

PRESTO W50 Process System

The rapid compensation of reactions even at higher ambient temperatures is the domain of the water-cooled W50 units. High heating and cooling capacity paired with powerful pumps.

Your advantages

- 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
- 5,7" industrial color TFT touch screen
- USB connection
- Ethernet
- SD-Card slot
- RS232
- Modbus
- RS485 (Accessory)
- Profibus DP (Accessory)
- CCC Anschlüsse für Alarm-Ausgang, Pt100-Externfühler und Standby-Eingang
- Pump pressure up to 3.2 bar, max. flow rate 76 l/min
- Cooling capacity up to 7.5 kW
- Second external Pt100 sensor connection (accessory)
- Temperature stability $\pm 0.05\text{ °C}$... $\pm 0.1\text{ °C}$



Technical data

Available voltage versions		Cooling	
Order No.	9 421 502	Cooling of compressor	1-stage Water
Available voltage versions:		Cooling water pressure max. bar	6 ... 5.5
9 421 502.07	400V/3PNPE/50Hz (Plug 16A CEE)	Cooling water difference pressure bar	0.5
9 421 502.16	208-230V/3PPE/60Hz (Without Plug)	Cooling water consumption l/min	8 ... 12
9 421 502.06	230V/3PPE/50Hz (Plug 32A CEE)		
Other		Electronics	
Sound pressure level dba	65	External pt100 sensor connection	integrated
Classification	Classification III (FL)	2nd external Pt100 sensor connection	accessory
IP Code	IP 20	Integrated programmer	8x60 steps
Pump type	Centrifugal Pump	Temperature control	ICC
Pump type Magnetically coupled	1	Absolute temperature calibration	3 Point Calibration
		Temperature display	5.7" TFT Touchscreen
		Temperature setting	Touchscreen
Dimensions and volumes		Temperature values	
Filling volume expansion vessel l	11.5	Setting display resolution °C	0.01
Internal usable expansion volume l	7.5	Working temperature range °C	-50.0 ... +250.0
Minimal process volume l	7.5	Temperature stability °C	± 0.05 ... ± 0.1
Active heat exchanger volume l	3.5	Ambient temperature °C	+5.0 ... +40.0
Weight kg	210	Temperature display resolution °C	0.01
Cooling Water Connection in	G $\frac{3}{4}$		
Dimensions cm (W x L x H)	53 x 66.5 x 126		
Pump connections	M30x1.5 male		

Power and capacities

400V/3PNPE/50Hz (Plug 16A CEE)

400V/3PNPE/50Hz

Heating capacity kW						6	
Cooling capacity (Ethanol)							
°C	200	20	0	-10	-20	-30	-40
kW	7	7.5	6.5	4.5	2.8	1.6	0.6
Viscosity max. cST						50	
Refrigerant						R452A	
Filling volume g						1100	
Global Warming Potential for R452A						2140	
Carbon dioxide equivalent t						2.354	
Pump capacity flow rate l/min						35 ... 76	
Pump capacity flow pressure bar						0.48 ... 3.2	

208-230V/3PPE/60Hz (Without Plug)

208V/3PPE/60Hz

Heating capacity kW							5.5
Cooling capacity (Ethanol)							
°C	200	20	0	-10	-20	-30	-40
kW	7	7.5	6.5	5	3	1.8	0.6
Viscosity max. cST							50
Refrigerant							R507
Filling volume g							0
Global Warming Potential for R507							3985
Carbon dioxide equivalent t							0
Pump capacity flow rate l/min							35 ... 76
Pump capacity flow pressure bar							0.48 ... 3

230V/3PPE/60Hz

Heating capacity kW							6
Cooling capacity (Ethanol)							
°C	200	20	0	-10	-20	-30	-40
kW	7	7.5	6.5	5	3	1.8	0.6
Viscosity max. cST							50
Refrigerant							R507
Filling volume g							0
Global Warming Potential for R507							3985
Carbon dioxide equivalent t							0
Pump capacity flow rate l/min							35 ... 76
Pump capacity flow pressure bar							0.48 ... 3.2

230V/3PPE/50Hz (Plug 32A CEE)

230V/3PPE/50Hz

Heating capacity kW						6	
Cooling capacity (Ethanol)							
°C	200	20	0	-10	-20	-30	-40
kW	7	7.5	6.5	4.5	2.8	1.6	0.6
Viscosity max. cST						50	
Refrigerant						R452A	
Filling volume g						1100	
Global Warming Potential for R452A						2140	
Carbon dioxide equivalent t						2.354	
Pump capacity flow rate l/min						35 ... 76	
Pump capacity flow pressure bar						0.48 ... 3.2	

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.



100 % Cooling capacity

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



Full control

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



Highest measuring accuracy

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



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.



Continuous operation up to +40 °C

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



Duplicate safety

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



Quick support

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



Green technology.

Development consistently applied environmentally friendly materials and technologies.



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



Intelligent temperature control.

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



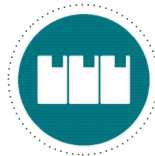
Control from the external application

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



Intelligent pump system

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



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



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.



For flammable bath fluid

Classification III (FL) according to DIN 12876-1



JULABO. Quality.

Highest standards of quality for a long product life.



Satisfied customers.

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



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



Quick start.
Individual JULABO consultation and comprehensive manuals at your disposal.



Services 24/7.
Around the clock availability. You can find suitable accessories, data sheets, manuals, case studies, and more at www.julabo.com.