

ET 833.01

Cooling tower 140kW



The illustration shows a similar unit

Description

 compact cooling tower for steam power plant ET 833 operated at ambient temperatures above 27°C

This forced draught wet cooling tower is integrated into the cooling water circuit of the ET 833 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 design emphasises the use of corrosion-resistant materials since the cooling tower is usually operated in the open air.

The cooling tower is connected to ET 833 for both power and water supply.

Learning objectives/experiments

■ energy balance

Specification

- [1] wet cooling tower with fan and pump for operation with ET 833
- [2] use of corrosion-resistant materials
- [3] instrumentation at the inlet: thermometer, manometer, flow meter

Technical data

Cooling tower

- cooling capacity: approx. 140kW
- water flow rate 10,9m³/h
- \blacksquare fan max.: $10100 \text{m}^3 / \text{h}$ at 930min^{-1}
- \blacksquare pump max.: $15\text{m}^3/\text{h}$

Measuring ranges

- temperature: 2x 0...80°C
- pressure: 1x 0...2,5bar, 1x 0...6bar
- \blacksquare flow rate: 0...20m 3 /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