Juliubo Case Study

JULABO PRESTO® A40

Cooling a 5 liters reactor from +200 °C to -25 °C



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.

Environment

Room temperature +20 °C Humidity 45 %

Voltage 230 V / 50 Hz

Test Conditions

JULABO unit

Cooling power

JULABO PRESTO® A40

+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)



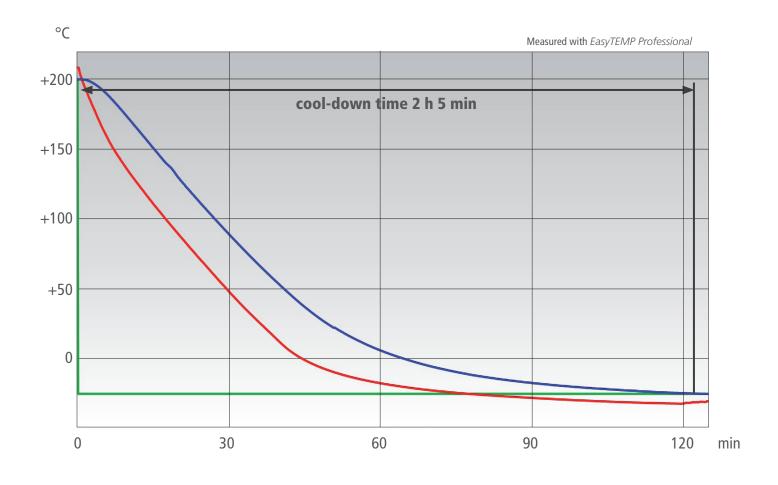
Test Results

See chart on back page: The A40 cooling process from +200 $^{\circ}$ C to -25 $^{\circ}$ C in 1 h 5 min without overshoot.

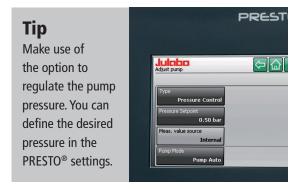


JULABO GmbH Eisenbahnstraße 45 77960 Seelbach / Germany Tel. +49 (0) 7823 51-0





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





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