

## PRESTO® W92tt

### Heating a 100 liters reactor from -20 °C to +20 °C

#### Objective

This case study tests the heating power of PRESTO® W92tt with a 100 liters glass reactor. The PRESTO® W92tt is connected to the reactor via two 3 m metal tubings. The PRESTO® W92tt is programmed to heat up from -20 °C to +20 °C.

#### Environment

Room temperature +20 °C  
 Humidity 45%  
 Voltage 400 V / 50 Hz

#### Test Conditions

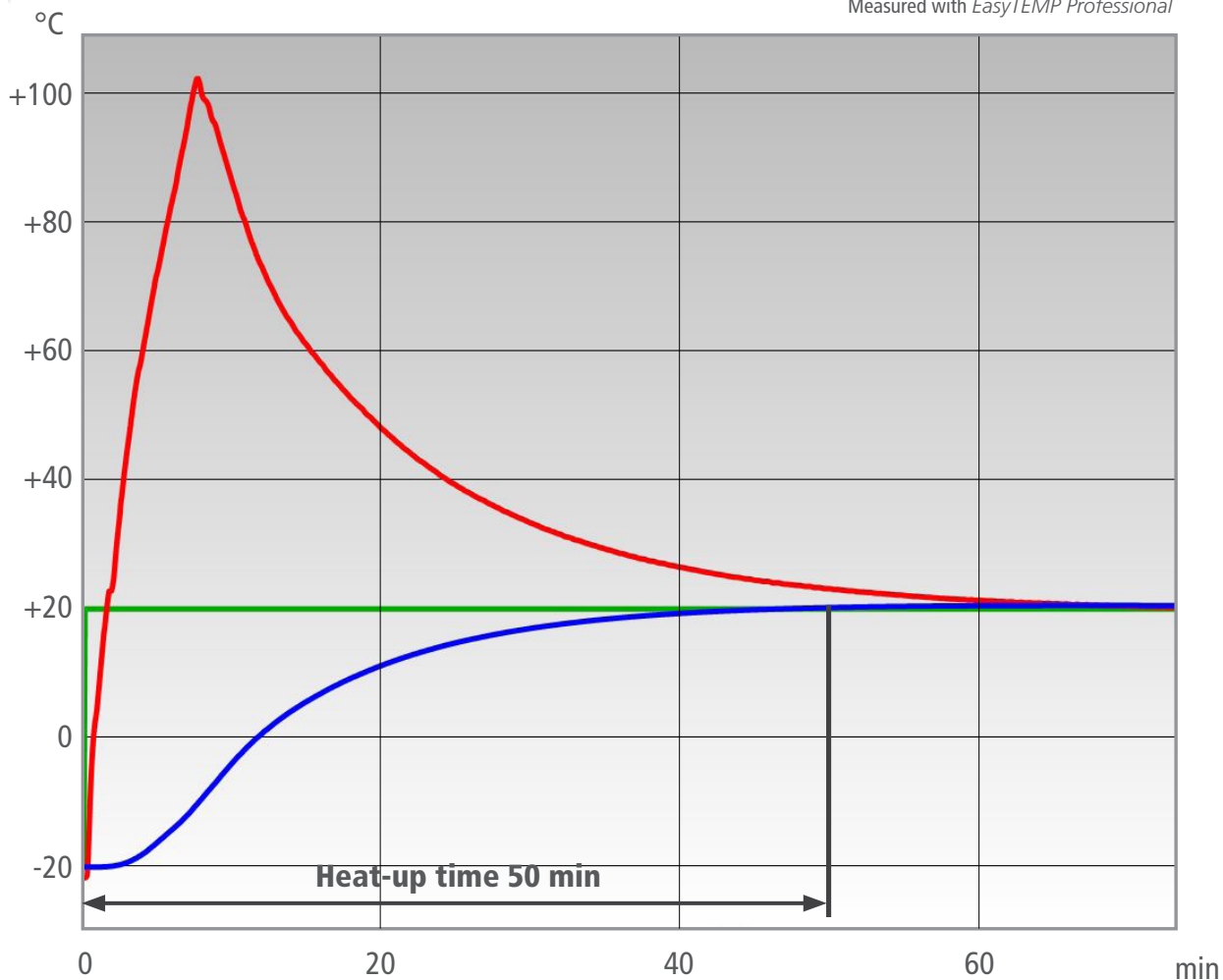
JULABO unit	PRESTO® W92tt
Cooling power	+20 °C 19 kW 0 °C 15.5 kW -20 °C 9.5 kW
Heating capacity	36 kW
Band limit	with
Flow pressure	0.5 bar
Bath fluid	Thermal HL80
Reactor	100 liters glass reactor (Büchiglas) filled with 70 l Ethanol
Jacket volume	30 l
Control	External (ICC)



## Test Results

The PRESTO® W92tt heating process from -20 °C to +20°C in 50 min without overshoot.

Measured with *EasyTEMP Professional*

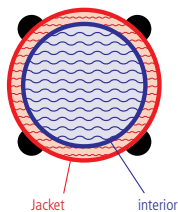


- Setpoint
- Temperature in reactor's interior
- Temperature in reactor's jacket

### 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

Take advantage of our wide range of accessories. The M+R adapter enables you to display and record an additional temperature.

