

PRESTO® A80t

Cooling a 20 liters reactor from +20 °C to 0 °C

Objective

This case study tests the cooling power of PRESTO® A80t with a 20 liters glass reactor. The PRESTO® A80t is connected to the reactor via two 1 m metal tubings. The PRESTO® A80t is programmed to cool down from +20 °C to 0 °C.



Environment

Room temperature +20 °C
 Humidity 45 %
 Voltage 208 V / 60 Hz

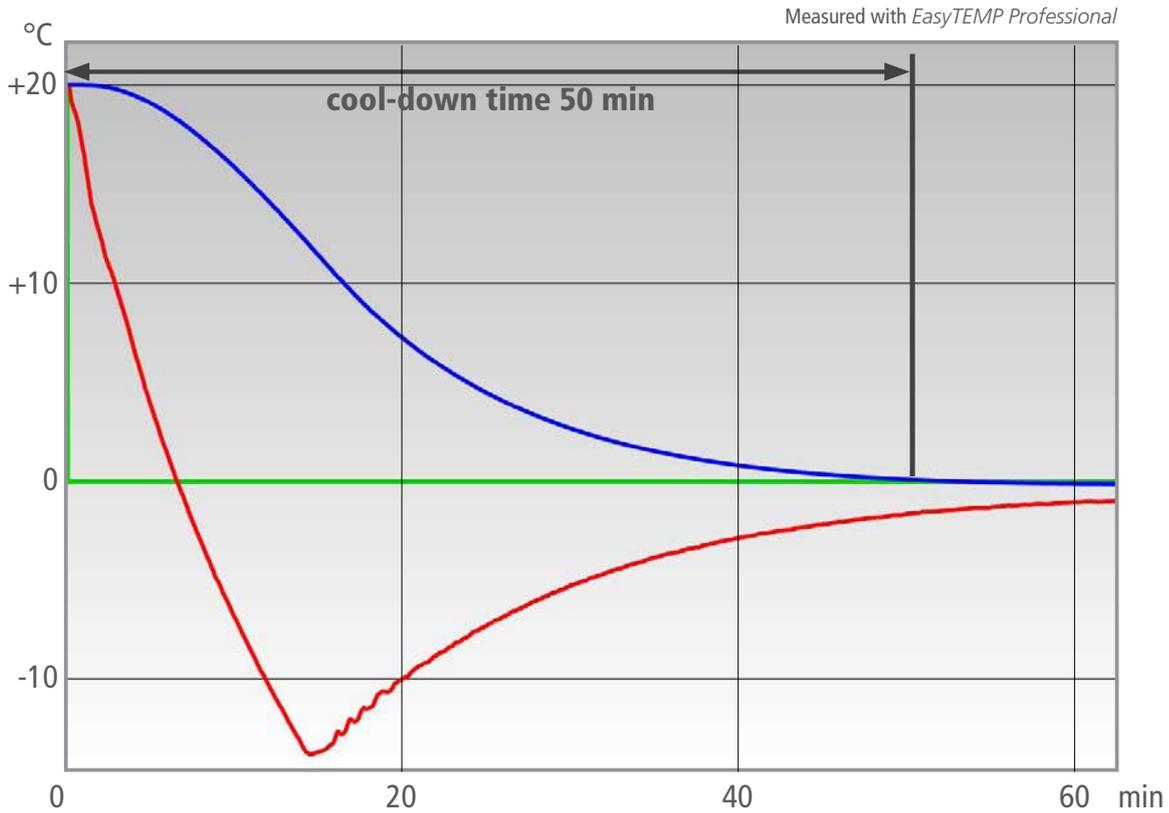
Test Conditions

JULABO unit	PRESTO® A80t
Cooling power	+20 °C 1.2 kW 0 °C 1.2 kW -20 °C 1.1 kW
Heating capacity	3.4 kW
Band limit	with
Flow pressure	0.5 bar
Bath fluid	Thermal HL80
Reactor	20 l glass reactor (Chemglass) filled with 19 l Ethanol
Jacket volume	8 l
Control	External (ICC)



Test Results

The PRESTO® A80t cooling process from +20 °C to 0 °C in 50 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.