PRESTO W50

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

Objective
This case study tests the cooling power of PRESTO W50 with a 100 liters glass reactor. The PRESTO W50 is connected to the reactor via two 2m metal tubings. The PRESTO W50 is programmed to cool down from +100 °C to +20 °C.

Environment
Room temperature  +20 °C
Humidity 45 %
Voltage 400 V / 50 Hz

Test Conditions
JULABO unit  PRESTO W50
Cooling power
+20 °C  7.5 kW
0 °C  6.5 kW
-20 °C  3.0 kW
Heating capacity 6 kW
Band limit without
Flow pressure 0.5 bar
Bath fluid Thermal HL60
Reactor 100 l glass reactor (Büchiglas) filled with 80 l Thermal HL60
Jacket volume 30 l
Control External (ICC)

Control Parameters
Xp 0.2 K
Tn 695 s
Tv 85 s
Xpu 15 K
Test Results

The PRESTO W50 cooling process from +100 °C to +20 °C in 1 h 5 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

Use the free of charge EasyTEMP software to control the units with the PC and to show the temperature curves graphically.