

# VRV20E1

## DATASHEET



### Cooling & heating - capacity

Cooling capacity KW	min 3	std 18	max 20
Cooling power source KW	min 0,7	std 3	max 5
Heating capacity KW	min 3	std 18	max 22
Heating power source KW	min 0,7	std 3	max 5

#### Power supply:

180 – 250 Vac 1Phase 50/60Hz.  
400 Vac and 700 Vdc on request

#### Sea water pump:

Magnetic type 300 watt included in unit power consumption.  
180 lt/min

#### Water pipe size:

1,5"

#### Gas pipe:

Liquid 2 x 1/2 + 1 x 3/8  
Gas 2 x 5/8 + 1 x 1/2

#### Size W x D x H:

667 x 517 x 476 mm

#### Weight:

87 Kg

#### Sea water working range:

+3°C to +40°C

Option polar water: -5°C

#### Air working range:

-20°C to +50°C

Compressor box use VRV inverter architecture with refrigerant circulation inside air handler  
Databus rs485 modbus on board

24Volt @ 400watt power supply 24VDC integrated in compressor unit for 10 air handlers management

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



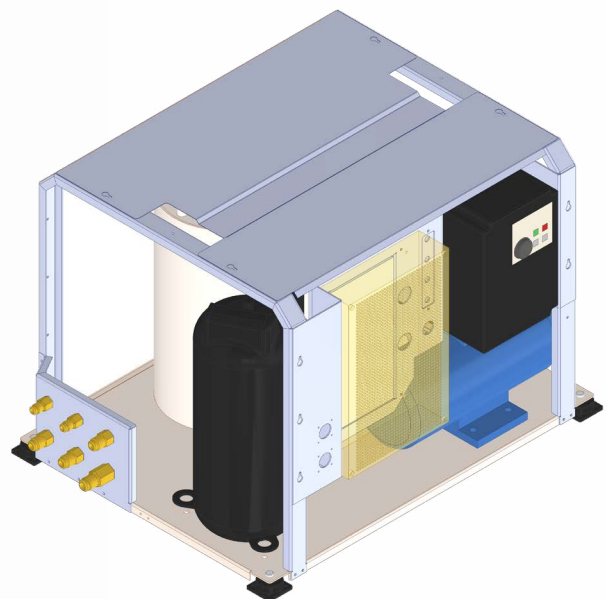
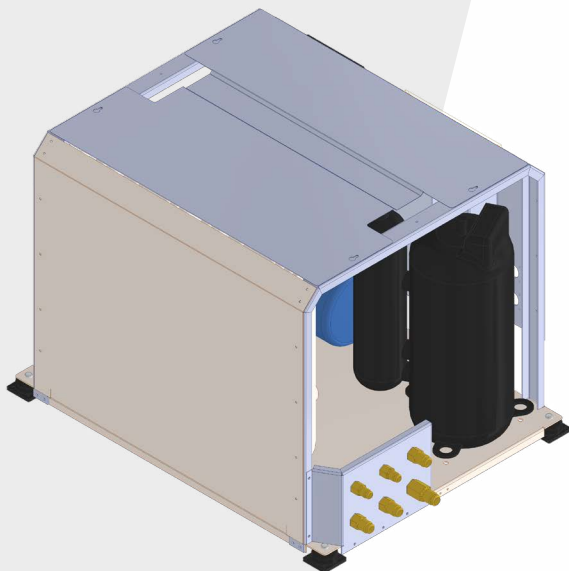
### COMPRESSOR PROTECTION:

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



### ELECTRONIC:

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



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PERFORMANCE CURVE  
DC INVERTER 70 rps/100

