

# Testcenter

## Tests on Air – to – Water heat-pumps

**independent test laboratory, certified for Heat Pump-Keymark- European certification mark; EHPA – quality label and Federal Office for Economic Affairs and Export Control - BAFA**

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 air-water heat pumps according to DIN EN: 14511, 14825, 16147 as well as tests according to ErP guideline (811/2013 ...814/2013)

### specifics

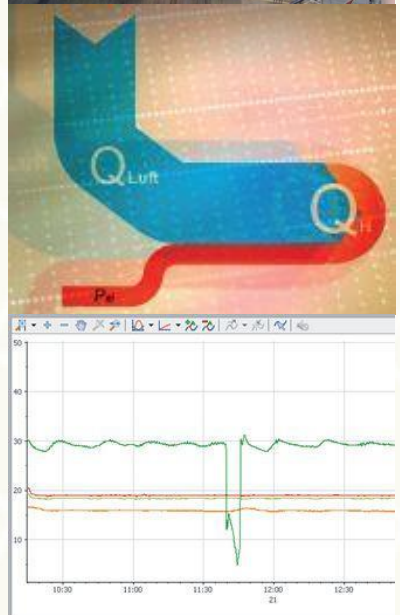
- Measurements in a climatic chamber:  
Temperature: - 20°C to + 40°C  
Humidity: 20 to 100% r. H.
- air volume flow measurements
- free positioning in test chamber or connection to air ducts
- redundant temperature sensors and humidity
- electrical power measurement via high-precision power Analyzers

### Performance limits test bench

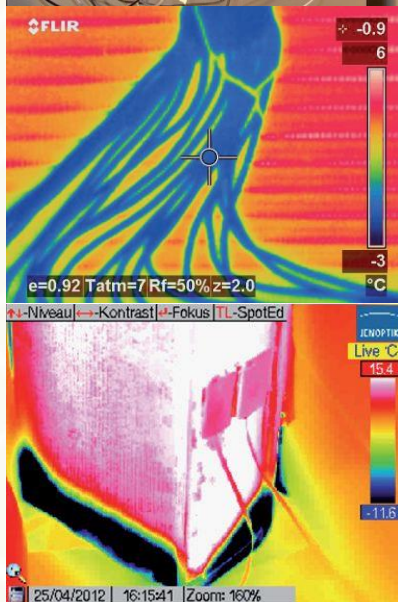
- heating capacity: 2 kW to 25 kW
- max. operating current: 25 A / 3~400V
- max. volume flow water: 6 m<sup>3</sup>/h

### extra services

- model range testing according EHPA-rules (BAFA-state subsidies, HP-Keymark)
- 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)
- (heating and cooling mode)
- Evaluation of operating performance



- Assessment of icing characteristics at surface of evaporators
- Measurement of temperature and speed profiles
- determination of fan characteristics
- High-speed pressure measurements for the detection of resonances, pulsations in the cooling circuit
- Development of optimization potentials in refrigeration applications
- 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



**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:**



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