PRESTO™ A80t

Heating a 20 liters reactor from -20 °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 -20 °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 °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 liters glass reactor (Asahi) filled with 19 l Thermal HL80
Jacket volume 7 l
Control External (ICC)
**Test Results**

The PRESTO™ A80t heating process from -20 °C to +20°C in 45 h without overshoot.

**Measurements**

- **Heat-up time**: 45 h
- **Temperature range**: -20°C to +20°C
- **Temperature curve**
  - Green line: Setpoint
  - Blue line: Temperature in reactor’s interior
  - Red line: 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.