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

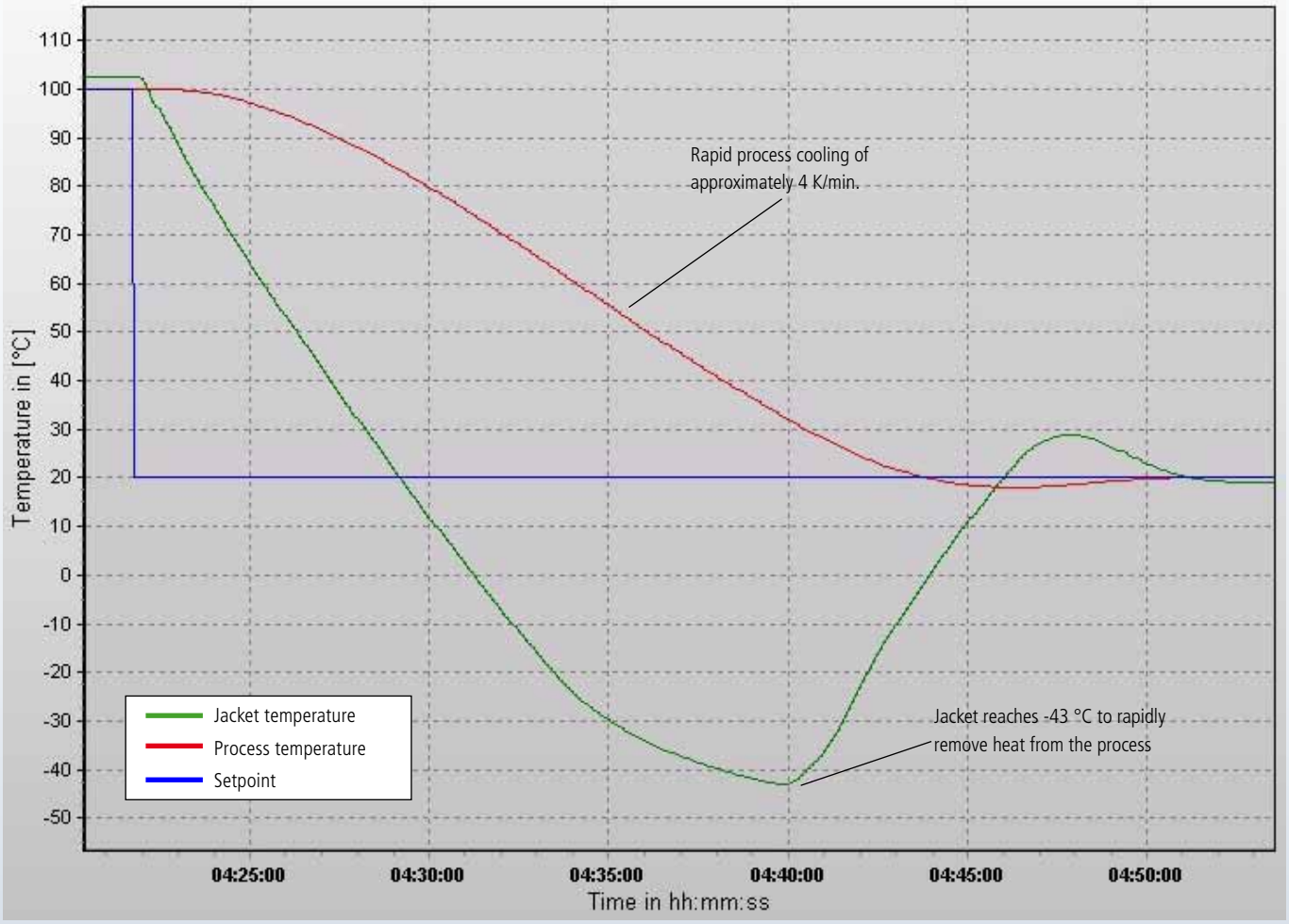
Unistat® 610w

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.



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