



develop

PSU test report

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2 General information

Testing the following device

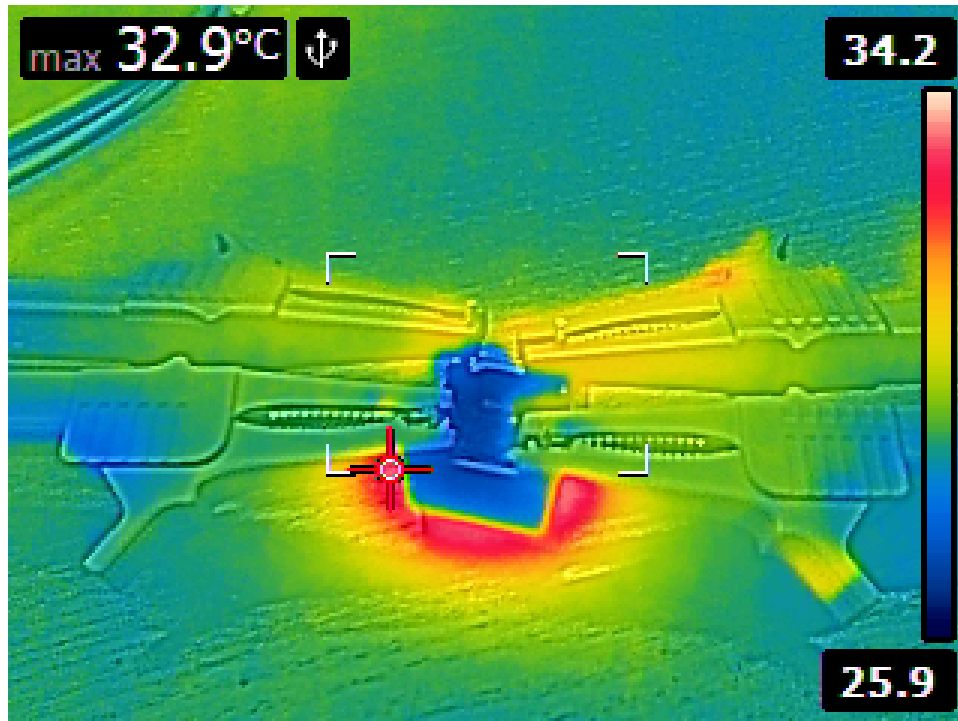
Manufacturer: Vigortronix
Device name: VTX-214-001-112
Serial number: 1
Nominal voltage: 12.000V
Nominal current: 0.085A
Tester: Bernhard Woerndl-Aichriedler <bwa@xdevelop.at>
Start time: 14-Jul-2016 01:06:49

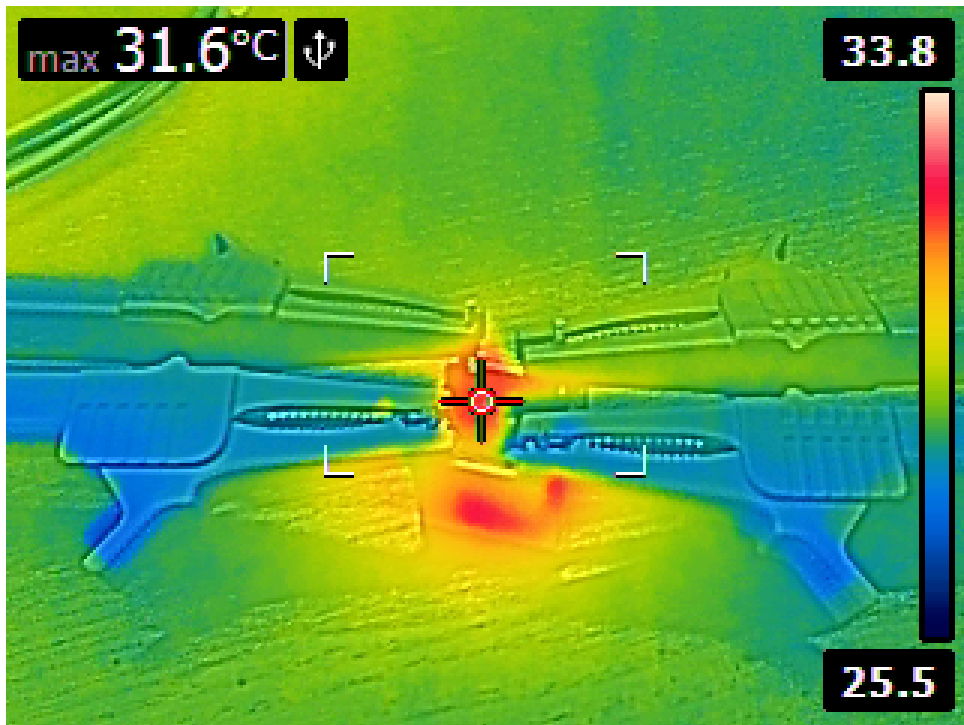
3 Point of operation

The test has been conducted with the following conditions

Voltage/Frequency: 230V-50Hz

Ambient Temperature: 31.59C





4 Standby power consumption

Voltage: 230.62V

Frequency: 50Hz

Current: 0.004085A

P active: 0.210W

P apparent: 0.942VA

P reactive: 0.918VAR

P factor: 0.223

Output voltage: 11.993V



5 Load testing

Characteristics

Voltage: 230.63V

Frequency: 50Hz

Loads: 0.000A to 0.085A

Minimum output voltage: 11.988V

Maximum output voltage: 11.998V

Regulation error absolute: -0.012V/+0.002V

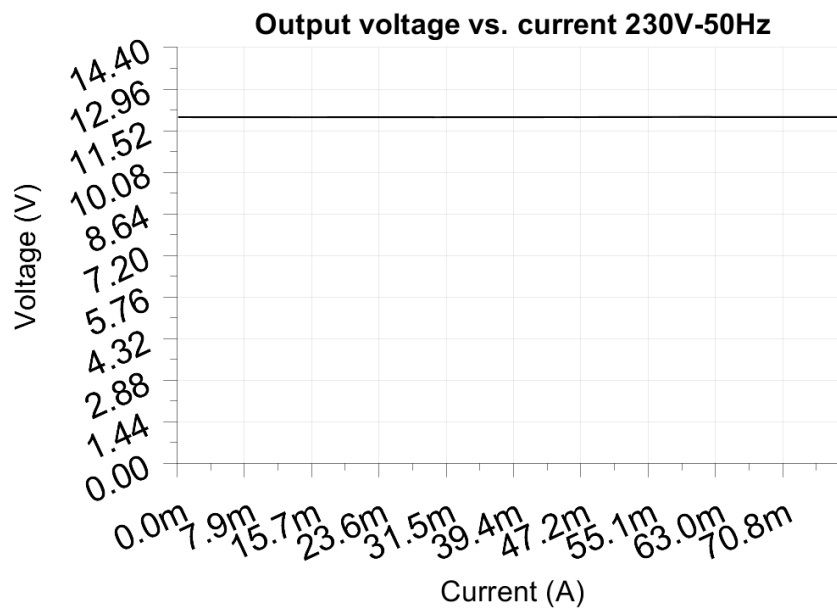
Regulation error relative: -0.1%/+0.0%

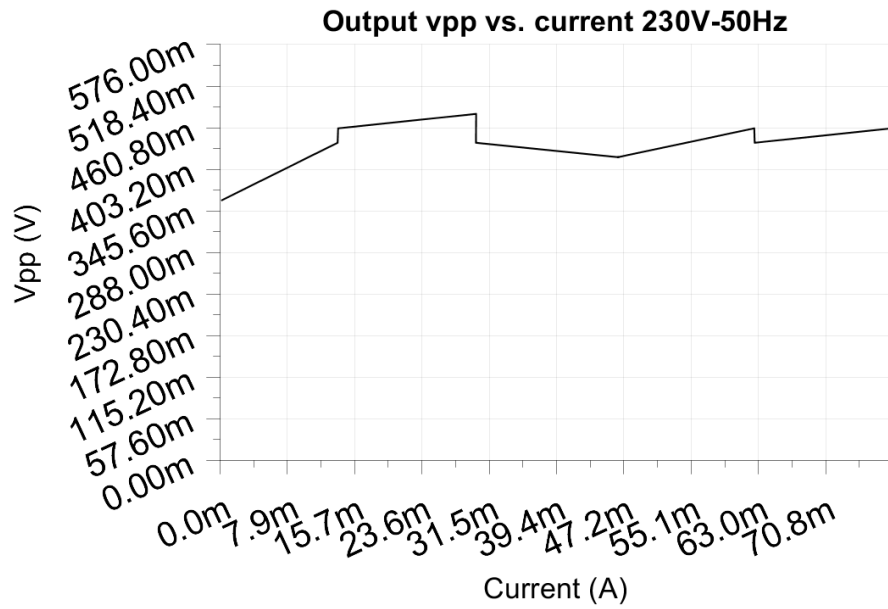
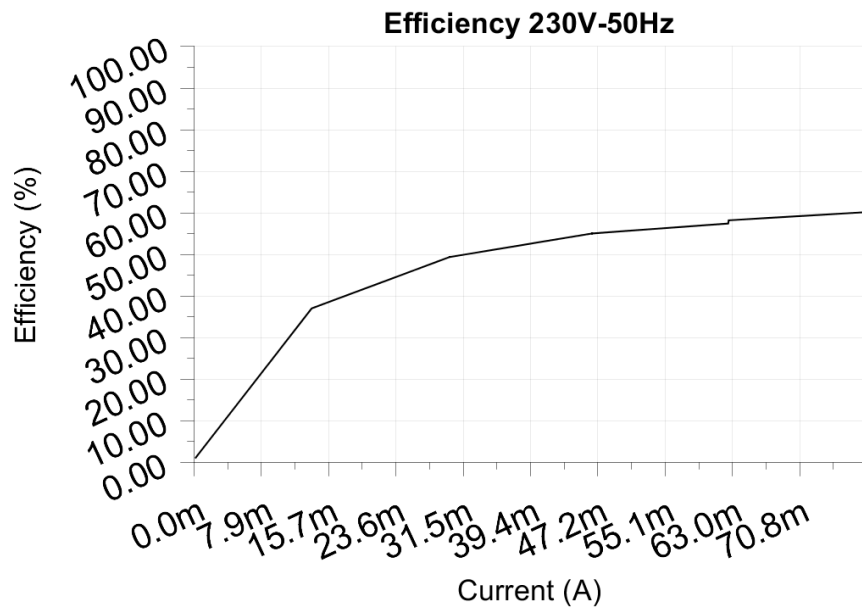
Vpp ripple&noise absolute: 0.480V

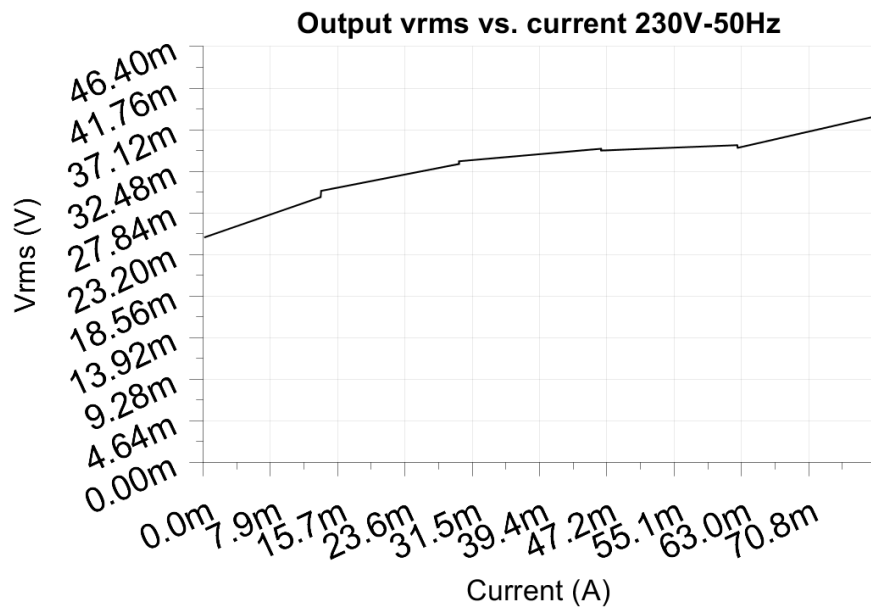
Vpp ripple&noise relative: 4.0%

RMS ripple&noise absolute: 0.039V

RMS ripple&noise relative: 0.3%







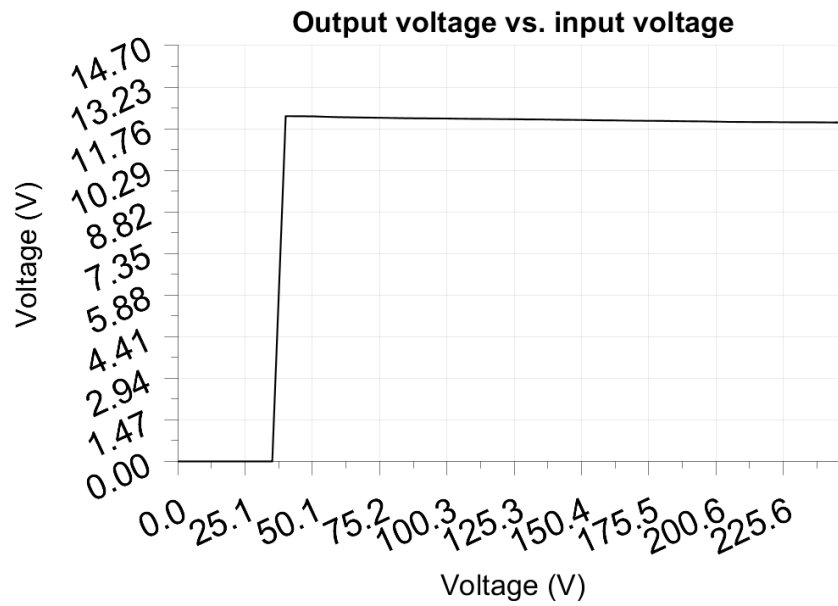
6 Turn on voltage

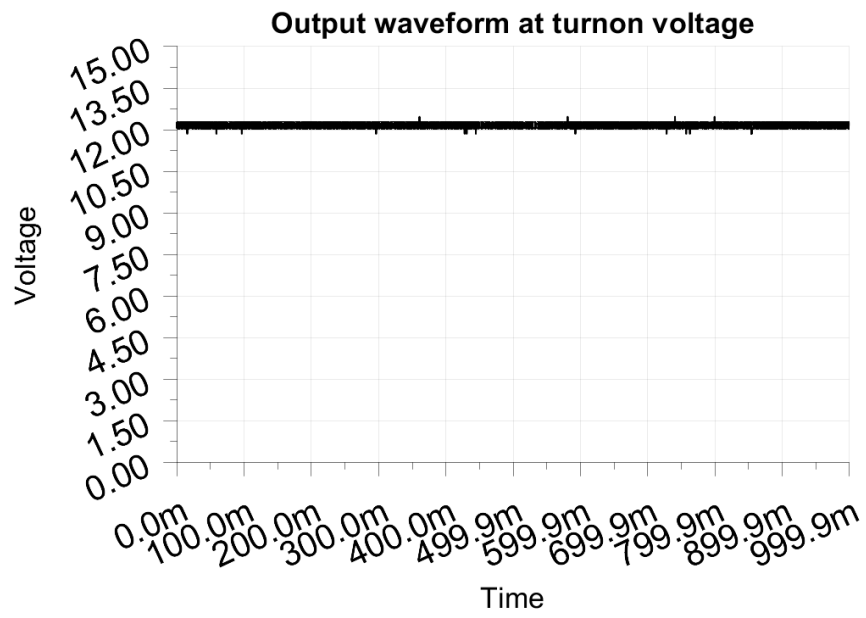
Testing when the PSU enables it's output

Test load: 0.009A
Test Frequency: 50Hz
Threshold: 9.000V

Turn-on voltage: 40.00V

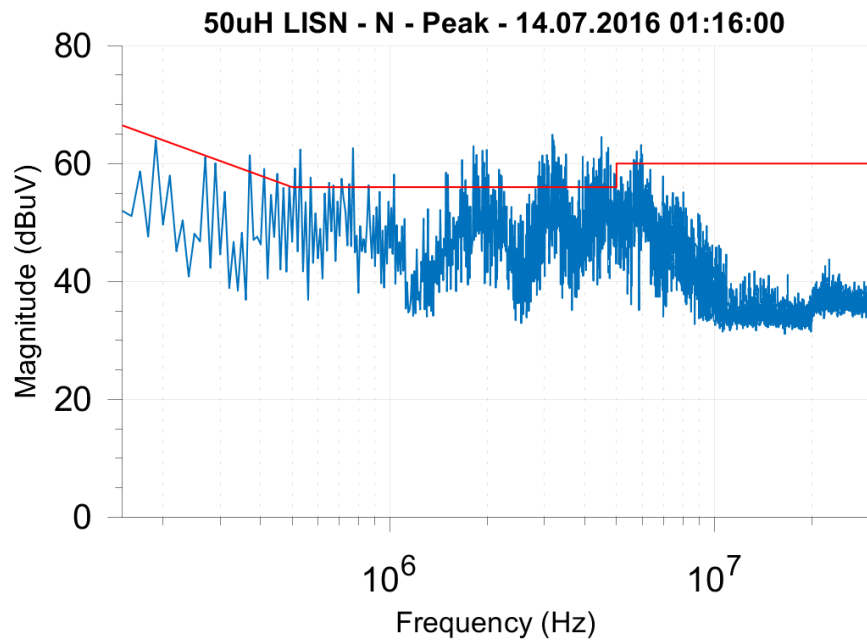
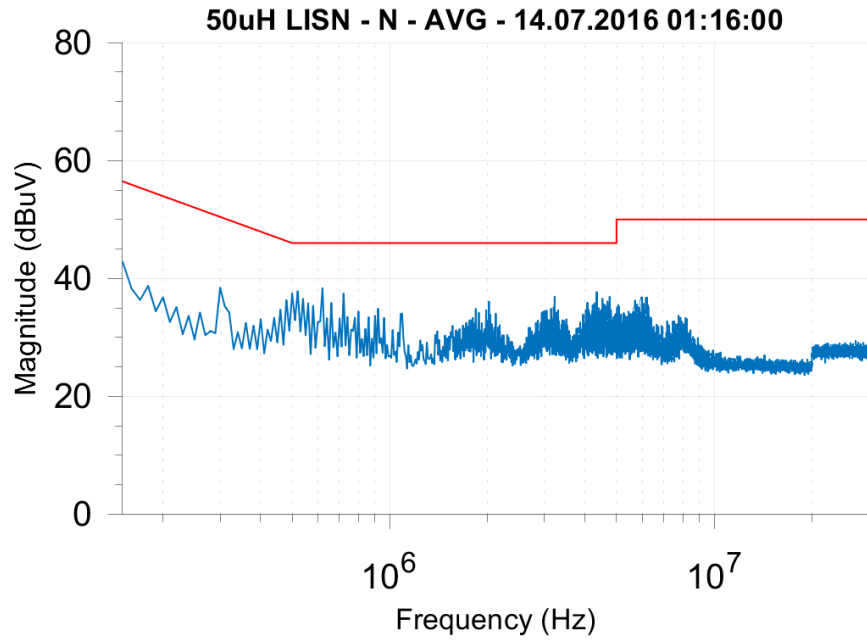
Output voltage: 12.204V

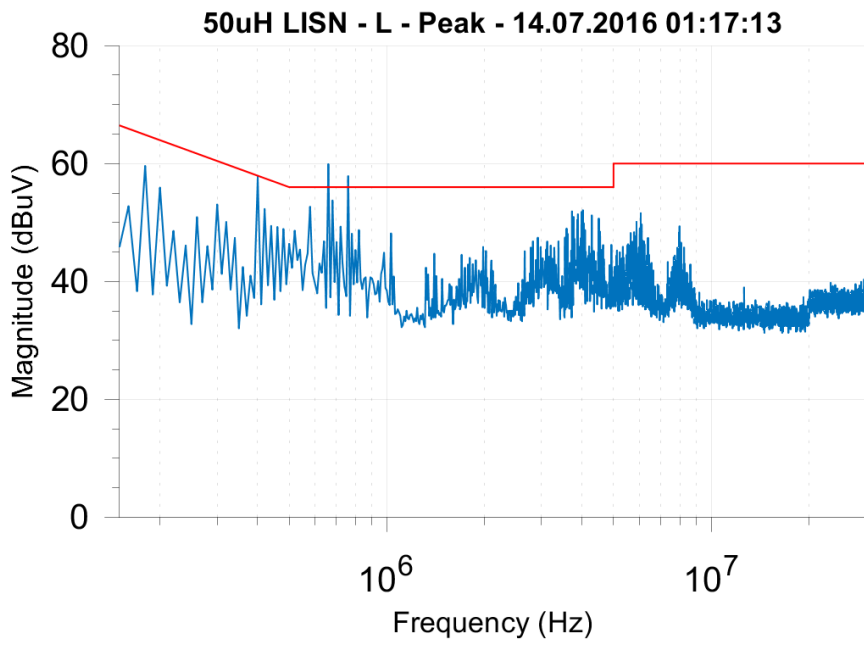
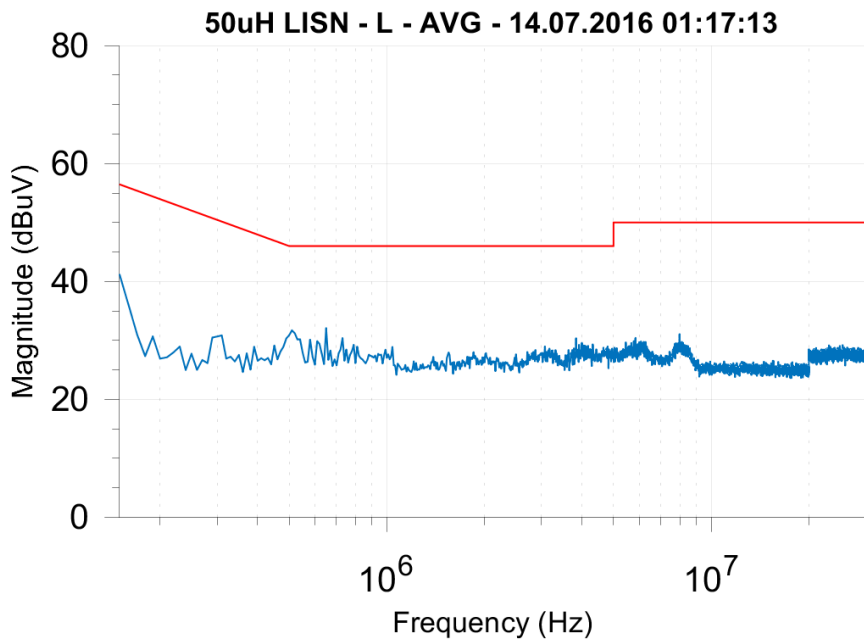




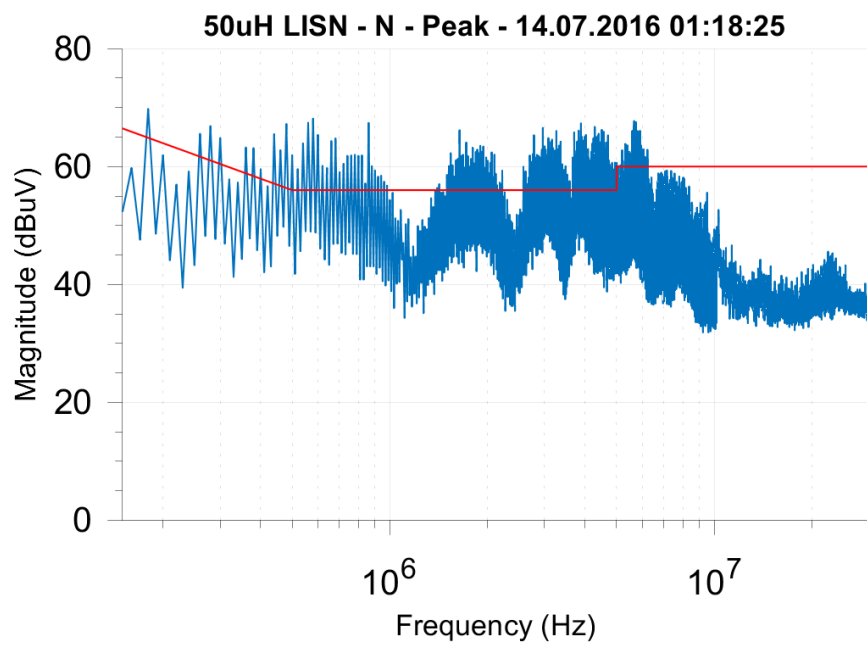
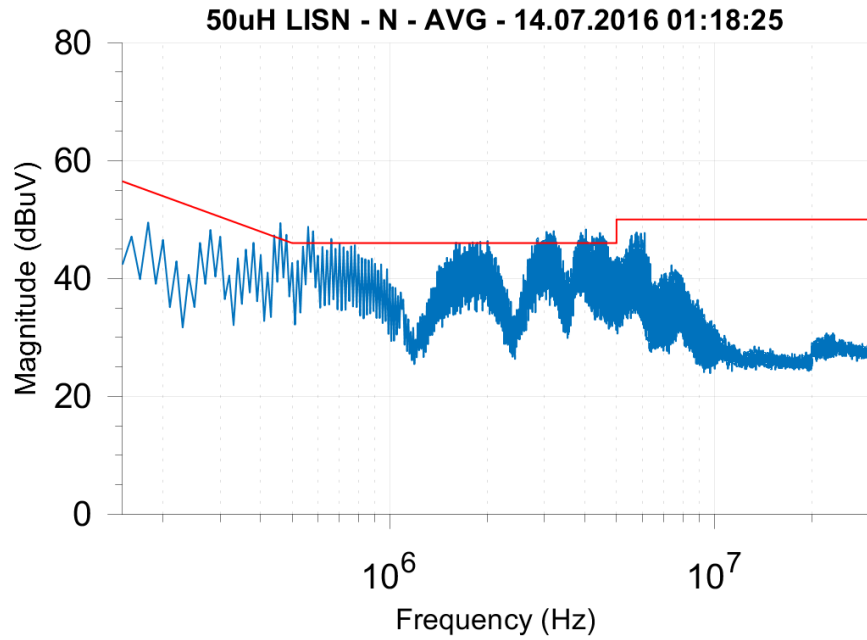
7 Conducted EMI

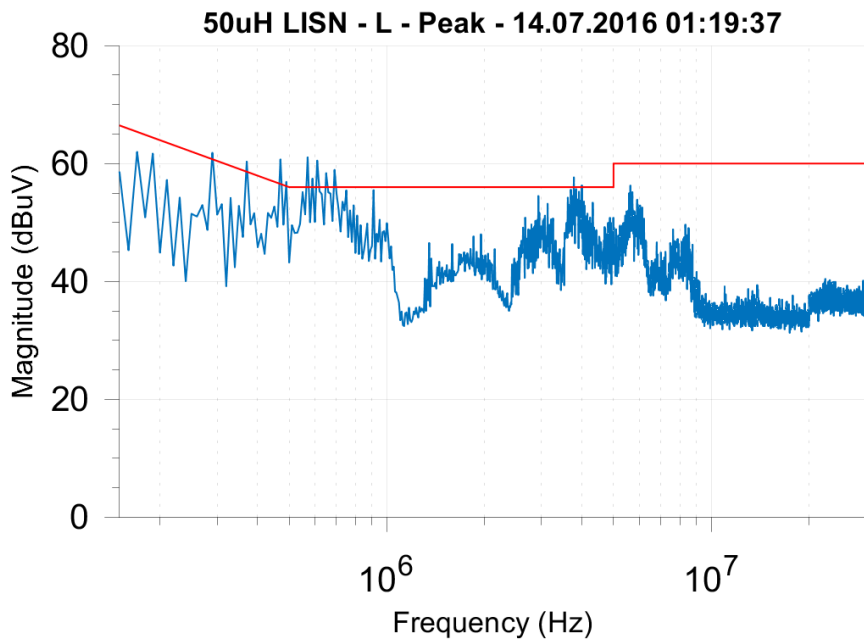
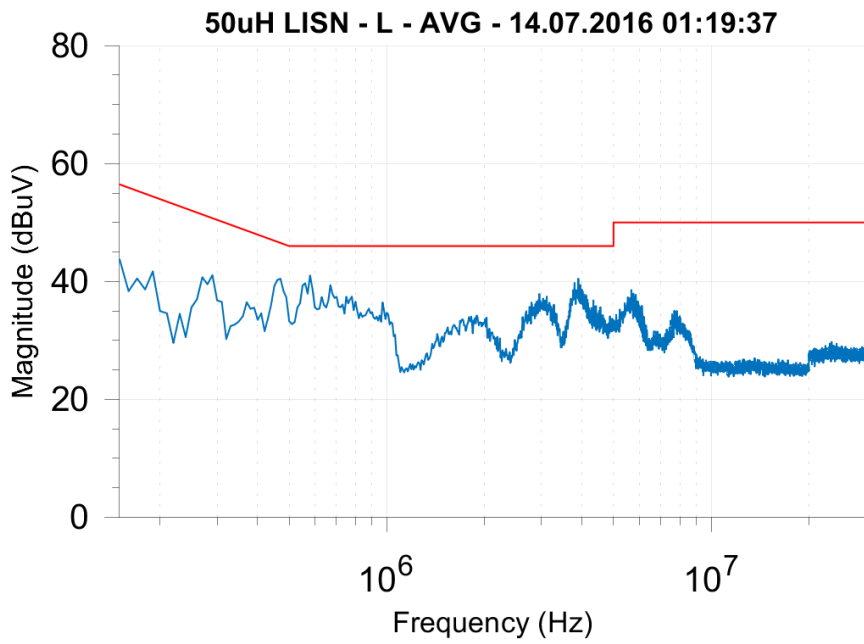
7.1 Output load 0.000A



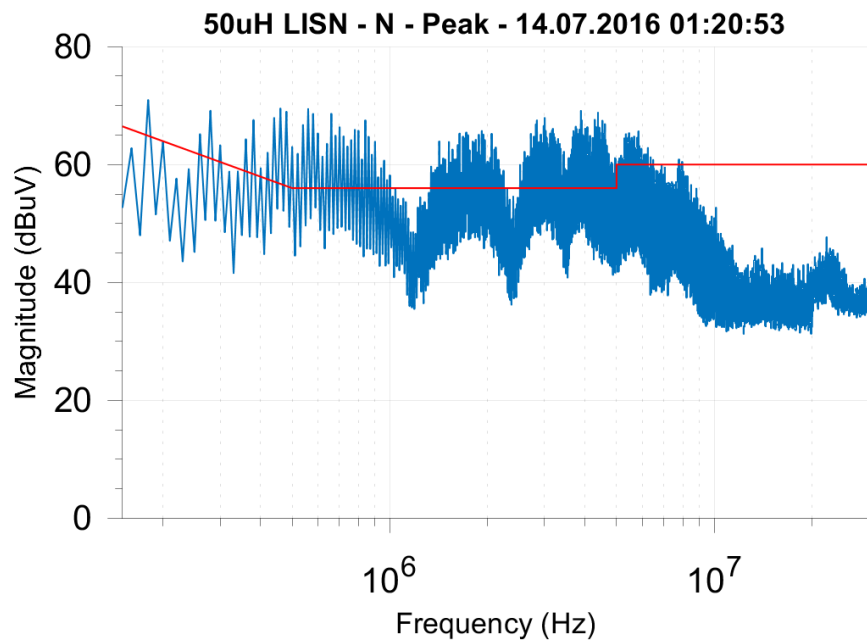
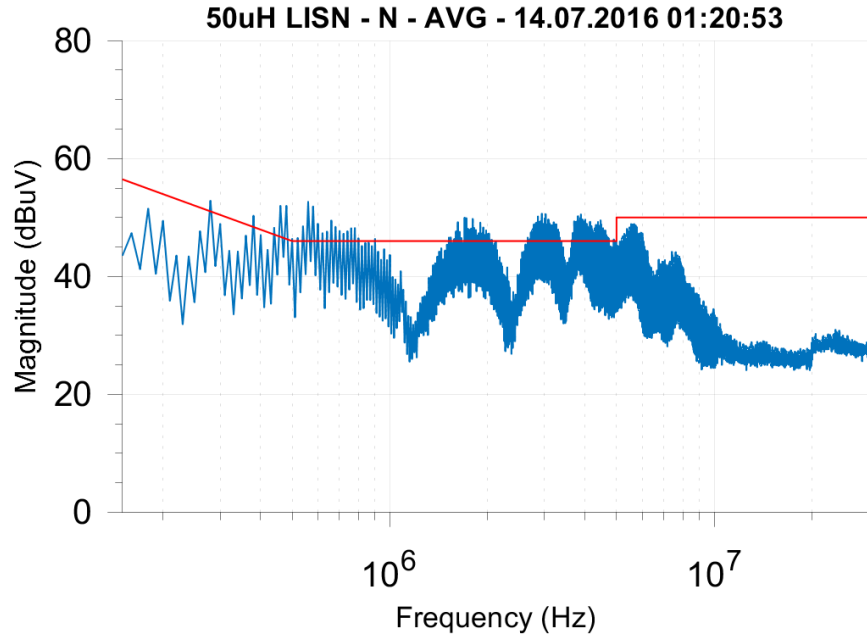


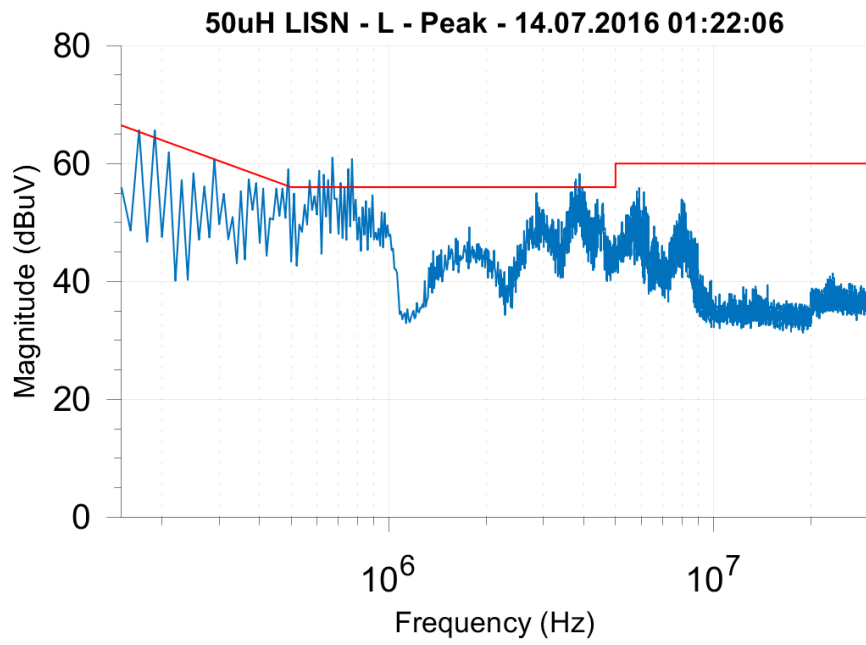
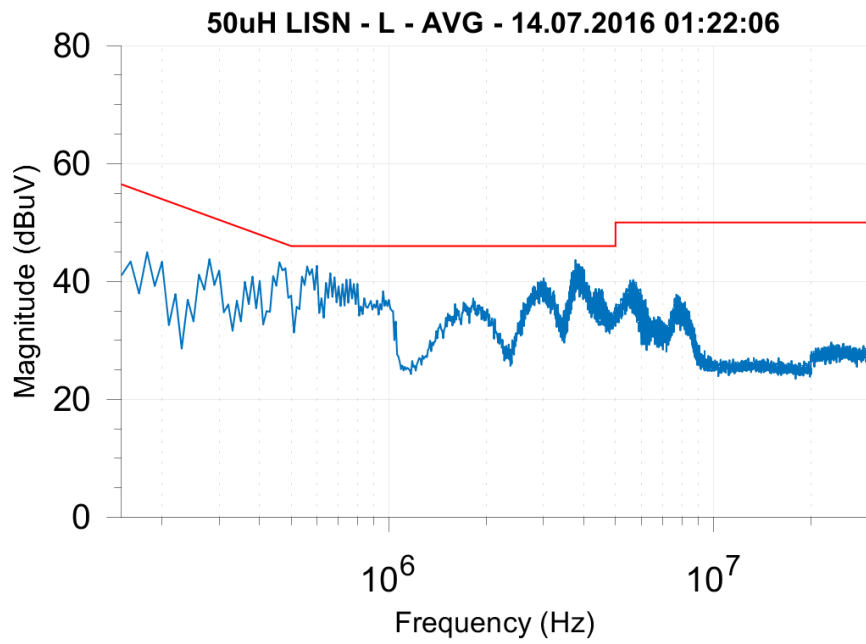
7.2 Output load 0.043A





7.3 Output load 0.085A





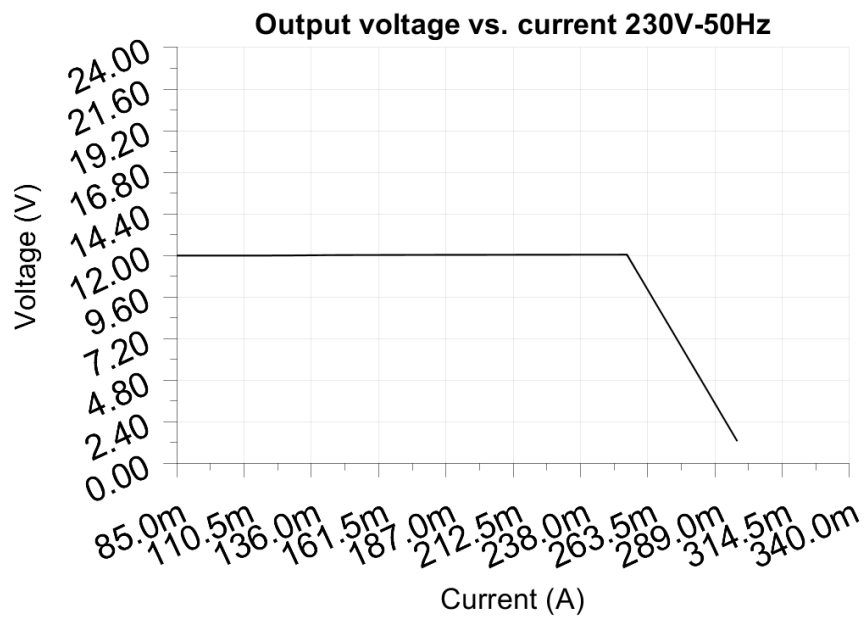
8 Overload testing

Test voltage: 230.00V

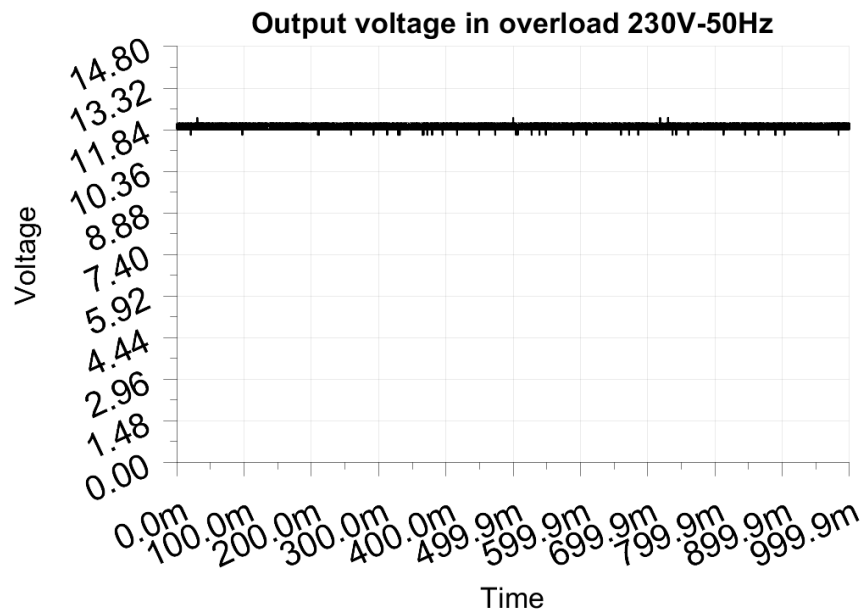
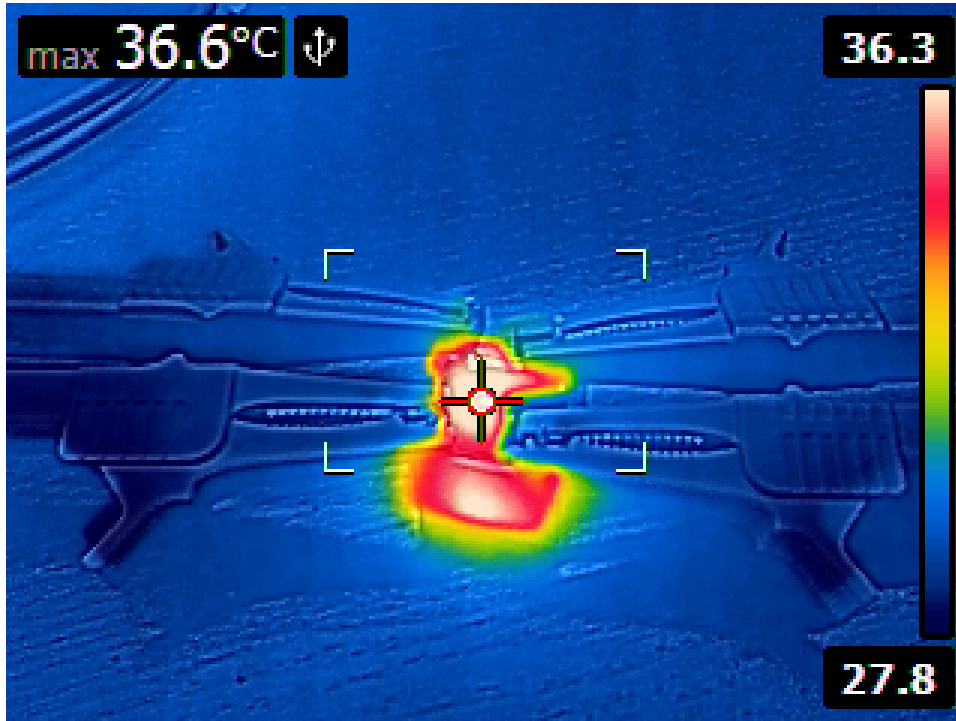
Test Frequency: 50Hz

Threshold: <6.000V

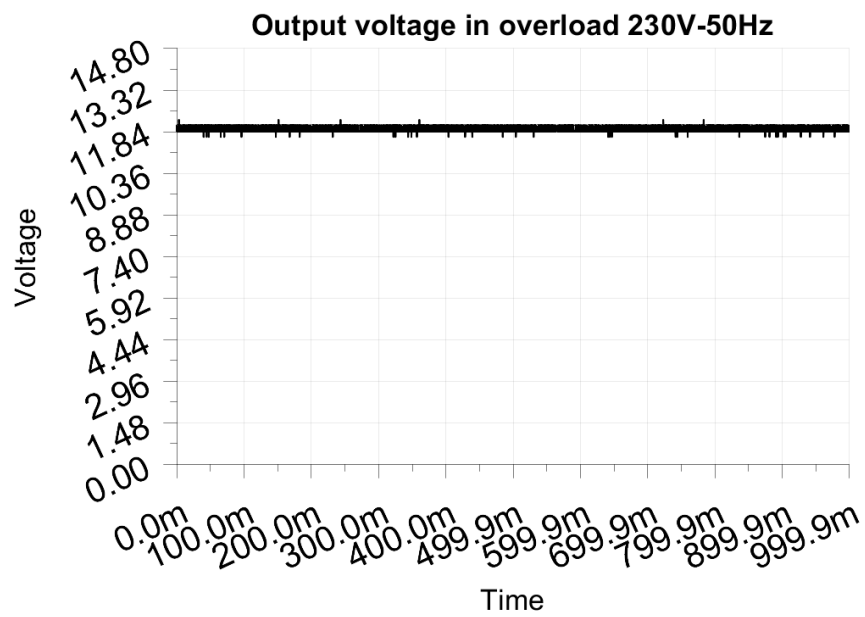
Maximum output current before shutdown: 0.298A



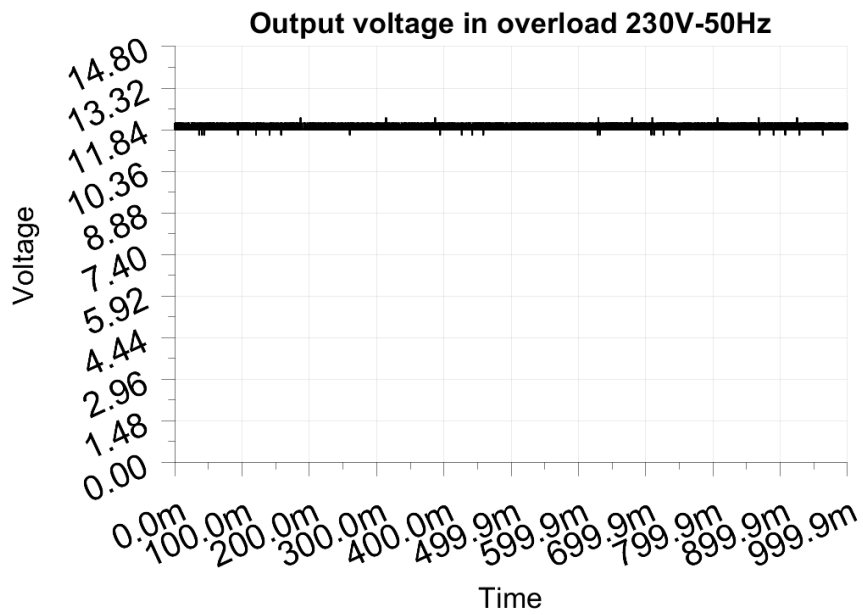
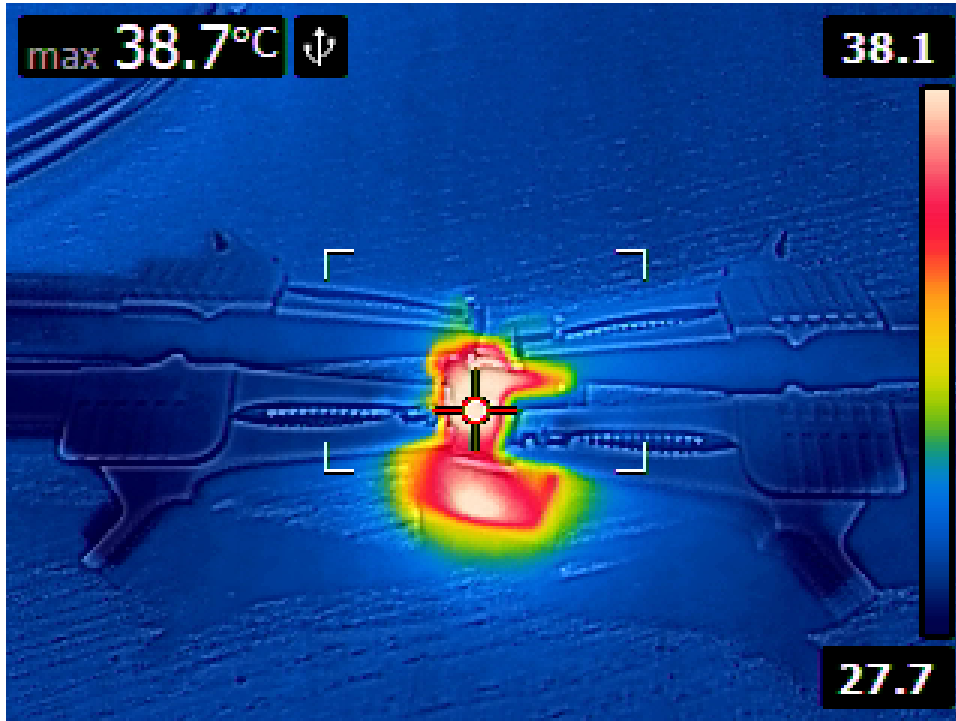
8.1 Output load 0.085A or 100%



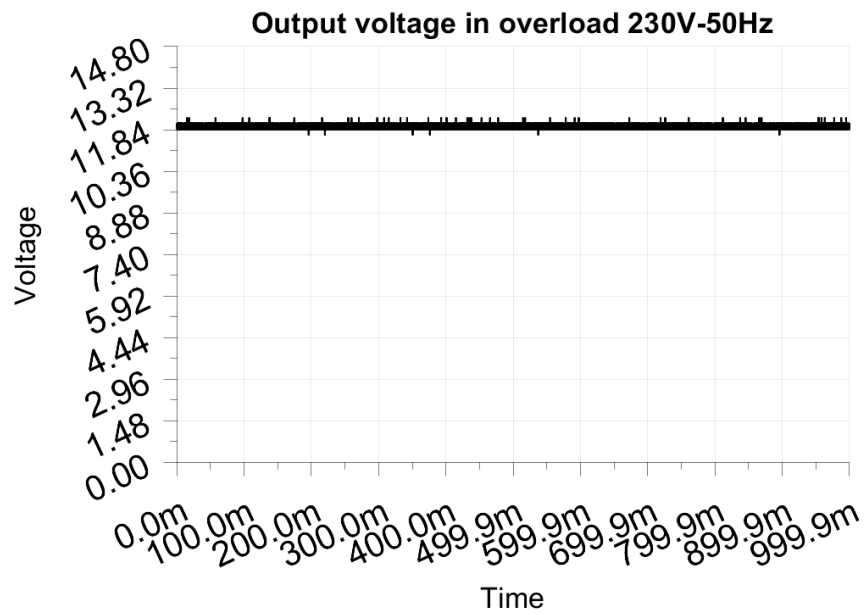
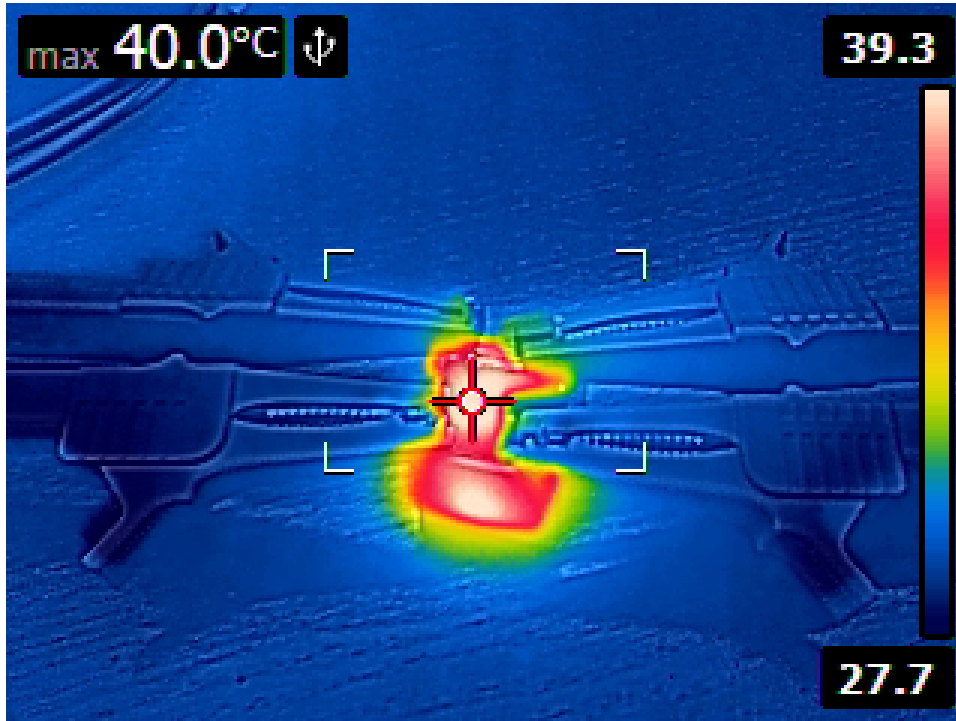
8.2 Output load 0.106A or 125%



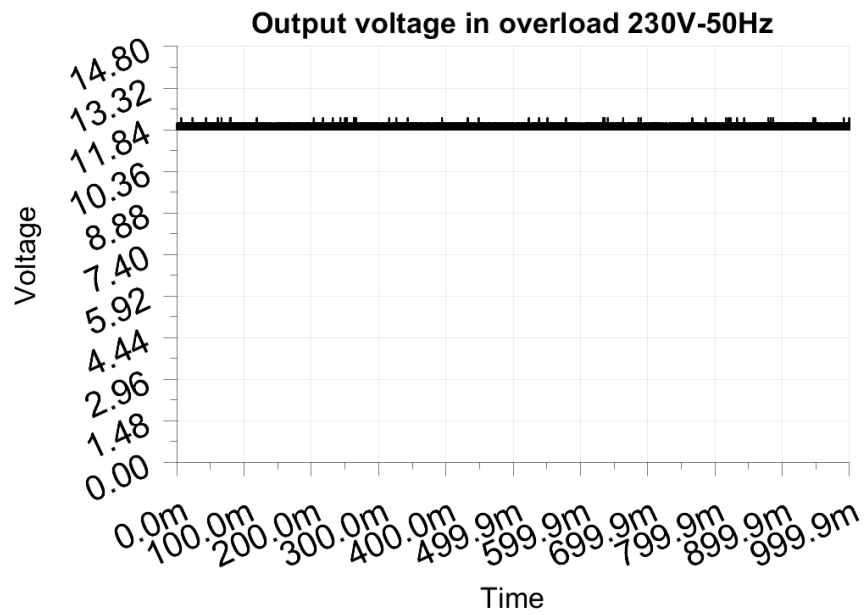
8.3 Output load 0.128A or 150%



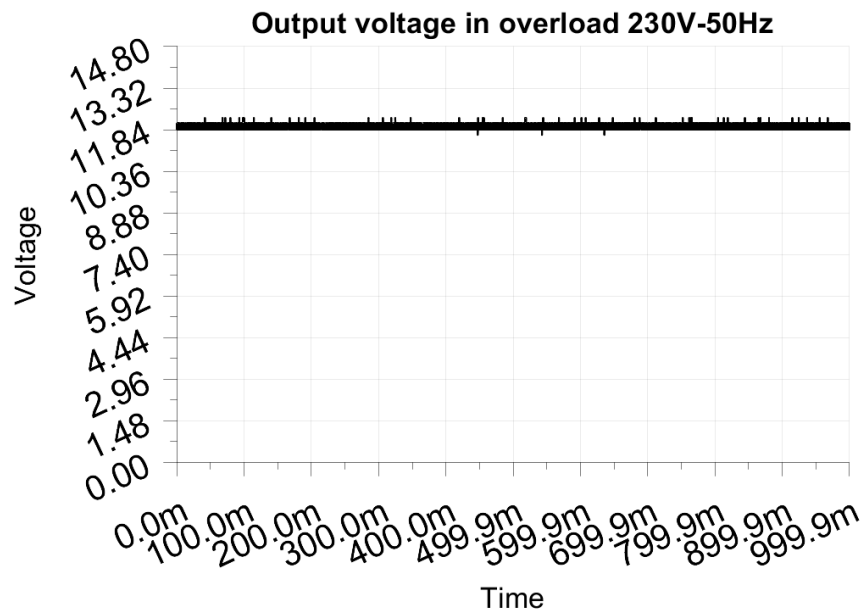
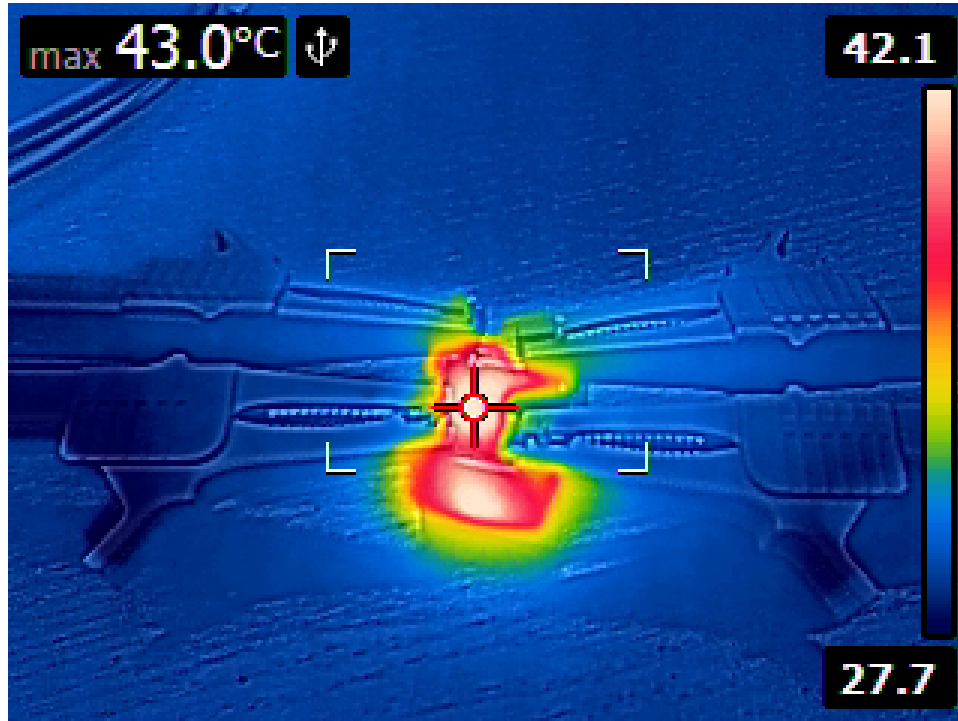
8.4 Output load 0.149A or 175%



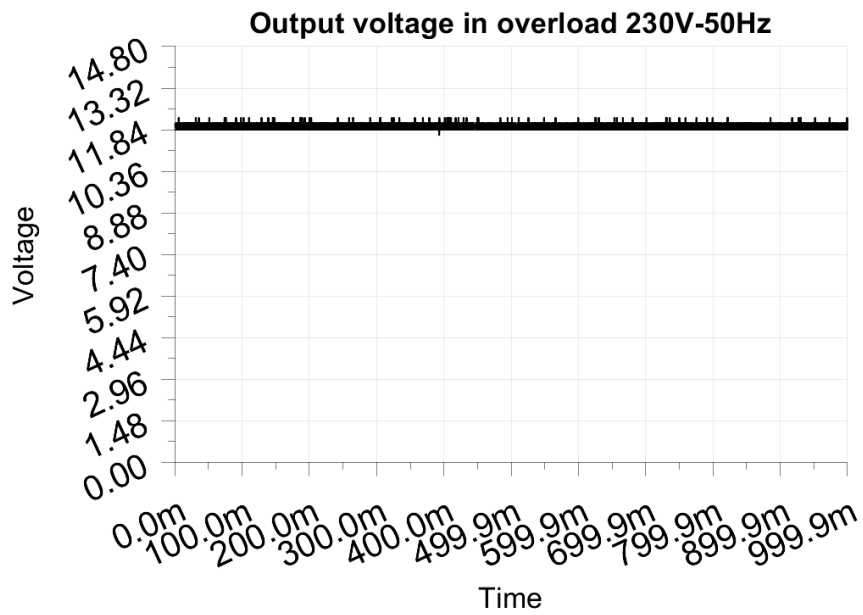
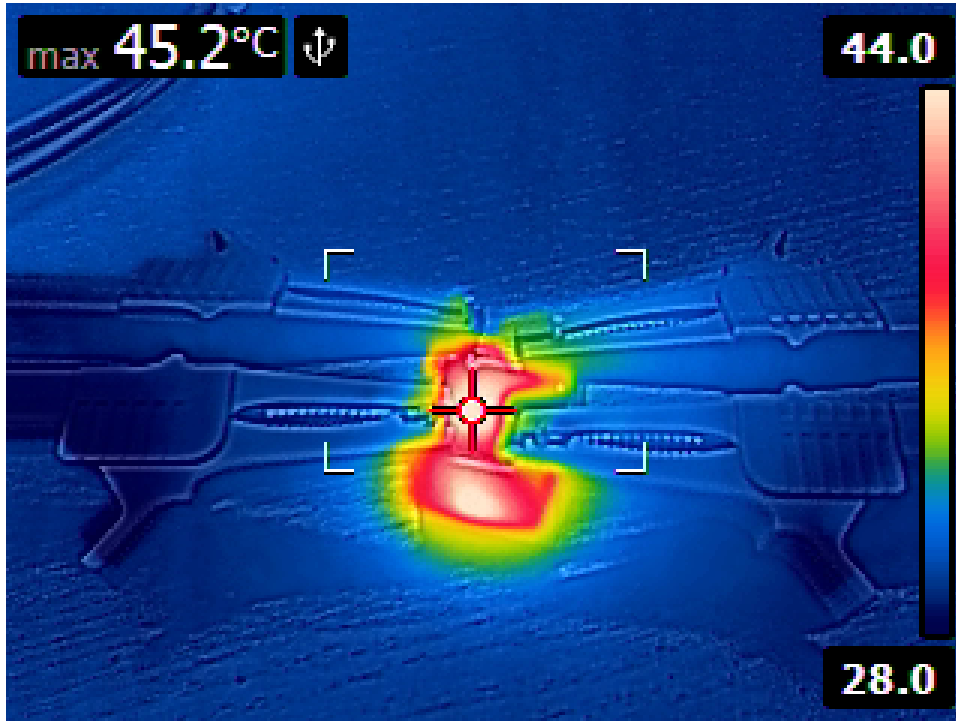
8.5 Output load 0.170A or 200%



8.6 Output load 0.213A or 250%



8.7 Output load 0.255A or 300%



8.8 Output load 0.298A or 350%



Output voltage in overload 230V-50Hz

