VOLTA W H

VOLTA W H 60

- Modulating thermal power control within a wide range (25-100%) and modulating Integrated management of simultaneous cooling/heating systems according to flow rate control of both brine and production circuits (20-100%).
- Inverter technology and scroll compressor.
- Integrated management of up to 5 different emission temperatures, 2 buffer tanks (heating and cooling), 1 DHW tank, 1 pool and hourly control of DHW recirculation.
- Management of aerothermal collection modulating units, in case of air source or hybrid configurations by means of the VOLTA S-Source.
- Integrated management of external On/Off or modulating auxiliary systems, such as electrical heaters, On/Off boilers or modulating boilers.
- Management of cascade systems up to 6 units by means of the VOLTA S-Supervisor.

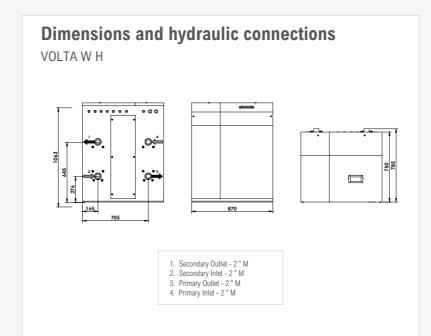
- Free cooling (Passive cooling) management.
- Integrated active cooling in models 3.
- Three-phase version available.
- Integrated photovoltaic hybridisation.
- Integrated energy meters to measure the electrical consumption, the heating/ cooling thermal power, the COP and the monthly and annual SPF.

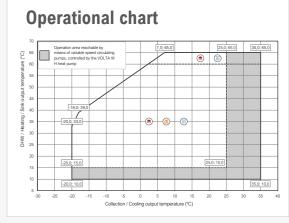
SPECIFICATIONS VOLTA W H 70		UNITS	WHH	WHA	
APPLICATION	Place of installation	-	Indoors		
	Type of brine system ¹	-	Ground source / Air so	Ground source / Air source / Hybrid source	
	DHW with external tank	-	✓	✓	
	Heating and Pool	-	✓	✓	
	External Passive cooling management	-	✓	✓	
	Integrated Active cooling	-	-	✓	
PERFORMANCE	Modulation range of the compressor	%	25 to	25 to 100	
	Heating power output ¹ , B0W35	kW	17,1 to	17,1 to 59,6	
	COP 1, B0W35	-	4,5	4,5	
	Active cooling power output ¹ , B35W7	kW	-	15,1 to 61,5	
	EER ¹ , B35W7	-	-	4,5	
	Max. DHW temperature without / with support	°C	60 /	60 / 70	
	Noise power emission level ³	db	53 to	53 to 71	
	Energy label / ŋs / SCOP W35 average climate control	-	A+++ / 200	A+++ / 200% / 5,09	
	Energy label / ŋs / SCOP W55 average climate control	-	A+++ / 152	A+++ / 152% / 3,90	
OPERATION LIMITS	Distribution / Set heating outlet temperature range ²	°C	10 to 60 /	10 to 60 / 20 to 60	
	Distribution / Set cooling outlet temperature range ²	°C	5 to 35 /	5 to 35 / 7 to 25	
	Brine inlet temperature range in heating applications ²	°C	-20 to	-20 to 35	
	Brine inlet temperature range in cooling applications ²	°C	10 to	10 to 60	
	Minimum / Maximum refrigerant circuit pressure	bar	2/4	2 / 45	
	Production / Pre-load circuit pressure	bar	0,5 to	0,5 to 5,0	
	Brine / Pre-load circuit pressure	bar	0,5 to	0,5 to 5,0	
WORKING FLUIDS	R410A Refrigerant load	kg	4,7	5,5	
	Compressor oil type / load	kg	POE 1609	POE 160SZ / 4,1	
	Nominal primary flow rate, B0W35 ($\Delta T = 3 ^{\circ}C$)	l/h	3230 to	3230 to 13195	
	Nominal secondary flow rate, B0W35 ($\Delta T = 5$ °C)	l/h	2465 to	2465 to 10265	
CONTROL ELECTRICAL DATA	1/N/PE 230 V / 50-60 Hz ⁵	-	✓	✓	
	Maximum recommended external protection 7	-	C1/	C1A	
	Transformer primary circuit fuse	Α	0,6	0,63	
	Transformer secondary circuit fuse	А	4,0	4,0	
ELECTRICAL DATA: THREE-PHASE	3/N/PE 400 V / 50-60Hz ⁵	-	✓		
	Maximum recommended external protection 7	-	C50	C50A	
	Maximum consumption ² , B0W35	kW / A	14,3 /	14,3 / 23,2	
	Maximum consumption ² , B0W55	kW / A	20,4 / 32,3		
	Maximum consumption	kW / A	23,7 / 37,0		
	Minimum / Maximum starting current ⁴	А	7,5 / 1	7,5 / 11,8	
	Correction of cosine Ø	-	0,96 / 1		
DIMENSIONS/WEIGHT	Height x width x depth	mm	1063x870x785		
	Empty weight (without assembly)	kg	322	336	

- consumption of the circulation pumps and the $$\operatorname{\textsc{the}}$$ the heat pump is $\pm 10\%.$ compressor driver
- the VOLTA W H heat pump.
- 1. In compliance with EN 14511, this includes the 5. The admissible voltage range for proper operation of 6. Maximum consumption can vary significantly
- compressor's range of operation is restricted. 7. External protection exclusively regarding the VOLTA 4. Starting current depends on working condition of the W heat pump controller electrical consumption. This protection should be updated in case of using

the controller single-phase electrical supply to wire Note: primary circuit and secondary circuit circulation other equipments depending on the features of such pumps not included. equinments

2. With variable speed circulating pumps, managed by according to working conditions, or if the 8. In case of air source or hybrid source configuration, it is required to combine the VOLTA W H heat pump





Installation management



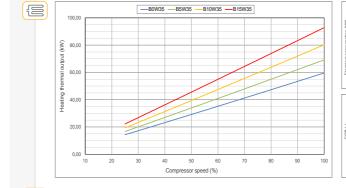


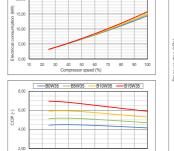


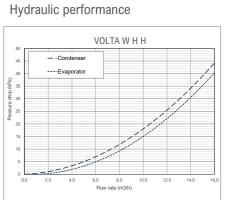


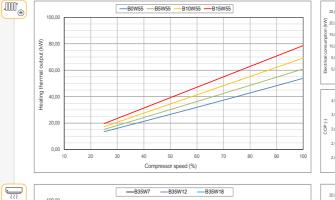


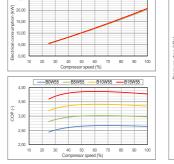
Thermal performance

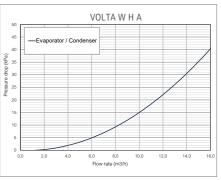


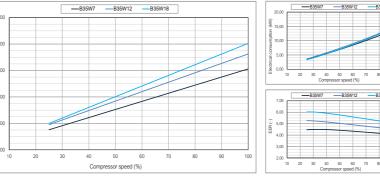


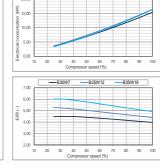


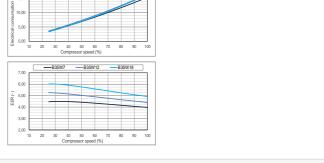














VOLTA