Objective
This case study tests the cooling power of JULABO PRESTO® A40 with a 5 liters glass reactor. The A40 is connected to the reactor via two 2 m metal tubings. The A40 is programmed to cool down from +200 °C to -25 °C.

Test Conditions
JULABO unit: JULABO 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: No
Flow pressure: 0.40 bar
Bath fluid: JULABO Thermal HL40
Reactor: 5 liters glass reactor (Rettberg) filled with 5 liter JULABO Thermal HL40
Control: External (ICC)

Test Results
See chart on back page: The A40 cooling process from +200 °C to -25 °C in 1 h 5 min without overshoot.

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

Tip
You can also use the robust Pt100 with PTFE coating.

More tips on back page >>
Tip
Make use of the option to regulate the pump pressure. You can define the desired pressure in the PRESTO\textsuperscript{\textregistered} settings.

Tip
The Ethernet interface permits full access to all operational functions of the PRESTO\textsuperscript{\textregistered}.

cool-down time 2 h 5 min

Measured with EasyTEMP Professional

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