



SPECIFICATION	S VOLTA W H 40	UNITS	W H H	WHA	
	Place of installation	_	Ind	oors	
APPLICATION	Type of brine system 1	_	Ground source / Air s	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 t	25 to 100	
	Heating power output <sup>1</sup> , BOW35	kW	10.7 to 44.6		
	COP 1, BOW35	_	4.6		
	Active cooling power output 1, B35W7	kW	_	11,3 to 45,8	
	EER 1, B35W7	_	_	4.4	
	Max. DHW temperature without / with support	°C	60	/70	
	Noise power emission level <sup>3</sup>	db	53	53 to 71	
	Energy label / ŋs / SCOP W35 average climate control	_	A+++ / 194% / 4.94		
	Energy label / ŋs / SCOP W55 average climate control	_	A++ / 148% / 3.81		
OPERATION LIMITS	Distribution / Set heating outlet temperature range <sup>2</sup>	°C	10 to 60 / 20 to 60		
	Distribution / Set cooling outlet temperature range <sup>2</sup>	°C	5 to 35 / 7 to 25		
	Brine inlet temperature range in heating applications <sup>2</sup>	°C	-20 to 35		
	Brine inlet temperature range in cooling applications <sup>2</sup>	°C	10 1	10 to 60	
	Minimum / Maximum refrigerant circuit pressure	bar	2,	2 / 45	
	Production / Pre-load circuit pressure	bar	0.5 to 5.0		
	Brine / Pre-load circuit pressure	bar	0.5 to 5.0		
WORKING FLUIDS	R410A Refrigerant load	kg	4.1	4.4	
	Compressor oil type / load	kg	POE 1605Z / 3.8		
	Nominal primary flow rate, BOW35 (ΔT = 3 °C)	l/h	2405 to 9830		
	Nominal secondary flow rate, BOW35 (ΔT = 5 °C)	l/h	1845 to 7685		
CONTROL ELECTRICAL DATA	1/N/PE 230 V / 50-60 Hz <sup>5</sup>	_	<b>√</b>		
	Maximum recommended external protection <sup>7</sup>	_	C1A		
	Transformer primary circuit fuse	А	0.63		
	Transformer secondary circuit fuse	А	4.0		
ELECTRICAL DATA: THREE-PHASE	3/N/PE 400 V / 50-60Hz <sup>5</sup>	_	✓		
	Maximum recommended external protection <sup>7</sup>	_	C40A		
	Maximum consumption <sup>2</sup> , BOW35	kW/A	10.9 / 17.7		
	Maximum consumption <sup>2</sup> , BOW55	kW/A	15.5 / 24.6		
	Maximum consumption	kW/A	18.1 / 28.6		
	Minimum / Maximum starting current <sup>4</sup>	А	5.6 / 9.0		
	Correction of cosine Ø	_	0.96 / 1		
DIMENSIONS/ WEIGHT	Height x width x depth	mm	1063x870x785		
	Empty weight (without assembly)	kg	295	307	

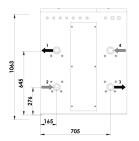
- In compliance with EN 14511, this includes the consumption of the circulation pumps and the compressor driver.
- 2. With variable speed circulating pumps, managed by the VOLTA W H heat pump.
- 3. According to EN 12102.
- 4. Starting current depends on working condition of the hydraulic circuits.
- 5. The admissible voltage range for proper operation of the heat pump is  $\pm 10\%$ .
- Maximum consumption can vary significantly according to working conditions, or if the compressor's range of operation is restricted.
- External protection exclusively regarding the VOLTA W heat pump controller electrical
  consumption. This protection should be updated in case of using the controller singlephase electrical supply to wire other equipments depending on the features of such
  equipments.
- In case of air source or hybrid source configuration, it is required to combine the VOLTA W H heat pump with the VOLTA S-Source.

Note: primary circuit and secondary circuit circulation pumps not included.



### Dimensions and hydraulic connections

#### **VOLTA W H**

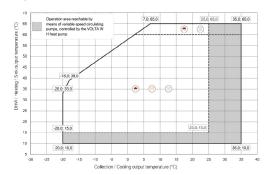






- Secondary Outlet 2 " M
- Secondary Inlet 2 " M
   Primary Outlet 2 " M
- 4. Primary Inlet 2 " M

# **Operational chart**



# Installation management





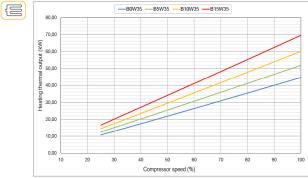


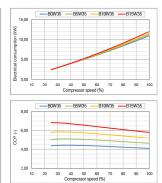


#### Performance curves

#### Thermal performance







# Hydraulic performance

