



Setup details

Unistat® 825w & Buchi Glas Uster «miniPilot» 10 reactor

Temperature range: -85...250 °C
 Cooling power: 2.4 kW @ 0...-40 °C
 1.5 kW @ -60 °C

Heating power: 3.0 kW
 Hoses: 2x1.5 m; M30x1.5 (#6386)
 HTF: DW-Therm (#6479)
 Reactor: 10-litre jacketed glass reactor

Reactor contents: 7.5 litre M90.055.03 (#6259)

Reactor stirrer speed: 400 rpm
 Control: process

Unistat® 825w

Cooling a Buchi Glas Uster 10-litre reactor from 20 °C to -60 °C

Requirement

The graphic shows the cooling performance of a Unistat 825w when cooling a Buchi Glas Uster 10-litre reactor under process control from 20 °C to -60 °C.

Method

The Unistat and reactor are connected using two 1.5-metre insulated metal hoses. The reactor is filled with 7.5 litre of "M90.055.03", a Huber supplied silicon based HTF.

Results

The internal temperature cools to approximately -78 °C to remove the heat from the reactor to pull the process temperature to its set-point.

