

# SC2500w Recirculating Cooler

The SemiChill series offers powerful recirculating coolers. These units have been especially designed for applications in the semiconductor industry. Five models are available, with cooling capacities from 2.5 to 10 kW (air- or water-cooled). Working temperature ranges from +5 to +35  $^{\circ}$ C which can optionally be extended from -20 to +130  $^{\circ}$ C.

Also available is a selection of powerful pumps. The units can be modified to provide heater capacities up to 5 kW. Selection between different electronic modules to conform to simple or high demands such as, for example flow rate and conductivity measurement, external temperature control or integration of the coolers via analogue signals, RS232, devicenet or ethernet. A large range of accessories and options including DI filters, microfilters, USB adapters, etc. is available.

## Your advantages

- For the most demanding applications
- · No side vents, instruments can be placed right next to other equipment
- · Handles and castor make relocation easy
- · Industrial grade mains power switch and emergency cut-off
- Pressure Indicator
- · Front filling port
- Low noise level
- · Precise PID temperature control
- · ATC3 3-Point-Calibration
- · Warning and safety functions

Working temperature range °C

Temperature stability °C

Ambient temperature °C

· Modular design allows selection between different options



# **Technical data**

Available voltage versions			Bath		
Order No.	9 5XX 026		Bath tank	Stainless steel	
Available voltage versions:					
9 5XX 026.03	230V/50Hz (Schuko Plug - CEE 7/4 Plug Type F)				
9 5XX 026.13	208-230V/60Hz (Nema N6-20 Plug)				
Cooling			Other		
Cooling of compressor		1-stage Water	Sound pressure level dbA	65	
Cooling water pressure max. bar		6	Classification	Classification III (FL)	
Cooling water difference pressure bar		3.5 6	IP Code	IP 21	
Cooling water consumption I/min		5	Pump type	Immersion Pump	
Electronics		Dimensions and volumes			
Temperature setting		Keypad	Weight kg	122.5	
			Cooling Water Connection in	G3⁄4	
			Barbed fittings inner diameter	3/4"	
			Dimensions cm (W $\times$ L $\times$ H)	49 x 62 x 105	
			Filling volume I	21 33	
			Pump connections	NTP¾" male	
Temperature values					

-20 ... +80

±0.1

5 ... 40



## Performance values

# 230V/50Hz (Schuko Plug - CEE 7/4 Plug Type F)

230V/50Hz						
Heatin	ıg capa	acity d	1			
Cooling capacity (Ethanol)						
°C	20	0	-10			
kW	2.5	1.5	0.9			
Pump capacity flow rate depends on options				1		
Pump option	•	ity flov	1			
Viscos	sity ma	x. cST	30			
Refrig	erant		R452A			
Filling	volum	e g	750			
Global	Warm	ing Po	2140			
Carbo	n dioxi	de equ	1.605			

## 208-230V/60Hz (Nema N6-20 Plug)

208V/60Hz		230V/60Hz		
Heating capacity depends on options	1	Heating capacity depends on options	1	
Cooling capacity (Ethanol)		Cooling capacity (Ethanol)		
°C 20 0 -10		°C 20 0 -10		
kW 2.5 1.5 0.9		kW 2.5 1.5 0.9		
Pump capacity flow rate depends on options	1	Pump capacity flow rate depends on options	1	
Pump capacity flow pressure depends on options	1	Pump capacity flow pressure depends on options	1	
Viscosity max. cST	30	Viscosity max. cST	30	
Refrigerant	R452A	Refrigerant	R452A	
Filling volume g	750	Filling volume g	750	
Global Warming Potential for R452A	2140	Global Warming Potential for R452A	2140	
Carbon dioxide equivalent t	1.605	Carbon dioxide equivalent t	1.605	

## **All Benefits**



## 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.



## Process. Under control.

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



## For higher demands

PID Temperature control with drift compensation and adjustable parameters, improved temperature stability for external applications, temperature stability  $\pm 0.01$  °C internal,  $<\pm 0.1$  °C external.





### 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.



# Early warning system for high/low temperature limits

Maximum safety for applications, optical and audible alarm, convertible to automated cut-off function



## Connection of additional equipment

Stakei connections for solenoid valve, HSP booster pump and HST booster heater



### For flammable bath fluid

Classification III (FL) according to DIN 12876-1



#### Precise

PID Temperature control with set control parameters, temperature stability ±0.02...±0.2 °C



## Services 24/7.

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



### Quick start.

Individual JULABO consultation and comprehensive manuals at your disposal.



### 100% Checked.

100% testing. 100% quality. Each JULABO Circulator undergoes thorough quality testing before leaving the factory.



### 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.



### JULABO. Quality.

Highest standards of quality for a long product life



### Clever pump system

Reliable and consistent pump capacity, electronically adjustable pump stages