

# SEMI series chiller

water-water-chiller systems



model		2 kW	5 kW	8 kW
refrigerant		R290	R513a	
medium		water with additives/DI-water/water		
material in contact with the medium		stainless steel and plasticiser free plastics		
process water temperature °C		13°C to 25°C (coolant water)		
temperature stability [K]		≤ ±0.1	≤ ±0.2	
standard flow rate and pressure <sup>5)</sup> [l/m] [bar]		8/3	19/3	
water circuit	water tank volume [l]	6	9	14
	filtration grade secondary circuit [µm]	5 to 200		
	bypass	adjustable		
	flow sensor	flow turbine		
	tank level sensor	continuous analog sensor		
	connection	4x g1/2" internal thread	4x g3/4" internal thread	
	dimension	HU (44.45mm)		
	height/dept/width [mm]	1030x606x366	1100x1000x450	
electrical system	supply voltage	1-phase 230V AC (±10%) 50Hz	3-phase 400V AC (±10%) 50Hz 3-phase 460V AC (±10%) 60Hz	3-phase 400V AC (±10%) 50Hz 3-phase 460V AC (±10%) 60Hz
	frequency	50 Hz and 60 Hz		
control systems	controller	CCC5		
	interlocks	SUB-D 9 M?		
	interface	RS485 and Ethernet		
	protocol	modbus RTU (RS485) and TCP (Ethernet)		
optional features		high pressure pump, ambient temperature sensor, relief valve, pressure sensor, smoke detector, mounting set for primary water filter		
noise level at 1m	[db(A)]	65		
approvals		CE, REACH, ROHS, UKCA		
conform to		UL, SEMI (S2, S8, F47)		

## Equipment

- suitable for DI water or water with additives
- water bypass valve set
- temperature accuracy ≤ 0.1 K
- remote start via 24 V DC signal
- leak sensor
- seismic brackets
- interface RS-485 and Ethernet



## Options

- conductivity regulation and monitoring
- ambient temperature display
- pressure measurement and monitoring
- heating/temperature/cooling capacity measurement
- smoke detector
- water filters and pressure relief valve
- high pressure pump
- Interface: various protocols on demand

## Advantages at a glance:

- conform to UL and SEMI (S2, S8, F47)
- suitable for semiconductor applications
- low noise and vibration
- multifunctional controller platform
- suitable for a variety of fluid media (waterglycol, di etc.)
- temperature stability ≤ 0,1 K
- reduced footprint

## Perfectly coordinated technology

A robust refrigeration technology, customized for the respective application is the prerequisite for a reliable, stable and economic production process.

For more than 50 years the technotrans group is a strong and competent partner for cooling, temperature control and filtration, and offers high quality system solutions for the graphics, laser and tooling industries worldwide. In order to fulfill the important demands for the semiconductor industry, technotrans has developed a new series, which is conform to the S2, S8 and F47 norms. The possible individual customization supports you in your individual requirements.

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