

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% absorption and only 5% reflection;
- The collectors' **increased surface** gives the possibility 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

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

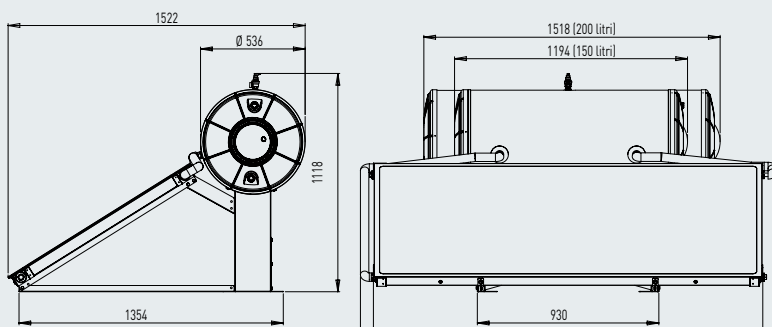
Solar collectors

| 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 ² | 2,2 | 2,2 | 2,2 | 2,2 | 4,4 | 4,4 | 4,4 | 4,4 |
| Collector aperture surface | m ² | 2,01 | 2,01 | 2,01 | 2,01 | 4,02 | 4,02 | 4,02 | 4,02 |
| Empty mass | kg | 135 | 133 | 153 | 151 | 200 | 190 | 231 | 218 |
| Solar circuit capacity | l | 6 | 6 | 6 | 6 | 8 | 8 | 11 | 11 |

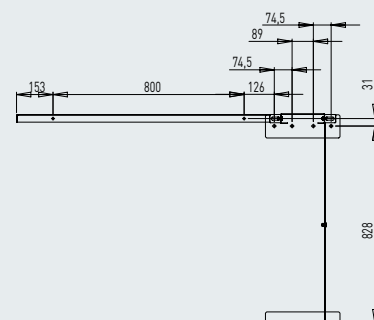
Tank module

| | | | | | | | | | |
|--|---------|------|------|------|------|------|------|------|------|
| Domestic hot water storage tank capacity | l | 153 | 153 | 202 | 202 | 202 | 202 | 270 | 270 |
| 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 | 2,39 | 2,39 | 2,67 | 2,67 | 2,67 | 2,67 | 2,81 | 2,81 |

| | | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|---------|---------|
| CODE (with antifreeze liquid) | 3023535 | 3023536 | 3023537 | 3023538 | 3023505 | 3023506 | 3023539 | 3023540 |
| CODE (without antifreeze liquid) | 3023551 | 3023552 | 3023553 | 3023554 | 3023511 | 3023512 | 3023555 | 3023556 |
| 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

ENERGY
EFFICIENTMADE
IN ITALY

HAIL PROOF

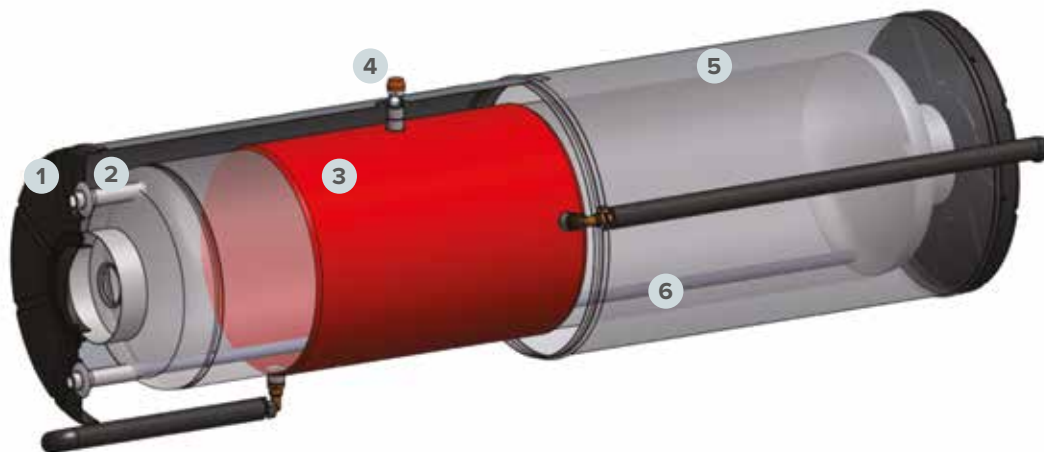
SOLAR
KEYMARK

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**;



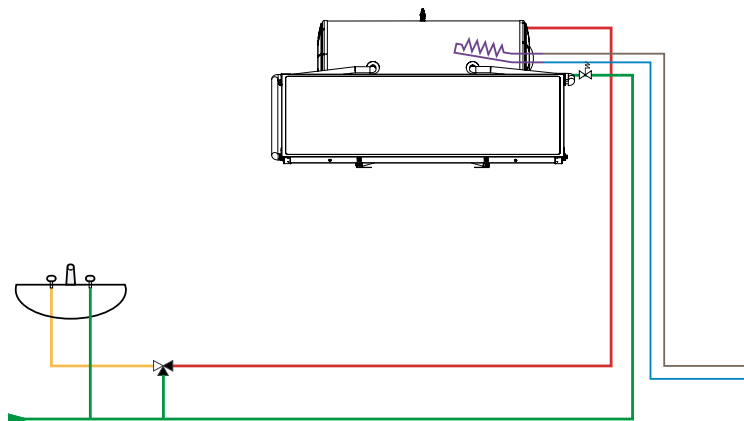
- 1 - Low dispersion polyurthean insulation free of CFC & HCFC
- 2 - Steel tank with exclusive titanium-based enamel treatment
- 3 - 360 °C heat exchanger
- 4 - 1,5 solar safety valve
- 5 - Extrenal tank in prepainted zinc-steel
- 6 - Cold water distrubution lance
- 7 - New o-ring connection



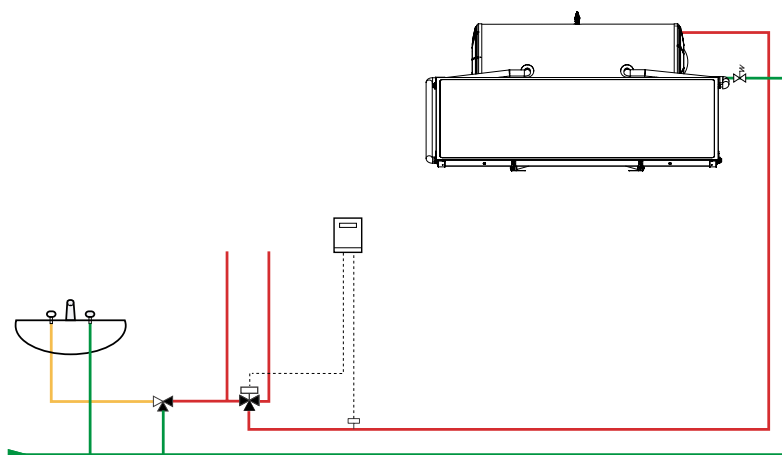
KAIROS THERMO HF

MAIN SYSTEM LAYOUTS

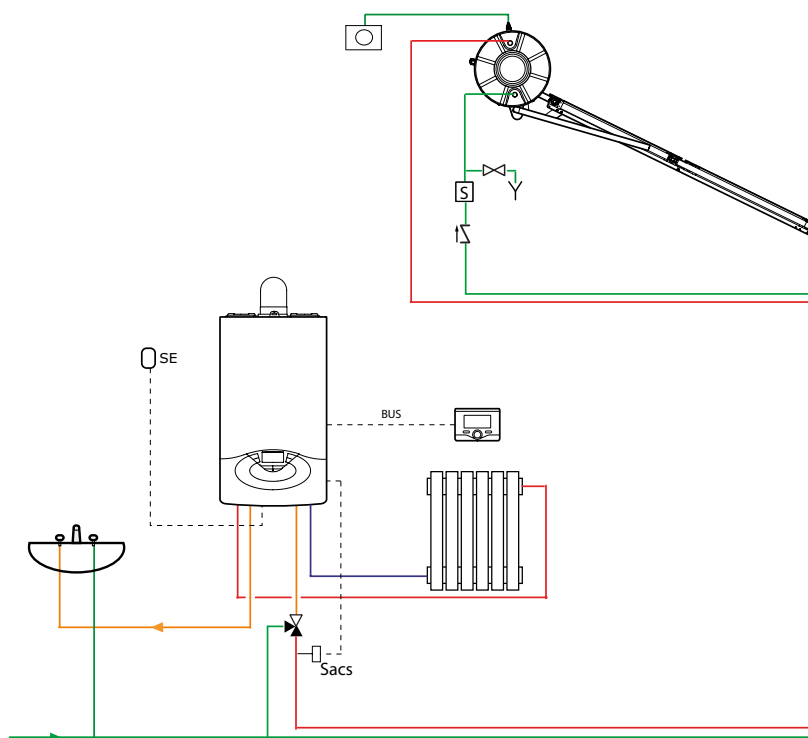
LAYOUT A



LAYOUT B



LAYOUT C



| LIST OF COMPONENTS | | Kairos CN direct collector Cod. 3020052 | 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 Ultra 150/1 TR | 3022184 | 1 | 1 | | | 1 | | 1 | |
| Kairos Thermo Direct Ultra 200/1 TR | 3022186 | 1 | | 1 | | 1 | | 1 | |
| Kairos Thermo Direct Ultra 300/2 TR | 3022188 | 2 | | | 1 | | 1 | | 1 |

| LIST OF COMPONENTS | | KAIROS VN 2.2 Code: 3020056 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 | 3023551 | 1 | 1 | | | | 1 | | | | | 1 | | | | | | | |
| KAIROS THERMO HF 150-1 TT ES | 3023552 | 1 | 1 | | | | | | 1 | | | | 1 | | | | | | |
| KAIROS THERMO HF 200-1 TR ES | 3023553 | 1 | | 1 | | | 1 | | | | | 1 | | | | | | | |
| KAIROS THERMO HF 200-1 TT ES | 3023554 | 1 | | 1 | | | | | 1 | | | | 1 | | | | | | |
| KAIROS THERMO HF 200-2 TR ES | 3023511 | 2 | | 1 | | | | 1 | | | | | | 1 | | | | | |
| KAIROS THERMO HF 200-2 TT ES | 3023512 | 2 | | 1 | | | | | | 1 | | | | | 1 | | | | |
| KAIROS THERMO HF 300-2 TR ES | 3023555 | 2 | | | 1 | | | | 1 | | | | | | | | | 1 | |
| KAIROS THERMO HF 300-2 TT ES | 3023556 | 2 | | | 1 | | | | | | | 1 | | | | | | | 1 |
| KAIROS THERMO HF 150-1 TR ELETROSOL | 3022175 | 1 | | | 1 | | 1 | | | | | 1 | | | | | | | |
| KAIROS THERMO HF 150-1 TT ELETROSOL | 3022174 | 1 | | | 1 | | | | | 1 | | | 1 | | | | | | |
| KAIROS THERMO HF 200-1 TR ELETROSOL | 3022177 | 1 | | | | 1 | 1 | | | | | 1 | | | | | | | |
| KAIROS THERMO HF 200-1 TT ELETROSOL | 3022176 | 1 | | | | 1 | | | | | 1 | | | 1 | | | | | |
| KAIROS THERMO HF 200-2 TR ELETROSOL | 3022179 | 2 | | | | 1 | | 1 | | | | | | | 1 | | | | |
| KAIROS THERMO HF 200-2 TT ELETROSOL | 3022178 | 2 | | | | 1 | | | | | 1 | | | | | 1 | | | |
| KAIROS THERMO HF 300-2 TR ELETROSOL | 3022181 | 2 | | | | | 1 | | 1 | | | | | | | | | 1 | |
| KAIROS THERMO HF 300-2 TT ELETROSOL | 3022180 | 2 | | | | | 1 | | | | | 1 | | | | | | | 1 |

| INTEGRATION SYSTEM | | None | Electric heating element | Generic combi boiler | 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)