

# Hot Water monoblock 200/300/400 litres at R134a **HEA Ducted** with solar thermal energy



TWMS 2202 HEA  
TWMS 2302 HEA  
TWMS 2402 HEA  
TWMS 4402 HEA

## POSSIBILITY OF SOLAR THERMAL ENERGY INTEGRATION

- Floor-standing heat pump water heaters
- R134A refrigerant gas
- Titanium anode with alarm LED
- Additional 1.5 kW electric heating element
- Hot water up to 60°C with compressor alone; up to 70°C with electric heating element integration

Capacity	Intake temperature (°C)		
	20	15	7
200	4.39*	-	2.61**
300	4.43*	-	2.68**
400	4.32*	-	2.61**
400	3.67*	-	2.62**

\* Factory test with air intake 20°C DB (15° C WB), water inlet 15°C/outlet 55°C.

\*\* Test according to EN 16147.

## Energy class

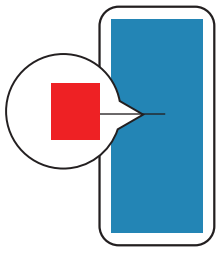


Model		TWMS 2202 HEA	TWMS 2302 HEA	TWMS 2402 HEA	TWMS 4402 HEA	
Tank volume	L	200	300	400	400	
Solar integration coil (stainless steel)	m <sup>2</sup>	1.0	1.0	1.0	1.0	
Rated thermal power <sup>1</sup>	W	2040	2040	2060	3285	
Rated power consumption <sup>1</sup>	W	465	460	477	895	
Rated hot water production capacity <sup>1</sup>	L/h	43.5	43.5	45.0	70.5	
COP (rated) <sup>1</sup>	W/W	4.39	4.43	4.32	3.67	
COPDHW <sup>2</sup>	W/W	2.61	2.68	2.61	2.62	
Test cycle profile <sup>2</sup>	-	L	XL	XL	XL	
Volume of hot water at 40°C <sup>2</sup>	L	250	390	434	434	
Energy Efficiency Class <sup>3</sup>	-	A	A	A	A	
IP Degree of protection	-	IPX1	IPX1	IPX1	IPX1	
Hot water T. adjustment interval	°C	10~70 (50 default)	10~70 (50 default)	10~70 (50 default)	10~70 (50 default)	
Maximum DHW temperature only compressor	°C	60	60	60	60	
Electrical data	Power	Ph-V-Hz	1-220~240V-50Hz			
	Integrative heating element	W	1500			
	Maximum current (including heating element)	A	10.00	10.00	10.00	13.00
Refrigerant circuit	Refrigerant <sup>4</sup>	type (GWP)	R134a (1430)			
	Quantity	kg	1.0	1.0	1.0	0.9
	Tons of CO2 equivalent	t	1.430	1.430	1.430	1.287
Product specifications	Compressor	type	Rotary ON/OFF			
	Dimensions (D x H)	mm	560 x 1745	640 x 1840	700 x 1880	700 x 1880
	Net weight	kg	95	105	115	118
	Sound power level	dB(A)	58.2	58.2	58	59.2
	Sound pressure level at 2 m	dB(A)	37.8	37.8	38	37.2
Tank	Tank material	-	Stainless steel 304			
	DHW hydraulic connections	inches	G1" (DN25)	G1" (DN25)	G1" (DN25)	G1" (DN25)
	Hydraulic solar coil connections	inches	G3/4" (DN20)	G3/4" (DN20)	G3/4" (DN20)	G3/4" (DN20)
	Titanium anode	-	Titanium electrode with alarm LED			
	Maximum operating pressure	bar	10	10	10	10
Suctioned air	Operating range	°C	-5~+43			
	Rated flow (not ducted)	m <sup>3</sup> /h	400	400	450	800
	Air flow (ducted)	Pa	60	60	60	60
	Air duct - Diameter	mm	177	177	177	177
	Air duct - Length	m	6	6	6	6

1. Conditions: air intake 20°C DB (15° C WB), water inlet 15°C/outlet 55°C. 2. Test according to EN 16147; air intake 7°C. 3. Directive 2009/125/EC - ERP EU No. 814/2013.

4. Refrigerant leakage contributes to climate change. When released into the atmosphere, refrigerants with a lower global warming potential (GWP) contribute less to global warming than those with a higher GWP. This appliance contains a refrigerant with a GWP of 1430. If 1 kg of this refrigerant fluid were released into the atmosphere, therefore, the impact on global warming would be 1430 times higher than 1 kg of CO<sub>2</sub>, over a period of 100 years. Under no circumstances should the user try to intervene on the refrigerant circuit or disassemble the product. Always contact qualified personnel if necessary.

## Product benefits



### Durable titanium anode

Titanium anode as standard with the Hot Water system.

## Comfort at home

- Programming to take advantage of any advantageous time slots on the electricity tariff and have hot water available when needed.
- Two operating modes: **maximum savings** with the use of the compressor alone or **maximum speed** with the simultaneous use of the heat pump and integrated electric heating element, to produce large quantities of DHW in a short time.

## Safety

- Since the heat exchanger is outside the tank, no contamination between water and coolant is possible.
- Anti-legionella system: the danger of legionella bacteria is averted thanks to periodic cycles that raise the temperature of the water inside the storage tank above 65°C.
- The titanium anode permanently protects the tank from the corrosive action of the water, ensuring greater reliability and lower maintenance costs than a magnesium anode solution.

## 5 installation modes

1. Recirculated air installation: air inlet and outlet take place in the installation premises.
2. Installation with internal air intake and air extraction outdoors.
3. Installation with intake from another room and expulsion outdoors
4. Installation with air intake from another room and expulsion to an internal room (with or without ducting).
5. Installation with air intake and extraction to the external environment.

## System diagram with solar thermal energy integration

