

## 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

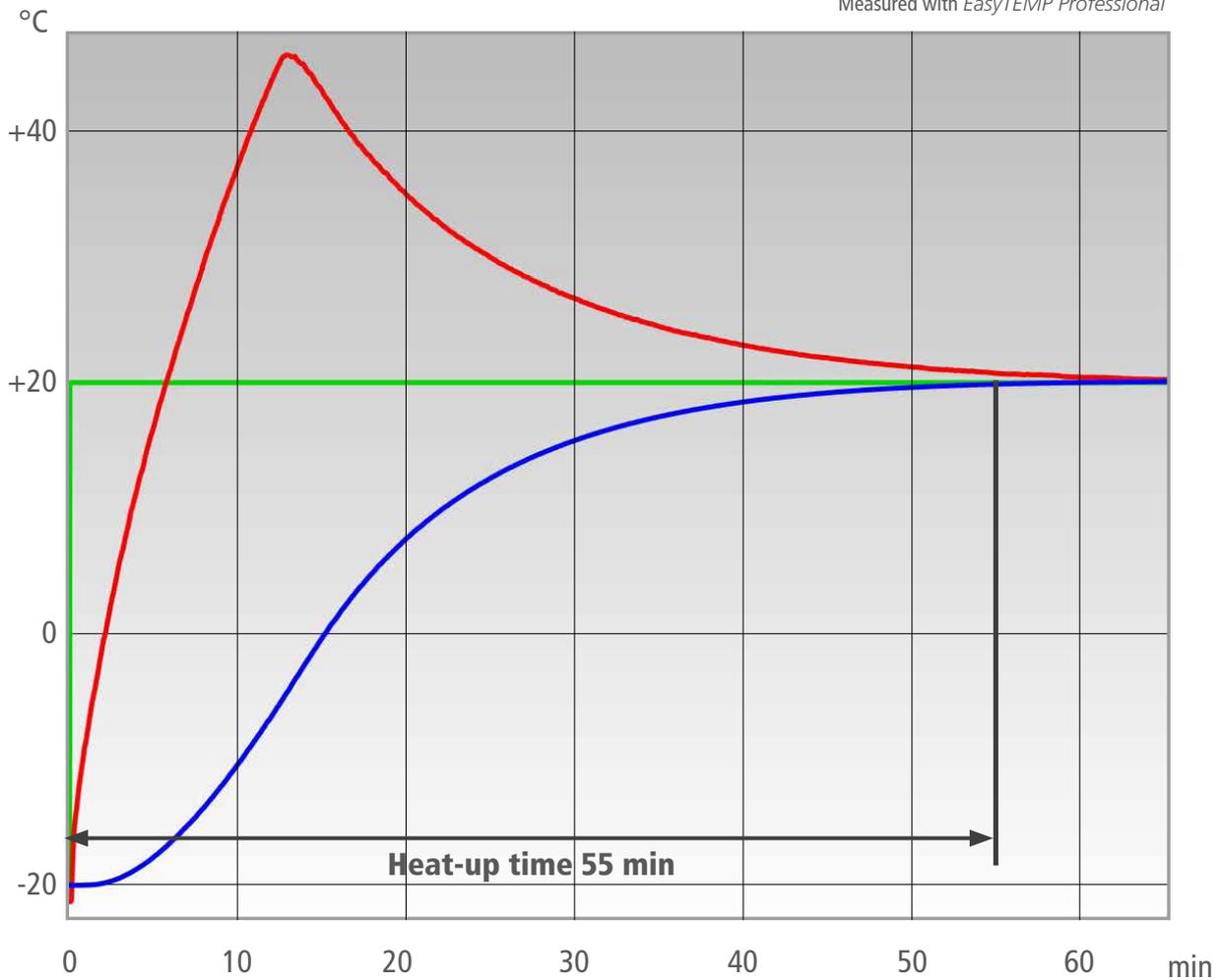
JULABO unit	PRESTO® A80t
Cooling power	+20 °C 1.2 kW 0 °C 1.2 kW -20 °C 1.1 kW
Heating capacity	3.4 kW
Band limit	with
Flow pressure	0.5 bar
Bath fluid	Thermal HL 80
Reactor	20 liters glass reactor (Chemglass) filled with 19 l Ethanol
Jacket volume	8 l
Control	External (ICC)



### Test Results

The PRESTO® A80t heating process from -20 °C to +20°C in 55 min without overshoot.

Measured with *EasyTEMP Professional*



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

**Tip**  
Use our tube adapters and your tubing will no longer kink.



**Tip**  
You can also use the robust Pt100 with PTFE coating.

