

PRESTO™ A80t

Cooling a 20 liters reactor from +20 °C to -40 °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 -40 °C.

Environment

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

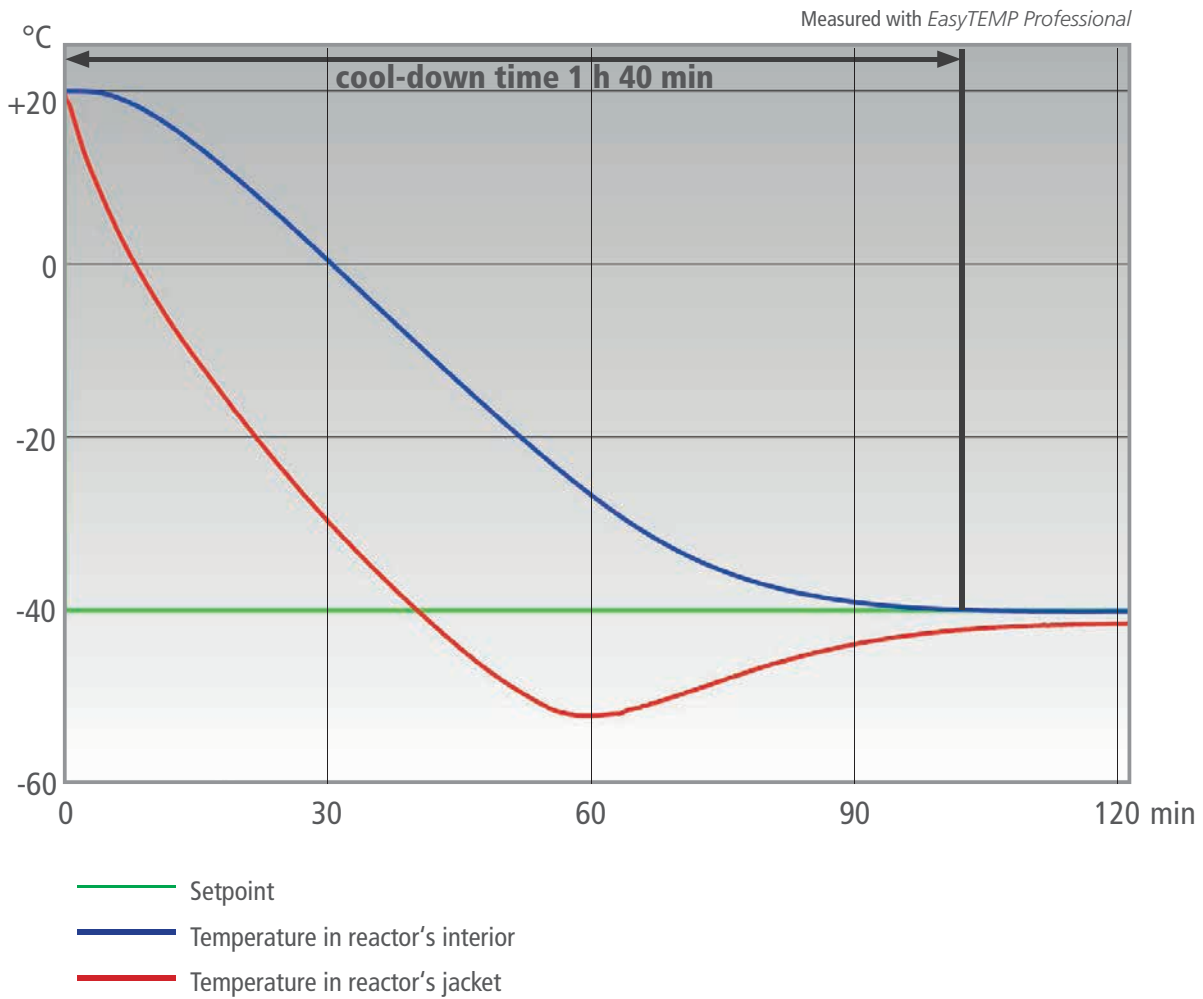
Test Conditions

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 (Asahi) filled with 19 l Thermal HL80
Jacket volume	7 l
Control	External (ICC)



Test Results

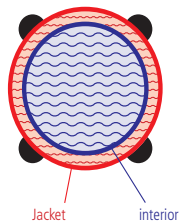
The PRESTO™ A80t cooling process from +20 °C to -40 °C in 1 h 40 min without overshoot.



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

EasyTEMP

