**Objective**
This case study tests the heating and cooling power of JULABO Presto W80 with a 10 liters glass reactor. The W80 is connected to the reactor via two 1.0 m metal tubings. The W80 is programmed to cycle between -60 °C and +100 °C.

**Test Conditions**
- **JULABO unit**: JULABO Presto W80
- **Cooling power**:
  - +20 °C: 1.2 kW
  - 0 °C: 1.2 kW
  - -20 °C: 1.1 kW
- **Heating capacity**: 1.8 kW
- **Band limit**: No
- **Flow pressure**: 0.5 bar
- **Bath fluid**: JULABO Thermal HL80
- **Reactor**: 10 liters glass reactor (Normag) filled with 10 liters Thermal HL80
- **Control**: External (ICC)

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

**Test Results**
See chart on back page: The W80 heating process from -60 °C to +100 °C in 2 h. Hitting exactly +100 °C without overshoot. The cooling process from +100 °C to -60 °C in 2 h 30 min. Hitting exactly -60 °C without overshoot.

**Tip**
Make use of the option to regulate the pump pressure. You can define the desired pressure in the PRESTO® settings.

JULABO GmbH
Eisenbahnstraße 45
77960 Seelbach / Germany
Tel. +49 (0) 7823 51-0

www.julabo.de
Cool-down time 3 h

Heat-up time 2 h 30 min

Measured with EasyTEMP Professional

Setpoint
Temperature in reactor’s interior
Temperature in reactor’s jacket