EcoZenith i250

System Tank and built-in Heat Pump Control

Enertech Group

Compact Intelligent Thermal Store

The CTC EcoZenith i250 is the next generation compact intelligent thermal store design developed to integrate with CTC EcoAir air source or EcoPart ground source heat pumps. With a 4.3-inch colour touchscreen controller displaying clear symbols and easily understandable text the intelligent controls make it easy to setup, commission and operate the heat pump and thermal store installation.

Produced in a white steel case in two types the CTC EcoZenith is unobtrusive and robust in design. With two types the i250L has flow and return connection for the heat pump at the top of the unit whilst the i250H has connections at the bottom of the unit.

A thermal baffle allows the lower section of the thermal store to be heated to temperatures required for heating whilst the upper section of the thermal store is heated to a higher temperature to satisfy the domestic hot water demand. This temperature differential maintains a high operating COP when working with a CTC EcoAir or EcoPart.

With a built-in copper coil providing copious amounts of hot water the CTC EcoZenith i250 is ideal for small and medium sized developments. With very low stored water quantities, below 6 litres, there is no risk of legionella and costly disinfection cycles are not required.

All CTC EcoZenith i250 thermal stores are supplied with a 146 mm valance which fits to the top of the EcoZenith covering the connecting pipework, valves and expansion vessel. Deeper valances are available, 480 mm and 580 mm to provide additional coverage.

Key features

- Intelligent thermal store providing both heating (LTHW) and domestic hot water (DHW)
- Controls a CTC heat pump and two weather compensated heating circuits
- Produces up to 20 l/min of DHW safe from Legionella
- Integrates with gas, oil, wood and pellet fired boilers as well as solar panels
- Can control swimming pool heating, borehole recharging and comfort cooling
- With the CTC Connect app the system can be controlled from your smart phone or iPad via the internet or SMS

ENERGY FLEX

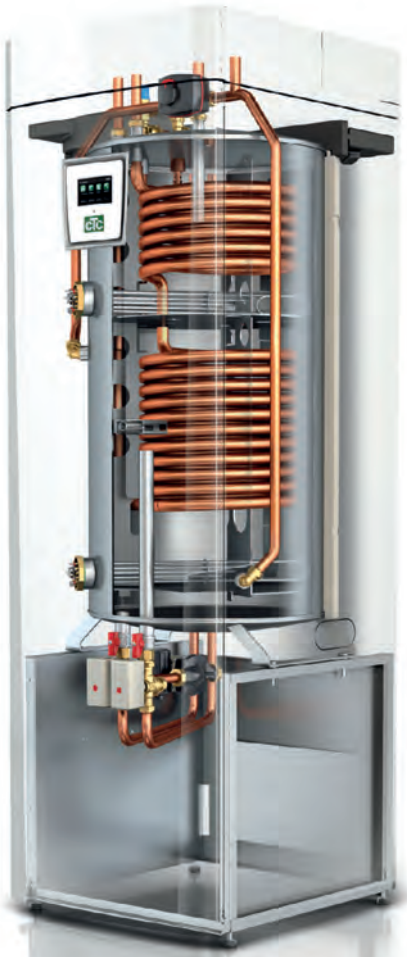
EcoZenith i250

Bivalent mixing valve for controlled even heat

New efficient insulation

Can control two fully weather compensated heating circuits

EnergyFlex provides total flexibility to connect other heat sources



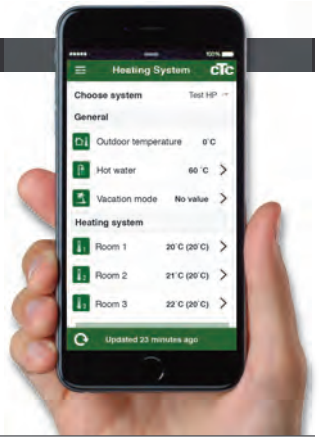
4.3 inch colour touchscreen controller ready to control a CTC heat pump

Supplied with an immersion heater to provide back up power

Built-in circulation low energy pump for easy connection of the heat pump

CTC Connect

The app based internet connectivity to allows for the user to monitor the house temperature, set desired room temperatures and turn on or off the Holiday mode. CTC Connect app is available for both Apple or Android operating systems.



CTC SMS Control

In locations without internet access communication with the app can be via the CTC SMS unit using a GSM modem. All that is required is a suitable SIM card.

CTC Wireless Room Sensor

The CTC Wireless room sensor can be placed anywhere in the property (depending on signal) without running cables. Room temperature is displayed and can be adjusted as required. You can connect up to two room sensors to each EcoZenith i250.

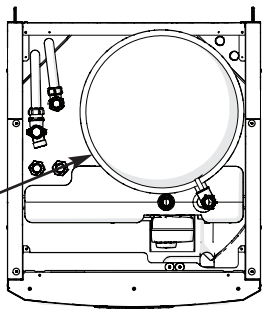
TECHNICAL DATA				
Electrical Data		EcoZenith i250		
Voltage		1 x 230V		3 x 400V
Rated Power	A	12.04		15.04
Immersion heater output	kW	0 to 12 (3, 5, 7, 9 & 12 kW)		0 to 15 (steps 0.3 kW)
IP Class		IPX1		IPX1
Other Data		EcoZenith i250L		EcoZenith i250H
Dimensions (H x W x D)	mm	1654 x 595 x 672		1904 x 595 x 672
Minimum ceiling height	mm	1696		1925
Weight	kg	167		182
Water volume, thermal store	l		223	
Max. operating pressure, thermal store	bar		2.5	
Max. temperature pressure, thermal store	˚C		110	
Water volume, hot water coil	l		5.7	
Max. operating pressure, hot water coil	bar		10	
Max. temperature hot water coil,	˚C		110	
ErP Energy Package Ratings		Heat Pump		Rating Heating/DHW
		EcoAir 406, 408 & 410		A+/A
		EcoPart 406		A+/A
		EcoPart 408		A++/A
		EcoPart 410		A++/B
		EcoPart 412		A++/A

Under the EU Ecodesign Directive CTC EcoZenith i250 is only approved for installation in a package with a CTC EcoAir or EcoPart heat pump.

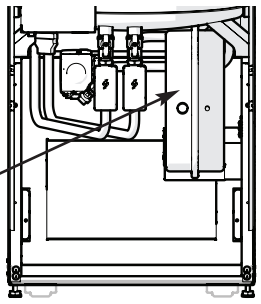
1) EcoZenith i250L available in 1 x 230V and 3 x 400V
2) EcoZenith i250H available in 3 x 400V only

Flexible location of expansion vessel

Expansion vessel for installation above the tank

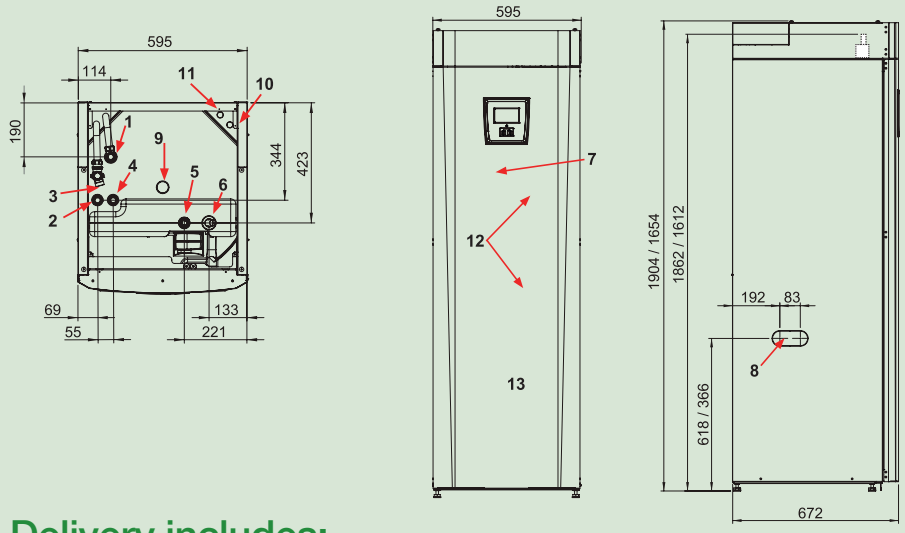


Expansion vessel for installation under the tank



EcoZenith i250

Dimensional drawing of the CTC EcoZenith i250



1. Air vent
2. Cold water connection Ø22
3. Connection waste pipe 3/4”
4. DHW Ø22 mm
5. Radiator primary flow 22 mm compression
6. Radiator return Ø22 mm / Expansion connection
7. Connection electric (behind the front)
8. Knockout for pipes (right/left side)
9. Lifting sleeve 3/4” BSP
10. Supply connection to heat pump Ø22 mm (only CTC EcoZenith 250 L)
11. Return connection from heat pump Ø22 mm (only CTC EcoZenith 250 L)
12. Connecting solar / other heat source 3/4” (behind the front cover)
13. Charge pump for heat pump (behind the front cover)

Delivery includes:

Power supply cable
Primary flow and return sensors
Kit bag containing:

- Room and outdoor sensor
- Installation and maintenance manual
- Safety valve 9 bar for DHW
- Cable ties and grommets

Accessories:	Part Number:
CTC Connect	587581301
CTC SMS Control	585518301
CTC Wireless room sensor	585520301
CTC Expansion vessel (to fit on top of the EcoZenith)	586749401
CTC Expansion vessel 350 x 440 x 152 mm (to fit under the EcoZenith tank)	586750401
CTC Valance 480 mm high	586463302
CTC Valance 580 mm high	586463303

ENERGY FLEX

CTC Enertech Group

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APPROVED PRODUCT