

HM 210 Characteristic variables of a radial fan

Order code: **5201.07021000**



Information about product price on demand

Parameters

Quantitative unit

ks

GUNT HM 210

The Radial Fan Experiment System allows for detailed study of the characteristic variables of a radial fan.

The system includes a radial fan with adjustable speed, controlled by a frequency converter. Flow rate is adjustable through an iris diaphragm or Venturi nozzle, with pressure measurements taken using a U-tube manometer, single tube manometer, and inclined tube manometer. The system digitally displays speed, torque, and electric power capacity.

This equipment is ideal for educational purposes in fluid dynamics, focusing on fan performance under different operating conditions. This system is ideal for studying the key performance parameters of radial fans, including their torque, pressure differences, and airflow behavior in a controlled environment.

Technical Data & Specifications:

Radial Fan:

- Max. power consumption: 0.08 kW
- Max. pressure difference: 1230 Pa
- Max. volumetric flow rate: 4.8 m³/min
- Iris diaphragm: adjustable in 6 stages
- Ø: 40-70 mm
- k = 1.8-7.8

Venturi Nozzle:

- Air inlet Ø: 100 mm
- Pipe neck Ø: 80 mm
- k = 7.32

Measuring Ranges:

- Differential pressure:
 - 30...0...30 mbar (U-tube manometer)
 - 0...15 mbar (single tube manometer)
 - 0...50 Pa (inclined tube manometer)

Power supply:

- 230 V, 50 Hz, 1 phase /
- 230 V, 60 Hz, 1 phase /
- 230 V, 60 Hz, 3 phases
- Optional UL/CSA

Included Items:

- Radial fan with drive motor
- Iris diaphragm and Venturi nozzle
- U-tube manometer, single tube manometer, and inclined tube manometer
- Digital display for speed, torque, and electric power
- Adjustable throttle valve for flow rate control

Dimensions & Weight:

- Size (LxWxH): 1300 × 720 × 1640 mm
- Weight: approx. 123 kg

Required for Operation:

- PC with Windows (optional for data acquisition)