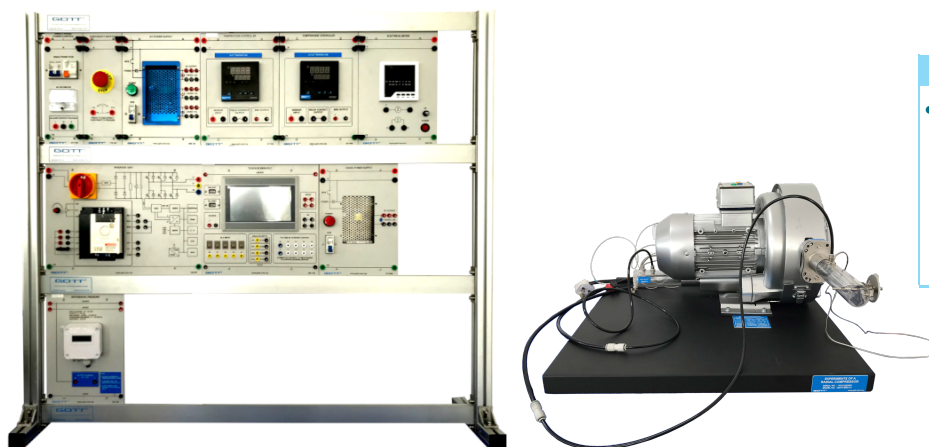


EXPERIMENTS WITH A RADIAL COMPRESSOR

Model Number : GOTT-ERC-01



DESCRIPTION

- Radial compressors are used to compress gases. The medium is drawn in axially to the drive shaft by the rotation of the rotor and flows through the rotor rotating at high speed. By means of centrifugal force, the medium is accelerated towards the outer edge and is compressed in this manner.

FEATURES

- GOTT-ERC-01 provides the basic experiments to get to know the operating behaviour and the important characteristic variables of radial compressors.
- GOTT-ERC-01 features a two-stage radial compressor with variable speed via a frequency converter, an intake pipe and a delivery pipe. The intake and delivery pipes are transparent. A protective plate placed in front of the inlet of the intake pipe prevents larger objects from being drawn in or the clogging of the intake opening. The air flow is adjusted by a throttle valve at the end of the delivery pipe.
- This unit is fitted with sensors for pressure, temperature and speed. The flow rate is determined via differential pressure measurement on the intake nozzle.
- The microprocessor-based measuring technique is well protected in the housing. All the advantages of software-supported experiments and evaluation are offered by the GOTT software and the microprocessor. The connection to a PC is made by USB.

TECHNICAL SPECIFICATIONS

- Functioning and operating behaviour of a radial fan
- Two-stage radial compressor with drive motor
- Variable speed via frequency converter
- Transparent intake and delivery pipes
- Throttle valve for adjusting the air flow in the delivery pipe
- Protecting plate at air inlet for undisturbed air flow
- Determination of flow rate via intake nozzle
- Display of differential pressures, flow rate, speed, electrical power consumption and hydraulic power output, temperatures and efficiency.
- Microprocessor-based measuring technique
- GOTT software with control functions and data acquisition via USB under Windows 7, 8.1, 10

Intake pipe

- inner diameter: 44mm

Delivery pipe

- inner diameter: 34mm

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- Rotors x 2
- GOTT software CD + USB cable

EXPERIMENT TOPICS

- Operating behavior and characteristic variables of a radial fan
- variables of a radial compressor recording of the compressor curve for both stages
- Effect of the rotor speed on the pressure
- Effect of the rotor speed on the flow rate
- distribution of stage pressure ratios effect of compression on the temperature increase
- Determination of hydraulic power output and efficiencies

Manuals :

- (1) All manuals are written in English.
- (2) Model Answer
- (3) Teaching Manuals

General Terms :

- (1) Accessories will be provided where applicable.
- (2) Manual & Training will be provided where applicable.
- (3) Design & specifications are subject to change without notice.
- (4) We reserve the right to discontinue the manufacturing of any product.

Warranty :

2 Years

ORDERING INFORMATION :

ITEM	MODEL NUMBER	CODE
EXPERIMENTS WITH A RADIAL COMPRESSOR	GOTT-ERC-01	133-101

*Proposed design only, subject to changes without any notice.