



Setup details

Unistat® 705w & Buchi Glas Uster reactor «eco-clave»

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
 Hoses: 2x1 m; M24x1.5 (#9325)
 HTF: DW-Therm (#6479)
 Reactor: 1-litre jacketed glass pressure reactor

Reactor content: 0.75 litre M90.055.03 (#6259)

Stirrer speed: 200 rpm
 Control: process

Unistat® 705w

1-litre Buchi Glas Uster reactor from 20 °C to T_{min}

Requirement

The purpose of this test is to demonstrate the minimum achievable process temperature in a 1-litre jacketed glass pressure reactor when connected to a Unistat 705w.

Method

The Unistat and reactor are connected using two 1-metre insulated metal hoses. The reactor is filled with 0.75 litre of "M90.055.03", a Huber supplied silicon based HTF.

Results

The graphic shows the process temperature beginning to asymptote at -50 °C. The jacket temperature reaches a minimum of -67 °C with a minimum process temperature of -66 °C.

