

# Unistat® 615w

## Ramping a 250-litre Buchi Glas Uster GLSS reactor

### Requirement

This case study shows the remarkable power transfer capabilities of the Unistat range in using a Unistat 615w to heat and cool a 250-litre Buchi Glas Uster GLSS reactor.

### Method

The Unistat was connected to the reactor using two 2-metre insulated metal hoses. The reactor was filled with 200 litre of Ethanol.

### Results

The closeness of control can be seen as the Unistat ramps the process temperature between 20 °C to 0 °C and back at differing pre-programmed ramp rates.

### Setup details

Temperature range: -60...200 °C  
 Cooling power: 9.5 kW @ 200...0 °C  
 8.0 kW @ -20 °C  
 4.8 kW @ -40 °C  
 1.2 kW @ -60 °C  
 Heating power: 12 kW  
 Hoses: M38x1,5; 2x2 m  
 HTF: DW-Therm  
 Reactor: Buchi Glas Uster CR252  
 250-litre glass-lined  
 (enameled) steel reactor  
 Reactor content: 200 litre Ethanol  
 Reactor stirrer speed: 90 rpm  
 Control: process

