# **Juliubo** Case Study

## **JULABO PRESTO® A40**

Cooling a 10 liters reactor from +200°C to -25°C



### **Objective**

This case study tests the cooling power of JULABO PRESTO® A40 with a 10 liters glass reactor. The A40 is connected to the reactor via two 2.0 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

+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

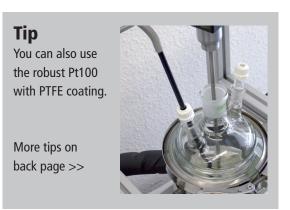
Reactor 10 liters glass reactor (Normag)

filled with 10 liter JULABO Thermal HL40

Control External (ICC)

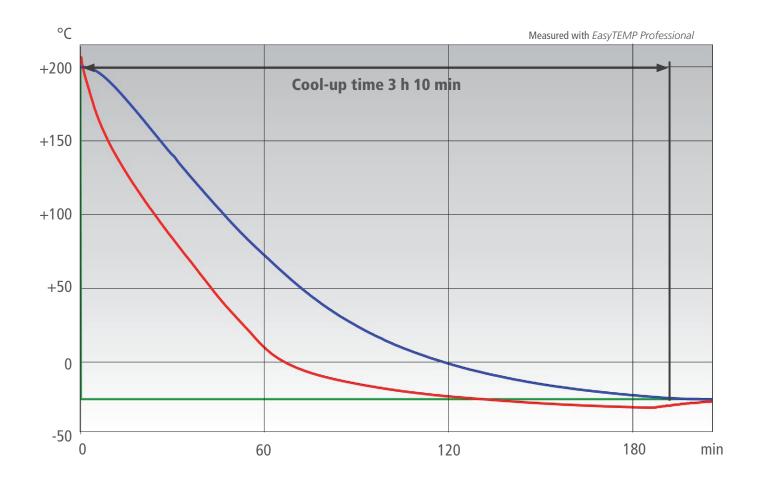
#### **Test Results**

See chart on back page: The A40 cooling process from +200  $^{\circ}$ C to -25  $^{\circ}$ C in 3 h 10 min without overshoot.

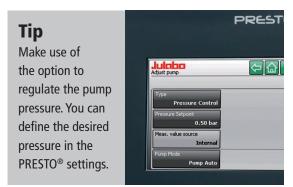


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Setpoint
Temperature in reactor's interior
Temperature in reactor's jacket





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