

PRESTO™ A80t

Cooling a 20 liters reactor from +20 °C to -20 °C

Objective

This case study tests the cooling power of PRESTO™ A80t with a 20 liters glass reactor. The PRESTO™ A80t is connected to the reactor via two 1 m metal tubings. The PRESTO™ A80t is programmed to cool down from +20 °C to -20 °C.

Environment

Room temperature +20 °C Humidity 45 %

Voltage 208 V / 60 Hz



Test Conditions

JULABO unit PRESTO $^{\text{TM}}$ A80t Cooling power +20 °C 1.2 kW

0 °C 1.2 kW -20 °C 1.1 kW

Heating capacity 3.4 kW
Band limit with
Flow pressure 0.5 bar
Bath fluid Thermal HL80

Reactor 20 l glass reactor (Asahi)

filled with 19 l Thermal HL80

Jacket volume 7 l

Control External (ICC)

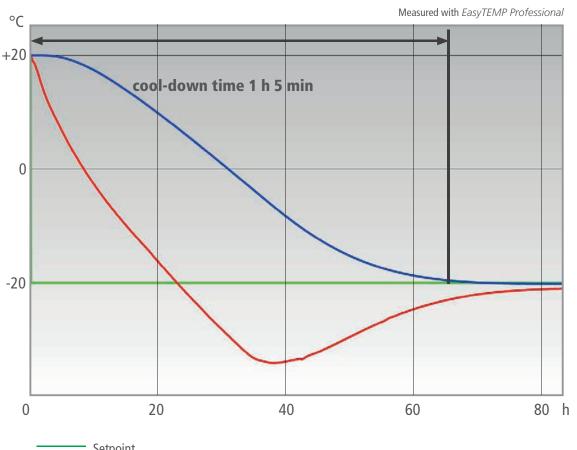






Test Results

The PRESTO $^{\scriptscriptstyle{TM}}$ A80t cooling process from +20 °C to -20 °C in 1 h 5 min without overshoot.



Setpoint

Temperature in reactor's interior

Temperature in reactor's jacket

