**PRESTO® A40**

Cooling a 6 liters reactor from +20 °C to -20 °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 -20 °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 -20 °C in 1 h 45 min without overshoot.

Tip

You can also use the robust Pt100 with PTFE coating.

Tip

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