



Setup details

Unistat® 705w & Buchi Glas Uster reactor

- Temperature range: -75...250 °C
- Cooling power: 0.6 kW @ 250...100 °C
0.65 kW @ 0 °C
0.6 kW @ -20...-40 °C
0.3 kW @ -60 °C
- Heating power: 1.5 kW / 3 kW
- Pump speed: 3500 rpm
- Hoses: 2x1 m; M24x1.5 (#9325)
- HTF: DW-Therm (#6479)
- Reactor: 3-litre un-insulated metal pressure reactor
- Reactor content: 2.25 litre M90.055.03 (#6259)
- Stirrer speed: 200 rpm
- Control: process

Unistat® 705w

Heating a Buchi Glas Uster 3-litre metal reactor from 20 °C to 100 °C

Requirement

The graphic shows the performance of a Unistat 705w heating a Buchi Glas Uster 3-litre un-insulated metal pressure reactor from 20 °C to 100 °C.

Method

The Unistat and reactor are connected using two 1-metre insulated metal hoses. The reactor is filled with 2.25 litre of "M90.055.03", a Huber supplied silicon based HTF.

Results

With a heating power of 1.5 kW the machine needs 25 minutes to heat the process through 80 K (average ramp rate of 3.2 K/min.).

