SC2500a 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 °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	
Order No.	9 5XX 025
Available voltage versions:	
9 5XX 025.03	
9 5XX 025.07	
9 5XX 025.13	

Bath	
Bath tank	Stainless steel

Cooling	
Cooling of compressor	1-stage Air

Other	
Sound pressure level dbA	65
Classification	Classification III (FL)
IP Code	IP 21
Pump type	Immersion Pump

Electronics	
Temperature setting	Keypad

Dimensions and volumes	
Weight kg	120
Barbed fittings inner diameter	¾"
Dimensions cm (W × L × H)	49 x 62 x 105
Filling volume l	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				depends on options
Pump capacity flow pressure				depends on options
Viscosity max. cST				30
Refrigerant				R452A
Filling volume g				1050
Global Warming Potential for R452A				2140
Carbon dioxide equivalent t				2.247

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

400V/3PNPE/50Hz				
Heating capacity				depends on options
Cooling capacity (Ethanol)				
°C	20	0	-10	
kW	2.5	1.5	0.9	
Pump capacity flow rate				depends on options
Pump capacity flow pressure				depends on options
Viscosity max. cST				30
Refrigerant				R452A
Filling volume g				1050
Global Warming Potential for R452A				2140
Carbon dioxide equivalent t				2.247

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

208V/60Hz				
Heating capacity				depends on options
Cooling capacity (Ethanol)				
°C	20	0	-10	
kW	2.5	1.5	0.9	
Pump capacity flow rate				depends on options
Pump capacity flow pressure				depends on options
Viscosity max. cST				30
Refrigerant				R452A
Filling volume g				1050
Global Warming Potential for R452A				2140
Carbon dioxide equivalent t				2.247

230V/60Hz				
Heating capacity				depends on options
Cooling capacity (Ethanol)				
°C	20	0	-10	
kW	2.5	1.5	0.9	
Pump capacity flow rate				depends on options
Pump capacity flow pressure				depends on options
Viscosity max. cST				30
Refrigerant				R452A
Filling volume g				1050
Global Warming Potential for R452A				2140
Carbon dioxide equivalent t				2.247

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 °C.

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 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.

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