

# 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 watercooled). Working temperature ranges from +5 to +35 °C which can optionally be extended from -20 to +130 °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
- · 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				
9 5XX 026.13				
Cooling		Other		
Cooling of compressor	1-stage Water	Sound pressure level dbA 65		
Cooling water pressure max. bar	6	Classification Classification		
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	G¾	
		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				
Working temperature range °C	-20 +80			
Temperature stability °C	±0.1			
Ambient temperature °C	5 40			



#### Performance values

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

230V/50Hz						
Heating capacity				depends on options		
Cooling capacity (Ethanol)						
°C	20	0	-10			
kW	2.5	1.5	0.9			
Pump capacity flow rate			v rate	depends on options		
Pump capacity flow pressure			v pressure	depends on options		
Viscosity max. cST				30		
Refrigerant			R452A			
Filling volume g			750			
Global Warming Potential for R452A			2140			
Carbon dioxide equivalent t			ivalent t	1.605		

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

208V/60Hz		230V/60Hz		
Heating capacity depends on options		Heating capacity	depends on options	
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	Pump capacity flow rate	depends on options	
Pump capacity flow pressure	depends on options	Pump capacity flow pressure	depends on options	
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



#### Process. Under control.

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



## Intelligent temperature control.

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



## For higher demands

PID Temperature control with drift compensation and adjustable parameters, improved temperature stability for external applications, temperature stability ±0.01 °C internal, <±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



## 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



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



Services 24/7.



#### Ouick 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



## Clever pump system

Reliable and consistent pump capacity, electronically adjustable pump stages