

LIAT V Series

Inverter-Controlled Precision Chiller

VS010-W-32/ VD100-W-32/ VT410-W-33

Real-time load
matching control

Adaptive

Faster heating and
cooling response

Responsiveness

Optimized energy
consumption reduction

Efficiency



Full-Range Wide Span

Single-channel covers $-20^{\circ}\text{C} \sim +90^{\circ}\text{C}$, VT series three channels cover -45°C , $+90^{\circ}\text{C}$, and $+55^{\circ}\text{C}$ independently, one-stop solution from deep-cool to high-temp for complete process chain



Inverter Energy Efficient

Standard inverter compressors modulate output based on real-time thermal load, eliminating start-stop losses of fixed-speed units, superior energy efficiency reducing long-term Fab electricity costs



High-Precision Stable Control

$\pm 0.1^{\circ}\text{C}$ steady-state accuracy across all series with fast dynamic response and minimal overshoot, ensuring batch-to-batch consistency for nano-scale manufacturing



Compact Standard Design

Ultra-narrow 380mm footprint minimum, fully SEMI S2/S8 compliant

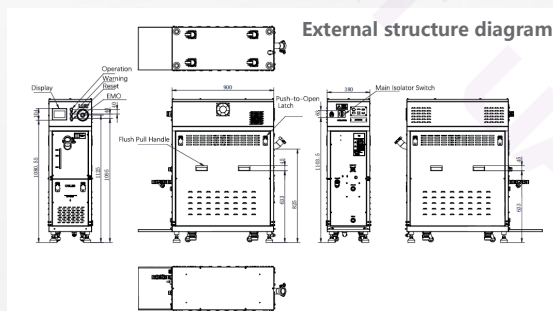


VS010-W-32F

SEMI Standard
S2, S8



TÜVRheinland®
Precisely Right.



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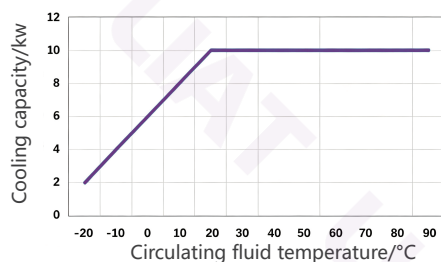


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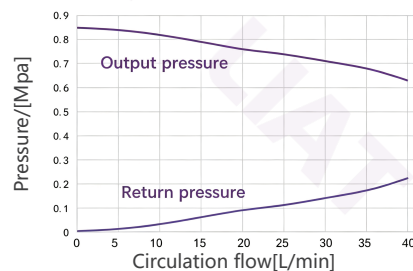
Inverter-Controlled Precision Chiller

Model	VS010-W-32	VS407-W-33	VD010-W-32	VT410-W-33
Cooling Method	Water-Cooling			
Control Mode	PID Control			
Temperature Control Range	-20°C~+90°C	-40°C~+80°C	-20°C~+90°C	CH1:-45~+60°C CH2:+30~+90°C CH3:+10~+55°C
Precision	±0.1°C	±0.1°C		
Refrigeration Capacity	-20°C@2 KW -10°C@4 KW 20°C@10 KW	-40°C@6 KW -20°C@12 KW 0°C@25 KW 20°C@25 KW 40°C @25 KW	CH1/ CH2: -20°C@2 KW -10°C@4 KW 0°C@6 KW 20°C@10 KW 80°C@10 KW	CH1:6KW@-40°C CH2:30KW@+30°C CH3:28KW@+20°C
Heater	3kW	3kW	CH1:3KW CH2:3KW	CH1:4KW CH2:14KW CH3:4KW
Tank	20L	25L	CH1: 20 L CH2: 20 L	CH1 / CH2 shared expansion tank 30L + hot water tank 25L
Circulating Liquid Flow Rate	20L/min(0.7MPa)	20L/min(0.7MPa)	CH1:20 L/min (0.7MPa) CH2:20 L/min (0.7MPa)	CH1:17 L/min @ 0.9MPa CH2:17 L/min @ 0.9MPa CH3:25 L/min @ 0.76MPa
PCW Traffic	15 L/min@15~25°C	50 L/min@15~25°C	CH1: 15 L/min@15~25 °C CH2: 15 L/min@15~25 °C	CH1: 50 L/min@15~25°C@0.3MPa CH2: 20 L/min@15~25°C@0.3MPa CH3: 50 L/min@15~25°C@0.3MPa
Types of Circulating Fluid	Ethylene glycol mixture, fluorinated liquid	Ethylene glycol mixture, fluorinated liquid	Ethylene glycol mixture, fluorinated liquid	FC3283
Refrigerant	R410A	R410A	R410A	R410A
Circulating Liquid Interface	Rc3/4"	Rc3/4"	Rc3/4" x 2	CH1/CH2/CH3: Rc 3/4"
PCW Interface	Rc1/2"	Rc1-1/4"	Rc1/2" x 2	CH1/CH2/CH3: Rc1"
External Dimensions (mm)	380W*900D*1250H	500W*1150D*1500H	600W*920D*1300H	600W*1370D*2000H
Input Power Supply	3Ph,208-220V,50Hz	3Ph,380-400V,50Hz	3Ph,208-220V,50Hz	3Ph,380-400V,50Hz
Machine Power	7.7kW	14kW	16kW	41.1 KW
net Weight	200kg	360kg	350kg	600 kg
Design Standards	SEMI			

Cooling capacity curves at different temperatures



Pump Performance[50HZ]



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