



**Setup details**

Unistat® 610w & Buchi Glas Uster reactor

- Temperature range: -60...200 °C
- Cooling power: 7.0 kW @ 200...0 °C  
6.4 kW @ -20 °C  
3.3 kW @ -40 °C  
0.8 kW @ -60 °C
- Heating power: 6.0 kW
- Hoses: 2x1.5 m; M38x1.5 (#6656)
- HTF: DW-Therm (#6479)
- Reactor: 20-litre jacketed glass pressure reactor
- Reactor content: 15 litre DW-Therm (#6479)
- Stirrer speed: 70 rpm
- Control: process

# Unistat® 610w

**Cooling a Buchi Glas Uster 20-litre reactor from 100 °C to 20 °C**

**Requirement**

This case study shows the temperature profile of a Unistat 610w working to cool a 20-litre reactor from 100 °C to 20 °C.

**Method**

The Unistat and reactor were connected using two 1.5 m insulated metal hoses. The reactor was filled with 15 litre of "M90.055.03", a Huber supplied silicon based HTF.

**Results**

The jacket temperature cools to approx. -43 °C to bring the process temperature rapidly to its set point in 40 minutes.

