



AIR/WATER-HEATPUMP FOR HEATING & COOLING

## ESTIA Hydrobox Compact 14 kW



### Highlights

- Energy efficiency A +++
- Operating range down to  $-25^{\circ}\text{C}$  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  $+65^{\circ}\text{C}$ , 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  $+65^{\circ}\text{C}$  (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
- 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 14 kW / SET

Outdoor unit			HWT-1401HW-E
Heating capacity @ A+7/W+35 (nom.)	kW	☀	14,00
Power consumption @ A+7/W+35 (nom.)	kW	☀	3,04
Energy efficiency COP @ A+7/W+35 (nom.)	W/W	☀	4,60
Heating capacity @ A+2/W+35 (max.)	kW	☀	16,13
Power consumption @ A+2/W+35 (max.)	kW	☀	4,62
Energy efficiency COP @ A+2/W+35 (max.)	W/W	☀	3,49
Energy efficiency class		☀	A+++
Seasonal energy efficiency ETAs - Average Climate, W+35/W+55	%	☀	183 / 138
Seasonal energy efficiency SCOP- Average Climate, W+35/W+55	W/W	☀	4,65 / 3,53
Cooling capacity @ A+35/W+7 (nom.)	kW	❄	10,00
Power consumption @ A+35/W+7 (nom.)	kW	❄	4,08
Energy efficiency EER @ A+35/W+7 (nom.)	W/W	❄	2,45
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		14,20
Current consumption (max.)	A		3x 13,00
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		25
Height difference (max.)	m		25
Sound power level (ERP)	dB(A)	☀	69
Sound power level (max.) /Heating capacity	dB(A) /kW	☀	72 /18,39
Sound power level (max.)	dB(A)	❄	70
Sound pressure level (Rated, 1m)	dB(A)	☀	59
Sound pressure level (Rated, 1m)	dB(A)	❄	59
Sound power level (night operation) /Heating capacity	dB(A) /kW	☀	62 /11,12
Sound power level (night operation)	dB(A)	❄	63
Sound pressure level (night operation, @ 1m)	dB(A)	☀	50
Sound pressure level (night operation, @ 1m)	dB(A)	❄	51
Refrigerant			R32
Refrigerant charge	kg		1,40
CO2 equivalent	t		0,945
Pre-charged up to	m		8
Dimensions (HxWxD)	mm		1050 x 1010 x 370
Weight	kg		88

## ESTIA Hydrobox Compact 14 kW / SET

Indoor unit			HWT-1401XWHT9W-E
Supply water temperature (min.-max.)	°C	☀	20/65
Supply water temperature (min.-max.)	°C	❄	7/25
Compatible outdoor units			1401
Controllable zones			1
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 <sup>3</sup> /h		0,78
Water flow rate (nom.)	m <sup>3</sup> /h		1,716
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)	☀	29
Sound pressure level (low/med/high)	dB(A)	❄	29
Sound power level	dB(A)	☀	40
Sound power level	dB(A)	❄	40
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>

