

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

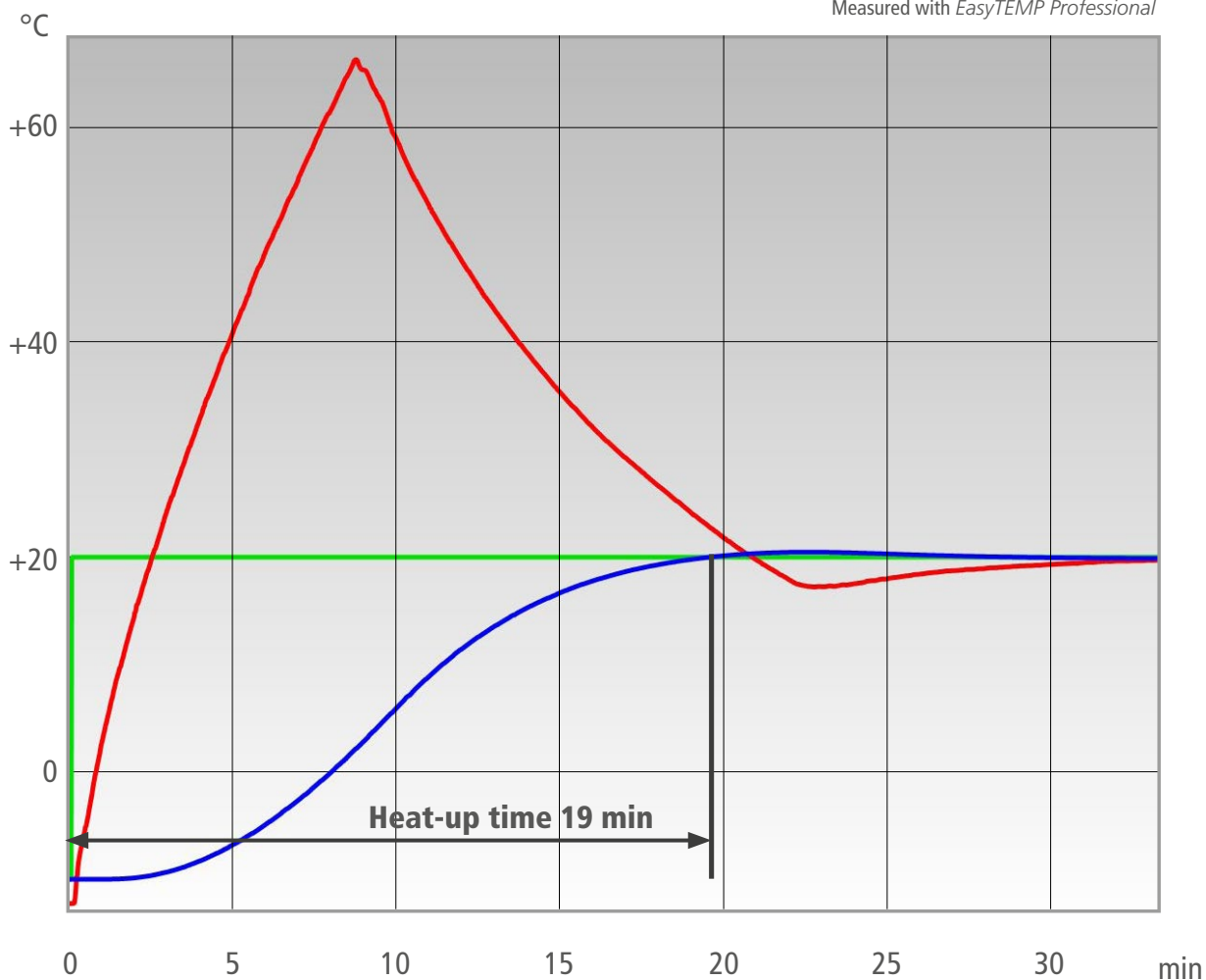
JULABO unit	PRESTO® A30
Cooling power	+20 °C 0.5 kW 0 °C 0.4 kW -20 °C 0.2 kW
Heating capacity	2.7 kW
Band limit	without
Flow pressure	0.5 bar
Bath fluid	Thermal HL60
Reactor	6 liters glass reactor (QVF) filled with 5 l Thermal HL60
Jacket volume	4.5 l
Control	External (ICC)



Test Results

The PRESTO® A30 heating process from -10 °C to +20°C in 19 min without overshoot.

Measured with *EasyTEMP Professional*

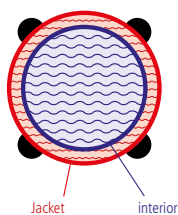


- Setpoint
- Temperature in reactor's interior
- Temperature in reactor's jacket

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.

EasyTEMP

