

## PRESTO W56 Process System

The water-cooled PRESTO W56 can temperature control applications with high performance requirements very quickly and efficiently. Even at low temperatures it has large power reserves for challenging external applications.

The magnetically coupled pump allows the user to optimally adjust pump capacity to suit the application, even over large distances and height differences, as well as for pressure-sensitive applications. Use of the latest thermodynamic technologies means that the cooling capacity is automatically adjusted to the current power requirements. In combination with additional optimizations, this makes the PRESTO W56 very economical and energy-efficient.

Water-glycol up to +150 °C

The PRESTO W56 contains a technical innovation: Connection of an expansion kit allows pressurized temperature control with water-glycol up to a working temperature of +150 °C.



### Your advantages

- 5,7" industrial color TFT touch screen
- RS232/RS485 interface for online communication
- ATC function for simple correction of temperature variations
- Analog connections, RS485, Profibus DP (accessory)
- Ports for USB, Ethernet, RS232, Modbus
- Space optimized design creates more room directly next to the units
- Ethernet
- RS232

### Technical data

Available voltage versions		Cooling	
Order No.	9 421 562	Cooling of compressor	1-stage Water
Available voltage versions:		Cooling water pressure max. psi	87 ... 79.8
9 421 562.07	400V/3PNPE/50Hz (Plug 63A CEE)	Cooling water difference pressure psi	7.3 ... 87
9 421 562.17	480V/3P(N)PE/60Hz (Without Plug)	1.0Cooling water consumption l/min	14 ... 25
Other		Electronics	
Sound pressure level dbA	72	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 displayTemperature display	5.7" TFT Touchscreen
		Temperature settingTemperature setting	Touchscreen
Dimensions and volumes		Temperature values	
Filling volume expansion vessel l	18.5	Setting the resolution of the temperature display °C	0.01
Internal usable expansion volume l	17.5	Working temperature range °C	-56.0 ... 250.0
Minimal process volume l	11	Temperature stability °C	0.05 ... 0.1
Active heat exchanger volume l	10	Ambient temperature °C	+5.0 ... +40.0
Weight lbs	848.8	Temperature display resolution °C	0.01
Cooling Water Connection in	G¾		
Dimensions in. (W × L × H)	23.6 x 37 x 64.6		

Pump connections	M30x1.5 male
------------------	--------------

### Performance values

#### 400V/3PNPE/50Hz (Plug 63A CEE)

400V/3PNPE/50Hz							
Heating capacity kW	27						
Cooling capacity (Ethanol)							
°C	20	0	-10	-20	-30	-40	-50
kW	25.8	23.1	16.9	11.5	7.1	3.5	1.4
Viscosity max. cST	50						
Refrigerant	R449A						
Filling volume g	2550						
Global Warming Potential for R449A	1397						
Carbon dioxide equivalent t	3.562						
Pump capacity flow rate l/min	35 ... 80						
Pump capacity flow pressure psi	7 ... 46.4						

#### 480V/3P(N)PE/60Hz (Without Plug)

480V/3P(N)PE/60Hz 40A							
Heating capacity kW	27						
Cooling capacity (Ethanol)							
°C	20	0	-10	-20	-30	-40	-50
kW	25.8	23.1	16.9	11.5	7.1	3.5	1.4
Viscosity max. cST	50						
Refrigerant	R449A						
Filling volume g	2550						
Global Warming Potential for R449A	1397						
Carbon dioxide equivalent t	3.562						
Pump capacity flow rate l/min	35 ... 80						
Pump capacity flow pressure psi	7 ... 46.4						

### Benefits



**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.



**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.



**Control from 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



**JULABO. Quality.**  
 Highest standards of quality for a long product life.



**Quick start.**  
 Consultoria individual JULABO e instruções detalhadas ajudam a colocação em funcionamento dos seus aparelhos no local.



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



**Services 24/7.**  
 Around the clock availability. You can find suitable accessories, data sheets, manuals, case studies, and more at [www.julabo.com](http://www.julabo.com).