

**ET 351C Thermodynamics of the
refrigeration circuit**
Order code: **5201.061351C0**



Information about product price on demand

Parameters

Quantitative unit

ks

GUNT ET 351C

System allows for the thermodynamic investigation of a refrigeration circuit.

It features an open compressor, water-cooled condenser, thermostatic expansion valve, and an indirectly heated evaporator.

The compressor drive utilizes a speed-controlled motor connected via a V-belt, and the motor is mounted on a pendulum bearing for torque measurement.

The system includes a tube evaporator with a hot water circuit acting as a cooling load and a water-cooled coaxial coil heat exchanger as the condenser.

Temperature, pressure, flow rate, speed, torque, and power are all displayed on the equipment. The refrigerant used is R513A with a GWP of 631.

Data acquisition is handled via GUNT software on Windows.

Technical Data & Specifications

- **Open Compressor:**
 - Refrigeration Capacity: Approx. 965W at a speed of 1450min⁻¹ and 5/40°C
- **Heater:**
 - Power: 1000W
- **Condenser:**
 - Capacity: 1300W
- **Refrigerant:**
 - Type: R513A
 - GWP: 631
 - Filling Volume: 2kg
 - CO₂ Equivalent: 1.3t
- **Measuring Ranges:**
 - Temperature: 9x -30...100°C, 1x 0...100°C
 - Pressure:
 - 1x -1...9bar
 - 1x -1...24bar
 - 4x -1...15bar
 - Torque (Compressor): 0...10Nm
 - Speed (Compressor): 0...2500min⁻¹
 - Power Consumption (Compressor): 0...1125W
 - Power (Heater): 0...1125W
 - Flow Rate (Water): 5...70g/s
 - Flow Rate (Refrigerant): 0.005...1.5L/min

Power Supply

- 230V, 50Hz, 1 phase
- 230V, 60Hz, 1 phase
- 230V, 60Hz, 3 phases
- UL/CSA (optional)

Dimensions & Weight

- **LxWxH:** 1520x790x1760mm
- **Weight:** ~120kg

Required for Operation

- Water connection and drain
- PC with Windows recommended