



## Measurement of a connected Otto-cycle engine and electric generator (mobile aggregator)

### *Measurement 3*

**Name, Neptun:** .....

**Course:** .....

**Lecturer:** .....

**Measurement staff:**

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**Location:** .....

**Date:** .....

**Signature:** .....

**1. Aim of the measurement:**

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**2. Short description of the measurement:**

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**3. Sketch of the measurement rig:**

- Aggregator

- Carburetor

## 4. Processing the measurement

- Quantities needed for the calculation:
  - Volume of the metering bowl:
  - Density of the fuel:
  - Heating value of the fuel:
  - Nominal power of the aggregator:
  
- Formulae for the calculation:
  - Volumetric flow rate of the fuel:
  - Mass flow rate of the fuel:
  - Specific fuel consumption:
  - Load factor:
  - Input power:
  - Efficiency:

### 5. Measured and calculated data

No.	$n$	$t$	$P_u$	$q_b$	$\dot{m}_b$	$b$	$x$	$P_{in}$	$\eta$
	[1/min]	[s]	[W]	[cm <sup>3</sup> /s]	[kg/s]	[kg/kWh]	[-]	[kW]	[-]
1.									
2.									
3.									
4.									
5.									
6.									
7.									
8.									

Dimension conversions for the calculations:

### 6. List of equipment used during the measurement

### 7. Summary of the measurement

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