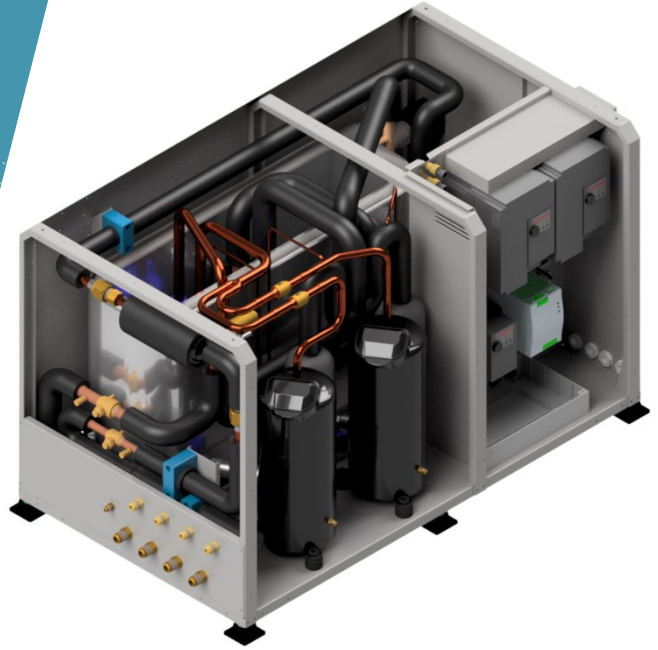


VRT50X2

DATASHEET



Cooling capacity KW	min 5	std 45	max 50
Cooling power source KW	min 2	std 7,5	max 14
Heating capacity KW	min 5	std 45	max 55
Heating power source KW	min 2	std 7,5	max 14

Total BTU Capacity:
Power supply options:

Comparable to 230.000 BTU/h of the competitors
180 - 230VAC / 50-60Hz 1ph+N → *mod. VRT50X2-2V*
On request: 400VAC → *mod. VRT50X2-4V*
On request: 700VDC → *mod. VRT50X2-7V*

Sea water pump:

Magnetic type. Centrifugal 1,2kW included in compressor power consumption.

Size W x D x H:

500 lt/min
1182 x 660 x 697 mm

Weight:

190 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:

1" 1/2

Refrigerant pipe:

4 x 5/8" Gas 4 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



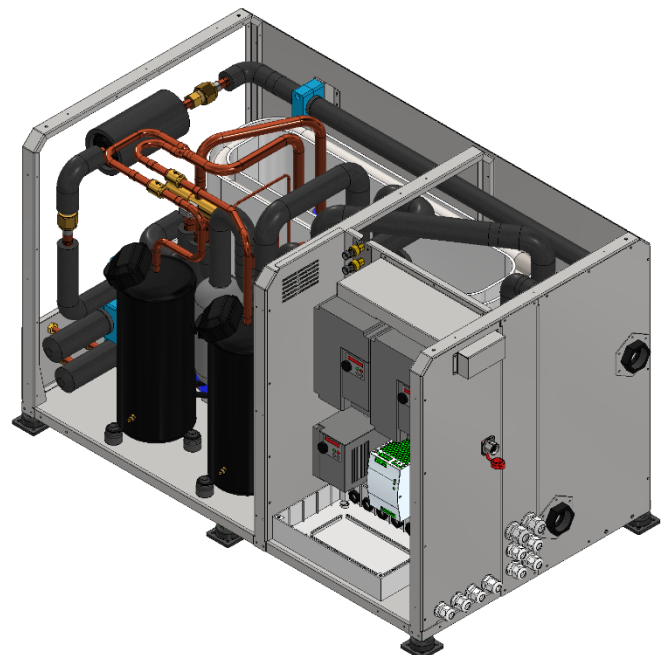
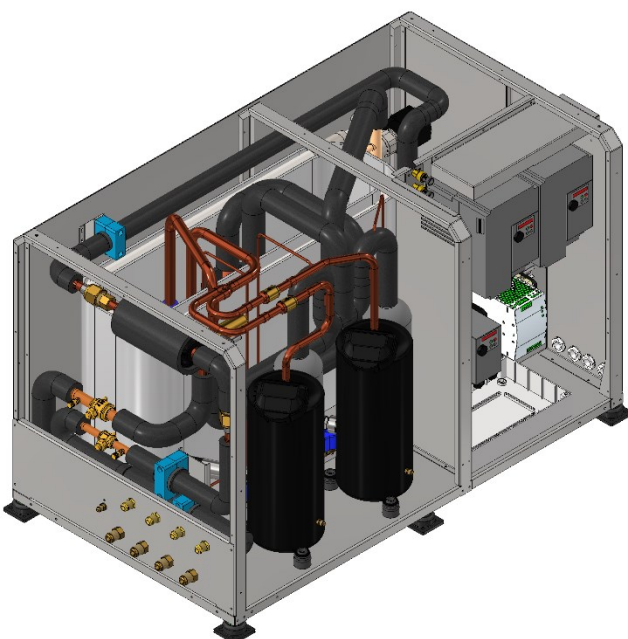
COMPRESSOR PROTECTION:

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



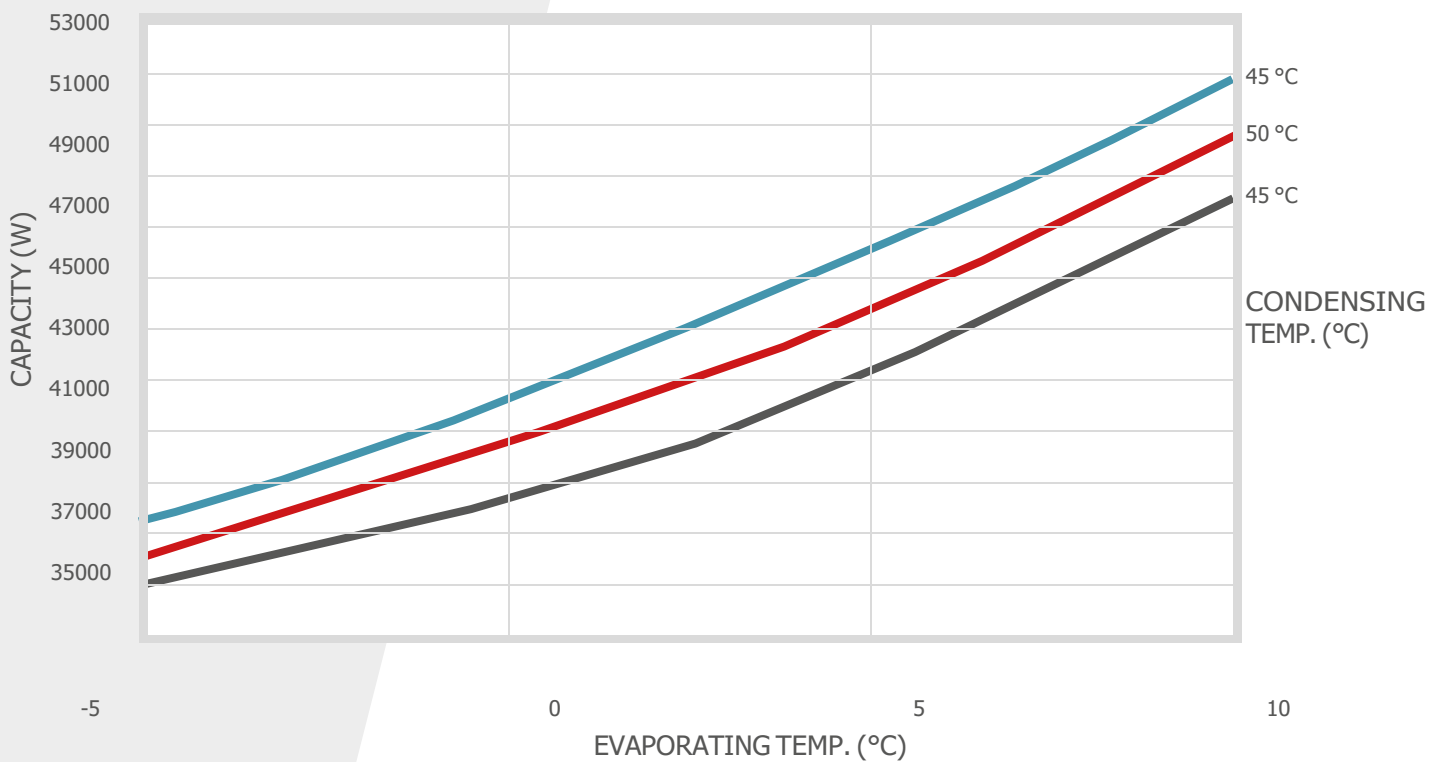
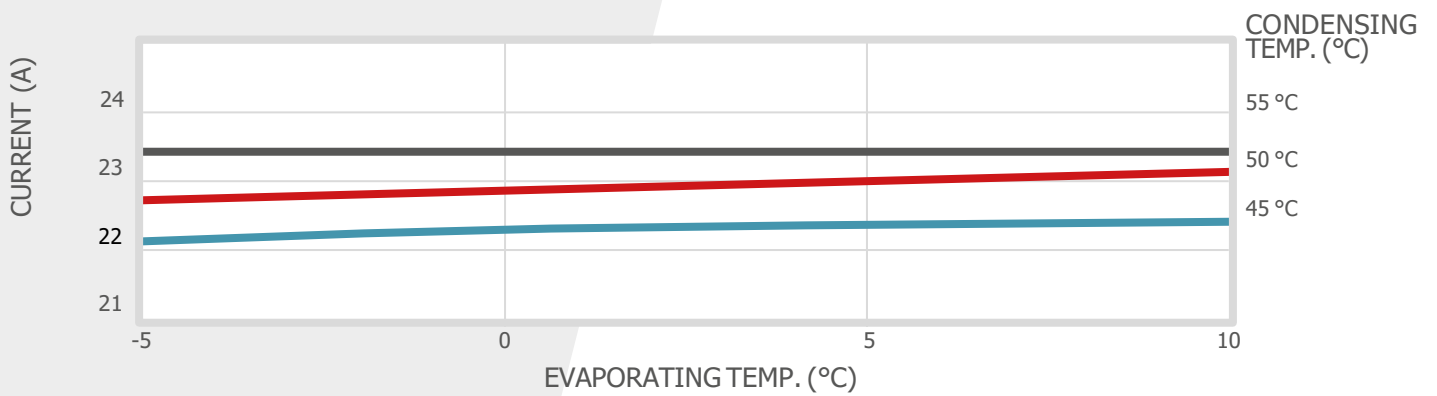
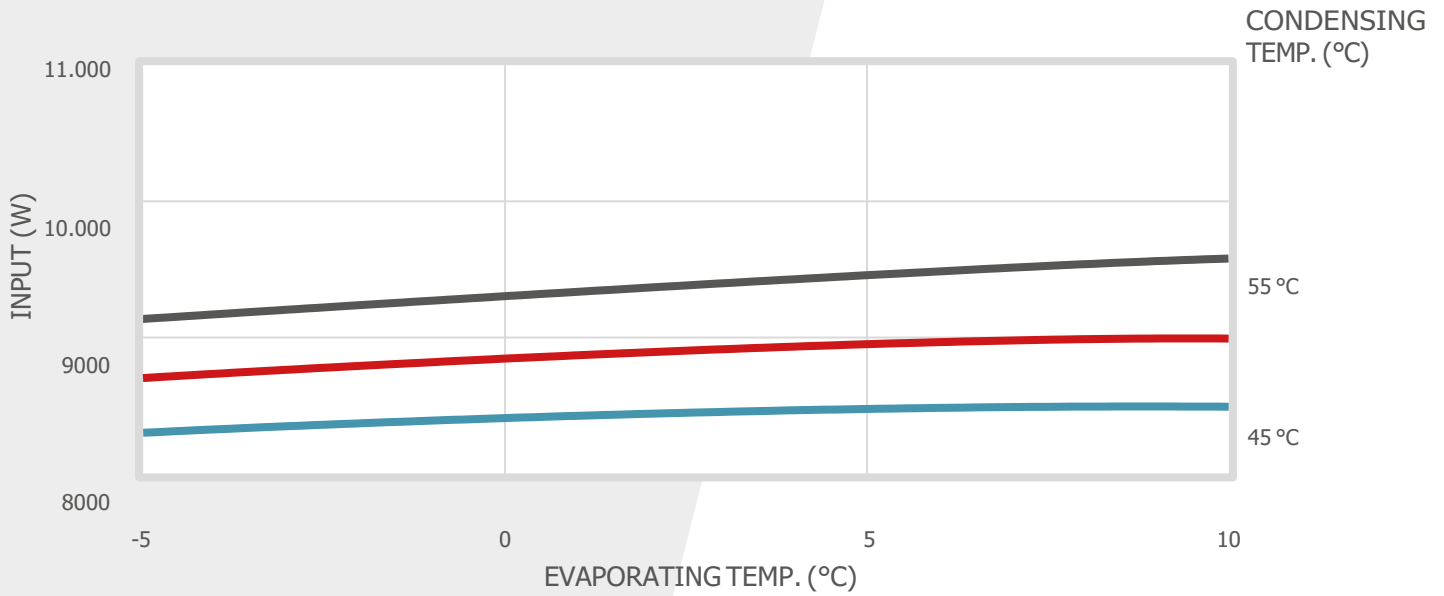
ELECTRONIC:

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



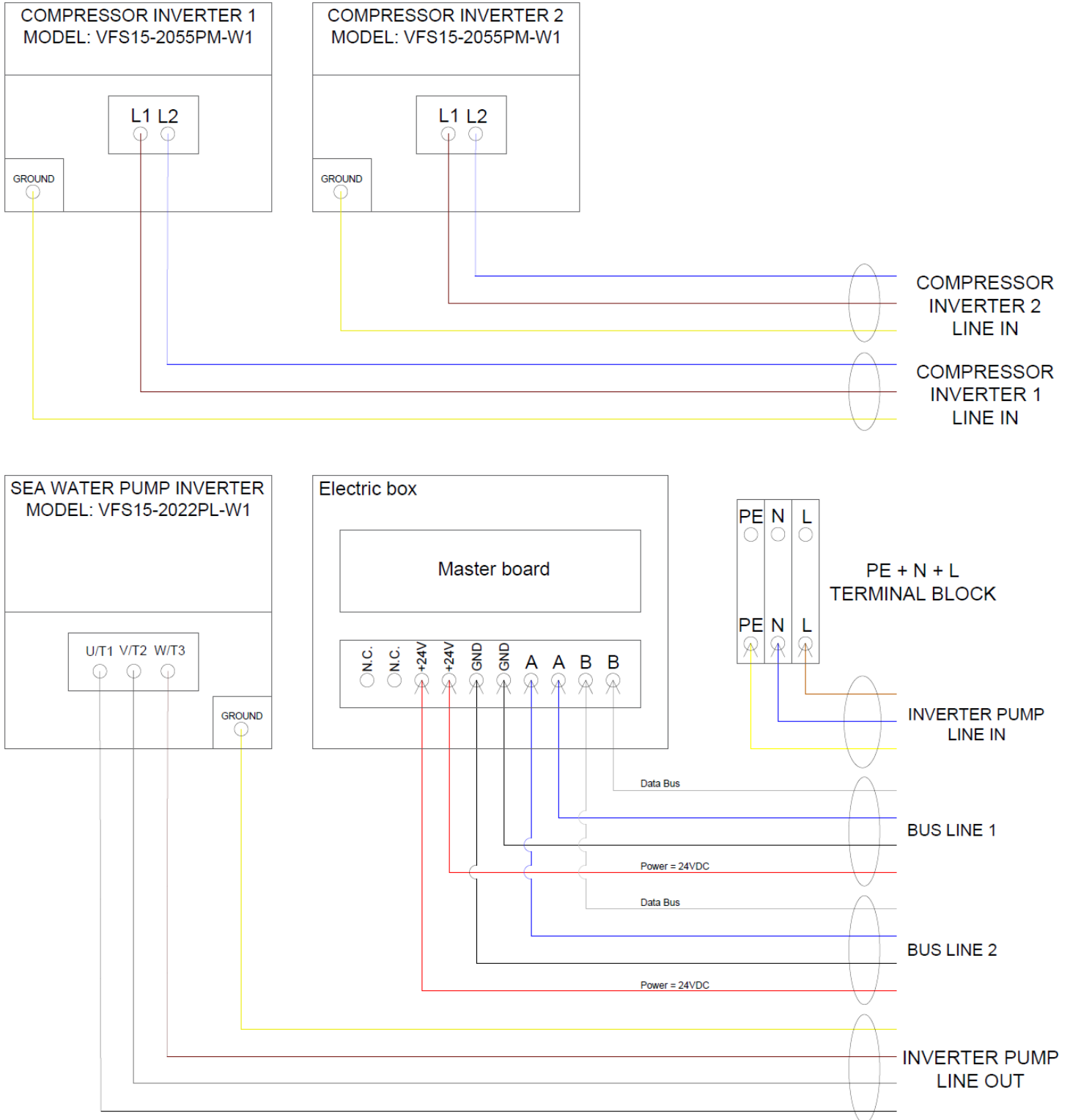
VRT50X2

PERFORMANCE CURVE DC INVERTER 70 rps/ 100



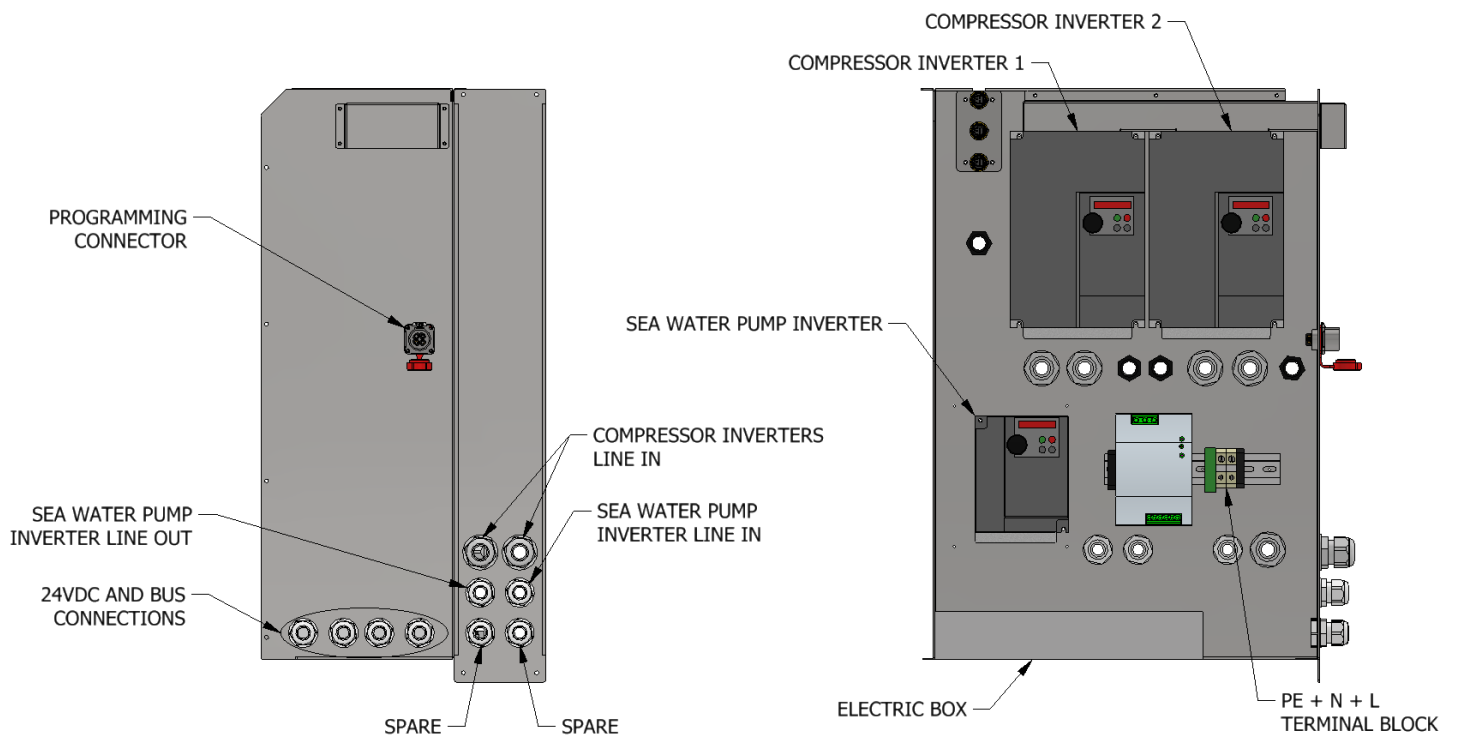


VRT50X2-2V (230VAC Version)





230VAC INVERTER PANEL DETAIL



VRT50X2

OVERALL DIMENSIONS

