

ONE SYSTEM FOR ALL APPLICATIONS

## Estia R410A 11



### Highlights

- Heating and cooling function
- Compressor control range 10 to 100%
- Operation without backup heating up to the standard outdoor temperature



Air/Water heat pumps in a split design for flow temperatures up to +55°C, in the power range of 5 to 16 kW, for generating hot or cold water. Combination of outdoor unit and hydro unit for supplying all applications such as hot water tanks, fan coils, radiators, or underfloor heating.



### Attractive and economical

- Very high energy efficiency (A++)
- COP efficiency up to 4.90
- Low investment, installation, and operating costs
- Exceptionally high efficiency in the partial load range
- Suitable for monovalent heating
- For heating and process water generation
- Can be connected to existing heating systems
- Reliable heating with an outdoor temperature down to -20°C
- Corresponds to the ECODESIGN Lot 1 Directive
- Master/Slave control for up to 8 ESTIA systems



### Resource-friendly

- Inverter control minimizes electricity consumption
- Pre-filled with environmentally-friendly refrigerant R410A
- Air used as energy source in heating mode
- Unobtrusive design fits any interior
- Compact & quiet outdoor unit
- "Night operation" whisper operating mode



### Easy operation

- Control unit integrated into the hydro unit
- Additional remote control available
- Easy icon-guided operation
- Integrated 2-zone temperature control
- Automatic restart after power outage
- Weekly timer
- Frost protection function
- Hot water boost
- Night set-back function



### Technical details

- Direct current hybrid inverter technology
- Twin-rotary compressor
- Pipe lengths up to 30 m
- Flow temperature heating up to +55°C
- Six-stage A-class water pump



## Estia R410A 11 / SET

Outdoor unit			HWS-1105H8-E
Heating capacity @ A+7/W+35 (nom.)	kW	☀	11,20
Power consumption @ A+7/W+35 (nom.)	kW	☀	2,34
Energy efficiency COP @ A+7/W+35 (nom.)	W/W	☀	4,80
Heating capacity @ A+2/W+35 (max.)	kW	☀	10,46
Power consumption @ A+2/W+35 (max.)	kW	☀	2,90
Energy efficiency COP @ A+2/W+35 (max.)	W/W	☀	3,61
Energy efficiency class		☀	A++
Seasonal space heating efficiency (ns), low temperature (35 °C), average climate	%		161
Cooling capacity @ A+35/W+7 (nom.)	kW	❄	10,00
Power consumption @ A+35/W+7 (nom.)	kW	❄	3,26
Energy efficiency EER @ A+35/W+7 (nom.)	W/W	❄	3,07
Energy efficiency class		❄	A++
Compressor type			Twin-Rotary
Power supply	V/Ph+N/Hz		380-400/3/50
Running current (max.)	A		14,60
Starting current	A		Softstart
Recommended power supply line type			H07RN-F 5G2,5
Recommended fusing	A		3 x 16
Communication line			H07RN-F 4G1,5
Outdoor temperature operating range (min.-max.)	°C	☀	-20 / +43
Outdoor temperature operating range (min.-max.)	°C	❄	+15 / +43
Liquid pipe diameter	mm (inch)		9,5 (3/8)
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 pressure level (low/med/high)	dB(A)	☀	51
Sound pressure level (low/med/high)	dB(A)	❄	51
Sound power level	dB(A)	☀	64
Sound power level	dB(A)	❄	66
Sound pressure level (night operation)	dB(A)	❄	46
Sound power level (night operation)	dB(A)	☀	61
Sound power level (night operation)	dB(A)	❄	60
Refrigerant			R410A
Refrigerant charge	kg		2,7
CO2 equivalent	t		5,638
Pre-charged up to	m		30
Dimensions (HxWxD)	mm		1340 x 900 x 320
Weight	kg		93

❄ Cooling ☀ Heating



## Estia R410A 11 / SET

Indoor unit			HWS-1405XWHM3-E
Supply water temperature (min.-max.)	°C	☀	20/55
Supply water temperature (min.-max.)	°C	❄	7/25
Compatible outdoor units			1105/1405/1605
Backup heater, capacity	kW		3
Backup heater, connection	Ph+N		220-230/1/50
Backup heater, recommend fusing	A		16
Water pump			Non-self-suction centrifugal pump
Water flow rate (min.)	m <sup>3</sup> /h		1,05
Water flow rate (nom.)	m <sup>3</sup> /h		1,926/1,734
Water pump, power consumption (max.)	kW		0,190
Water pump, energy efficiency class			A
Water pump, discharge head (max.)	m		8,8
Expansion vessel	l		12
Water connection (inlet/outlet)	Inch		1 1/4
Sound pressure level (low/med/high)	dB(A)	☀	32
Sound pressure level (low/med/high)	dB(A)	❄	32
Sound power level	dB(A)	☀	43
Sound power level	dB(A)	❄	43
Dimensions (HxWxD)	mm		925 x 525 x 355
Weight	kg		52

❄ Cooling ☀ Heating

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

