

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 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 (accessorie) allows pressurized temperature control with water-glycol up to a working temperature of +150 °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
- Connections for USB, Ethernet, RS232, and Alarm output
- Optional analog connections, RS485, Profibus DP, Modbus
- Profibus DP (Accessory)

Performance values

400V/3PNPE/50Hz (Plug 63A CEE)	
Heating capacity kW	27
Viscosity max. cST	280
Pump capacity flow rate l/min	18 ... 70
Pump capacity flow pressure bar	0.8 ... 5.5
Power A	47

Refrigerant variants

Order No.	9421563.S1.07					
Cooling capacity 1 (Thermal HL30)						
°C	20	0	-10	-20	-30	
kW	24.5	20.1	14.4	9.1	5.4	
Cooling capacity 2 (Water Glycol 40:60)						
°C	20	0	-10	-20	-30	-40
kW	24.5	19.4	13.8	8.9	4.8	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

Available voltage versions		Cooling	
Order No.	9 421 563	Cooling of compressor	1-stage Water
Available voltage versions:		Cooling water pressure max. bar	6
9421563.S1.07	400V/3PNPE/50Hz (Plug 63A CEE) (R449A)	Cooling water difference pressure bar	0.5 ... 6
9421563.S1.17	480V/3P(N)PE/60Hz (Without Plug) (R449A)	Cooling 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	Gear Pump	Temperature control	ICC
Dimensions and volumes		Absolute temperature calibration	3 Point Calibration
Internal usable expansion volume l	17.5	Temperature display	5.7" TFT Touchscreen
Minimal process volume l	11	Temperature setting	Touchscreen
Active heat exchanger volume l	10	Temperature values	
Weight kg	385	Setting the resolution of the temperature display °C	0.01
Cooling Water Connection in	G $\frac{3}{4}$	Working temperature range °C	-56.0 ... 250.0
Dimensions cm (W x L x H)	60 x 94 x 164	Temperature stability °C	0.05 ... 0.1
Pump connections	M38x1.5 male	Ambient temperature °C	+5.0 ... +40.0
		Temperature display resolution °C	0.01

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



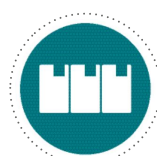
Highest measuring accuracy
'Absolute Temperature Calibration' for manual compensation of a temperature difference, 3-point calibration



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



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.