Objective
This case study tests the cooling power of JULABO PRESTO® A80 with a 20 liters glass reactor. The A80 is connected to the reactor via two 2.0 m metal tubings. The A80 is programmed to cool down from -30 °C to -60 °C.

Test Conditions
JULABO unit: JULABO PRESTO® A80
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: 0.40 bar
Bath fluid: JULABO Thermal HL80
Reactor: 20 liters glass reactor (Asahi) filled with 18 liter JULABO Thermal HL40
Jacket volume: 7.0 l
Control: External (ICC)

Test Results
See chart on back page: The A80 cooling process from -30 °C to -60 °C in 2 h 10 min with small 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® settings.

**Tip**

The Ethernet interface permits full access to all operational functions of the PRESTO®.

Measured with EasyTEMP Professional

![Graph showing cool-down time](image)

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

Cool-down time 2 h 10 min

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