

AIR/WATER-HEATPUMP FOR HEATING & COOLING

ESTIA Hydrobox Compact 11



Highlights

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 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 hydrobox to supply all applications such as hot water tanks, 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
- 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 hydrobox
- Additional (2nd) remote control possible as an option
- Integrated 2-zone temperature control
- 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, 14 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

- Compact & lightweight indoor units
- Compact & quiet single-fan outdoor units
- Small amount of refrigerant, below the EN378 minimum limit
- "DynaKit" Startup Tool for easy commissioning via preconfiguration



ESTIA Hydrobox Compact 11 / SET

| Outdoor unit | | | HWT-1101HW-E |
|--|-----------|---|-------------------|
| Heating range @A+7/W+35 (min. - max.) | kW | ☀ | 1,01 - 13,24 |
| 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 |

❄ Cooling ☀ Heating



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| Indoor unit | | | HWT-1101XWHT6W-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, connection | Ph+N | | 380-415/3+N/50 |
| Backup heater, recommend fusing | A | | 2x 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 | | | EEI |
| Water pump, discharge head (max.) | m | | 7,2 |
| Expansion vessel | l | | 8 |
| Water connection (inlet/outlet) | Inch | | 1 |
| Sound pressure level (low/med/high) | dB(A) | ☀ | 28 |
| Sound pressure level (low/med/high) | dB(A) | ❄ | 28 |
| Sound power level | dB(A) | ☀ | 38 |
| Sound power level | dB(A) | ❄ | 38 |
| Dimensions (HxWxD) | mm | | 725 x 450 x 235 |
| Weight | kg | | 27 |

❄ Cooling ☀ Heating

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

