

## PRODUCT BULLETIN

### Estia Air to Water Heat Pump 5 Series

- *HWS-455H-E Outdoor Unit*
- *HWS-455XWHM3-E Hydro Indoor Unit*

\*\*\* Available Qtr 4 2017 \*\*\*

**TOSHIBA** are pleased to announce the production of the NEW Estia 5 series 4.5 kW Air to Water Heat Pump to join the current product line-up.



#### 1. Product Line-up

Outdoor Unit	
Power Supply	Model Name
220-230V/1PH/50HZ	HWS-455H-E

Hydro Indoor Unit		
Power Supply	Model Name	Note
220-230V/1PH/50HZ	HWS-455XWHM3-E	3kW Back up Heater

Standard Controller	Model Name
Hard wired remote controller	HWS-AMS54E

#### 2. Release Date

Factory production commences mid-June 2017, anticipated availability Q4 2017.

#### 3. Features

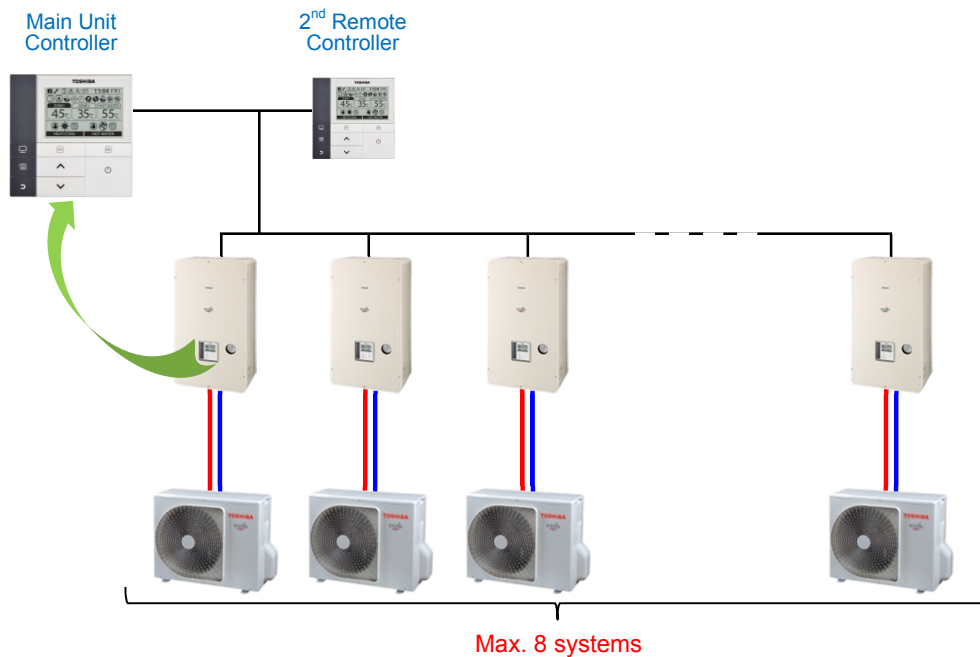
Industry leading COP: -

Conditions	A7/W35	A-7/W35
COP	4.9	3.08

- ♦ Compact small chassis outdoor H 630mm x W 800mm x D 300mm

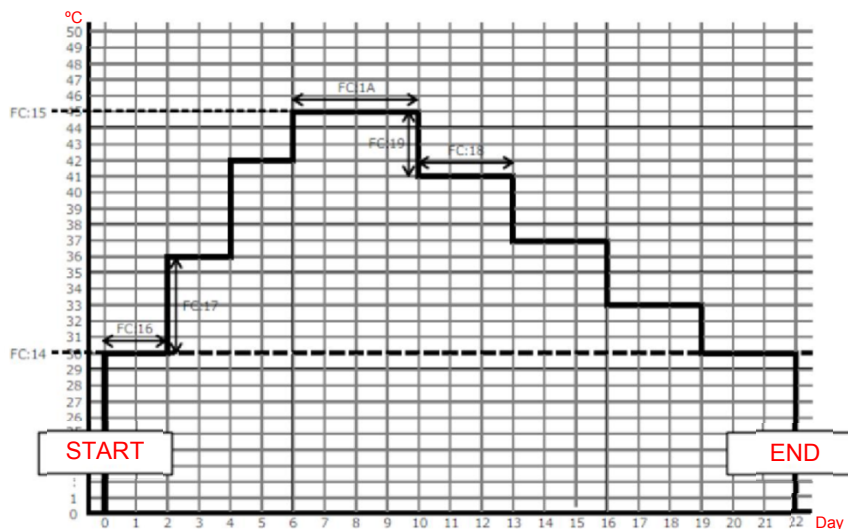
## 4. New 2<sup>nd</sup> Remote Controller

- ◆ Stylish design & new icons
- ◆ Backlight installed
- ◆ 6 languages available:
  - English
  - French
  - German
  - Turkish
  - Italian
  - Spanish
- ◆ New group control function; max. 8 systems can operate simultaneously using one remote controller
- ◆ 2 Remote controllers can be connected to the system



- ◆ Floor drying function: This function changes the target hot water temperature according to setting by installer in stages to gradually dry concrete when the underfloor heating system is newly installed.

(Target floor temp.)



Water temperature and days can be set by installer

## 5. Accessories

Model	Description	Function
TCB-PCIN3E	Output signal PCB	Boiler operation signal, alarm output signal, defrost output signal, compressor operation output signal
TCB-PCMO3E	Input signal PCB	Room thermostat input, emergency stop input
HWS-AMS54E	Remote Controller	Hard wired remote controller

## 6. Preliminary Performance Data

Estia 5 Series Air To Water Heat Pump Outdoor/Hydro Unit Combination						HWS-455H-E
						HWS-455XWHM3-E
Under floor heating	Max heating capacity	+7°C	35°C	kW	H	6.83
	Nominal heating capacity	+7°C	35°C	kW	H	4.5
	COP	+7°C	35°C	WM	H	4.9
	Energy efficiency class - Low temp.		35°C		H	A++
	Seasonal space heating energy efficiency (ηs)		35°C	%	H	TBC
	Max heating capacity	-7°C	35°C	kW	H	4.48
	Heating capacity (1)	-7°C	35°C	kW	H	4.18
	COP	-7°C	35°C	WM	H	3.01
	Max heating capacity	-15°C	35°C	kW	H	3.61
	Heating capacity (1)	-15°C	35°C	kW	H	3.14
Radiators heating & DHW	COP	-15°C	35°C	WIW	H	2.45
	Max heating capacity	+7°C	45°C	kW	H	6.42
	Max heating capacity	-7°C	45°C	kW	H	4.37
	Max heating capacity	-15°C	42°C	kW	H	2.84
	Max heating capacity	+7°C	55°C	kW	H	6.25
	Max heating capacity	-7°C	50°C	kW	H	4.29
	Energy efficiency class - Medium temp.		55°C		H	A++
Cooling	Seasonal space heating energy efficiency (ηs)		55°C	%	H	TBC
	Nominal cooling capacity	35°C	+7°C	kW	C	4.5
	EER			W/W	C	TBC

Max heating capacities are shown at peak value during operation, at max compressor operating range in accordance with EN14511

Nominal heating capacity are given at water delta T° 5°C and rated compressor operating frequency in accordance with EN14511

(1) Heating capacity at -7°C is shown at max compressor operating frequency in accordance with EN1451. Energy Efficiencies Class and Seasonal Space Heating Energy Efficiency (ηs) are provided for Average Climate conditions in accordance with EN14825

## 7. Preliminary Specifications

Model		HWS-455H-E	HWS-455XWHM3-E
Dimensions (HxWxD)	mm	630 x 800 x 300	925 x 525 x 355
Weight	kg	42	49
Sound pressure level (max)	dB(A)	48	27
Sound power level (max)	dB(A)	65	-
Sound pressure level (night mode)	dB(A)	44	-
Sound power level (night mode)	dB(A)	61	-
Compressor type		DC Twin rotary	-
Refrigerant		R410A	R410A
Flare connections (gas-liquid)	inch	1/2 - 1/4	1/2 - 1/4
Minimum pipe length	m	5	-
Maximum pipe length	m	15	-
Maximum height difference	m	10	-
Chargeless pipe length	m	15	-
Operating range in space heating	°C	-20-25	-
Operating range domestic hot water	°C	-20-43	20-55
Operating range in cooling	°C	10-43	7-25
Electric back-up heater	kW	-	3.0
Power supply	V-ph-Hz-A	220/230-1-50-10	220/230-1-50-13

For further information please contact our customer support team on 0870 843 0333, your local representative, your supplier of **TOSHIBA** products or email any enquiries to: - [general.enquiries@toshiba-ac.com](mailto:general.enquiries@toshiba-ac.com)