PRESTO® A30

Cooling a 6 liters reactor from +200 °C to +20 °C

Objective

This case study tests the cooling power of PRESTO® A30 with a 6 liters glass reactor. The PRESTO® A30 is connected to the reactor via two 2 m metal tubings. The PRESTO® A30 is programmed to cool down from +200 °C to +20 °C.

Environment

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

Test Conditions

JULABO unit  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  without
Flow pressure  0.5 bar
Bath fluid  Thermal HL60
Reactor  6 l glass reactor (QVF)
filled with 5 l Thermal HL60
Jacket volume  4.5 l
Control  External (ICC)
**Test Results**

The PRESTO® A30 cooling process from +200 °C to +20 °C in 1 h 45 min without overshoot.

---

**Tip**

Protect your reactor. The function "band limit" (see above) permits setting the max. temperature difference between jacket and internal vessel.

**Profile of reactor**

---

**Tip**

Use the free of charge EasyTEMP software to control the units with the PC and to show the temperature curves graphically.