

# KAIROS THERMO HF

**Natural circulation solar system for the production of domestic hot water**

## PERFORMANCES

- Kairos Thermo HF has a new optimized heat exchanger that allows a **very quick production of domestic hot water**;
- The blue selective surface treatment forgives **very high performances** with the 95% absorbtion and only 5% reflection;
- The collectors' **increased surface** gives the possibilty to produce even more domestic hot water;
- The laser welding technology guarantees a very smooth absorbing surface, **maximizing the exploitation of the solar energy**;
- The polyurethane insulation free of CFC & HCFC, and the collectors' lower insulation in glass wool ensure **maximum protection against heat losses**;



## TECHNICAL DATA

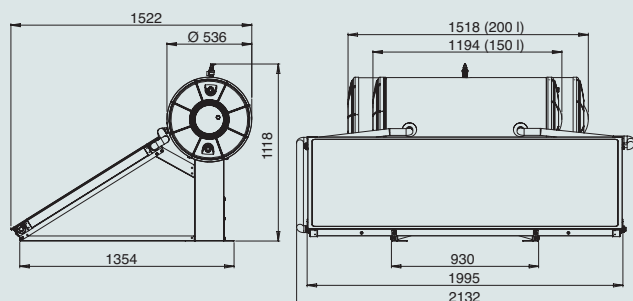
### Solar collectors

		HF 150/1 TR	HF 150/1 TT	HF 200/1 TR	HF 200/1 TT	HF 200/2 TR	HF 200/2 TT	HF 300/2 TR	HF 300/2 TT
Installation		Ground or flat roof	Sloped roof	Ground or flat roof	Sloped roof	Ground or flat roof	Sloped roof	Ground or flat roof	Sloped roof
Collector gross surface	m <sup>2</sup>	2,2	2,2	2,2	2,2	4,4	4,4	4,4	4,4
Collector aperture surface	m <sup>2</sup>	2,01	2,01	2,01	2,01	4,02	4,02	4,02	4,02
Empty mass	kg	113	104	124	116	170	157	194	187
Solar circuit capacity	l	5	5	5	5	6,6	6,6	10,6	10,6

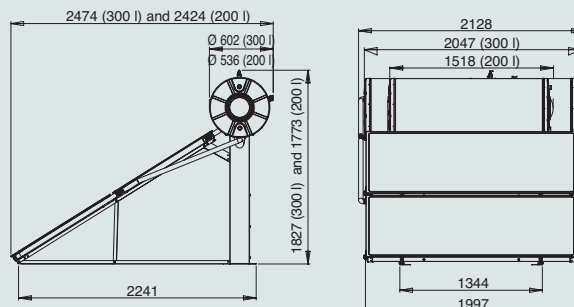
### Tank module

Domestic hot water storage tank capacity	l	153	153	202	202	202	202	280	280
DHW circuit max. pressure	bar	8	8	8	8	8	8	8	8
Solar circuit safety valve calibration	bar	1,5	1,5	1,5	1,5	1,5	1,5	1,5	1,5
Heat losses	kWh/24h	1,8	1,8	2,2	2,2	2,2	2,2	3,6	3,6

CODE (with antifreeze liquid)	3022100	3022101	3022102	3022103	3022158	3022157	3022104	3022105
CODE (without antifreeze liquid)	3022125	3022124	3022127	3022126	3022141	3022140	3022129	3022128
CODE (with 2 kW electrical heating element)	3022175	3022174	3022177	3022176	3022179	3022178	3022181	3022180



These drawings refer to 150/1 and 200/1 models



These drawings refer to 200/2 and 300/2 models

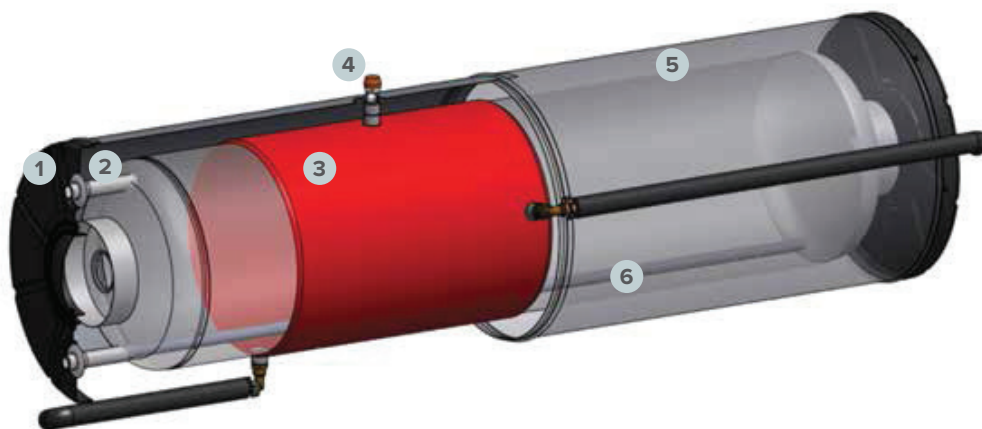


### DESIGN AND TECHNOLOGY

- Kairos Thermo HF offers the **best enjoyable** design of its category, thanks to the accurate study of the lines, and of the external shape;
- The new o-ring connection allows a **very quick installation**, even eliminating the risk to damage the hydraulic connection kit;
- Kairos Thermo HF is designed to work both **on flat roof and on inclined roof**, thanks to the use of different accessories;
- The new geometry of the heating element, shorter and thicker, allows more homogeneous consumption and consequently **longer lifetime**;
- The enamelled heating element, with its extra-smooth surface, represents a barrier against the deposition of limestone, ensuring, during the working time, **an ever efficient heat exchange**;

### QUALITY

- Kairos Thermo HF is made up with the best material available: the steel tank with exclusive titanium-based enamel treatment, the copper hydraulic circuit and the zn-mg chassis guarantee **high reliability, corrosion proof** and very long life cycle;
- The special tempered glass with low content iron assures very **high protection against the hail**, and against the collector's loading;
- With the **solar key mark** and the test report according EN 12975-2, the compliance with the international standard is certified;
- The magnesium anode guarantees **corrosion proof protection**; even **longer lifetime** is guaranteed thanks to the enamel coating technology that represents a barrier against water impurities and acids;
- The technopolymer angle, that integrates the condensate exhaust and the flanged manifold outlet, ensures a **more precise production process**;



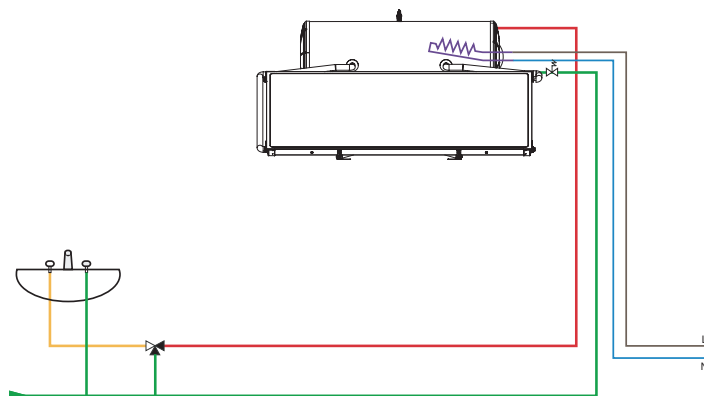
- 1 - Low dispersion polyurethane insulation free of CFC & HCFC
- 2 - Steel tank with exclusive titanium-based enamel treatment
- 3 - 360 °C heat exchanger
- 4 - 1,5 solar safety valve
- 5 - External tank in prepainted zinc-steel
- 6 - Cold water distribution lance
- 7 - New o-ring connection



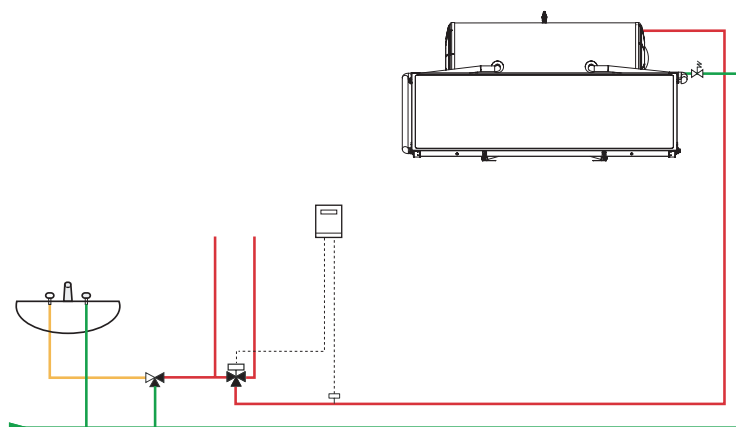
# KAIROS THERMO HF

## MAIN SYSTEM LAYOUTS

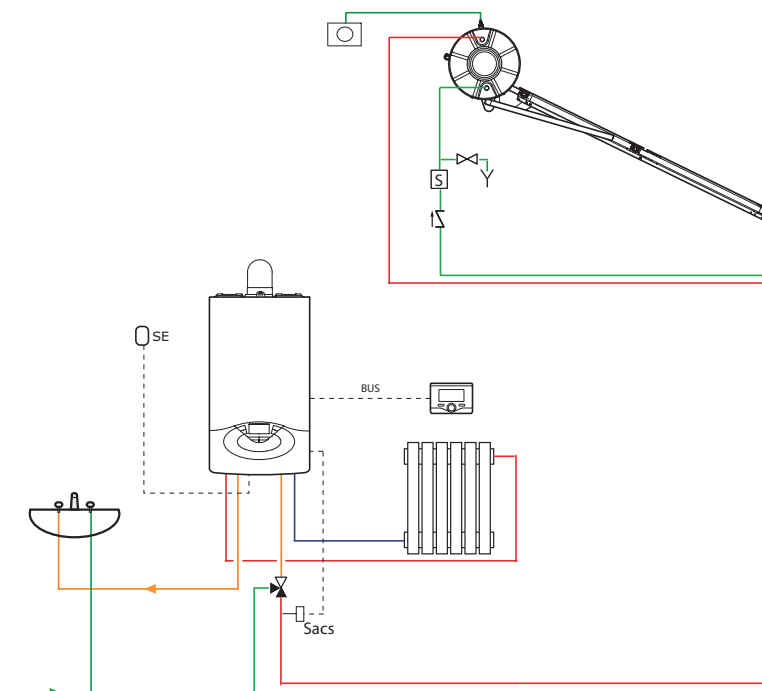
LAYOUT A



LAYOUT B



LAYOUT C



LIST OF COMPONENTS		Kairos CN direct collector Cod. 3020036		CNA1R direct Cod. 3507082		CNA2R direct Cod. 3507080		CNA3R direct Cod. 3507081		Ground Frame for 150-1 and 200-1 direct Cod. 3024140		Ground Frame for 300-2 Cod. 3024141		Hydraulic fittings kit 150-1 and 200-1 direct Cod. 3024101		Hydraulic fittings kit 300-2 direct Cod. 3024102				
Description	Code																			
Kairos Thermo Direct 150/1 TR	3022091	1		1						1				1						
Kairos Thermo Direct 200/1 TR	3022092	1				1				1				1						
Kairos Thermo Direct 300/2 TR	3022093	2						1				1				1				
LIST OF COMPONENTS		KAIROS VN 2.2 Code:3020041  CNA 150 HF ARISTON Code: 3507104  CNA 200 HF ARISTON Code: 3507105  CNA 300 HF ARISTON Code: 3507106  CNA 150 HF-E 2KW ARISTON Code: 3507172  CNA 200 HF-E 2KW ARISTON Code: 3507173  CNA 300 HF-E 2KW ARISTON Code: 3507174  Ground frame for kairos Thermo HF 150/1 and 200/1 Code: 3024166  Ground frame for Kairos Thermo HF 200/2 Code:3024206  Ground frame for Kairos Thermo HF 300/2 Code: 3024167  Roof frame for Kairos Thermo HF 150/1 and 200/1 Code: 3024168  Roof frame for Kairos Thermo HF 200/2 Code:3024193  Roof frame for Kairos Thermo HF 300/2 Code: 3024169  Hydraulic fittings 150/1 and 200/1 for ground installation Code: 3024162  Hydraulic fittings 150/1 and 200/1 for roof installation Code: 3024164  Hydraulic fittings for ground installation of 200/2 Code: 3024205  Hydraulic fittings for roof installation of 200/2 Code:3024091  Hydraulic fittings 300/2 for ground installation Code: 3024163  Hydraulic fittings 300/2 for roof installation Code: 3024165																		
				Description	Code															
				KAIROS THERMO HF 150-1 TR ES	3022125	1	1					1					1			
				KAIROS THERMO HF 150-1 TT ES	3022124	1	1								1			1		
				KAIROS THERMO HF 200-1 TR ES	3022127	1		1				1					1			
				KAIROS THERMO HF 200-1 TT ES	3022126	1		1							1			1		
				KAIROS THERMO HF 200-2 TR ES	3022141	2		1					1						1	
				KAIROS THERMO HF 200-2 TT ES	3022140	2		1								1			1	
				KAIROS THERMO HF 300-2 TR ES	3022129	2			1					1						1
				KAIROS THERMO HF 300-2 TT ES	3022128	2			1							1				1
				KAIROS THERMO HF 150-1 TR ELETTROSOL	3022175	1				1			1				1			
				KAIROS THERMO HF 150-1 TT ELETTROSOL	3022174	1				1					1			1		
				KAIROS THERMO HF 200-1 TR ELETTROSOL	3022177	1					1		1				1			
				KAIROS THERMO HF 200-1 TT ELETTROSOL	3022176	1					1				1			1		
				KAIROS THERMO HF 200-2 TR ELETTROSOL	3022179	2					1			1					1	
KAIROS THERMO HF 200-2 TT ELETTROSOL	3022178	2					1					1			1					
KAIROS THERMO HF 300-2 TR ELETTROSOL	3022181	2						1		1						1				
KAIROS THERMO HF 300-2 TT ELETTROSOL	3022180	2						1					1			1				
INTEGRATION SYSTEM						None	Electric heating element	Generic combi boller	Egis Plus	Genus Evo < 28 kW Clas Evo < 28 kw	Genus Evo ≥ 28 kW Clas Evo ≥ 28 kw Clas B	Outdoor models	Built-in models							
Description		Code																		
ENAMELLED ELECTRIC KIT 2 KW FOR 150-200-300 LT		3024272				●														
ELECTRIC KIT 1,5 KW FOR 150-200-300 LT		107069				●														
THERMOSTATIC MIXER		3024085		●		●	●													
MOTORIZED THREE-WAY VALVE		3087085					●													
DIGITAL THERMOSTAT		800232					●													
INTEGRATED THERMOSTATIC MANUAL MIXING VALVE		3318379							●	●										
HIGH FLOW RATE THERMOSTATIC MIXING VALVE		3318419									●									
BUILT IN SOLAR KIT*		3318408										●								
MOTORIZED BUILT-IN SOLAR KIT*		3318484											●							
INTEGRATED SOLAR PROBE		3318317								●	●	●	●							
						A		B		C										

\*It is required the code 3318401 antifreeze kit (protection down -20 °C)