

# Electa-SAN Plus

## TWCTZ 200-300

DHW capacity 200-300 L



**Renewable energy water heater**

**New Electa-SAN Plus models in A+ class**

**Standard version and with additional solar thermal coil**

**Heat pump operation with outdoor air temperature from -10°C to +43°C**

**Contact for integration with photovoltaic system**



**Tax incentives\***

**Air-water heat pump for the production of domestic hot water. Rotary hermetic compressor and R134a refrigerant gas.**

### Construction features

- Carbon steel tank with double layer vitrification and internal treatment according to standards DIN 4753-3.
- Anti-corrosion magnesium anode to ensure the durability of the tank.
- Condenser wrapped externally to the boiler, free from scaling and chiller liquid-water contamination.
- Auxiliary coil for use in combination with solar panels (TWCTZ-S only)
- Thermal insulation in thick expanded polyurethane (PU) (45 and 50 mm).
- Sheet metal coating painted color RAL839.
- Acoustically insulated plastic top cover.
- High efficiency compressor with R134a refrigerant.
- Electronic expansion valve.
- Finned coil heat exchanger with hydrophilic treatment for TCWTZ.
- Safety devices for high and low gas pressure.

- Electrical resistance available in the unit as a back-up with a safety thermostat, which ensures hot water at a constant temperature even in extreme winter conditions.

Electronic control and user interface for unit management:

- Tank temperature display.
- Domestic hot water set-point adjustment.
- Clock display and switch-on and shutdown timer.
- Electrical resistance management, in manual mode or in automatic integration.
- Anti-legionella cycle function, with activation timer.
- Indication of any alarms and malfunctions.
- Contact for integration with a photovoltaic system: the temperature set is raised to the highest possible value, on photovoltaic inverter enabling.
- ON-OFF contact to start the unit from an external switch.
- RS485 interface for serial communication with other devices (Modbus RTU protocol).

## **Version**

- TWCTZ-B: water heater with heat pump.
- TWCTZ-S: water heater with heat pump and additional solar thermal coil.

## Technical data

		Electa-SAN Plus	Electa-SAN Plus	Electa-SAN Plus	Electa-SAN Plus
MODEL		TWCTZ-B 200	TWCTZ-B 300	TWCTZ-S 200	TWCTZ-S 300
Tank capacity	l	180	270	174	261
① Heating capacity	W	1800	1800	1800	1800
Absorbed power	W	460	460	460	460
Electrical resistance power	W	1500	1500	1500	1500
Maximum operating pressure	bar	7	7	7	7
② COPDHW		3,14	3,16	3,14	3,16
③ COPDHW		3,37	3,58	3,37	3,58
④ heating up time	h:min	04:46	07:02	04:46	07:02
⑤ heating up time with active resistance	h:min	02:36	04:01	02:36	04:01
⑥ Maximum volume of DHW usable at 40°C	l	239	349	239	349
Solar thermal coil surface	m <sup>2</sup>	-	-	1	1,5
Maximum solar coil operating pressure	bar	-	-	7	7
Nominal air flow	m <sup>3</sup> /h	450	450	450	450
Air flow rate at the maximum available static pressure 60 Pa	m <sup>3</sup> /h	350	350	350	350
Internal sound power	db(A)	58	59	58	59
⑦ Sound pressure	db(A)	43	44	43	44
Electrical supply	V-ph-Hz	230-1-50	230-1-50	230-1-50	230-1-50
Maximum absorbed power	W	560	560	560	560
Absorbed power in standby (Pes)	W	32	37	32	37
Protection rating	IP	IPX1	IPX1	IPX1	IPX1
<b>DIMENSIONS AND WEIGHTS</b>					
MODEL		TWCTZ-B 200	TWCTZ-B 300	TWCTZ-S 200	TWCTZ-S 300
L – Width	mm	560	640	560	640
H – Height	mm	1770	1880	1770	1880
P – Depth	mm	590	670	590	670
Empty weight	kg	92	112	113	136
Weight with a full water tank	kg	272	382	287	397
<b>ENERGY PERFORMANCE</b>					
WATER HEATING		TWCTZ-B 200	TWCTZ-B 300	TWCTZ-S 200	TWCTZ-S 300
⑧ Load profile	L		XL	L	XL
⑨ ηwh	%	132,3	131,5	132,3	131,5
⑩ Energy class	A+	A+	A+	A+	A+
⑪ Annual energy consumption	kWh/annum	774	1274	774	1274

Data at the following conditions:

- ① Air 20°C D.B. – 15°C W.B.; water from 15°C to 55°C.
  - ② Air 7°C D.B. – 6°C W.B.; water from 10°C to 55°C (EN 16147).
  - ③ Air 14°C D.B. – 12°C W.B.; water from 10°C to 55°C (EN 16147).
  - ④ According to ISO 3744:2010 at 1 m from the unit
  - ⑤ Water heating energy efficiency in average climatic conditions (+7°C). (Regulations (EU) No.812/2013 and No.814/2013)
- Operating range:
- Inlet air/working ambient temperature: -10 to 43°C
  - Domestic hot water up to 60°C for TWCTZ, 65°C for TWCZ.



**RHOSS S.P.A.**  
Via Oltre Ferrovia, 32  
33033 Codroipo (UD) - ITALY  
tel. +39 0432 911611  
[rhooss@rhooss.com](mailto:rhooss@rhooss.com)

[rhooss.com](http://rhooss.com)

RHOSS S.P.A. non si assume alcuna responsabilità per eventuali errori del presente stampato e si ritiene libera di variare senza preavviso le caratteristiche dei propri prodotti.