

# Julabo Case Study

## JULABO PRESTO® W91tt

Heating a 100 liters reactor  
from -50 °C to +20 °C



### Objective

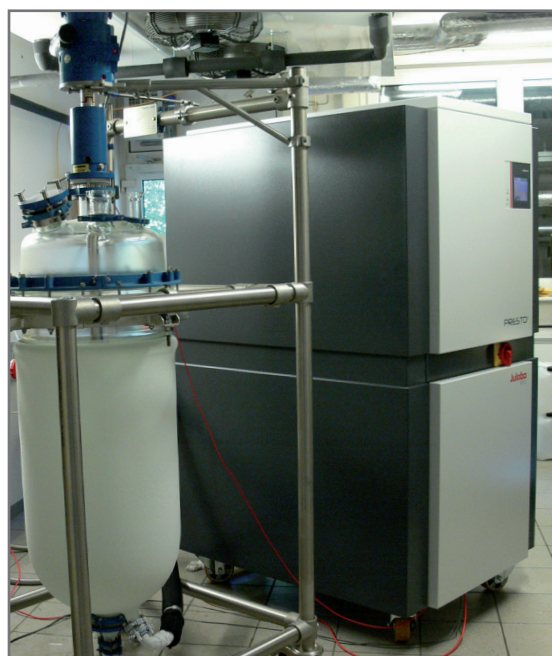
This case study tests the cooling power of JULABO PRESTO® W91tt with a 100 liters glass reactor. The W91tt is connected to the reactor via two 2.0 m metal tubings. The W91tt is programmed to heat up from -50 °C to +20 °C.

### Test Conditions

JULABO unit	JULABO PRESTO® W91tt
Cooling power	+20 °C   11.0 kW
	0 °C   10.0 kW
	-20 °C   9.5 kW
Heating capacity	36 kW
Band limit	without
Flow pressure	0.45 bar
Bath fluid	JULABO Thermal HL80
Reactor	100 liters glass reactor (Büchiglas) filled with 100 liters Thermal HL80
Control	External (ICC)

### Environment

Room temperature	+20 °C
Humidity	45 %
Voltage	3 x 400 V / 50 Hz



### Test Results

See chart on back page: The W91tt heats up the reactor from -50 °C to +20 °C in 2 h 55 min. +20 °C are hit without overshoot.

### Tip

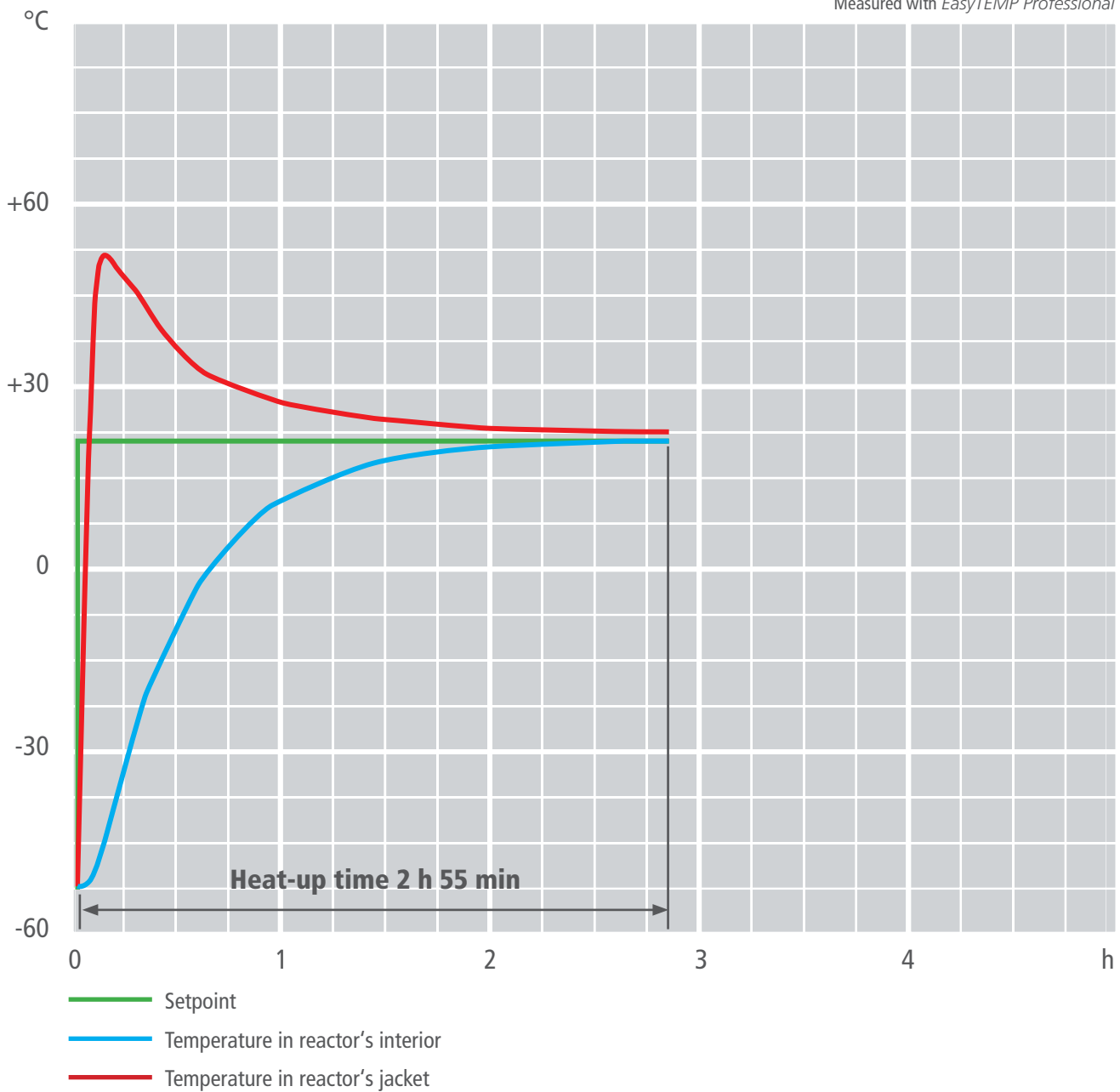
You can also use the robust Pt100 with PTFE coating.

More tips on back page >>



JULABO GmbH  
Eisenbahnstraße 45  
77960 Seelbach / Germany  
Tel. +49 (0) 7823 51-0

Measured with EasyTEMP Professional



**Tip**

Make use of the option to regulate the pump pressure. You can define the desired pressure in the PRESTO® settings.



**Tip**

The Ethernet interface permits full access to all operational functions of the PRESTO®.



JULABO GmbH  
 Eisenbahnstraße 45  
 77960 Seelbach / Germany  
 Tel. +49 (0) 7823 51-0