

VOLTA XS R290



- Modulating thermal power control within a wide range (12,5-100%) and modulating flow rate control of both brine and production circuits (20-100%).
- Natural refrigerant R290: GWP 3.
- Inverter technology.
- Compact design including brine and production circulation pumps, 7 liter production expansion vessel, brine and production safety valves and DHW three-way valve.
- Integrated management of up to 2 different emission temperatures.
- Integrated management of aerothermal collection modulating units, in case of air source or hybrid configurations.
- Integrated active cooling in model A.
- Single-phase version available.
- Integrated photovoltaic hybridisation.
- Integrated energy meters to measure the electrical consumption, the heating/cooling thermal power, the COP and the monthly and annual SPF.
- Only 790 mm x 595 mm x 575 mm (height x width x depth).

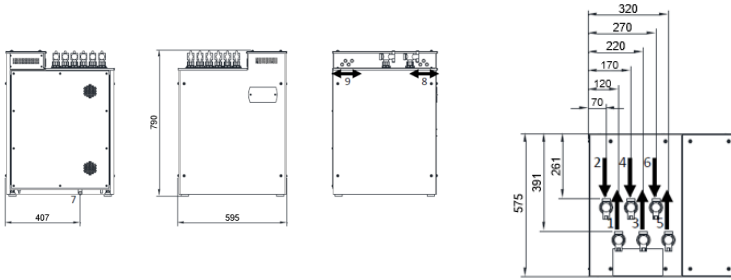


SPECIFICATIONS VOLTA XS R290		UNITS	W-XS-A-6-230 R290
APPLICATION	Place of installation	-	Indoors
	Type of brine system ¹	-	Ground source / Air source / Hybrid source
	Heating	-	✓
	Integrated Active cooling	-	✓
PERFORMANCE	Modulation range of the compressor	%	12,5 to 100
	Heating power output ² , B0W35	kW	1,0 to 6,0
	COP ² , B0W35	-	4,3 / 2,6
	Active cooling power output ² , B35W7	kW	1,0 to 6,0
	EER ² , B35W7	-	4,4 / 2
	Max. DHW temperature without / with support ⁵	°C	75 / 80
	Noise power emission level ⁶	db	33 to 44
OPERATION LIMITS	Energy label / ηs	-	A+++ / 182%
	Heating temperatures / Maximum setpoint	°C	10 to 75 / 75
	Cooling temperatures / Min. setpoint	°C	5 to 35 / 7
	Brine inlet temperature range in heating applications	°C	-25 to 35
	Brine inlet temperature range in cooling applications	°C	10 to 70
	Minimum / Maximum refrigerant circuit pressure	bar	0,5 / 32
	Production / Pre-load circuit pressure	bar	0,5 to 3,0 / 1,5
WORKING FLUIDS	Brine / Pre-load circuit pressure	bar	0,5 to 6,0
	R290 Refrigerant load	kg	0,15
CONTROL ELECTRICAL DATA	Compressor oil type / load	kg	PZ46M / 0,3
	1/N/PE 230 V / 50-60 Hz ⁸	-	✓
	Maximum recommended external protection ⁹	A	C16A
	Transformer primary circuit fuse	A	0,5
ELECTRICAL DATA: SINGLE-PHASE	Transformer secondary circuit fuse	A	2,5
	1/N/PE 230 V / 50-60 Hz ⁸	-	✓
	Maximum recommended external protection ⁹	A	C16A
	Maximum consumption ² , B0W35	kW / A	1,6 / 6,8
	Maximum consumption ² , B0W55	kW / A	2,0 / 8,6
DIMENSIONS/WEIGHT	Minimum / Maximum starting current ⁷	A	0,6 / 1,8
	Correction of cosine Ø	-	0,96 / 1
	Height x width x depth	mm	790 x 595 x 575
	Empty weight (without assembly)	kg	107

1. Air source by replacing the ground source circuit by one or more VOLTA W-O air units. Consult the VOLTA W-O aerothermal units manual for more detailed information.
2. In compliance with EN 14511, this includes the consumption of the circulation pumps and the compressor driver.
3. Considering brine and production flow rates in compliance with EN 14511.
4. Considering a heat slope from 20°C to 50°C in absence of consumption.
5. Considering support provided by the emergency electrical heater.
6. In compliance with EN 12102.
7. Starting current depends on the working conditions of the hydraulic circuits.
8. The admissible voltage range for proper operation of the heat pump is ±10%.
9. Maximum consumption can vary significantly according to working conditions, or if the compressor's operation range is restricted. Consult the technical service manual for more detailed information.
10. Certification in process.

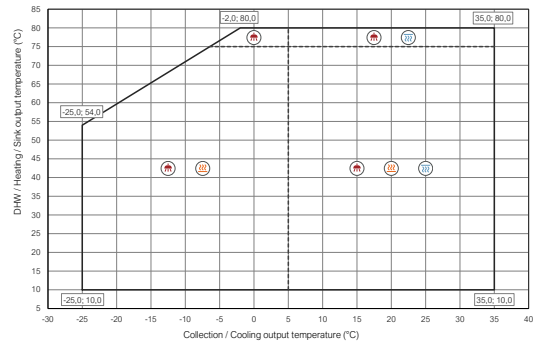
Dimensions and hydraulic connections

VOLTA W-XS-A-6-230 R290

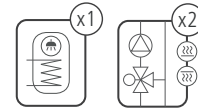


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|----------------------------------|----------------------------|
| 1. Heating/Cooling Outlet - 1" M | 6. DHW System Inlet - 1" M |
| 2. Heating/Cooling Inlet - 1" M | 7. Drain - G3/4" M |
| 3. Brine Outlet - 1" M | 8. Power cables inlet |
| 4. Brine Inlet - 1" M | 9. Control cables inlet |
| 5. DHW system Outlet - 1" M | |

Operational chart

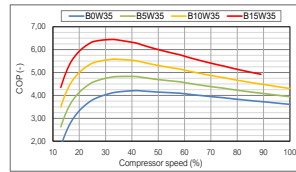
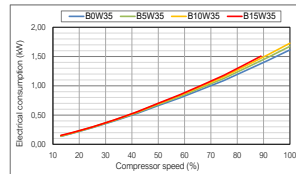
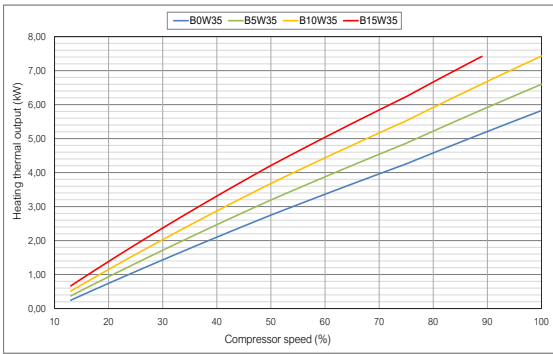


Installation management



Performance curves

Thermal performance



Hydraulic performance

