

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
- Cooling capacity up to 7.5 kW
- 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. bar	6 ... 5.5
9 421 552.16	208-230V/3PPE/60Hz (Without Plug)	Cooling water difference pressure bar	0.5 ... 6
9 421 552.07	400V/3PNPE/50Hz (Plug 32A CEE)	Cooling water consumption l/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
Dimensions and volumes		Temperature display	5.7" TFT Touchscreen
Filling volume expansion vessel l	11.5	Temperature setting	Touchscreen
Internal usable expansion volume l	7.5	Temperature values	
Minimal process volume l	11.5	Setting display resolution °C	0.01
Active heat exchanger volume l	7	Working temperature range °C	-55.0 ... +250.0
Weight kg	288	Temperature stability °C	+/-0.05 ... +/-0.1
Cooling Water Connection in	G $\frac{3}{4}$	Ambient temperature °C	+5.0 ... +40.0
Dimensions cm (W x L x H)	61 x 84.5 x 125	Temperature display resolution °C	0.01
Pump connections	M30x1.5 male		

Power and capacities

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

208V/3PPE/60Hz									230V/3PPE/60Hz								
Heating capacity kW									Heating capacity kW								
12.5									15								
Cooling capacity (Ethanol)									Cooling capacity (Ethanol)								
°C	200	20	0	-10	-20	-30	-40	-50	°C	200	20	0	-10	-20	-30	-40	-50
kW	13.5	15	10	6.5	4	2.5	1.2	0.3	kW	13.5	15	10	6.5	4	2.5	1.2	0.3
Viscosity max. cST									Viscosity max. cST								
50									50								
Refrigerant									Refrigerant								
R452A									R452A								
Filling volume g									Filling volume g								
1600									1600								
Global Warming Potential for R452A									Global Warming Potential for R452A								
2140									2140								
Carbon dioxide equivalent t									Carbon dioxide equivalent t								
3.424									3.424								
Pump capacity flow rate l/min									Pump capacity flow rate l/min								
35 ... 80									35 ... 80								
Pump capacity flow pressure bar									Pump capacity flow pressure bar								
0.48 ... 3									0.48 ... 3.2								

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 l/min								
35 ... 80								
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.



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.



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



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



Green technology.
 Development consistently applied environmentally friendly materials and technologies.



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.