PRESTO® A30

Heating a 6 liters reactor from -10 °C to +20 °C

Objective
This case study tests the heating power of PRESTO® A30 with a 6 liters glass reactor. The PRESTO® A30 is connected to the reactor via two 2 m metal tubings. The PRESTO® A30 is programmed to heat up from -10 °C to +20 °C.

Environment
Room temperature +20 °C
Humidity 45%
Voltage 230 V / 50 Hz

Test Conditions
JULABO unit PRESTO® A30
Cooling power +20 °C 0.5 kW
0 °C 0.4 kW
-20 °C 0.2 kW
Heating capacity 2.7 kW
Band limit without
Flow pressure 0.5 bar
Bath fluid Thermal HL60
Reactor 6 liters glass reactor (QVF)
filled with 5 l Thermal HL60
Jacket volume 4.5 l
Control External (ICC)
Test Results
The PRESTO® A30 heating process from -10 °C to +20°C in 19 min without overshoot.

Heat-up time 19 min

Tip
Protect your reactor.
The function “band limit” (see above) permits setting the max. temperature difference between jacket and internal vessel.

Profile of reactor

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