



Tesca Ventilation Systems Trainer 32412 is used in building services engineering to achieve the required air change rates in the individual rooms. The ventilation air can also be heated or cooled by heat exchangers. A ventilation system is a preliminary stage for an air conditioning system in which the air can also be humidified or dehumidified. The system is assembled from standard industrial components. The plexi-glas windows and exposed ductwork ensure that normally hidden components can be seen: inspection covers and fire dampers, filters, heaters / coolers, Louvre damper, etc. The original function is fully retained. The system emphasizes ventilation rather than air conditioning. Depending on the operating mode, heating or cooling, a supply of hot or cold water is required in the laboratory. The system requires a three-phase mains supply. With the additional module HL 722, a room temperature control system can be realized with the ventilation system.

#### Technical Specifications

- Ventilation system on trolley on castors, l x w x h 2100x880x2050mm, 180kg
- Climatic unit with filter, heat exchanger and fan
- All components from air conditioning, some arranged under plexi-glas covers in the ventilation duct
- Duct with pressure measurement glands
- Pressure measurement with inclined tube manometer
- Current measurement using ammeter
- Cold and hot water connection necessary for operation of the system with cooler/heater
- 400V, 50Hz, 3 phases

#### Technical Data

- Climatic unit:
  - Fan: max. airflow rate: 2500m<sup>3</sup>/h, speed:1600rpm, drive motor: 750W
  - Air-to-water heat exchanger: capacity: 7.6kW
- Components: weather protection grille, louvre damper, inspection cover, 2x sound absorbing panel, ventilation grille with flow control, fire damper, 2x ceiling air outlet
- Measuring ranges:
  - Pressure: 0...750Pa
  - current: 0...6A

#### Experiments

Familiarization with a ventilation system and its layout

- Familiarization with the components of a ventilation system
- Pressure measurements in the ventilation duct
- Measurement of fan motor current
- Function of typical components:
  - Weather protection grille
  - Louvre damper
  - Filter
  - Heater / cooler
  - Fan
  - Inspection cover
  - Sound absorbing panel
  - Ventilation grille with flow control
  - Fire damper
  - Ceiling air outlet

**Dimensions :** l x w x h : 2100 x 880 x 2050 mm

**Weight :** approx. 180 kg

#### Supplies required:

- 400V, 50Hz, 3 phases
- Hot and cold water supply

Note: Specifications are subject to change.

#### **Tesca Technologies Pvt. Ltd.**

IT-2013, Ramchandrapura Industrial Area, Sitapura Extension,  
Near Bombay Hospital, Vidhani Circle, Jaipur-302022, Rajasthan, India,  
Tel: +91-141-2771791 / 2771792; Email: info@tesca.in, tesca.technologies@gmail.com  
Website: www.tescaglobal.com