

# Testcenter

## Tests on brine/(water)-water heat-pumps

We support the industry in its efforts to develop energy-efficient refrigeration systems and heat pumps after the cold steam process.

### The ILK Dresden provides the following services for you:

The Testcenter PLWP carry out performance tests on brine(water)-water heat pumps according to DIN EN: 14511, 14825, 16147 as well as tests according to ErP guideline (811/2013 ...814/2013)



### specifics

- performance tests of heat pumps with water storage
- model range testing according EHPA-rules (BAFA-state subsidies, HP-Keymark)
- electrical power measurement via high-precision power Analyzers
- expert opinions to heat pumps and cooling systems or refrigeration plants
- performance tests (hybrid heat pumps, heat pumps with direct condensation)
- performance rating of individual heat pump components
- Refrigeration circuit measurements (pressure, temperature and mass flow)
- Evaluation of operating performance
- Fault analyses (operating and control behaviour)
- energetic evaluation according to ErP

- High-speed pressure measurements for the detection of resonances, pulsations in the cooling circuit
- Sound power measurements according to EN 12102, EN 3741 and EN 9614
- Refrigerant/material analyses
- by qualified refrigeration experts Modifications of the refrigeration circuits in consultation with the customer are possible on site

### Performance limits test bench

- heating capacity: 4 kW to 100 kW
- max. volume flow side: heat source: 20 m<sup>3</sup>/h
- temperature range side: heat source: -15 ... 40°C
- max. volume flow side: heat source: 20 m<sup>3</sup>/h
- temperature range side: heat sink: 5 ... 65°C
- max. operating current: 25 A / 3~ 400V

### Use of state-of-the-art measuring equipment:

- Acoustic camera
- Reverberation chamber analyses
- Thermography - Camera
- high-precision electric Power Analyzer

### For further information please contact us directly:



#### Testcenter PLWP at ILK Dresden

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