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 °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 HL 80
- Reactor: 20 liters glass reactor (Chemglass) filled with 19 l 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.

Heat-up time 1 h 30 min

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.