

Julabo Case Study

JULABO PRESTO® A80

Cooling a 20 liters reactor from
-30 °C to -60 °C



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)

Environment

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



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.

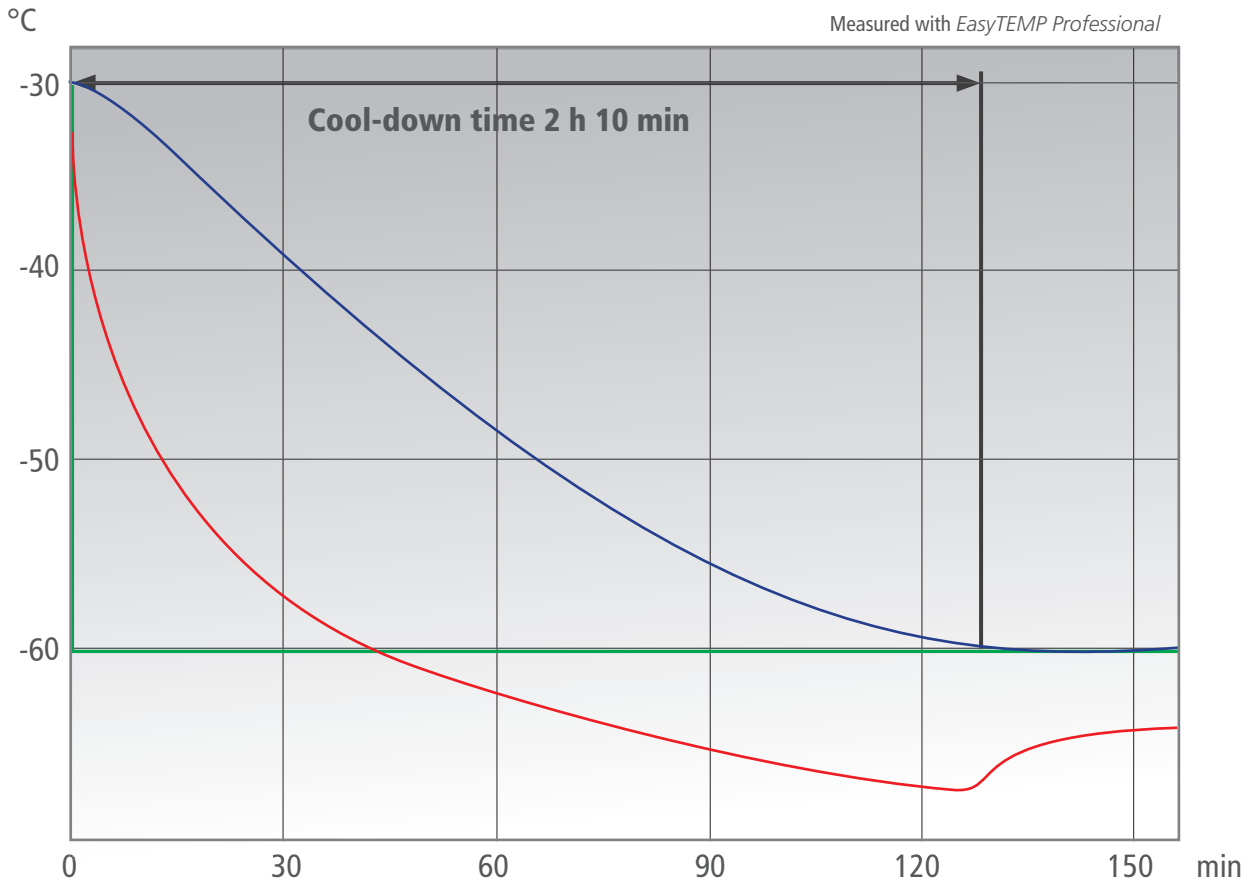
Tip

You can also use the robust Pt100 with PTFE coating.

More tips on back page >>



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

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®.



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