



VRT30X1

DATASHEET



Cooling capacity KW	min 5	std 20	max 30
Cooling power source KW	min 1	std 4	max 5,8
Heating capacity KW	min 5	std 20	max 30
Heating power source KW	min 1	std 4	max 5,8

Total BTU Capacity:
Power supply options:

Comparable to 135.000 BTU/h of the competitors.
180 - 250 VAC 1Phase / 50-60Hz → *mod. VRT30X1-2V*
On request: 400VAC → *mod. VRT30X1-4V*
On request: 700VDC → *mod. VRT30X1-7V*

Sea water pump:

Magnetic type 370W included in unit power consumption.
220 lt/min

Size W x D x H:

674 x 571 x 479 mm

Weight:

80 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 VRV 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



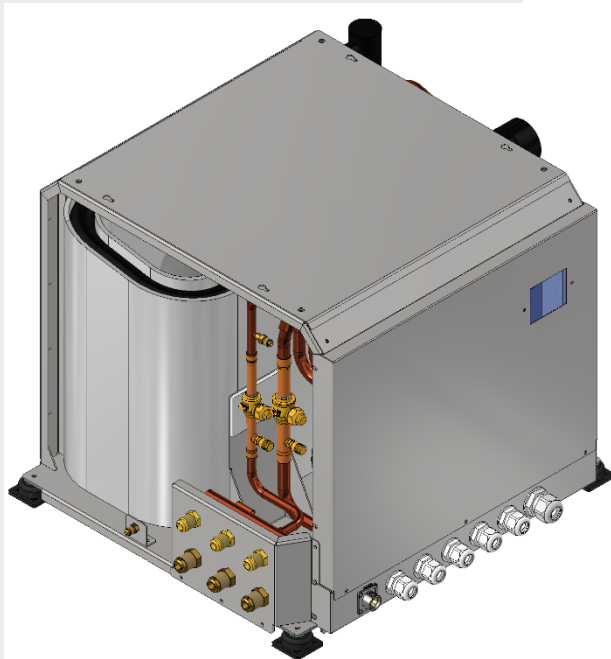
SOFTWARE MANAGEMENT:

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



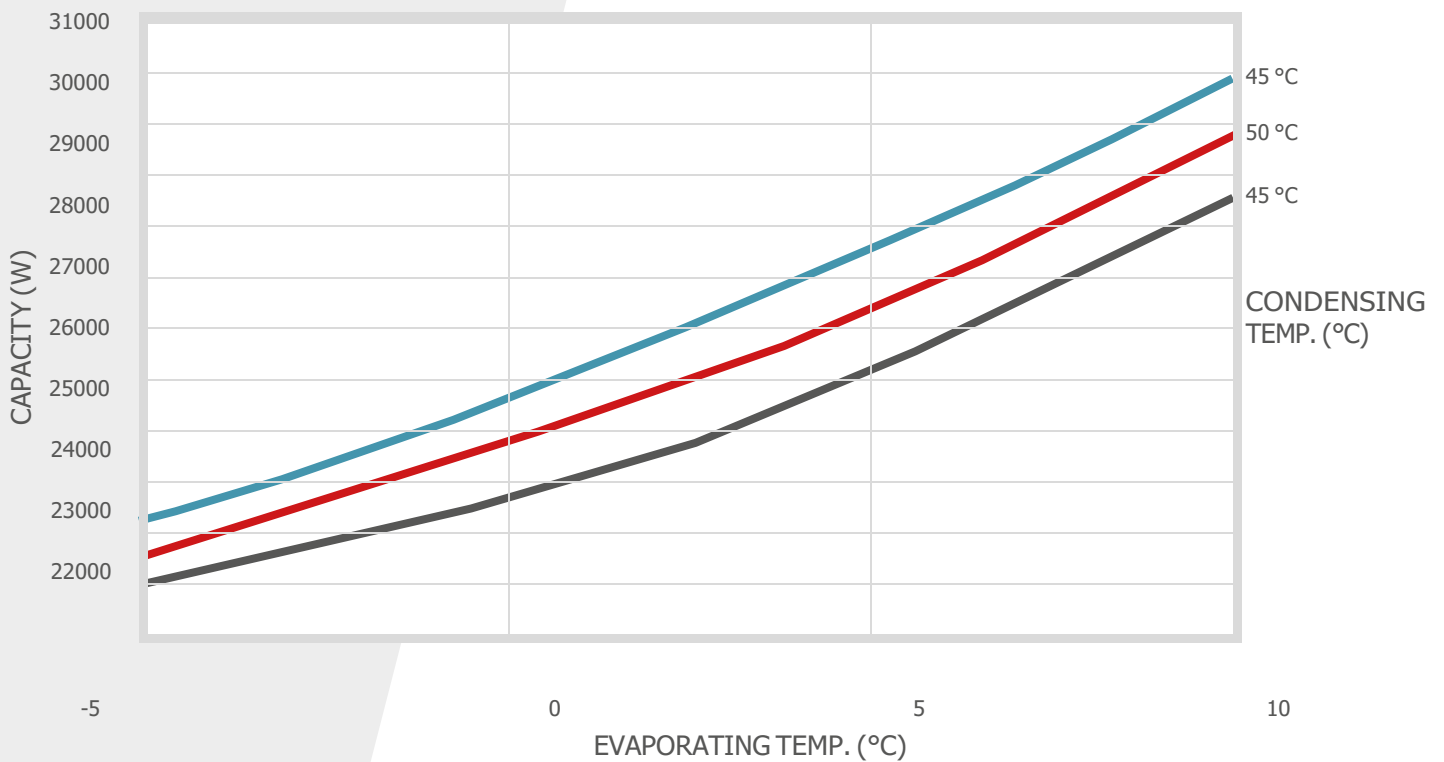
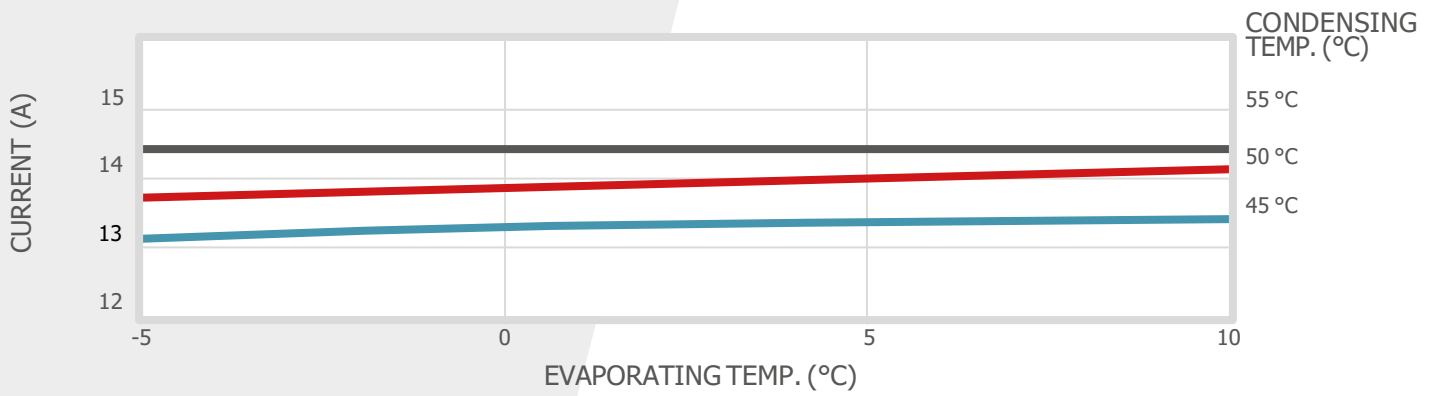
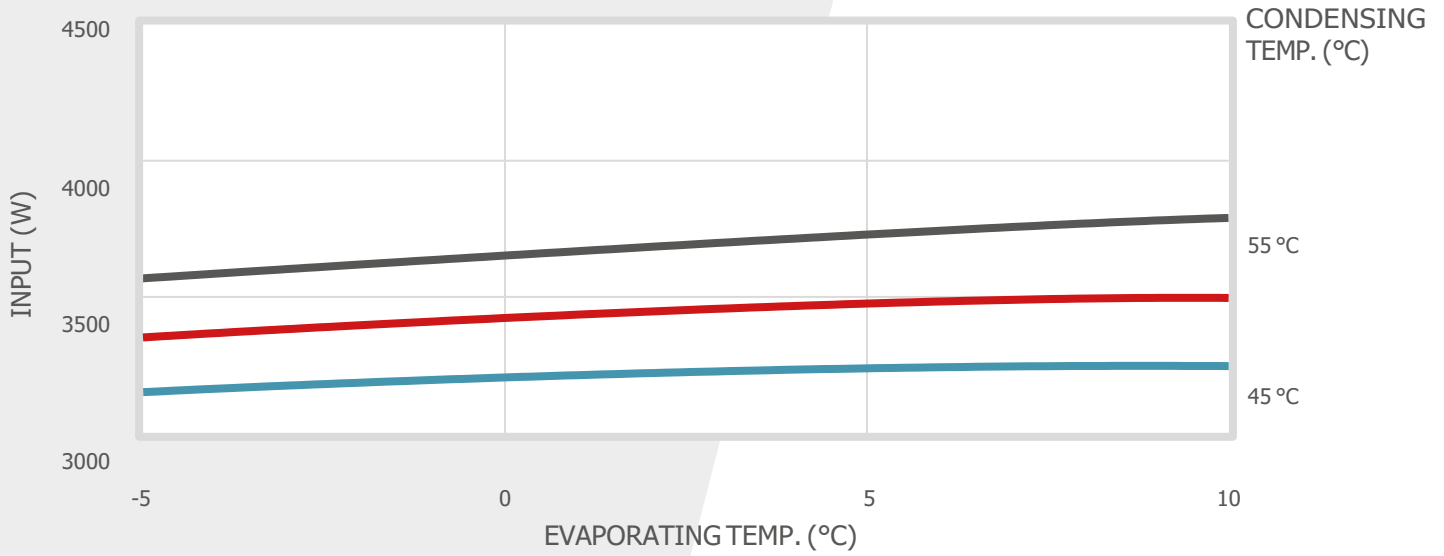
COMPRESSOR PROTECTION:

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



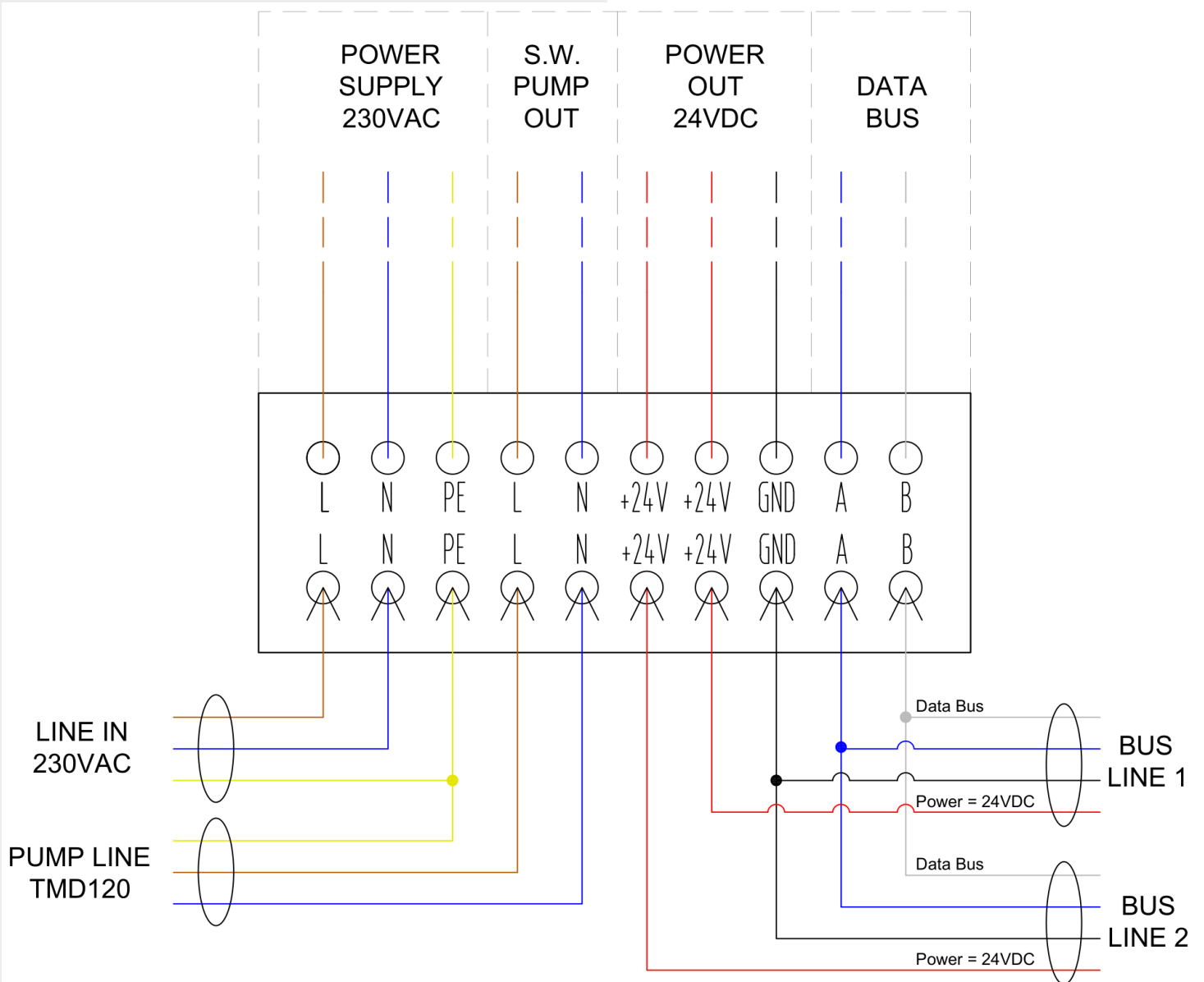
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PERFORMANCE CURVE DC INVERTER 70 rps/ 100



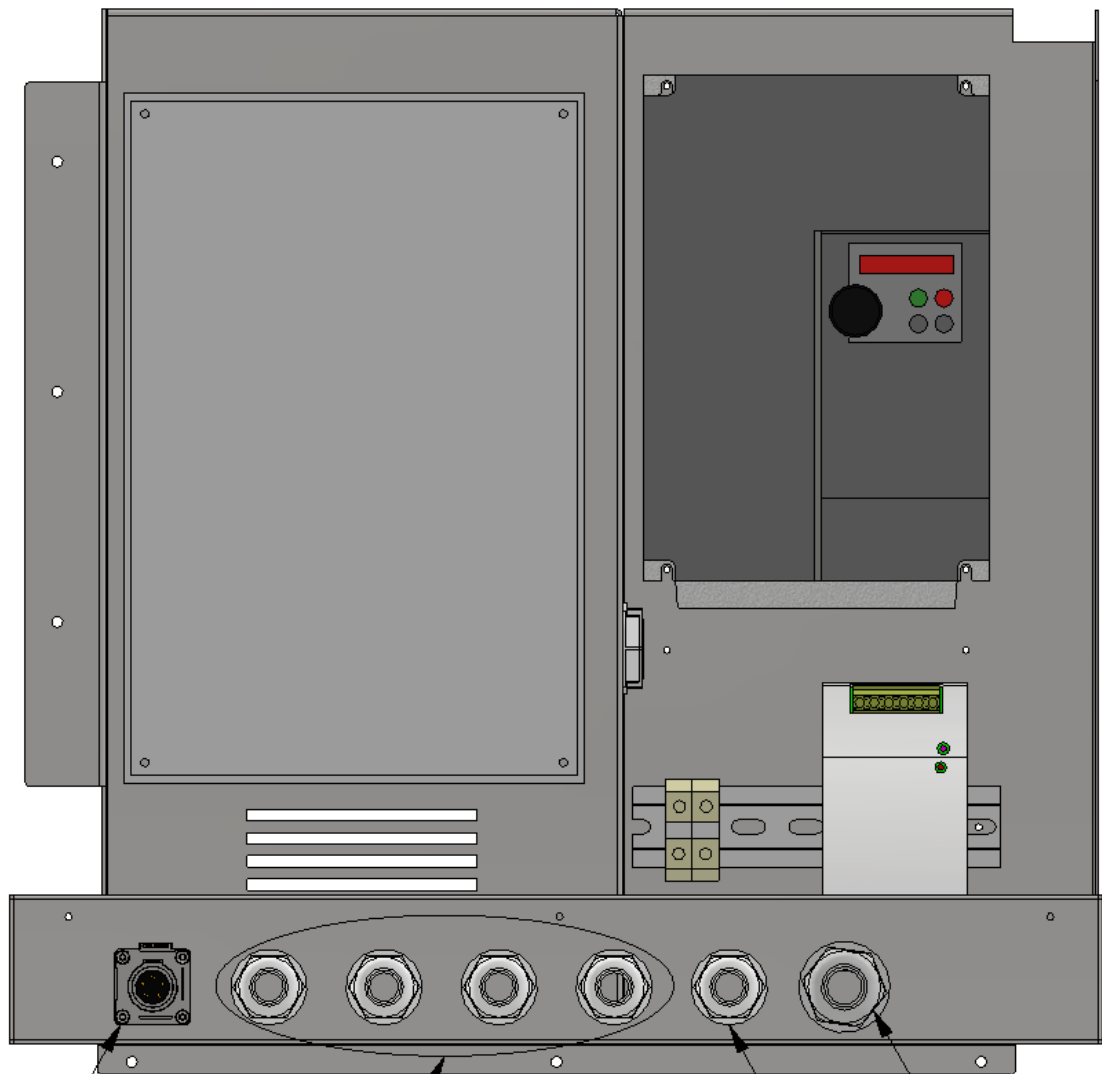
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ELECTRICAL CONNECTIONS





230VAC INVERTER PANEL DETAIL



PROGRAMMING
CONNECTOR

24VDC AND BUS
CONNECTIONS

230VAC LINE IN

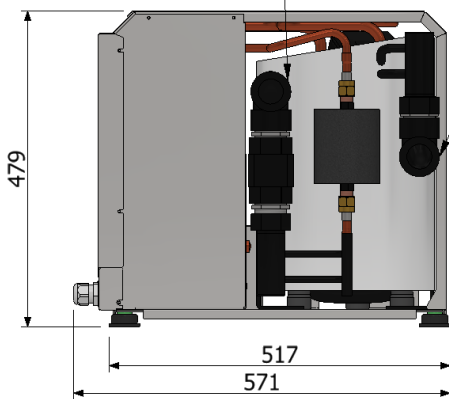
SEA WATER PUMP LINE

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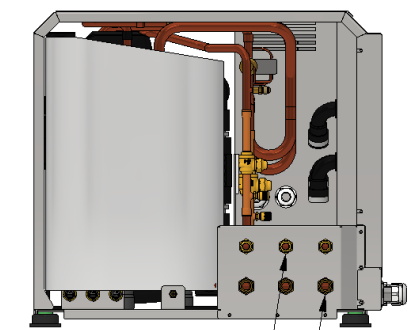
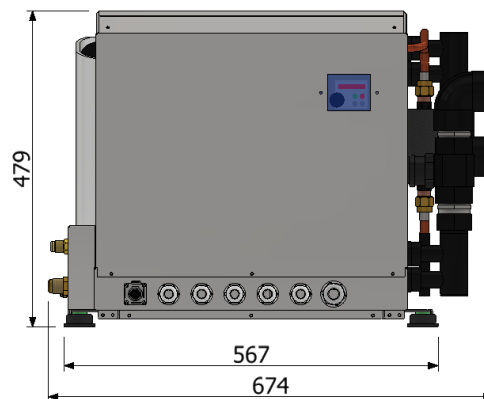
OVERALL DIMENSIONS



WATER IN 1" 1/2"



WATER OUT 1" 1/2"



LIQUID 3 x 1/2"

GAS 3 x 5/8"

