

Julabo Case Study

JULABO Presto W80

Cooling and heating a 10 liters reactor
between -50 °C and +100 °C



Objective

This case study tests the heating and cooling power of JULABO Presto W80 with a 10 litre glass reactor. The W80 is connected to the reactor with two 1.0 m metal tubings. The W80 is programmed to cycle between -50 °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

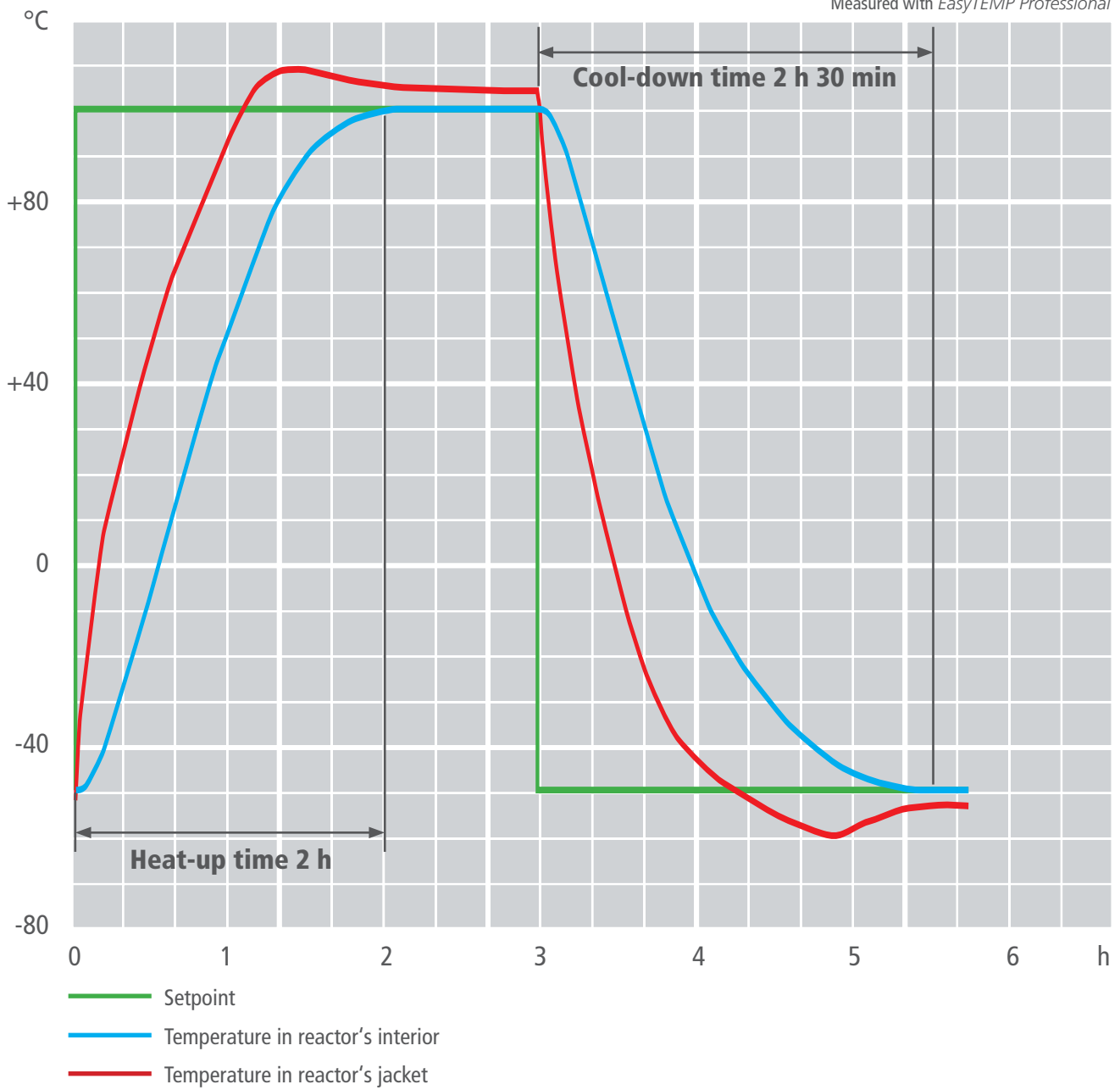
See chart on back page: The W80 heating process from -50 °C to +100 °C in 2 h. Hitting exactly +100 °C without overshoot. The cooling process from +100 °C to -50 °C in 2 h 30 min. Hitting exactly -50 °C without overshoot.

Tip

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



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Measured with *EasyTEMP Professional*

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