



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-214-010-112  
Serial number: 1  
Nominal voltage: 12.000V  
Nominal current: 0.830A  
Tester: Bernhard Woerndl-Aichriedler <bwa@xdevelop.at>  
Start time: 13-Jul-2016 21:38:55

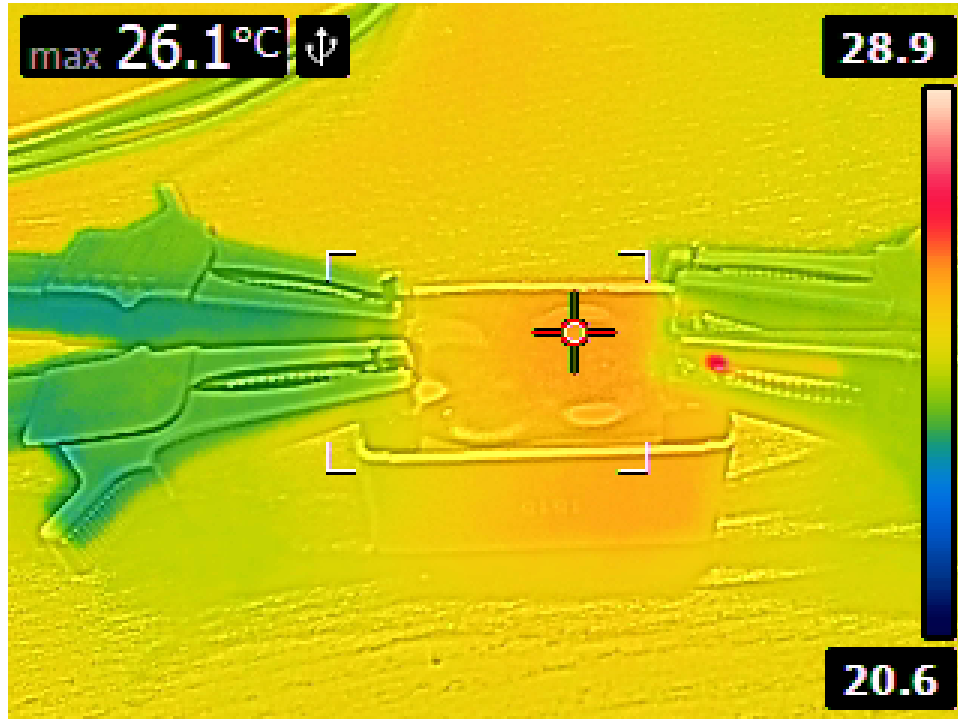


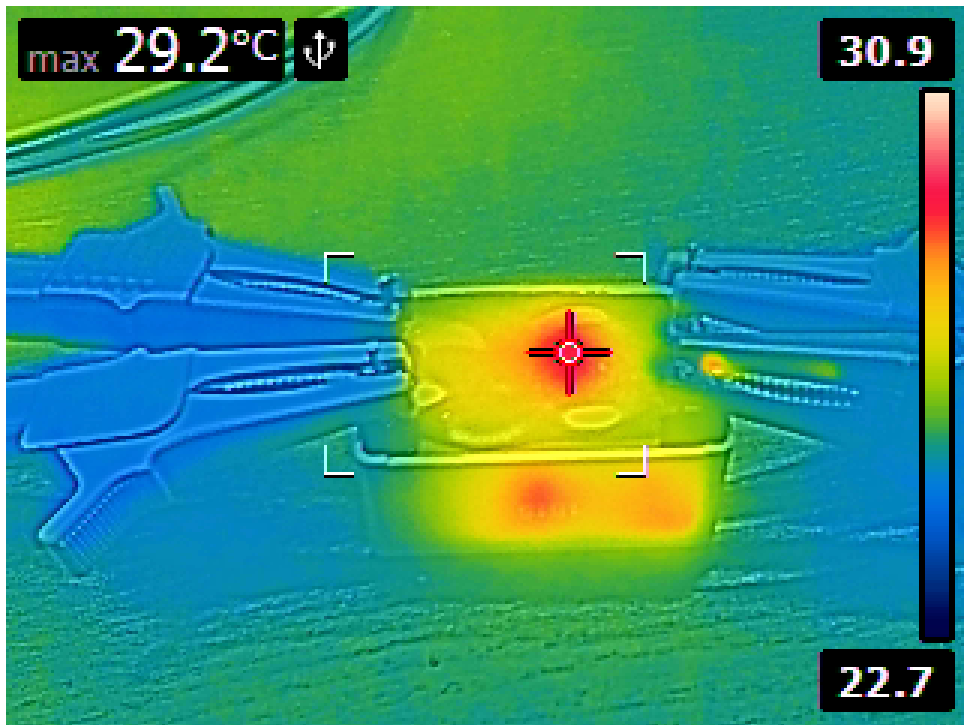
### 3 Point of operation

The test has been conducted with the following conditions

Voltage/Frequency: 230V-50Hz

Ambient Temperature: 28.61C





## 4 Standby power consumption

Voltage: 230.64V

Frequency: 50Hz

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Current: 0.003376A  
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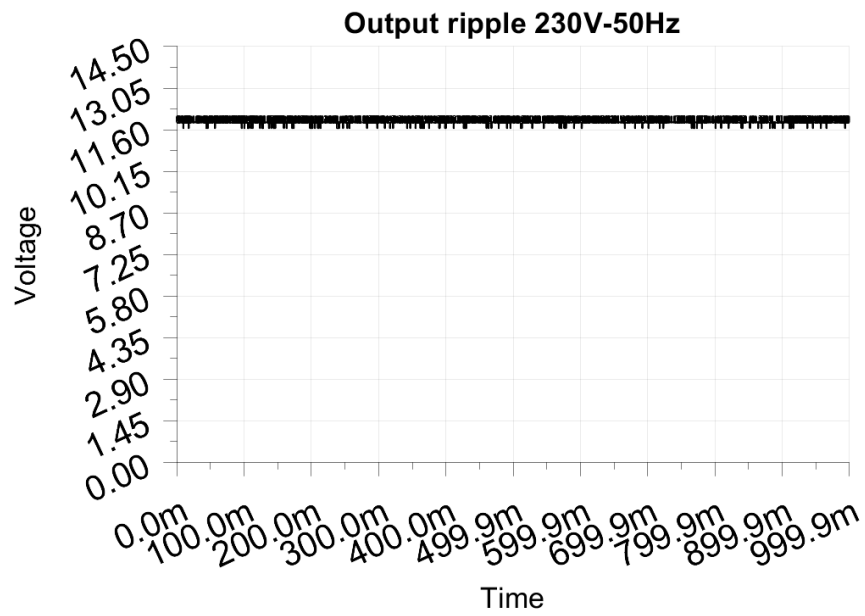
P active: 0.167W

P apparent: 0.779VA

P reactive: 0.761VAR

P factor: 0.214  
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Output voltage: 11.924V



## 5 Load testing

Characteristics

Voltage: 230.64V

Frequency: 50Hz

Loads: 0.000A to 0.830A

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Minimum output voltage: 11.906V

Maximum output voltage: 11.924V

Regulation error absolute: -0.094V/+0.076V

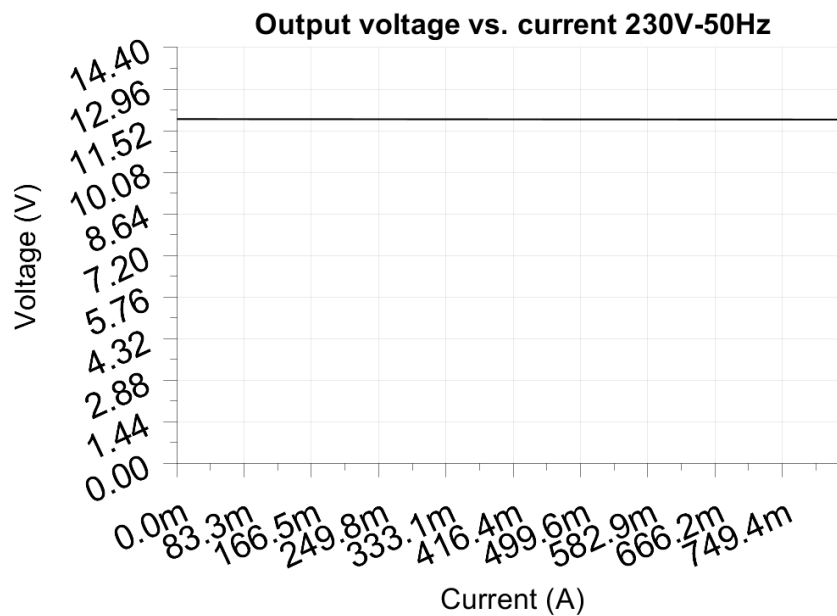
Regulation error relative: -0.8%/+0.6%

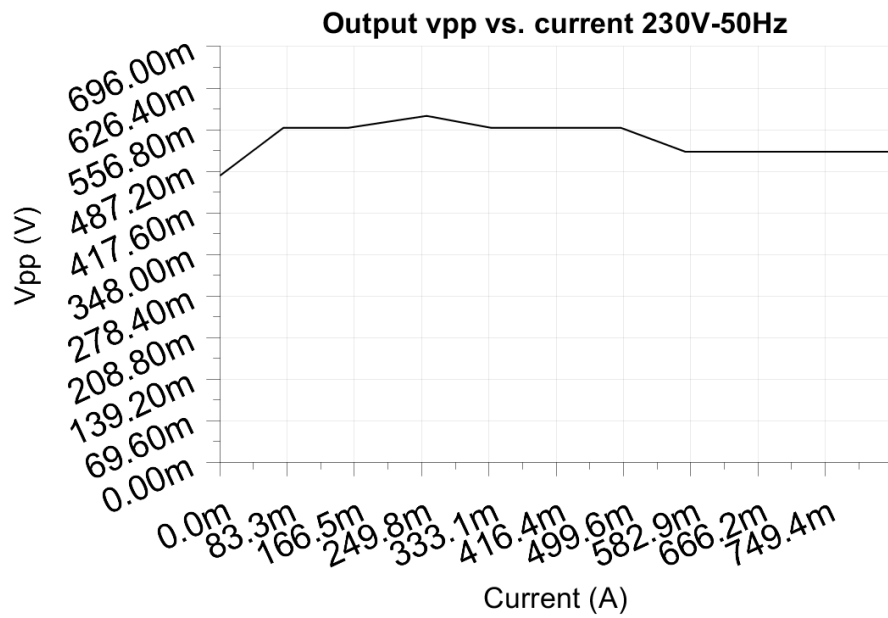
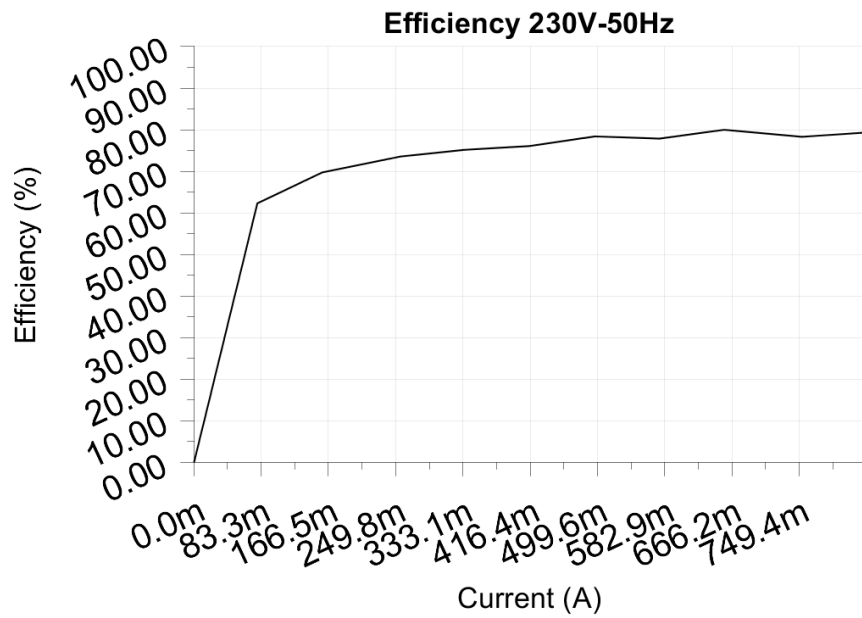
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Vpp ripple&noise absolute: 0.580V

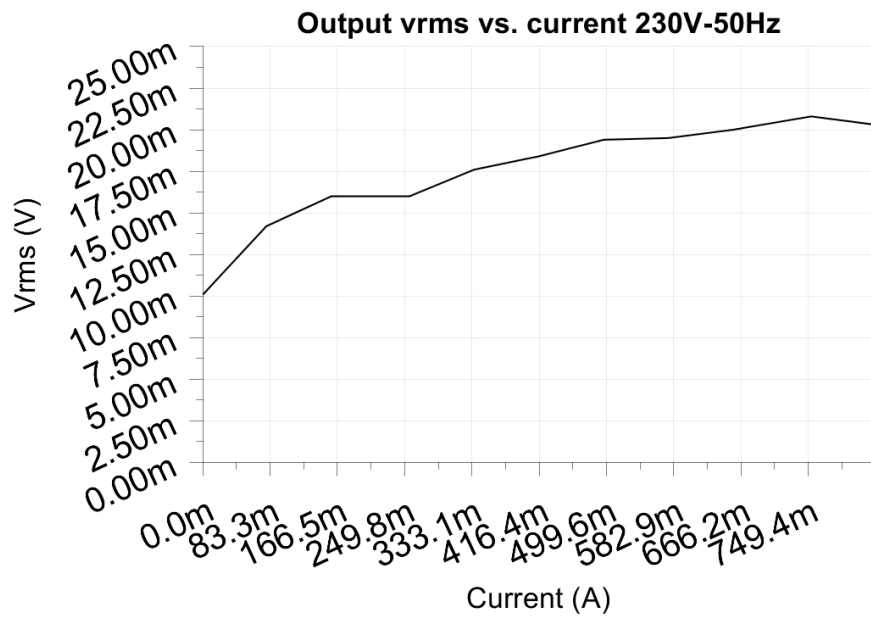
Vpp ripple&noise relative: 4.8%

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RMS ripple&noise absolute: 0.021V

RMS ripple&noise relative: 0.2%









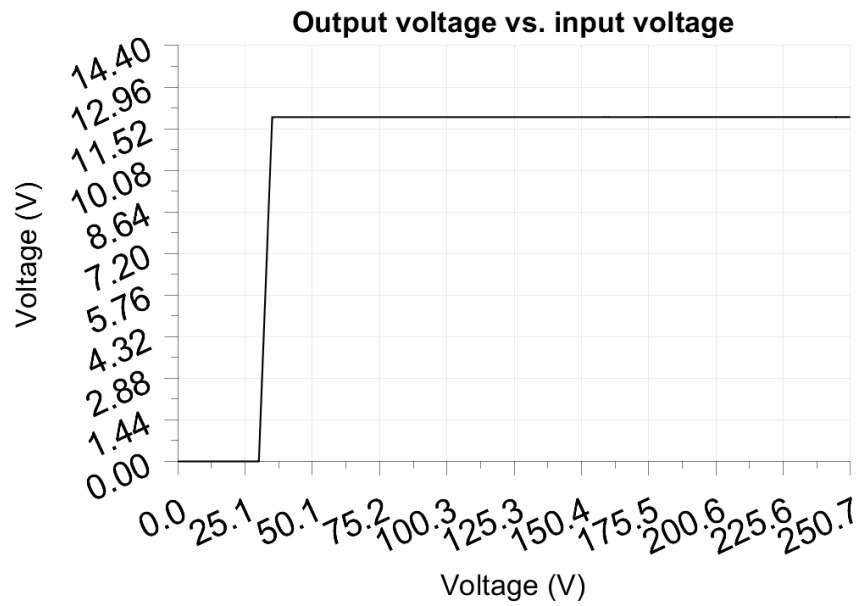
## 6 Turn on voltage

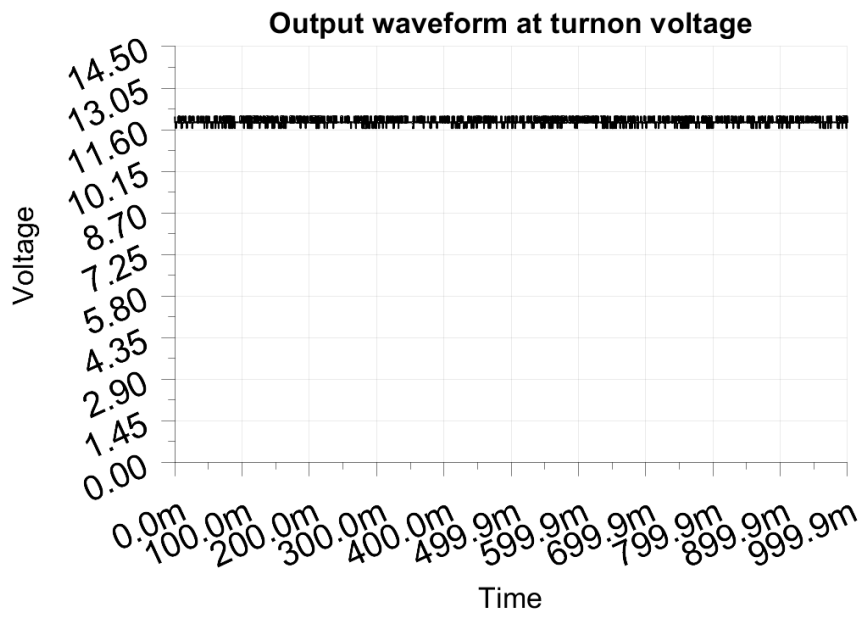
Testing when the PSU enables it's output

Test load: 0.083A  
Test Frequency: 50Hz  
Threshold: 9.000V

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Turn-on voltage: 35.00V  
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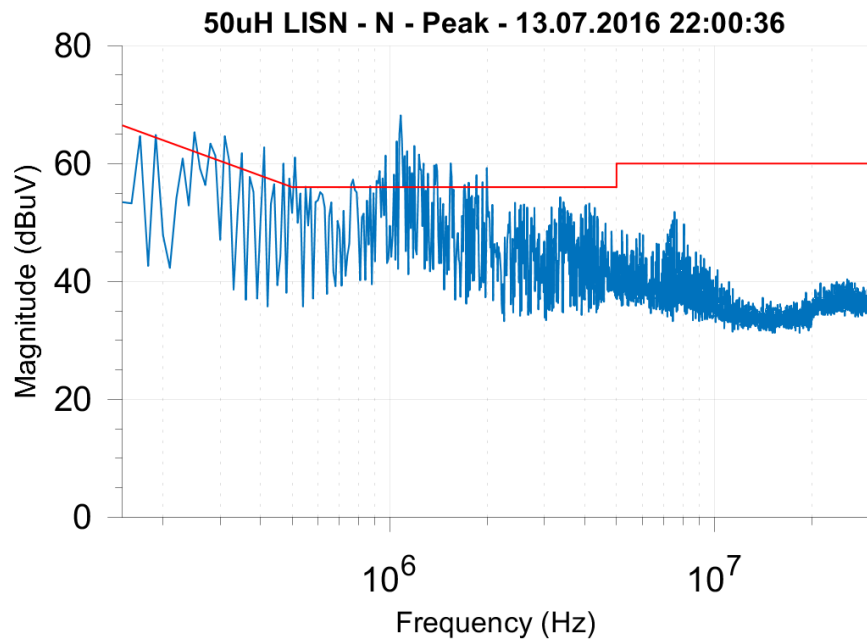
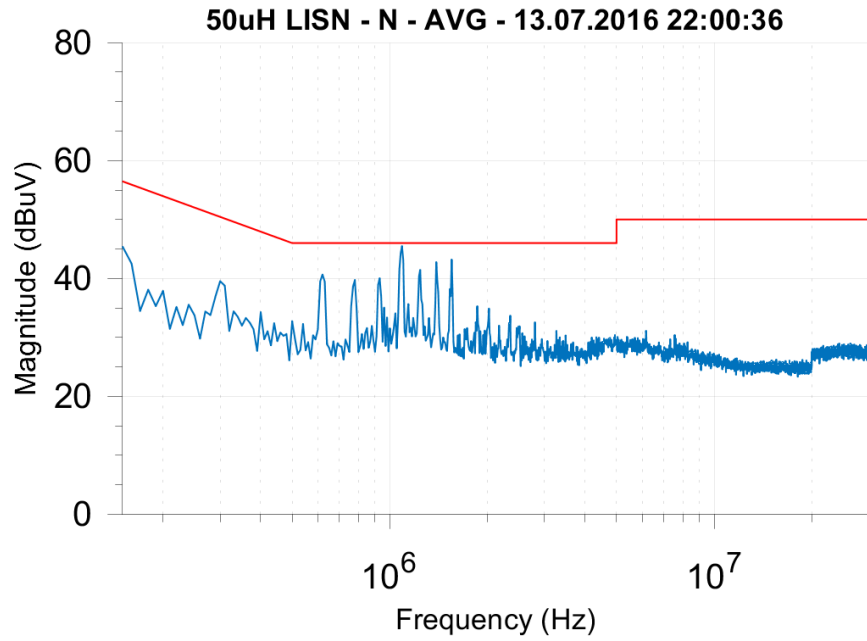
Output voltage: 11.922V

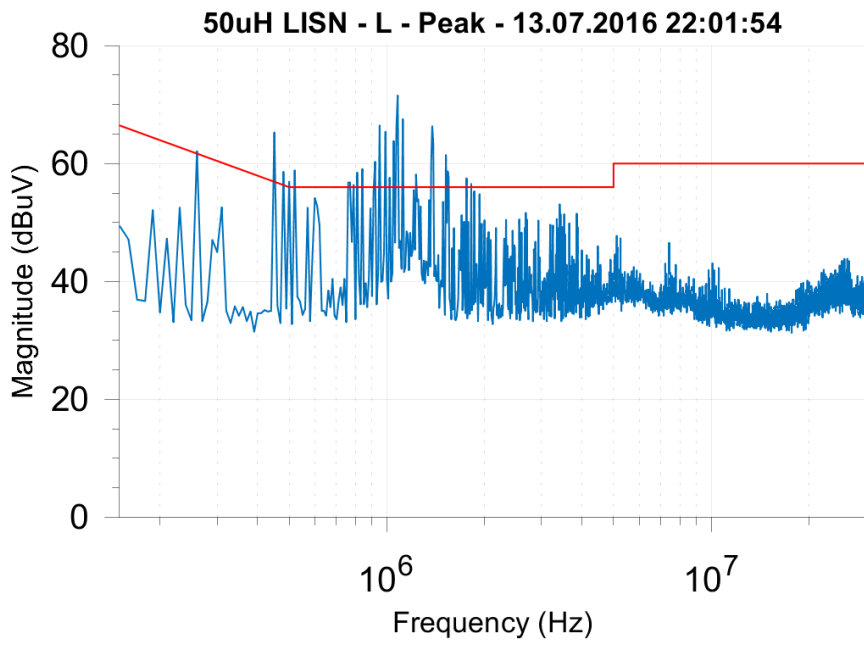
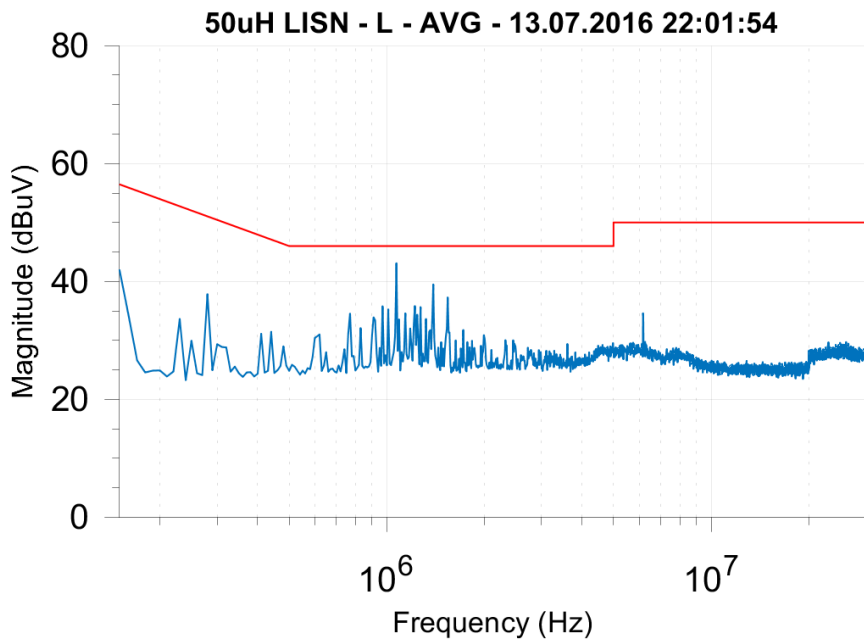




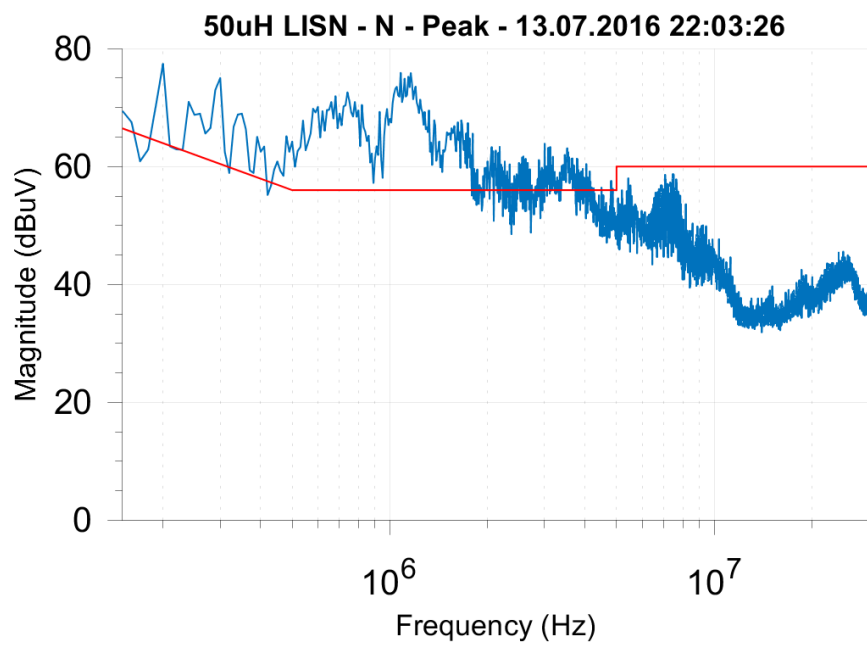
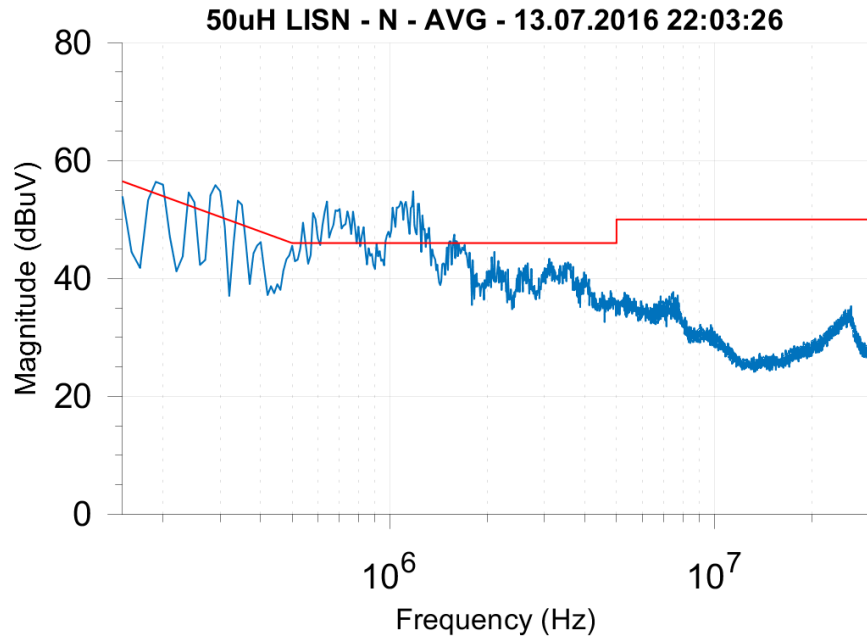
## 7 Conducted EMI

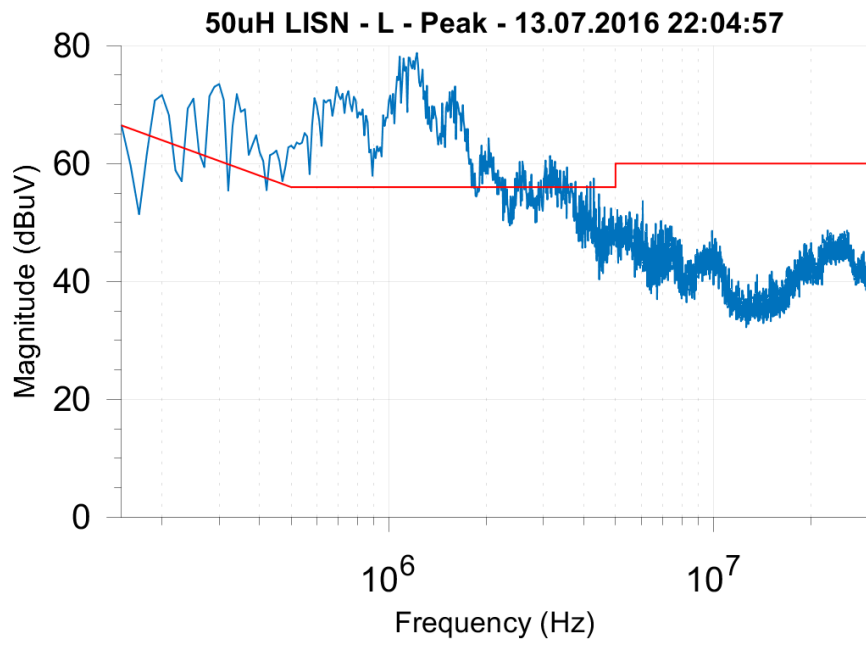
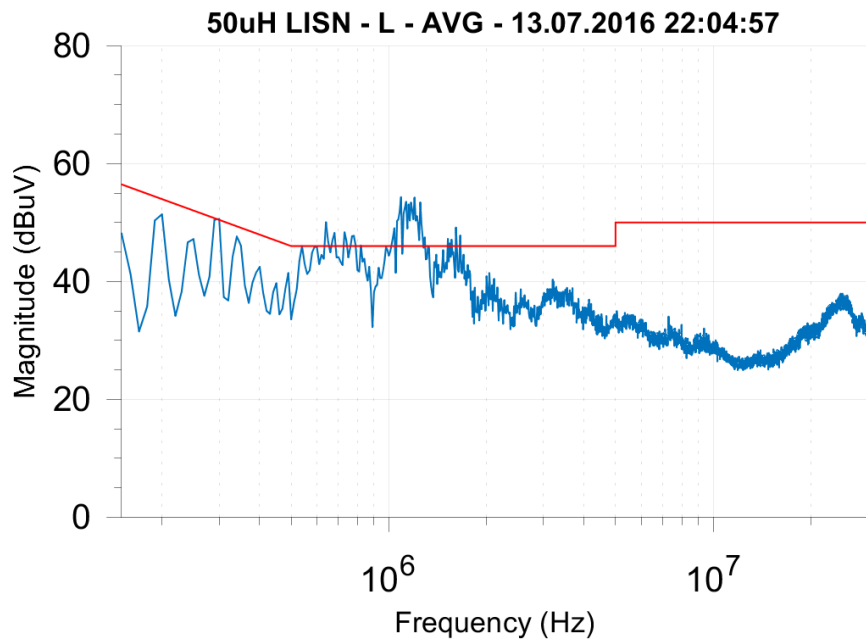
### 7.1 Output load 0.000A



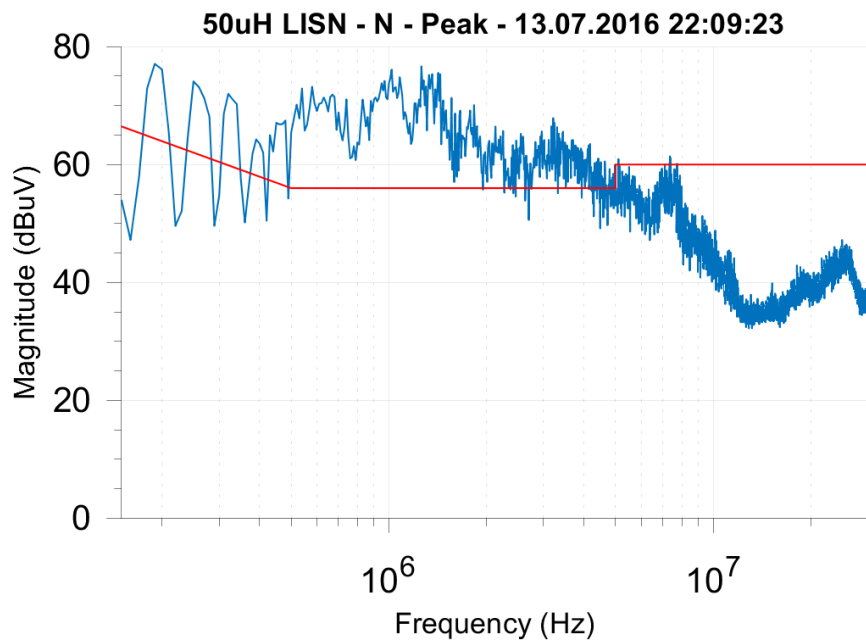
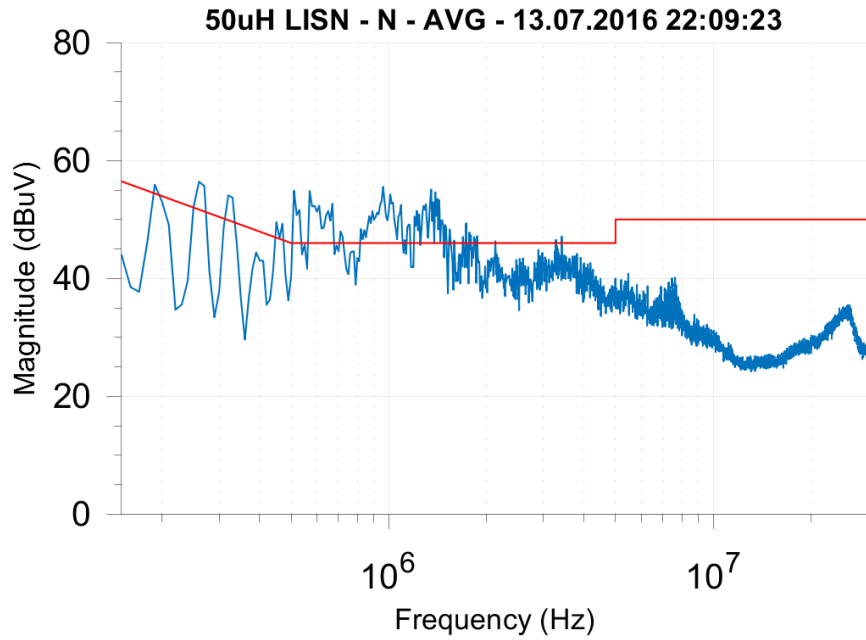


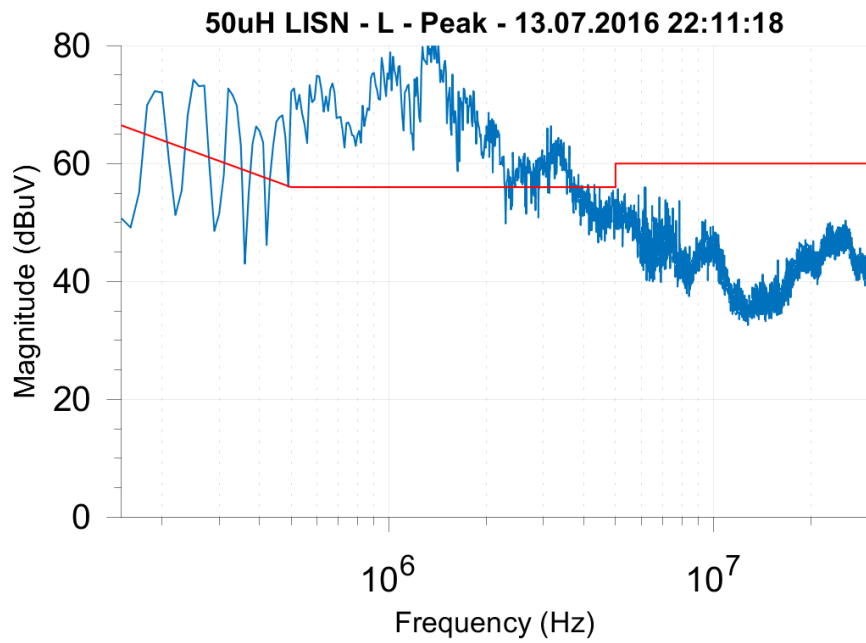
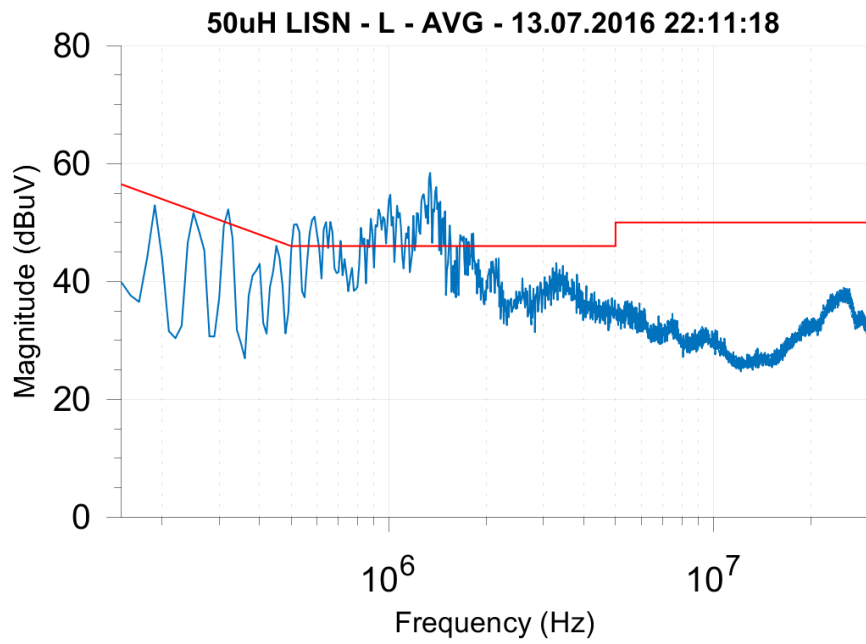
## 7.2 Output load 0.415A





### 7.3 Output load 0.830A







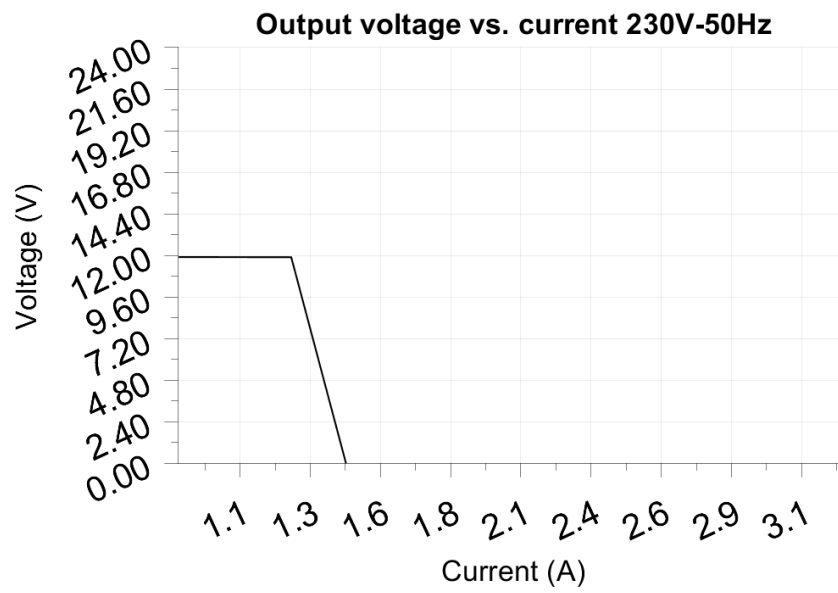
## 8 Overload testing

Test voltage: 230.00V

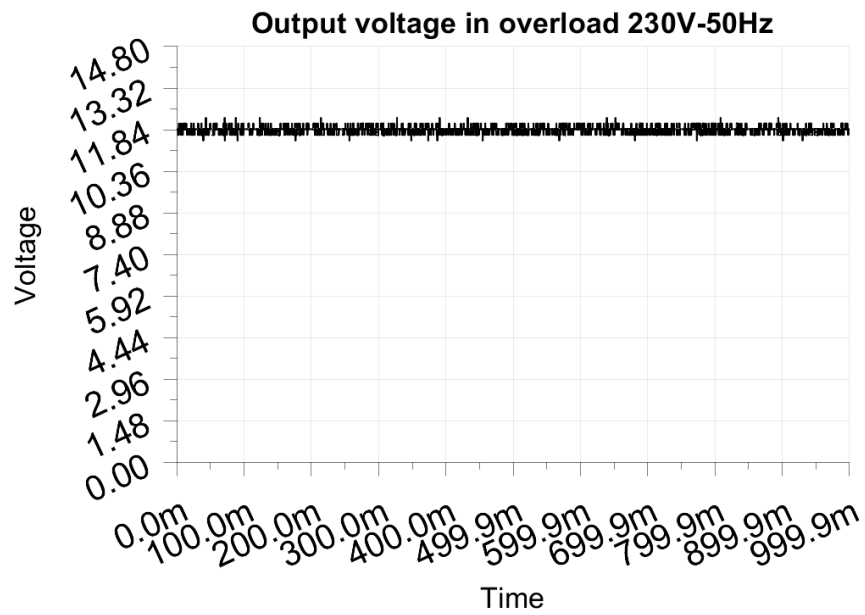
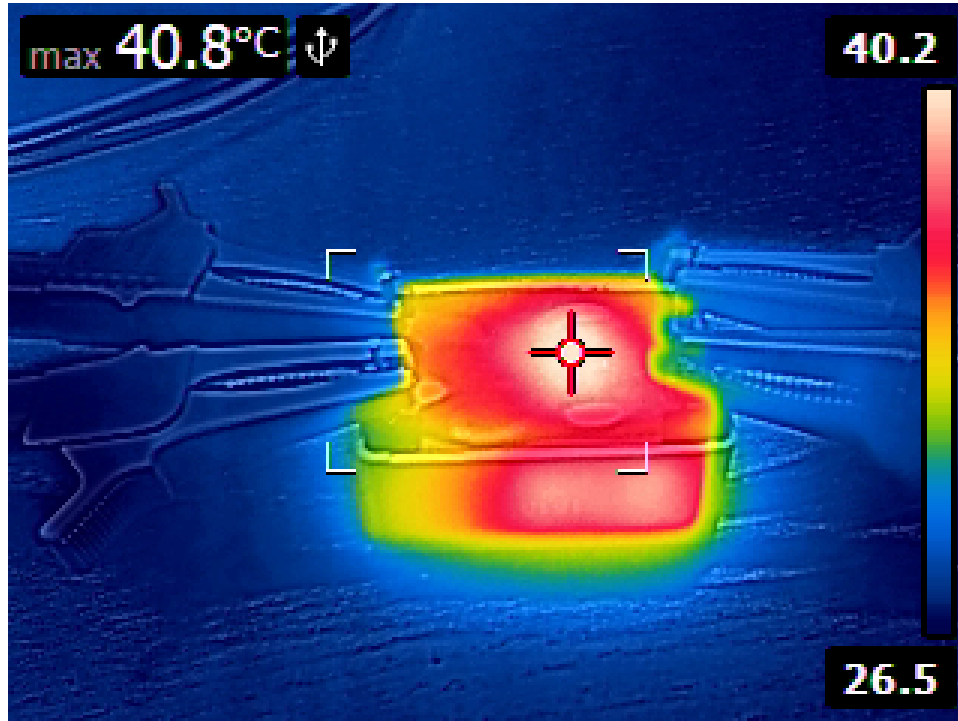
Test Frequency: 50Hz

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Threshold: <6.000V  
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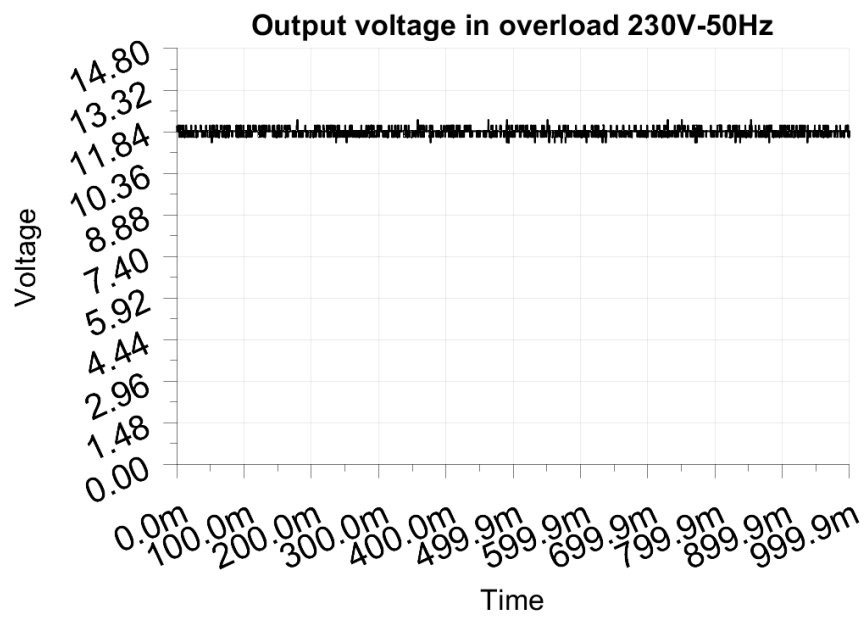
Maximum output current before shutdown: 1.452A



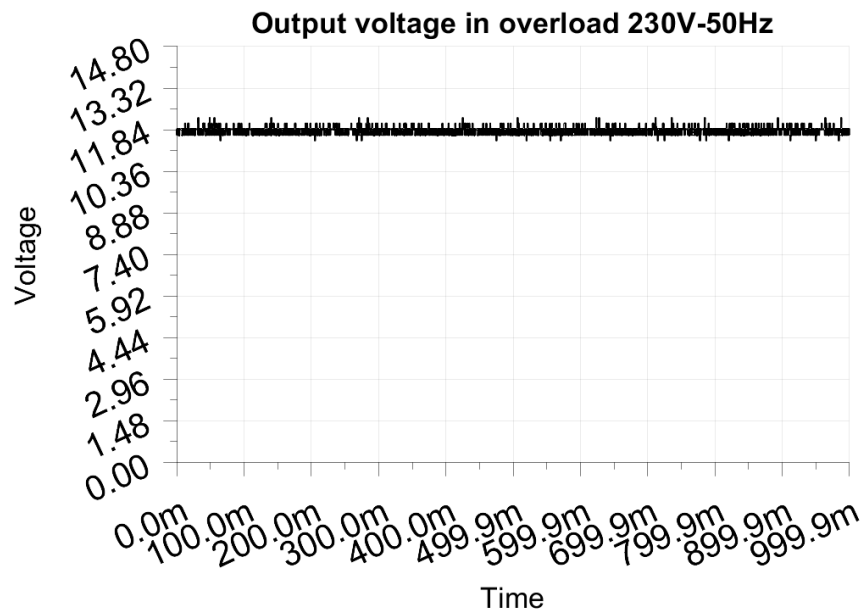
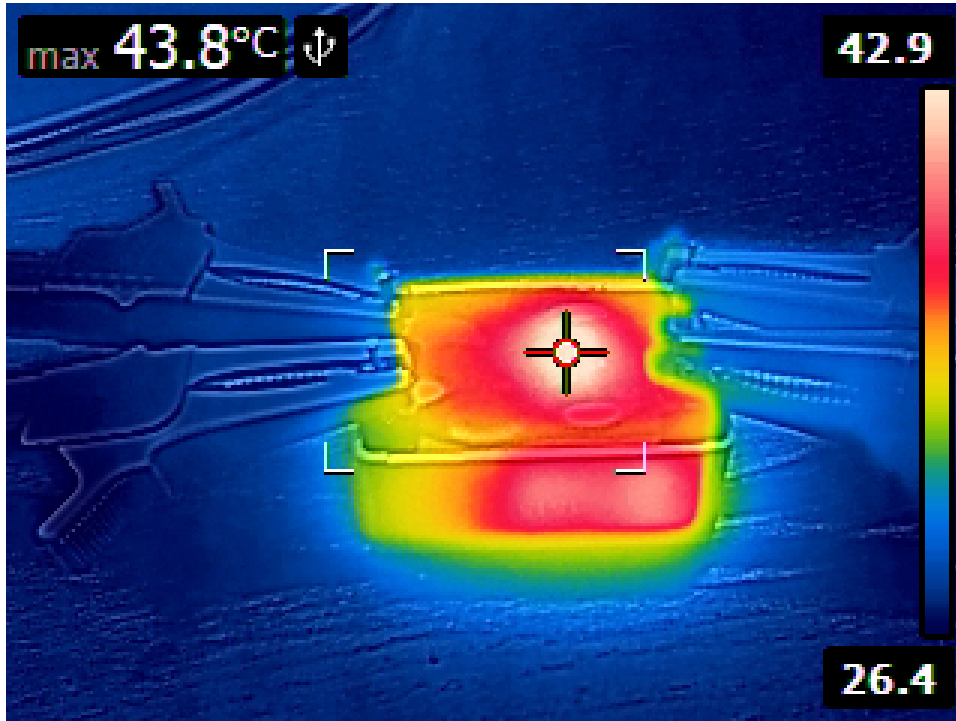
### 8.1 Output load 0.830A or 100%



## 8.2 Output load 1.037A or 125%



### 8.3 Output load 1.245A or 150%



### 8.4 Output load 1.452A or 175%

