

SPECIFICATIONS VOLTA W-S 12 R410A		UNITS	S/L H	S/L P	S/L A	S/L F
APPLICATION	Place of installation	—	Indoors			
	Type of brine system <sup>1</sup>	—	Ground source / Air source / Hybrid source			
	DHW, Heating and Pool	—	✓	✓	✓	✓
	Superheater (SH) system option	—	✓	✓	✓ <sup>by default</sup>	✓ <sup>by default</sup>
	Integrated Active cooling	—	—	—	✓	✓
	Integrated Passive cooling	—	—	✓	—	✓
PERFORMANCE	Modulation range of the compressor	%	12.5 to 100			
	Heating power output <sup>2</sup> , BOW35	kW	2.1 to 16.0			
	COP <sup>2</sup> , BOW35	-	4.6			
	Active cooling power output <sup>2</sup> , B35W7	kW	—	2.1 to 15.0		
	EER <sup>2</sup> , B35W7	—	—	5.2		
	Max. DHW temperature without / with support <sup>5</sup>	°C	63 / 70			
	Noise power emission level <sup>6</sup>	db	34 to 45			
	Energy label / ηs / SCOP W35 average climate control	—	A+++ / 194% / 4.95			
	Energy label / ηs / SCOP W55 average climate control	—	A++ / 142% / 3.65			
OPERATION LIMITS	Distribution / Set heating outlet temperature range	°C	10 to 60 / 20 to 60			
	Distribution / Set cooling outlet temperature range	°C	5 to 35 / 7 to 25	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 60			
	Minimum / Maximum refrigerant circuit pressure	bar	2 / 45			
	Production / Pre-load circuit pressure	bar	0.5 to 3.0 / 1.5			
	Brine / Pre-load circuit pressure	bar	0.5 to 3.0 / 0.7			
	Volume / Max. DHW storage tank pressure (VOLTA W L)	l / bar	165 / 8			
WORKING FLUIDS	R410A Refrigerant load without SH / with SH	kg	0.9 / 1.0	1.0		
	Compressor oil type / load	kg	POE / 0.74			
CONTROL ELECTRICAL DATA	1/N/PE 230 V / 50-60 Hz <sup>8</sup>	—	✓			
	Maximum recommended external protection <sup>9</sup>	—	C16A			
	Transformer primary circuit fuse	A	0.5			
	Transformer secondary circuit fuse	A	2.5			
ELECTRICAL DATA: SINGLE-PHASE	1/N/PE 230 V / 50-60 Hz <sup>8</sup>	—	✓			
	Maximum recommended external protection <sup>9</sup>	—	C32A			
	Maximum consumption <sup>2</sup> , BOW35	kW / A	4.2 / 18.6			
	Maximum consumption <sup>2</sup> , BOW55	kW / A	5.0 / 21.7			
	Minimum / Maximum starting current <sup>7</sup>	A	2.0 / 8.0			
	Correction of cosine Ø	—	0.96 / 1			
ELECTRICAL DATA: THREE-PHASE	3/N/PE 400 V / 50-60Hz <sup>8</sup>	—	✓			
	Maximum recommended external protection <sup>9</sup>	—	C16A			
	Maximum consumption <sup>2</sup> , BOW35	kW / A	4.2 / 6.2			
	Maximum consumption <sup>2</sup> , BOW55	kW / A	5.0 / 7.2			
	Minimum / Maximum starting current <sup>7</sup>	A	0.7 / 2.6			
	Correction of cosine Ø	—	0.96 / 1			
DIMENSIONS/ WEIGHT	Height x width x depth	mm	VOLTA W S: 1058x600x710 · VOLTA W L: 1851x600x720			
	Empty weight (without assembly)	kg	S 185 · L 246	S 193 · L 254	S 185 · L 246	S 193 · L 254

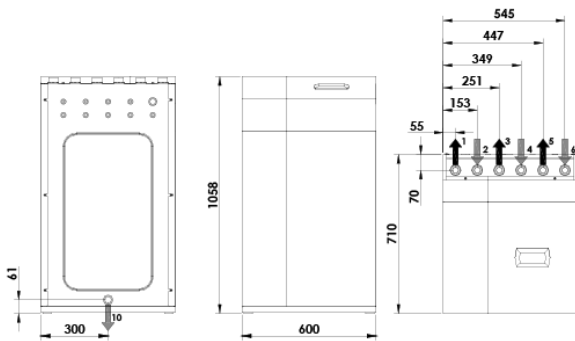
- Air source/Hybrid source by replacing/combining the ground source circuit by/with one or more VOLTA W-O. Consult the VOLTA W-O manual for more detailed information.
- In compliance with EN 14511, this includes the consumption of the circulation pumps and the compressor driver.
- Considering brine and production flow rates in compliance with EN 14511.

- Considering a heat slope from 20°C to 50°C in absence of consumption.
- Considering support provided by the emergency electrical heater or the SH system. Maximum DHW temperature with the SH system can be limited by the compressor discharge temperature.
- In compliance with EN 12102.
- Starting current depends on the working conditions of the hydraulic circuits.

- The admissible voltage range for proper operation of the heat pump is ±10%.
- 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.
- Certification in process.

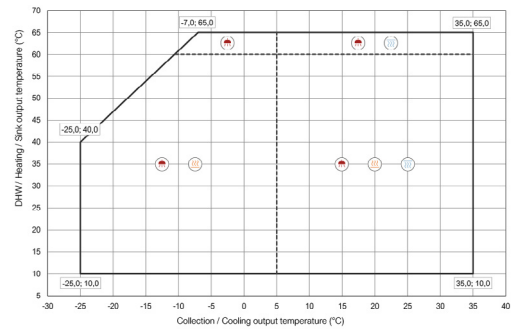
**Dimensions and hydraulic connections**

**VOLTA W S**

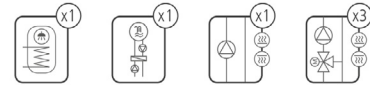


1. Heating/Cooling Outlet - 1 1/4" M
2. Heating/Cooling Inlet - 1 1/4" M
3. Brine Outlet - 1 1/4" M
4. Brine Inlet - 1 1/4" M
5. DHW system Outlet - 1 1/4" M
6. DHW System Inlet - 1 1/4" M
7. CW Inlet - 1" F
8. DHW Outlet - 1" F
9. DHW Recirculation Inlet - 3/4" F
10. Drain - 16 mm

**Operational chart**

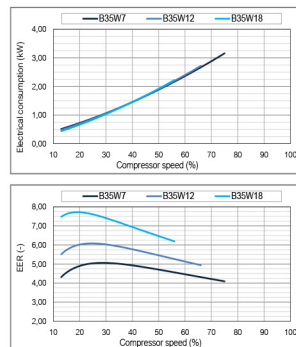
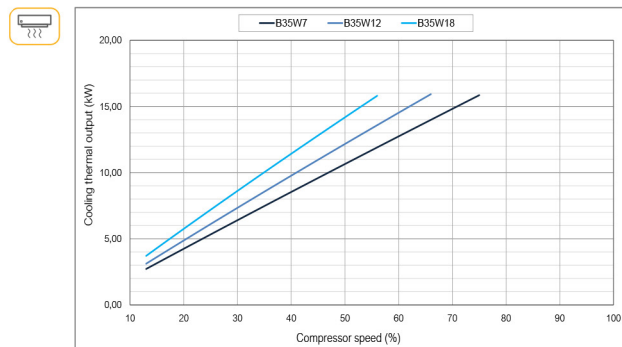
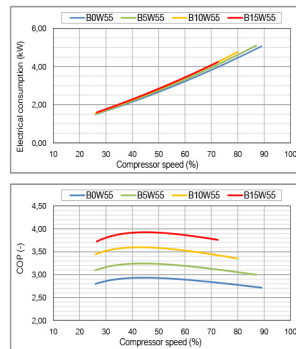
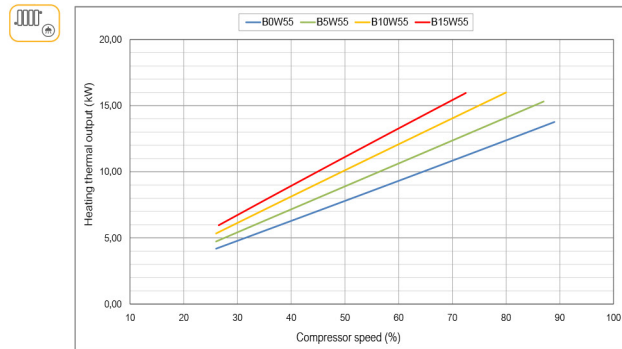
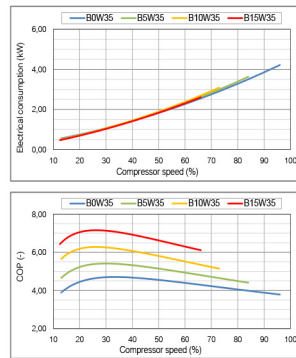
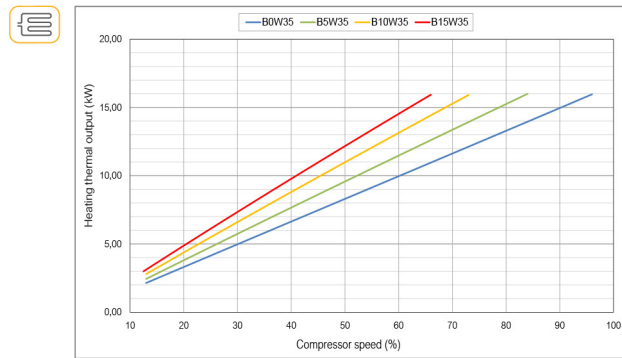


**Installation management**



**Performance curves**

**Thermal performance**



**Hydraulic performance**

