

SPLIT-HEATPUMP FOR HEATING & COOLING

ESTIA R32 Split Hydrobox



Highlights

- Energy efficiency A +++
- Operating range down to -25°C outdoor temperature
- Operation without backup heater up to the standard outside temperature

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 R32 Split Hydrobox / SET

Outdoor unit			HWT-1401HW-E
Heating capacity @ A+7/W+35 (nom.)	kW	☀	14,00
Energy efficiency COP @ A+7/W+35 (nom.)	W/W	☀	4,60
Energy efficiency class		☀	A+++
Seasonal space heating efficiency (ns), low temperature (35 °C), average climate	%		183
Cooling capacity @ A+35/W+7 (nom.)	kW	❄	10,00
Energy efficiency EER @ A+35/W+7 (nom.)	W/W	❄	2,45
Compressor type			Twin-Rotary w/inj
Power supply	V/Ph+N/Hz		220-230/1/50
Starting current	A		Softstart
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 pressure level (low/med/high)	dB(A)	☀	72
Sound pressure level (low/med/high)	dB(A)	❄	70
Sound power level	dB(A)	☀	70
Sound power level	dB(A)	❄	70
Sound pressure level (night operation)	dB(A)	❄	63
Sound power level (night operation)	dB(A)	☀	62
Sound power level (night operation)	dB(A)	❄	63
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

❄ Cooling ☀ Heating



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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
Backup heater, capacity	kW		9
Backup heater, connection	Ph+N		380-400/3+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 pump, power consumption (max.)	kW		0,060
Water pump, energy efficiency class			EEl
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>

