PRESTO® A40

Cooling a 6 liters reactor from +20 °C to -10 °C

Objective

This case study tests the cooling power of PRESTO® A40 with a 6 liters glass reactor. The PRESTO® A40 is connected to the reactor via two 2 m metal tubings. The PRESTO® A40 is programmed to cool down from +20 °C to -10 °C.

Environment

- Room temperature: +20 °C
- Humidity: 45 %
- Voltage: 230 V / 50 Hz

Test Conditions

- JULABO unit: PRESTO® A40
- Cooling power:
  - +20 °C: 1.2 kW
  - 0 °C: 0.9 kW
  - -20 °C: 0.6 kW
- Heating capacity: 2.7 kW
- Band limit: without
- Flow pressure: 0.5 bar
- Bath fluid: Thermal HL60
- Reactor:
  - 6 l glass reactor (QVF)
  - filled with 5 l Thermal HL60
- Jacket volume: 4.5 l
- Control: External (ICC)
Test Results

The PRESTO® A40 cooling process from +20 °C to -10 °C in 55 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 our tube adapters and your tubing will no longer kink.