

## TH 217 CROSS FLOW HEAT EXCHANGER, Water-to-Air

### GENERAL DESCRIPTION

The apparatus is for studying heat transfer from hot water to cross flow air such as in automobile radiator.

The unit consists of an air duct with outlet damper, an automotive radiator, an axial flow fan and a service module. The module provided hot water with transfer pump and control and measuring instruments.



### EXPERIMENT CAPABILITIES

- Determination of heat transfer from hot water to air by finned tubes.
- Determination of heat transfer coefficient.
- Effect of flow rate and temperature difference.

### TECHNICAL DATA

- Heat exchangers:
  - Type : Finned tube
  - Material : Copper/Aluminum (Cu/Al)
- Pump
- Fan : Axial
- Service module consisting of :
  - Stainless steel hot water tank with level switch to prevent heater operation if level is too low.
  - Hot water pump.
  - Heater : 3000 W.
  - Flow meters : Hot water and cold water.
  - Temperature control unit to limit temperature of hot water.
- Power supply : 220V 1Ph 50 Hz. Other power supply is available on request.

### OPTIONAL EQUIPMENT

- TH 010 Flow digital display.
- HP 011 Pressure digital display.
- TH 217-050 Computer Interface  
Relevant sensor(s) instead of standard measuring device(s), computer interface unit and software for data display and analysis by computer (separately supplied).
- TH 217-060 Computer Control  
Control motor(s), a relevant sensor(s) instead of standard measuring device(s), computer interface unit and software for data display, analysis and control by computer (separately supplied).

**Net (unpacked) shipping dimensions WxLxH** : 55 x 120 x 80 cm.  
**Net weight** : Approx. 70 kg.