

# **PRESTO W50**

# Cooling a 100 liters reactor from +100 °C to +20 °C

## **Objective**

This case study tests the cooling power of PRESTO W50 with a 100 liters glass reactor. The PRESTO W50 is connected to the reactor via two 2 m metal tubings. The PRESTO W50 is programmed to cool down from +100 °C to +20 °C.

#### **Environment**

Room temperature +20 °C Humidity 45 %

Voltage 400 V / 50 Hz



JULABO unit PRESTO W50
Cooling power +20 °C 7.5 kW

0 °C 6.5 kW -20 °C 3.0 kW

Heating capacity 6 kW
Band limit without
Flow pressure 0.5 bar
Bath fluid Thermal HL60

Reactor 100 l glass reactor (Büchiglas)

filled with 80 I Thermal HL60

Jacket volume 30 l

Control External (ICC)

#### **Control Parameters**

Xp 0.2 K Tn 695 s Tv 85 s Xpu 15 K



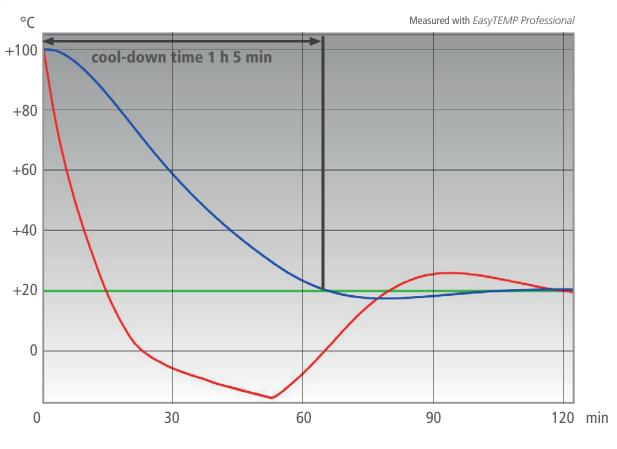






#### **Test Results**

The PRESTO W50 cooling process from +100 °C to +20 °C in 1 h 5 min without overshoot.



Setpoint

Temperature in reactor's interior

Temperature in reactor's jacket

#### Tip

Take advantage of our wide range of accessories. The M+R adapter enables you to display and record an additional temperature.



### Tip

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

