

ET 830.01

Cooling tower 115kW



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. 115kW
- water flow rate $9\text{m}^3/\text{h}$
- fan max.: $3900\text{m}^3/\text{h}$ at 1450min^{-1}
- pump max.: $19,2\text{m}^3/\text{h}$

Measuring ranges

- temperature: 2x $10\text{...}50^\circ\text{C}$, 2x $0\text{...}80^\circ\text{C}$
- humidity: 2x $5\text{...}95\%$ r.F.
- pressure: 1x $0\text{...}2,5\text{bar}$, 1x $0\text{...}6\text{bar}$
- flow rate: $0\text{...}20\text{m}^3/\text{h}$

400V, 50Hz, 3 phases
 400V, 60Hz, 3 phases
 230V, 60Hz, 3 phases
 UL/CSA optional
 LxWxH: 1690x850x1810mm
 Weight: approx. 120kg

Description

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

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

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.

Required for operation

water connection $200\text{L}/\text{h}$

Scope of delivery

- 1 cooling tower