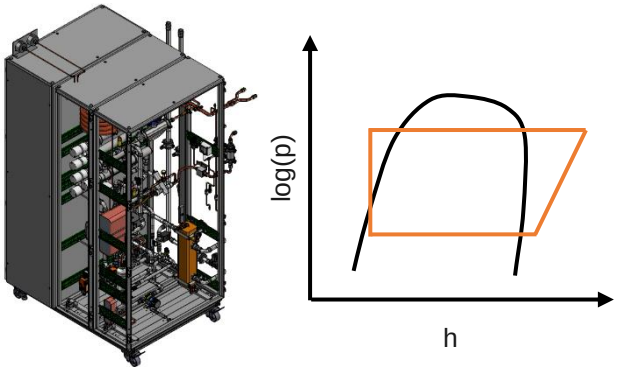
R1234yf and R134a Load-Units

Full refrigerant circuit IPE-LU-03-P

For precise steady state development testing



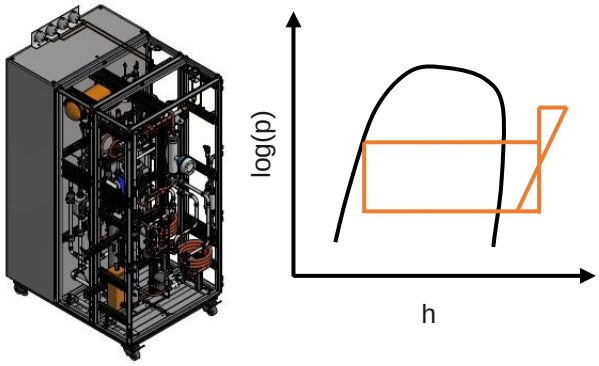
- Very high accuracy and repeatability
- Oil circulation rate as precise measurement
- Main test applications:
  - FAT tests
  - 24/30/.. points matrix
  - Oil circulation rate evaluation

Especially in pre-development, when it comes to validating new prototypes or new construction stages, these must be tested regarding their performance and efficiency. To ensure comparability of the measurement results, this testing must be reproducible and accurate.

The full refrigerant circuit (IPE-LU-03-P) is excellently suited for this purpose. In particular, the repeated running of performance profiles with consideration of important parameters, such as the oil circulation rate (OCR) or the coefficient of performance (COP), are to be mentioned here.

Gas refrigerant circuit IPE-LU-03-D

For fast alternating durability testing



- Very fast change of operating points
- Oil circulation rate is a controlled value
- Main test applications:
  - A/C or heatpump durability
  - A/C or heatpump raffer
  - Boost sequence

To ensure that a refrigerant compressor also meets the life span requirements, durability testing is essential. With the fast-responding gas circuit, the desired target values can quickly be reached after load changes.

With the gas refrigerant circuit (IPE-LU-03-D), the load on the compressor during its whole life span is simulated within a few days, in so-called 'Raffer tests'. An integral part of the test are the boost sequences, in which the compressor is brought from standstill to its maximum speed within a few seconds repeated several hundred times.

Operating point ranges

High pressure	bar,abs	8 ... 30
Low pressure	bar,abs	1,5 ... 6
Oil measurement	m-%	0 ... 10
Vapor content	%	75 – 100

Superheat	K	5 ... 50
Massflow	kg/h	30 ... 800

More information needed?
www.ipetronik.com

IPETRONIK GmbH & Co. KG | Phone: +49 7221 99 22 – 0 | Fax: -100 | www.ipetronik.com | info@ipetronik.com