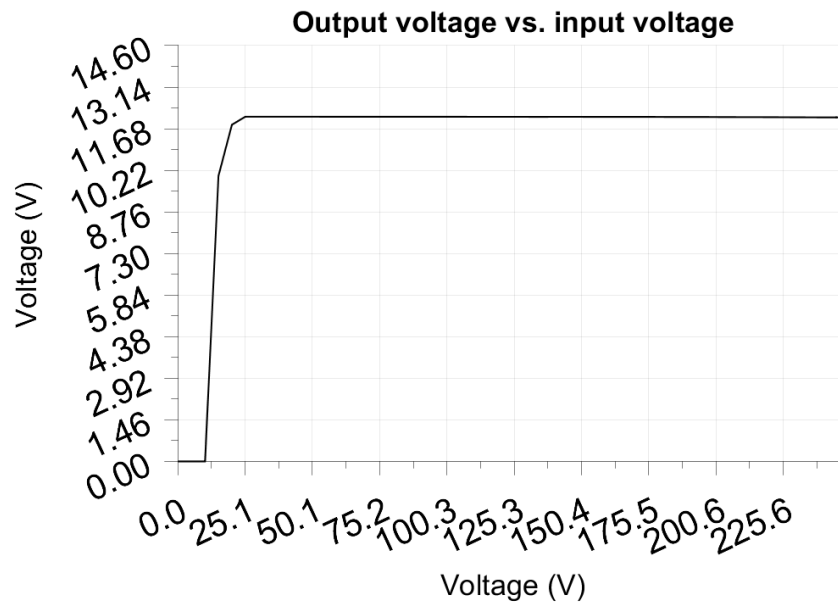
Test load: 0.125A

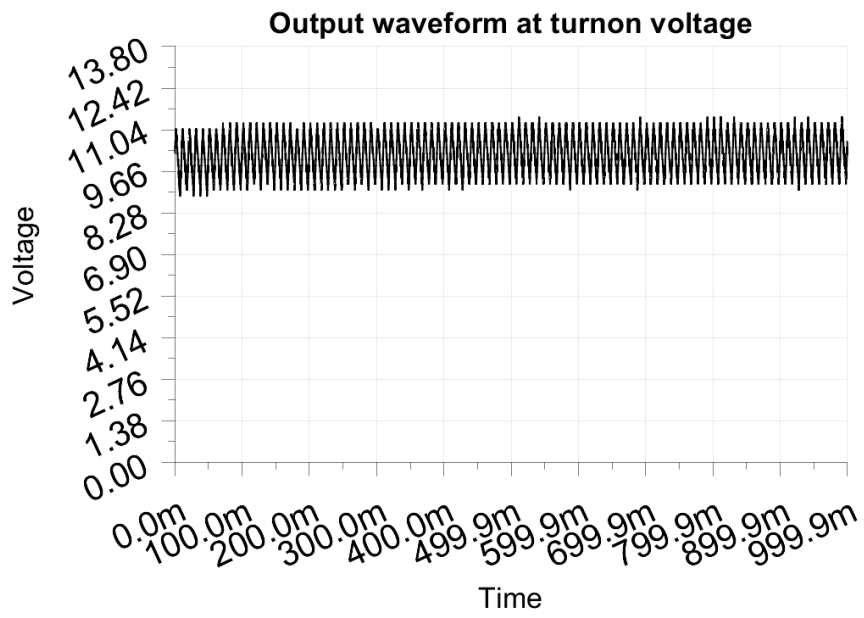
Test Frequency: 50Hz

Threshold: 9.000V

Turn-on voltage: 15.00V

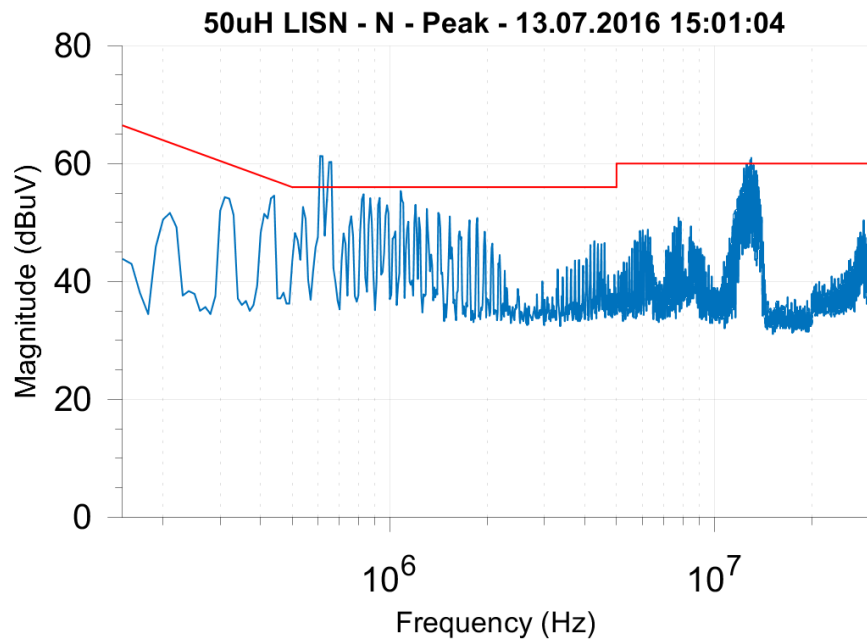
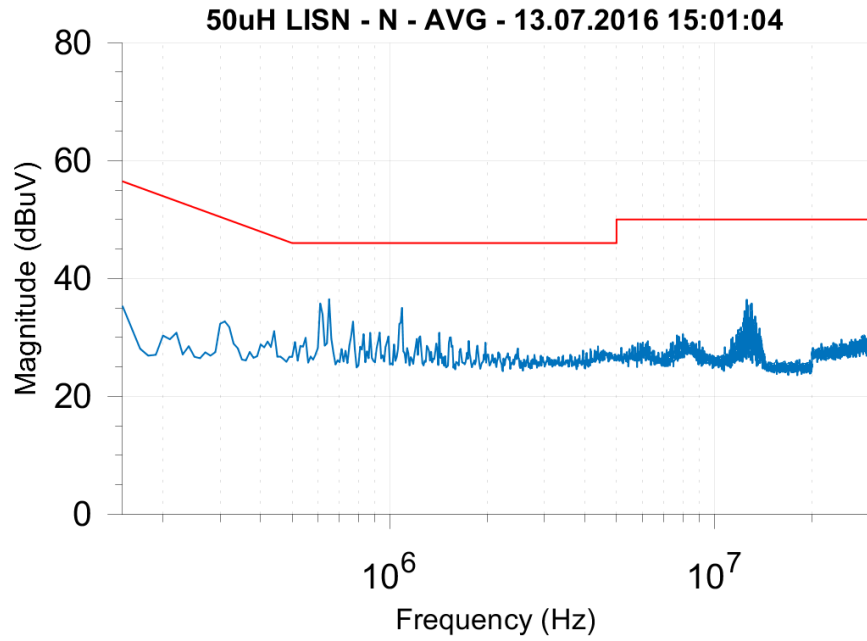
Output voltage: 10.025V

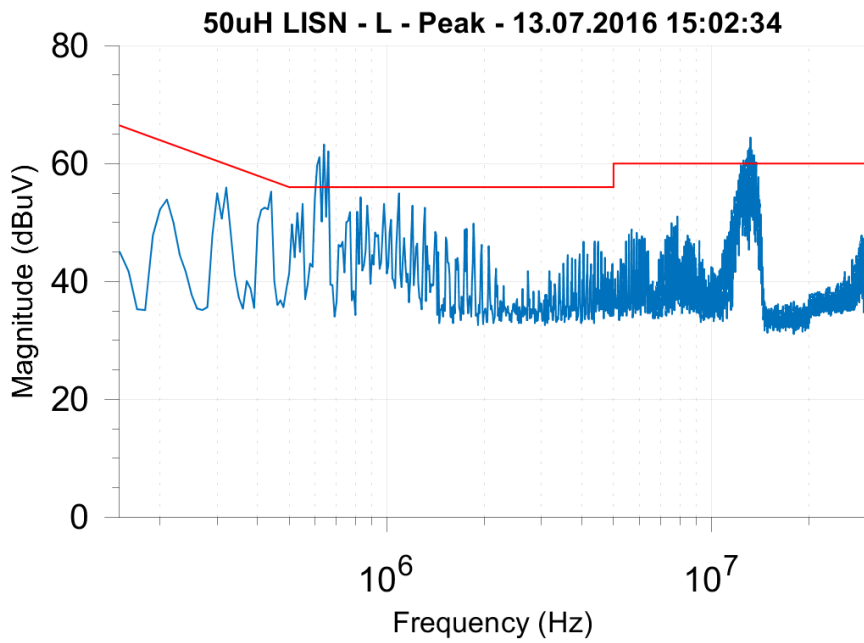
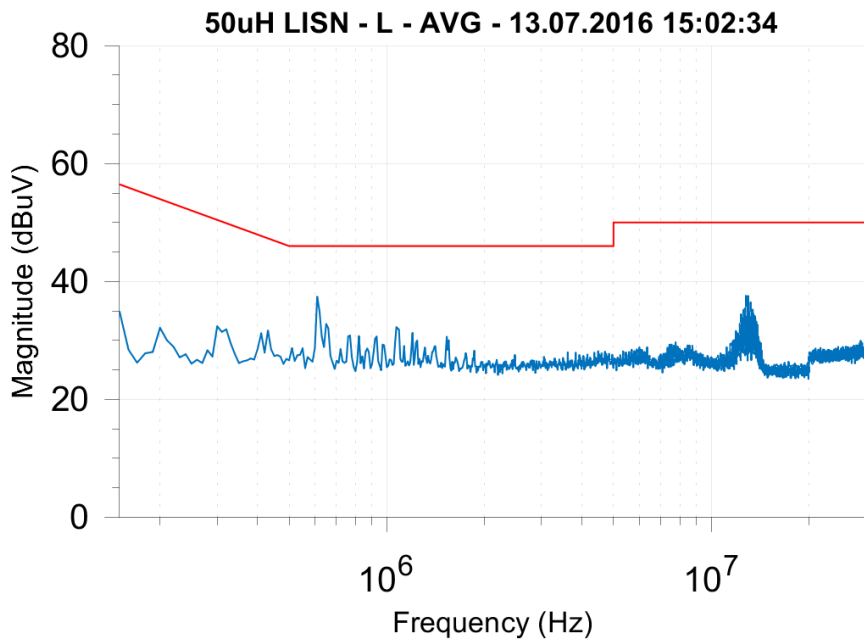




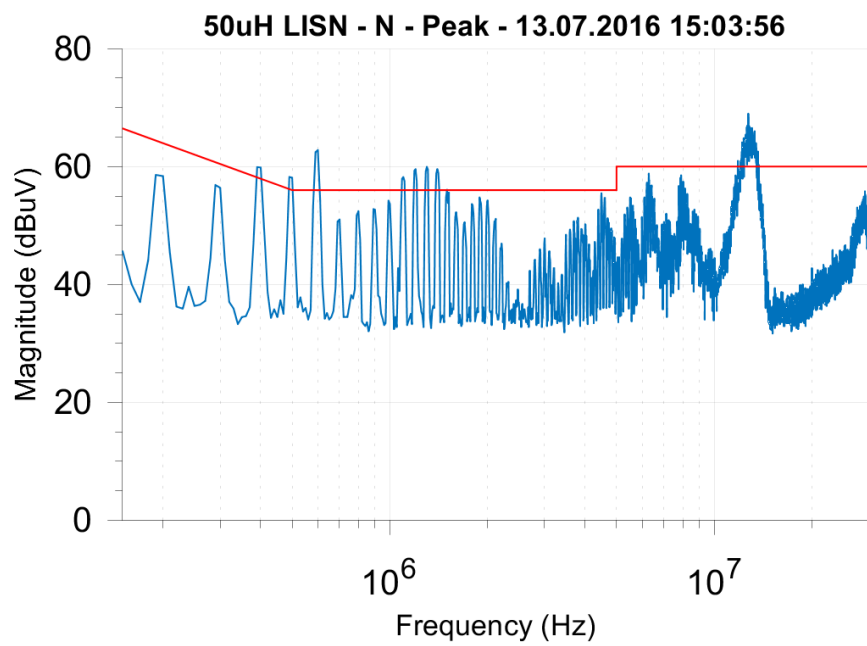
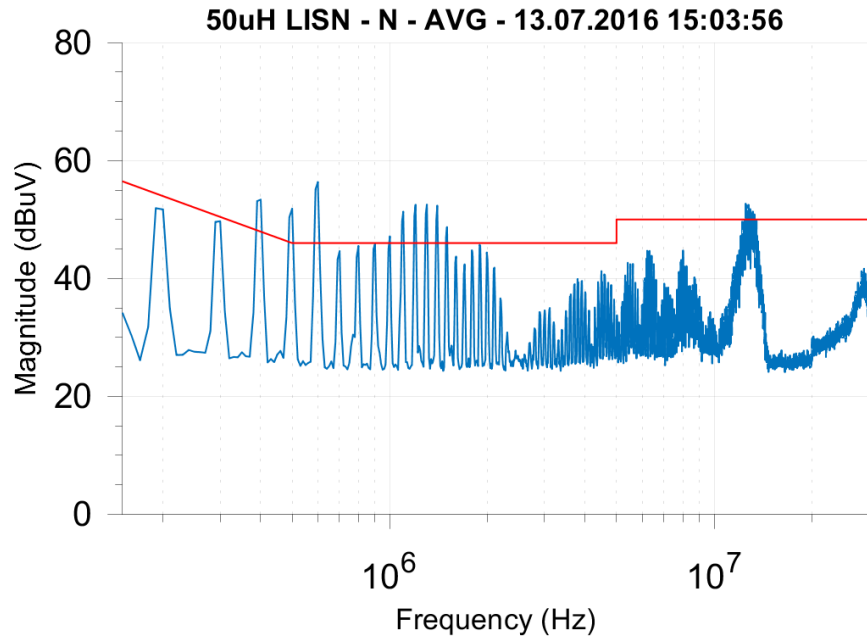
7 Conducted EMI

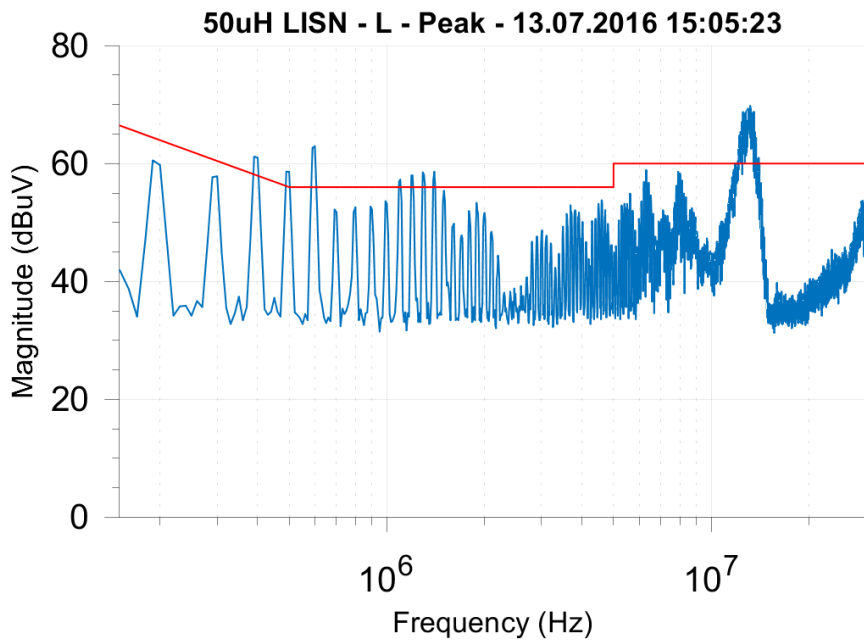
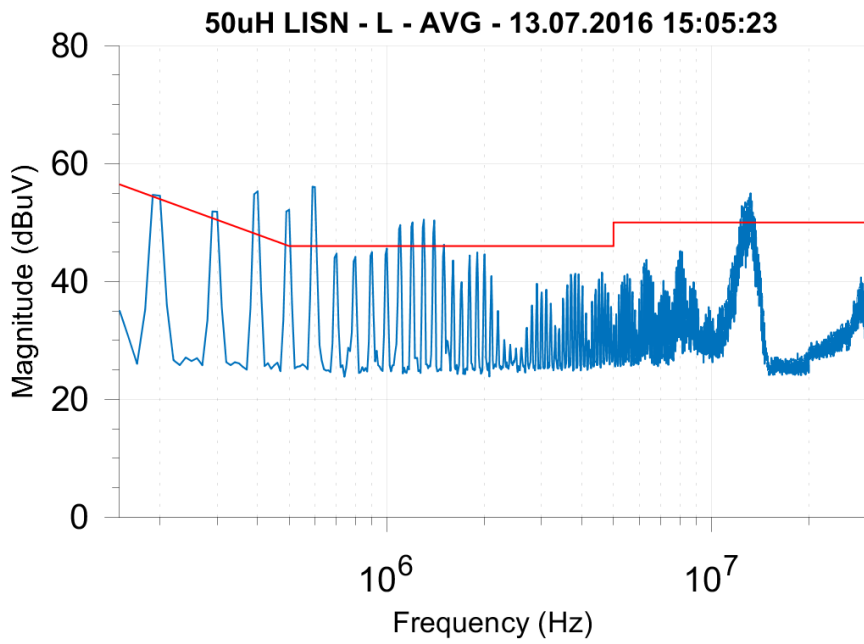
7.1 Output load 0.000A



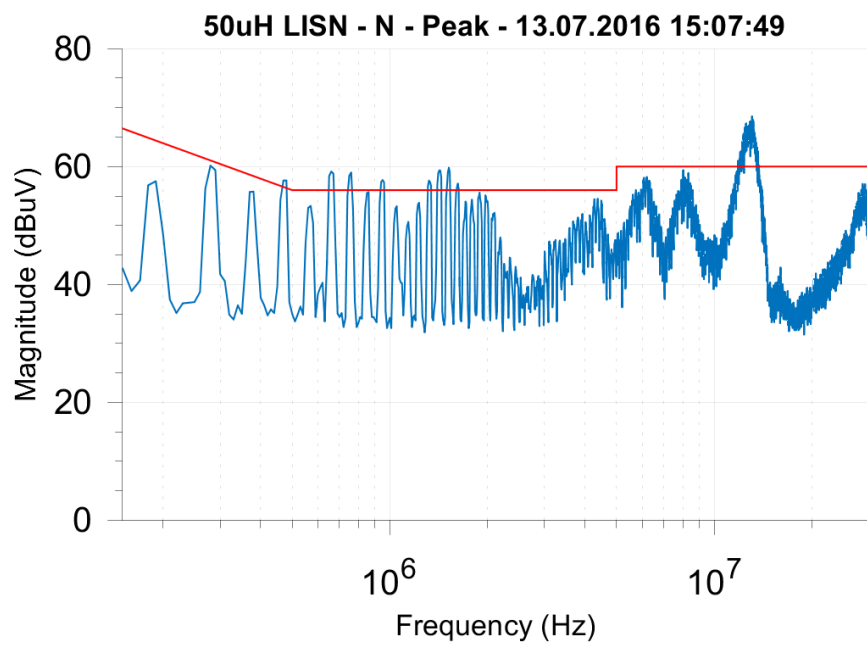
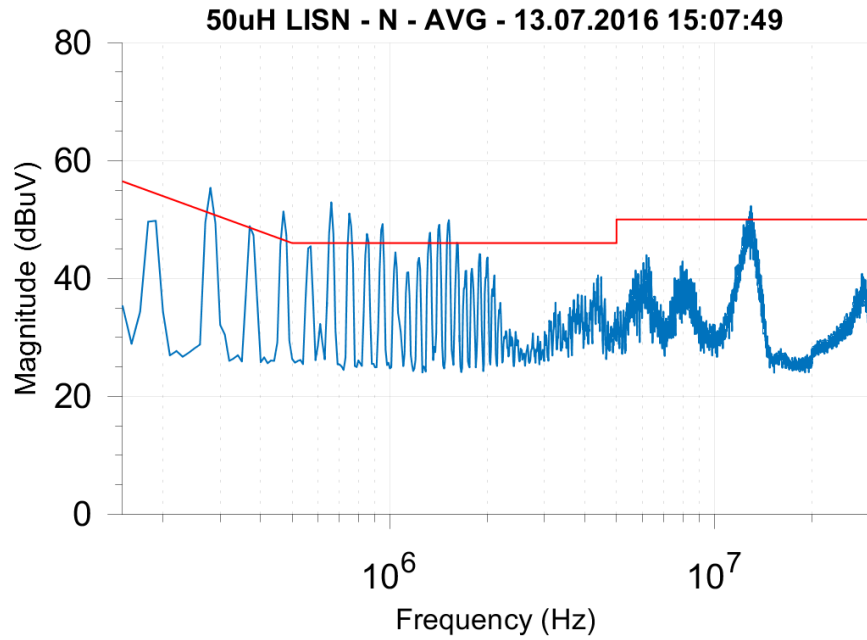


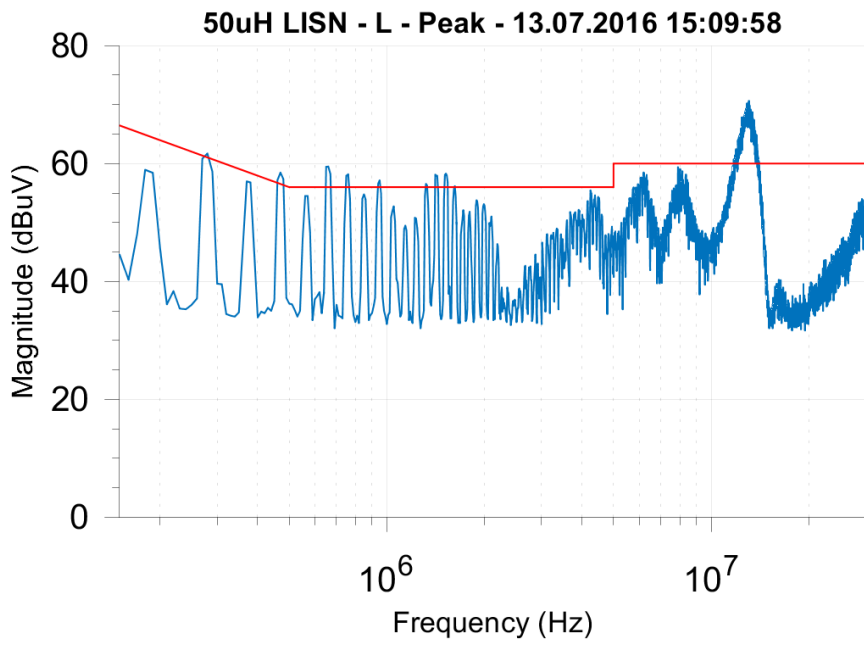
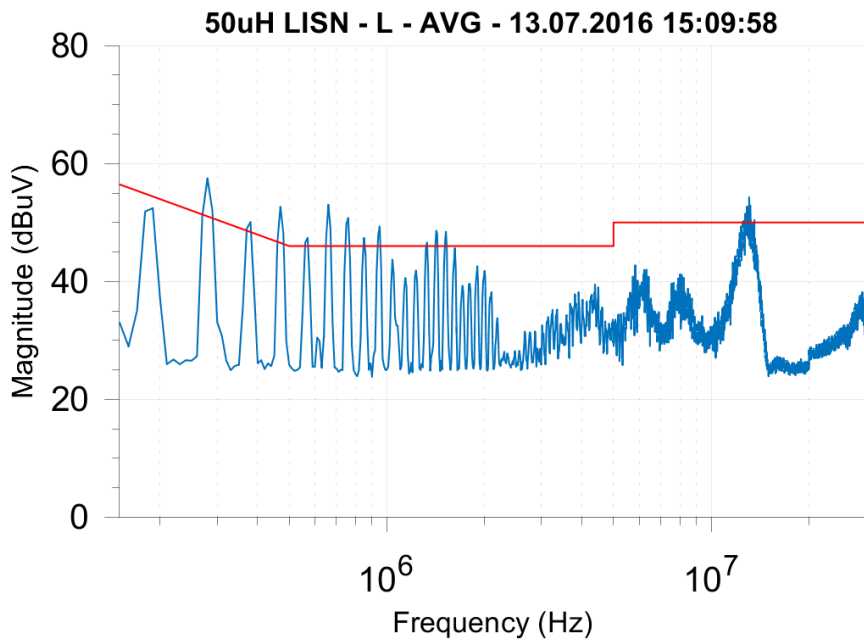
7.2 Output load 0.625A





7.3 Output load 1.250A





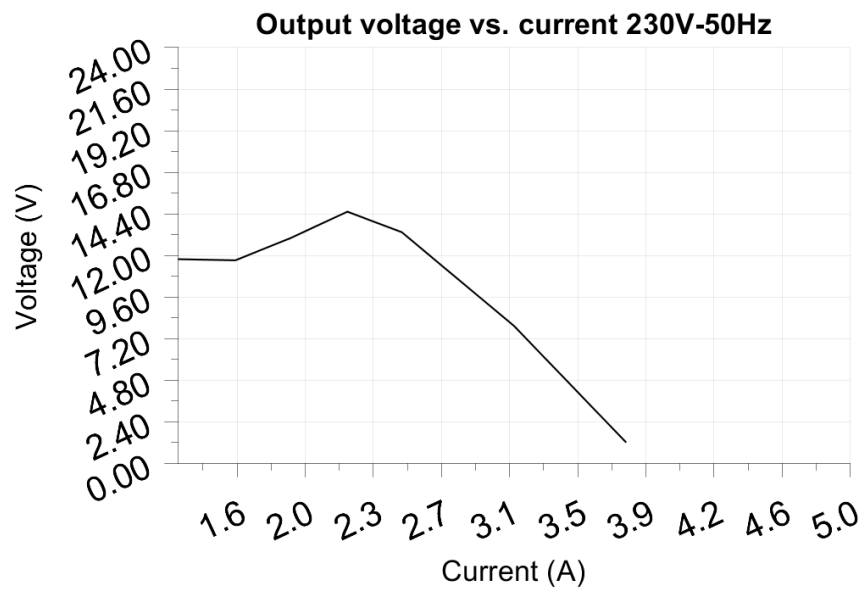
8 Overload testing

Test voltage: 230.00V

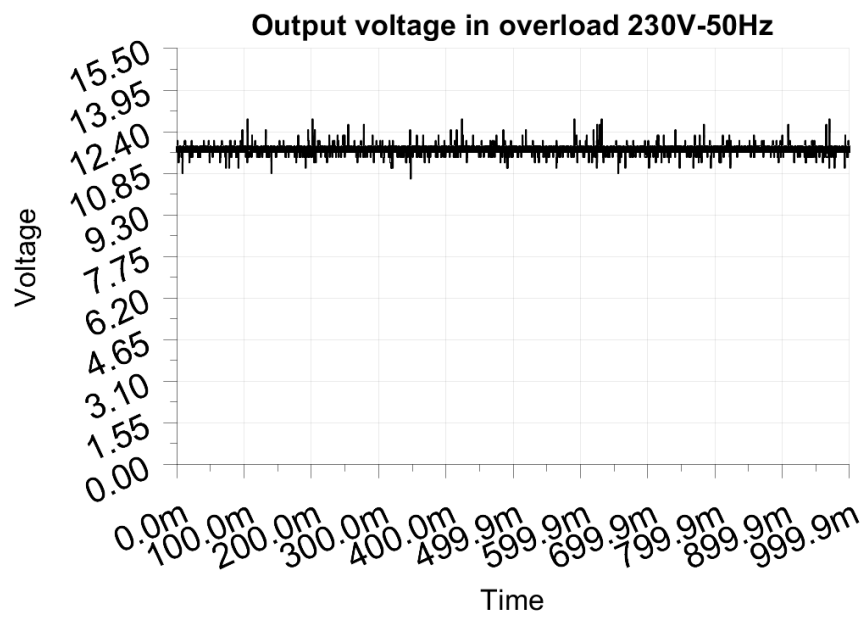
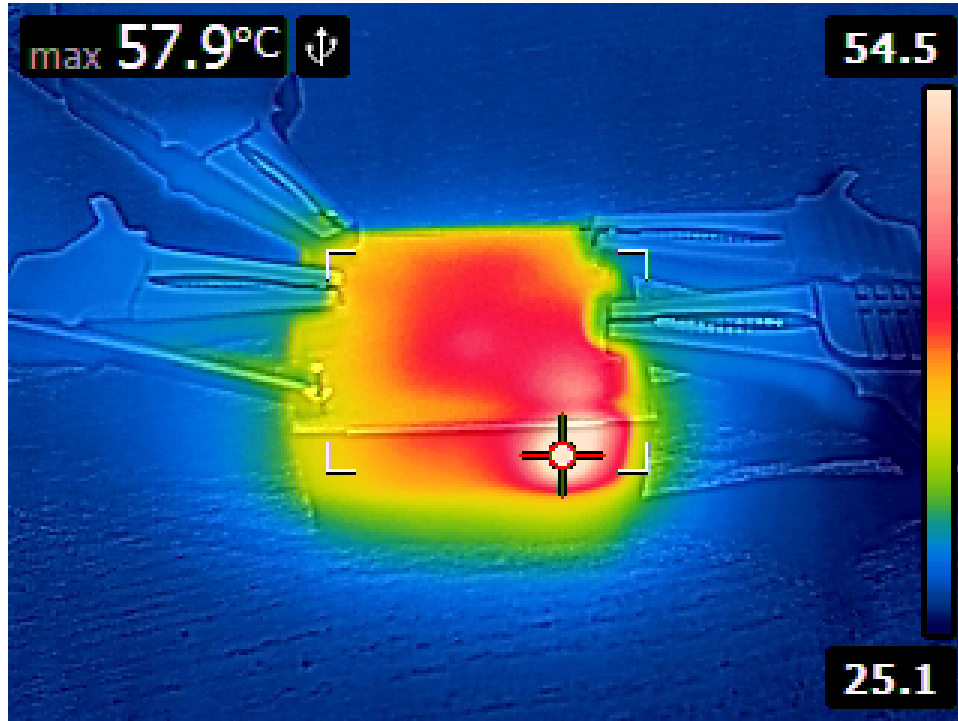
Test Frequency: 50Hz

Threshold: <6.000V

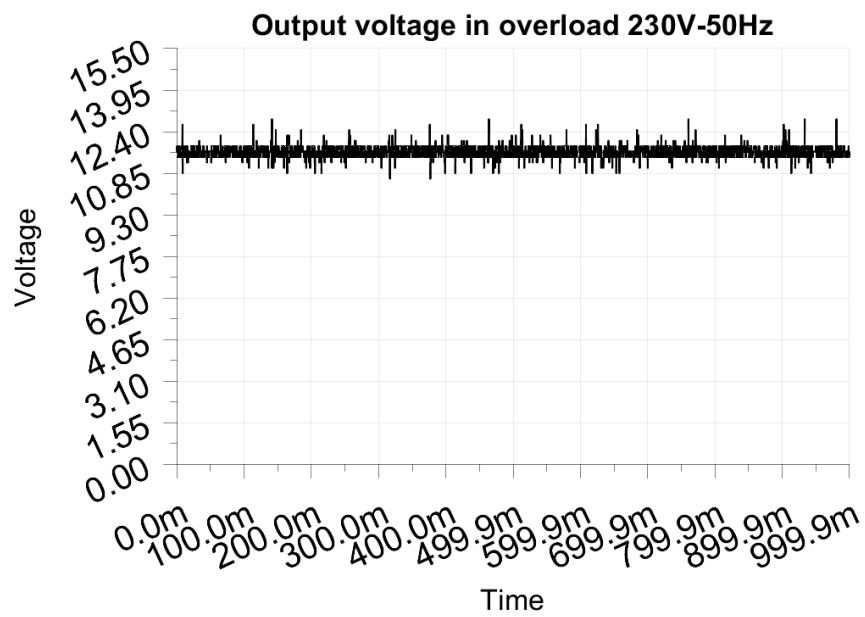
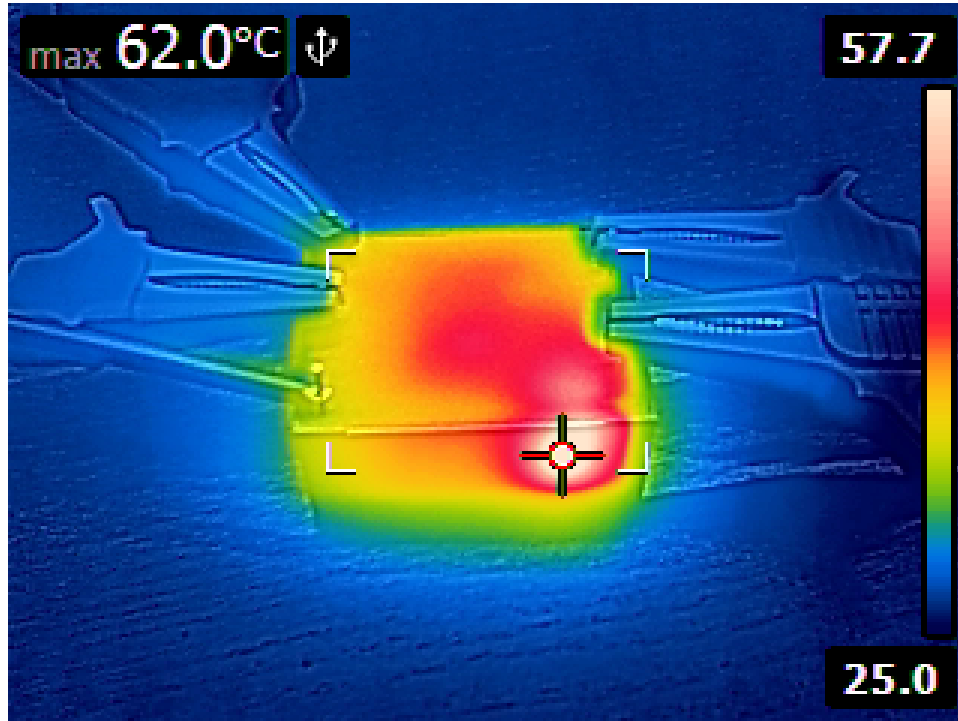
Maximum output current before shutdown: 3.750A



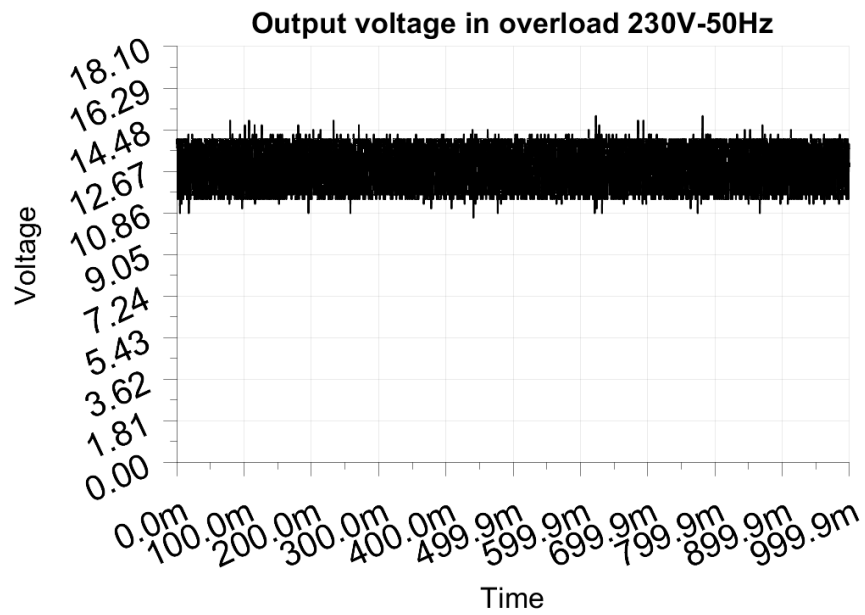
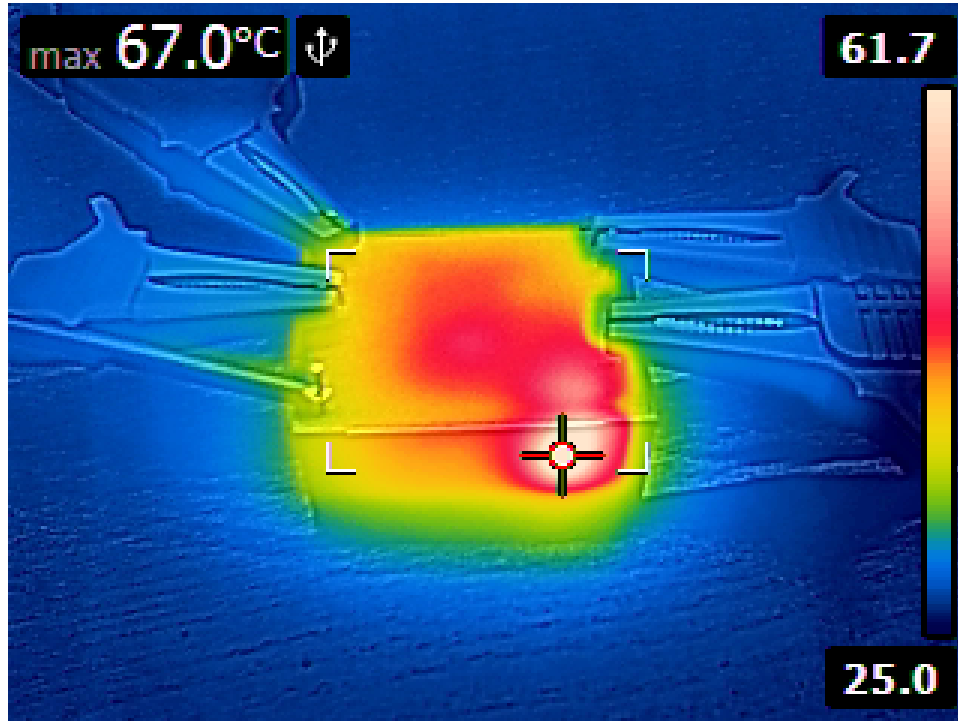
8.1 Output load 1.250A or 100%



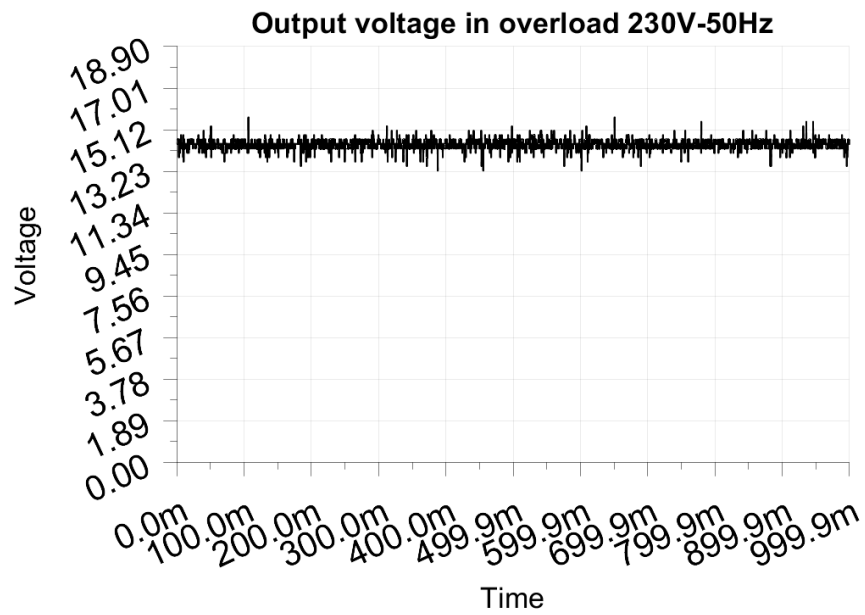
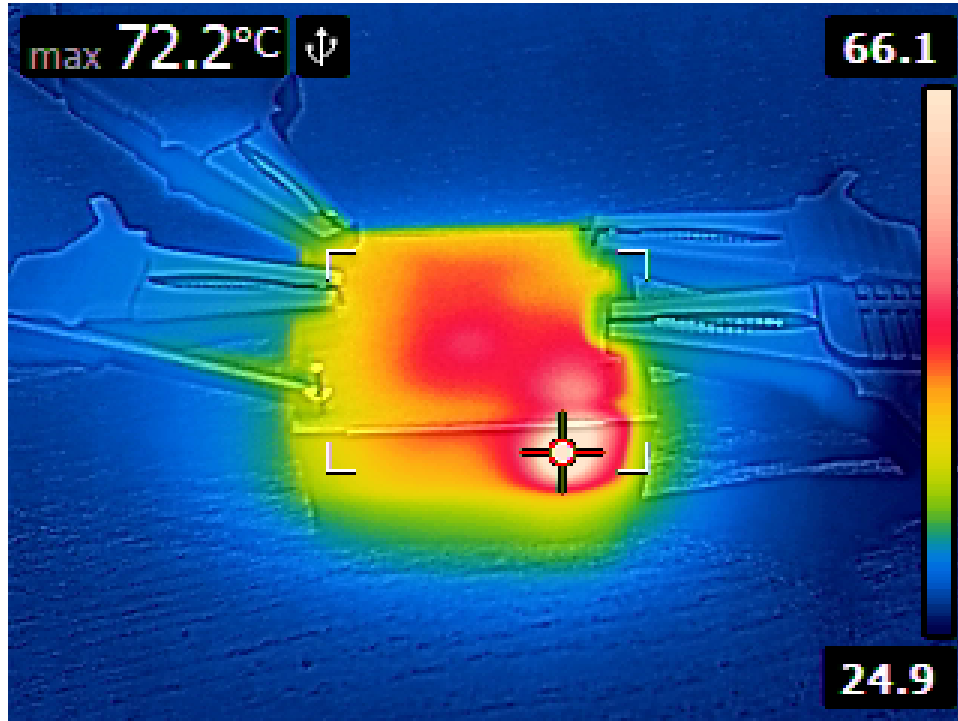
8.2 Output load 1.563A or 125%



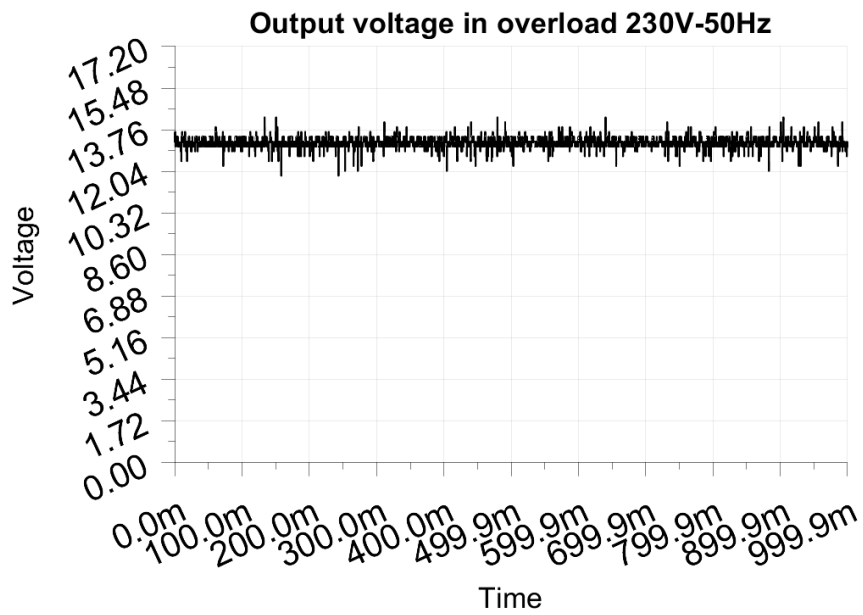
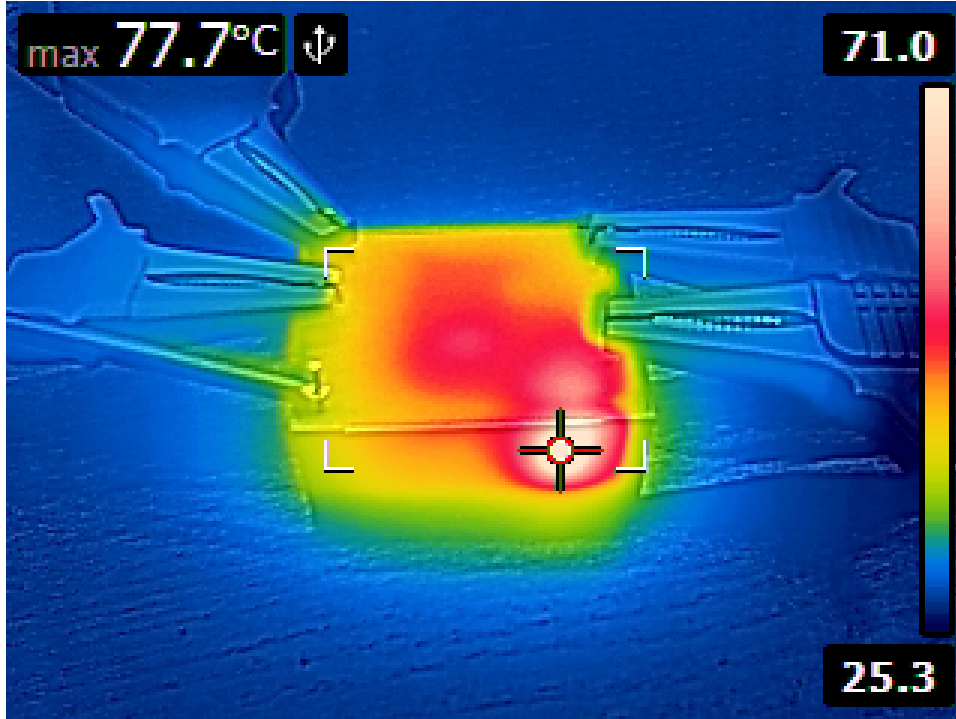
8.3 Output load 1.875A or 150%



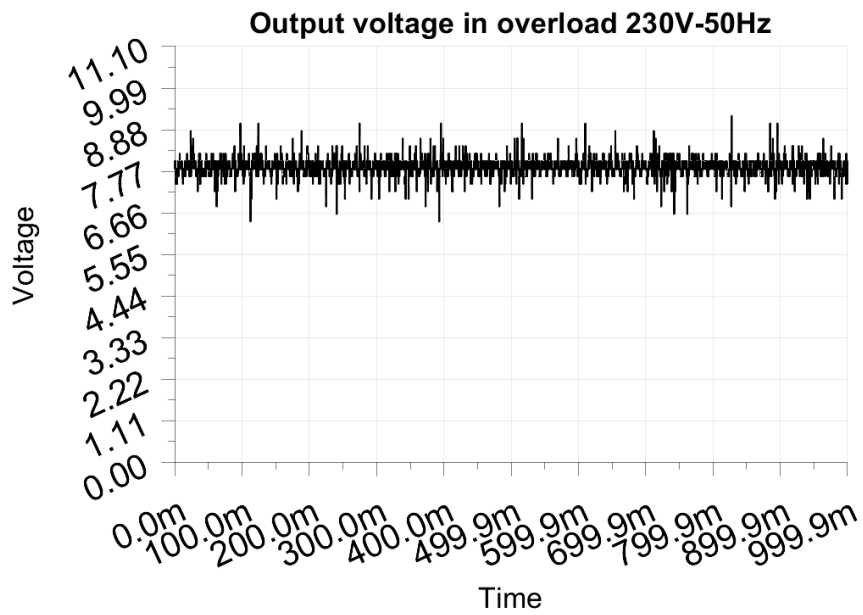
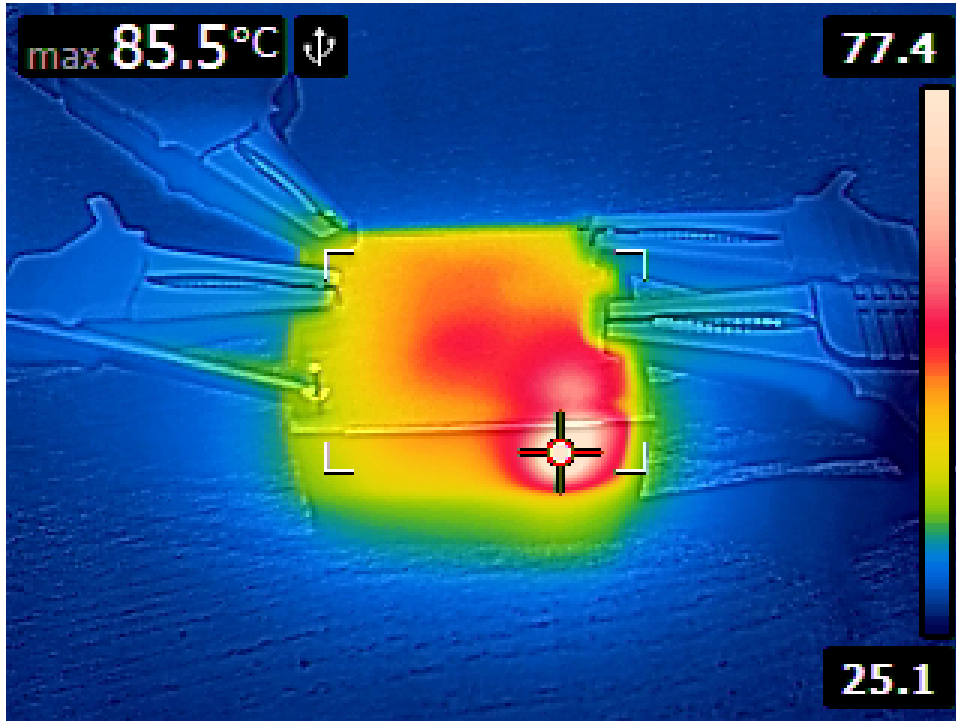
8.4 Output load 2.188A or 175%



8.5 Output load 2.500A or 200%



8.6 Output load 3.125A or 250%



8.7 Output load 3.750A or 300%

