Austria Email

Domestic hot water heat pump

# WPA 450 ECO

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The combination of particularly high-quality components results in a heat pump cylinder that is perfect for apartment blocks, local authorities and commercial buildings. Its high COP value of 3.9 and its operating range down to -7°C are the outstanding advantages of this high-end product.

## ADVANTAGES

- With switching input for photovoltaic system
- Hot water heat pump (free-standing storage tank with welded-in with 1.76 m2 heating surface, integrated heat pump and electric heating and electric heater)
- Extremely energy-saving operation
- With 2 connection nozzles Ø 250 mm at the side (supply and exhaust air)
- High COP value: 3.9 (according to EN 16147 : A20/W10-55)
- The device is built in a compact design
- Operating range (-7°C to +35°C)
- Corrosion protection thanks to high-quality enamelling in accordance with DIN 4753
- No heat transfer losses between heat pump and cylinder
- Tried and tested technology, easy to install, simple to integrate into all systems integrated in all systems
- No refrigeration connection work required
- The cylinder is equipped with high-quality insulation (PU, 50 mm)
- Wide range of operating options (heating via heat pump or boiler)
- Control of the boiler circulation pump via built-in electronics
- Combination operation of heat pump + electric auxiliary heating or heat pump + boiler possible
- Economy mode with at least 40°C possible, can be heated up to 65°C using a heat pump
- Enables cooling of a room in addition to hot water preparation
- Automatic switch-off of the heat pump at temperatures below -7°C
- Also designed for multivalent operation
- Digital temperature display
- Integrated automatic legionella protection
- Short amortisation period
- Environmentally friendly
- Robust and extremely user-friendly controller with digital temperature display temperature display
- Easy to select basic programmes

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# Technical data

| | | WPA 450 ECO |
|---|---|---|
| Article number | | A 411 82 |
| Content | L | 450 |
| Heat output heat pump | W/W[2] | 3830/7830 |
| Heat pump power consumption | W/W[2] | 980/4980 |
| Electric heating element | W | 2x2000 |
| COP value | | 3,9[1] |
| Voltage/frequency | V/Hz | 230/50<br>400/50 |
| Electrical fuse protection | V/Hz | 16 A/ 25 A/ 3x16 A |
| Refrigerant | | R 134 A |
| Refrigerant charge | kg | 1,8 |
| Heat pump operating range | °C | -7 bis +35 |
| Max. water temperature | °C | 65 (70)[3] |
| Legionella protection | °C | ≈ 60 |
| Required air flow rate | m³/h | 800 |
| Register heating surface below | m² | 1,76 |
| Storage tank protection | | Magnesium anode |
| Thermal insulation | | 50 mm PU |
| Air duct connection | mm/m | 250 / max. 25 m |
| Water connection | Zoll | 1 |
| Outer diameter (D) | mm | 794 |
| Unit height (H) | mm | 2070 |
| Tilt dimension | mm | 2220 |
| Heat retention loss S according to EN 12897 | kWh/24h | 2,71 |
| | Watt | 113 |
| Tap profile | | XXL |
| Energy efficiency class | | A+ |

1 ...according to EN 16147 - air temperature 20°C, water heating 10°C to 55°C, relative humidity 70%
2 ...with electric heating
3 ...with electric heating (heat pump operation up to max. 70°C with PV signal)

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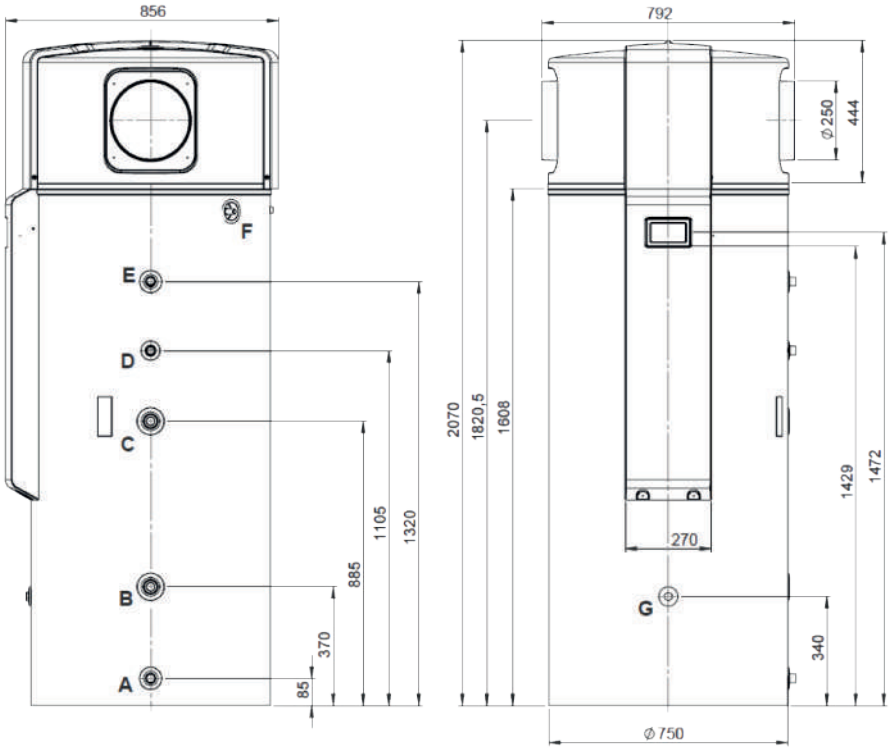
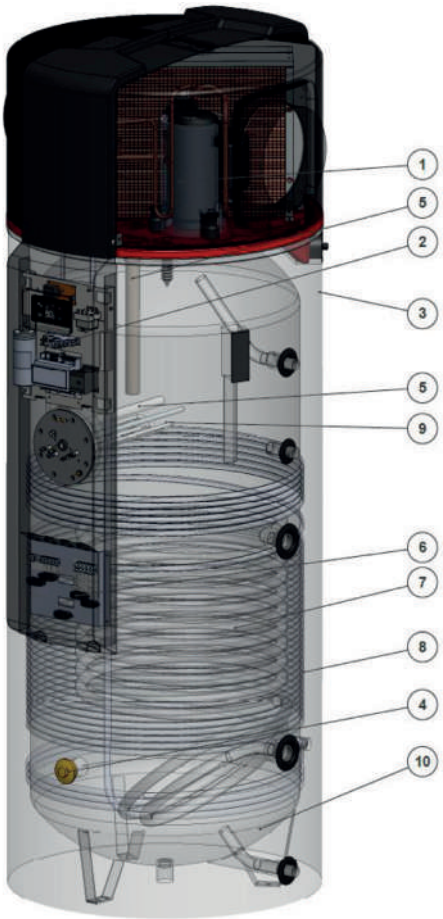
# Technical data




1 - Heat pump
2 - Regulator
3 - Hard foam insulation 50mm
4 - Sleeve G 6/4’
5 - Magnesium anode
6 - Connection terminal board
7 - Solar heat exchanger
8 - Condenser
9 - Flange with electric heater and magnesium anode
10 - Enamelled steel tank

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Subject to printing errors and technical changes | V0924