

VRT120E2

DATASHEET



Cooling capacity KW	min 12	std 96	max 120
Cooling power source KW	min 3	std 20	max 30
Heating capacity KW	min 12	Std 96	max 120
Heating power source KW	min 3	std 20	max 30

Total BTU Capacity:
Power supply options:

Comparable to 500.000 BTU/h of the competitors
400VAC → *mod. VRT120E2-4V*

On request: 700VDC → *mod. VRT120E2-7V*

Sea water pump:

Magnetic type. Centrifugal 1,2kW included in compressor power consumption. 500 lt/min.

Size W x D x H:

1637 x 818 x 935 mm

Weight:

290 Kg

Sea water working range:

+3°C to +40°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:

2"

Refrigerant pipe options:

ø35mm Gas

ø28mm 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.

VRT120E2 *MAIN FEATURES*



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:

Aluminum silver anodized, 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



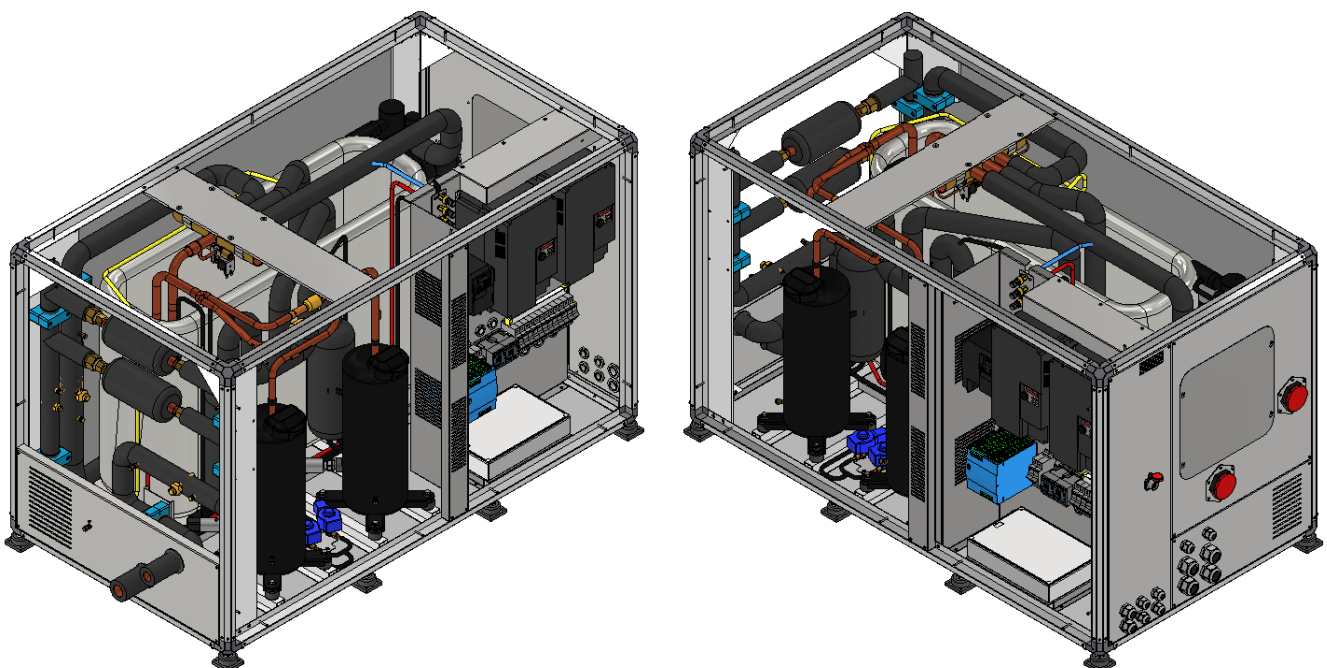
COMPRESSOR PROTECTION:

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

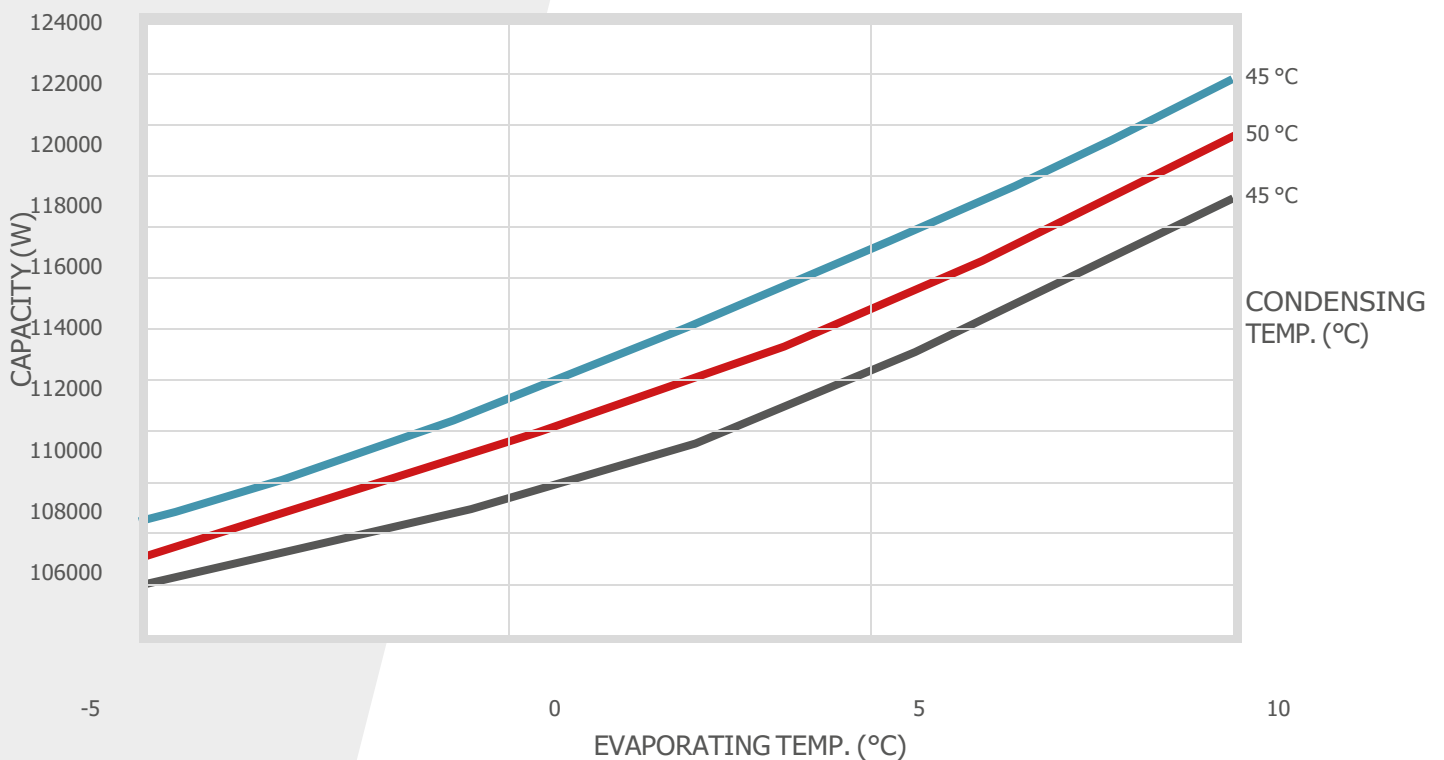
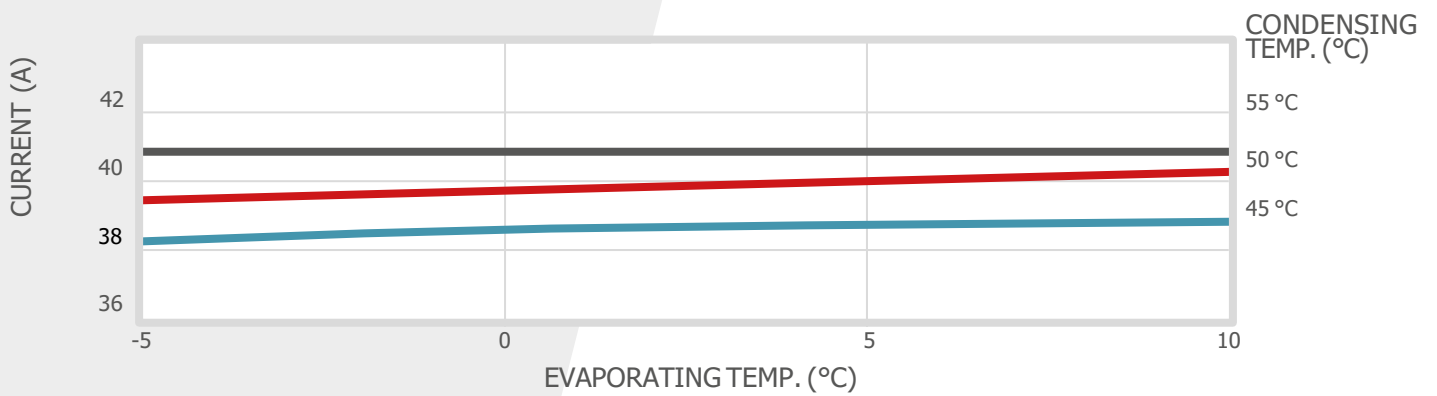
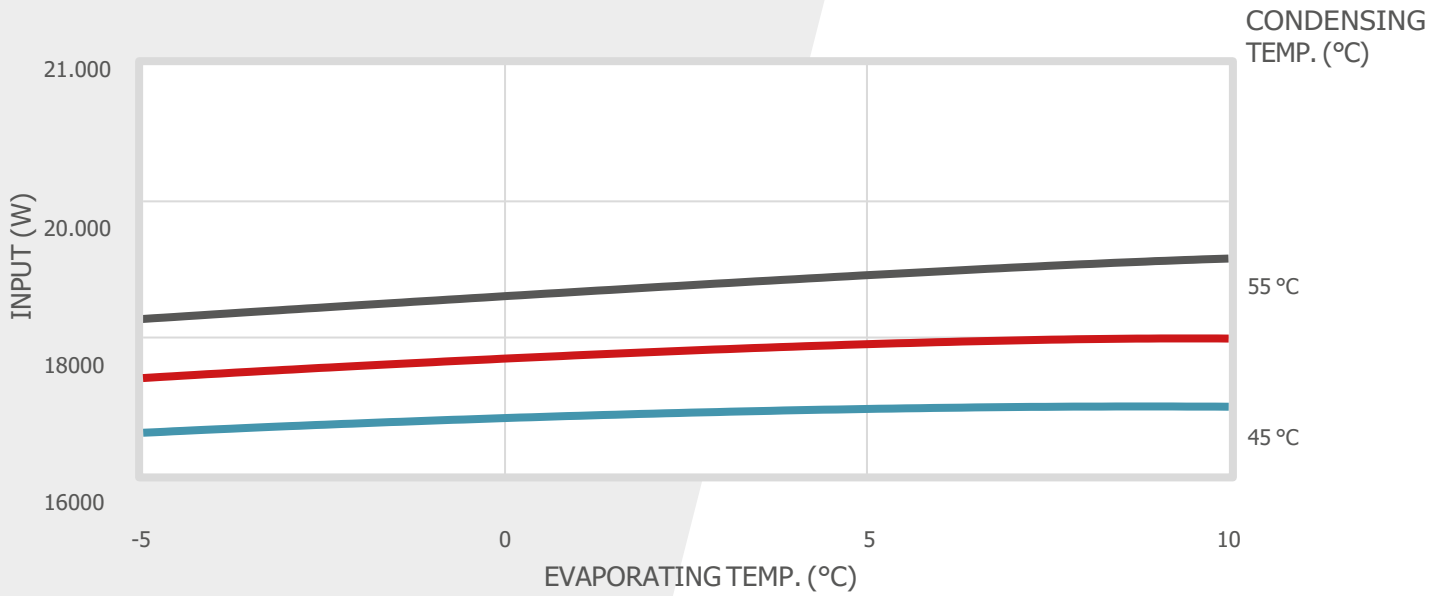


ELECTRONIC:

Microprocessor board with rs485 modbus rtu communication. Interface to Termodinamica air handling unit or fresh air unit

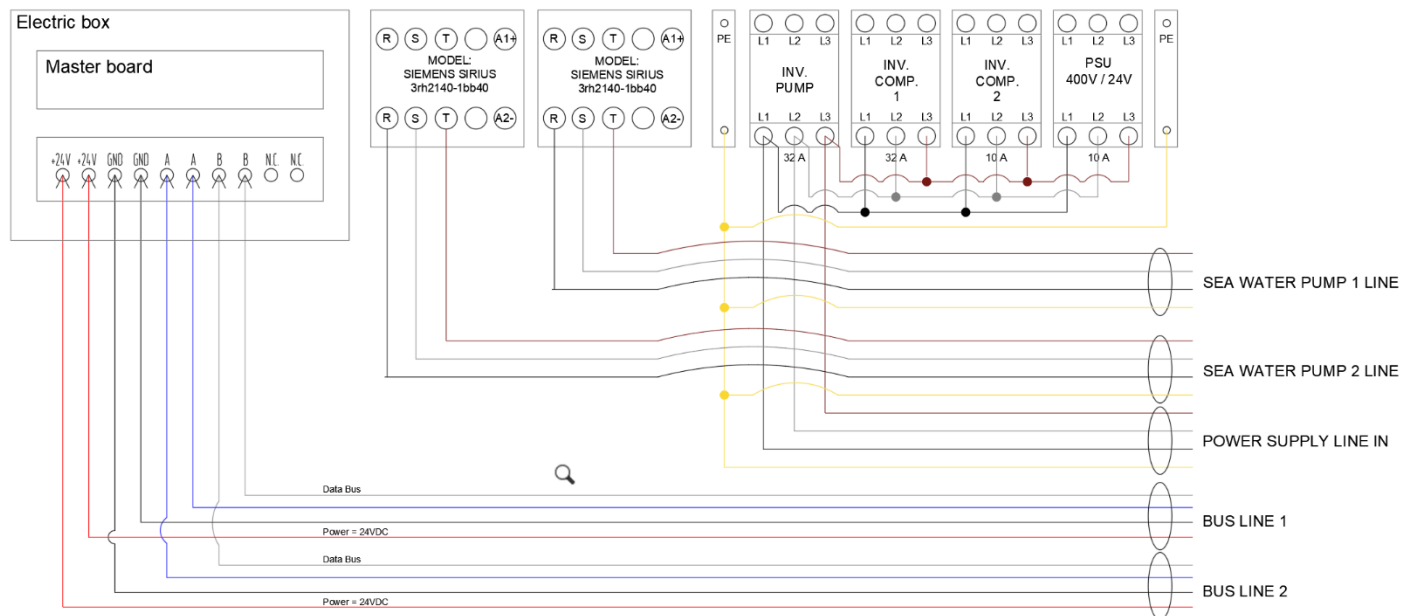


VRT120E2 PERFORMANCE CURVE DC INVERTER 70 rps/ 100



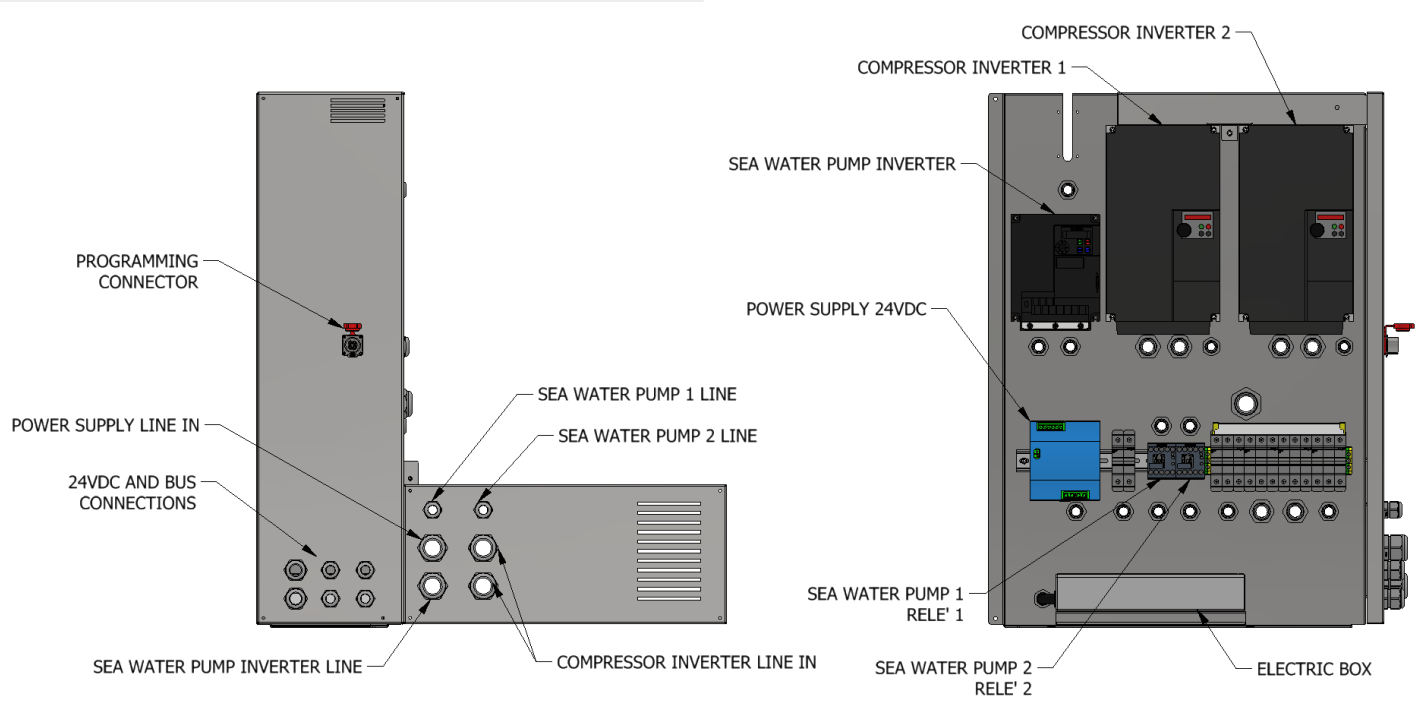


VRT120E2-4V (400VAC Version)



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ELECTRICAL CONNECTIONS



VRT120E2

OVERALL DIMENSIONS

