PRESTO® W92tt

Cooling a 100 liters reactor from +20 °C to 0 °C

Objective
This case study tests the cooling power of PRESTO® W92tt with a 100 liters glass reactor. The PRESTO® W92tt is connected to the reactor via two 3 m metal tubings. The PRESTO® W92tt is programmed to cool down from +20 °C to 0 °C.

Environment
- Room temperature: +20 °C
- Humidity: 45 %
- Voltage: 400 V / 50 Hz

Test Conditions
- JULABO unit: PRESTO® W92tt
- Cooling power:
  - +20 °C: 19 kW
  - 0 °C: 15.5 kW
  - -20 °C: 9.5 kW
- Heating capacity: 36 kW
- Band limit: with
- Flow pressure: 0.5 bar
- Bath fluid: Thermal HL80
- Reactor: 100 l glass reactor (Büchiglas) filled with 70 l Ethanol
- Jacket volume: 30 l
- Control: External (ICC)
Test Results

The PRESTO® W92tt cooling process from +20 °C to 0 °C in 40 min without overshoot.

Tip

Protect your reactor. The function „band limit“ (see above) permits setting the max. temperature difference between jacket and internal vessel.

Profile of reactor

Tip

Use the free of charge EasyTEMP software to control the units with the PC and to show the temperature curves graphically.