

AIR/WATER-HEATPUMP FOR HEATING & COOLING

ESTIA All-in-One S1 11 kW



→ Highlights

- Integrated storage tank with 210 Liter
- Energy efficiency A +++
- Operating range down to -25°C outdoor temperature
- Operation without backup heater up to the standard outside temperature

R32 Air to water heat pumps in split design with integrated hot water tank, for leaving water temperatures up to +65°C, in the capacity range from 4 to 14 kW, for the preparation of hot or cold water. Combination of outdoor unit and All-in-One indoor unit to supply all applications such as fan coils, radiators or underfloor heating.

→ Attractive and economical

- Highest energy efficiency (A +++)
- COP efficiency up to 5.20
- Low investment, installation and operating costs
- Particularly high efficiency in the partial load range
- Compressor control range from 10 to 100%
- Suitable for monovalent heating
- For heating and domestic hot water preparation
- Connection to existing heating systems possible
- EHPA and KEYMARK certified performance & quality
- Master / slave control for up to 8 ESTIA systems
- Highest "Japan-designed & Europe-manufactured" quality

→ Convenient operation

- Control unit integrated in the All-in-One indoor unit
- Additional (2nd) remote control possible as an option
- Optional 2-zone temperature control (8, 11, 14 kW)
- 1-zone temperature control (4 & 6 kW)
- Automatic restart after a power failure
- Optional WiFi control via smartphone APP
- Weekly timer
- Frost protection function
- Hot water boost
- Night set-back function
- Screed heating program

→ Resource-saving

- Inverter control minimizes the power requirement
- Low-GWP refrigerant R32 pre-filled
- Air as an energy source in heating mode
- "Night Operation" whisper mode

→ Technical details

- DC hybrid inverter technology
- Twin-rotary compressor
- Liquid-Injection (8 & 11 kW)
- Piping length up to 30 m
- Leaving water temperature up to +65°C (8, 11, 14 kW)
- 6-stage A-class water pump
- Digital IN / OUT functions as standard
- Smart Grid Onboard
- Control options: Modbus, KNX, 0-10 Volts, WiFi

→ Easy selection, installation & commissioning

- "ESTIA Selection Tool" Software supports selection & calculates cost savings
- Only 60 x 67 cm installation space for the indoor unit
- Compact & quiet single-fan outdoor units
- Small amount of refrigerant, below the EN378 minimum limit
- "DynaKit" Startup Tool for easy commissioning via preconfiguration



ESTIA All-in-One S1 11 kW / SET

| Outdoor unit | | | HWT-1101HW-E |
|--|-----------|---|-------------------|
| Heating capacity @ A+7/W+35 (nom.) | kW | ☀ | 11,00 |
| Power consumption @ A+7/W+35 (nom.) | kW | ☀ | 2,39 |
| Energy efficiency COP @ A+7/W+35 (nom.) | W/W | ☀ | 4,60 |
| Heating capacity @ A+2/W+35 (max.) | kW | ☀ | 11,46 |
| Power consumption @ A+2/W+35 (max.) | kW | ☀ | 3,24 |
| Energy efficiency COP @ A+2/W+35 (max.) | W/W | ☀ | 3,54 |
| Energy efficiency class | | ☀ | A+++ |
| Seasonal energy efficiency ETAs - Average Climate, W+35/W+55 | % | ☀ | 179 / 142 |
| Seasonal energy efficiency SCOP- Average Climate, W+35/W+55 | W/W | ☀ | 4,55 / 3,62 |
| Cooling capacity @ A+35/W+7 (nom.) | kW | ❄ | 8,00 |
| Power consumption @ A+35/W+7 (nom.) | kW | ❄ | 2,86 |
| Energy efficiency EER @ A+35/W+7 (nom.) | W/W | ❄ | 2,80 |
| Compressor type | | | Twin-Rotary w/inj |
| Power supply | V/Ph+N/Hz | | 220-240/1+N/50 |
| Running current (max.) | A | | 19,98 |
| Current consumption (nom.) | A | | 10,60 |
| Current consumption (max.) | A | | 19,98 |
| Starting current | A | | Softstart |
| Recommended power supply line type | | | H07RN-F 3G4,0 |
| Recommended fusing | A | | 20 |
| Communication line | | | H07RN-F 4G1,5 |
| Outdoor temperature operating range (min.-max.) | °C | ☀ | -25 / +25 |
| Outdoor temperature operating range (min.-max.) | °C | ❄ | +10 / +43 |
| Liquid pipe diameter | mm (inch) | | 6,3 (1/4) |
| Suction gas pipe diameter | mm (inch) | | 15,9 (5/8) |
| Pipe length (min.) | m | | 5 |
| Pipe length (max.) | m | | 30 |
| Height difference (max.) | m | | 30 |
| Sound power level (ERP) | dB(A) | ☀ | 65 |
| Sound power level (max.) /Heating capacity | dB(A) /kW | ☀ | 72 /13,24 |
| Sound power level (max.) | dB(A) | ❄ | 67 |
| Sound pressure level (Rated, 1m) | dB(A) | ☀ | 51 |
| Sound pressure level (Rated, 1m) | dB(A) | ❄ | 51 |
| Sound power level (night operation) /Heating capacity | dB(A) /kW | ☀ | 62 /8,28 |
| Sound power level (night operation) | dB(A) | ❄ | 60 |
| Sound pressure level (night operation, @ 1m) | dB(A) | ☀ | 49 |
| Sound pressure level (night operation, @ 1m) | dB(A) | ❄ | 47 |
| Refrigerant | | | R32 |
| Refrigerant charge | kg | | 1,25 |
| CO2 equivalent | t | | 0,844 |
| Pre-charged up to | m | | 8 |
| Dimensions (HxWxD) | mm | | 1050 x 1010 x 370 |
| Weight | kg | | 75 |

ESTIA All-in-One S1 11 kW / SET

| Indoor unit | HWT-1101F21MT9W-E | | |
|--------------------------------------|-------------------|---|---------------------------------|
| Supply water temperature (min.-max.) | °C | ☀ | 20/65 |
| Supply water temperature (min.-max.) | °C | ❄ | 7/25 |
| Compatible outdoor units | | | 801/1101 |
| Controllable zones | | | 2 |
| Backup heater, capacity | kW | | 9 |
| Backup heater, connection | Ph+N | | 380-415/3+N/50 |
| Backup heater, recommend fusing | A | | 3x 16 |
| Water pump | | | Variable speed centrifugal pump |
| Water flow rate (min.) | m ³ /h | | 0,78 |
| Water flow rate (nom.) | m ³ /h | | 1,362 |
| Water pump, power consumption (max.) | kW | | 0,060 |
| Water pump, energy efficiency class | | | EEl |
| Water pump, discharge head (max.) | m | | 7,2 |
| Expansion vessel | l | | 10 |
| Water connection (inlet/outlet) | Inch | | 22 |
| Sound pressure level (low/med/high) | dB(A) | ☀ | 32 |
| Sound pressure level (low/med/high) | dB(A) | ❄ | 32 |
| Sound power level | dB(A) | ☀ | 44 |
| Sound power level | dB(A) | ❄ | 44 |
| Dimensions (HxWxD) | mm | | 1700 x 600 x 670 |
| Weight | kg | | 162 |

❄ Cooling ☀ Heating

The measuring conditions for this product can be found at <https://www.toshiba-aircondition.com/en/measuring-conditions.html>

