



develop

PSU test report

Bernhard Woerndl-Aichriedler
bwa@xdevelop.at

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2 General information

Testing the following device

Manufacturer: Vigortronix
Device name: VTX-214-003-112
Serial number: 1
Nominal voltage: 12.000V
Nominal current: 0.250A
Tester: Bernhard Woerndl-Aichriedler <bwa@xdevelop.at>
Start time: 13-Jul-2016 23:34:41

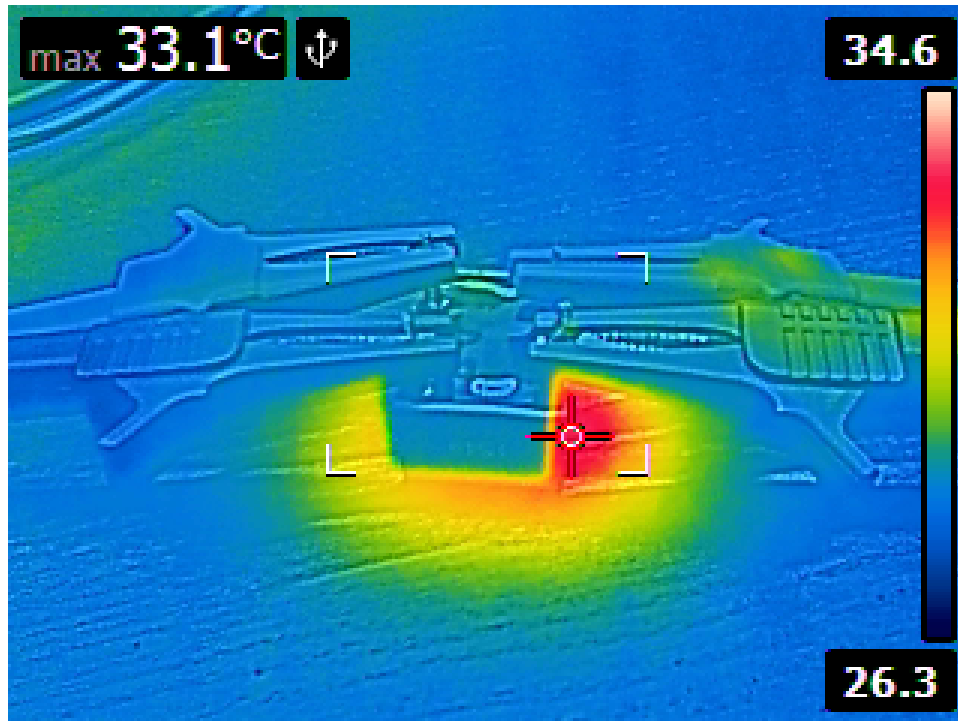


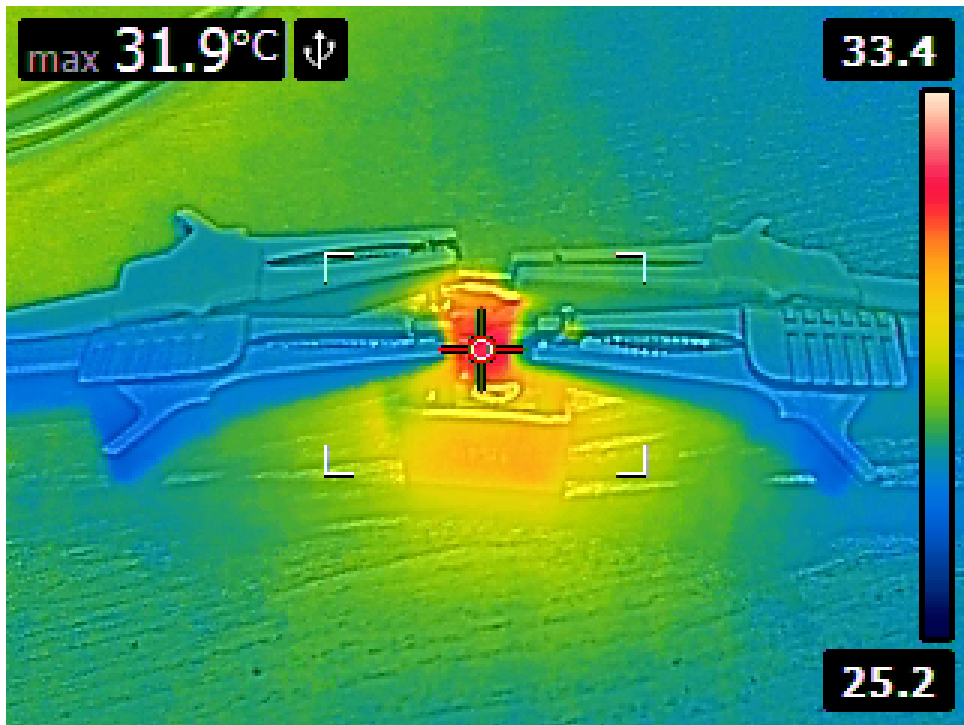
3 Point of operation

The test has been conducted with the following conditions

Voltage/Frequency: 230V-50Hz

Ambient Temperature: 31.25C





4 Standby power consumption

Voltage: 230.62V

Frequency: 50Hz

Current: 0.001683A

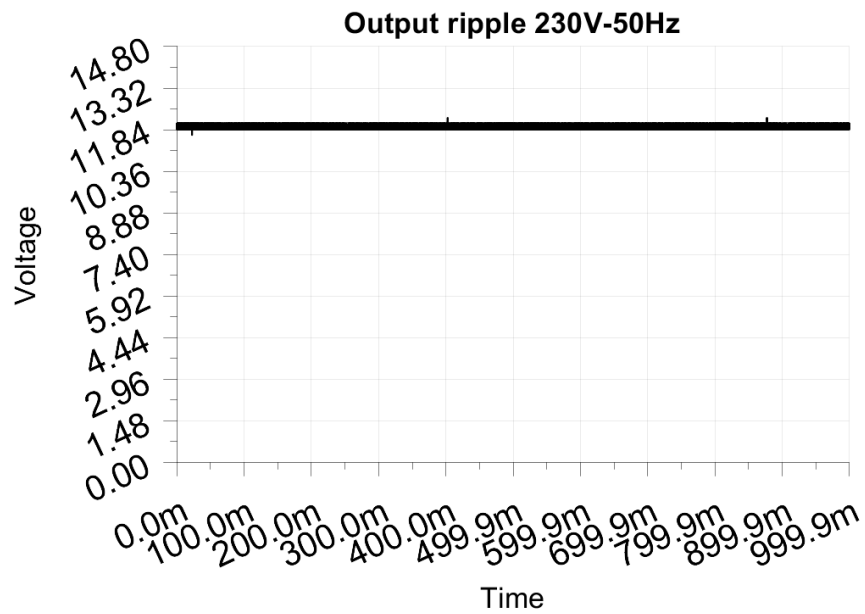
P active: 0.088W

P apparent: 0.388VA

P reactive: 0.378VAR

P factor: 0.228

Output voltage: 12.040V



5 Load testing

Characteristics

Voltage: 230.63V

Frequency: 50Hz

Loads: 0.000A to 0.250A

Minimum output voltage: 12.026V

Maximum output voltage: 12.070V

Regulation error absolute: -0.026V/+0.070V

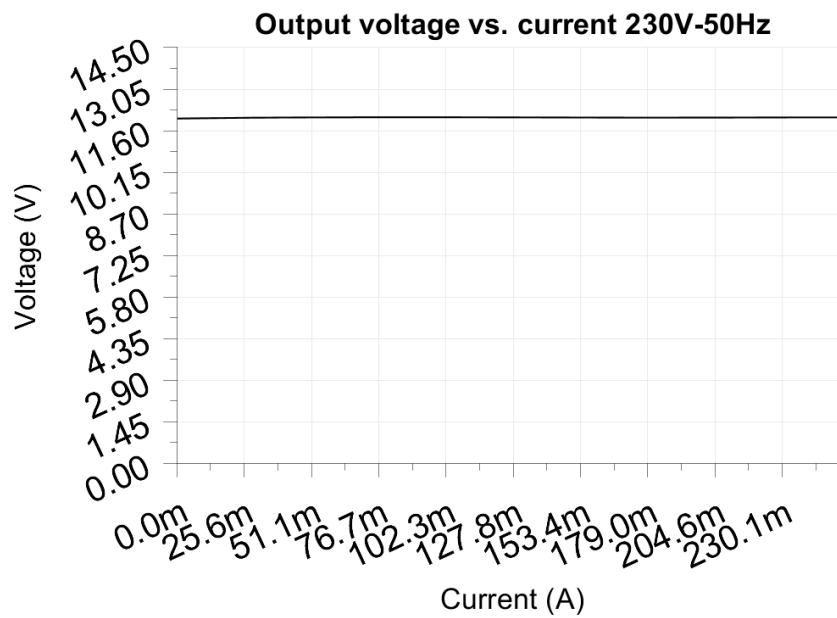
Regulation error relative: -0.2%/+0.6%

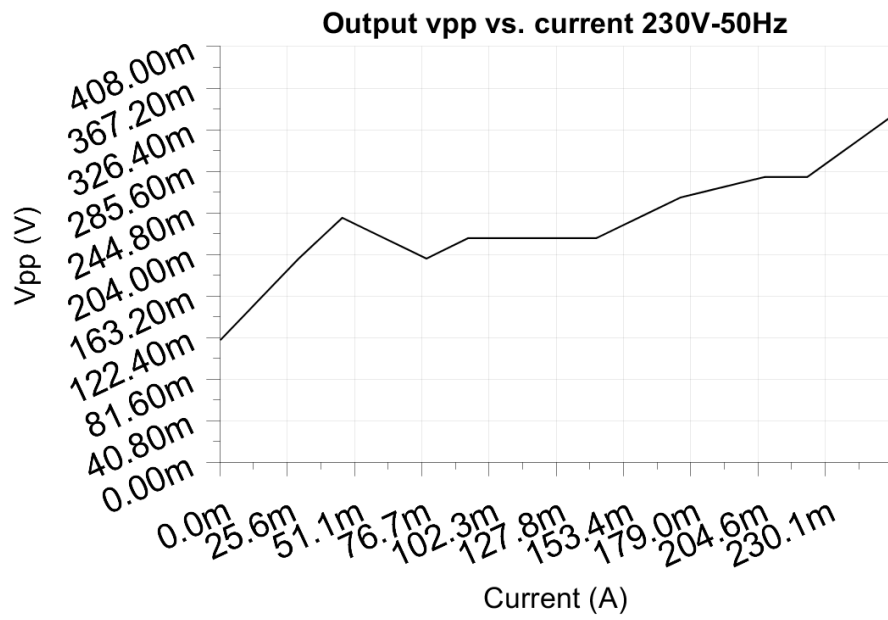
Vpp ripple&noise absolute: 0.340V

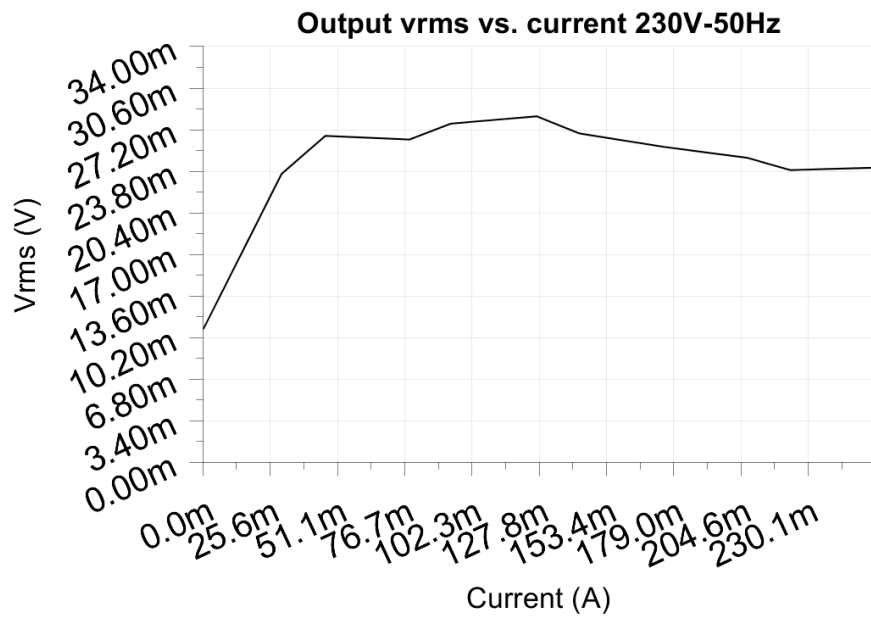
Vpp ripple&noise relative: 2.8%

RMS ripple&noise absolute: 0.028V

RMS ripple&noise relative: 0.2%







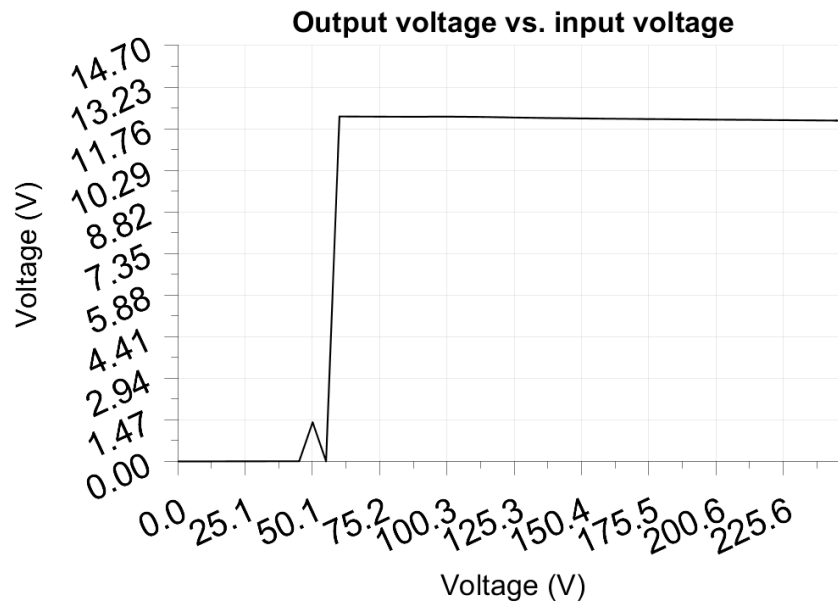
6 Turn on voltage

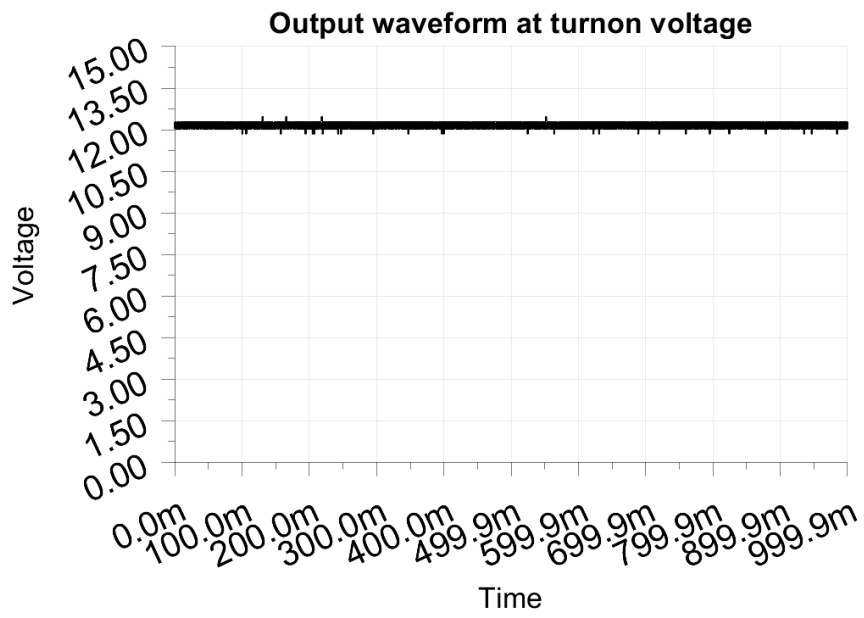
Testing when the PSU enables it's output

Test load: 0.025A
Test Frequency: 50Hz
Threshold: 9.000V

Turn-on voltage: 60.00V

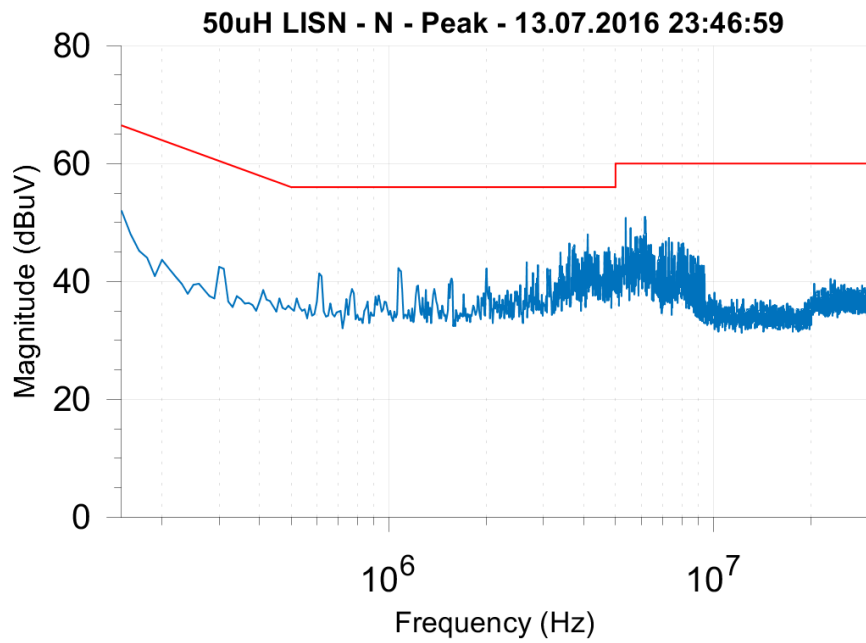
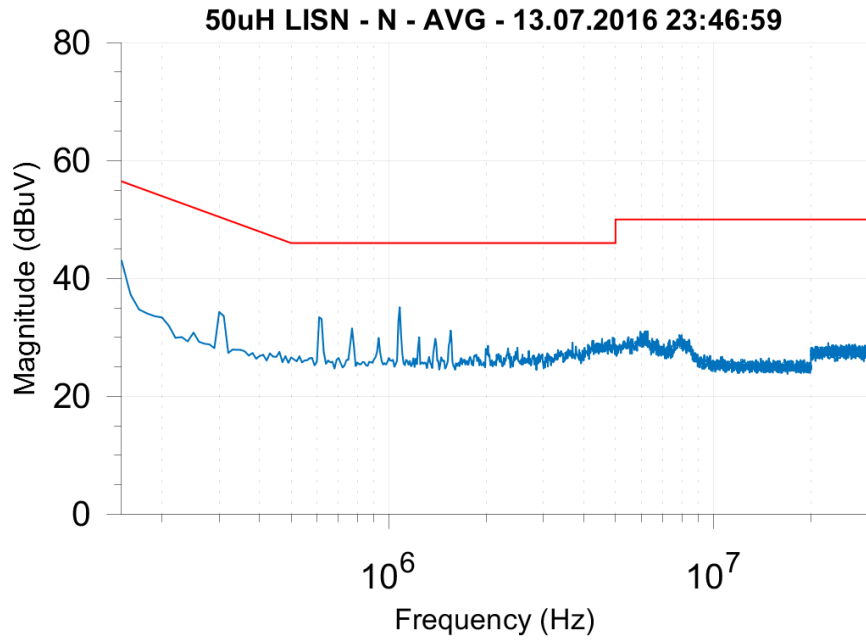
Output voltage: 12.194V

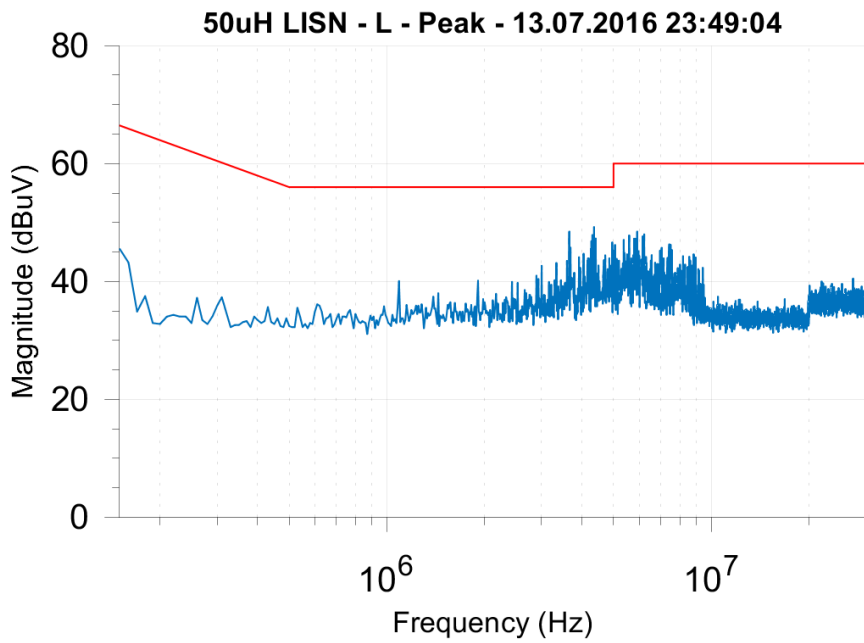
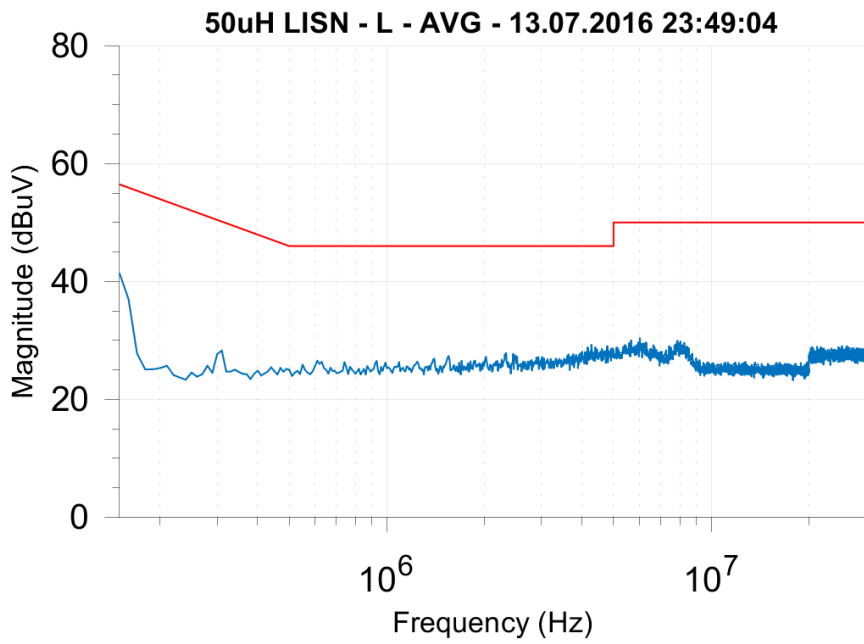




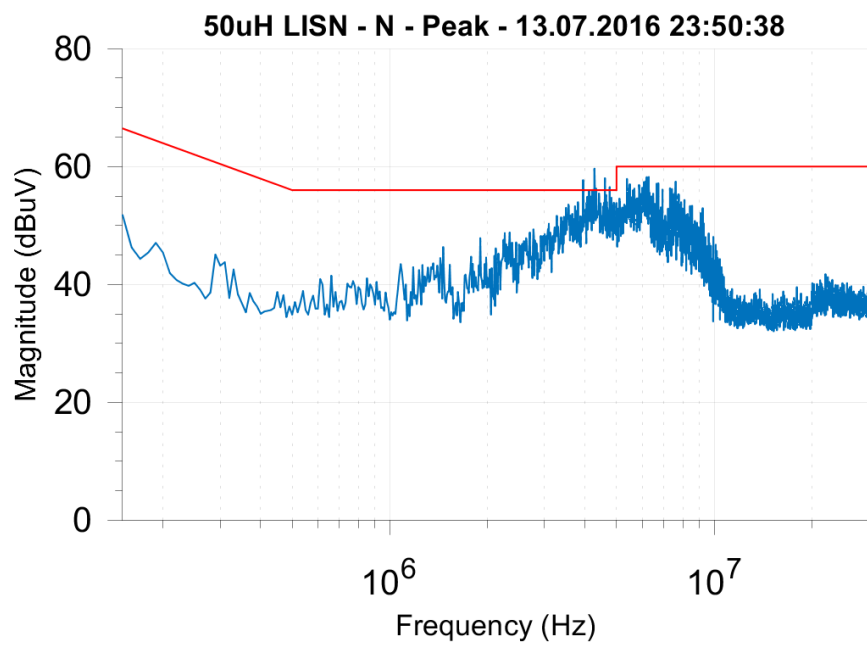
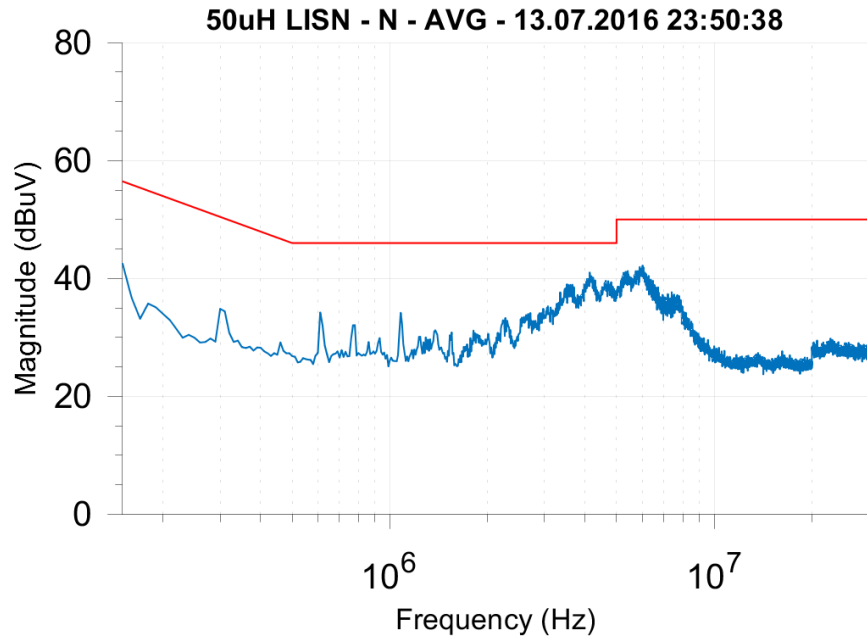
7 Conducted EMI

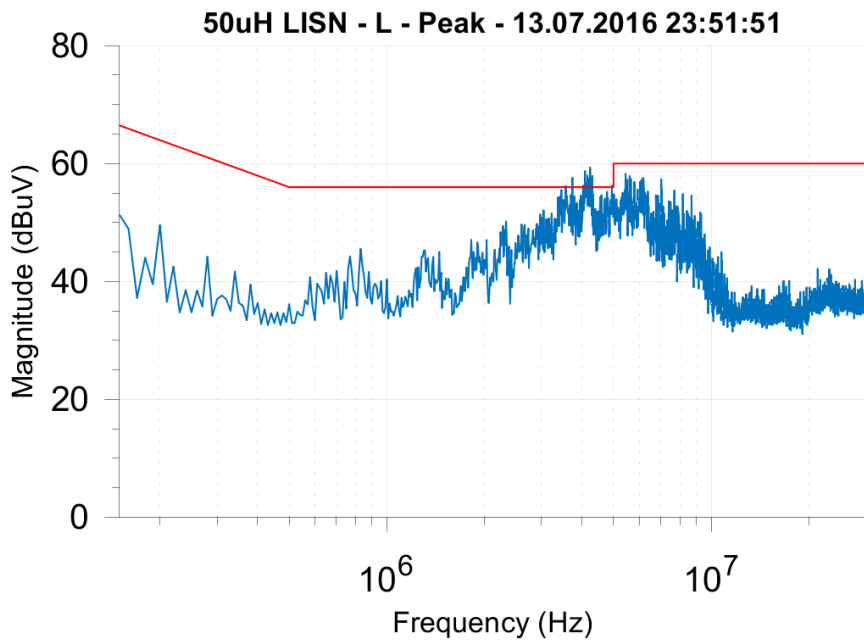
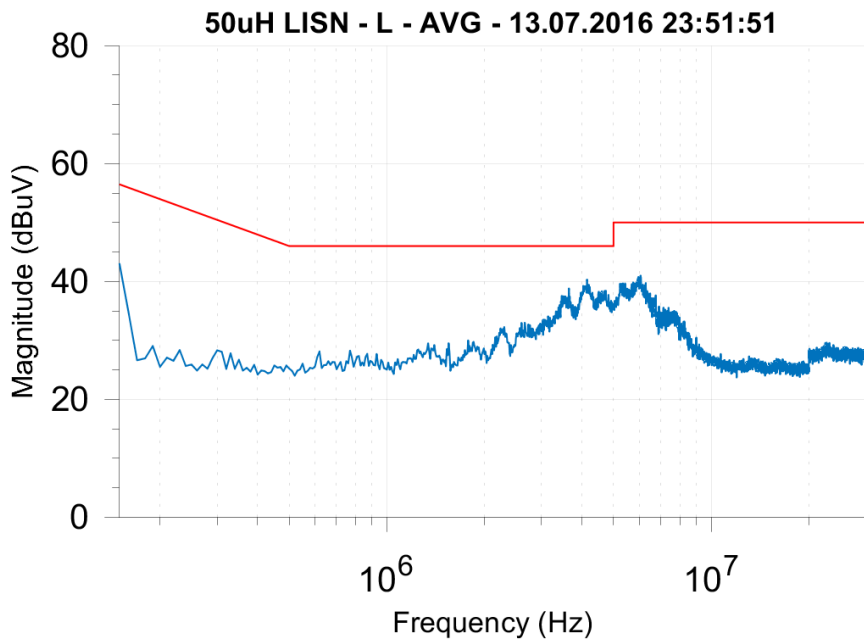
7.1 Output load 0.000A



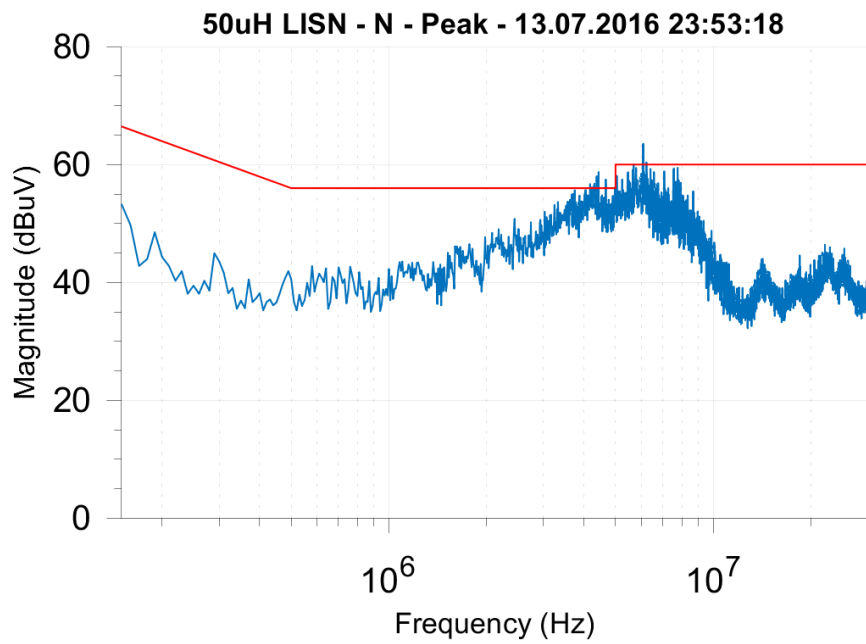
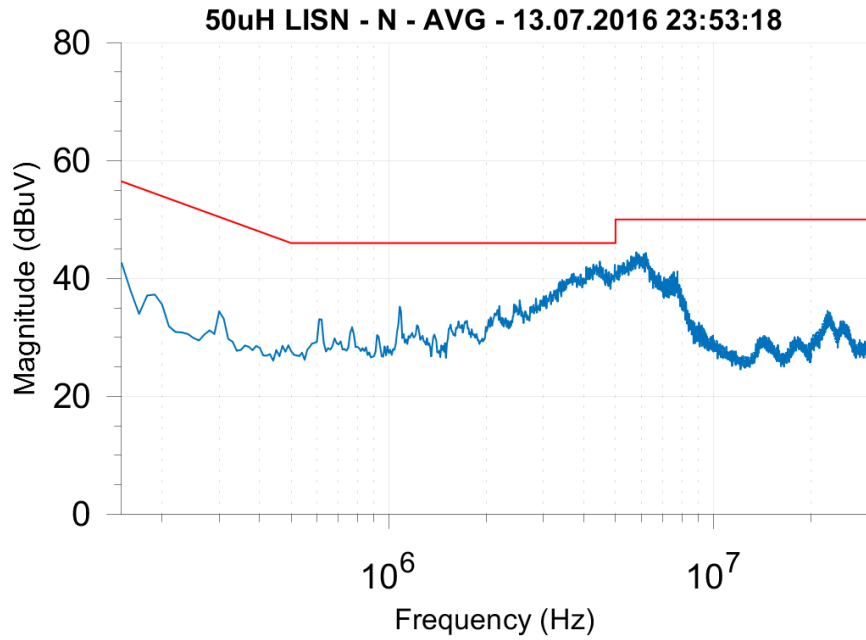


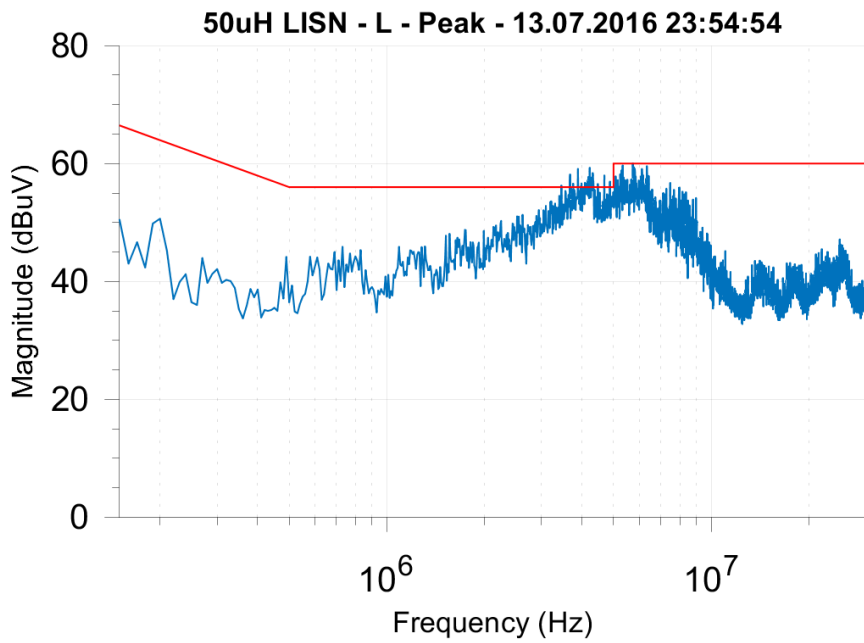
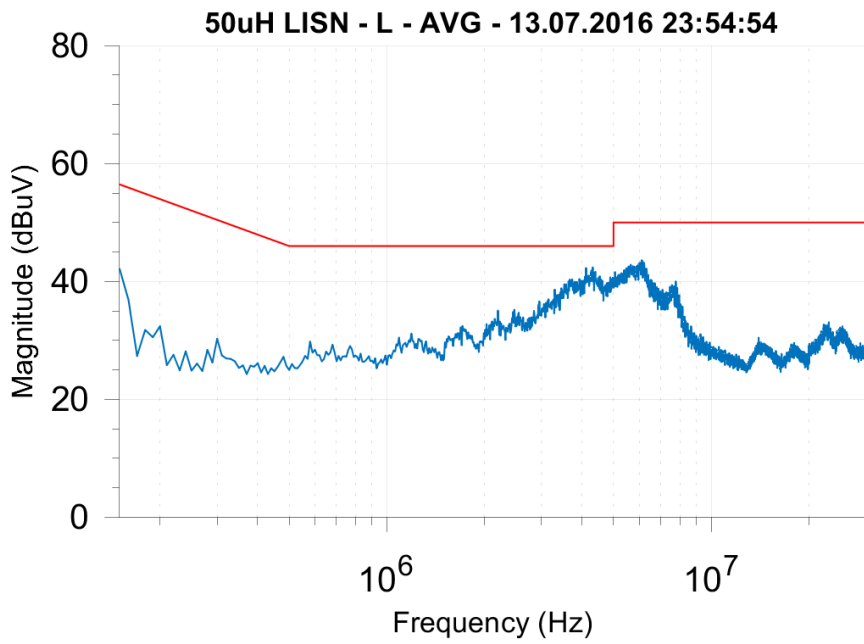
7.2 Output load 0.125A





7.3 Output load 0.250A





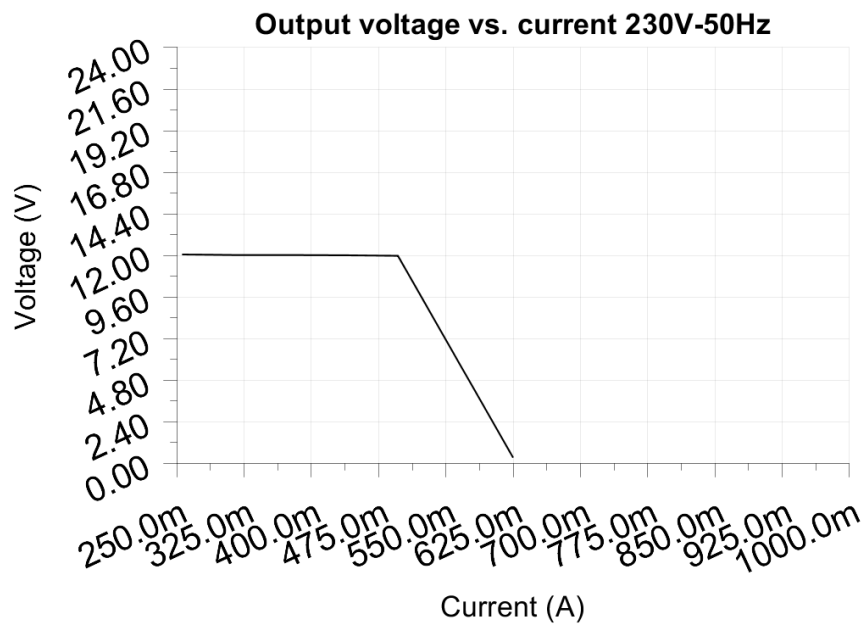
8 Overload testing

Test voltage: 230.00V

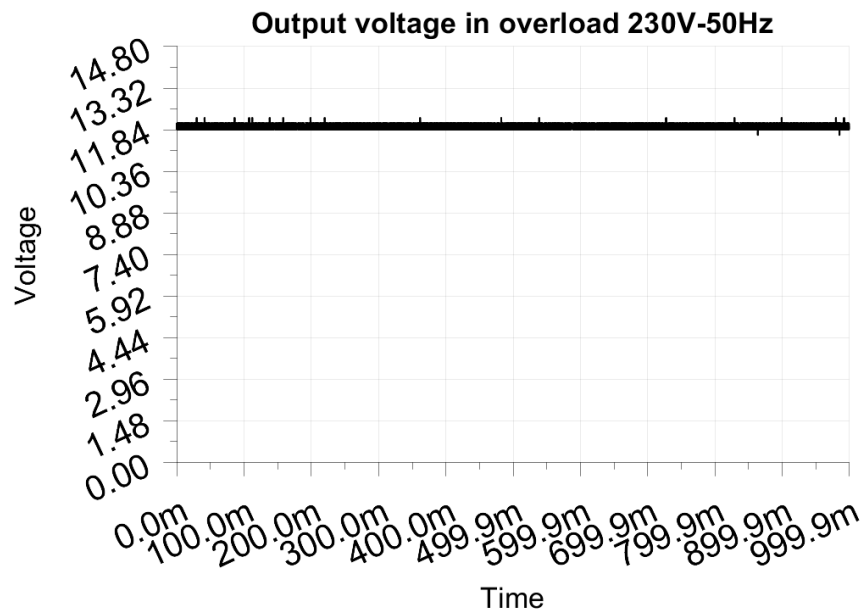
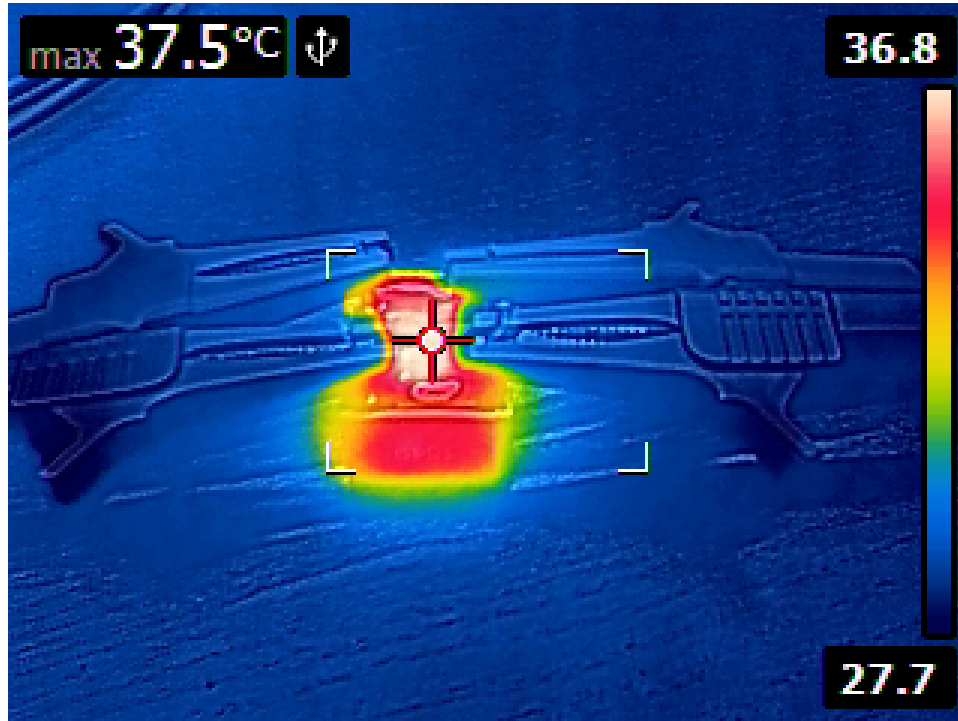
Test Frequency: 50Hz

Threshold: <6.000V

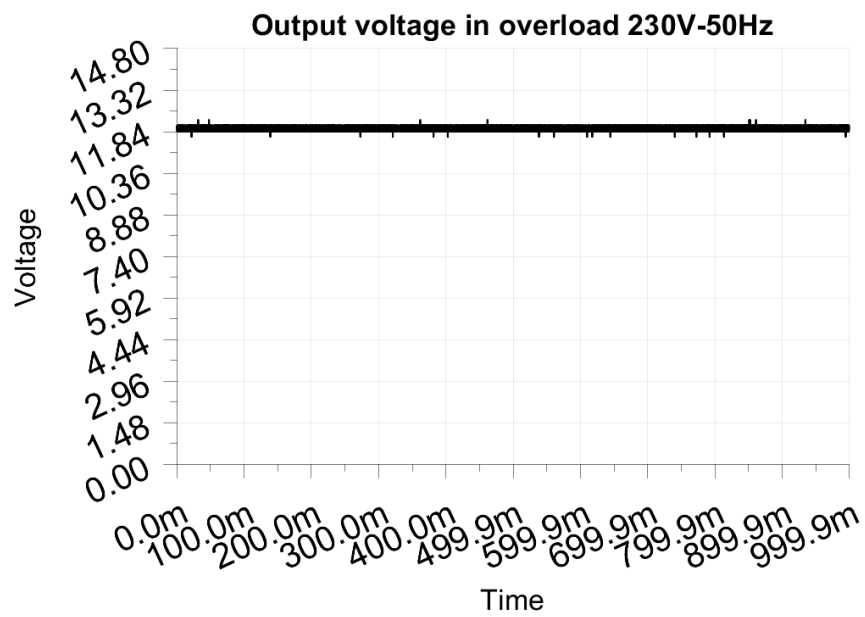
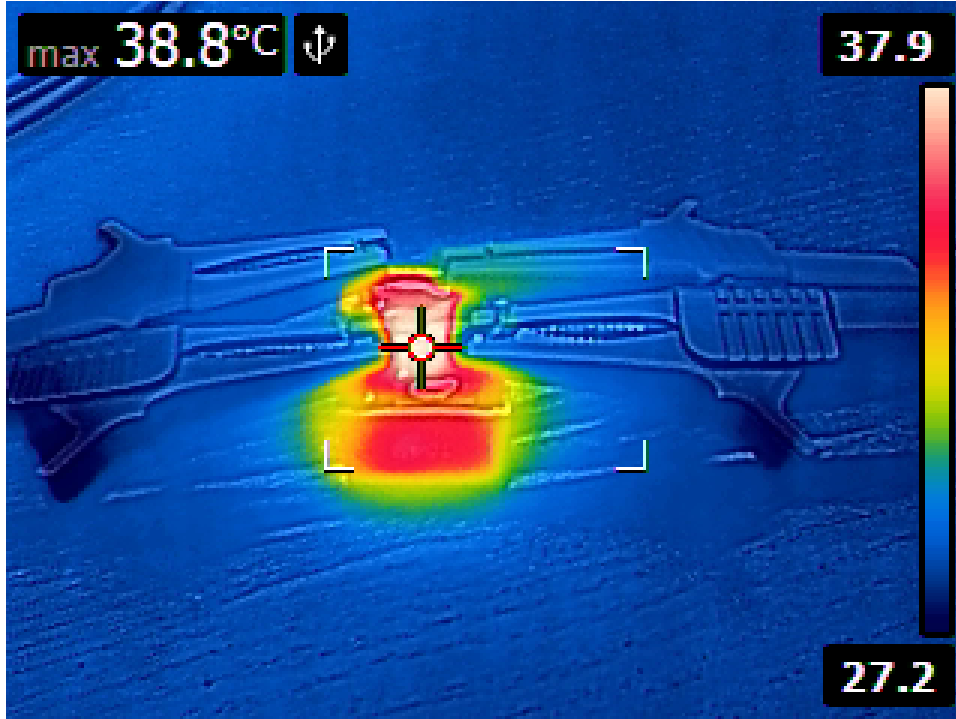
Maximum output current before shutdown: 0.625A



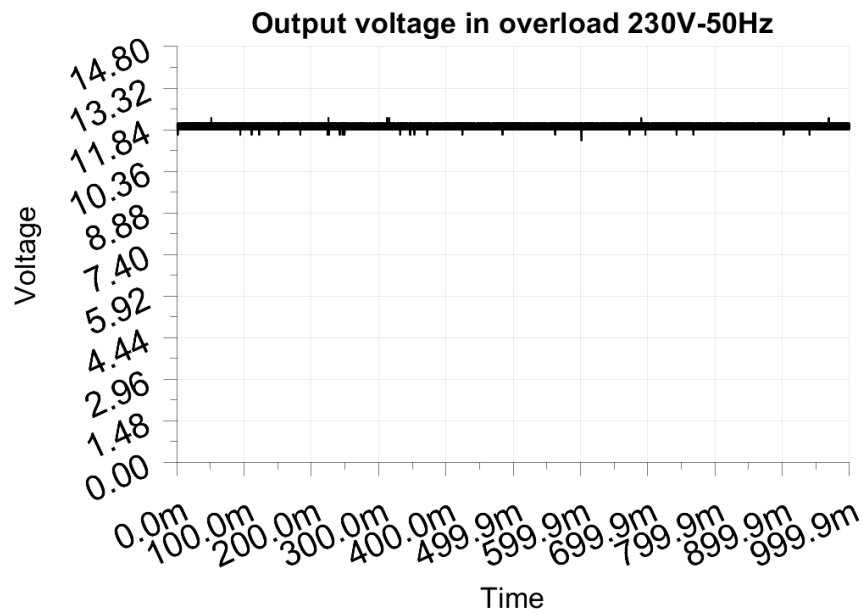
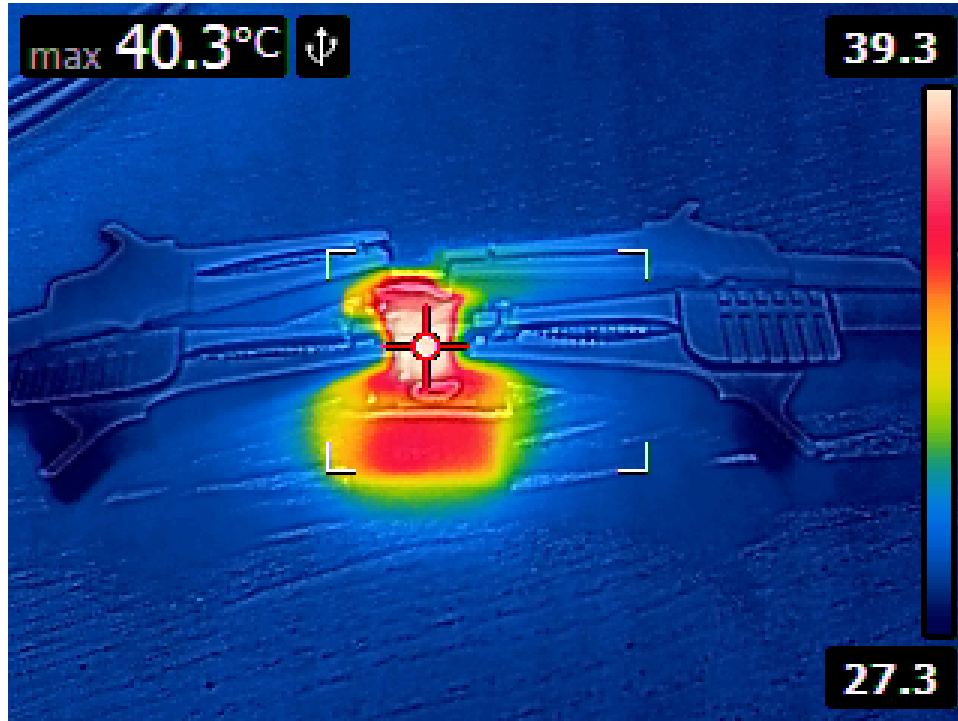
8.1 Output load 0.250A or 100%



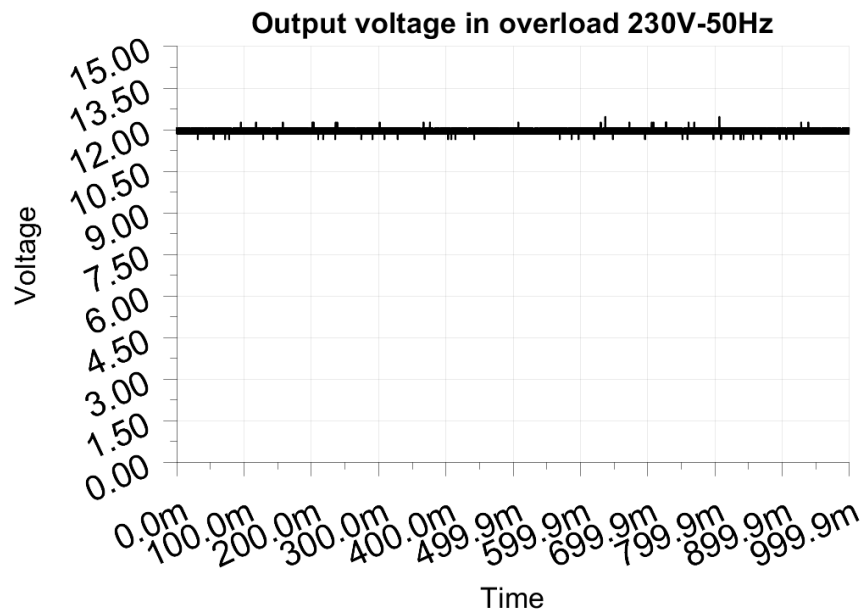
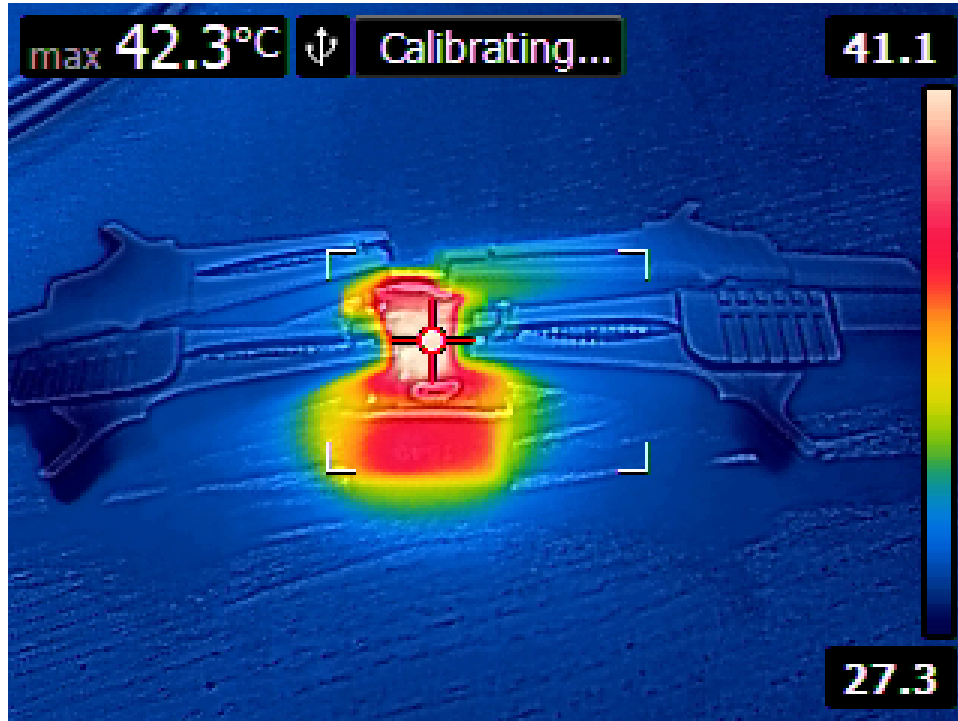
8.2 Output load 0.313A or 125%



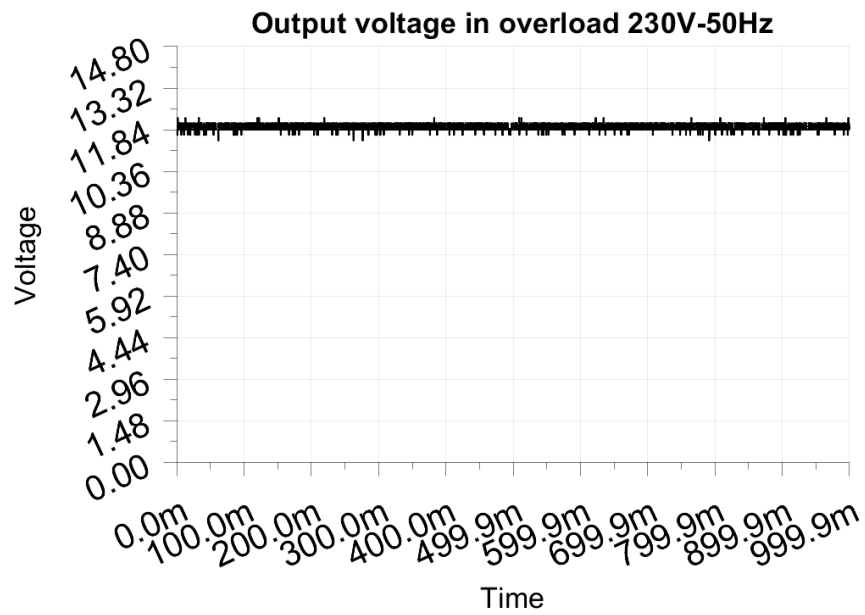
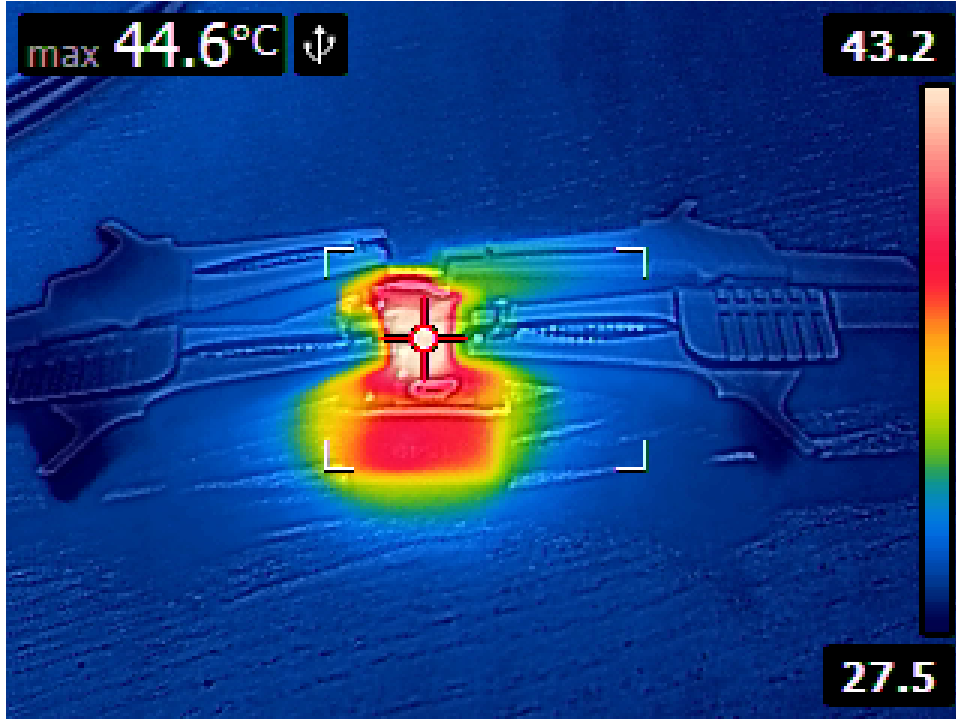
8.3 Output load 0.375A or 150%



8.4 Output load 0.438A or 175%



8.5 Output load 0.500A or 200%



8.6 Output load 0.625A or 250%

