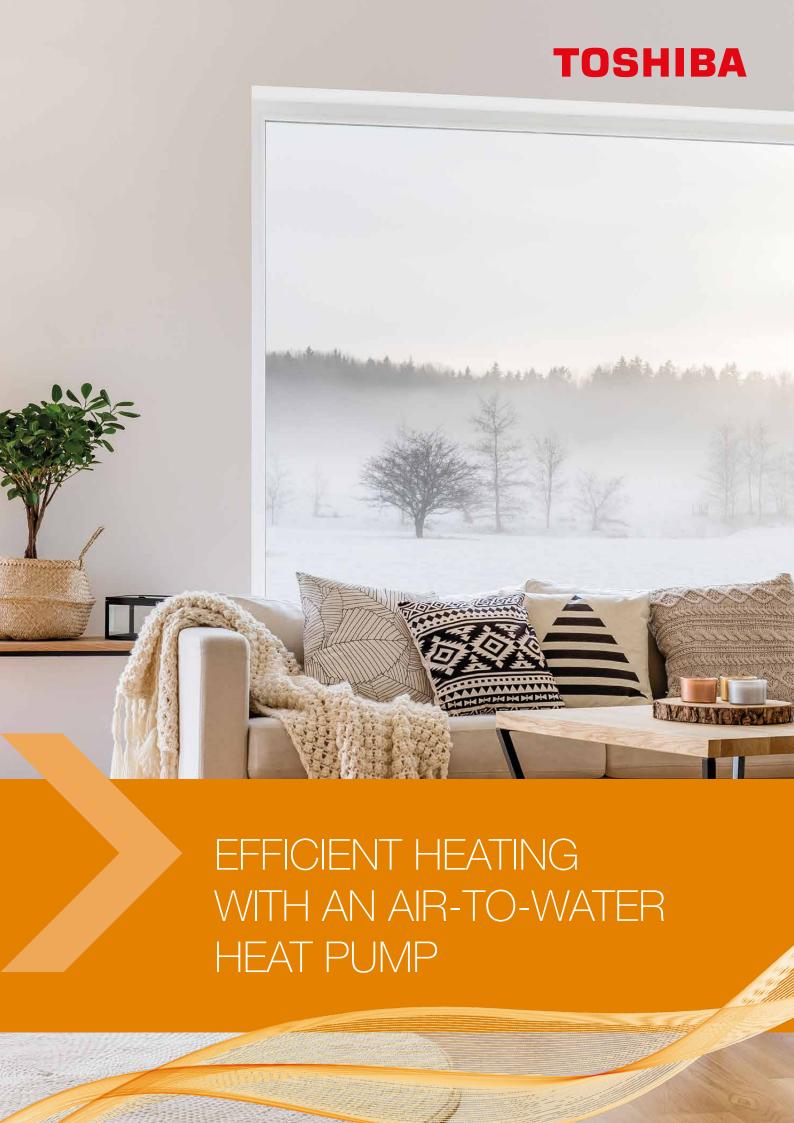


4	THE ENVIRONMENTALLY-FRIENDLY AND COST-EFFECTIVE HEATING SOLUTION
5	COMPONENTS OF THE ESTIA
6	GOOD REASONS FOR CHOOSING AN ESTIA AIR-TO-WATER HEAT PUMP
8	WARRANTY, SAFETY, AND RELIABILITY
10	CONTROL OPTIONS / ACCESSORIES
14	HOW AN AIR-TO-WATER HEAT PUMP WORKS
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# HEATING WITH HEAT FROM THE AIR – ENVIRONMENTALLY FRIENDLY, COST-EFFECTIVE, AND EFFICIENT.

The ESTIA air-to-water heat pump is extremely efficient and provides cost-effective heating, hot water preparation, and cooling in your home. The pump uses the outdoor air as an energy source, making it extremely environmentally friendly.

# 100% ENERGY FROM THE AIR

Rather than generating the hot water you need for bathing or heating using fuels (oil, pellets, wood, gas, etc.) or 100% electricity, all of the energy used comes from the air and simply requires a small amount of electrical energy to run the pump (depending on the outdoor air temperature).





# THE COMPONENTS

The ESTIA air-to-water heat pump consists of an out-door unit and an indoor unit. This is designed either as a compact Hydrobox or as an all-in-one unit with integrated hot water tank. All applications such as radiators, the underfloor heating, or an external hot water tank are supplied via the indoor unit.



# 1 The outdoor unit

Via compressor and heat exchanger, the thermal energy is obtained from the outside air and transferred to the hydrobox in the house.

# 2 The Hydrobox

In the Hydrobox, the heat is transferred with minimal heat loss from the refrigerant to the water system via a plate heat exchanger.

# 3 The All-in-One

The All-in-One indoor unit combines the Hydrobox with a hot water tank, making it especially space-saving. Despite its compact structure, the All-in-One model has a 210 liter stainless steel hot water tank and can supply heat to one or two zones, depending on the model.

# 4 The hot water tank

This is where the hot water is stored before use. The insulated boiler is made from stainless steel, which is both lightweight and very durable.

# 5 The control unit

The control panel is located on the Hydrobox and controls all the functions. There is an optional external room remote control with temperature sensor available. You can also equip your ESTIA with a WiFi module. Now you can control your ESTIA R32 from anywhere using the TOSHIBA AC Control app (only available for the ESTIA R32).



# Saving money with **ESTIA**

The air-to-water heat pump combines the benefit of **low acquisition costs** with **low operating costs**, and makes efficient use of renewable energies. Offering considerable versatility, it can be used for heating or preparing domestic hot water in new or renovated buildings when combined with radiators, underfloor heating, wall heating, or as ancillary pool heating. It can be used to regulate the temperature of rooms in the summer. Active cooling is possible via fancoils, for example.

# GOOD REASONS FOR CHOOSING AN ESTIA AIR-TO-WATER HEAT PUMP

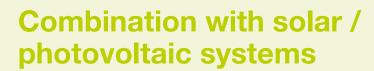
# Energy and cost-efficient

An air-to-water heat pump uses the free energy from the surrounding air to achieve high temperature values with low operating costs.

With its low electricity consumption, the heat pump is a cost-effective and efficient heating system both to purchase and in terms of ongoing operation.







ESTIA air-to-water heat pumps can be combined with solar and PV systems, making your heating or cooling even more environmentally-friendly and cost-effective.

# CO<sub>2</sub>-neutral & not dependent on fossil fuels

Use of the air as an energy source is  ${\rm CO_2}$ -neutral and causes no emissions as it is totally independent of fossil fuels such as oil and gas.





# **Flexibility**

ESTIA – Climate-friendly and economical heating for **RENOVATIONS** and **NEW-BUILDS**.

An air-to-water heat pump from TOSHIBA generates cozy thermal heat sustainably from the surrounding air. As a smart heat source, the heat pump fits into any new or old building, providing a reliable supply of water for heating and/or domestic hot water.

### **RENOVATION**





An ESTIA air-to-water heat pump is ideally suited for renovation measures in old buildings. With an existing domestic hot water heating system, a heating system replacement is basically not a problem. It can generally be installed in one day and the existing radiators can continue to be used.

Combination of heating systems

Combination with conventional, existing heating systems, such as gas, oil, etc., is also possible.

All the necessary pipes for the heat pump can be incorporated when a new house is designed. There is no need to design in a space for storing







The indoor and outdoor units can be set up quickly and easily, generally within one working day, without the need for further structural changes. There is no need for chimneys, groundworks, or space for storing fuel.

# WARRANTY, SAFETY AND RELIABILITY





# Reliable

ESTIA units are characterized by reliability and durability. In heating mode, they run reliably and efficiently in outdoor temperatures **down to -25°C**. ESTIA was launched on the market in 2009; we know that there are still many of the first series or units in operation.

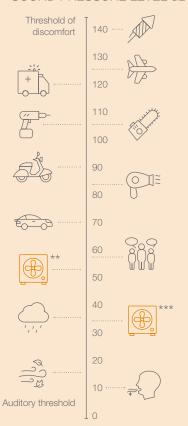


# An ESTIA is so quiet

An ESTIA heat pump is quiet – as shown by the sound pressure level, which describes the volume that we perceive. At a distance of just a few meters, an ESTIA outdoor unit barely reaches 30 dB(A). This is equivalent to a person whispering or the sound level inside a library – much to the delight of neighbors, municipal authorities, and the environment.

A trained specialist partner will be happy to advise you, and together you can find the best location for installing your new ESTIA.

### SOUND PRESSURE LEVEL dB(A)\*





- \* The data provided is for guidance only
- \*\* ESTIA measured at a distance of 1 m
- \*\*\* ESTIA measured at a distance of 5 m





# Reliable comfort guaranteed

TOSHIBA represents outstanding quality, as demonstrated by the excellent levels of efficiency. For the ESTIA, TOSHIBA offers a 5-year warranty for the unit's key component – the compressor.

### FIVE-YEAR COMPRESSOR WARRANTY

You automatically receive a 5-year warranty on the ESTIA compressor.

### **EXTENDED WARRANTY**

An extended warranty of 4 or 5 years is also possible for all other components.

# Safe and sustainable

The ESTIA air-to-water heat pumps have EHPA and Keymark certification awarded by independent, external institutes, making them eligible for public grants.

Your TOSHIBA specialist partner will tell you which grants are available.





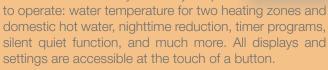


# **Convenient control options**

The unit can be controlled conveniently from its own control panel, by using a remote control in the living area, or as a mobile option using the smartphone app.

### **INTEGRATED CONTROL UNIT**

The clear icons on the integrated control unit make the entire system very simple



## **ROOM REMOTE** CONTROL

To operate the heat pump from the living room, the external additional remote control is used. This is an exact copy of the integrated control unit and allows settings to be conveniently made from the living room.





# Control by app for ESTIA R32



The **TOSHIBA Home AC Control app** allows users to easily take control of their own living environment. Water and outdoor temperatures, special functions such as quiet mode,

frost protection, and hot water boost can be easily controlled by smartphone. The **Energy Monitoring** for ESTIA R32 also provides a complete overview of energy consumption.







Cooling



Heating



Hot water

With **ESTIA Energy Monitoring** you will not miss out on any necessary kWh from your unit. As well as unbeatable efficiency, you will also benefit from maximum comfort while keeping an eye on your actual heating costs at all times.

Perfection and sustainability combined in a single app.



# ACCESSORIES ESTIA R32

### TYPE / DESCRIPTION



### HWS-AMSU51-E External control unit (wired)



### HWS-IFAIP01U-E

0-10 volt interface, for external control via 0-10 volt signals



### HWS-IWF0010UP-E

ESTIA R32 WiFi Adapter



### 95612037

Temperature sensor for locally provided hot water tank



### BMS-IFKX0AWR-E

KNX® interface, integration in building control systems, group control for up to 8 units



### BMS-IFMBOUEW-E

Modbus interface, integration in building control systems, group control for up to 8 units

# ACCESSORIES ESTIA R410A

### TYPE / DESCRIPTION



### HWS-AMS54E

External control unit (wired)



### TCB-PCIN3E

Enable signal for external heat generator and error signal output or compressor operating and defrosting signal outputs



### TCB-PCM03E

Input for external room thermostat or input for emergency stop or external on/off



### 95612037

Temperature sensor for locally provided hot water tank



### VK320M0AIRC001

Replacement flow switch, for sizes 8, 11, 14



### VK320M0AIRC002

Replacement flow switch, for size 4



### BMS-IFKX0AWR-E

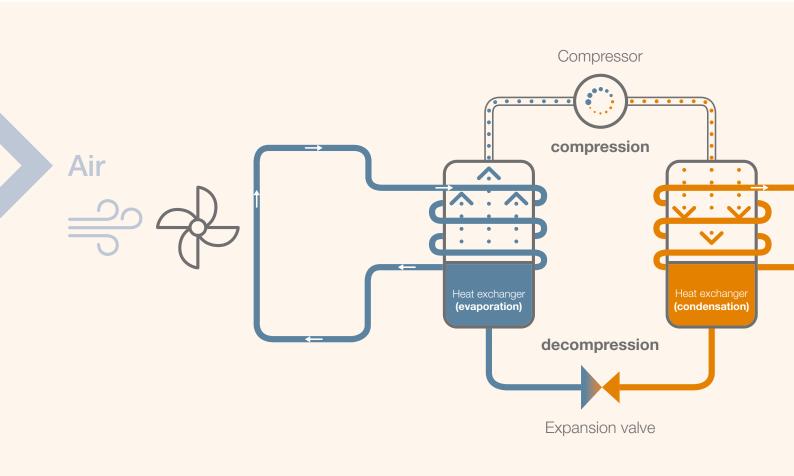
KNX® interface, integration in building control systems, group control for up to 8 units



### BMS-IFMBOUEW-E

Modbus interface, integration in building control systems, group control for up to 8 units

# SO HOW DOES AN AIR-TO-WATER HEAT PUMP WORK?





The refrigerant circulating around the system transfers and transports the heat.



In the evaporator (outdoor unit), the liquid refrigerant changes its state, and stores the energy absorbed in so doing.

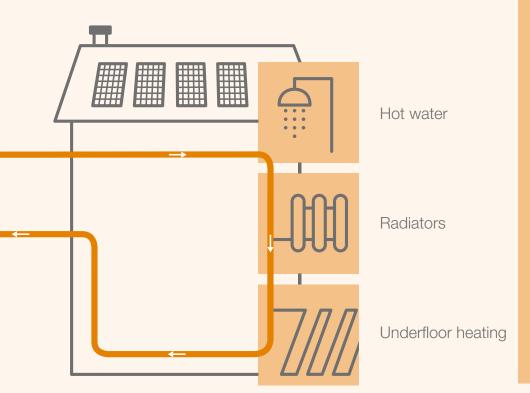


The compressor brings the refrigerant to a high pressure and temperature level.

The ESTIA air-to-water heat pump recovers energy from the air and transfers it to the heating system. This job is carried out by an environmentally-friendly refrigerant and an efficient compressor. The heat generated during this process is transferred to the water pipe system via

a heat exchanger. The domestic hot water and heating water are thus heated to the required temperature.

This energy-saving system works efficiently **down to chilly outdoor temperatures of -25°C**.



# 100% ENERGY FROM THE AIR

On average, the air-to-water heat pump heats with energy from the air and electrical energy in a ratio of 4:1. This means that 1 kWh electricity yields on average 4 kWh heating capacity.

It is a space-saving, efficient, and sustainable system compared to conventional heating systems.



The refrigerant is now very hot; it flows to the condenser (indoor unit) which is a heat exchanger in which the heat recovered from the environment is transferred to the water.



After cooling, the refrigerant returns to the liquid state and can once again absorb heat from the environment due to the pressure and temperature reduction caused by the expansion valve. And so the cycle begins again.

# ESTIA IN SINGLE-FAMILY HOMES

# PHOTOVOLTAIC/SOLAR

A photovoltaic (PV)/solar system can be incorporated without complications using a smart grid. This makes heating and cooling even more environmentally friendly and cost-effective.

# **OUTDOOR UNIT**

In the outdoor unit, the energy is recovered from the outdoor air with the aid of a heat exchanger, compressor, and refrigerant. It is then transferred to the indoor unit.

## **HYDROBOX**

The Hydrobox transfers the heat energy from the refrigerant to the water system in the house.

# **BUFFER TANK**

Incorporating a buffer tank can reduce your costs even further; it also has a number of technical benefits. Contact your local ESTIA partner for more information.

# 5 EXISTING RADIATORS

Existing radiators can continue to be used. A supply water temperature of up to 65°C is possible in combination with radiators.

# **UNDERFLOOR HEATING**

Combined with underfloor heating, the ESTIA system delivers the water for heating at a lower supply water temperature.

# **CONSTANT HOT WATER**

ESTIA is guaranteed to always supply sufficient domestic hot water in outdoor air temperatures from +43 down to -25°C.

# **ROOM REMOTE CONTROL**

The control panel is located on the Hydrobox and controls all the functions. An optional external room remote control is available. It can be linked into standard building control systems.

# STORAGE BATTERY

The photovoltaic battery stores the energy from the sun and outputs it to the devices to be supplied with electricity as required.

Your ESTIA R32 system can also be conveniently controlled via the TOSHIBA Home AC app. The energy monitoring function provides a complete overview of your energy consumption and costs.









# ESTIA IN APARTMENTS

# **OUTDOOR UNIT**

In the outdoor unit, the energy is recovered from the outdoor air with the aid of a heat exchanger, compressor, and refrigerant. It is then transferred to the indoor unit.

## **ALL-IN-ONE**

The All-in-One indoor unit transfers the heat energy from the refrigerant to the water system in the house. It also features a space-saving built-in 210 liter hot water tank.

## 3 EXISTING RADIATORS

Existing radiators can continue to be used. A supply water temperature of up to 65°C is possible in combination with radiators.

# **UNDERFLOOR HEATING**

Combined with underfloor heating, the ESTIA system delivers the water for heating at a lower supply water temperature.

# **CONSTANT HOT WATER**

ESTIA is guaranteed to always supply sufficient domestic hot water in outdoor air temperatures from +43 down to -25°C from the integrated 210 liter DHW tank.

# **CONTROL UNIT**

The control panel is located on the All-in-One and controls all the functions. An optional external room remote control is available. It can be linked into standard building control systems.

Your ESTIA R32 system can also be conveniently controlled via the TOSHIBA Home AC app. The energy monitoring function provides a complete overview of your energy consumption and costs.







App works with Android and iOS



# TYPICAL ESTIA APPLICATIONS



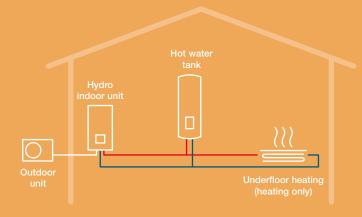
Different heating systems require **different supply** water temperatures.

For a radiator, for example, the supply water temperature required is significantly higher than for underfloor heating.

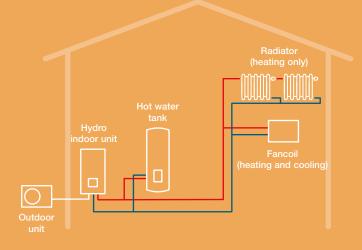
In this case, a **two-zone system** is required, while if only one supply water temperature is needed, then **one zone** is sufficient.

# 1 zone

1 zone with heating function and hot water preparation

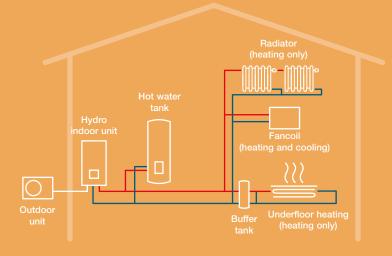


1 zone with heating and cooling function plus hot water preparation

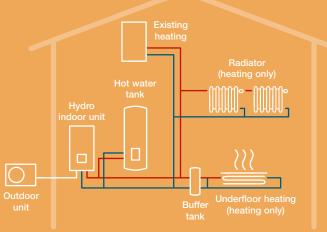


# 2 zones

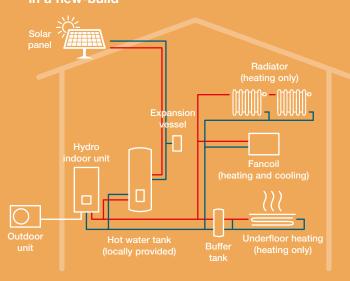
## 2 zones with cooling function in a new-build



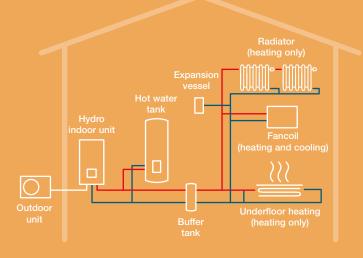
### 2 zones in a house with existing heating



# 2 zones with solar and cooling function in a new-build \_\_\_\_\_



# 2 zones with buffer tank and cooling function in a new-build



PLEASE NOTE: The examples shown above are purely symbolic diagrams.

# ESTIA PRODUCT OVERVIEW

Heating capacity (kW)			4		6
ESTIA All-in-One 1 zone	R32	1-phase Page 25		1-phase Page 27	
ESTIA All-in-One 2 zones	R32				
ESTIA  Hydrobox – Compact  1/2 zones	7 n S	1-phase Page 24		1-phase Page 26	
ESTIA  Hydrobox – Standard  1/2 zones	7 n R410A				
ESTIA  Hydrobox – Hi Power  1/2 zones	7 <u>ñ</u> { R410A				

8	11	14	16
1-phase / 3-phase*	1-phase / 3-phase*	1-phase* / 3-phase*	
Page 29	Page 31	Page 33	
1-phase / 3-phase*	1-phase / 3-phase*	1-phase* / 3-phase*	
Page 29	Page 31	Page 33	
1-phase / 3-phase*	1-phase / 3-phase*	1-phase* / 3-phase*	
Page 28	Page 30	Page 32	
	3-phase	1-phase / 3-phase	3-phase
	Page 30	Page 32	Page 34
	3-phase	3-phase	
7	Page 30	Page 32	

\* coming soon

# ESTIA 4 kW

# Hydrobox



# **ESPECIALLY FOR RENOVATIONS** – easy to replace

Suitable for older systems such as existing radiators



## **Energy efficiency class**

A+++

## Operating range



-25 to +43°C

# Supply water temperature for heating



Up to +55°C

depending on the model





# Combination options Outdoor and indoor unit

### **Hydrobox Compact**

		nyurobox compact
		1-phase
		HWT-401HW-E
kW	*	4,00
kW	*	4,00
kW	*	0,79 - 7,25
dB(A)	☀/攀	59 / 60
dB(A)	*	54
W/W	*	5,20
W/W	*	3,45
	*	A+++
		4,30
°C	*	-25 / +25
°C	*	+10 / +43
/Ph+N/Hz		220-230/1/50
А		16
		R32
mm		630 x 800 x 300
	kW kW dB(A) dB(A) W/W W/W °C °C Ph+N/Hz A	kW

INDOOR UNIT			HWT- 601XWHM3W-E	HWT- 601XWHT6W-E
Supply water temperature (minmax.)	°C	*	20/55	20/55
Supply water temperature (minmax.)	°C	*	7/25	7/25
Backup heater, capacity	kW		3	6
Water flow rate (min.)	m³/h		0,66	0,66
Water pump, discharge head (max.)	m		7,2	7,2
Sound power level	dB(A)	☀/※	40 / 40	40 / 40
Dimensions (HxWxD)	mm		720 x 450 x 235	720 x 450 x 235

# ESTIA 4 kW

# All-in-One with hot water tank



ESPECIALLY FOR NEW-BUILDS - compact installation

Suitable for modern systems such as underfloor or panel heating



### **Energy efficiency class**

A+++

### **Operating range**

-25 to +43°C

# Supply water temperature for heating



Up to +55°C

depending on the model

Combination options
Outdoor and indoor unit



### All-in-One

			1-phase
OUTDOOR UNIT			HWT-401HW-E
Heating capacity @ A+7/W+35 (nom.)	kW	*	4,00
Cooling capacity @ A+35/W+7 (nom.)	kW	*	4,00
Heating range @A+7/W+35 (min. – max.)	kW	*	0,79 - 7,25
Sound power level	dB(A)	☀/※	59 / 60
Sound power level (night operation)	dB(A)	*	54
Energy efficiency COP @ A+7/W+35 (nom.)	W/W	*	5,20
Energy efficiency EER @ A+35/W+7 (nom.)	W/W	*	3,45
Energy efficiency class		*	A+++
СОР			4,30
Outdoor temperature operating range (minmax.)	°C	*	-25 / +25
Outdoor temperature operating range (minmax.)	°C	*	+10 / +43
Outdoor unit power supply	V/Ph+N/H	lz	220-230/1/50
Recommended fusing	А		16
Refrigerant			R32
Dimensions (HxWxD)	mm		630 x 800 x 300

INDOOR UNIT			HWT- 601F21SM3W-E	HWT- 601F21ST6W-E	HWT- 602S21SM3W-E	HWT- 602S21ST6W-E
Tank volume	- 1		210	210	210	210
Supply water temperature (minmax.)	°C	*	20/55	20/55	20/55	20/55
Supply water temperature (minmax.)	°C	*	7/25	7/25	7/25	7/25
Backup heater, capacity	kW		3	6	3	6
Water flow rate (min.)	m³/h		0,66	0,66	0,66	0,66
Water pump, discharge head (max.)	m		7,2	7,2	7,2	7,2
Sound power level	dB(A)	<b>☀</b> /攀	42 / 42	42 / 42	40 / 40	40 / 40
Dimensions (HxWxD)	mm		1700 x 600 x 670	1700 x 600 x 670	1700 x 595 x 670	1700 x 595 x 670

# ESTIA 6 kW

# Hydrobox



# **ESPECIALLY FOR RENOVATIONS** – easy to replace

Suitable for older systems such as existing radiators



## **Energy efficiency class**

A+++

## **Operating range**



-25 to +43°C

Supply water temperature for heating



Up to +55°C

depending on the model





### **Hydrobox Compact**

			1-phase
OUTDOOR UNIT			HWT-601HW-E
Heating capacity @ A+7/W+35 (nom.)	kW	*	6,00
Cooling capacity @ A+35/W+7 (nom.)	kW	*	5,00
Heating range @A+7/W+35 (min. – max.)	kW	*	0,80 - 7,25
Sound power level	dB(A)	☀/辮	62 / 61
Sound power level (night operation)	dB(A)	*	58
Energy efficiency COP @ A+7/W+35 (nom.)	W/W	*	4,80
Energy efficiency EER @ A+35/W+7 (nom.)	W/W	*	3,30
Energy efficiency class		*	A+++
COP			4,30
Outdoor temperature operating range (minmax.)	°C	*	-25 / +25
Outdoor temperature operating range (minmax.)	°C	*	+10 / +43
Outdoor unit power supply	V/Ph+N/H	Z	220-230/1/50
Recommended fusing	А		16
Refrigerant			R32
Dimensions (HxWxD)	mm		630 x 800 x 300

INDOOR UNIT			HWT- 601XWHM3W-E	HWT- 601XWHT6W-E
Supply water temperature (minmax.)	°C	*	20/55	20/55
Supply water temperature (minmax.)	°C	*	7/25	7/25
Backup heater, capacity	kW		3	6
Water flow rate (min.)	m³/h		0,66	0,66
Water pump, discharge head (max.)	m		7,2	7,2
Sound power level	dB(A)	*/*	40 / 40	40 / 40
Dimensions (HxWxD)	mm		725 x 450 x 235	725 x 450 x 235

# ESTIA 6 kW

# All-in-One with hot water tank



ESPECIALLY FOR NEW-BUILDS - compact installation

Suitable for modern systems such as underfloor or panel heating





A+++





-25 to +43°C

# Supply water temperature for heating



Up to +55°C

depending on the model

Combination options

Outdoor and indoor unit



### All-in-One

		All III OIG
		1-phase
		HWT-601HW-E
kW	*	6,00
kW	*	5,00
kW	*	0,80 - 7,25
dB(A)	☀/攀	62 / 61
dB(A)	*	58
W/W	*	4,80
W/W	*	3,30
	*	A+++
		4,30
°C	*	-25 / +25
°C	*	+10 / +43
V/Ph+N/H	Z	220-230/1/50
А		16
		R32
mm		630 x 800 x 300
	kW kW dB(A) dB(A) W/W W/W  °C °C V/Ph+N/H A	kW

		1 zone						
INDOOR UNIT			HWT- 601F21SM3W-E	HWT- 601F21ST6W-E	HWT- 602S21SM3W-E	HWT- 602S21ST6W-E		
Tank volume	- 1		210	210	210	210		
Supply water temperature (minmax.)	°C	*	20/55	20/55	20/55	20/55		
Supply water temperature (minmax.)	°C	*	7/25	7/25	7/25	7/25		
Backup heater, capacity	kW		3	6	3	6		
Water flow rate (min.)	m³/h		0,66	0,66	0,66	0,66		
Water pump, discharge head (max.)	m		7,2	7,2	7,2	7,2		
Sound power level	dB(A)	*/≉	42 / 42	42 / 42	40 / 40	40 / 40		
Dimensions (HxWxD)	mm		1700 x 600 x 670	1700 x 600 x 670	1700 x 595 x 670	1700 x 595 x 670		

# ESTIA 8 kW

# Hydrobox



# **ESPECIALLY FOR RENOVATIONS** – easy to replace

Suitable for older systems such as existing radiators



## **Energy efficiency class**

A+++

## Operating range



-25 to +43°C

# Supply water temperature for heating



Up to +65°C

depending on the model



# Combination options Outdoor and indoor unit

**Hydrobox Compact** 

Hard	lrob	OV I	$rac{1}{2}$	pact
пуц	II UL	י אטו	GUIII	uaci

			1-phase	3-phase
OUTDOOR UNIT			HWT-801HW-E	HWT-801H8W-E
Heating capacity @ A+7/W+35 (nom.)	kW	*	8,00	8,00
Cooling capacity @ A+35/W+7 (nom.)	kW	*	6,00	6,00
Heating range @A+7/W+35 (min. – max.)	kW	*	1,01 - 11,90	-
Sound power level	dB(A)	☀/※	63 / 62	61 / 61
Sound power level (night operation)	dB(A)	*	58	-
Energy efficiency COP @ A+7/W+35 (nom.)	W/W	*	5,19	5,06
Energy efficiency EER @ A+35/W+7 (nom.)	W/W	*	3,20	2,87
Energy efficiency class		*	A+++	A+++
COP			4,40	-
Outdoor temperature operating range (minmax.)	°C	*	-25 / +25	-25 / +25
Outdoor temperature operating range (minmax.)	°C	*	+10 / +43	+10 / +43
Outdoor unit power supply	V/Ph+N/F	Z	220-230/1/50	380-415/3+N/50
Recommended fusing	А		20	-
Refrigerant			R32	R32
Dimensions (HxWxD)	mm		1050 x 1010 x 370	1050 x 1010 x 370

INDOOR UNIT			HWT- 1101XWHT6W-E	HWT- 1101XWHT9W-E	HWT- 1101XWHT6W-E	HWT- 1101XWHT9W-E
Supply water temperature (minmax.)	°C	*	20/65	20/65	20/65	20/65
Supply water temperature (minmax.)	°C	*	7/25	7/25	7/25	7/25
Backup heater, capacity	kW		6	9	6	9
Water flow rate (min.)	m³/h		0,78	0,78	0,78	0,78
Water pump, discharge head (max.)	m		7,2	7,2	7,2	7,2
Sound power level	dB(A)	☀/辮	40 / 40	40 / 40	40 / 40	40 / 40
Dimensions (HxWxD)	mm		720 x 450 x 235	720 x 450 x 235	725 x 450 x 235	725 x 450 x 235

# ESTIA 8 kW

# All-in-One with hot water tank



**ESPECIALLY FOR NEW-BUILDS** – compact installation

Suitable for modern systems such as underfloor or panel heating



### **Energy efficiency class**

A+++

### **Operating range**

-25 to +43°C

### Supply water temperature for heating



Up to +65°C

depending on the model



V/Ph+N/Hz

Α

mm



All-in-One 3-phase

1050 x 1010 x 370

### **OUTDOOR UNIT** HWT-801HW-E HWT-801H8W-E 8,00 8,00 kW \* 6,00 \* 6,00 kW \* 1,01 - 11,90 kW **☀**/₩ 63 / 62 61 / 61 dB(A) \* 58 dB(A) \* W/W 3.20 2.87 \* W/W \* -25 / +25 -25 / +25 \* +10 / +43 +10/+43 °C 380-415/3+N/50

20

1050 x 1010 x 370

1-phase

			1 zone	2 zones						
INDOOR UNIT			HWT- 1101F21ST9W-E	HWT- 1101F21MT9W-E	HWT- 1102S21ST9W-E	HWT- 1102S21MT9W-E	HWT- 1101F21ST9W-E	HWT- 1101F21MT9W-E	HWT- 1102S21ST9W-E	HWT- 1102S21MT9W-E
Tank volume	- 1		210	210	210	210	210	210	210	210
Supply water temperature (minmax.)	°C	*	20/65	20/65	20/65	20/65	20/65	20/65	20/65	20/65
Supply water temperature (minmax.)	°C	*	7/25	7/25	7/25	7/25	7/25	7/25	7/25	7/25
Backup heater, capacity	kW		9	9	9	9	9	9	9	9
Water flow rate (min.)	m³/h		0,78	0,78	0,78	0,78	0,78	0,78	0,78	0,78
Water pump, discharge head (max.)	m		7,2	7,2	7,2	7,2	7,2	7,2	7,2	7,2
Sound power level	dB(A)	*/₩	42 / 42	44 / 44	40 / 40	45 / 45	40 / 40	40 / 40	40 / 40	45 / 45
Dimensions (HxWxD)	mm		1700 x 600 x 670	1700 x 600 x 670	1700 x 595 x 670	1700 x 595 x 670	1700 x 600 x 670	1700 x 600 x 670	1700 x 595 x 670	1700 x 595 x 670

# ESTIA 11 kW

# Hydrobox



# **ESPECIALLY FOR RENOVATIONS** – easy to replace

Suitable for older systems such as existing radiators



## **Energy efficiency class**

A++ / A+++

## **Operating range**



-25 to +43°C

### Supply water temperature for heating



Up to +65°C

depending on the model







					Hyarobox	
			Hydrobox Compact	Hydrobox Compact	Standard	Hydrobox Hi Power
			1-phase	3-phase	3-phase	3-phase
OUTDOOR UNIT			HWT-1101HW-E	HWT-1101H8W-E	HWS-1105H8-E	HWS-P1105H8R-E
Heating capacity @ A+7/W+35 (nom.)	kW	*	11,00	11,00	11,20	11,20
Cooling capacity @ A+35/W+7 (nom.)	kW	*	8,00	8,00	10,00	10,00
Heating range @A+7/W+35 (min. – max.)	kW	*	1,01 - 13,24	-	2,69 - 14,73	2,21 - 18,00
Sound power level	dB(A)	<b>☀</b> /₩	64 / 62	61 / 61	64 / 66	64 / 66
Sound power level (night operation)	dB(A)	*	62	-	61	61
Energy efficiency COP @ A+7/W+35 (nom.)	W/W	*	4,60	4,74	4,80	4,80
Energy efficiency EER @ A+35/W+7 (nom.)	W/W	*	2,80	2,62	3,07	3,00
Energy efficiency class		*	A+++	A+++	A++	A+++
COP			4,30	-	4,42	0,00
Outdoor temperature operating range (minmax.)	°C	*	-25 / +25	-25 / +25	-20 / +43	-25 / +43
Outdoor temperature operating range (minmax.)	°C	*	+10 / +43	+10 / +43	+15 / +43	+15 / +43
Outdoor unit power supply	V/Ph+N/Hz		220-230/1/50	380-415/3+N/50	380-415/3+N/50	380-415/3+N/50
Recommended fusing	А		20	-	3 x 16	3 x 16
			R32	R32	R410A	R410A
Dimensions (HxWxD)	mm		1050 x 1010 x 370	1050 x 1010 x 370	1340 x 900 x 320	1340 x 900 x 320

INDOOR UNIT			HWT- 1101XWHT6W-E	HWT- 1101XWHT9W-E	HWT- 1101XWHT6W-E	HWT- 1101XWHT9W-E	HWS- 1405XWHT9-E	HWS- P1105XWHT6-E	HWS- P1105XWHT9-E
Supply water temperature (minmax.)	°C	*	20/65	20/65	20/65	20/65	20/55	20/60	20/60
Supply water temperature (minmax.)	°C	*	7/25	7/25	7/25	7/25	7/25	7/25	7/25
Backup heater, capacity	kW		6	9	6	9	9	6	9
Water flow rate (min.)	m³/h		0,78	0,78	0,78	0,78	1,05	1,05	1,05
Water pump, discharge head (max.)	m		7,2	7,2	7,2	7,2	8,8	8,8	8,8
Sound power level	dB(A)	☀/※	40 / 40	40 / 40	40 / 40	40 / 40	43 / 43	43 / 43	43 / 43
Dimensions (HxWxD)	mm		725 x 450 x 235	925 x 525 x 355	925 x 525 x 355	925 x 525 x 355			

# ESTIA 11 kW

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A+++

## **Operating range**

-25 to +43°C

# Supply water temperature for heating



Up to +65°C

depending on the model





			All-in-One	All-in-One
			1-phase	3-phase
OUTDOOR UNIT			HWT-1101HW-E	HWT-1101H8W-E
Heating capacity @ A+7/W+35 (nom.)	kW	*	11,00	11,00
Cooling capacity @ A+35/W+7 (nom.)	kW	*	8,00	8,00
Heating range @A+7/W+35 (min. – max.)	kW	*	1,01 - 13,24	-
Sound power level	dB(A)	☀/辮	64 / 62	61 / 61
Sound power level (night operation)	dB(A)	*	62	-
Energy efficiency COP @ A+7/W+35 (nom.)	W/W	*	4,60	4,74
Energy efficiency EER @ A+35/W+7 (nom.)	W/W	*	2,80	2,62
Energy efficiency class		*	A+++	A+++
COP			4,30	-
Outdoor temperature operating range (minmax.)	°C	*	-25 / +25	-25 / +25
Outdoor temperature operating range (minmax.)	°C	*	+10 / +43	+10 / +43
Outdoor unit power supply	V/Ph+N/H	Z	220-230/1/50	380-415/3+N/50
Recommended fusing	А		20	-
Refrigerant			R32	R32
Dimensions (HxWxD)	mm		1050 x 1010 x 370	1050 x 1010 x 370

			1 zone	2 zones						
INDOOR UNIT			HWT- 1101F21ST9W-E	HWT- 1101F21MT9W-E	HWT- 1102S21ST9W-E	HWT- 1102S21MT9W-E	HWT- 1101F21ST9W-E	HWT- 1101F21MT9W-E	HWT- 1102S21ST9W-E	HWT- 1102S21MT9W-E
Tank volume	- 1		210	210	210	210	210	210	210	210
Supply water temperature (minmax.)	°C	*	20/65	20/65	20/65	20/65	20/65	20/65	20/65	20/65
Supply water temperature (minmax.)	°C	*	7/25	7/25	7/25	7/25	7/25	7/25	7/25	7/25
Backup heater, capacity	kW		9	9	9	9	9	9	9	9
Water flow rate (min.)	m³/h		0,78	0,78	0,78	0,78	0,78	0,78	0,78	0,78
Water pump, discharge head (max.)	m		7,2	7,2	7,2	7,2	7,2	7,2	7,2	7,2
Sound power level	dB(A)	*/₩	42 / 42	44 / 44	40 / 40	40 / 40	42 / 42	44 / 44	40 / 40	40 / 40
Dimensions (HxWxD)	mm		1700 x 600 x 670	1700 x 600 x 670	1700 x 595 x 670	1700 x 595 x 670	1700 x 600 x 670	1700 x 600 x 670	1700 x 595 x 670	1700 x 595 x 670

# ESTIA 14 kW

# Hydrobox



# **ESPECIALLY FOR RENOVATIONS** – easy to replace

Suitable for older systems such as existing radiators



## **Energy efficiency class**

A++ / A+++

# Operating range



-25 to +43°C

# Supply water temperature for heating



Up to +65°C

depending on the model









			Compact	Compact	<b>Hydrobox Standard</b>	<b>Hydrobox Standard</b>	<b>Hydrobox Hi Power</b>
			1-phase	3-phase	1-phase	3-phase	3-phase
OUTDOOR UNIT			HWT-1401HW-E	HWT-1401H8W-E	HWS-1405H-E	HWS-1405H8-E	HWS-P1405H8R-E
Heating capacity @ A+7/W+35 (nom.)	kW	*	14,00	14,00	14,00	14,00	14,00
Cooling capacity @ A+35/W+7 (nom.)	kW	*	10,00	10,00	11,00	11,00	11,00
Heating range @A+7/W+35 (min. – max.)	kW	*	-	-	2,92 - 16,74	2,48 - 14,81	2,21 - 21,10
Sound power level	dB(A)	☀/※	70 / 70	62 / 63	68 / 68	68 / 68	68 / 68
Sound power level (night operation)	dB(A)	*	62	-	61	61	61
Energy efficiency COP @ A+7/W+35 (nom.)	W/W	*	4,60	4,60	4,50	4,44	4,44
Energy efficiency EER @ A+35/W+7 (nom.)	W/W	*	2,45	2,45	2,89	2,89	2,82
Energy efficiency class		*	A+++	A+++	A++	A++	A++
COP			-	-	4,03	4,23	0,00
Outdoor temperature operating range (minmax.)	°C	*	-25 / +25	-25 / +25	-20 / +43	-20 / +43	-25 / +43
Outdoor temperature operating range (minmax.)	°C	*	+10 / +43	+10 / +43	+15 / +43	+15 / +43	+15 / +43
Outdoor unit power supply	V/Ph+N/H	lz	220-230/1/ 50	380-415/3+N/ 50	220-230/1/ 50	380-415/3+N/ 50	380-415/3+N/ 50
Recommended fusing	А		20	-	25	3 x 16	3 x 16
Refrigerant			R32	R32	R410A	R410A	R410A
Dimensions (HxWxD)	mm		1050 x 1010 x 370	1050 x 1010 x 370	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320

INDOOR UNIT			HWT- 1401XWHT9W-E	HWT- 1401XWHT9W-E	HWS- 1405XWHT6-E	HWS- 1405XWHT9-E	HWS- 1405XWHT6-E	HWS- 1405XWHT9-E	HWS- P1105XWHT6-E	HWS- P1105XWHT9-E
Supply water temperature (minmax.)	°C	*	20/65	20/65	20/55	20/55	20/55	20/55	20/60	20/60
Supply water temperature (minmax.)	°C	*	7/25	7/25	7/25	7/25	7/25	7/25	7/25	7/25
Backup heater, capacity	kW		9	9	6	9	6	9	6	9
Water flow rate (min.)	m³/h		0,78	0,78	1,05	1,05	1,05	1,05	1,05	1,05
Water pump, discharge head (max.)	m		7,2	7,2	8,8	8,8	8,8	8,8	8,8	8,8
Sound power level	dB(A)	<b>☀</b> /₩	40 / 40	40 / 40	43 / 43	43 / 43	43 / 43	43 / 43	43 / 43	43 / 43
Dimensions (HxWxD)	mm		725 x 450 x 235	725 x 450 x 235	925 x 525 x 355	925 x 525 x 355				

# ESTIA 14 kW

# All-in-One with hot water tank



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### **Energy efficiency class**

A+++

### **Operating range**

-25 to +43°C

# Supply water temperature for heating



Up to +65°C

depending on the model







All-in-One

		All-III-Olic	All III Olic
		1-phase	3-phase
		HWT-1401HW-E	HWT-1401H8W-E
kW	*	14,00	14,00
kW	*	10,00	10,00
kW	*	-	-
dB(A)	*/*	70 / 70	62 / 63
dB(A)	*	62	-
W/W	*	4,60	4,60
W/W	*	2,45	2,45
	*	A+++	A+++
		-	-
°C	*	-25 / +25	-25 / +25
°C	*	+10 / +43	+10 / +43
V/Ph+N/H	Iz	220-230/1/50	380-415/3+N/50
А		20	-
		R32	R32
mm		1050 x 1010 x 370	1050 x 1010 x 370
	kW kW dB(A) dB(A) W/W W/W °C °C °C V/Ph+N/H A	kW	1-phase  HWT-1401HW-E  kW * 14,00  kW * 10,00  kW * -  dB(A) */* 70 / 70  dB(A) * 4,60  W/W * 2,45  * A+++   °C * -25 / +25  °C * +10 / +43  V/Ph+N/Hz 220-230/1/50  A 20  R32

			1 zone	2 zones	1 zone	2 zones
INDOOR UNIT			HWT- 1402S21ST9W-E	HWT- 1402S21MT9W-E	HWT- 1402S21ST9W-E	HWT- 1402S21MT9W-E
Tank volume	- 1		210	210	210	210
Supply water temperature (minmax.)	°C	*	20/65	20/65	20/65	20/65
Supply water temperature (minmax.)	°C	*	7/25	7/25	7/25	7/25
Backup heater, capacity	kW		9	9	9	9
Water flow rate (min.)	m³/h		0,78	0,78	0,78	0,78
Water pump, discharge head (max.)	m		7,2	7,2	7,2	7,2
Sound power level	dB(A)	<b>☀</b> /₩	- / -	- / -	- / -	-/-
Dimensions (HxWxD)	mm		1700 x 595 x 670			

# ESTIA 16 kW

# Hydrobox



# **ESPECIALLY FOR RENOVATIONS** – easy to replace

Suitable for older systems such as existing radiators



## **Energy efficiency class**

A++

# Operating range



-20 to +43°C



for heating
Up to +55°C

Supply water temperature

depending on the model

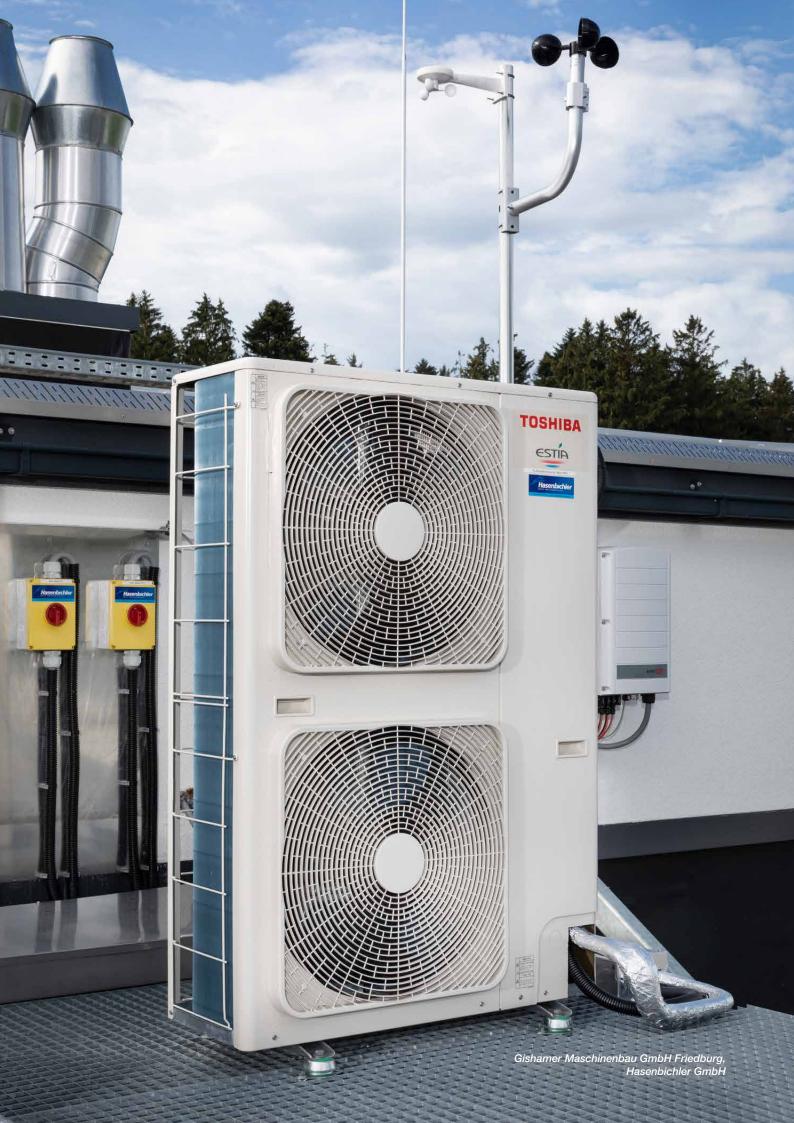


# Combination options Outdoor and indoor unit

### **Hydrobox Standard**

3-phase           OUTDOOR UNIT         HWS-1605H8-E           Heating capacity @ A+7/W+35 (nom.)               ⟨W  **          16,00           Cooling capacity @ A+35/W+7 (nom.)               ⟨W  **          13,00	
Heating capacity @ A+7/W+35 (nom.) KW * 16,00	
Cooling capacity @ 4+35/W+7 (nom) kW \$\\ 13.00	
RW 14	
Heating range @A+7/W+35 (min. − kW	
Sound power level         dB(A)         ★/綠         69 / 69	
Sound power level (night operation) dB(A) * 61	
Energy efficiency COP @ A+7/W+35 (nom.)	
Energy efficiency EER @ A+35/W+7 (nom.)   W/W   \$ 2,71	
Energy efficiency class A++	
<b>COP</b> 4,10	
Outdoor temperature operating range (minmax.) *C **	
Outdoor temperature operating range (minmax.) +15 / +43	
Outdoor unit power supply V/Ph+N/Hz 380-415/3+N/50	
Recommended fusing A 3 x 16	
Refrigerant R410A	
Dimensions (HxWxD)         mm         1340 x 900 x 320	

INDOOR UNIT			HWS- 1405XWHT9-E
Supply water temperature (minmax.)	°C	*	20/55
Supply water temperature (minmax.)	°C	*	7/25
Backup heater, capacity	kW		9
Water flow rate (min.)	m³/h		1,05
Water pump, discharge head (max.)	m		8,8
Sound power level	dB(A)	☀/辮	43 / 43
Dimensions (HxWxD)	mm		925 x 525 x 355



# **TOSHIBA**



Single-family home in Podersdorf, Robert Müllner GmbH















# **TOSHIBA**

Expertise in every sector – air conditioning systems and heat pumps for cooling and heating

HOME comprises all the air conditioning solutions for your own home.



Every ESTIA heat pump incorporates TOSHIBA's knowledge and experience.



LIGHT BUSINESS / BUSINESS delivers air conditioning solutions for business and industry.



USX chillers – the new and superlative special systems.







TOSHIBA's innovative air conditioning systems were specially developed to ensure your wellbeing in your home, and its progressive technology offers comfort 365 days a year. Quiet operation, air filtering, and purification are just some of the benefits for greater comfort in your home. An air conditioning system is also the perfect heating solution, especially at season changes.

High quality and efficiency in a space-saving format. The ESTIA air-to-water heat pump is extremely effective and is ideal for heating, hot water preparation, and cooling in your home. Heating with heat from the air – environmentally friendly, cost-effective, and efficient.





Single-room solutions are suitable for smaller commercial applications, such as offices, shop floors, or plant rooms, where reliability is paramount and continuous operation is required.

Multi-room solutions comprise air conditioning systems for complex installations in large structures such as office buildings, shopping malls, or hotels.

TOSHIBA's USX chillers represent a new dimension in refrigeration and heat generation. If the capacity required exceeds the technical and financial limits of direct evaporation systems, then water-based systems are used.



# **TOSHIBA**

# We advise you personally your certified toshiba partner

TOSHIBA specialist partner:

TOSHIBA is proud of its network of qualified specialist companies in the refrigeration and air conditioning sector. With a TOSHIBA air conditioning system, you will not only receive top product quality, but will benefit from professional advice, planning, installation, and service. Rely on a perfect climate from a specialist!

### From small to large

TOSHIBA covers the entire spectrum with products for both domestic situations and for industrial and commercial applications. Contact your TOSHIBA specialist partner or visit our website for detailed information.



# For more information: Visit our website!

You will find further information about TOSHIBA products and sales partners on our website: www.toshiba-aircondition.com

