

Julabo Case Study

JULABO Presto A30

Cooling and heating a 2 liters reactor
between +20 °C and +100 °C



Objective

This case study tests the heating and cooling power of JULABO Presto A30 with a 2 litre glass reactor. The A30 is connected to the reactor with two 1.0 m metal tubings. The A30 is programmed to cycle between +20 °C and +100 °C.

Test Conditions

JULABO unit	JULABO Presto A30
Cooling power	+20 °C 0.5 kW
	0 °C 0.4 kW
	-20 °C 0.2 kW
Heating capacity	2.7 kW
Band limit	no
Flow pressure	0.35 bar
Bath fluid	JULABO Thermal HL45
Reactor	2 liters glass reactor (Schott Duran) filled with 1.8 liters Thermal HL45
Control	External (ICC)

Environment

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



Test Results

See chart on back page: The A30 heating process from +20 °C to +100 °C in 27 min. Hitting exactly +100 °C without overshoot. The cooling process from +100 °C to +20 °C in 32 min. Hitting exactly +20 °C without overshoot.

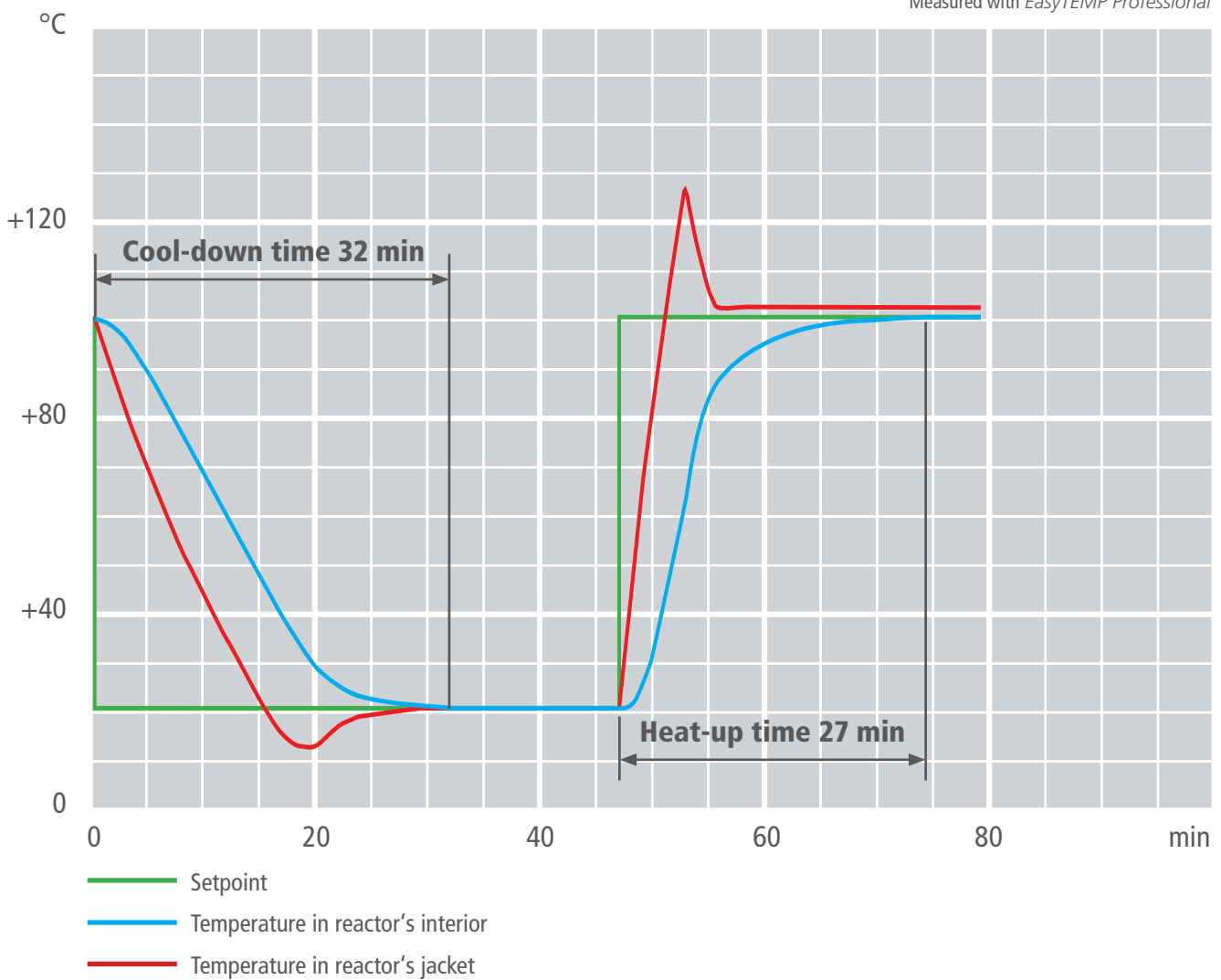
Tip

You can also use the robust Pt100 with Teflon coating.

More tips on back page >>



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

Measured with *EasyTEMP Professional***Tip**

Elbow fittings 90° help relieving the connectors of the glass reactor.



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