

PRESTO A80t Process system

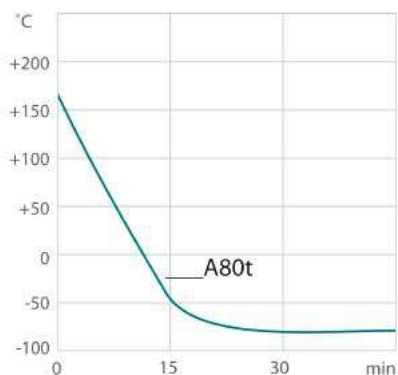
As air- or water-cooled versions, the A80 and W80 units with 2-stage refrigeration unit offer high cooling and heating capacities for lowest temperatures down to -80 °C.

Product features

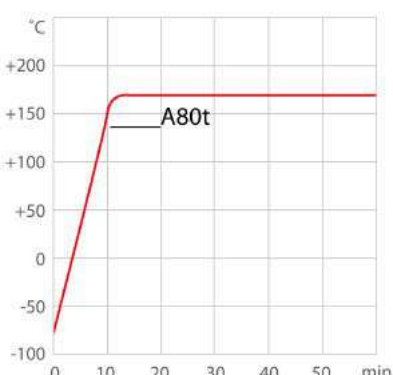
- For highly precise, external temperature applications
- Rapid heating and cooling
- Wide working temperature ranges without changing fluids
- Highest performance with small footprint
- Space-saving design optimizes space utilization in your lab
- Heating capacity up to 3.4 kW
- Cooling capacity up to 1.2 kW
- 5,7" industrial color TFT touch screen
- Ports for USB, Ethernet, RS232, Modbus
- SD-Card slot
- Analog connections, RS485, Profibus DP (accessory)



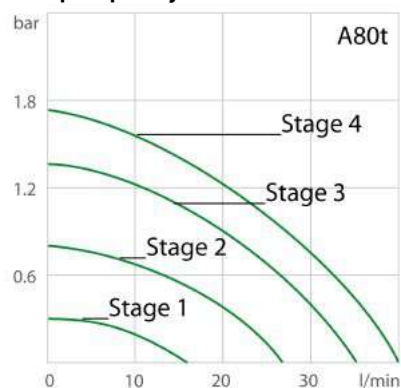
Cool-down time



Heat-up time



Pump capacity



Performance values

208V/60Hz (Without Plug)

Heating capacity kW	2.8
Viscosity max. cST	50
Pump capacity flow rate l/min	15 ... 38
Pump capacity flow pressure bar	0.3 ... 1.5
Power A	15

Order No. 9420801.16.T

Cooling capacity (Ethanol)

°C	200	100	20	0	-20	-30	-40	-60	-80
kW	1.2	1.2	1.2	1.2	1.1	1.1	1.1	0.65	0.1

* Performance specifications measured in accordance with DIN12876. Cooling capacities up to 20 °C measured with ethanol; over 20 °C with thermal oil unless otherwise specified. Performance specifications apply at an ambient temperature of 20 °C. Performance values may differ with other bath fluids.

Refrigerant stage 1

Refrigerant R507

Filling volume g 1140

Global Warming Potential for R507 3985

Carbon dioxide equivalent t 4.543

Refrigerant stage 2

Refrigerant R23

Filling volume g 500

Global Warming Potential for R23 14800

Carbon dioxide equivalent t 7.4

Technical data

Available voltage versions

Order No. 9 420 801.T

Available voltage versions:

9420801.07.T	400V/3PNPE/50Hz (Plug 16A CEE) (R507)
9420801.S1.07.T	400V/3PNPE/50Hz (Plug 16A CEE) (R449A)
9420801.16.T	208-220V/3PPE/60Hz (Without Plug) (R507)
9420801.06.T	230V/3PPE/50Hz (Plug 32A CEE) (R507)

Other

Sound pressure level dbA	68
Classification	Classification III (FL)
IP Code	IP 20
Pump type	Centrifugal Pump
Pump type Magnetically coupled	1

Dimensions and volumes

Internal usable expansion volume l	5.6
Minimal process volume l	3.9
Active heat exchanger volume l	1.7

Cooling

Cooling of compressor 2-stage Air

Electronics

Digital interface	RS232, RS485 optional, Profibus optional, SD memory card, USB, Ethernet, Modbus, Alarm output, Reg/Eprog optional, Standby-Input optional
External pt100 sensor connection	integrated
2nd external Pt100 sensor connection	accessory
Integrated programmer	8x60 steps
Temperature control	ICC
Absolute temperature calibration	3 Point Calibration
Temperature display	5.7" TFT Touchscreen
Temperature setting	Touchscreen

Temperature values

Setting the resolution of the temperature display °C	0.01
Working temperature range °C	-80 ... +250
Temperature stability °C	±0.01 ... ±0.05

Weight kg	167	Ambient temperature °C	+5 ... +40
Dimensions cm (W × L × H)	43 x 65 x 126	Temperature display resolution °C	0.01
Pump connections	M24x1.5 male		

All Benefits



Touch display. Perfect operation.

With the touch display, the user always has an overview of all values and functions. The intuitive and multilingual menu structure enables perfect control.



Convenience for several users

Administrator level for customizing instrument settings, user levels with limited permissions for fast and safe defined access, password protection, all levels adjustable



100 % Cooling capacity

'Active Cooling Control' for cooling available throughout the entire working temperature range, fast cool-down even at higher temperatures



Intelligent temperature control.

Intelligent cascade control - automatic and self-optimizing adaptation of the PID control parameters with external stability of +/- 0.05 °C.



Full control

'Temperature Control Features', for individual optimization, access to all important control parameters, additional settings for band limit, limits, co-speedfactor etc.



Control of the external application

External Pt100 sensor connection for precise measurement and control directly in the external application



Highest measuring accuracy

'Absolute Temperature Calibration' for manual compensation of a temperature difference, 3-point calibration



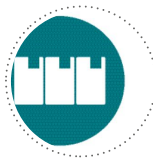
Intelligent pump system

Reliable and consistent pump capacity, electronically adjustable pump stages or pressure value, automatic adjustment of pump capacity to viscosity



Many interfaces.

Straight-forward remote control, data management, and integration into process structures. USB, Ethernet, RS232, SD card, and alarm off are permanently integrated. Further interfaces available as accessories.



Space-saving footprint

All connections as well supply and exhaust air are located at the front or rear, no venting grids on the sides, units can be placed close to each other or the application



Continuous operation up to +40 °C

Robust temperature control instrument, continuous operation even at ambient temperatures of up to +40 °C



Maximum safety.

Classification III according to DIN12876-1 enables safe operation, even with flammable fluids. Automatic switch-off in the event of high temperature or low liquid level.



Duplicate safety

Adjustable high temperature cut-off for internal tank and for integrated expansion vessel



For flammable bath fluid

Classification III (FL) according to DIN 12876-1



Quick support

If an error occurs, the integrated Black-Box function permits fast diagnosis by the JULABO service team



100% Checked.

100% testing. 100% quality. Each JULABO Circulator undergoes thorough quality testing before leaving the factory.



Green technology.

Development consistently applied environmentally friendly materials and technologies.



JULABO. Quality.

Highest standards of quality for a long product life.



Quick start.

Individual JULABO consultation and comprehensive manuals at your disposal.



Satisfied customers.

11 subsidiaries and more than 100 partners worldwide guarantee fast and qualified JULABO support.