

# ET 830.02

## Cooling tower 140kW



The illustration shows a similar unit

### Description

- **compact cooling tower for steam power plant ET 830 operated at ambient temperatures above 27°C**

The forced draught wet cooling tower is integrated into the cooling water circuit of the ET 830 steam power plant. It provides recooling for the condenser cooling water used in the steam power plant. Evaporation losses are automatically compensated for. Temperature, air humidity and water flow rate at the inlet and outlet of the cooling tower can be read directly on the device.

The cooling tower is designed for the open air operation.

The cooling tower is connected to the electrical system and the water connections of ET 830.

### Learning objectives/experiments

- energy balance

### Specification

- [1] wet cooling tower with fan and pump for operation with ET 830
- [2] open air operation
- [3] water flow measurement at the outlet
- [4] temperature measurement at the inlet and outlet
- [5] temperature/humidity measuring instruments for air

### Technical data

Cooling tower

- cooling capacity: approx. 140kW
- water flow rate 10,9m<sup>3</sup>/h
- fan max.: 10100m<sup>3</sup>/h at 930min<sup>-1</sup>
- pump max.: 15m<sup>3</sup>/h

Measuring ranges

- temperature: 2x 10...50°C, 2x 0...80°C
- humidity: 2x 5...95% r.F.
- pressure: 1x 0...2,5bar, 1x 0...6bar
- flow rate: 0...20m<sup>3</sup>/h

400V, 50Hz, 3 phases  
 400V, 60Hz, 3 phases  
 230V, 60Hz, 3 phases  
 UL/CSA optional  
 LxWxH: 2000x1700x2250mm  
 Weight: approx. 352kg

### Required for operation

water connection 200L/h

### Scope of delivery

- 1 cooling tower