

FPW55-SL Ultra-Low Refrigerated-Heating Circulator

Ultra-Low Refrigerated Circulators with SL circulator impress with their high heating, cooling and pump capacities for external temperature control applications.

Your advantages

- VFD COMFORT DISPLAY
- LCD DIALOG DISPLAY backlit for convenient interactive operation
- Keypad for setpoints, warning/safety values and menu functions
- ICC (Intelligent Cascade Control), self-optimizing temperature control
- TCF Temperature Control Features to optimize the control behavior
- ATC3 3-Point-Calibration
- Pt100 External sensor connection for measurement and control
- SMART PUMP, electronically adjustable pump stages
- · Adjustable high temperature cut-out, visible via display
- RS232/RS485 interface for online communication
- Integrated programmer for 6 x 60 program steps
- · Connections for solenoid valve and HSP booster pump
- Proportional cooling control

Technical data

Available voltage versions			Bath			
Order No.	9 352 756N150		Bath cover	integrated		
Available voltage versions	s:					
9 352 756N150.07	400V/3PNPE/50Hz (Plug 32A CEE)					
9 352 756N150.16	208V/3PPE/60Hz (Without Plug)					
Cooling			Other			
Cooling of compressor		1-stage Water	Classification	Classification III (FL)		
Cooling water pressure max. bar		6	IP Code	IP 21		
Cooling water difference pressure bar		3.5 6				
Cooling water consumption l/min		6.6				
Electronics			Dimensions and volumes			
Digital interface		Profibus optional	Weight kg	146		
External pt100 sensor connection		integrated	Cooling Water Connection in	G¾		
Integrated programmer		6x60 steps	Dimensions cm ($W \times L \times H$)	59 x 76 x 116		
Temperature control		ICC	Filling volume I	27		
Absolute temperature calibration		3 Point Calibration	Pump connections	M16x1 male		
Temperature display		VFD				
Temperature setting		Keypad				
Temperature values						
Setting the resolution of the temperature display °C		0.01				
Temperature display resolution °C		0.01				

Performance values





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

400V/3PNPE/50Hz							
Heating capacity kW						3	
Cooling capacity (Ethanol)							
°C	20	0	-20	-40	-60		
kW	5.2	4.1	2.2	1	0.13		
Viscosity max. cST 70							
Refrigerant						R452A	
Filling volume g						850	
Global Warming Potential for R452A						2140	
Carbon dioxide equivalent t						1.819	
Pump capacity flow rate l/min						22 26	
Pump capacity flow pressure bar						0.4 0.7	
Maximum suction bar						0.2 0.4	

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

208V/3PPE/60Hz		230V/3PPE/60Hz			
Heating capacity kW	3	Heating capacity kW	3		
Cooling capacity (Ethanol)		Cooling capacity (Ethanol)			
°C 20 0 -20 -40 -60		°C 20 0 -20 -40 -60			
kW 5.2 4.1 2.2 1 0.13		kW 5.2 4.1 2.2 1 0.13			
Viscosity max. cST	70	Viscosity max. cST	70		
Refrigerant	R452A	Refrigerant	R452A		
Filling volume g	850	Filling volume g	850		
Global Warming Potential for R452A	2140	Global Warming Potential for R452A	2140		
Carbon dioxide equivalent t	1.819	Carbon dioxide equivalent t	1.819		
Pump capacity flow rate l/min	22 26	Pump capacity flow rate I/min	22 26		
Pump capacity flow pressure bar	0.4 0.7	Pump capacity flow pressure bar	0.4 0.7		
Maximum suction bar	0.2 0.4	Maximum suction bar	0.2 0.4		

Benefits



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



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





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

100% Checked. 100% testing. 100% quality. Each JULABO Circulator undergoes thorough quality test

Circulator undergoes thorough quality testing before leaving the factory.

°C

function





Quick start. Individual JULABO consultation and

comprehensive manuals at your disposal.



Intelligent temperature control. Intelligent cascade control - automatic and self-optimizing adaptation of the PID control parameters with external stability of +/- 0.05



Early warning system for high/low temperature limits Maximum safety for applications, optical and



Control from the external application External Pt100 sensor connection for precise measurement and control directly in the external application



ATC3. Calibration. 'Absolute Temperature Calibration' for

compensating a physically caused temperature difference, 3-point calibration.



100 % Cooling capacity

'Active Cooling Control' for cooling available throughout the entire working temperature range, fast cool-down even at higher temperatures



Condensation and ice protection

A heated cover plate prevents condensation or ice build-up in the bath

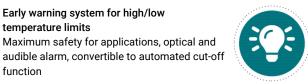


Around the clock availability. You can find suitable accessories, data sheets, manuals, case studies, and more at www.julabo.com.

Services 24/7.



Connection of additional equipment Stakei connections for solenoid valve, HSP booster pump and HST booster heater



Clever pump system Reliable and consistent pump capacity, electronically adjustable pump stages



For flammable bath fluid Classification III (FL) according to DIN 12876-1



Process. Under control. Full regulation of the dynamics control, access to all important control parameters for individual process optimization.



Energy saving cooling

Proportional cooling control for automatic adjustment of cooling power or temporary switch-off of compressor as needed to save up to 90 % energy in comparison to unregulated cooling machines