



| | S VOLTA W-S 16 R290 | UNITS | S/L H | S/L P | S/L A | S/L F |
|----------------------------------|--|----------|---|---------------|--------|-------|
| | Place of installation | _ | Indoors | | | |
| APPLICATION | Type of brine system ¹ | _ | Ground source / Air source / Hybrid source | | | |
| | DHW, Heating and Pool | _ | ✓ | ✓ | ✓ | ✓ |
| | Superheater (SH) system option ¹¹ | _ | ✓ | ✓ | ✓ | ✓ |
| | Integrated Active cooling | _ | _ | _ | ✓ | ✓ |
| | Integrated Passive cooling | _ | _ | ✓ | _ | ✓ |
| PERFORMANCE | Modulation range of the compressor | % | 15 to 100 | | | |
| | Heating power output ², BOW35 | kW | 3.1 to 16.1 | | | |
| | COP 2, BOW35 | _ | 4.6 | | | |
| | Active cooling power output ² , B35W7 | kW | - 2.2 to 13.8 | | | |
| | EER ² , B35W7 | _ | - 3.7 | | | 3.7 |
| | Max. DHW temperature without / with support ⁵ | °C | 75 / 80 | | | |
| | Noise power emission level ⁶ | db | 35 to 46 | | | |
| | Energy label / ηs / SCOP W35 average climate control | _ | A+++ / 188% / 4.85 | | | |
| | Energy label / ŋs / SCOP W55 average climate control | _ | A++ / 146% / 3.84 | | | |
| OPERATION LIMITS | Distribution / Set heating outlet temperature range | °C | 10 to 70 / 70 | | | |
| | Distribution / Set cooling outlet temperature range | °C | -20 to 35 /-15 5 to 35 / 7 | | 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 | 1/32 | | | |
| | 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) | I / bar | 165 / 8 | | | |
| WORKING FLUIDS | R290 Refrigerant load | kg | 0.86 | | | |
| | Compressor oil type / load | kg | HXL4467 / 1.18 | | | |
| CONTROL ELECTRICAL DATA | 1/N/PE 230 V / 50-60 Hz ⁸ | _ | √ · | | | |
| | Maximum recommended external protection ⁹ | _ | C16A | | | |
| | Transformer primary circuit fuse | Α | 0.5 | | | |
| | Transformer secondary circuit fuse | Α | 2.5 | | | |
| ELECTRICAL DATA: SINGLE-PHASE | 1/N/PE 230 V / 50-60 Hz ⁸ | _ | ✓ | | | |
| | Maximum recommended external protection ⁹ | _ | C32A | | | |
| | Maximum consumption ² , BOW35 | kW / A | 4.4 / 19.2 | | | |
| | Maximum consumption ² , BOW35 | kW/A | 5.5 / 23.9 | | | |
| | Minimum / Maximum starting current ⁷ | Α | 2.6 / 12.5 | | | |
| | Correction of cosine Ø | _ | 0.96 / 1 | | | |
| ELECTRICAL DATA: THREE-PHASE | 3/N/PE 400 V / 50-60 Hz ⁸ | _ | <i>√</i> | | | |
| | Maximum recommended external protection ⁹ | _ | C13A | | | |
| | Maximum consumption 2, BOW35 | kW/A | 4.4 / 6.4 | | | |
| | Maximum consumption ² , B0W35 | kW/A | 5.5 / 7.9 | | | |
| | Minimum / Maximum starting current ⁷ | A | 0.9 / 4.2 | | | |
| | Correction of cosine Ø | _ | 0.96/1 | | | |
| DIMENSIONS/ WEIGHT | Height x width x depth | mm | VOLTA W S: 1051x609x716 · VOLTA W L: 1943x609x724 | | | |
| | Empty weight (without assembly) | mm kg | S 195 · L 260 | S 205 · L 270 | | |

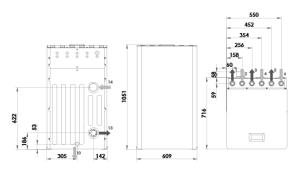
- Air source by replacing the ground source circuit by one or more VOLTA W-O air units. Consult the VOLTA W-O aerothermal units manual for more detailed information.
- In compliance with EN 14511, this includes the consumption of the circulation pumps and the compressor driver.
- 3. Considering brine 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.
- 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.
- 10. Certification in process.
- 11. Integrated by default in modules S/L A and S/L F.





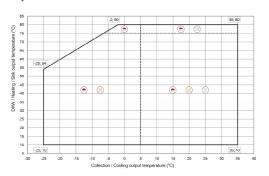
Dimensions and hydraulic connections

VOLTA W S



- Heating/Cooling Outlet 1 1/4" M
- Heating/Cooling Inlet 1 1/4" M
- Brine Outlet 1 1/4" M Brine Inlet 1 1/4" M
- 5. DHW system Outlet 1 1/4" M 6. DHW System Inlet 1 1/4" M
- CW Inlet 1" F
- 8. DHW Outlet 1" F
- 9. DHW Recirculation Inlet 3/4" F
- 10. Drain 16 mm
- 11. Safety duct outlet Ø80
- 12. Safety duct inlet Ø80

Operational chart



Installation management



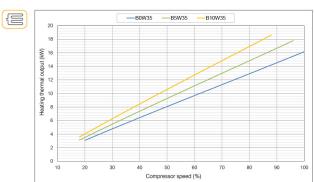


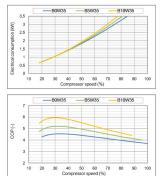




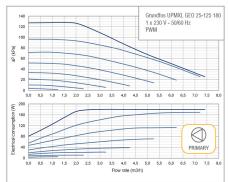
Performance curves

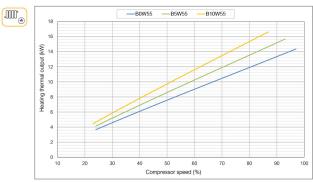
Thermal performance

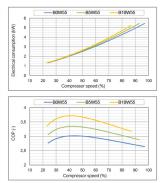


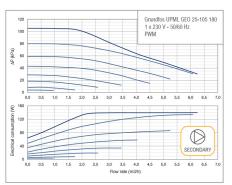


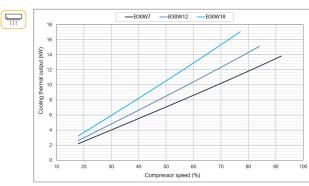
Hydraulic performance

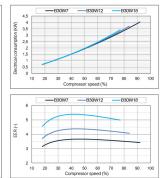


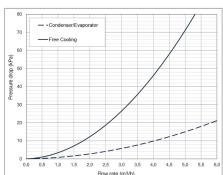














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