

PRESTO® A40

Cooling a 6 liters reactor from +20 °C to -10 °C

Objective

This case study tests the cooling power of PRESTO® A40 with a 6 liters glass reactor. The PRESTO® A40 is connected to the reactor via two 2 m metal tubings. The PRESTO® A40 is programmed to cool down from +20 °C to -10 °C.



Environment

Room temperature +20 °C
 Humidity 45 %
 Voltage 230 V / 50 Hz

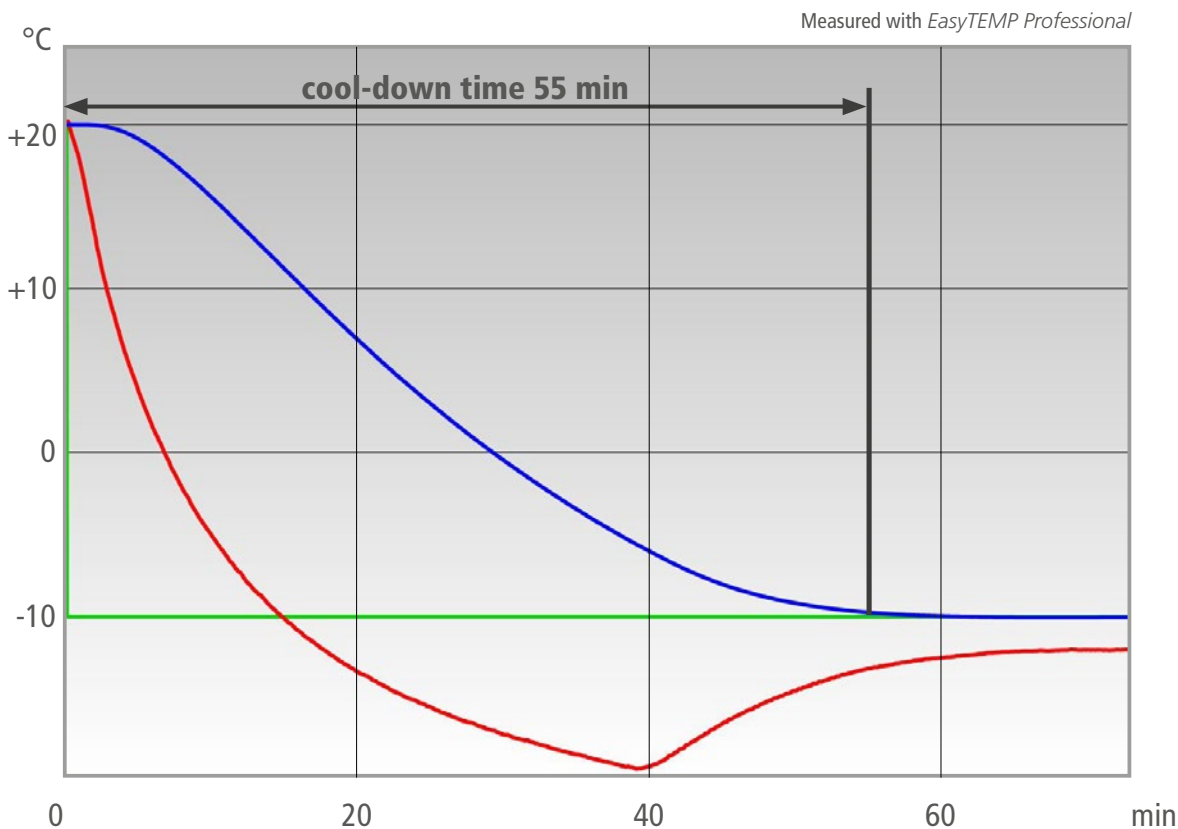
Test Conditions

JULABO unit	PRESTO® A40
Cooling power	+20 °C 1.2 kW 0 °C 0.9 kW -20 °C 0.6 kW
Heating capacity	2.7 kW
Band limit	without
Flow pressure	0.5 bar
Bath fluid	Thermal HL60
Reactor	6 l glass reactor (QVF) filled with 5 l Thermal HL60
Jacket volume	4.5 l
Control	External (ICC)



Test Results

The PRESTO® A40 cooling process from +20 °C to -10 °C in 55 min without overshoot.

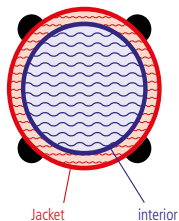


- Setpoint
- Temperature in reactor's interior
- Temperature in reactor's jacket

Tip

Protect your reactor. The function "band limit" (see above) permits setting the max. temperature difference between jacket and internal vessel.

Profile of reactor



Tip

Use our tube adapters and your tubing will no longer kink.

