

PRESTO® W92tt

Cooling a 100 liters reactor from +20 °C to -50 °C

Objective

This case study tests the cooling power of PRESTO® W92tt with a 100 liters glass reactor. The PRESTO® W92tt is connected to the reactor via two 3 m metal tubings. The PRESTO® W92tt is programmed to cool down from +20 °C to -50 °C.

Environment

Room temperature +20 °C Humidity 45 %

Voltage 400 V / 50 Hz



Test Conditions

JULABO unit PRESTO® W92tt
Cooling power +20 °C 19 kW

0 °C 15.5 kW -20 °C 9.5 kW

Heating capacity 36 kW
Band limit with
Flow pressure 0.5 bar
Bath fluid Thermal HL80

Reactor 100 l glass reactor (Büchiglas)

filled with 70 I Ethanol

Jacket volume 30 l

Control External (ICC)

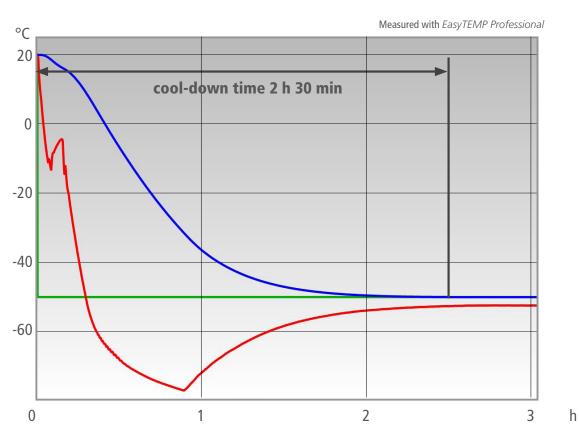






Test Results

The PRESTO® W92tt cooling process from +20 °C to -50 °C in 2 h 30 min without overshoot.



Setpoint

Temperature in reactor's interior

Temperature in reactor's jacket

Tip Take advantage of our wide range of accessories. The M+R adapter enables you to display and record an additional temperature.



