

PRESTO™ A80t

Heating a 20 liters reactor from +20 °C to +100 °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 +100 °C.

Environment

Room temperature +20 °C
Humidity 45%
Voltage 208 V / 60 Hz

Test Conditions

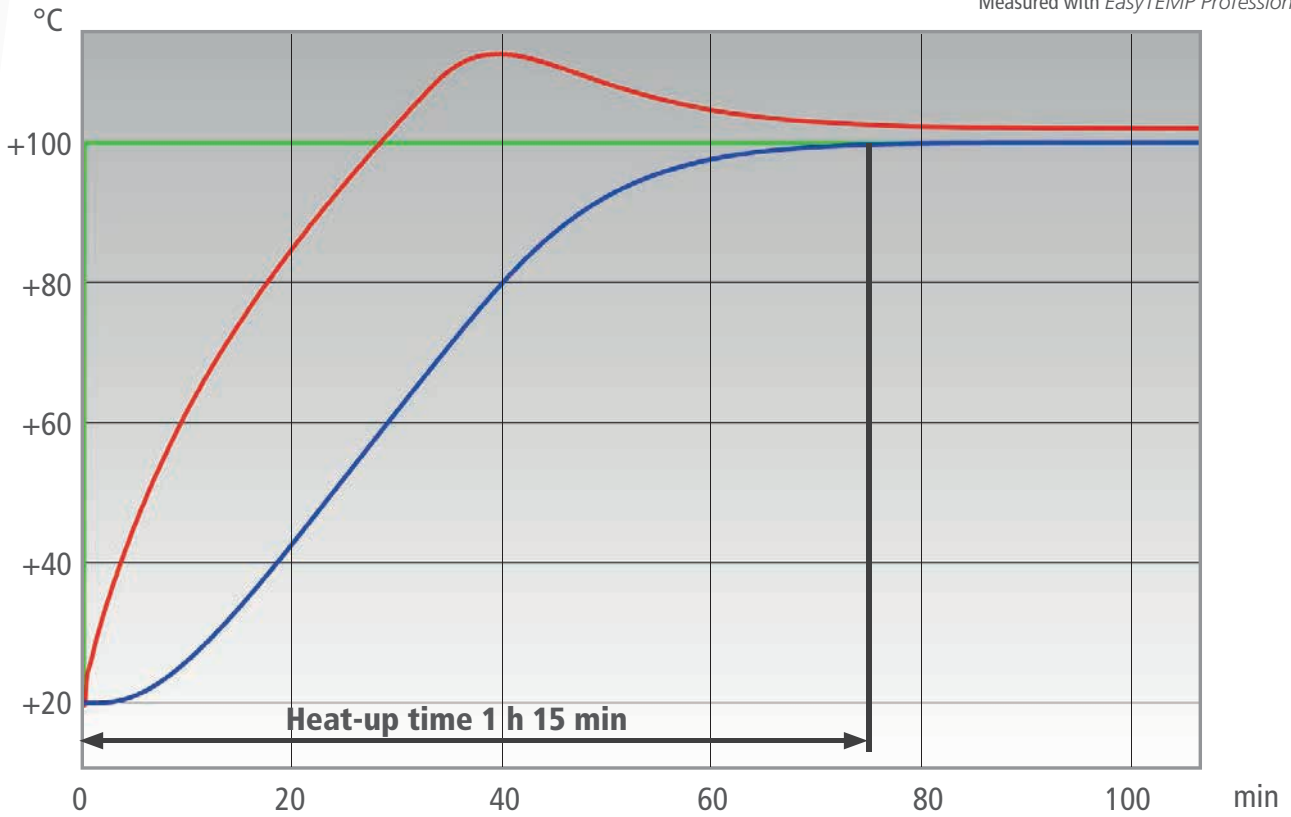
JULABO unit	PRESTO™ A80t
Cooling power	+20 °C 1.2 kW 0 °C 1.2 kW -20 °C 1.1 kW
Heating capacity	3.4 kW
Band limit	with
Flow pressure	0.5 bar
Bath fluid	Thermal HL80
Reactor	20 liters glass reactor (Asahi) filled with 19 l Thermal HL80
Jacket volume	7 l
Control	External (ICC)



Test Results

The PRESTO™ A80t heating process from +20 °C to +100°C in 1 h 15 min without overshoot.

Measured with *EasyTEMP Professional*

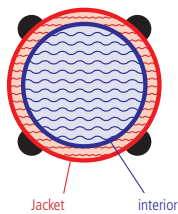


- Setpoint
- Temperature in reactor's interior
- Temperature in reactor's jacket

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

