

# **PRESTO W55 Process System**

The powerful W55 regulates temperatures with high precision and convinces with faster cool-down and heat-up times. It is ideal for use in large external applications such as reactor temperature control, material stress testing or temperature simulation.

# 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
- Temperature stability ±0.05 °C ... ±0.1 °C
- Second external Pt100 sensor connection (accessory)



### Technical data

Available voltage versions		Cooling					
Order No. 9 421 552		Cooling of compressor	1-stage Water				
Available voltage versions:		Cooling water pressure max. psi	87 79.8				
9 421 552.16 208-230V/3PP	E/60Hz (Without Plug)	Cooling water difference pressure psi	7.3 87				
9 421 552.07 400V/3PNPE/	50Hz (Plug 32A CEE)	1.0Cooling water consumption I/min	2 12				
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 displayTemperature display	5.7" TFT Touchscreen				
		Temperature settingTemperature setting	Touchscreen				
Dimensions and volumes		Temperature values					
Filling volume expansion vessel I	11.5	Setting the resolution of the temperature	0.01				
Internal usable expansion volume I	7.5	display °C					
Minimal process volume I	11.5	Working temperature range °C	-55.0 +250.0				
Active heat exchanger volume I	7	Temperature stability °C	+/-0.05 +/-0.1				
Weight lbs	634.9	Ambient temperature °C	+5.0 +40.0				
Cooling Water Connection in	G¾	Temperature display resolution °C	0.01				
Dimensions in. (W $\times$ L $\times$ H)	24 x 33.3 x 49.2						
Pump connections	M30x1.5 male						



# Performance values

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

208V/3PPE/60Hz									
Heating capacity kW 12.5									
Coolir	Cooling capacity (Ethanol)								
°C	200	20	0	-10	-20	-30	-40	-50	
kW	13.5	15	10	6.5	4	2.5	1.2	0.3	
Viscosity max. cST 50									
Refrigerant						R452A			
Filling volume g						1600			
Global Warming Potential for R452A						2140			
Carbon dioxide equivalent t 3.42							3.424		
Pump capacity flow rate I/min 35 80									
Pump capacity flow pressure psi 7 43.5									

230V/3PPE/60Hz									
Heating capacity kW 15									
Cooling capacity (Ethanol)									
°C	200	20	0	-10	-20	-30	-40	-50	
kW	13.5	15	10	6.5	4	2.5	1.2	0.3	
Viscosity max. cST 50									
Refrigerant R452A									
Filling volume g						•	1600		
Global Warming Potential for R452A 2140									
Carbon dioxide equivalent t 3.424									
Pump capacity flow rate I/min 35 80									
Pump capacity flow pressure psi 7 46.4									

# 400V/3PNPE/50Hz (Plug 32A CEE)

400V/3PNPE/50Hz									
Heating capacity kW 15									
Cooling capacity (Ethanol)									
°C	200	20	0	-10	-20	-30	-40	-50	
kW	13.5	15	10	6.5	4	2.5	1.2	0.3	
Viscosity max. cST 50									
Refrigerant						R452A			
Filling volume g						1600			
Global Warming Potential for R452A						2140			
Carbon dioxide equivalent t 3.424									
Pump capacity flow rate I/min 35 80									
Pump capacity flow pressure psi 7 46.4									

# **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





#### Full control

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



#### 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



#### 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.



### Services 24/7.

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