

AIR/WATER-HEATPUMP FOR HEATING & COOLING

## ESTIA All-in-One S1 6 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 6 kW / SET

Outdoor unit			HWT-601HW-E
Heating capacity @ A+7/W+35 (nom.)	kW	☀	6,00
Power consumption @ A+7/W+35 (nom.)	kW	☀	1,25
Energy efficiency COP @ A+7/W+35 (nom.)	W/W	☀	4,80
Heating capacity @ A+2/W+35 (max.)	kW	☀	6,42
Power consumption @ A+2/W+35 (max.)	kW	☀	1,52
Energy efficiency COP @ A+2/W+35 (max.)	W/W	☀	4,22
Energy efficiency class		☀	A+++
Seasonal energy efficiency ETAs - Average Climate, W+35/W+55	%	☀	180 / 132
Seasonal energy efficiency SCOP- Average Climate, W+35/W+55	W/W	☀	4,58 / 3,37
Cooling capacity @ A+35/W+7 (nom.)	kW	❄	5,00
Power consumption @ A+35/W+7 (nom.)	kW	❄	1,52
Energy efficiency EER @ A+35/W+7 (nom.)	W/W	❄	3,30
Compressor type			Twin-Rotary
Power supply	V/Ph+N/Hz		220-240/1+N/50
Running current (max.)	A		14,60
Current consumption (nom.)	A		5,78
Current consumption (max.)	A		14,6
Starting current	A		Softstart
Recommended power supply line type			H07RN-F 3G2,5
Recommended fusing	A		16
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)		12,7 (1/2)
Pipe length (min.)	m		5
Pipe length (max.)	m		30
Height difference (max.)	m		30
Sound power level (ERP)	dB(A)	☀	66
Sound power level (max.) /Heating capacity	dB(A) /kW	☀	71 /7,25
Sound power level (max.)	dB(A)	❄	65
Sound pressure level (Rated, 1m)	dB(A)	☀	46
Sound pressure level (Rated, 1m)	dB(A)	❄	46
Sound power level (night operation) /Heating capacity	dB(A) /kW	☀	58 /4,29
Sound power level (night operation)	dB(A)	❄	57
Sound pressure level (night operation, @ 1m)	dB(A)	☀	42
Sound pressure level (night operation, @ 1m)	dB(A)	❄	41
Refrigerant			R32
Refrigerant charge	kg		0,9
CO2 equivalent	t		0,608
Pre-charged up to	m		20
Dimensions (HxWxD)	mm		630 x 800 x 300
Weight	kg		42

## ESTIA All-in-One S1 6 kW / SET

Indoor unit			HWT-601F21ST6W-E
Supply water temperature (min.-max.)	°C	☀	20/55
Supply water temperature (min.-max.)	°C	❄	7/25
Compatible outdoor units			401/601
Controllable zones			1
Backup heater, capacity	kW		6
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 <sup>3</sup> /h		0,66
Water flow rate (nom.)	m <sup>3</sup> /h		0,858
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)	☀	30
Sound pressure level (low/med/high)	dB(A)	❄	30
Sound power level	dB(A)	☀	42
Sound power level	dB(A)	❄	42
Dimensions (HxWxD)	mm		1700 x 600 x 670
Weight	kg		157

❄ Cooling ☀ Heating

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

