

PRESTO® A80t

Heating a 20 liters reactor from -60 °C to +20 °C

Objective

This case study tests the heating 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 heat up from -60 °C to +20 °C.



Environment

Room temperature +20 °C Humidity 45%

Voltage 208 V / 60 Hz

Test Conditions

JULABO unit PRESTO® A80t Cooling power $+20 \,^{\circ}\text{C}$ 1.2 kW $0 \,^{\circ}\text{C}$ 1.2 kW

-20 °C 1.1 kW

Heating capacity 3.4 kW
Band limit with
Flow pressure 0.5 bar
Bath fluid Thermal HL 80

Reactor 20 liters glass reactor (Chemglass)

filled with 19 I Ethanol

Jacket volume 8 l

Control External (ICC)

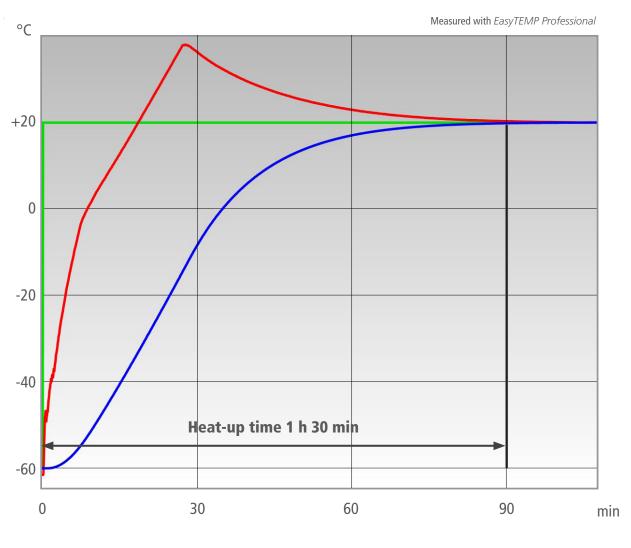






Test Results

The PRESTO® A80t heating process from -60 °C to +20°C in 1 h 30 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.

