PRESTO® W92tt

Cooling a 100 liters reactor from +20 °C to -80 °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 -80 °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 l Ethanol
Jacket volume      30 l
Control            External (ICC)
Test Results
The PRESTO® W92tt cooling process from +20 °C to -80 °C in 3 h 45 min without overshoot.

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

Tip
You can also use the robust Pt100 with PTFE coating.