

## PRESTO W56x 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 PRESTO W56x process system is equipped with a gear pump. As a result, bath fluids with a high viscosity, such as water-glycol mixtures at low temperatures of up to  $-45\text{ }^{\circ}\text{C}$ , can also be used.

### Water-glycol up to $+150\text{ }^{\circ}\text{C}$

The PRESTO W56 contains a technical innovation: Connection of an expansion kit (accessorie) allows pressurized temperature control with water-glycol up to a working temperature of  $+150\text{ }^{\circ}\text{C}$ .



### Product features

- ATC function for simple correction of temperature variations
- Analog connections, RS485, Profibus DP (accessory)
- Ports for USB, Ethernet, RS232, Modbus
- Integrated 5.7" industrial color touchscreen displays all essential information and enables simple fingertip control
- Extensive warning, protection, and monitoring functions with detailed self-explanatory messages
- Profibus DP (Accessory)

### Performance values

480V/3P(N)PE/60Hz (Without Plug)	
Heating capacity kW	27
Viscosity max. cST	280
Pump capacity flow rate l/min	18 ... 70
Pump capacity flow pressure psi	11.6 ... 79.8
Power A	47

Order No.	9421563.S1.17						
Cooling capacity 1 (Ethanol)							
°C	20	0	-10	-20	-30	-40	-50
kW	25.8	23.1	16.9	11.5	7.1	3.5	1.4
Cooling capacity 2 (Thermal HL30)							
°C	20	10	0	-10	-20	-30	
kW	25.8	25.1	23.2	16.5	9.4	5.6	
Cooling capacity 3 (Water Glycol 40:60)							
°C	20	10	0	-10	-20	-30	-40
kW	25.6	25.2	23.3	16.2	9.1	5.7	2.3
Refrigerant stage 1							
Refrigerant	R449A						
Filling volume g	2550						
Global Warming Potential for R449A	1397						
Carbon dioxide equivalent t	3.562						

## Technical data

<b>Available voltage versions</b>		<b>Cooling</b>	
Order No.	9 421 563	Cooling of compressor	1-stage Water
Available voltage versions:		Cooling water temperature max. °C	35
9421563.S1.07	400V/3PNPE/50Hz (Plug 63A CEE) (R449A)	Cooling water pressure max. psi	87
9421563.S1.17	480V/3P(N)PE/60Hz (Without Plug) (R449A)	Cooling water difference pressure psi	7.3
		1.0Cooling water consumption l/min	14 ... 25
<b>Other</b>		<b>Electronics</b>	
Sound pressure level dbA	72	Digital interface	RS232, RS485 optional, Profibus optional, SD memory card, USB, Ethernet, Modbus, Alarm output, Reg/Eprog optional, Standby-Input optional
Classification	Classification III (FL)	External pt100 sensor connection	integrated
IP Code	IP 20	2nd external Pt100 sensor connection	accessory
Pump type	Gear Pump	Integrated programmer	8x60 steps
		Temperature control	ICC
		Absolute temperature calibration	3 Point Calibration
		Temperature display	5.7" TFT Touchscreen
		Temperature setting	Touchscreen
<b>Dimensions and volumes</b>		<b>Temperature values</b>	
Internal usable expansion volume l	17.5		

Minimal process volume l	11	Setting the resolution of the temperature display °C	0.01
Active heat exchanger volume l	10	Working temperature range °C	-45 ... +150
Weight lbs	848.8	Temperature stability °C	±0.05 ... ±0.5
Cooling Water Connection in	G¾	Ambient temperature °C	+5 ... +40
Dimensions in. (W x L x H)	23.6 x 37 x 64.6	Temperature display resolution °C	0.01
Pump connections	M38x1.5 male		

**Included in delivery**

**All Benefits**

 <p><b>100% Checked.</b> 100% testing. 100% quality. Each JULABO Circulator undergoes thorough quality testing before leaving the factory.</p>	 <p><b>Green technology.</b> Development consistently applied environmentally friendly materials and technologies.</p>
 <p><b>Touch display. Perfect operation.</b> With the touch display, the user always has an overview of all values and functions. The intuitive and multilingual menu structure enables perfect control.</p>	 <p><b>Convenience for several users</b> Administrator level for customizing instrument settings, user levels with limited permissions for fast and safe defined access, password protection, all levels adjustable</p>
 <p><b>100 % Cooling capacity</b> 'Active Cooling Control' for cooling available throughout the entire working temperature range, fast cool-down even at higher temperatures</p>	 <p><b>Intelligent temperature control.</b> Intelligent cascade control - automatic and self-optimizing adaptation of the PID control parameters with external stability of +/- 0.05 °C.</p>
 <p><b>Control of the external application</b> External Pt100 sensor connection for precise measurement and control directly in the external application</p>	 <p><b>Highest measuring accuracy</b> 'Absolute Temperature Calibration' for manual compensation of a temperature difference, 3-point calibration</p>
 <p><b>Intelligent pump system</b> Reliable and consistent pump capacity, electronically adjustable pump stages or pressure value, automatic adjustment of pump capacity to viscosity</p>	 <p><b>Many interfaces.</b> 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.</p>
 <p><b>Space-saving footprint</b> 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</p>	 <p><b>Continuous operation up to +40 °C</b> Robust temperature control instrument, continuous operation even at ambient temperatures of up to +40 °C</p>
 <p><b>Maximum safety.</b> 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.</p>	 <p><b>Duplicate safety</b> Adjustable high temperature cut-off for internal tank and for integrated expansion vessel</p>



**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.**  
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.



**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).