**PRESTO® W92tt**

**Heating a 100 liters reactor from -80 °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 -80 °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 -80 °C to +20°C in 2 h without overshoot.

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.