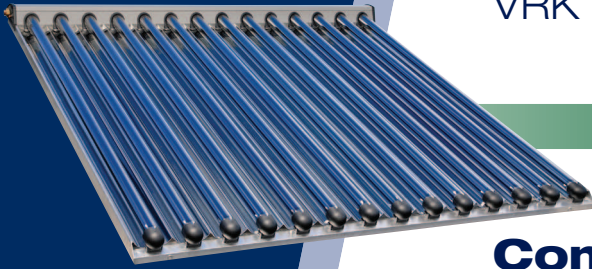




Enertech Group

CTC EcoSol

VRK 14 Vacuum Solar collectors



Complete solar systems for CTC heat pumps, CTC EcoEI or stand alone solar systems

CTC solar collectors are European made by premier manufacturers and are supplied in CTC designed packages, making it easy to select the right solar equipment for your CTC product. CTC EcoSol echoes the high quality of all other CTC products, features leading edge technology and is attractively designed. CTC EcoSol can raise the temperature in a borehole of a geothermal heat pump; can charge stored water in EcoHeat or EcoEI systems – benefiting both hot water and heating services. By using solar energy for heating and hot water, EcoSol will extend compressor life. What's more, CTC EcoSol is also ideal for wood or pellet boiler systems – with accumulator tank – to provide low cost heating over much of the year.

CTC EcoSol packages are of high quality, feature leading edge technology and are attractively designed.

CTC VRK 14 Vacuum solar collectors are extremely efficient solar collectors measuring 2.23 m² with an annual output of 1240* kWh/panel. The solar collectors consist of 14 individual glass tubes drained of air with the vacuum acting as insulation. The special coating inside the tubes means very little energy is lost, even at low temperatures. There are UV-resistant reflectors underneath the tubes which capture the sun's rays no matter what direction they come from. The solar collectors are easy to maintain because each individual tube can be replaced without the system needing to be drained. The solar collectors are easy to install using the fixing kits for different roof types.

CTC EcoSol benefits:

- Quality marked with Solar Keymark
- High operational reliability with minimal maintenance
- Effective reflectors increase the vacuum tubes' efficiency
- Increase the heat pump's efficiency and service life
- Fixing kits for different roof types
- Smart controls for different systems



VRK14 Vacuum solar collectors incl. brackets and Tyfocor		
		Article-no
Roof tiles Vertical installation	1 p	58 49 05 001
	2p	58 49 05 002
	3p	58 49 05 003
Corrugated steel plate Vertical installation	1 p	58 49 06 001
	2p	58 49 06 002
	3p	58 49 06 003
Flat roof Vertical installation	1 p	58 49 07 001
	2p	58 49 07 002
	3p	58 49 07 003
Component Kits		
EcoSol for EcoEl (see diagram 1)	Solar controls, circ. pump, exp. vessel, heat exchanger and sensor.	58 25 10 002
EcoSol for EcoHeat (see diagram 2)	Solar controls, circ. pump, exp. vessel, two heat exchangers, changeover valve and sensor.	58 25 10 003
EcoSol for Acktank (see diagram 3)	Solar controls, circ. pump, exp. vessel and sensor.	58 25 10 001
EcoSol for EcoZenith (see diagram 4)	Main unit circ. pump and sensor. (exp. vessel not included)**	58 31 43 003
Other		
Brine - Tyfocor, 10 L		58 25 45 001
Tubing package (insulation, sensor cable, Cu piping)		58 25 53 001
Tubing package (insulation, sensor cable, R piping)		58 25 53 002
Expansion vessel, 18 L		58 25 82 001

Technical data	
Type	Vakuum VRK14
Width	1560 mm
Height	1647 mm
Thickness	107 mm
Aperture area	2,23 m ²
Max. working pressure	10 bar
Weight	42 kg
Liquid volume	2,27 L
Output at 50°C (kWh/m ² /year)	696*
Approved installation angle	15-75°
Stagnation temperature	292 °C
Glass	Borosilicate

* Annual yield forecast [kWh/m² a] (reference location Wurzburg, Germany, aperture area 5 m²)

** For EcoSol for EcoZenith, the size of the expansion vessel is determined by the number of solar panels.

Diagram 1

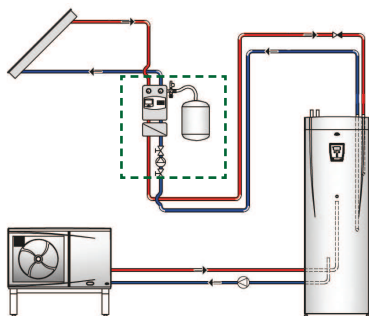


Diagram 2

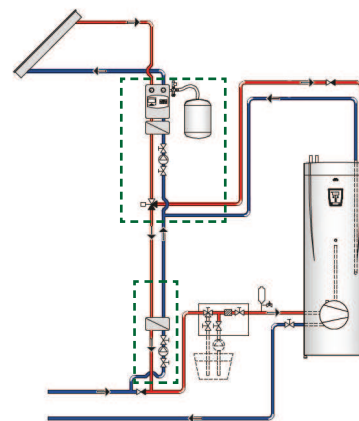


Diagram 3

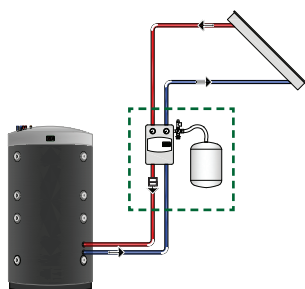


Diagram 4

