

VRT22X1

DATASHEET



Cooling capacity KW	min 5	std 14	max 22
Cooling power source KW	min 0,8	std 2,3	max 4,0
Heating capacity KW	min 5	std 14	max 22
Heating power source KW	min 0,8	std 2,3	max 4,0

Total BTU Capacity:	Comparable to 115.000 BTU/h of the competitors.		
Power supply options:	180 - 250 VAC 1Phase / 50-60Hz → <i>mod. VRT22X1-2V</i> On request: 400VAC → <i>mod. VRT22X1-4V</i> On request: 700VDC → <i>mod. VRT22X1-7V</i>		
Sea water pump:	Magnetic type 260W included in unit power consumption. 135 lt/min		
Size W x D x H:	674 x 571 x 479 mm		
Weight:	77 Kg		
Sea water working range:	+3°C to +40°C	Option polar water: -5°C	
Air working range:	-20°C to +50°C		
Noise:	Compressor @ 140 hz – 73db @ 1 meter from box		
Vibration:	No significant vibration transmitted to the feet		
Sea water pipes connection:	1" 1/2		
Refrigerant pipe:	3 x 5/8" Gas	3 x 1/2" Liquid	

Compressor box use VRT inverter architecture with refrigerant circulation inside air handler
Databus rs485 Modbus on board.

System based on Toshiba VFD and twin rotary compressor.



CONDENSER:

Titanium Grade 2. No fouling, no corrosion. 3 times lighter than copper nickel



COMPRESSOR:

Toshiba inverter twin rotary. COP > 4

Rotation speed: 600 to 6000 rpm



FRAME:

Stainless Steel 316



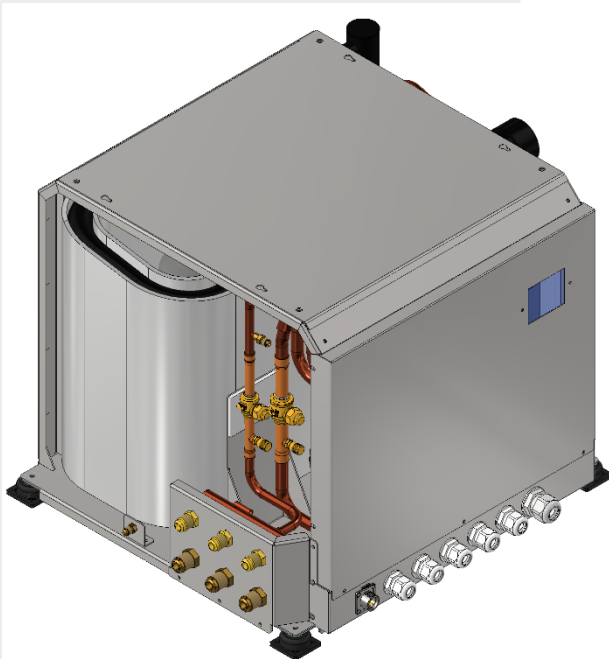
SOFTWARE MANAGEMENT:

Compressor high temperature, low temperature, high pressure condenser, low pressure compressor, electronic pressure gas, electronic pressure liquid, Condensation control, Evaporation control



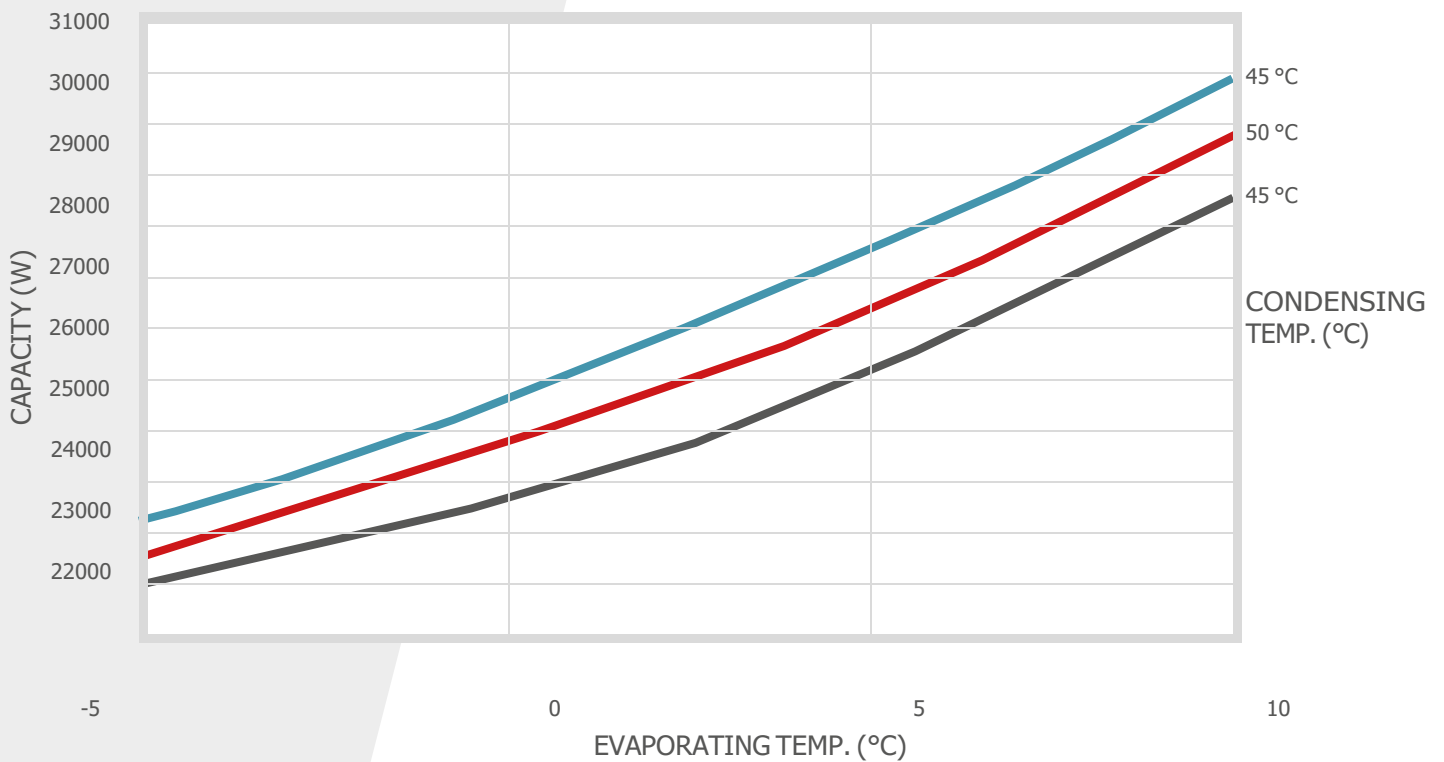
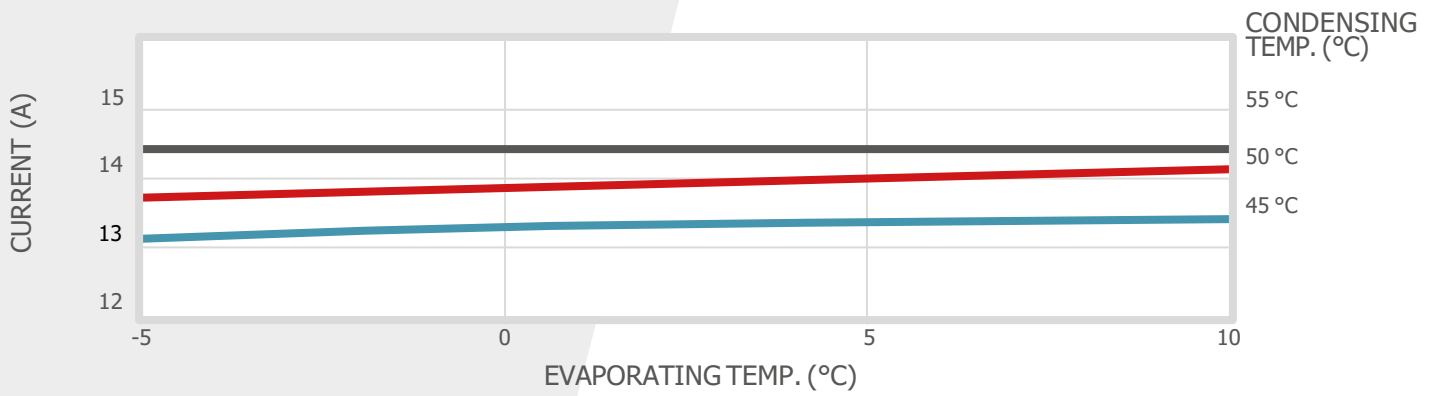
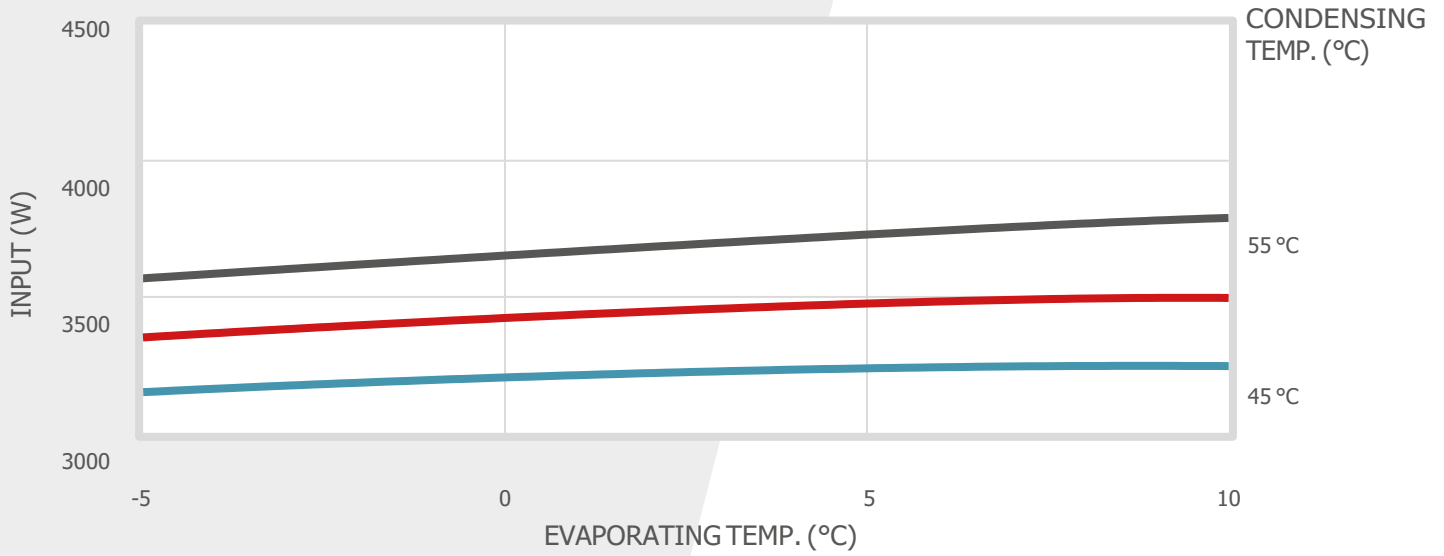
COMPRESSOR PROTECTION:

Over/undervoltage, overcurrent, torque, winding temperature, stepout (bad lubrication), power input, power output, efficiency, overload, oil level (with EEV)



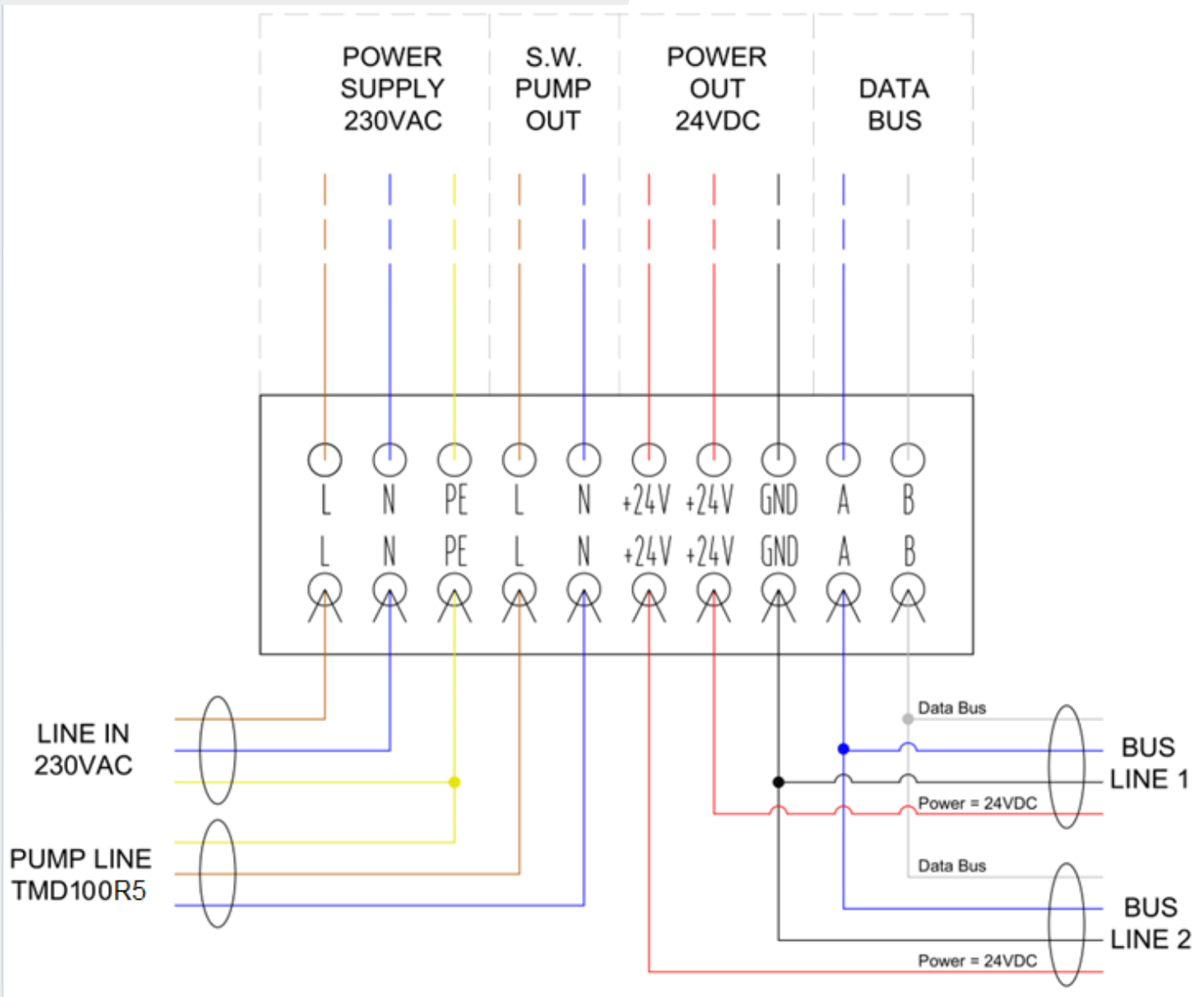
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PERFORMANCE CURVE DC INVERTER 70 rps/ 100



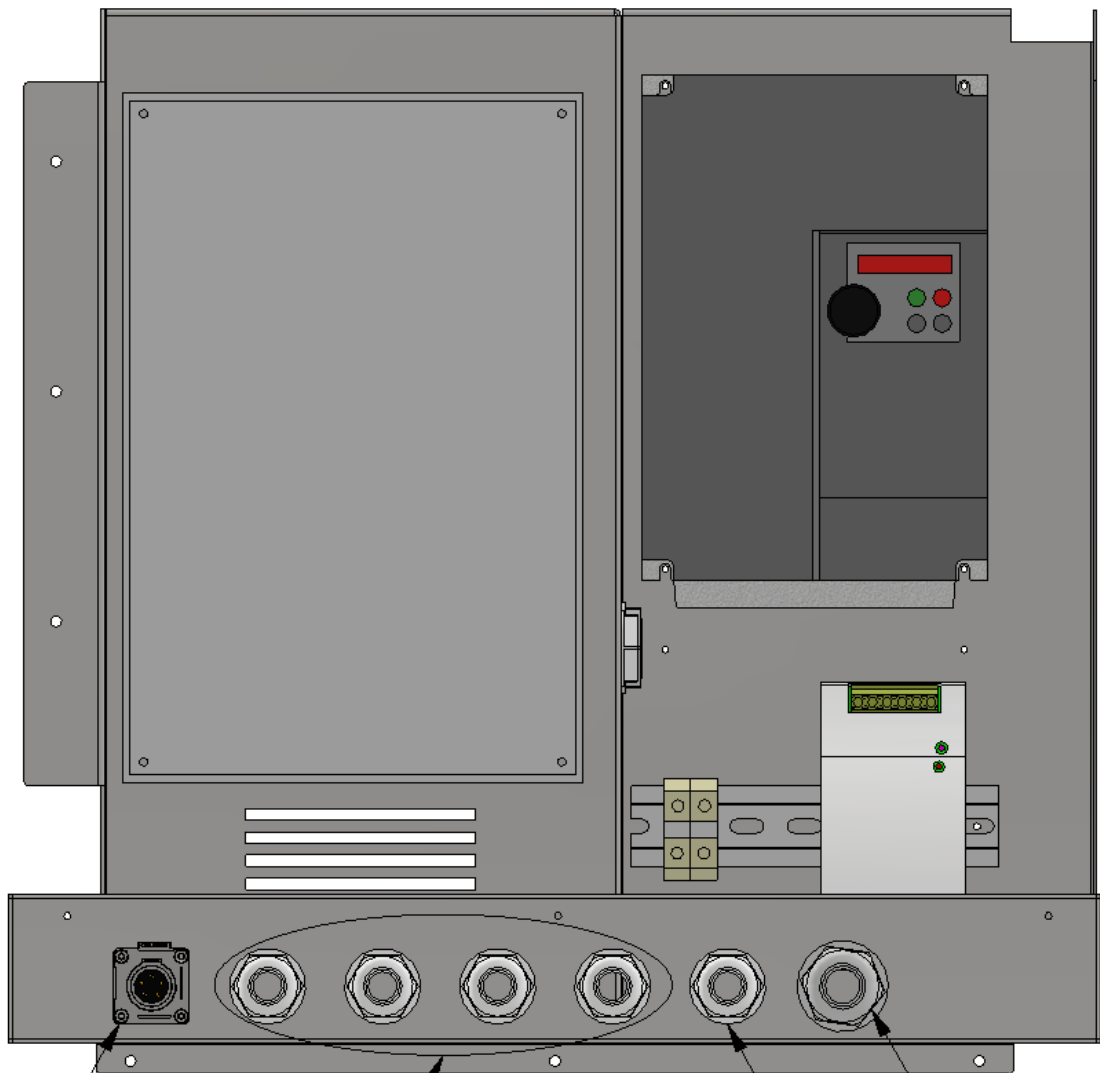
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ELECTRICAL CONNECTIONS





230VAC INVERTER PANEL DETAIL



PROGRAMMING CONNECTOR

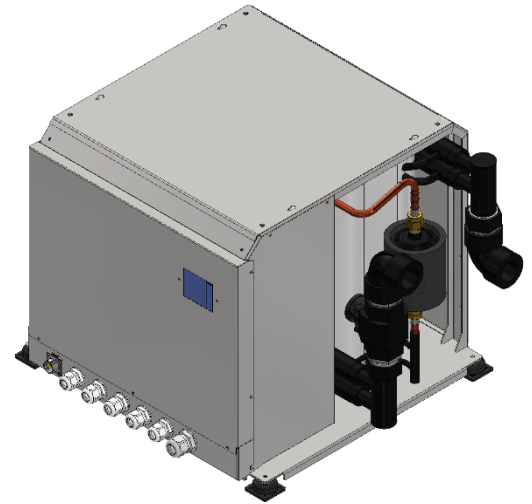
24VDC AND BUS CONNECTIONS

230VAC LINE IN

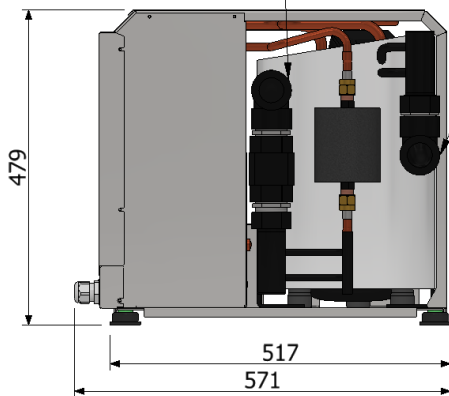
SEA WATER PUMP LINE

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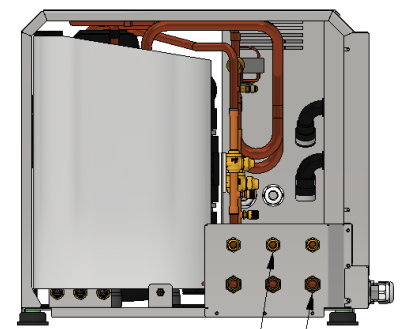
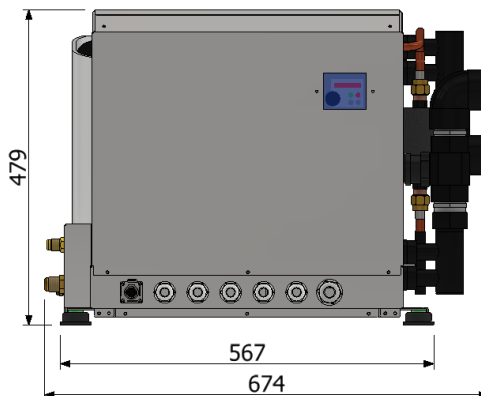
OVERALL DIMENSIONS



WATER IN 1" 1/2



WATER OUT 1" 1/2



LIQUID 3 x 1/2"

GAS 3 x 5/8"

