EN

fondital

BE INNOVATIVE


# GENERAL CATALOGUE

## 2019


fondital
BE INNOVATIVE

# COMPANY'S MISSION STATEMENT

**To design high quality, innovative heating systems that meet human needs while respecting the environment.**

Fondital offers a complete range of products, systems and services for the heating of rooms, created to offer maximum comfort and maximum energy efficiency.

Fondital is certified under **UNI EN ISO 9001:2015.**

Since 2017 it has implemented Environmental and Energy Management System in compliance with the requirements of **UNI EN ISO 140001:2015** and **ISO 50001:2011.**

*"A successful company is a company that can create value for its customers"*
Silvestro Niboli

## 1970

Silvestro Niboli founds Fondital, a pioneer company in the aluminium radiator production field.

## 1984

Fondital introduces on the market Gazelle, a gas-fired convection stove. An innovative and practical solution for domestic heating, which is still a product icon.

## 1992

In line with the group's growth strategy, Florida Srl is acquired in 1992, in order to enrich and diversify the product offering.

## 2006

To better meet the market's new demands, Fondital designs Panarea wall-hung boilers and Tahiti Condensing boilers.

## 2009

Madeira condensing thermal solar units and heat meters are designed to complete the 'green' range.

## 2012

Wall-hung boilers are renewed with Delfis, Formentera and Itaca models, new design and touch screen interface for top-of-the-range products. New Madeira base-plate solar boilers.

## QUALITY

Design made in Italy and an R&D division which cooperates with the primary international Universities. The UNI EN ISO 9001 certification issued by DNV proves Fondital's greatest attention to the search for quality.

## INTERNATIONALITY

We are one of the leading suppliers on the market on an international level in the field of heating solutions. Multilingual personnel and representative offices ensure non-stop presence on the global market, as a witness to our "customer-oriented" vision.

## INNOVATION

We are the leading manufacturer in the world of radiators in die-cast aluminium, and we have to date introduced a remarkable number of innovations and patents which have become milestones in the history of the heating industry.

## RELIABILITY

We are a reliable marketing partner. Our innovative and quality products are also efficient from an energetic saving standpoint. Our sales organization enables us to be particularly close to the customer and provides a thorough pre and post sales counselling service.

## COMPLETENESS

We offer complete solutions for heating purposes tailored to any personal requirement or need, asserting ourselves as the only supplier of an all-round package. Our products allow saving on energy and costs while being considerate of the environment.

### 1995

Fondital presents Mital and Mital Max wall-hung boilers and Polycal base-plate boiler to the market.

### 2000

Presentation of the new range of Flores, Tahiti and Nias wall-hung boilers with electronic modulation and of Elba, Alor and Moorea base-plate boilers.

### 2002

Wall-hung boilers are renewed with Flores Dual and Tahiti Dual models, while base-plate boilers are topped off by Bali and Rodi ranges.

### 2014

Market introduction of Itaca KB, a wall-hung condensing boiler with integrated 45l water heater.

### 2015

Erp Ready! Fondital products achieve the highest possible energy efficiency standards. The new range of Minorca wall-hung boilers is designed to enrich the range of boilers.

### 2018

GAR Ready! The new Gas Regulation enters into force and Fondital products comply with the safety standards required by the new provisions.
The Itaca CH range goes into production.

# ErP AND ECO-LABELLING

## WHAT IS ERP (ENERGY RELATED PRODUCTS)?

Following the values expressed by the Kyoto Protocol, the European Community has set an ambitious goal, known as 20 - 20 - 20 goal. The aim is to reduce greenhouse gas emissions by 20% by the end of 2020, as well as to reduce the energy consumption and ensure that the 20% of the European total energy needs are met from renewable energy sources.
For this reason, two directives have been issued: ErP or Eco Design Directive and Eco-Labelling Directive.

## WHAT CHANGES HAVE BEEN MADE?


**26 September 2015**
The prohibition against the placing on the European Community's market of boilers having seasonal efficiency values for heating ≤ 86% and outputs ≤ 400 kW enters into force, with the following exceptions: CH-only natural draught boilers (B1 type) with Pr ≤ 10 kW and combination boilers with Pr ≤ 30 kW, if installed in collective branched chimneys.

The boilers placed on the marked before the indicated deadline, can be sold until warehouse stocks are exhausted.
All CH-only and combination heat generators with Pr ≤ 70 kW, and all the combined water heaters up to 500l, must bear THE ENERGY CLASS LABEL to be placed on the market.

| EXPIRATION | HEATING BOILERS (ALSO MIXED FOR THE PRODUCTION OF HOT WATER) | BOILERS FOR THE PRODUCTION OF DHW |
|---|---|---|
| 26 SEPTEMBER 2015 | Energy label with classes from A++ to G and minimum performance requirements | Energy label with classes from A to G and minimum performance requirements |
| 26 SEPTEMBER 2017 | New and more stringent minimum performance requirements | Elimination of the lower efficiency classes and energy label with classes from A+ to F, new and more stringent minimum performance requirements |
| 26 SEPTEMBER 2018 | Introduction of Nox emission limit values | Introduction of NOx emission limit values |
| 26 SEPTEMBER 2019 | Elimination of the lower efficiency classes and energy label with classes from A+++ to D | |

## PRODUCT LABEL

Example: combination boiler

**Every product placed on the market with an output up to 70 kW must be provided with a label bearing a seasonal energy efficiency for room heating ranging from A++ to G and from A to G for domestic hot water energy efficiency class.**

1. Name of the Manufacturer or Brand
2. Name of the Model
3. Symbol for "heating" function
4. Symbol for DHW function
5. The letter indicates which hot water "usage profile" has been used to calculate the energy class
6. Energy class indicators
7. Output of the appliance


## SYSTEM LABEL

**All the equipment combinations which will be installed must also be subject to energy classification. For instance: a condensing boiler and a solar panel connected to a water heater are considered as a system subject to Eco-Labelling. The calculation of the system's energy efficiency must be provided by filling in a data sheet known as "Fiche".**

1. Energy classification of the system
2. Energy efficiency of the generator
3. Thermal solar system
4. Water heater
5. Heat generator control system
6. Additional heat generator


## RESPONSIBILITY

- ✓ The manufacturer is responsible for providing the energy class label together with the Appliance.
- ✓ Those who showcase the Product must apply the label on it, in such a way that it is clearly visible for the final user.
- ✓ Those who install the system must calculate its energy efficiency, provide the energy class label and fill in the system's specific fiche.

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## SYSTEM COMPONENTS PAGE 111



## FLUE FITTINGS AND ACCESSORIES PAGE 123





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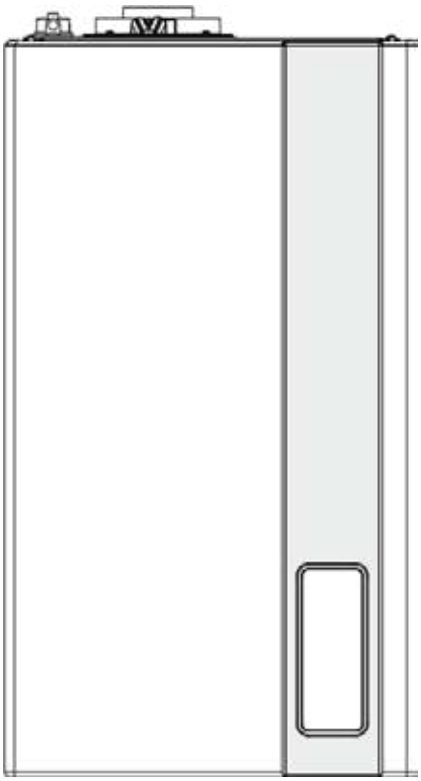
# BOILERS

## CODE OF THE PRODUCT

KC KRB KB KR KBS KRBS CTN

## EXAMPLE



**ITACA KC**

WALL-HUNG CONDENSING BOILER WITH INSTANT PRODUCTION OF DHW

**K =** CONDENSING

**C =** COMBINATION INSTANTANEOUS BOILER FOR DHW

## KEY

| | | | |
|---|---|---|---|
| **K** | CONDENSING | **RB** | CH ONLY PLUS 3-WAY VALVE FOR WATER HEATER |
| **C** | COMBINATION INSTANTANEOUS BOILER FOR DHW | **S** | INTEGRATED HYDRAULIC UNIT |
| **B** | INTEGRATED WATER HEATER | **TN** | NATURAL DRAUGHT |
| **R** | CH ONLY | **AF** | BI-THERMAL HEAT EXCHANGER |

# OVERVIEW OF AVAILABLE MODELS

| MODEL | CONDENSING | OPEN CHAMBER ATMOSPHERIC BOILER | BOILER BODY | CENTRAL HEATING | INSTANTANEOUS DHW PRODUCTION | INTEGRATED STORAGE TANK | REMOTE STORAGE TANK | SOLAR EASY | WALL-HUNG | BASE PLATE | CASCADE-TYPE INSTALLATION | < 35 KW | > 35 KW |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANTEA KC | ● | | | | ● | | | ● | ● | | | ● | |
| ANTEA KR | ● | | | ● | | | ● | ● | ● | | | ● | |
| ANTEA KRB | ● | | | ● | | | ● | ● | ● | | | ● | |
| FORMENTERA KC | ● | | | | ● | | | ● | ● | | | ● | |
| FORMENTERA KR | ● | | | ● | | | ● | ● | ● | | | ● | |
| FORMENTERA KRB | ● | | | ● | | | ● | ● | ● | | | ● | |
| ITACA KB | ● | | | | | ● | | ● | ● | | | ● | |
| ITACA KC | ● | | | | ● | | | ● | ● | | | ● | |
| ITACA KR | ● | | | ● | | | ● | ● | ● | | | ● | |
| ITACA KRB | ● | | | ● | | | ● | ● | ● | | | ● | |
| MINORCA KC | ● | | | | ● | | | | ● | | | ● | |
| MINORCA KR | ● | | | ● | | | ● | | ● | | | ● | |
| MINORCA KRB | ● | | | ● | | | ● | | ● | | | ● | |
| ITACA CH KR | ● | | | ● | | | | ● | ● | | ● | | ● |
| GIAVA KRB | ● | | | | | ● | | | | ● | | ● | |
| MADEIRA SOLAR COMPACT KBS | ● | | | | | ● | | ● | | ● | | ● | |
| MADEIRA SOLAR KRBS | ● | | | | | ● | | ● | | ● | | ● | |
| ANTEA PRO CTN | | ● | | | ● | | | | ● | | | ● | |
| FORMENTERA PRO CTN | | ● | | | ● | | | ● | ● | | | ● | |
| RODI DUAL 70-1300 | | | ● | ● | | | ● | | | ● | ● | | ● |
| RODI DUAL 1400-3500 | | | ● | ● | | | ● | | | ● | ● | | ● |
| RODI DUAL HR 70-1300 | | | ● | ● | | | ● | | | ● | ● | | ● |
| RODI DUAL HR 1400-3500 | | | ● | ● | | | ● | | | ● | ● | | ● |
| PYRÓS 1M | | | | | | | | | | | | | |
| PYRÓS DUAL 1G | | | | | | | | | | | | | |
| PYRÓS 1G | | | | | | | | | | | | | |

# SYMBOLS AND PERFORMANCE

**INDOOR INSTALLATION**
Indoor wall-hung boiler


**STAINLESS STEEL PRIMARY EXCHANGER**
Stainless steel heat exchanger

**OUTDOOR INSTALLATION**
Boiler that can be installed outdoors, in a partially protected place


**ALUMINIUM PRIMARY EXCHANGER**
Aluminium primary exchanger

**BUILT-IN INSTALLATION**
Boiler to be installed in a suitable flush-mounting unit


**12-PLATE HEAT EXCHANGER**
12-plate DHW heat exchanger

**BASE-PLATE INSTALLATION**
Indoor base-plate boiler


**26-PLATE HEAT EXCHANGER**
26-plate DHW heat exchanger

**CASCADE-TYPE INSTALLATION**
Boiler that can be installed in cascade-type connection

**SOLAR EASY**
Boiler that can be combined with natural or forced circulation solar systems

**CONDENSING**
Condensing boiler

**OUTDOOR DHW WATER HEATER**
Boiler preset for connection to a remote water heater

**TRADITIONAL**
Atmospheric boiler

**INTEGRATED DHW WATER HEATER 45 -130 - 170 - 300 litres**
Boiler with water heater


**MODULATION RATIO 1:9**
Modulation range of heat output in CH and DHW modes


**MODULATION RATIO 1:10**
Modulation range of heat output in CH up to 1:10

**EXPANSION VESSEL**
Diaphragm expansion vessel

**LOW NOISE LEVEL**
Low noise levels

**FREEZE PROTECTION**
Boiler self-protection system

**GSM CONNECTION**
Prearrangement for connection to GSM for switching on and off and remote display of faults

**ENERGETIC SAVING**
Product with high energy efficiency

**MADE IN ITALY**
Manufactured in Italy

**TOP COMFORT DHW*****
High-performance boiler for DHW

**REDUCED SIZE**
Reduced overall dimensions

**FRONT DOOR FOR ACCESS**
Front access for easy maintenance

**CABINET WITH RAIN COVER**
Protection during maintenance

**AUTO FUNCTION**
Top efficiency and energy saving through the automatic analysis of the environment conditions carried out via external devices connected

**COMFORT FUNCTION**
Control for activating DHW comfort function

**EASY TO CONTROL**
Multilingual menu with detailed access to parameters

**MODULATING PUMP**
High efficiency modulating pump to optimize energy consumption and performance

# CONDENSING BOILERS

## WALL-HUNG BOILERS <35KW



## HIGH OUTPUT BOILERS >35KW



## BASE-PLATE BOILERS <35KW



## FUEL OVERVIEW



## TECHNICAL SPECIFICATIONS OF CONDENSING BOILERS

# ITACA KC

WALL-HUNG CONDENSING BOILER WITH INSTANT PRODUCTION OF DHW
CAN BE MATCHED TO OUTDOOR INSTALLATION KIT

**Available in the following models:**

12 24 28 32

- **Standard ambient temperature probe**
- **Modulation ratio: 1:9**
- **High efficiency circulation pump**
- **Standard management of 2 heating zones with ambient temperature probes**
- **CH water flow rate electronic control**
- **Controls to manage two different types of thermal solar systems fitted as standard**
- Thermosetting polymer-covered stainless steel heat exchanger
- Fully pre-mixed burner
- Heating expansion vessel - 10 litres
- Prearrangement for connection to GSM modem for switching on and off and remote display of faults (optional)
- Multifunction relay for connection to systems with zone valves or to solar plant or to remote alarm signal
- Double filling system: automatic and manual
- 26-plate DHW thermally-insulated heat exchanger
- DHW comfort function: ★★★

| Model | Gas type | Code | Heat output (kW) | | Energy efficiency class | | W x H x D (mm) | Gross weight (Kg) |
|---|---|---|---|---|---|---|---|---|
| | | | Nominal Pn | DHW (ΔT 30°C) | Room heating | Heating DHW | | |
| **KC 12** | NATURAL GAS | KITxx2KC12 | 11,7 | 18,6 | A | A M | 420x750x315 | 35,5 |
| | PROPANE | KITxx6KC12 | | | | | | |
| **KC 24** | NATURAL GAS | KITxx2KC24 | 23,0 | 27,4 | A | A XL | 420x750x315 | 38,0 |
| | PROPANE | KITxx6KC24 | | | | | | |
| **KC 28** | NATURAL GAS | KITxx2KC28 | 25,5 | 29,2 | A | A XL | 420x750x315 | 39,0 |
| | PROPANE | KITxx6KC28 | | | | | | |
| **KC 32** | NATURAL GAS | KITxx2KC32 | 29,4 | 33,4 | A | A XXL | 420x750x315 | 40,5 |
| | PROPANE | KITxx6KC32 | | | | | | |

**Itaca KC** supplied with ambient temperature probe has a room heating seasonal efficiency of:
94% for model 12; 95% for model 28; 95% for model 28; 96% for model 32

**TOUCH SCREEN INTERFACE**

- *Modulating thermostat*
- *Day/night temperature level selection*
- *Weekly programming*
- *Timer and ambient temperature setting*
- *DHW "comfort" function enabling:* ★★★

**The TOUCH SCREEN interface Itaca KC combined with the ambient temperature probe supplied is a class V adjustment system.**

## How to increase energy efficiency?

Discover the most suitable solution

| Regulation device | | Code | KC 12 | KC 24 | KC 28 | KC 32 |
|---|---|---|---|---|---|---|
| **Option 1** | External probe (ambient temperature probe is not supplied) | **0SONDAES01** | 92% | 94% | 94% | 95% |
| **Option 2** | External probe (ambient temperature probe is supplied) | **0SONDAES01** | 94% | 96% | 96% | 97% |
| **Option 3** | Remote control (ambient temperature probe is not supplied) | **0CREMOTO04** | 93% | 95% | 95% | 96% |
| **Option 4** | Remote control and external probe (ambient temperature probe is not supplied) | **0CREMOTO04**<br>**0SONDAES01** | 94% | 96% | 96% | 97% |

| Technical specifications | um | KC 12 | KC 24 | KC 28 | KC 32 |
|---|---|---|---|---|---|
| Nominal heat output (Pn) | kW | 12 | 23 | 26 | 29 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 90 | 92 | 92 | 93 |
| Water heating energy efficiency (ηwh) | % | 78 (**) | 85 (**) | 84 (**) | 87 (**) |
| Nominal heat input (Qn) | kW | 12,0 | 23,7 | 26,4 | 30,4 |
| Nominal heat output (80-60°C) (Pn) | kW | 11,7 | 23,0 | 25,5 | 29,4 |
| Heat output (50-30°C) | kW | 12,6 | 25,0 | 28,0 | 32,3 |
| Reduced heat output (50-30°C) | kW | 2,1 | 3,2 | 3,5 | 4,4 |
| Useful efficiency at nominal input (80-60°C) | % | 97,1 | 96,8 | 96,7 | 96,8 |
| Useful efficiency at 30% (30°C return) | % | 106,0 | 107,4 | 107,4 | 108,3 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 | 20-78 | 20-78 |
| Heating expansion vessel capacity | l | 10 | 10 | 10 | 10 |
| DHW circuit working pressure (min-max) | bar | 0,5-6,0 | 0,5-6,0 | 0,5-6,0 | 0,5-6,0 |
| Specific DHW flow ΔT=30K | l/min | 8,8 | 13,4 | 15,5 | 16,2 |
| DHW temperature range | °C | 35-57 | 35-57 | 35-57 | 35-57 |
| NOx emission class | - | 6 | 6 | 6 | 6 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 80 | 89 | 91 | 99 |
| Electric protection rating | IP | IPX5D | IPX5D | IPX5D | IPX5D |

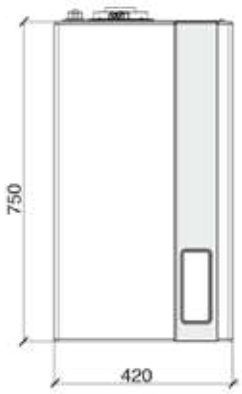
For other technical specifications, see from page 55 - Maximum length of flue gas venting, see page 124

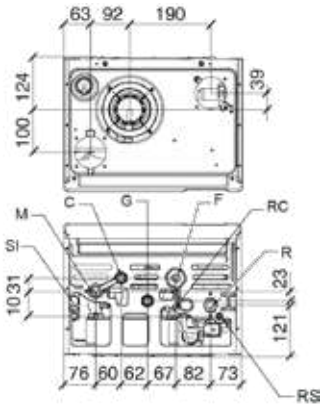
| Item | Description | Code |
|---|---|---|
|  | Coaxial kit Ø 60/100 length 75cm | 0CONDASP00 |
|  | Remote control, ErP V class (118x85x32 mm) | 0CREMOTO04 |
|  | Hydrocyclonic and magnetic filter ¾"(3,000 l/hour) | 0FILTIMP00 |
|  | Coaxial fitting kit Ø60/100 | 0KITATCO00 |
|  | Tap kit with filter | 0KITRUBI04 |
|  | Ambient temperature probe (12x12x20 mm, with 50cm cable) | 0KITSAMB00 |

| Item | Description | Code |
|---|---|---|
|  | Splitter kit Ø80+80 | 0KITSDOP00 |
|  | Kit for connection to solar plant | 0KITSOLC07 |
|  | Electric kit for complex solar plant management | 0KITSOLC08 |
|  | Electrical kit for zone management with external probe | 0KITZONE05 |
|  | Protective liquid for domestic mixed metal plants (0.5 l bottle) | 0PROTIMP00 |
|  | External probe (60x45x31 mm) | 0SONDAES01 |

For other accessories, see from page 123

## DIMENSIONS AND CONNECTION CENTRE DISTANCES




**SI** Condensate drain
**M** CH system flow (3/4")
**C** DHW outlet (1\2")
**G** Gas inlet (1/2")
**F** Cold water inlet (1/2")
**RC** Filler tap
**R** CH system return (3/4")
**RS** Discharge tap

# ITACA KR

WALL-HUNG CONDENSING BOILER CH ONLY
CONNECTION TO AN EXTERNAL WATER HEATER FOR DHW WITH EXTERNAL 3-WAY VALVE

**Available in the following models:**

12 24 28 32

- **Standard ambient temperature probe**
- **Modulation ratio: 1:9**
- **High efficiency circulation pump**
- **CH water flow rate electronic control**
- **Standard management of one type of thermal solar plant**
- **Standard management of 2 heating zones with ambient temperature probes**
- **External water heater heating setting (optional)**
- Thermosetting polymer-covered stainless steel heat exchanger
- Fully pre-mixed burner
- Heating expansion vessel - 10 litres
- Prearrangement for connection to GSM modem for switching on and off and remote display of faults (optional)
- Multifunction relay for connection to systems with zone valves or to solar plant or to remote alarm signal
- Integrated hydraulic unit including: 3-way valve, automatic by-pass, safety valve, pressure transducer, discharge tap and connection to the expansion vessel
- Anti-legionella function for water heater

| Model | Gas type | Code | Heat output (kW) | | Energy efficiency class | W x H x D (mm) | Gross weight (Kg) |
|---|---|---|---|---|---|---|---|
| | | | Nominal Pn | DHW (ΔT 30°C) | Room heating | | |
| **KR 12** | NATURAL GAS | KITxx2KR12 | 11,7 | 18,6 | A | 420x750x315 | 34,0 |
| | PROPANE | KITxx6KR12 | | | | | |
| **KR 24** | NATURAL GAS | KITxx2KR24 | 23,0 | 27,4 | A | 420x750x315 | 35,5 |
| | PROPANE | KITxx6KR24 | | | | | |
| **KR 28** | NATURAL GAS | KITxx2KR28 | 25,5 | 29,2 | A | 420x750x315 | 37,0 |
| | PROPANE | KITxx6KR28 | | | | | |
| **KR 32** | NATURAL GAS | KITxx2KR32 | 29,4 | 33,4 | A | 420x750x315 | 38,5 |
| | PROPANE | KITxx6KR32 | | | | | |

**Itaca KR** supplied with ambient temperature probe has a room heating seasonal efficiency of:
94% for model 12; 95% for model 24; 95% for model 28; 96% for model 32

**TOUCH SCREEN INTERFACE**

- *Modulating thermostat*
- *Day/night temperature level selection*
- *Weekly programming*
- *Timer and ambient temperature setting*
- *DHW "comfort" function enabling*

**The TOUCH SCREEN interface Itaca KR combined with the ambient temperature probe supplied is a class V adjustment system.**

## How to increase energy efficiency?

Discover the most suitable solution

| Regulation device | | Code | KR 12 | KR 24 | KR 28 | KR 32 |
|---|---|---|---|---|---|---|
| **Option 1** | External probe (ambient temperature probe is not supplied) | **0SONDAES01** | 92% | 94% | 94% | 95% |
| **Option 2** | External probe (ambient temperature probe is supplied) | **0SONDAES01** | 94% | 96% | 96% | 97% |
| **Option 3** | Remote control (ambient temperature probe is not supplied) | **0CREMOTO04** | 93% | 95% | 95% | 96% |
| **Option 4** | Remote control and external probe (ambient temperature probe is not supplied) | **0CREMOTO04**<br>**0SONDAES01** | 94% | 96% | 96% | 97% |

| Technical specifications | um | KR 12 | KR 24 | KR 28 | KR 32 |
|---|---|---|---|---|---|
| Nominal heat output (Pn) | kW | 12 | 23 | 26 | 29 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 90 | 92 | 92 | 93 |
| Nominal heat input (Qn) | kW | 12,0 | 23,7 | 26,4 | 30,4 |
| Nominal heat output (80-60°C) (Pn) | kW | 11,7 | 23,0 | 25,5 | 29,4 |
| Heat output (50-30°C) | kW | 12,6 | 25,0 | 28,0 | 32,3 |
| Reduced heat output (50-30°C) | kW | 2,1 | 3,2 | 3,5 | 4,4 |
| Useful efficiency at nominal input (80-60°C) | % | 97,1 | 96,8 | 96,7 | 96,8 |
| Useful efficiency at 30% (30°C return) | % | 106,0 | 107,4 | 107,4 | 108,3 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 | 20-78 | 20-78 |
| Heating expansion vessel capacity | l | 10 | 10 | 10 | 10 |
| DHW temperature range | °C | 35-65 (*) | 35-65 (*) | 35-65 (*) | 35-65 (*) |
| NOx emission class | - | 6 | 6 | 6 | 6 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 80 | 89 | 91 | 99 |
| Electric protection rating | IP | IPX5D | IPX5D | IPX5D | IPX5D |

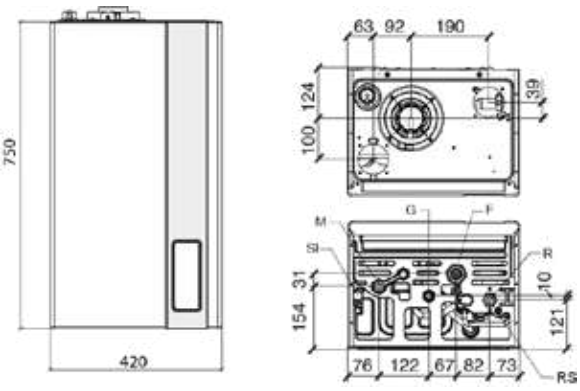
(*) with water heater probe connected
For other technical specifications, see from page 56 - Maximum length of flue gas venting, see page 124

| Item | Description | Code |
|---|---|---|
|  | Coaxial kit Ø 60/100 length 75cm | 0CONDASP00 |
|  | Remote control, ErP V class (118x85x32 mm) | 0CREMOTO04 |
|  | Hydrocyclonic and magnetic filter ¾"(3,000 l/hour) | 0FILTIMP00 |
|  | Coaxial fitting kit Ø60/100 | 0KITATCO00 |
|  | Tap kit with filter | 0KITRUBI04 |
|  | Ambient temperature probe (12x12x20 mm, with 50cm cable) | 0KITSAMB00 |

| Item | Description | Code |
|---|---|---|
|  | Splitter kit Ø80+80 | 0KITSDOP00 |
|  | Electric kit for complex solar plant management | 0KITSOLC08 |
|  | Electrical kit for zone management with external probe | 0KITZONE05 |
|  | Protective liquid for domestic mixed metal plants (0.5 l bottle) | 0PROTIMP00 |
|  | External probe (60x45x31 mm) | 0SONDAES01 |

For other accessories, see from page 123

## DIMENSIONS AND CONNECTION CENTRE DISTANCES




| | | | |
|---|---|---|---|
| **SI** | Condensate drain | **F** | Cold water inlet (1/2") |
| **M** | CH system flow (3/4") | **R** | CH system return (3/4") |
| **G** | Gas inlet (1/2") | **RS** | Discharge tap |

# ITACA KRB

HEATING ONLY WALL-HUNG CONDENSING BOILER WITH 3-WAY VALVE - CONNECTION TO AN EXTERNAL WATER TANK FOR DHW

- **Standard ambient temperature probe**
- **Modulation ratio: 1:9**
- **High efficiency circulation pump**
- **CH water flow rate electronic control**
- **Standard management of one type of thermal solar plant**
- **Standard management of 2 heating zones with ambient temperature probes**
- **External water heater heating setting (optional)**
- Thermosetting polymer-covered stainless steel heat exchanger
- Fully pre-mixed burner
- Heating expansion vessel - 10 litres
- Prearrangement for connection to GSM modem for switching on and off and remote display of faults (optional)
- Multifunction relay for connection to systems with zone valves or to solar plant or to remote alarm signal
- Installation flexibility thanks to IPX5D electrical protection degree
- Anti-legionella function for water heater

**Available in the following models:**

12 24 28 32

| Model | Gas type | Code | Heat output (kW) | | Energy efficiency class | W x H x D (mm) | Gross weight (Kg) |
|---|---|---|---|---|---|---|---|
| | | | Nominal Pn | DHW (ΔT 30°C) | Room heating | | |
| **KRB 12** | NATURAL GAS | KITxx2KU12 | 11,7 | 18,6 | A | 420x750x315 | 36,5 |
| | PROPANE | KITxx6KU12 | | | | | |
| **KRB 24** | NATURAL GAS | KITxx2KU24 | 23,0 | 27,4 | A | 420x750x315 | 37,0 |
| | PROPANE | KITxx6KU24 | | | | | |
| **KRB 28** | NATURAL GAS | KITxx2KU28 | 25,5 | 29,2 | A | 420x750x315 | 38,5 |
| | PROPANE | KITxx6KU28 | | | | | |
| **KRB 32** | NATURAL GAS | KITxx2KU32 | 29,4 | 33,4 | A | 420x750x315 | 40,0 |
| | PROPANE | KITxx6KU32 | | | | | |

**Itaca KRB** supplied with ambient temperature probe has a room heating seasonal efficiency of:
94% for model 12; 95% for model 24; 95% for model 28; 96% for model 32

**TOUCH SCREEN INTERFACE**

- *Modulating thermostat*
- *Day/night temperature level selection*
- *Weekly programming*
- *Timer and ambient temperature setting*
- *DHW "comfort" function enabling*

**The TOUCH SCREEN interface Itaca KRB combined with the ambient temperature probe supplied is a class V adjustment system.**

## How to increase energy efficiency?

Discover the most suitable solution

| Regulation device | | Code | KRB 12 | KRB 24 | KRB 28 | KRB 32 |
|---|---|---|---|---|---|---|
| **Option 1** | External probe (ambient temperature probe is not supplied) | **0SONDAES01** | 92% | 94% | 94% | 95% |
| **Option 2** | External probe (ambient temperature probe is supplied) | **0SONDAES01** | 94% | 96% | 96% | 97% |
| **Option 3** | Remote control (ambient temperature probe is not supplied) | **0CREMOTO04** | 93% | 95% | 95% | 96% |
| **Option 4** | Remote control and external probe (ambient temperature probe is not supplied) | **0CREMOTO04**<br>**0SONDAES01** | 94% | 96% | 96% | 97% |

| Technical specifications | um | KRB 12 | KRB 24 | KRB 28 | KRB 32 |
|---|---|---|---|---|---|
| Nominal heat output (Pn) | kW | 12 | 23 | 26 | 29 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 90 | 92 | 92 | 93 |
| Nominal heat input (Qn) | kW | 12,0 | 23,7 | 26,4 | 30,4 |
| Nominal heat output (80-60°C) (Pn) | kW | 11,7 | 23,0 | 25,5 | 29,4 |
| Heat output (50-30°C) | kW | 12,6 | 25,0 | 28,0 | 32,3 |
| Reduced heat output (50-30°C) | kW | 2,1 | 3,2 | 3,5 | 4,4 |
| Useful efficiency at nominal input (80-60°C) | % | 97,1 | 96,8 | 96,7 | 96,8 |
| Useful efficiency at 30% (30°C return) | % | 106,0 | 107,4 | 107,4 | 108,3 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 | 20-78 | 20-78 |
| Heating expansion vessel capacity | l | 10 | 10 | 10 | 10 |
| DHW temperature range | °C | 35-65 (*) | 35-65 (*) | 35-65 (*) | 35-65 (*) |
| NOx emission class | - | 6 | 6 | 6 | 6 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 80 | 89 | 91 | 99 |
| Electric protection rating | IP | IPX5D | IPX5D | IPX5D | IPX5D |

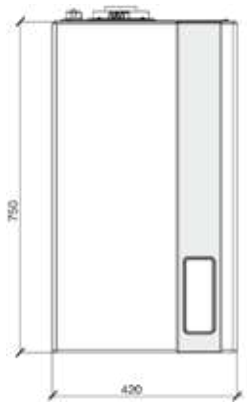
(*) with water heater probe connected
For other technical specifications, see from page 57 - Maximum length of flue gas venting, see page 124

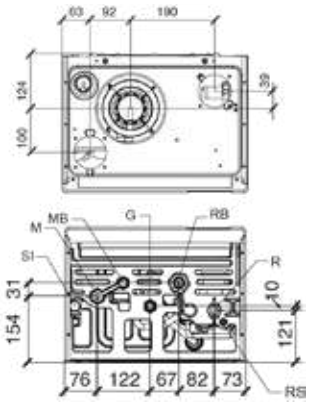
| Item | Description | Code |
|---|---|---|
|  | Coaxial kit Ø 60/100 length 75cm | 0CONDASP00 |
|  | Remote control, ErP V class (118x85x32 mm) | 0CREMOTO04 |
|  | Hydrocyclonic and magnetic filter ¾"(3,000 l/hour) | 0FILTIMP00 |
|  | Coaxial fitting kit Ø60/100 | 0KITATCO00 |
|  | Tap kit with filter | 0KITRUBI04 |
|  | Ambient temperature probe (12x12x20 mm, with 50cm cable) | 0KITSAMB00 |

| Item | Description | Code |
|---|---|---|
|  | Splitter kit Ø80+80 | 0KITSDOP00 |
|  | Electric kit for complex solar plant management | 0KITSOLC08 |
|  | Electrical kit for zone management with external probe | 0KITZONE05 |
|  | Protective liquid for domestic mixed metal plants (0.5 l bottle) | 0PROTIMP00 |
|  | External probe (60x45x31 mm) | 0SONDAES01 |

For other accessories, see from page 123

## DIMENSIONS AND CONNECTION CENTRE DISTANCES




**SI** Condensate drain
**M** CH system flow (3/4")
**MB** Flow for water heater (1/2")
**G** Gas inlet (1/2")
**RB** Return from water heater (1/2")
**R** CH system return (3/4")
**RS** Discharge tap

# ITACA KB

WALL-HUNG CONDENSING BOILER WITH DHW WATER HEATER

- **Standard ambient temperature probe**
- **Modulation ratio: 1:9**
- **High efficiency circulation pump**
- **Thermally-insulated 45-litre stainless steel water heater**
- **Water heater heating setting**
- **CH water flow rate electronic control**
- Thermosetting polymer-covered stainless steel heat exchanger
- Fully pre-mixed burner
- Heating expansion vessel - 10 litres
- Prearrangement for connection to GSM modem for switching on and off and remote display of faults (optional)
- Multifunction relay for connection to systems with zone valves or to solar plant or to remote alarm signal
- Prearranged for connection to recirculation system
- Anti-legionella function for water heater

**Available in the following models:**

24 32

| Model | Gas type | Code | Heat output (kW) | | Energy efficiency class | | W x H x D (mm) | Gross weight (Kg) |
|---|---|---|---|---|---|---|---|---|
| | | | Nominal Pn | DHW (ΔT 30°C) | Room heating | Heating DHW | | |
| **KB 24** | NATURAL GAS<br>PROPANE | KITxx2KB24<br>KITxx6KB24 | 23,0 | 26,8 | A | A XL | 580x861x402 | 74,0 |
| **KB 32** | NATURAL GAS<br>PROPANE | KITxx2KB32<br>KITxx6KB32 | 29,4 | 33,4 | A | A XL | 580x861x402 | 79,0 |

**Itaca KB** supplied with ambient temperature probe has a room heating seasonal efficiency of:
95% for model 24; 96% for model 32

**TOUCH SCREEN INTERFACE**

- *Modulating thermostat*
- *Day/night temperature level selection*
- *Weekly programming*
- *Timer and ambient temperature setting*
- *DHW "comfort" function enabling*

**The TOUCH SCREEN interface Itaca KB combined with the ambient temperature probe supplied is a class V adjustment system.**

## How to increase energy efficiency?

Discover the most suitable solution

| Regulation device | | Code | KB 24 | KB 32 |
|---|---|---|---|---|
| **Option 1** | External probe (ambient temperature probe is not supplied) | **0SONDAES01** | 94% | 95% |
| **Option 2** | External probe (ambient temperature probe is supplied) | **0SONDAES01** | 96% | 97% |
| **Option 3** | Remote control (ambient temperature probe is not supplied) | **0CREMOTO04** | 95% | 96% |
| **Option 4** | Remote control and external probe (ambient temperature probe is not supplied) | **0CREMOTO04**<br>**0SONDAES01** | 96% | 97% |

| Technical specifications | um | KB 24 | KB 32 |
|---|---|---|---|
| Nominal heat output (Pn) | kW | 23 | 29 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 92 | 93 |
| Water heating energy efficiency (ηwh) | % | 82 | 80 |
| Nominal heat input (Qn) | kW | 23,7 | 30,4 |
| Nominal heat output (80-60°C) (Pn) | kW | 23,0 | 29,4 |
| Heat output (50-30°C) | kW | 25,0 | 32,3 |
| Reduced heat output (50-30°C) | kW | 3,2 | 4,4 |
| Useful efficiency at nominal input (80-60°C) | % | 96,8 | 96,2 |
| Useful efficiency at 30% (30°C return) | % | 107,4 | 108,3 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 |
| Heating expansion vessel capacity | l | 10 | 10 |
| DHW circuit working pressure (min-max) | bar | 0,5-6,0 | 0,5-6,0 |
| Specific DHW flow ΔT=30K | l/min | 16,2 | 19,5 |
| DHW temperature range | °C | 35-65 | 35-65 |
| NOx emission class | - | 6 | 6 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 89 | 99 |
| Electric protection rating | IP | IPX4D | IPX4D |

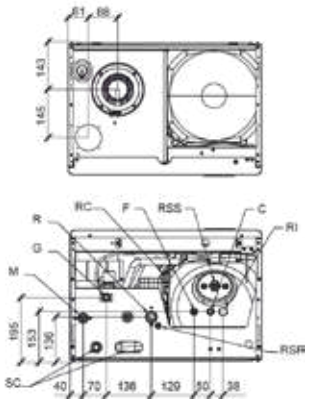
For other technical specifications, see from page 58 - Maximum length of flue gas venting, see page 124

| Item | Description | Code |
|---|---|---|
|  | Coaxial kit Ø 60/100 length 75cm | 0CONDASP00 |
|  | Remote control, ErP V class (118x85x32 mm) | 0CREMOTO04 |
|  | Hydrocyclonic and magnetic filter ¾"(3,000 l/hour) | 0FILTIMP00 |
|  | Coaxial fitting kit Ø60/100 | 0KITATCO00 |
|  | Tap kit with filter | 0KITRUBI04 |
|  | Ambient temperature probe (12x12x20 mm, with 50cm cable) | 0KITSAMB00 |

| Item | Description | Code |
|---|---|---|
|  | Splitter kit Ø80+80 | 0KITSDOP00 |
|  | Electrical kit for zone management with external probe | 0KITZONE05 |
|  | Recirculation kit | 0KRICIRC02 |
|  | Protective liquid for domestic mixed metal plants (0.5 l bottle) | 0PROTIMP00 |
|  | Universal mild cleaning product (0.5 l bottle) | 0PROTIMP01 |
|  | External probe (60x45x31 mm) | 0SONDAES01 |

For other accessories, see from page 123

## DIMENSIONS AND CONNECTION CENTRE DISTANCES


**M** CH system flow (3/4")
**G** Gas inlet (1/2")
**R** CH system return (3/4")
**RC** Filler tap
**F** Cold water inlet (1/2")

**RSS** DHW drain cock
**C** DHW outlet (1\2")
**RI** Recirculation inlet (1/2")
**RSR** CH discharge tap
**SC** Condensate drain and safety valves

# FORMENTERA KC

WALL-HUNG CONDENSING BOILER WITH INSTANT PRODUCTION OF DHW

- **Modulation ratio: 1:9**
- **High efficiency circulation pump**
- **CH water flow rate electronic control**
- **Controls to manage two different types of thermal solar systems fitted as standard**
- **Ambient temperature can be set from the boiler if an external probe is installed**
- **26-plate DHW heat exchanger**
- Thermosetting polymer-covered stainless steel heat exchanger
- Fully pre-mixed burner
- Heating expansion vessel - 10 litres
- Multifunction relay for connection to systems with zone valves or to solar plant or to remote alarm signal
- Easy maintenance

**Available in the following models:**

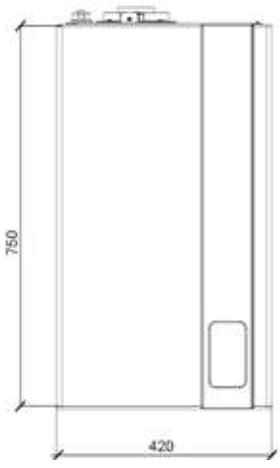
12 24 28 32

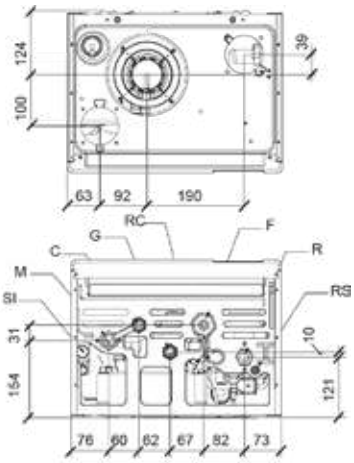
**TOUCH SCREEN INTERFACE**

- *DHW and heating temperature setting*
- *Operating mode setting*
- *Thermal solar plant status display*

| Model | Gas type | Code | Heat output (kW) | | Energy efficiency class | | W x H x D (mm) | Gross weight (Kg) |
|---|---|---|---|---|---|---|---|---|
| | | | Nominal Pn | DHW (ΔT 30°C) | Room heating | Heating DHW | | |
| **KC 12** | NATURAL GAS<br>PROPANE | KFOxx2KC12<br>KFOxx6KC12 | 11,7 | 18,6 | A | A M | 420x750x315 | 36,5 |
| **KC 24** | NATURAL GAS<br>PROPANE | KFOxx2KC24<br>KFOxx6KC24 | 23,0 | 27,4 | A | A XL | 420x750x315 | 37,5 |
| **KC 28** | NATURAL GAS<br>PROPANE | KFOxx2KC28<br>KFOxx6KC28 | 25,5 | 29,2 | A | A XL | 420x750x315 | 39,0 |
| **KC 32** | NATURAL GAS<br>PROPANE | KFOxx2KC32<br>KFOxx6KC32 | 29,4 | 33,4 | A | A XXL | 420x750x315 | 40,5 |

## DIMENSIONS AND CONNECTION CENTRE DISTANCES




**SI** Trap inspection cap
**M** CH system flow (3/4")
**C** DHW outlet (1\2")
**G** Gas inlet (1/2")
**RC** Filler tap
**F** Cold water inlet (1/2")
**R** CH system return (3/4")
**RS** Discharge tap

| Technical specifications | um | KC 12 | KC 24 | KC 28 | KC 32 |
|---|---|---|---|---|---|
| Nominal heat output (Pn) | kW | 12 | 23 | 26 | 29 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 90 | 92 | 92 | 93 |
| Water heating energy efficiency (ηwh) | % | 77 | 85 | 86 | 87 |
| Nominal heat input (Qn) | kW | 12,0 | 23,7 | 26,4 | 30,4 |
| Nominal heat output (80-60°C) (Pn) | kW | 11,7 | 23,0 | 25,5 | 29,4 |
| Heat output (50-30°C) | kW | 12,6 | 25,0 | 28,0 | 32,3 |
| Reduced heat output (50-30°C) | kW | 2,1 | 3,2 | 3,5 | 4,4 |
| Useful efficiency at nominal input (80-60°C) | % | 97,1 | 96,8 | 96,7 | 96,8 |
| Useful efficiency at 30% (30°C return) | % | 106,0 | 107,4 | 107,4 | 108,3 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 | 20-78 | 20-78 |
| Heating expansion vessel capacity | l | 10 | 10 | 10 | 10 |
| DHW circuit working pressure (min-max) | bar | 0,5-6,0 | 0,5-6,0 | 0,5-6,0 | 0,5-6,0 |
| Specific DHW flow ΔT=30K | l/min | 8,8 | 13,4 | 15,5 | 16,2 |
| DHW temperature range | °C | 35-57 | 35-57 | 35-57 | 35-57 |
| NOx emission class | - | 6 | 6 | 6 | 6 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 75 | 83 | 84 | 91 |
| Electric protection rating | IP | IPX5D | IPX5D | IPX5D | IPX5D |

For other technical specifications, see from page 59 - Maximum length of flue gas venting, see page 124

| Item | Description | Code |
|---|---|---|
|  | Coaxial kit Ø 60/100 length 75cm | 0CONDASP00 |
|  | Remote control, ErP V class (118x85x32 mm) | 0CREMOTO04 |
|  | Hydrocyclonic and magnetic filter ¾"(3,000 l/hour) | 0FILTIMP00 |
|  | Coaxial fitting kit Ø60/100 | 0KITATCO00 |
|  | Tap kit with filter | 0KITRUBI04 |
|  | Ambient temperature probe (12x12x20 mm, with 50cm cable) | 0KITSAMB00 |

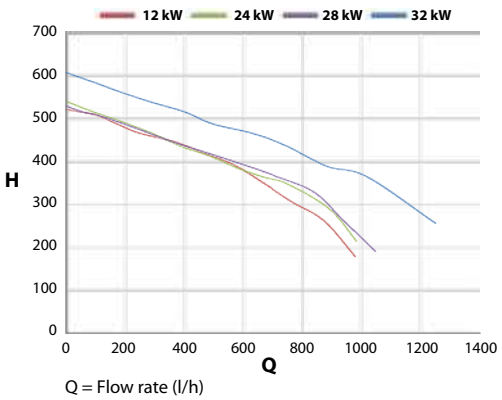
| Item | Description | Code |
|---|---|---|
|  | Splitter kit Ø80+80 | 0KITSDOP00 |
|  | Kit for connection to solar plant | 0KITSOLC07 |
|  | Electrical kit for zone management with external probe | 0KITZONE05 |
|  | Protective liquid for domestic mixed metal plants (0.5 l bottle) | 0PROTIMP00 |
|  | Universal mild cleaning product (0.5 l bottle) | 0PROTIMP01 |
|  | External probe (60x45x31 mm) | 0SONDAES01 |

For other accessories, see from page 123

## How to increase energy efficiency?

Discover the most suitable solution

| Regulation device | | Code | KC 12 | KC 24 | KC 28 | KC 32 |
|---|---|---|---|---|---|---|
| **Option 1** | External probe | **0SONDAES01** | 92% | 94% | 94% | 95% |
| **Option 2** | Remote control | **0CREMOTO04** | 93% | 95% | 95% | 96% |
| **Option 3** | Remote control and external probe | **0CREMOTO04** **0SONDAES01** | 94% | 96% | 96% | 97% |




Q = Flow rate (l/h)
H = Available head (mbar)

# FORMENTERA KR

WALL-HUNG CONDENSING BOILER CH ONLY
CONNECTION TO AN EXTERNAL WATER HEATER FOR DHW WITH EXTERNAL 3-WAY VALVE

**Available in the following models:**

12 24 28 32

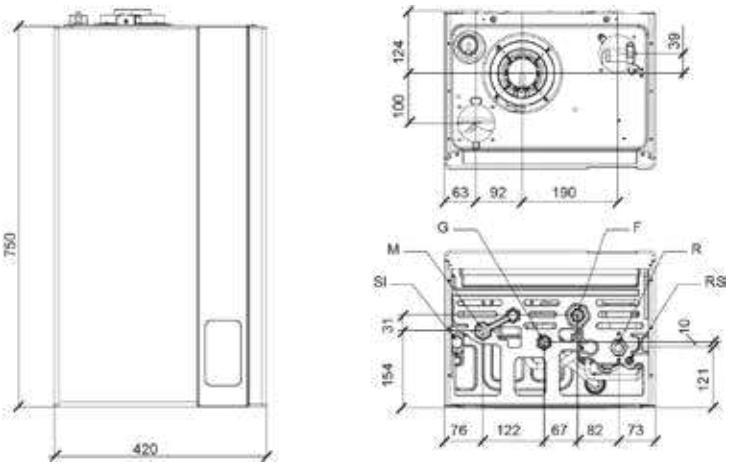
- **Modulation ratio: 1:9**
- **High efficiency circulation pump**
- **CH water flow rate electronic control**
- **Standard management of one type of thermal solar plant**
- **Ambient temperature can be set from the boiler if an external probe is installed**
- Thermosetting polymer-covered stainless steel heat exchanger
- Fully pre-mixed burner
- Heating expansion vessel - 10 litres
- Multifunction relay for connection to systems with zone valves or to solar plant or to remote alarm signal
- Installation flexibility thanks to IPX5D electrical protection degree
- Freeze protection function for heating and water heater
- By-pass
- Anti-legionella function for water heater

**TOUCH SCREEN INTERFACE**

- *DHW and heating temperature setting*
- *Operating mode setting*
- *Thermal solar plant status display*

| Model | Gas type | Code | Heat output (kW) | | Energy efficiency class | W x H x D (mm) | Gross weight (Kg) |
|---|---|---|---|---|---|---|---|
| | | | Nominal Pn | DHW (ΔT 30°C) | Room heating | | |
| **KR 12** | NATURAL GAS | KFOxx2KR12 | 11,7 | 18,6 | A | 420x750x315 | 34,0 |
| | PROPANE | KFOxx6KR12 | | | | | |
| **KR 24** | NATURAL GAS | KFOxx2KR24 | 23,0 | 27,4 | A | 420x750x315 | 36,0 |
| | PROPANE | KFOxx6KR24 | | | | | |
| **KR 28** | NATURAL GAS | KFOxx2KR28 | 25,5 | 29,2 | A | 420x750x315 | 37,5 |
| | PROPANE | KFOxx6KR28 | | | | | |
| **KR 32** | NATURAL GAS | KFOxx2KR32 | 29,4 | 33,4 | A | 420x750x315 | 39,0 |
| | PROPANE | KFOxx6KR32 | | | | | |

## DIMENSIONS AND CONNECTION CENTRE DISTANCES




**SI** Trap inspection cap
**M** CH system flow (3/4")
**G** Gas inlet (1/2")
**F** Cold water inlet (1/2")
**R** CH system return (3/4")
**RS** Discharge tap

| Technical specifications | um | KR 12 | KR 24 | KR 28 | KR 32 |
|---|---|---|---|---|---|
| Nominal heat output (Pn) | kW | 12 | 23 | 26 | 29 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 90 | 92 | 92 | 93 |
| Nominal heat input (Qn) | kW | 12,0 | 23,7 | 26,4 | 30,4 |
| Nominal heat output (80-60°C) (Pn) | kW | 11,7 | 23,0 | 25,5 | 29,4 |
| Heat output (50-30°C) | kW | 12,6 | 25,0 | 28,0 | 32,3 |
| Reduced heat output (50-30°C) | kW | 2,1 | 3,2 | 3,5 | 4,4 |
| Useful efficiency at nominal input (80-60°C) | % | 97,1 | 96,8 | 96,7 | 96,8 |
| Useful efficiency at 30% (30°C return) | % | 106,0 | 107,4 | 107,4 | 108,3 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 | 20-78 | 20-78 |
| Heating expansion vessel capacity | l | 10 | 10 | 10 | 10 |
| DHW temperature range | °C | 35-65 (*) | 35-65 (*) | 35-65 (*) | 35-65 (*) |
| NOx emission class | - | 6 | 6 | 6 | 6 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 75 | 83 | 84 | 91 |
| Electric protection rating | IP | IPX5D | IPX5D | IPX5D | IPX5D |

(*) with water heater probe connected
For other technical specifications, see from page 60 - Maximum length of flue gas venting, see page 124

| Item | Description | Code |
|---|---|---|
|  | Coaxial kit Ø 60/100 length 75cm | 0CONDASP00 |
|  | Remote control, ErP V class (118x85x32 mm) | 0CREMOTO04 |
|  | Hydrocyclonic and magnetic filter ¾"(3,000 l/hour) | 0FILTIMP00 |
|  | Coaxial fitting kit Ø60/100 | 0KITATCO00 |
|  | Tap kit with filter | 0KITRUBI04 |
|  | Ambient temperature probe (12x12x20 mm, with 50cm cable) | 0KITSAMB00 |

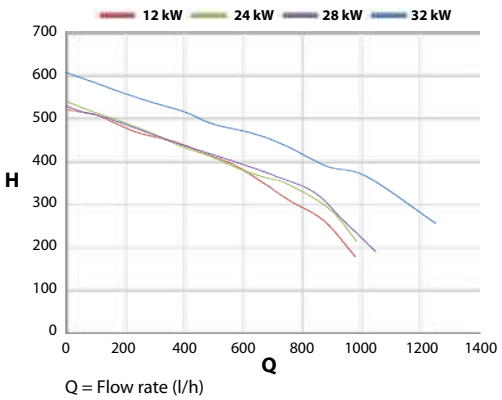
| Item | Description | Code |
|---|---|---|
|  | Splitter kit Ø80+80 | 0KITSDOP00 |
|  | Electric kit for complex solar plant management | 0KITSOLC08 |
|  | Water heater temperature probe 3m | 0KITSOND00 |
|  | Electrical kit for zone management with external probe | 0KITZONE05 |
|  | External probe (60x45x31 mm) | 0SONDAES01 |

For other accessories, see from page 123

## How to increase energy efficiency?

Discover the most suitable solution

| Regulation device | | Code | KR 12 | KR 24 | KR 28 | KR 32 |
|---|---|---|---|---|---|---|
| **Option 1** | External probe | **0SONDAES01** | 92% | 94% | 94% | 95% |
| **Option 2** | Remote control | **0CREMOTO04** | 93% | 95% | 95% | 96% |
| **Option 3** | Remote control and external probe | **0CREMOTO04** **0SONDAES01** | 94% | 96% | 96% | 97% |




Q = Flow rate (l/h)
H = Available head (mbar)

# FORMENTERA KRB

WALL-HUNG CONDENSING BOILER, CH ONLY, WITH INTEGRATED 3-WAY VALVE - CONNECTION TO AN EXTERNAL WATER HEATER FOR DHW

- **Modulation ratio: 1:9**
- **High efficiency circulation pump**
- **CH water flow rate electronic control**
- **Standard management of one type of thermal solar plant**
- **Ambient temperature can be set from the boiler if an external probe is installed**
- Thermosetting polymer-covered stainless steel heat exchanger
- Fully pre-mixed burner
- Heating expansion vessel - 10 litres
- Multifunction relay for connection to systems with zone valves or to solar plant or to remote alarm signal
- Installation flexibility thanks to IPX5D electrical protection degree
- Freeze protection function for heating and water heater

**Available in the following models:**

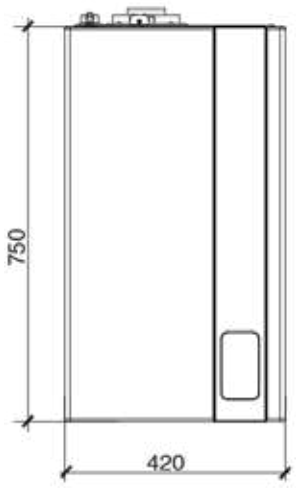
12 24 28 32

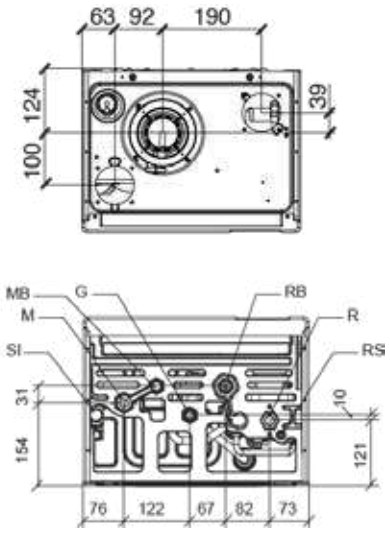
**TOUCH SCREEN INTERFACE**

- *DHW and heating temperature setting*
- *Operating mode setting*
- *Thermal solar plant status display*

| Model | Gas type | Code | Heat output (kW) | | Energy efficiency class | W x H x D (mm) | Gross weight (Kg) |
|---|---|---|---|---|---|---|---|
| | | | Nominal Pn | DHW (ΔT 30°C) | Room heating | | |
| **KRB 12** | NATURAL GAS | KFOxx2KU12 | 11,7 | 18,6 | A | 420x750x315 | 35,5 |
| | PROPANE | KFOxx6KU12 | | | | | |
| **KRB 24** | NATURAL GAS | KFOxx2KU24 | 23,0 | 27,4 | A | 420x750x315 | 37,0 |
| | PROPANE | KFOxx6KU24 | | | | | |
| **KRB 28** | NATURAL GAS | KFOxx2KU28 | 25,5 | 29,2 | A | 420x750x315 | 38,0 |
| | PROPANE | KFOxx6KU28 | | | | | |
| **KRB 32** | NATURAL GAS | KFOxx2KU32 | 29,4 | 33,4 | A | 420x750x315 | 39,0 |
| | PROPANE | KFOxx6KU32 | | | | | |

## DIMENSIONS AND CONNECTION CENTRE DISTANCES



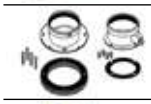

**SI** Trap inspection cap
**M** CH system flow (3/4")
**MB** Secondary flow to water heater (1/2")
**G** Gas inlet (1/2")
**RB** Secondary return from water heater (1/2")
**R** CH system return (3/4")
**RS** Discharge tap

| Technical specifications | um | KRB 12 | KRB 24 | KRB 28 | KRB 32 |
|---|---|---|---|---|---|
| Nominal heat output (Pn) | kW | 12 | 23 | 26 | 29 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 90 | 92 | 92 | 93 |
| Nominal heat input (Qn) | kW | 12,0 | 23,7 | 26,4 | 30,4 |
| Nominal heat output (80-60°C) (Pn) | kW | 11,7 | 23,0 | 25,5 | 29,4 |
| Heat output (50-30°C) | kW | 12,6 | 25,0 | 28,0 | 32,3 |
| Reduced heat output (50-30°C) | kW | 2,1 | 3,2 | 3,5 | 4,4 |
| Useful efficiency at nominal input (80-60°C) | % | 97,1 | 96,8 | 96,7 | 96,8 |
| Useful efficiency at 30% (30°C return) | % | 106,0 | 107,4 | 107,4 | 108,3 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 | 20-78 | 20-78 |
| Heating expansion vessel capacity | l | 10 | 10 | 10 | 10 |
| DHW temperature range | °C | 35-65 (*) | 35-65 (*) | 35-65 (*) | 35-65 (*) |
| NOx emission class | - | 6 | 6 | 6 | 6 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 75 | 83 | 84 | 91 |
| Electric protection rating | IP | IPX5D | IPX5D | IPX5D | IPX5D |

(*) with water heater probe connected

For other technical specifications, see from page 61 - Maximum length of flue gas venting, see page 124

| Item | Description | Code |
|---|---|---|
|  | Coaxial kit Ø 60/100 length 75cm | 0CONDASP00 |
|  | Remote control, ErP V class (118x85x32 mm) | 0CREMOTO04 |
|  | Hydrocyclonic and magnetic filter ¾"(3,000 l/hour) | 0FILTIMP00 |
|  | Coaxial fitting kit Ø60/100 | 0KITATCO00 |
|  | GSM kit including antenna, power supply, interface board, modem | 0KITMGSM00 |
|  | Tap kit with filter | 0KITRUBI04 |

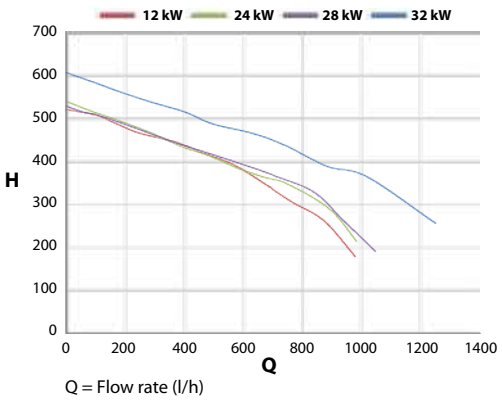
| Item | Description | Code |
|---|---|---|
|  | Ambient temperature probe (12x12x20 mm, with 50cm cable) | 0KITSAMB00 |
|  | Splitter kit Ø80+80 | 0KITSDOP00 |
|  | Electric kit for complex solar plant management | 0KITSOLC08 |
|  | Electrical kit for zone management with external probe | 0KITZONE05 |
|  | Protective liquid for domestic mixed metal plants (0.5 l bottle) | 0PROTIMP00 |
|  | External probe (60x45x31 mm) | 0SONDAES01 |

For other accessories, see from page 123

## How to increase energy efficiency?

Discover the most suitable solution

| Regulation device | | Code | KRB 12 | KRB 24 | KRB 28 | KRB 32 |
|---|---|---|---|---|---|---|
| **Option 1** | External probe | **0SONDAES01** | 92% | 94% | 94% | 95% |
| **Option 2** | Remote control | **0CREMOTO04** | 93% | 95% | 95% | 96% |
| **Option 3** | Remote control and external probe | **0CREMOTO04** + **0SONDAES01** | 94% | 96% | 96% | 97% |




Q = Flow rate (l/h)
H = Available head (mbar)

# ANTEA KC

WALL-HUNG CONDENSING BOILER WITH INSTANT PRODUCTION OF DHW

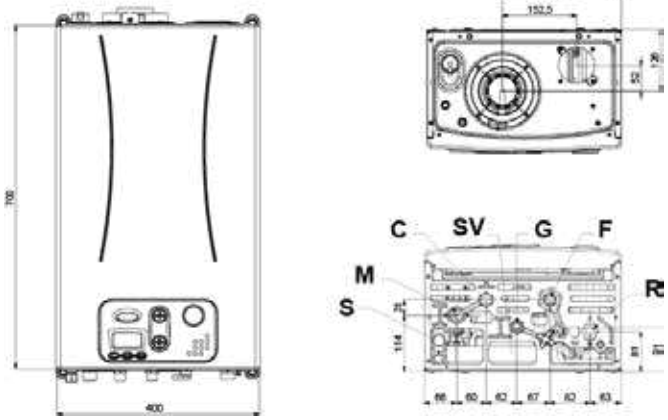
- **Ultra-compact size**
- **Modulation ratio: 1:9**
- **CH water flow rate electronic control**
- **LCD user interface with diagnostics**
- **Ambient temperature can be set from the boiler if an external probe is installed**
- **Controls to manage two different types of thermal solar systems fitted as standard**
- Thermosetting polymer-covered stainless steel heat exchanger
- Fully pre-mixed burner
- Heating expansion vessel - 9 litres
- Multifunction relay for connection to systems with zone valves or to solar plant or to remote alarm signal
- NTC temperature probe on flow and return lines
- Ready for connection to remote control

**Available in the following models:**

12 24 28

| Model | Gas type | Code | Heat output (kW) | | Energy efficiency class | | W x H x D (mm) | Gross weight (Kg) |
|---|---|---|---|---|---|---|---|---|
| | | | Nominal Pn | DHW (ΔT 30°C) | Room heating | Heating DHW | | |
| **KC 12** | NATURAL GAS<br>PROPANE | KAOxx2KC12<br>KAOxx6KC12 | 11,7 | 18,4 | A | A M | 400x700x250 | 30,5 |
| **KC 24** | NATURAL GAS<br>PROPANE | KAOxx2KC24<br>KAOxx6KC24 | 22,8 | 27,4 | A | A XL | 400x700x250 | 32,0 |
| **KC 28** | NATURAL GAS<br>PROPANE | KAOxx2KC28<br>KAOxx6KC28 | 25,5 | 29,2 | A | A XL | 400x700x250 | 33,5 |

## DIMENSIONS AND CONNECTION CENTRE DISTANCES




| | | | |
|---|---|---|---|
| **S** | Trap inspection cap | | |
| **M** | CH system flow (3/4") | **G** | Gas inlet (1/2") |
| **C** | DHW outlet (1\2") | **F** | Cold water inlet (1/2") |
| **SV** | 3-bar safety valve drain | **R** | CH system return (3/4") |

| Technical specifications | um | KC 12 | KC 24 | KC 28 |
|---|---|---|---|---|
| Nominal heat output (Pn) | kW | 12 | 23 | 26 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 90 | 92 | 92 |
| Water heating energy efficiency (ηwh) | % | 78 | 84 | 80 |
| Nominal heat input (Qn) | kW | 12,0 | 23,7 | 26,4 |
| Nominal heat output (80-60°C) (Pn) | kW | 11,7 | 22,8 | 25,5 |
| Heat output (50-30°C) | kW | 12,6 | 24,9 | 28,0 |
| Reduced heat output (50-30°C) | kW | 2,1 | 3,2 | 3,5 |
| Useful efficiency at nominal input (80-60°C) | % | 97,1 | 96,3 | 96,7 |
| Useful efficiency at 30% (30°C return) | % | 106,0 | 107,2 | 107,5 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 | 20-78 |
| Heating expansion vessel capacity | l | 9 | 9 | 9 |
| DHW circuit working pressure (min-max) | bar | 0,5-6,0 | 0,5-6,0 | 0,5-6,0 |
| Specific DHW flow ΔT=30K | l/min | 8,6 | 13,4 | 15,0 |
| DHW temperature range | °C | 35-57 | 35-57 | 35-57 |
| NOx emission class | - | 6 | 6 | 6 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 75 | 83 | 84 |
| Electric protection rating | IP | IPX4D | IPX4D | IPX4D |

For other technical specifications, see from page 62 - Maximum length of flue gas venting, see page 124

| Item | Description | Code |
|---|---|---|
|  | Coaxial kit Ø 60/100 length 75cm | 0CONDASP00 |
|  | Remote control, ErP V class (118x85x32 mm) | 0CREMOTO04 |
|  | Coaxial fitting kit Ø60/100 | 0KITATCO00 |
|  | Flow - return cold water 90° taps kit | 0KITIDBA11 |
|  | Basic hydr. kit for basic compact unit | 0KITIDBA13 |
|  | Plus hydr. kit for basic compact unit | 0KITIDBA14 |

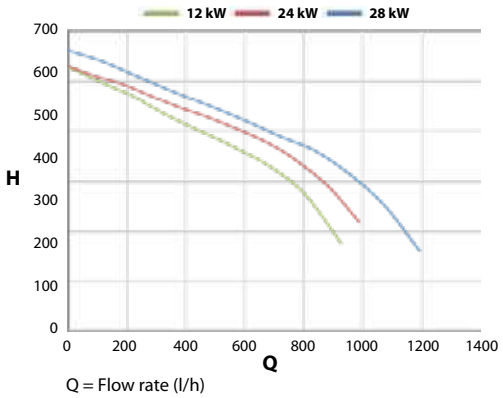
| Item | Description | Code |
|---|---|---|
|  | Tap kit with filter | 0KITRUBI04 |
|  | Splitter kit Ø80+80 | 0KITSDOP00 |
|  | Kit for connection to solar plant | 0KITSOLC07 |
|  | Electric kit for complex solar plant management | 0KITSOLC08 |
|  | Electrical kit for zone management with external probe | 0KITZONE05 |
|  | External probe (60x45x31 mm) | 0SONDAES01 |

For other accessories, see from page 123

## How to increase energy efficiency?

Discover the most suitable solution

| Regulation device | | Code | KC 12 | KC 24 | KC 28 |
|---|---|---|---|---|---|
| **Option 1** | External probe | **0SONDAES01** | 92% | 94% | 94% |
| **Option 2** | Remote control | **0CREMOTO04** | 93% | 95% | 95% |
| **Option 3** | Remote control and external probe | **0CREMOTO04** + **0SONDAES01** | 94% | 96% | 96% |




Q = Flow rate (l/h)
H = Available head (mbar)

# ANTEA KR

WALL-HUNG CONDENSING BOILER CH ONLY
CONNECTION TO AN EXTERNAL WATER HEATER FOR DHW WITH EXTERNAL 3-WAY VALVE

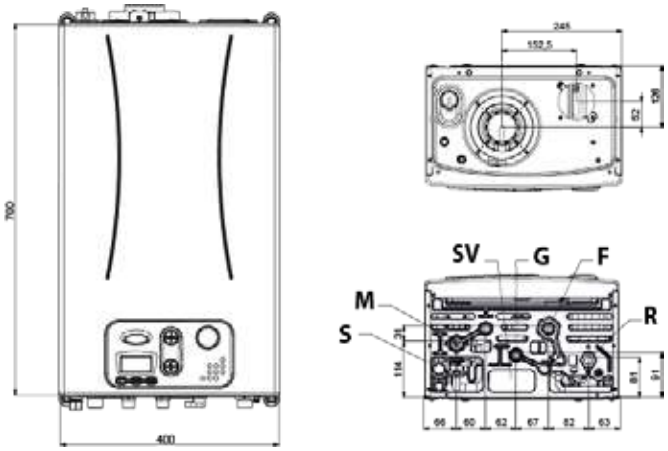
**Available in the following models:**

12 24 28

- **Ultra-compact size**
- **Modulation ratio: 1:9**
- **CH water flow rate electronic control**
- **LCD user interface with diagnostics**
- **Ambient temperature can be set from the boiler if an external probe is installed**
- **Standard management of one type of thermal solar plant**
- Thermosetting polymer-covered stainless steel heat exchanger
- Fully pre-mixed burner
- Heating expansion vessel - 9 litres
- CH water flow rate electronic control
- Freeze protection function for heating and water heater
- By-pass
- NTC temperature probe on flow and return lines
- Multifunction relay for connection to systems with zone valves or to solar plant or to remote alarm signal

| Model | Gas type | Code | Heat output (kW) | | Energy efficiency class | W x H x D (mm) | Gross weight (Kg) |
|---|---|---|---|---|---|---|---|
| | | | Nominal Pn | DHW (ΔT 30°C) | Room heating | | |
| **KR 12** | NATURAL GAS | KAOxx2KR12 | 11,7 | 18,4 | A | 400x700x250 | 29,5 |
| | PROPANE | KAOxx6KR12 | | | | | |
| **KR 24** | NATURAL GAS | KAOxx2KR24 | 22,8 | 27,4 | A | 400x700x250 | 32,0 |
| | PROPANE | KAOxx6KR24 | | | | | |
| **KR 28** | NATURAL GAS | KAOxx2KR28 | 25,5 | 29,2 | A | 400x700x250 | 31,0 |
| | PROPANE | KAOxx6KR28 | | | | | |

## DIMENSIONS AND CONNECTION CENTRE DISTANCES




| | | | |
|---|---|---|---|
| **S** | Trap inspection cap | **G** | Gas inlet (1/2") |
| **M** | CH system flow (3/4") | **F** | Cold water inlet (1/2") |
| **SV** | 3-bar safety valve drain | **R** | CH system return (3/4") |

| Technical specifications | um | KR 12 | KR 24 | KR 28 |
|---|---|---|---|---|
| Nominal heat output (Pn) | kW | 12 | 23 | 26 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 90 | 92 | 92 |
| Nominal heat input (Qn) | kW | 12,0 | 23,7 | 26,4 |
| Nominal heat output (80-60°C) (Pn) | kW | 11,7 | 22,8 | 25,5 |
| Heat output (50-30°C) | kW | 12,6 | 24,9 | 28,0 |
| Reduced heat output (50-30°C) | kW | 2,1 | 3,2 | 3,5 |
| Useful efficiency at nominal input (80-60°C) | % | 97,1 | 96,3 | 96,7 |
| Useful efficiency at 30% (30°C return) | % | 106,0 | 107,2 | 107,5 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 | 20-78 |
| Heating expansion vessel capacity | l | 9 | 9 | 9 |
| DHW temperature range | °C | 35-65 (*) | 35-65 (*) | 35-65 (*) |
| NOx emission class | - | 6 | 6 | 6 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 75 | 83 | 84 |
| Electric protection rating | IP | IPX4D | IPX4D | IPX4D |

(*) with water heater probe connected
For other technical specifications, see from page 63 - Maximum length of flue gas venting, see page 124

| Item | Description | Code |
|---|---|---|
|  | Coaxial kit Ø 60/100 length 75cm | 0CONDASP00 |
|  | Remote control, ErP V class (118x85x32 mm) | 0CREMOTO04 |
|  | Hydrocyclonic and magnetic filter ¾"(3,000 l/hour) | 0FILTIMP00 |
|  | Coaxial fitting kit Ø60/100 | 0KITATCO00 |
|  | Flow - return cold water 90° taps kit | 0KITIDBA11 |
|  | Basic hydr. kit for basic compact unit | 0KITIDBA13 |

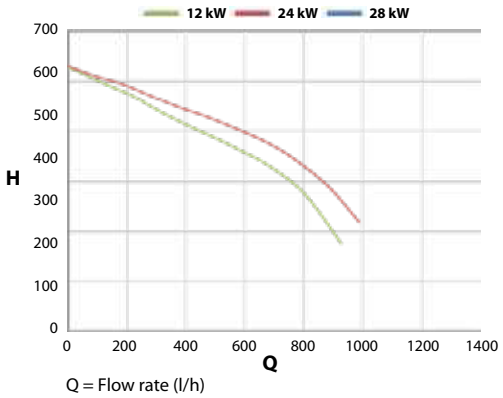
| Item | Description | Code |
|---|---|---|
|  | Plus hydr. kit for basic compact unit | 0KITIDBA14 |
|  | Tap kit with filter | 0KITRUBI04 |
|  | Splitter kit Ø80+80 | 0KITSDOP00 |
|  | Electric kit for complex solar plant management | 0KITSOLC08 |
|  | Electrical kit for zone management with external probe | 0KITZONE05 |
|  | External probe (60x45x31 mm) | 0SONDAES01 |

For other accessories, see from page 123

## How to increase energy efficiency?

Discover the most suitable solution

| Regulation device | | Code | KR 12 | KR 24 | KR 28 |
|---|---|---|---|---|---|
| **Option 1** | External probe | **0SONDAES01** | 92% | 94% | 94% |
| **Option 2** | Remote control | **0CREMOTO04** | 93% | 95% | 95% |
| **Option 3** | Remote control and external probe | **0CREMOTO04** + **0SONDAES01** | 94% | 96% | 96% |




Q = Flow rate (l/h)
H = Available head (mbar)

# ANTEA KRB

WALL-HUNG CONDENSING BOILER, CH ONLY, WITH INTEGRATED 3-WAY VALVE CONNECTION TO AN EXTERNAL WATER HEATER FOR DHW

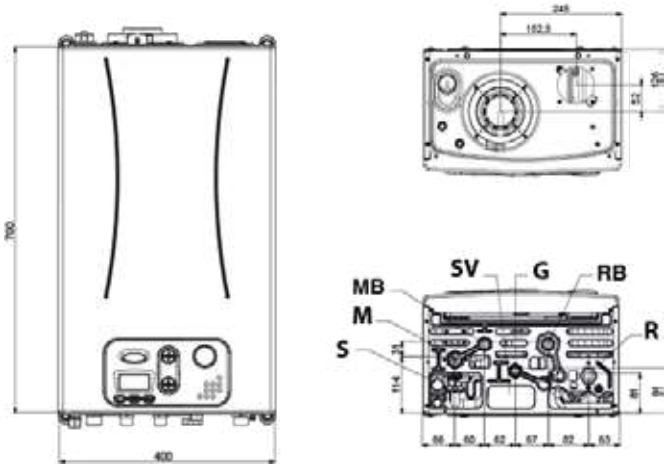
- **Ultra-compact size**
- **Modulation ratio: 1:9**
- **CH water flow rate electronic control**
- **LCD user interface with diagnostics**
- **Ambient temperature can be set from the boiler if an external probe is installed**
- **Standard management of one type of thermal solar plant**
- Thermosetting polymer-covered stainless steel heat exchanger
- Fully pre-mixed burner
- Heating expansion vessel - 9 litres
- Freeze protection function for heating and water heater
- By-pass
- Multifunction relay for connection to systems with zone valves or to solar plant or to remote alarm signal

**Available in the following models:**

12 24 28

| Model | Gas type | Code | Heat output (kW) | | Energy efficiency class | W x H x D (mm) | Gross weight (Kg) |
|---|---|---|---|---|---|---|---|
| | | | Nominal Pn | DHW (ΔT 30°C) | Room heating | | |
| **KRB 12** | NATURAL GAS | KAOxx2KU12 | 11,7 | 18,4 | A | 400x700x250 | 29,5 |
| | PROPANE | KAOxx6KU12 | | | | | |
| **KRB 24** | NATURAL GAS | KAOxx2KU24 | 22,8 | 27,4 | A | 400x700x250 | 31,0 |
| | PROPANE | KAOxx6KU24 | | | | | |
| **KRB 28** | NATURAL GAS | KAOxx2KU28 | 25,5 | 29,2 | A | 400x700x250 | 32,5 |
| | PROPANE | KAOxx6KU28 | | | | | |

## DIMENSIONS AND CONNECTION CENTRE DISTANCES




| | | | |
|---|---|---|---|
| **S** | Trap inspection cap | **G** | Gas inlet (1/2") |
| **M** | CH system flow (3/4") | **RB** | Secondary return from water heater (1/2") |
| **MB** | Secondary flow to water heater (1/2") | | |
| **SV** | 3-bar safety valve drain | **R** | CH system return (3/4") |

| Technical specifications | um | KRB 12 | KRB 24 | KRB 28 |
|---|---|---|---|---|
| Nominal heat output (Pn) | kW | 12 | 23 | 26 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 90 | 92 | 92 |
| Nominal heat input (Qn) | kW | 12,0 | 23,7 | 26,4 |
| Nominal heat output (80-60°C) (Pn) | kW | 11,7 | 22,8 | 25,5 |
| Heat output (50-30°C) | kW | 12,6 | 24,9 | 28,0 |
| Reduced heat output (50-30°C) | kW | 2,1 | 3,2 | 3,5 |
| Useful efficiency at nominal input (80-60°C) | % | 97,1 | 96,3 | 96,7 |
| Useful efficiency at 30% (30°C return) | % | 106,0 | 107,2 | 107,5 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 | 20-78 |
| Heating expansion vessel capacity | l | 9 | 9 | 9 |
| DHW temperature range | °C | 35-65 (*) | 35-65 (*) | 35-65 (*) |
| NOx emission class | - | 6 | 6 | 6 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 75 | 83 | 84 |
| Electric protection rating | IP | IPX4D | IPX4D | IPX4D |

(*) with water heater probe connected
For other technical specifications, see from page 64 - Maximum length of flue gas venting, see page 124

| Item | Description | Code |
|---|---|---|
|  | Coaxial kit Ø 60/100 length 75cm | 0CONDASP00 |
|  | Remote control, ErP V class (118x85x32 mm) | 0CREMOTO04 |
|  | Hydrocyclonic and magnetic filter ¾"(3,000 l/hour) | 0FILTIMP00 |
|  | Coaxial fitting kit Ø60/100 | 0KITATCO00 |
|  | Flow - return cold water 90° taps kit | 0KITIDBA11 |
|  | Tap kit with filter | 0KITRUBI04 |

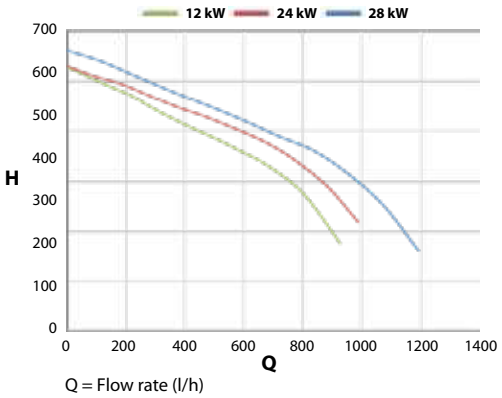
| Item | Description | Code |
|---|---|---|
|  | Splitter kit Ø80+80 | 0KITSDOP00 |
|  | Electric kit for complex solar plant management | 0KITSOLC08 |
|  | Electrical kit for zone management with external probe | 0KITZONE05 |
|  | Protective liquid for domestic mixed metal plants (0.5 l bottle) | 0PROTIMP00 |
|  | Universal mild cleaning product (0.5 l bottle) | 0PROTIMP01 |
|  | External probe (60x45x31 mm) | 0SONDAES01 |

For other accessories, see from page 123

## How to increase energy efficiency?

Discover the most suitable solution

| Regulation device | | Code | KRB 12 | KRB 24 | KRB 28 |
|---|---|---|---|---|---|
| **Option 1** | External probe | **0SONDAES01** | 92% | 94% | 94% |
| **Option 2** | Remote control | **0CREMOTO04** | 93% | 95% | 95% |
| **Option 3** | Remote control and external probe | **0CREMOTO04** + **0SONDAES01** | 94% | 96% | 96% |




Q = Flow rate (l/h)
H = Available head (mbar)

# MINORCA KC

WALL-HUNG CONDENSING BOILER WITH INSTANT PRODUCTION OF DHW

Product included in the "Condesing boilers catalogue" of the Energy Account by GSE

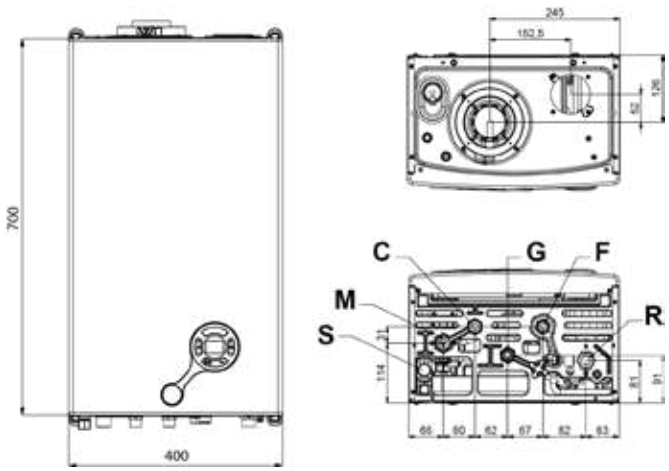
- **Ultra-compact size**
- **CH water flow rate electronic control**
- **LCD user interface with diagnostics**
- **Ideal for replacement in systems with radiators**
- **Primary aluminium heat exchanger**
- **NTC temperature probe on flow and return lines**
- Heating expansion vessel - 7 litres
- Modulation ratio: 1:5
- Fully pre-mixed burner
- Ambient temperature can be set from the boiler if an external probe is installed
- Boiler replacement kit available as optional equipment
- Stainless steel plate DHW heat exchanger
- Hydraulic unit in composite material

**Available in the following models:**

24

| Model | Gas type | Code | Heat output (kW) | | Energy efficiency class | | W x H x D (mm) | Gross weight (Kg) |
|---|---|---|---|---|---|---|---|---|
| | | | Nominal Pn | DHW (ΔT 30°C) | Room heating | Heating DHW | | |
| **KC 24** | NATURAL GAS<br>PROPANE | KMFxx2CR24<br>KMFxx6CR24 | 19,5 | 23,4 | A | A | 400x700x250 | 23,6 |

## DIMENSIONS AND CONNECTION CENTRE DISTANCES




| | | | |
|---|---|---|---|
| **S** | Condensate drain | **G** | Gas inlet (1/2") |
| **M** | CH system flow (3/4") | **F** | Cold water inlet (1/2") |
| **C** | DHW outlet (1\2") | **R** | CH system return (3/4") |

| Technical specifications | um | KC 24 |
|---|---|---|
| Nominal heat input (Qn) | kW | 20,0 |
| Nominal heat output (80-60°C) (Pn) | kW | 19,5 |
| Heat output (50-30°C) | kW | 21,0 |
| Reduced heat output (50-30°C) | kW | 5,4 |
| Useful efficiency at nominal input (80-60°C) | % | 97,3 |
| Useful efficiency at 30% (30°C return) | % | 109,6 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 |
| Heating expansion vessel capacity | l | 7 |
| DHW circuit working pressure (min-max) | bar | 0,5-6,0 |
| Specific DHW flow ΔT=30K | l/min | 12,2 |
| DHW temperature range | °C | 35-57 |
| NOx emission class | - | 6 |
| Power supply voltage/frequency | V/Hz | 230/50 |
| Maximum power consumption (ERP) | W | 85 |
| Electric protection rating | IP | IPX4D |

For other technical specifications, see from page 65 - Maximum length of flue gas venting, see page 124

| Item | Description | Code |
|---|---|---|
|  | Coaxial kit Ø 60/100 length 75cm | 0CONDASP00 |
|  | Remote control, ErP V class (118x85x32 mm) | 0CREMOTO04 |
|  | Hydrocyclonic and magnetic filter ¾"(3,000 l/hour) | 0FILTIMP00 |
|  | Coaxial fitting kit Ø60/100 | 0KITATCO00 |
|  | Flow - return cold water 90° taps kit | 0KITIDBA11 |
|  | Basic hydr. kit for basic compact unit | 0KITIDBA13 |

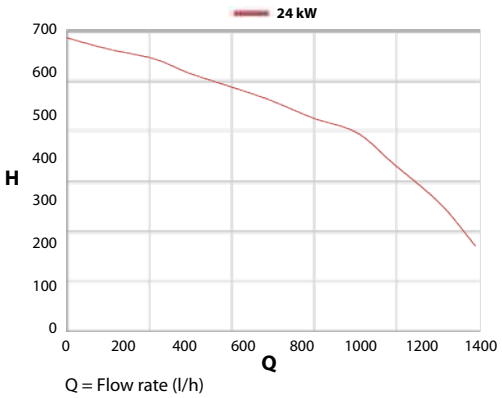
| Item | Description | Code |
|---|---|---|
|  | Plus hydr. kit for basic compact unit | 0KITIDBA14 |
|  | Tap kit with filter | 0KITRUBI04 |
|  | Splitter kit Ø80+80 | 0KITSDOP00 |
|  | Protective liquid for domestic mixed metal plants (0.5 l bottle) | 0PROTIMP00 |
|  | Universal mild cleaning product (0.5 l bottle) | 0PROTIMP01 |
|  | External probe (60x45x31 mm) | 0SONDAES01 |

For other accessories, see from page 123

## How to increase energy efficiency?

Discover the most suitable solution

| Regulation device | | Code | KC 24 |
|---|---|---|---|
| **Option 1** | External probe | **0SONDAES01** | 95% |
| **Option 2** | Ambient probe | **0SONDAMB02** | 95% |
| **Option 3** | Remote control | **0CREMOTO04** | 96% |
| **Option 4** | Remote control and external probe | **0CREMOTO04** | 97% |
| | | **0SONDAES01** | |




Q = Flow rate (l/h)
H = Available head (mbar)

# MINORCA KR

WALL-HUNG CONDENSING BOILER CH ONLY
CONNECTION TO AN EXTERNAL WATER HEATER WITH EXTERNAL 3-WAY VALVE

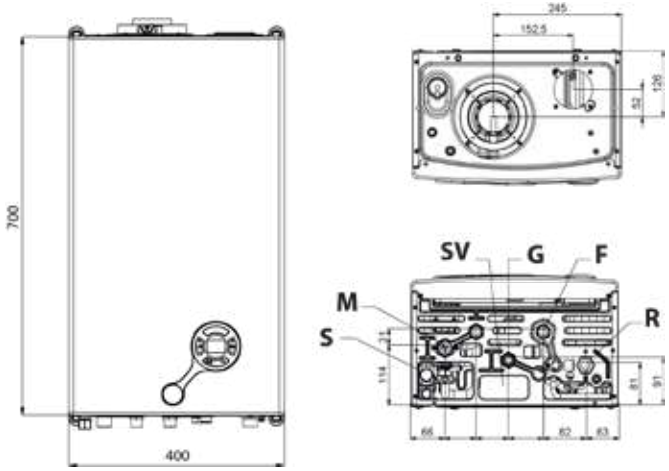
- **Ultra-compact size**
- **CH water flow rate electronic control**
- **LCD user interface with diagnostics**
- **Ideal for replacement in systems with radiators**
- **Primary aluminium heat exchanger**
- **NTC temperature probe on flow and return lines**
- Fully pre-mixed burner
- Modulation ratio: 1:5
- Heating expansion vessel - 7 litres
- Ambient temperature can be set from the boiler if an external probe is installed
- Boiler replacement kit available as optional equipment
- By-pass

**Available in the following models:**

24

| Model | Gas type | Code | Heat output (kW) | | Energy efficiency class | W x H x D (mm) | Gross weight (Kg) |
|---|---|---|---|---|---|---|---|
| | | | Nominal Pn | DHW (ΔT 30°C) | Room heating | | |
| **KR 24** | NATURAL GAS<br>PROPANE | KMFxx2RR24<br>KMFxx6RR24 | 19,5 | 23,4 | A | 400x700x250 | 23,6 |

## DIMENSIONS AND CONNECTION CENTRE DISTANCES




| | | | |
|---|---|---|---|
| **S** | Condensate drain | **G** | Gas inlet (1/2") |
| **M** | CH system flow (3/4") | **F** | Cold water inlet (1/2") |
| **SV** | 3-bar safety valve drain | **R** | CH system return (3/4") |

| Technical specifications | um | KR 24 |
|---|---|---|
| Nominal heat input (Qn) | kW | 20,0 |
| Nominal heat output (80-60°C) (Pn) | kW | 19,5 |
| Heat output (50-30°C) | kW | 21,0 |
| Reduced heat output (50-30°C) | kW | 5,4 |
| Useful efficiency at nominal input (80-60°C) | % | 97,3 |
| Useful efficiency at 30% (30°C return) | % | 109,6 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 |
| Heating expansion vessel capacity | l | 7 |
| DHW temperature range | °C | 35-65 (*) |
| NOx emission class | - | 6 |
| Power supply voltage/frequency | V/Hz | 230/50 |
| Maximum power consumption (ERP) | W | 85 |
| Electric protection rating | IP | IPX4D |

(*) with water heater probe connected
For other technical specifications, see from page 66 - Maximum length of flue gas venting, see page 124

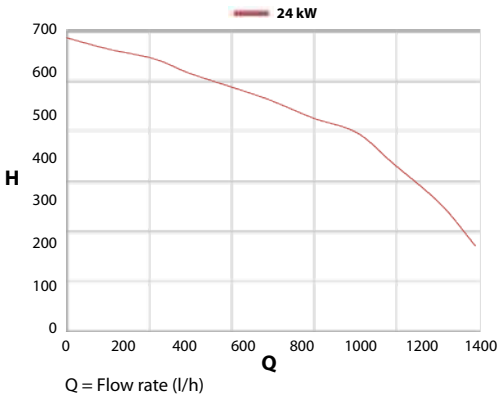
| Item | Description | Code |
|---|---|---|
|  | Coaxial kit Ø 60/100 length 75cm | 0CONDASP00 |
|  | Remote control, ErP V class (118x85x32 mm) | 0CREMOTO04 |
|  | Hydrocyclonic and magnetic filter ¾"(3,000 l/hour) | 0FILTIMP00 |
|  | Coaxial fitting kit Ø60/100 | 0KITATCO00 |
|  | Flow - return cold water 90° taps kit | 0KITIDBA11 |
|  | Basic hydr. kit for basic compact unit | 0KITIDBA13 |

| Item | Description | Code |
|---|---|---|
|  | Plus hydr. kit for basic compact unit | 0KITIDBA14 |
|  | Tap kit with filter | 0KITRUBI04 |
|  | Splitter kit Ø80+80 | 0KITSDOP00 |
|  | Protective liquid for domestic mixed metal plants (0.5 l bottle) | 0PROTIMP00 |
|  | Universal mild cleaning product (0.5 l bottle) | 0PROTIMP01 |
|  | External probe (60x45x31 mm) | 0SONDAES01 |

## How to increase energy efficiency?

Discover the most suitable solution

| Regulation device | | Code | KR 24 |
|---|---|---|---|
| **Option 1** | External probe | **0SONDAES01** | 95% |
| **Option 2** | Ambient probe | **0SONDAMB02** | 95% |
| **Option 3** | Remote control | **0CREMOTO04** | 96% |
| **Option 4** | Remote control and external probe | **0CREMOTO04** | 97% |
| | | **0SONDAES01** | |




Q = Flow rate (l/h)
H = Available head (mbar)

# MINORCA KRB

WALL-HUNG CONDENSING BOILER, CH ONLY, WITH INTEGRATED 3-WAY VALVE CONNECTION TO AN EXTERNAL WATER HEATER

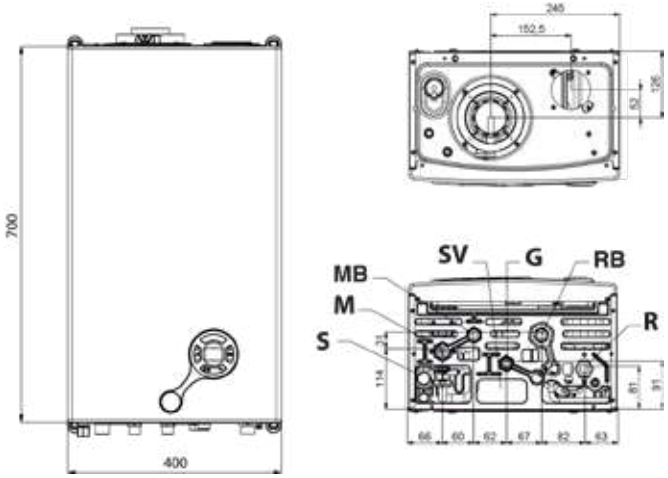
- **Ultra-compact size**
- **CH water flow rate electronic control**
- **LCD user interface with diagnostics**
- **Ideal for replacement in systems with radiators**
- **Primary aluminium heat exchanger**
- **NTC temperature probe on flow and return lines**
- Fully pre-mixed burner
- Modulation ratio: 1:5
- Heating expansion vessel - 7 litres
- Ambient temperature can be set from the boiler if an external probe is installed
- Boiler replacement kit available as optional equipment
- By-pass

**Available in the following models:**

24

| Model | Gas type | Code | Heat output (kW) | | Energy efficiency class | W x H x D (mm) | Gross weight (Kg) |
|---|---|---|---|---|---|---|---|
| | | | Nominal Pn | DHW (ΔT 30°C) | Room heating | | |
| **KRB 24** | NATURAL GAS<br>PROPANE | KMFxx2RU24<br>KMFxx6RU24 | 19,5 | 23,4 | A | 400x700x250 | 23,6 |

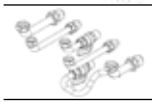
## DIMENSIONS AND CONNECTION CENTRE DISTANCES




| | | | |
|---|---|---|---|
| **S** | Condensate drain | **G** | Gas inlet (1/2") |
| **M** | CH system flow (3/4") | **RB** | Secondary return from water heater (1/2") |
| **MB** | Secondary flow to water heater (1/2") | | |
| **SV** | 3-bar safety valve drain | **R** | CH system return (3/4") |

| Technical specifications | um | KRB 24 |
|---|---|---|
| Nominal heat input (Qn) | kW | 20,0 |
| Nominal heat output (80-60°C) (Pn) | kW | 19,5 |
| Heat output (50-30°C) | kW | 21,0 |
| Reduced heat output (50-30°C) | kW | 5,4 |
| Useful efficiency at nominal input (80-60°C) | % | 97,3 |
| Useful efficiency at 30% (30°C return) | % | 109,6 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 |
| Heating expansion vessel capacity | l | 7 |
| DHW temperature range | °C | 35-65 (*) |
| NOx emission class | - | 6 |
| Power supply voltage/frequency | V/Hz | 230/50 |
| Maximum power consumption (ERP) | W | 85 |
| Electric protection rating | IP | IPX4D |

(*) with water heater probe connected
For other technical specifications, see from page 67 - Maximum length of flue gas venting, see page 124

| Item | Description | Code |
|---|---|---|
|  | Coaxial kit Ø 60/100 length 75cm | 0CONDASP00 |
|  | Remote control, ErP V class (118x85x32 mm) | 0CREMOTO04 |
|  | Hydrocyclonic and magnetic filter ¾"(3,000 l/hour) | 0FILTIMP00 |
|  | Coaxial fitting kit Ø60/100 | 0KITATCO00 |
|  | Flow - return cold water 90° taps kit | 0KITIDBA11 |
|  | Horizontal installation kit Basic KRB IN | 0KITISTI09 |

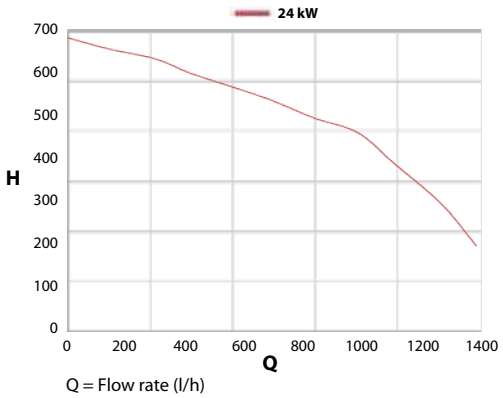
| Item | Description | Code |
|---|---|---|
|  | Tap kit with filter | 0KITRUBI04 |
|  | Splitter kit Ø80+80 | 0KITSDOP00 |
|  | Protective liquid for domestic mixed metal plants (0.5 l bottle) | 0PROTIMP00 |
|  | Universal mild cleaning product (0.5 l bottle) | 0PROTIMP01 |
|  | External probe (60x45x31 mm) | 0SONDAES01 |

For other accessories, see from page 123

## How to increase energy efficiency?

Discover the most suitable solution

| Regulation device | | Code | KRB 24 |
|---|---|---|---|
| **Option 1** | External probe | **0SONDAES01** | 95% |
| **Option 2** | Ambient probe | **0SONDAMB02** | 95% |
| **Option 3** | Remote control | **0CREMOTO04** | 96% |
| **Option 4** | Remote control and external probe | **0CREMOTO04** + **0SONDAES01** | 97% |




Q = Flow rate (l/h)
H = Available head (mbar)

# ITACA CH KR

WALL-HUNG CONDENSING BOILER CH ONLY
INSTALLATION IN CASCADE HEATING SYSTEMS UP TO 900 KW

- **Class 6 of NOx emissions**
- **CH water flow rate double electronic control**
- **Integrated flue gas check valve**
- **Multilingual dot matrix display interface**
- **Possibility to connect up to 6 boilers in a cascade-type connection with Master-Slave logic**
- Fully pre-mixed burner
- High-efficiency stainless steel heat exchanger
- Variable speed combustion fan
- High modulation ratios, up to 1:10
- Alarm output or LPG valve control, input for external probe, ambient thermostat, water heater probe, connection for solar pump, plant pump
- 0-10 V control on adjustment temperature or power
- Standard: Split air / flue gas connection, paper template, wall installation kit, condensation drain trap, intake closing plugs

**Available in the following models:**

45 60 85 120 150

It is possible to connect up to 6 boilers in a cascade-type connection.
The cascade installation has to be composed by boilers of the same or very next size in the power range ( for instance 45-60, 60-85, 85-120, 120-150)

| Model | Gas type | Code | Heat output (kW) | | Energy efficiency class | W x H x D (mm) | Gross weight (Kg) |
|---|---|---|---|---|---|---|---|
| | | | Nominal Pn | DHW (ΔT 30°C) | Room heating | | |
| **CH KR 45** | NATURAL GAS | KITXX2KR45 | 38,5 | 38,5 | A | 500x834x510 | 71,0 |
| | PROPANE | KITXX6KR45 | | | | | |
| **CH KR 60** | NATURAL GAS | KITXX2KR60 | 58,3 | 58,3 | A | 500x834x510 | 75,5 |
| | PROPANE | KITXX6KR60 | | | | | |
| **CH KR 85** | NATURAL GAS | KITXX2KR85 | 77,8 | 77,8 | – | 500x834x510 | 100,0 |
| | PROPANE | KITXX6KR85 | | | | | |
| **CH KR 120** | NATURAL GAS | KITXX2KR1C | 111,3 | 111,3 | – | 500x883x689 | 112,0 |
| | PROPANE | KITXX6KR1C | | | | | |
| **CH KR 150** | NATURAL GAS | KITXX2KR1F | 135,7 | 135,7 | – | 500x883x689 | 133,5 |
| | PROPANE | KITXX6KR1F | | | | | |

mod. CH KR 45

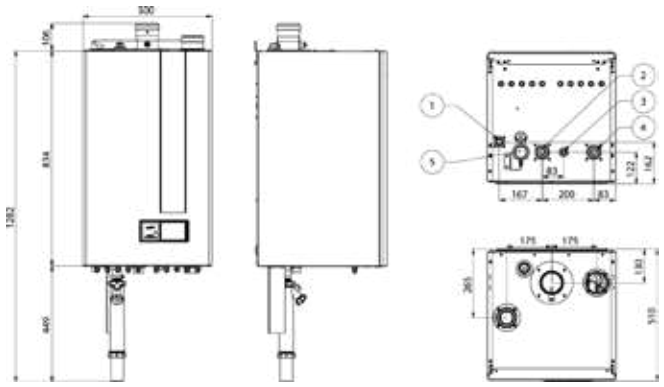
mod. CH KR 60

mod. CH KR 85

mod. CH KR 120

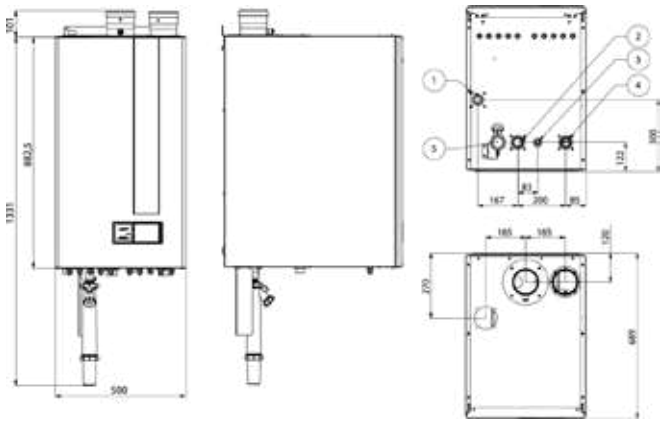
mod. CH KR 150

## DIMENSIONS AND CONNECTION CENTRE DISTANCES



**mod. CH KR 45 - 60 - 85**
Those boilers must be installed with condensing flue gases ducts. The standard starting kit configuration is splitted 80 + 80. Flue gases coaxial 125/80 parts are available

**1** Gas inlet (3/4")
**2** Flow (1 1/4")
**3** Safety relief valve drain (1/2")
**4** Return (1 1/4")
**5** Drain pipe



**mod. CH KR 120 - 150**
Those boilers must be installed with condensing flue gases ducts. The standard starting kit configuration is splitted 100 + 100. Flue gases coaxial 150/100 parts are available

**1** Gas inlet (1")
**2** Flow (1 1/4")
**3** Safety relief valve drain (1/2")
**4** Return (1 1/4")
**5** Drain pipe

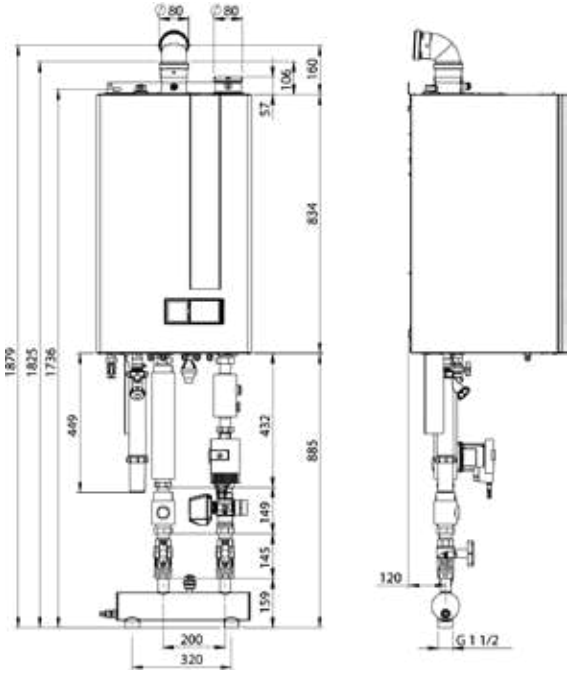
| Technical specifications | um | CH KR 45 | CH KR 60 | CH KR 85 | CH KR 120 | CH KR 150 |
|---|---|---|---|---|---|---|
| Nominal heat output (Pn) | kW | 39 | 58 | 78 | 111 | 136 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 92 | 93 | 93 | 93 | 93 |
| Nominal heat input (Qn) | kW | 40,0 | 60,0 | 81,0 | 115,0 | 140,0 |
| Nominal heat output (80-60°C) (Pn) | kW | 38,5 | 58,3 | 77,8 | 111,3 | 135,7 |
| Heat output (50-30°C) | kW | 41,5 | 62,8 | 84,8 | 122,0 | 148,7 |
| Reduced heat output (50-30°C) | kW | 4,3 | 6,5 | 9,7 | 12,4 | 23,9 |
| Useful efficiency at nominal input (80-60°C) | % | 97,1 | 97,1 | 96,1 | 96,8 | 96,9 |
| Useful efficiency at 30% (30°C return) | % | 108,2 | 108,4 | 108,3 | 108,6 | 108,4 |
| Heating circuit working pressure (min-max) | bar | 3 | 3.5 | 5 | 5 | 5 |
| CH temperature setting range | °C | 20-85 | 20-85 | 20-85 | 20-85 | 20-85 |
| NOx emission class | - | 6 | 6 | 6 | 6 | 6 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 | 230/50 | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 94 | 119 | 156 | 251 | 310 |

For other technical specifications, see from page 68 - Maximum length of flue gas venting, see page 124

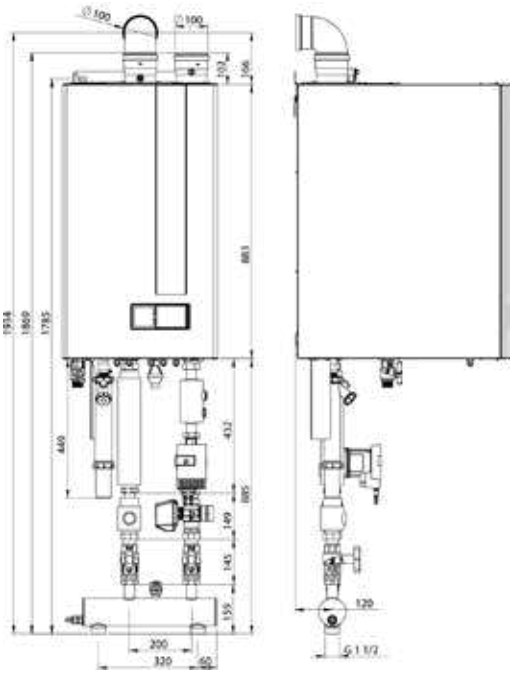
## How to increase energy efficiency?
Discover the most suitable solution

| Regulation device | | Code | CH KR 45 | CH KR 60 |
|---|---|---|---|---|
| **Option 1** | External probe | **0KSONEST01** | 94% | 95% |
| **Option 2** | Remote control | **0CREMOTO04** | 95% | 96% |
| **Option 3** | Remote control and external probe | **0CREMOTO04** + **0SONDAES01** | 96% | 97% |

## INSTALLING DIMENSIONS

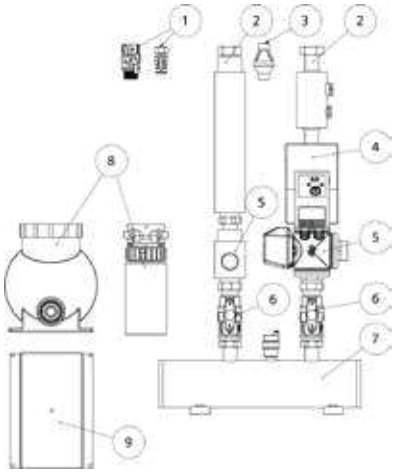



mod. CH KR 45 - 60 - 85

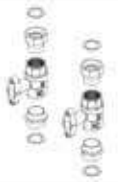
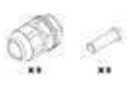



mod. CH KR 120 - 150

## HYDRAULIC KITS REF.




| Ref. | Item | Description | Code | CH KR 45 | CH KR 60 | CH KR 85 | CH KR 120 | CH KR 150 |
|---|---|---|---|---|---|---|---|---|
| 1 |  | Gas cock g ¾ kit | 0KRUBGAS00 | ● | ● | ● | | |
| |  | Gas cock g 1 kit | 0KRUBGAS01 | | | | ● | ● |
| 2 |  | Hidraulic connection kit G1 – G1 ½<br>the return flow connection is provided with connection for exapnsion vessel and for drain<br>cock | 0KCONIDR00 | ● | ● | ● | ● | ● |
| 3 |  | Drain funnel kit for G ½ F fitting safety valve (no INAIL) | 0KIMBSCA01 | ● | ● | ● | ● | ● |
| 4 |  | PUMP PWM – 7.5 m height 180 mm – connection G 1 ½ M | 0KCIRCOL00 | ● | ● | | | |
| |  | PUMP PWM – 8 m height 180 mm – connection G 1 ½ M | 0KCIRCOL01 | | | ● | | |

| Ref. | Item | Description | Code | CH KR 45 | CH KR 60 | CH KR 85 | CH KR 120 | CH KR 150 |
|---|---|---|---|---|---|---|---|---|
| 4 |  | Insulation casing for 0KCIRCOL00 and 0KCIRCOL01 provided with velcro fastening | 0KISOCIR00 | ● | ● | ● | | |
| |  | PUMP PWM – 11 m height 180 mm – connection G 1 ½ M | 0KCIRCOL02 | | | ● | | |
| |  | Insulation casing for 0KCIRCOL02 provided with velcro fastening | 0KISOCIR01 | | | ● | | |
| |  | Pompa autoflow - 7 m height 180 mm connection G 1 ½ M | 0KCIRCOL03 | ● | ● | | | |
| |  | Pompa autoflow – 12 m height 180 mm connection G 1 ½ M | 0KCIRCOL04 | | | ● | ● | ● |
| |  | Insulation casing for 0KCIRCOL03 and 0KCIRCOL04 provided with velcro fastening | 0KISOCIR02 | | | ● | ● | ● |
| 5 |  | 3 way valve kit for dhw tank | 0KTREVBO00 | ● | ● | ● | ● | ● |
| 6 |  | Hidraulic taps provided with fittings G 1 ½ and gaskets | 0KRUBMAN00 | ● | ● | ● | ● | ● |
| |  | Hidraulic taps with termometer<br>provided with fittings G 1 ½ and gaskets | 0KRUBMAN01 | ● | ● | ● | ● | ● |
| |  | Insulation for main / return flow tap - shell equipped with Velcro | 0KISORUB00 | ● | ● | ● | ● | ● |
| 7 |  | hydraulic separator 3" , relief valve (1/2") and cap included<br>Pump - hydraulic separator recommended coupling<br>PWM pump - 8 m<br>Insulation included | 0KSEPIDR00 | ● | ● | ● | ● | ● |
| | | | 0KCIRCOL01 | ● | ● | ● | ● | ● |
| 8 |  | Condensate neutralizer kit (Pmax 85 kw) | 0FILNECO03 | ● | ● | ● | | |
| |  | Condensate neutralizer kit (Pmax 350 kw) | 0FILNECO01 | | | | ● | ● |
| |  | Support for neutralizer | 0KBASFIL00 | ● | ● | ● | ● | ● |
| - |  | PG9 cable gland (x5) | 0KPRESPG00 | ● | ● | ● | ● | ● |
| |  | Paper Installation template | 0DIMACAR29 | ● | ● | ● | ● | ● |

| Ref. | Item | Description | Code | CH KR 45 | CH KR 60 | CH KR 85 | CH KR 120 | CH KR 150 |
|---|---|---|---|---|---|---|---|---|
| |  | Remote control, ErP V class (118x85x32 mm) | 0CREMOTO04 | ● | ● | ● | ● | ● |
| |  | Water heater temperature probe 3m | 0KITSOND00 | ● | ● | ● | ● | ● |
| - |  | External probe | 0KSONEST01 | ● | ● | ● | ● | ● |
| |  | Cascade controlling probe | 0KSONDCO00 | ● | ● | ● | ● | ● |
| |  | Heating zones management kit, 2 low-temperature zones and 1 high-temperature zone, with two probes included | 0KGESTZO00 | ● | ● | ● | ● | ● |

| Item | Description | Code | CH KR 45 | CH KR 60 | CH KR 85 | CH KR 120 | CH KR 150 |
|---|---|---|---|---|---|---|---|
|  | Coaxial flue gases starting kit 125/80 | 0ATTCOFL01 | ● | ● | ● | | |
|  | Coaxial flue gases starting kit 150/100 | 0ATTCOFL00 | | | | ● | ● |

# GIAVA KRB

CONDENSING BASE-PLATE BOILER WITH DHW WATER HEATER

Available in the following models:

12 24 28 32

- **Standard ambient temperature probe**
- **Modulation ratio: 1:9**
- **130-litre water heater with single coil**
- **CH water flow rate electronic control**
- **Available in the KRB version with a direct zone, in the KRB-V version with one direct and one mixed integrated zones, and in the KRB-Z version with one direct and two mixed integrated zones.**
- **Front door for immediate access to boiler**
- Thermosetting polymer-covered stainless steel heat exchanger
- Fully pre-mixed burner
- Hydraulic connections on the sides
- Prearrangement for connection to GSM modem for switching on and off and remote display of faults (optional)
- 5-litre DHW expansion vessel
- Freeze protection function for heating and water heater
- Anti-legionella function for water heater

| Model | Gas type | Code | Heat output (kW) | | Energy efficiency class | | W x H x D (mm) | Gross weight (Kg) |
|---|---|---|---|---|---|---|---|---|
| | | | Nominal Pn | DHW (ΔT 30°C) | Room heating | Heating DHW | | |
| **KRB 12** | NATURAL GAS | KGBxx2KU12 | 11,6 | 17,5 | A | A XL | 600x1857x642 | 189,0 |
| | PROPANE | KGBxx6KU12 | | | | | | |
| **KRB 24** | NATURAL GAS | KGBxx2KU24 | 22,9 | 26,8 | A | A XL | 600x1857x643 | 190,0 |
| | PROPANE | KGBxx6KU24 | | | | | | |
| **KRB 28** | NATURAL GAS | KGBxx2KU28 | 25,4 | 29,3 | A | A XL | 600x1857x644 | 192,0 |
| | PROPANE | KGBxx6KU28 | | | | | | |
| **KRB 32** | NATURAL GAS | KGBxx2KU32 | 29,4 | 33,4 | A | A XL | 600x1857x645 | 193,0 |
| | PROPANE | KGBxx6KU32 | | | | | | |
| **KRB V 12** | NATURAL GAS | KGBxx2KV12 | 11,6 | 17,5 | A | A XL | 600x1857x642 | 201,00 |
| | PROPANE | KGBxx6KV12 | | | | | | |
| **KRB V 24** | NATURAL GAS | KGBxx2KV24 | 22,9 | 26,8 | A | A XL | 600x1857x643 | 203,00 |
| | PROPANE | KGBxx6KV24 | | | | | | |
| **KRB V 28** | NATURAL GAS | KGBxx2KV28 | 25,4 | 29,3 | A | A XL | 600x1857x644 | 204,00 |
| | PROPANE | KGBxx6KV28 | | | | | | |
| **KRB V 32** | NATURAL GAS | KGBxx2KV32 | 29,4 | 33,4 | A | A XL | 600x1857x645 | 205,00 |
| | PROPANE | KGBxx6KV32 | | | | | | |
| **KRB Z 12** | NATURAL GAS | KGBxx2KZ12 | 11,6 | 17,5 | A | A XL | 600x1857x642 | 204,00 |
| | PROPANE | KGBxx6KZ12 | | | | | | |
| **KRB Z 24** | NATURAL GAS | KGBxx2KZ24 | 22,9 | 26,8 | A | A XL | 600x1857x643 | 205,00 |
| | PROPANE | KGBxx6KZ24 | | | | | | |
| **KRB Z 28** | NATURAL GAS | KGBxx2KZ28 | 25,4 | 29,3 | A | A XL | 600x1857x644 | 207,00 |
| | PROPANE | KGBxx6KZ28 | | | | | | |
| **KRB Z 32** | NATURAL GAS | KGBxx2KZ32 | 29,4 | 33,4 | A | A XL | 600x1857x645 | 208,00 |
| | PROPANE | KGBxx6KZ32 | | | | | | |

**Giava KRB** supplied with ambient temperature probe has a room heating seasonal efficiency of:
93% for model 12; 94% for model 24; 94% for model 28; 95% for model 32

**TOUCH SCREEN INTERFACE**

- *Modulating thermostat*
- *Day/night temperature level selection*
- *Weekly programming*
- *Timer and ambient temperature setting*
- *DHW "comfort" function enabling*

**The TOUCH SCREEN interface of Giava KRB combined with the ambient temperature probe supplied is a class V adjustment system.**

## How to increase energy efficiency?

Discover the most suitable solution

| Regulation device | | Code | KRB 12 | KRB 24 | KRB 28 | KRB 32 |
|---|---|---|---|---|---|---|
| **Option 1** | External probe (ambient temperature probe is not supplied) | **0SONDAES01** | 92% | 93% | 93% | 94% |
| **Option 2** | External probe (ambient temperature probe is supplied) | **0SONDAES01** | 94% | 95% | 95% | 96% |
| **Option 3** | Remote control (ambient temperature probe is not supplied) | **0CREMOTO04** | 93% | 94% | 94% | 95% |
| **Option 4** | Remote control and external probe (ambient temperature probe is not supplied) | **0CREMOTO04** **0SONDAES01** | 94% | 95% | 95% | 96% |

| Technical specifications | um | KRB 12 | KRB 24 | KRB 28 | KRB 32 |
|---|---|---|---|---|---|
| Nominal heat output (Pn) | kW | 12 | 23 | 25 | 29 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 90 | 91 | 91 | 92 |
| Water heating energy efficiency (ηwh) | % | 83 | 80 | 82 | 81 |
| Nominal heat input (Qn) | kW | 12,0 | 23,7 | 26,4 | 30,4 |
| Nominal heat output (80-60°C) (Pn) | kW | 11,6 | 22,9 | 25,4 | 29,4 |
| Heat output (50-30°C) | kW | 12,6 | 24,9 | 27,9 | 32,3 |
| Reduced heat output (50-30°C) | kW | 2,1 | 3,22 | 3,58 | 4,4 |
| Useful efficiency at nominal input (80-60°C) | % | 97,1 | 96,7 | 96,4 | 96,8 |
| Useful efficiency at 30% (30°C return) | % | 106,0 | 106,5 | 107,0 | 108,3 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 | 20-78 | 20-78 |
| Heating expansion vessel capacity | l | 10 | 10 | 10 | 10 |
| DHW circuit working pressure (min-max) | bar | 0,5-6,0 | 0,5-6,0 | 0,5-6,0 | 0,5-6,0 |
| Specific DHW flow ΔT=30K | l/min | 19,5 | 22 | 22,5 | 23,4 |
| DHW temperature range | °C | 35-65 | 35-65 | 35-65 | 35-65 |
| NOx emission class | - | 6 | 6 | 6 | 6 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 80 | 88 | 90 | 98 |
| Electric protection rating | IP | IPX5D | IPX5D | IPX5D | IPX5D |

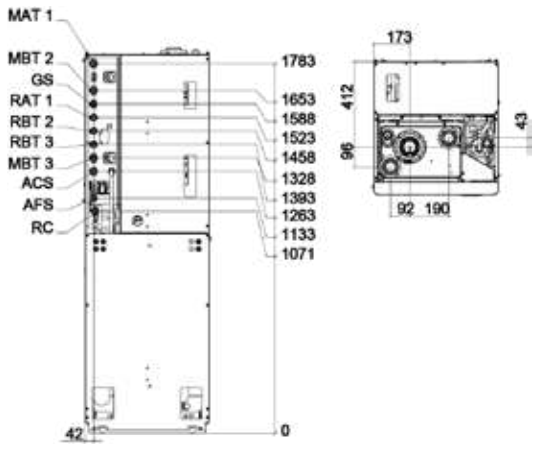
For other technical specifications, see from page 69 - Maximum length of flue gas venting, see page 124

| Item | Description | Code |
|---|---|---|
|  | Coaxial kit Ø 60/100 length 75cm | 0CONDASP00 |
|  | Remote control, ErP V class (118x85x32 mm) | 0CREMOTO04 |
|  | Hydrocyclonic and magnetic filter ¾"(3,000 l/hour) | 0FILTIMP00 |
|  | Elbow 90° and flange kit Ø60/100 | 0KCURFLA00 |
|  | Coaxial fitting kit Ø60/100 | 0KITATCO00 |
|  | Ambient temperature probe (12x12x20 mm, with 50cm cable) | 0KITSAMB00 |

| Item | Description | Code |
|---|---|---|
|  | Splitter kit Ø80+80 | 0KITSDOP00 |
|  | Electrical kit for zone management with external probe | 0KITZONE05 |
|  | Giava recirculation optional kit | 0KRICIRC00 |
|  | Protective liquid for domestic mixed metal plants (0.5 l bottle) | 0PROTIMP00 |
|  | External probe (60x45x31 mm) | 0SONDAES01 |

For other accessories, see from page 123

## DIMENSIONS AND CONNECTION CENTRE DISTANCES




**MAT 1** High-temperature flow area 1 (3/4")
**MBT 2** Low-temperature flow area 2 (3/4")
**GS** Gas (1/2")
**RAT 1** High-temperature return area 1 (3/4")
**RBT 2** Low-temperature return area 2 (3/4")
**RBT 3** Low-temperature return area 3 (3/4")
**MBT 3** Low-temperature flow area 3 (3/4")
**DHW** Domestic hot water (3/4")
**AFS** Domestic cold water (3/4")
**RC** Recirculation (3/4")

# MADEIRA SOLAR KRBS

BASE-PLATE CONDENSING BOILER WITH DHW HEATER WITH DOUBLE COIL - COMPLETE WITH HYDRAULIC UNIT AND ELECTRONICS FOR THERMAL SOLAR MANAGEMENT

**Available in the following models:**

12 24 28 32

- **Standard ambient temperature probe**
- **Modulation ratio: 1:9**
- **CH water flow rate electronic control**
- **300-litre water heater with double coil**
- **Available in the KRBS version with a direct zone, in the KRBS-V version with one direct and one mixed integrated zones, and in the KRBS-Z version with one direct and two mixed integrated zones.**
- **Front door for immediate access to boiler**
- Thermosetting polymer-covered stainless steel heat exchanger
- Fully pre-mixed burner
- Hydraulic connections on the sides
- Heating expansion vessel - 10 litres
- 12-litre DHW expansion vessel
- 18-litre solar expansion vessel
- Additional 5-litre safety solar tank

| Technical specifications | um | KRBS 12 | KRBS 24 | KRBS 28 | KRBS 32 |
|---|---|---|---|---|---|
| Nominal heat output (Pn) | kW | 12 | 23 | 25 | 29 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 90 | 91 | 91 | 93 |
| Water heating energy efficiency (ηwh) | % | 91 | 91 | 91 | 89 |
| Nominal heat input (Qn) | kW | 12,0 | 23,7 | 26,4 | 30,4 |
| Nominal heat output (80-60°C) (Pn) | kW | 11,6 | 22,9 | 25,4 | 29,4 |
| Heat output (50-30°C) | kW | 12,6 | 24,9 | 27,9 | 32,3 |
| Reduced heat output (50-30°C) | kW | 2,1 | 3,22 | 3,58 | 4,4 |
| Useful efficiency at nominal input (80-60°C) | % | 97,1 | 96,7 | 96,4 | 96,8 |
| Useful efficiency at 30% (30°C return) | % | 106,0 | 106,5 | 107,0 | 108,3 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 | 20-78 | 20-78 |
| Heating expansion vessel capacity | l | 10 | 10 | 10 | 10 |
| DHW circuit working pressure (min-max) | bar | 0,5-6,0 | 0,5-6,0 | 0,5-6,0 | 0,5-6,0 |
| Specific DHW flow ΔT=30K | l/min | 23,6 | 23,6 | 25,3 | 26,3 |
| DHW temperature range | °C | 35-65 | 35-65 | 35-65 | 35-65 |
| NOx emission class | - | 6 | 6 | 6 | 6 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 95 | 103 | 106 | 114 |
| Electric protection rating | IP | IPX5D | IPX5D | IPX5D | IPX5D |

**Madeira Solar KRBS** supplied with ambient temperature probe has a room heating seasonal efficiency of:
93% for model 12; 94% for model 24; 94% for model 28; 96% for model 32

**TOUCH SCREEN INTERFACE**

- *Modulating thermostat*
- *Day/night temperature level selection*
- *Weekly programming*
- *Timer and ambient temperature setting*
- *DHW "comfort" function enabling*

**The TOUCH SCREEN interface Madeira Solar KRBS combined with the ambient temperature probe supplied is a class V adjustment system.**

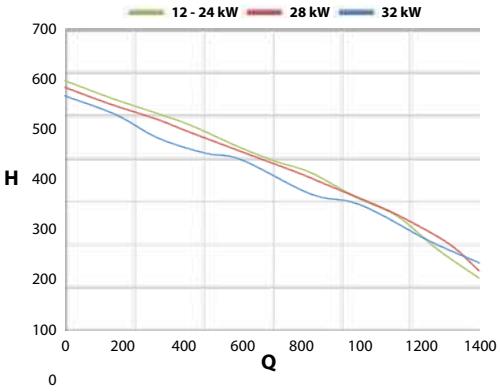
## How to increase energy efficiency?

Discover the most suitable solution

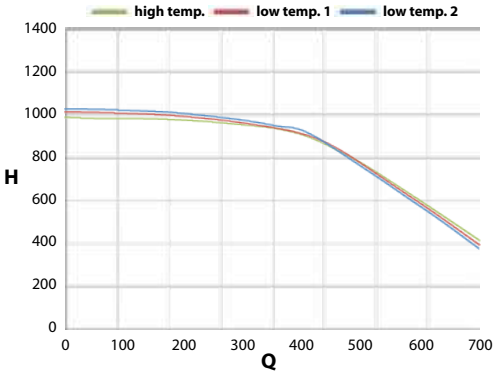
| Regulation device | | Code | KRBS 12 | KRBS 24 | KRBS 28 | KRBS 32 |
|---|---|---|---|---|---|---|
| **Option 1** | External probe (ambient temperature probe is not supplied) | **0SONDAES01** | 92% | 93% | 93% | 95% |
| **Option 2** | External probe (ambient temperature probe is supplied) | **0SONDAES01** | 94% | 95% | 95% | 97% |
| **Option 3** | Remote control (ambient temperature probe is not supplied) | **0CREMOTO04** | 93% | 94% | 94% | 96% |
| **Option 4** | Remote control and external probe (ambient temperature probe is not supplied) | **0CREMOTO04**<br>**0SONDAES01** | 94% | 95% | 95% | 97% |

| Model | Gas type | Code | Heat output (kW) | | Energy efficiency class | | W x H x D (mm) | Gross weight (Kg) |
|---|---|---|---|---|---|---|---|---|
| | | | Nominal Pn | DHW (ΔT 30°C) | Room heating | Heating DHW | | |
| **KRBS 12** | NATURAL GAS<br>PROPANE | KMBxx2KD12<br>KMBxx6KD12 | 11,6 | 17,5 | A | A XXL | 600x1857x985 | 270,0 |
| **KRBS 24** | NATURAL GAS<br>PROPANE | KMBxx2KD24<br>KMBxx6KD24 | 22,9 | 26,8 | A | A XXL | 600x1857x985 | 272,0 |
| **KRBS 28** | NATURAL GAS<br>PROPANE | KMBxx2KD28<br>KMBxx6KD28 | 25,4 | 29,3 | A | A XXL | 600x1857x985 | 273,0 |
| **KRBS 32** | NATURAL GAS<br>PROPANE | KMBxx2KD32<br>KMBxx6KD32 | 29,4 | 33,4 | A | A XXL | 600x1857x985 | 274,0 |
| **KRBS M 12** | NATURAL GAS<br>PROPANE | KMBxx2KE12<br>KMBxx6KE12 | 11,6 | 17,5 | A | A XXL | 600x1857x985 | 271,00 |
| **KRBS M 24** | NATURAL GAS<br>PROPANE | KMBxx2KE24<br>KMBxx6KE24 | 22,9 | 26,8 | A | A XXL | 600x1857x985 | 273,00 |
| **KRBS M 28** | NATURAL GAS<br>PROPANE | KMBxx2KE28<br>KMBxx6KE28 | 25,4 | 29,3 | A | A XXL | 600x1857x985 | 274,00 |
| **KRBS M 32** | NATURAL GAS<br>PROPANE | KMBxx2KE32<br>KMBxx6KE32 | 29,4 | 33,4 | A | A XXL | 600x1857x985 | 275,00 |
| **KRBS MV 12** | NATURAL GAS<br>PROPANE | KMBxx2KG12<br>KMBxx6KG12 | 11,6 | 17,5 | A | A XXL | 600x1857x985 | 283,00 |
| **KRBS MV 24** | NATURAL GAS<br>PROPANE | KMBxx2KG24<br>KMBxx6KG24 | 22,9 | 26,8 | A | A XXL | 600x1857x985 | 285,00 |
| **KRBS MV 28** | NATURAL GAS<br>PROPANE | KMBxx2KG28<br>KMBxx6KG28 | 25,4 | 29,3 | A | A XXL | 600x1857x985 | 283,00 |
| **KRBS MV 32** | NATURAL GAS<br>PROPANE | KMBxx2KG32<br>KMBxx6KG32 | 29,4 | 33,4 | A | A XXL | 600x1857x985 | 287,00 |
| **KRBS MZ 12** | NATURAL GAS<br>PROPANE | KMBxx2KK12<br>KMBxx6KK12 | 11,6 | 17,5 | A | A XXL | 600x1857x985 | 287,00 |
| **KRBS MZ 24** | NATURAL GAS<br>PROPANE | KMBxx2KK24<br>KMBxx6KK24 | 22,9 | 26,8 | A | A XXL | 600x1857x985 | 288,00 |
| **KRBS MZ 28** | NATURAL GAS<br>PROPANE | KMBxx2KK28<br>KMBxx6KK28 | 25,4 | 29,3 | A | A XXL | 600x1857x985 | 290,00 |
| **KRBS MZ 32** | NATURAL GAS<br>PROPANE | KMBxx2KK32<br>KMBxx6KK32 | 29,4 | 33,4 | A | A XXL | 600x1857x985 | 291,00 |
| **KRBS V 12** | NATURAL GAS<br>PROPANE | KMBxx2KF12<br>KMBxx6KF12 | 11,6 | 17,5 | A | A XXL | 600x1857x985 | 283,00 |
| **KRBS V 24** | NATURAL GAS<br>PROPANE | KMBxx2KF24<br>KMBxx6KF24 | 22,9 | 26,8 | A | A XXL | 600x1857x985 | 284,00 |
| **KRBS V 28** | NATURAL GAS<br>PROPANE | KMBxx2KF28<br>KMBxx6KF28 | 25,4 | 29,3 | A | A XXL | 600x1857x985 | 286,00 |
| **KRBS V 32** | NATURAL GAS<br>PROPANE | KMBxx2KF32<br>KMBxx6KF32 | 29,4 | 33,4 | A | A XXL | 600x1857x985 | 287,00 |
| **KRBS Z 12** | NATURAL GAS<br>PROPANE | KMBxx2KJ12<br>KMBxx6KJ12 | 11,6 | 17,5 | A | A XXL | 600x1857x985 | 286,00 |
| **KRBS Z 24** | NATURAL GAS<br>PROPANE | KMBxx2KJ24<br>KMBxx6KJ24 | 22,9 | 26,8 | A | A XXL | 600x1857x985 | 287,00 |
| **KRBS Z 28** | NATURAL GAS<br>PROPANE | KMBxx2KJ28<br>KMBxx6KJ28 | 25,4 | 29,3 | A | A XXL | 600x1857x985 | 289,00 |
| **KRBS Z 32** | NATURAL GAS<br>PROPANE | KMBxx2KJ32<br>KMBxx6KJ32 | 29,4 | 33,4 | A | A XXL | 600x1857x985 | 291,00 |

**Standard**

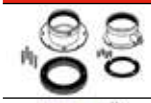



**V and Z version**



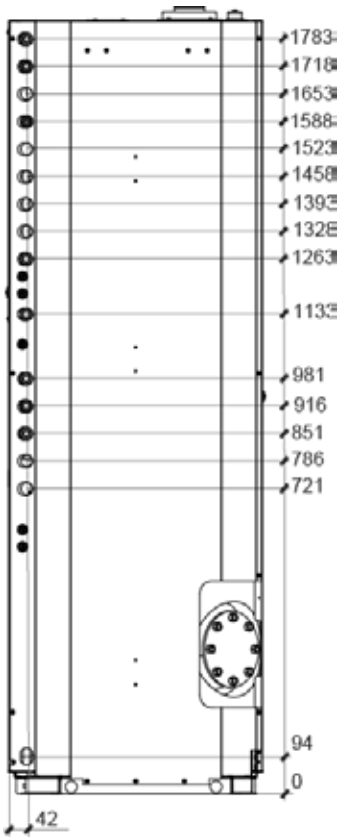

Q = Flow rate (l/h)
H = Available head (mbar)

| Item | Description | Code |
|---|---|---|
|  | Coaxial kit Ø 60/100 length 75cm | 0CONDASP00 |
|  | Remote control, ErP V class (118x85x32 mm) | 0CREMOTO04 |
|  | Hydrocyclonic and magnetic filter ¾"(3,000 l/hour) | 0FILTIMP00 |
|  | Elbow 90° and flange kit Ø60/100 | 0KCURFLA00 |
|  | Coaxial fitting kit Ø60/100 | 0KITATCO00 |
|  | Ambient temperature probe (12x12x20 mm, with 50cm cable) | 0KITSAMB00 |

| Item | Description | Code |
|---|---|---|
|  | Splitter kit Ø80+80 | 0KITSDOP00 |
|  | Electrical kit for zone management with external probe | 0KITZONE05 |
|  | DHW recirculation kit | 0KRICIRC01 |
|  | Protective liquid for domestic mixed metal plants (0.5 l bottle) | 0PROTIMP00 |
|  | External probe (60x45x31 mm) | 0SONDAES01 |

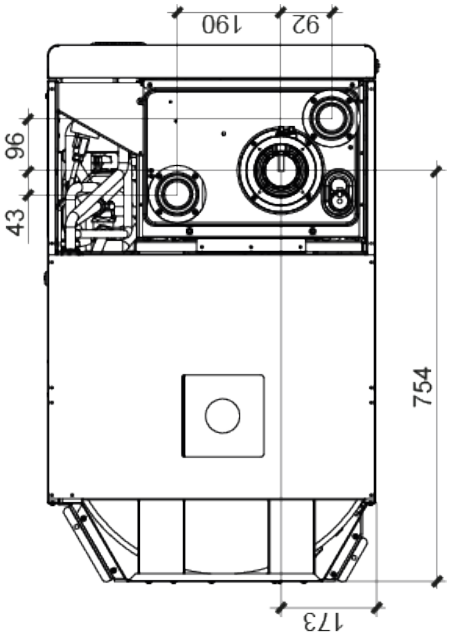
For other accessories, see from page 123

## DIMENSIONS AND CONNECTION CENTRE DISTANCES




The boiler is also available in the following versions:

**KRBS-M** arranged with three-way solar deviating valve for thermal discharge.
**KRBS-V** arranged for the management of two heating zones, a high temperature one and a low temperature one.
**KRBS-Z** arranged for the management of three heating zones, a high temperature one and two low temperature ones.
**KRBS-MV** arranged with 3-way solar deviating valve for thermal discharge and for the management of two heating zones, a high temperature one and a low temperature one.
**KRBS-MZ** arranged with 3-way solar deviating valve for thermal discharge and for the management of three heating zones, a high temperature one and two low temperature ones.




**MAT 1** High-temperature flow area 1 (3/4")
**MBT 2** Low-temperature flow area 2 (3/4")
**GS** Gas (1/2")
**RAT 1** High-temperature return area 1 (3/4")
**RBT 2** Low-temperature return area 2 (3/4")
**RBT 3** Low-temperature return area 3 (3/4")
**MBT 3** Low-temperature flow area 3 (3/4")

**DHW** Domestic hot water (3/4")
**AF** Cold water (1/2")
**RSS** Solar coil return (3/4")
**RC** Recirculation (3/4")
**MSS** Solar coil flow (3/4")
**MST** Thermal discharge flow (3/4")
**RST** Thermal discharge return (3/4")

# MADEIRA SOLAR COMPACT KBS

CONDENSING BASE-PLATE BOILER WITH INSTANT PRODUCTION OF DHW AND WITH SINGLE-COIL SOLAR DHW WATER HEATER. COMPLETED WITH HYDRAULIC UNIT AND ELECTRONICS FOR MANAGING THERMAL SOLAR

- **Modulation ratio: 1:9**
- **CH water flow rate electronic control**
- **170-litre water heater with single coil**
- **DHW thermostatic mixing valve**
- **Front door for immediate access to boiler**
- **Available in the KBS version with a direct zone, in the KBS-V version with one direct and one mixed integrated zones, and in the KBS-Z version with one direct and two mixed integrated zones.**
- Thermosetting polymer-covered stainless steel heat exchanger
- Fully pre-mixed burner
- Hydraulic connections on the sides
- Heating expansion vessel - 10 litres
- 12-litre DHW expansion vessel
- 12-litre solar expansion vessel

**Available in the following models:**

24 32

| Model | Gas type | Code | Heat output (kW) | | Energy efficiency class | | W x H x D (mm) | Gross weight (Kg) |
|---|---|---|---|---|---|---|---|---|
| | | | Nominal Pn | DHW (ΔT 30°C) | Room heating | Heating DHW | | |
| **KBS 24** | NATURAL GAS<br>PROPANE | KMCxx2KM24<br>KMCxx6KM24 | 22,9 | 27,4 | A | A XL | 600x1857x645 | 206,0 |
| **KBS 32** | NATURAL GAS<br>PROPANE | KMCxx2KM32<br>KMCxx6KM32 | 29,4 | 33,4 | A | A XXL | 600x1857x645 | 209,0 |
| **KBS V 24** | NATURAL GAS<br>PROPANE | KMCxx2KN24<br>KMCxx6KN24 | 22,9 | 27,4 | A | A XL | 600x1857x645 | 218,00 |
| **KBS V 32** | NATURAL GAS<br>PROPANE | KMCxx2KN32<br>KMCxx6KN32 | 29,4 | 33,4 | A | A XXL | 600x1857x645 | 221,00 |
| **KBS Z 24** | NATURAL GAS<br>PROPANE | KMCxx2KP24<br>KMCxx6KP24 | 22,9 | 27,4 | A | A XL | 600x1857x645 | 221,00 |
| **KBS Z 32** | NATURAL GAS<br>PROPANE | KMCxx2KP32<br>KMCxx6KP32 | 29,4 | 33,4 | A | A XXL | 600x1857x645 | 224,00 |

**Madeira Solar Compact KBS** supplied with ambient temperature probe has a room heating seasonal efficiency of:94% for model 12; 95% for model 24; 95% for model 28; 96% for model 32


**TOUCH SCREEN INTERFACE**

- *Modulating thermostat*
- *Day/night temperature level selection*
- *Weekly programming*
- *Timer and ambient temperature setting*
- *DHW "comfort" function enabling*

**The TOUCH SCREEN interface Madeira Solar Compact KBS combined with the ambient temperature probe supplied is a class V adjustment system.**

## How to increase energy efficiency?

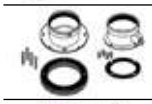
Discover the most suitable solution

| Regulation device | | Code | KBS 24 | KBS 32 |
|---|---|---|---|---|
| **Option 1** | External probe (ambient temperature probe is not supplied) | **0SONDAES01** | 93% | 95% |
| **Option 2** | External probe (ambient temperature probe is supplied) | **0SONDAES01** | 95% | 97% |
| **Option 3** | Remote control (ambient temperature probe is not supplied) | **0CREMOTO04** | 94% | 96% |
| **Option 4** | Remote control and external probe (ambient temperature probe is not supplied) | **0CREMOTO04**<br>**0SONDAES01** | 95% | 97% |

| Technical specifications | um | KBS 24 | KBS 32 |
|---|---|---|---|
| Nominal heat output (Pn) | kW | 23 | 29 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 91 | 93 |
| Water heating energy efficiency (ηwh) | % | 85 (**) | 87 (**) |
| Nominal heat input (Qn) | kW | 23,7 | 30,4 |
| Nominal heat output (80-60°C) (Pn) | kW | 22,9 | 29,4 |
| Heat output (50-30°C) | kW | 24,9 | 32,3 |
| Reduced heat output (50-30°C) | kW | 3,22 | 4,4 |
| Useful efficiency at nominal input (80-60°C) | % | 96,7 | 96,8 |
| Useful efficiency at 30% (30°C return) | % | 106,5 | 108,3 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 |
| Heating expansion vessel capacity | l | 10 | 10 |
| DHW circuit working pressure (min-max) | bar | 0,5-6,0 | 0,5-6,0 |
| Specific DHW flow ΔT=30K | l/min | 13,4 | 16,2 |
| DHW temperature range | °C | 35-65 | 35-65 |
| NOx emission class | - | 6 | 6 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 105 | 115 |
| Electric protection rating | IP | IPX5D | IPX5D |

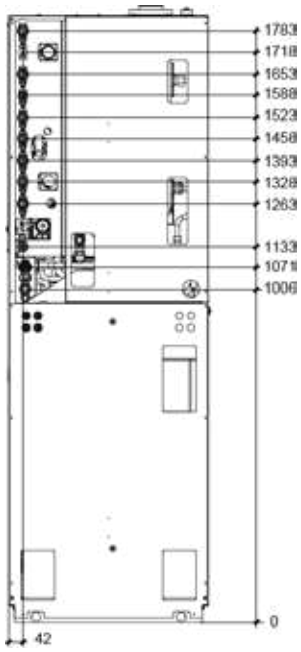
For other technical specifications, see from page 71 - Maximum length of flue gas venting, see page 124

| Item | Description | Code |
|---|---|---|
|  | Coaxial kit Ø 60/100 length 75cm | 0CONDASP00 |
|  | Remote control, ErP V class (118x85x32 mm) | 0CREMOTO04 |
|  | Hydrocyclonic and magnetic filter ¾"(3,000 l/hour) | 0FILTIMP00 |
|  | Elbow 90° and flange kit Ø60/100 | 0KCURFLA00 |
|  | Coaxial fitting kit Ø60/100 | 0KITATCO00 |

| Item | Description | Code |
|---|---|---|
|  | Ambient temperature probe (12x12x20 mm, with 50cm cable) | 0KITSAMB00 |
|  | Splitter kit Ø80+80 | 0KITSDOP00 |
|  | Electrical kit for zone management with external probe | 0KITZONE05 |
|  | Protective liquid for domestic mixed metal plants (0.5 l bottle) | 0PROTIMP00 |
|  | External probe (60x45x31 mm) | 0SONDAES01 |

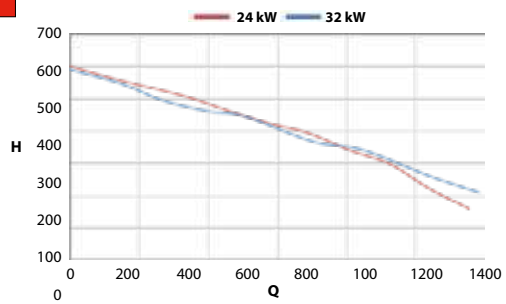
For other accessories, see from page 123

## DIMENSIONS AND CONNECTION CENTRE DISTANCES

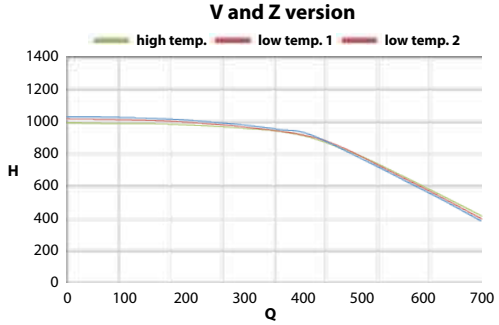



**MAT 1** High-temperature flow area 1 (3/4")
**MBT 2** Low-temperature flow area 2 (3/4")
**GS** Gas (1/2")
**RAT 1** High-temperature return area 1 (3/4")
**RBT 2** Low-temperature return area 2 (3/4")
**RBT 3** Low-temperature return area 3 (3/4")
**MBT 3** Low-temperature flow area 3 (3/4")
**DHW** Domestic hot water (3/4")
**AF** Cold water (1/2")
**RSS** Solar coil return (3/4")
**MSS** Solar coil flow (3/4")

**Standard**




**V and Z version**




Q = Flow rate (l/h)
H = Available head (mbar)

# FUEL OVERVIEW

| Country | | Category | Gas | Pressure |
|---|---|---|---|---|
| Belgium | BE | II2E(R)3P | G20 | 20 |
| | | | G31 | 37 |
| Bulgaria | BG | I2H | G20 | 20 |
| Bulgaria | BG | II2H3P | G20 | 20 |
| | | | G31 | 30 |
| France | BE | II2Er3P | G20 | 20 |
| | | | G25 | 25 |
| | | | G31 | 37 |
| Germany | DE | I2ELL - I3P | G20 | 20 |
| | | | G25 | 20 |
| | | | G31 | 50 |
| Greece | GR | II2H3P | G20 | 20 |
| | | | G31 | 37 |
| Ireland | IE | II2H3P | G20 | 20 |
| | | | G31 | 37 |

| Country | | Category | Gas | Pressure |
|---|---|---|---|---|
| England | GB | II2H3P | G20 | 20 |
| | | | G31 | 37 |
| Lithuania | LT | II2H3P | G20 | 20 |
| | | | G31 | 37 |
| Portugal | PT | II2H3P | G20 | 20 |
| | | | G31 | 37 |
| Chzech Republic | CZ | II2H3P | G20 | 20 |
| | | | G31 | 37 |
| Romania | RO | II2H3P | G20 | 20 |
| | | | G31 | 30 |
| Slovakia | SK | II2H3P | G20 | 20 |
| | | | G31 | 37 |
| Hungary | HU | I2HS - I3P | G20 | 25 |
| | | | G25.1 | 25 |
| | | | G31 | 37 |

# TECHNICAL SPECIFICATIONS OF CONDENSING BOILERS

| Technical specifications | um | Itaca | Itaca | Itaca | Itaca |
|---|---|---|---|---|---|
| Model | - | KC 12 | KC 24 | KC 28 | KC 32 |
| Type | - | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X |
| Nominal heat output (Pn) | kW | 12 | 23 | 26 | 29 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 90 | 92 | 92 | 93 |
| Seasonal energy efficiency class of ambient heating | - | A | A | A | A |
| Stated load profile | - | M | XL | XL | XXL |
| Water heating energy efficiency (ηwh) | % | 78 (**) | 85 (**) | 84 (**) | 87 (**) |
| Energy efficiency class of water heating | - | A | A | A | A |
| Nominal heat input (Qn) | kW | 12,0 | 23,7 | 26,4 | 30,4 |
| Reduced heat input (Qr) | kW | 2,0 | 3,0 | 3,3 | 4,2 |
| Nominal heat output (80-60°C) (Pn) | kW | 11,7 | 23,0 | 25,5 | 29,4 |
| Reduced heat output (80-60°C) (Pr) | kW | 1,8 | 2,6 | 3,0 | 3,9 |
| Heat output (50-30°C) | kW | 12,6 | 25,0 | 28,0 | 32,3 |
| Reduced heat output (50-30°C) | kW | 2,1 | 3,2 | 3,5 | 4,4 |
| Useful efficiency at nominal input (80-60°C) | % | 97,1 | 96,8 | 96,7 | 96,8 |
| Useful efficiency at nominal input (50-30°C) | % | 105,1 | 105,6 | 106,0 | 106,2 |
| Useful efficiency at 30% (30°C return) | % | 106,0 | 107,4 | 107,4 | 108,3 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 | 20-78 | 20-78 |
| CH maximum working temperature | °C | 83 | 83 | 83 | 83 |
| Heating expansion vessel capacity | l | 10 | 10 | 10 | 10 |
| DHW nominal heat input | kW | 18,0 | 27,3 | 30,4 | 34,5 |
| DHW minimum heat input | kW | 2,0 | 3,0 | 3,3 | 4,2 |
| DHW nominal heat output (ΔT 30°C) | kW | 18,6 | 27,4 | 29,2 | 33,4 |
| DHW circuit working pressure (min-max) | bar | 0,5-6,0 | 0,5-6,0 | 0,5-6,0 | 0,5-6,0 |
| Specific DHW flow ΔT=25K | l/min | 10,6 | 16,1 | 18,6 | 19,4 |
| Specific DHW flow ΔT=30K | l/min | 8,8 | 13,4 | 15,5 | 16,2 |
| Qualification of domestic hot water | - | * * * | * * * | * * * | * * * |
| DHW temperature range | °C | 35-57 | 35-57 | 35-57 | 35-57 |
| DHW maximum working temperature | °C | 62 | 62 | 62 | 62 |
| NOx emission class | - | 6 | 6 | 6 | 6 |
| Casing heat loss with burner on at nominal heat input | % | 0,40 | 0.44 | 1.04 | 0,87 |
| Casing heat loss with burner off | % | 0,53 | 0,21 | 0,20 | 0,19 |
| Chimney heat loss with burner on at nominal heat input | % | 2,50 | 2.72 | 2.26 | 2,33 |
| Air-flue ΔT at nominal heat input | °C | 57,9 | 61 | 60 | 60 |
| Flue gas flow at nominal heat input | g/s | 8,25 | 12,43 | 13,93 | 15,81 |
| CO2 at nominal heat input of heating (Natural gas) | % | 9 | 9 | 9 | 9 |
| CO2 at nominal heat input of heating (Propane) | % | 10 | 10 | 10 | 10 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 80 | 89 | 91 | 99 |
| Circulation pump power input (ERP) | W | 46 | 46 | 46 | 46 |
| Electric protection rating | IP | IPX5D | IPX5D | IPX5D | IPX5D |
| Air intake/flue gas vent pipe diameter | mm | 80+80<br>100/60 | 80+80<br>100/60 | 80+80<br>100/60 | 80+80<br>100/60 |

(*) with water heater probe connected
(**) with comfort function disabled.

# TECHNICAL SPECIFICATIONS OF CONDENSING BOILERS

| Technical specifications | um | Itaca | Itaca | Itaca | Itaca |
|---|---|---|---|---|---|
| Model | - | KR 12 | KR 24 | KR 28 | KR 32 |
| Type | - | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X |
| Nominal heat output (Pn) | kW | 12 | 23 | 26 | 29 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 90 | 92 | 92 | 93 |
| Seasonal energy efficiency class of ambient heating | - | A | A | A | A |
| Nominal heat input (Qn) | kW | 12,0 | 23,7 | 26,4 | 30,4 |
| Reduced heat input (Qr) | kW | 2,0 | 3,0 | 3,3 | 4,2 |
| Nominal heat output (80-60°C) (Pn) | kW | 11,7 | 23,0 | 25,5 | 29,4 |
| Reduced heat output (80-60°C) (Pr) | kW | 1,8 | 2,6 | 3,0 | 3,9 |
| Heat output (50-30°C) | kW | 12,6 | 25,0 | 28,0 | 32,3 |
| Reduced heat output (50-30°C) | kW | 2,1 | 3,2 | 3,5 | 4,4 |
| Useful efficiency at nominal input (80-60°C) | % | 97,1 | 96,8 | 96,7 | 96,8 |
| Useful efficiency at nominal input (50-30°C) | % | 105,1 | 105,6 | 106,0 | 106,2 |
| Useful efficiency at 30% (30°C return) | % | 106,0 | 107,4 | 107,4 | 108,3 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 | 20-78 | 20-78 |
| CH maximum working temperature | °C | 83 | 83 | 83 | 83 |
| Heating expansion vessel capacity | l | 10 | 10 | 10 | 10 |
| DHW nominal heat input | kW | 18,0 | 27,3 | 30,4 | 34,5 |
| DHW minimum heat input | kW | 2,0 | 3,0 | 3,3 | 4,2 |
| DHW nominal heat output (ΔT 30°C) | kW | 18,6 | 27,4 | 29,2 | 33,4 |
| DHW temperature range | °C | 35-65 (*) | 35-65 (*) | 35-65 (*) | 35-65 (*) |
| DHW maximum working temperature | °C | 65 (*) | 65 (*) | 65 (*) | 65 (*) |
| NOx emission class | - | 6 | 6 | 6 | 6 |
| Casing heat loss with burner on at nominal heat input | % | 0,40 | 0.44 | 1.04 | 0,87 |
| Casing heat loss with burner off | % | 0,53 | 0,21 | 0,20 | 0,19 |
| Chimney heat loss with burner on at nominal heat input | % | 2,50 | 2.72 | 2.26 | 2,33 |
| Air-flue ΔT at nominal heat input | °C | 57,9 | 61 | 60 | 60 |
| Flue gas flow at nominal heat input | g/s | 8,25 | 12,43 | 13,93 | 15,81 |
| CO2 at nominal heat input of heating (Natural gas) | % | 9 | 9 | 9 | 9 |
| CO2 at nominal heat input of heating (Propane) | % | 10 | 10 | 10 | 10 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 80 | 89 | 91 | 99 |
| Circulation pump power input (ERP) | W | 46 | 46 | 46 | 46 |
| Electric protection rating | IP | IPX5D | IPX5D | IPX5D | IPX5D |
| Air intake/flue gas vent pipe diameter | mm | 80+80<br>100/60 | 80+80<br>100/60 | 80+80<br>100/60 | 80+80<br>100/60 |

(*) with water heater probe connected

# TECHNICAL SPECIFICATIONS OF CONDENSING BOILERS

| Technical specifications | um | Itaca | Itaca | Itaca | Itaca |
|---|---|---|---|---|---|
| Model | - | KRB 12 | KRB 24 | KRB 28 | KRB 32 |
| Type | - | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X |
| Nominal heat output (Pn) | kW | 12 | 23 | 26 | 29 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 90 | 92 | 92 | 93 |
| Seasonal energy efficiency class of ambient heating | - | A | A | A | A |
| Nominal heat input (Qn) | kW | 12,0 | 23,7 | 26,4 | 30,4 |
| Reduced heat input (Qr) | kW | 2,0 | 3,0 | 3,3 | 4,2 |
| Nominal heat output (80-60°C) (Pn) | kW | 11,7 | 23,0 | 25,5 | 29,4 |
| Reduced heat output (80-60°C) (Pr) | kW | 1,8 | 2,6 | 3,0 | 3,9 |
| Heat output (50-30°C) | kW | 12,6 | 25,0 | 28,0 | 32,3 |
| Reduced heat output (50-30°C) | kW | 2,1 | 3,2 | 3,5 | 4,4 |
| Useful efficiency at nominal input (80-60°C) | % | 97,1 | 96,8 | 96,7 | 96,8 |
| Useful efficiency at nominal input (50-30°C) | % | 105,1 | 105,6 | 106,0 | 106,2 |
| Useful efficiency at 30% (30°C return) | % | 106,0 | 107,4 | 107,4 | 108,3 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 | 20-78 | 20-78 |
| CH maximum working temperature | °C | 83 | 83 | 83 | 83 |
| Heating expansion vessel capacity | l | 10 | 10 | 10 | 10 |
| DHW nominal heat input | kW | 18,0 | 27,3 | 30,4 | 34,5 |
| DHW minimum heat input | kW | 2,0 | 3,0 | 3,3 | 4,2 |
| DHW nominal heat output (ΔT 30°C) | kW | 18,6 | 27,4 | 29,2 | 33,4 |
| DHW temperature range | °C | 35-65 (*) | 35-65 (*) | 35-65 (*) | 35-65 (*) |
| DHW maximum working temperature | °C | 65 (*) | 65 (*) | 65 (*) | 65 (*) |
| NOx emission class | - | 6 | 6 | 6 | 6 |
| Casing heat loss with burner on at nominal heat input | % | 0,40 | 0.44 | 1.04 | 0,87 |
| Casing heat loss with burner off | % | 0,53 | 0,21 | 0,20 | 0,19 |
| Chimney heat loss with burner on at nominal heat input | % | 2,50 | 2.72 | 2.26 | 2,33 |
| Air-flue ΔT at nominal heat input | °C | 57,9 | 61 | 60 | 60 |
| Flue gas flow at nominal heat input | g/s | 8,25 | 12,43 | 13,93 | 15,81 |
| CO2 at nominal heat input of heating (Natural gas) | % | 9 | 9 | 9 | 9 |
| CO2 at nominal heat input of heating (Propane) | % | 10 | 10 | 10 | 10 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 80 | 89 | 91 | 99 |
| Circulation pump power input (ERP) | W | 46 | 46 | 46 | 46 |
| Electric protection rating | IP | IPX5D | IPX5D | IPX5D | IPX5D |
| Air intake/flue gas vent pipe diameter | mm | 80+80<br>100/60 | 80+80<br>100/60 | 80+80<br>100/60 | 80+80<br>100/60 |

(*) with water heater probe connected

# TECHNICAL SPECIFICATIONS OF CONDENSING BOILERS

| Technical specifications | um | Itaca | Itaca |
|---|---|---|---|
| Model | - | KB 24 | KB 32 |
| Type | - | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93 | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93 |
| Nominal heat output (Pn) | kW | 23 | 29 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 92 | 93 |
| Seasonal energy efficiency class of ambient heating | - | A | A |
| Stated load profile | - | XL | XL |
| Water heating energy efficiency (ηwh) | % | 82 | 80 |
| Energy efficiency class of water heating | - | A | A |
| Nominal heat input (Qn) | kW | 23,7 | 30,4 |
| Reduced heat input (Qr) | kW | 3,0 | 4,2 |
| Nominal heat output (80-60°C) (Pn) | kW | 23,0 | 29,4 |
| Reduced heat output (80-60°C) (Pr) | kW | 2,6 | 3,9 |
| Heat output (50-30°C) | kW | 25,0 | 32,3 |
| Reduced heat output (50-30°C) | kW | 3,2 | 4,4 |
| Useful efficiency at nominal input (80-60°C) | % | 96,8 | 96,2 |
| Useful efficiency at nominal input (50-30°C) | % | 105,6 | 106,2 |
| Useful efficiency at 30% (30°C return) | % | 107,4 | 108,3 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 |
| CH maximum working temperature | °C | 83 | 83 |
| Heating expansion vessel capacity | l | 10 | 10 |
| DHW nominal heat input | kW | 27,3 | 34,5 |
| DHW minimum heat input | kW | 3,0 | 4,2 |
| DHW nominal heat output (ΔT 30°C) | kW | 26,8 | 33,4 |
| DHW circuit working pressure (min-max) | bar | 0,5-6,0 | 0,5-6,0 |
| Specific DHW flow ΔT=25K | l/min | 19,4 | 23,4 |
| Specific DHW flow ΔT=30K | l/min | 16,2 | 19,5 |
| Qualification of domestic hot water | - | * * * | * * * |
| DHW temperature range | °C | 35-65 | 35-65 |
| DHW maximum working temperature | °C | 65 | 65 |
| NOx emission class | - | 6 | 6 |
| Casing heat loss with burner on at nominal heat input | % | 0.44 | 0.87 |
| Casing heat loss with burner off | % | 0.21 | 0,19 |
| Chimney heat loss with burner on at nominal heat input | % | 2.72 | 2.33 |
| Air-flue ΔT at nominal heat input | °C | 61 | 60 |
| Flue gas flow at nominal heat input | g/s | 12,43 | 15,81 |
| CO2 at nominal heat input of heating (Natural gas) | % | 9 | 9 |
| CO2 at nominal heat input of heating (Propane) | % | 10 | 10 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 89 | 99 |
| Circulation pump power input (ERP) | W | 46 | 46 |
| Electric protection rating | IP | IPX4D | IPX4D |
| Air intake/flue gas vent pipe diameter | mm | 80+80<br>100/60 | 80+80<br>100/60 |

# TECHNICAL SPECIFICATIONS OF CONDENSING BOILERS

| Technical specifications | um | Formentera | Formentera | Formentera | Formentera |
|---|---|---|---|---|---|
| Model | - | KC 12 | KC 24 | KC 28 | KC 32 |
| Type | - | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X |
| Nominal heat output (Pn) | kW | 12 | 23 | 26 | 29 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 90 | 92 | 92 | 93 |
| Seasonal energy efficiency class of ambient heating | - | A | A | A | A |
| Stated load profile | - | M | XL | XL | XXL |
| Water heating energy efficiency (ηwh) | % | 77 | 85 | 86 | 87 |
| Energy efficiency class of water heating | - | A | A | A | A |
| Nominal heat input (Qn) | kW | 12,0 | 23,7 | 26,4 | 30,4 |
| Reduced heat input (Qr) | kW | 2,0 | 3,0 | 3,3 | 4,2 |
| Nominal heat output (80-60°C) (Pn) | kW | 11,7 | 23,0 | 25,5 | 29,4 |
| Reduced heat output (80-60°C) (Pr) | kW | 1,8 | 2,6 | 3,0 | 3,9 |
| Heat output (50-30°C) | kW | 12,6 | 25,0 | 28,0 | 32,3 |
| Reduced heat output (50-30°C) | kW | 2,1 | 3,2 | 3,5 | 4,4 |
| Useful efficiency at nominal input (80-60°C) | % | 97,1 | 96,8 | 96,7 | 96,8 |
| Useful efficiency at nominal input (50-30°C) | % | 105,1 | 105,6 | 106,0 | 106,2 |
| Useful efficiency at 30% (30°C return) | % | 106,0 | 107,4 | 107,4 | 108,3 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 | 20-78 | 20-78 |
| CH maximum working temperature | °C | 83 | 83 | 83 | 83 |
| Heating expansion vessel capacity | l | 10 | 10 | 10 | 10 |
| DHW nominal heat input | kW | 18,0 | 27,3 | 30,4 | 34,5 |
| DHW minimum heat input | kW | 2,0 | 3,0 | 3,3 | 4,2 |
| DHW nominal heat output (ΔT 30°C) | kW | 18,6 | 27,4 | 29,2 | 33,4 |
| DHW circuit working pressure (min-max) | bar | 0,5-6,0 | 0,5-6,0 | 0,5-6,0 | 0,5-6,0 |
| Specific DHW flow ΔT=25K | l/min | 10,6 | 16,1 | 18,6 | 19,4 |
| Specific DHW flow ΔT=30K | l/min | 8,8 | 13,4 | 15,5 | 16,2 |
| Qualification of domestic hot water | - | ** | ** | ** | ** |
| DHW temperature range | °C | 35-57 | 35-57 | 35-57 | 35-57 |
| DHW maximum working temperature | °C | 62 | 62 | 62 | 62 |
| NOx emission class | - | 6 | 6 | 6 | 6 |
| Casing heat loss with burner on at nominal heat input | % | 0,40 | 0.44 | 1.04 | 0,87 |
| Casing heat loss with burner off | % | 0,53 | 0.21 | 0,20 | 0,19 |
| Chimney heat loss with burner on at nominal heat input | % | 2,50 | 2.72 | 2.26 | 2,33 |
| Air-flue ΔT at nominal heat input | °C | 57,9 | 61 | 60 | 60 |
| Flue gas flow at nominal heat input | g/s | 8,25 | 12,43 | 13,93 | 15,81 |
| CO2 at nominal heat input of heating (Natural gas) | % | 9 | 9 | 9 | 9 |
| CO2 at nominal heat input of heating (Propane) | % | 10 | 10 | 10 | 10 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 75 | 83 | 84 | 91 |
| Circulation pump power input (ERP) | W | 41 | 41 | 41 | 41 |
| Electric protection rating | IP | IPX5D | IPX5D | IPX5D | IPX5D |
| Air intake/flue gas vent pipe diameter | mm | 80+80<br>100/60 | 80+80<br>100/60 | 80+80<br>100/60 | 80+80<br>100/60 |

# TECHNICAL SPECIFICATIONS OF CONDENSING BOILERS

| Technical specifications | um | Formentera | Formentera | Formentera | Formentera |
|---|---|---|---|---|---|
| Model | - | KR 12 | KR 24 | KR 28 | KR 32 |
| Type | - | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X |
| Nominal heat output (Pn) | kW | 12 | 23 | 26 | 29 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 90 | 92 | 92 | 93 |
| Seasonal energy efficiency class of ambient heating | - | A | A | A | A |
| Nominal heat input (Qn) | kW | 12,0 | 23,7 | 26,4 | 30,4 |
| Reduced heat input (Qr) | kW | 2,0 | 3,0 | 3,3 | 4,2 |
| Nominal heat output (80-60°C) (Pn) | kW | 11,7 | 23,0 | 25,5 | 29,4 |
| Reduced heat output (80-60°C) (Pr) | kW | 1,8 | 2,6 | 3,0 | 3,9 |
| Heat output (50-30°C) | kW | 12,6 | 25,0 | 28,0 | 32,3 |
| Reduced heat output (50-30°C) | kW | 2,1 | 3,2 | 3,5 | 4,4 |
| Useful efficiency at nominal input (80-60°C) | % | 97,1 | 96,8 | 96,7 | 96,8 |
| Useful efficiency at nominal input (50-30°C) | % | 105,1 | 105,6 | 106,0 | 106,2 |
| Useful efficiency at 30% (30°C return) | % | 106,0 | 107,4 | 107,4 | 108,3 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 | 20-78 | 20-78 |
| CH maximum working temperature | °C | 83 | 83 | 83 | 83 |
| Heating expansion vessel capacity | l | 10 | 10 | 10 | 10 |
| DHW nominal heat input | kW | 18,0 | 27,3 | 30,4 | 34,5 |
| DHW minimum heat input | kW | 2,0 | 3,0 | 3,3 | 4,2 |
| DHW nominal heat output (ΔT 30°C) | kW | 18,6 | 27,4 | 29,2 | 33,4 |
| DHW temperature range | °C | 35-65 (*) | 35-65 (*) | 35-65 (*) | 35-65 (*) |
| DHW maximum working temperature | °C | 65 (*) | 65 (*) | 65 (*) | 65 (*) |
| NOx emission class | - | 6 | 6 | 6 | 6 |
| Casing heat loss with burner on at nominal heat input | % | 0,40 | 0.44 | 1.04 | 0,87 |
| Casing heat loss with burner off | % | 0,53 | 0.21 | 0,20 | 0,19 |
| Chimney heat loss with burner on at nominal heat input | % | 2,50 | 2.72 | 2.26 | 2,33 |
| Air-flue ΔT at nominal heat input | °C | 57,9 | 61 | 60 | 60 |
| Flue gas flow at nominal heat input | g/s | 8,25 | 12,43 | 13,93 | 15,81 |
| CO2 at nominal heat input of heating (Natural gas) | % | 9 | 9 | 9 | 9 |
| CO2 at nominal heat input of heating (Propane) | % | 10 | 10 | 10 | 10 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 75 | 83 | 84 | 91 |
| Circulation pump power input (ERP) | W | 41 | 41 | 41 | 41 |
| Electric protection rating | IP | IPX5D | IPX5D | IPX5D | IPX5D |
| Air intake/flue gas vent pipe diameter | mm | 80+80<br>100/60 | 80+80<br>100/60 | 80+80<br>100/60 | 80+80<br>100/60 |

(*) with water heater probe connected

# TECHNICAL SPECIFICATIONS OF CONDENSING BOILERS

| Technical specifications | um | Formentera | Formentera | Formentera | Formentera |
|---|---|---|---|---|---|
| Model | - | KRB 12 | KRB 24 | KRB 28 | KRB 32 |
| Type | - | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X |
| Nominal heat output (Pn) | kW | 12 | 23 | 26 | 29 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 90 | 92 | 92 | 93 |
| Seasonal energy efficiency class of ambient heating | - | A | A | A | A |
| Nominal heat input (Qn) | kW | 12,0 | 23,7 | 26,4 | 30,4 |
| Reduced heat input (Qr) | kW | 2,0 | 3,0 | 3,3 | 4,2 |
| Nominal heat output (80-60°C) (Pn) | kW | 11,7 | 23,0 | 25,5 | 29,4 |
| Reduced heat output (80-60°C) (Pr) | kW | 1,8 | 2,6 | 3,0 | 3,9 |
| Heat output (50-30°C) | kW | 12,6 | 25,0 | 28,0 | 32,3 |
| Reduced heat output (50-30°C) | kW | 2,1 | 3,2 | 3,5 | 4,4 |
| Useful efficiency at nominal input (80-60°C) | % | 97,1 | 96,8 | 96,7 | 96,8 |
| Useful efficiency at nominal input (50-30°C) | % | 105,1 | 105,6 | 106,0 | 106,2 |
| Useful efficiency at 30% (30°C return) | % | 106,0 | 107,4 | 107,4 | 108,3 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 | 20-78 | 20-78 |
| CH maximum working temperature | °C | 83 | 83 | 83 | 83 |
| Heating expansion vessel capacity | l | 10 | 10 | 10 | 10 |
| DHW nominal heat input | kW | 18,0 | 27,3 | 30,4 | 34,5 |
| DHW minimum heat input | kW | 2,0 | 3,0 | 3,3 | 4,2 |
| DHW nominal heat output (ΔT 30°C) | kW | 18,6 | 27,4 | 29,2 | 33,4 |
| DHW temperature range | °C | 35-65 (*) | 35-65 (*) | 35-65 (*) | 35-65 (*) |
| DHW maximum working temperature | °C | 65 (*) | 65 (*) | 65 (*) | 65 (*) |
| NOx emission class | - | 6 | 6 | 6 | 6 |
| Casing heat loss with burner on at nominal heat input | % | 0,40 | 0.44 | 1.04 | 0,87 |
| Casing heat loss with burner off | % | 0,53 | 0.21 | 0,20 | 0,19 |
| Chimney heat loss with burner on at nominal heat input | % | 2,50 | 2.72 | 2.26 | 2,33 |
| Air-flue ΔT at nominal heat input | °C | 57,9 | 61 | 60 | 60 |
| Flue gas flow at nominal heat input | g/s | 8,25 | 12,43 | 13,93 | 15,81 |
| CO2 at nominal heat input of heating (Natural gas) | % | 9 | 9 | 9 | 9 |
| CO2 at nominal heat input of heating (Propane) | % | 10 | 10 | 10 | 10 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 75 | 83 | 84 | 91 |
| Circulation pump power input (ERP) | W | 41 | 41 | 41 | 41 |
| Electric protection rating | IP | IPX5D | IPX5D | IPX5D | IPX5D |
| Air intake/flue gas vent pipe diameter | mm | 80+80 100/60 | 80+80 100/60 | 80+80 100/60 | 80+80 100/60 |

(*) with water heater probe connected
(**) with comfort function disabled.

# TECHNICAL SPECIFICATIONS OF CONDENSING BOILERS

| Technical specifications | um | Antea | Antea | Antea |
|---|---|---|---|---|
| Model | - | KC 12 | KC 24 | KC 28 |
| Type | - | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X |
| Nominal heat output (Pn) | kW | 12 | 23 | 26 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 90 | 92 | 92 |
| Seasonal energy efficiency class of ambient heating | - | A | A | A |
| Stated load profile | - | M | XL | XL |
| Water heating energy efficiency (ηwh) | % | 78 | 84 | 80 |
| Energy efficiency class of water heating | - | A | A | A |
| Nominal heat input (Qn) | kW | 12,0 | 23,7 | 26,4 |
| Reduced heat input (Qr) | kW | 2,0 | 3,0 | 3,3 |
| Nominal heat output (80-60°C) (Pn) | kW | 11,7 | 22,8 | 25,5 |
| Reduced heat output (80-60°C) (Pr) | kW | 1,8 | 2,8 | 3,1 |
| Heat output (50-30°C) | kW | 12,6 | 24,9 | 28,0 |
| Reduced heat output (50-30°C) | kW | 2,1 | 3,2 | 3,5 |
| Useful efficiency at nominal input (80-60°C) | % | 97,1 | 96,3 | 96,7 |
| Useful efficiency at nominal input (50-30°C) | % | 105,1 | 105,1 | 105,9 |
| Useful efficiency at 30% (30°C return) | % | 106,0 | 107,2 | 107,5 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 | 20-78 |
| CH maximum working temperature | °C | 83 | 83 | 83 |
| Heating expansion vessel capacity | l | 9 | 9 | 9 |
| DHW nominal heat input | kW | 18,0 | 27,3 | 30,4 |
| DHW minimum heat input | kW | 2,0 | 3,0 | 3,3 |
| DHW nominal heat output (ΔT 30°C) | kW | 18,4 | 27,4 | 29,2 |
| DHW circuit working pressure (min-max) | bar | 0,5-6,0 | 0,5-6,0 | 0,5-6,0 |
| Specific DHW flow ΔT=25K | l/min | 10,3 | 16,1 | 18,0 |
| Specific DHW flow ΔT=30K | l/min | 8,6 | 13,4 | 15,0 |
| Qualification of domestic hot water | - | ** | ** | ** |
| DHW temperature range | °C | 35-57 | 35-57 | 35-57 |
| DHW maximum working temperature | °C | 62 | 62 | 62 |
| NOx emission class | - | 5 | 5 | 5 |
| Casing heat loss with burner on at nominal heat input | % | 0,26 | 1.28 | 1.11 |
| Casing heat loss with burner off | % | 0,55 | 0,26 | 0.27 |
| Chimney heat loss with burner on at nominal heat input | % | 2,64 | 2.45 | 2.19 |
| Air-flue ΔT at nominal heat input | °C | 57,9 | 61 | 60 |
| Flue gas flow at nominal heat input | g/s | 8,25 | 12,43 | 13,93 |
| CO2 at nominal heat input of heating (Natural gas) | % | 9 | 9 | 9 |
| CO2 at nominal heat input of heating (Propane) | % | 10 | 10 | 10 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 75 | 83 | 84 |
| Circulation pump power input (ERP) | W | 41 | 41 | 41 |
| Electric protection rating | IP | IPX4D | IPX4D | IPX4D |
| Air intake/flue gas vent pipe diameter | mm | 80+80<br>100/60 | 80+80<br>100/60 | 80+80<br>100/60 |

# TECHNICAL SPECIFICATIONS OF CONDENSING BOILERS

| Technical specifications | um | Antea | Antea | Antea |
|---|---|---|---|---|
| Model | - | KR 12 | KR 24 | KR 28 |
| Type | - | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X |
| Nominal heat output (Pn) | kW | 12 | 23 | 26 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 90 | 92 | 92 |
| Seasonal energy efficiency class of ambient heating | - | A | A | A |
| Nominal heat input (Qn) | kW | 12,0 | 23,7 | 26,4 |
| Reduced heat input (Qr) | kW | 2,0 | 3,0 | 3,3 |
| Nominal heat output (80-60°C) (Pn) | kW | 11,7 | 22,8 | 25,5 |
| Reduced heat output (80-60°C) (Pr) | kW | 1,8 | 2,8 | 3,1 |
| Heat output (50-30°C) | kW | 12,6 | 24,9 | 28,0 |
| Reduced heat output (50-30°C) | kW | 2,1 | 3,2 | 3,5 |
| Useful efficiency at nominal input (80-60°C) | % | 97,1 | 96,3 | 96,7 |
| Useful efficiency at nominal input (50-30°C) | % | 105,1 | 105,1 | 105,9 |
| Useful efficiency at 30% (30°C return) | % | 106,0 | 107,2 | 107,5 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 | 20-78 |
| CH maximum working temperature | °C | 83 | 83 | 83 |
| Heating expansion vessel capacity | l | 9 | 9 | 9 |
| DHW nominal heat input | kW | 18,0 | 27,3 | 30,4 |
| DHW minimum heat input | kW | 2,0 | 3,0 | 3,3 |
| DHW nominal heat output (ΔT 30°C) | kW | 18,4 | 27,4 | 29,2 |
| DHW temperature range | °C | 35-65 (*) | 35-65 (*) | 35-65 (*) |
| DHW maximum working temperature | °C | 65 (*) | 65 (*) | 65 (*) |
| NOx emission class | - | 6 | 6 | 6 |
| Casing heat loss with burner on at nominal heat input | % | 0,26 | 1.28 | 1.11 |
| Casing heat loss with burner off | % | 0,55 | 0,26 | 0.27 |
| Chimney heat loss with burner on at nominal heat input | % | 2,64 | 2.45 | 2.19 |
| Air-flue ΔT at nominal heat input | °C | 57,9 | 61 | 60 |
| Flue gas flow at nominal heat input | g/s | 8,25 | 12,43 | 13,93 |
| CO2 at nominal heat input of heating (Natural gas) | % | 9 | 9 | 9 |
| CO2 at nominal heat input of heating (Propane) | % | 10 | 10 | 10 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 75 | 83 | 84 |
| Circulation pump power input (ERP) | W | 41 | 41 | 41 |
| Electric protection rating | IP | IPX4D | IPX4D | IPX4D |
| Air intake/flue gas vent pipe diameter | mm | 80+80 100/60 | 80+80 100/60 | 80+80 100/60 |

(*) with water heater probe connected

# TECHNICAL SPECIFICATIONS OF CONDENSING BOILERS

| Technical specifications | um | Antea | Antea | Antea |
|---|---|---|---|---|
| Model | - | KRB 12 | KRB 24 | KRB 28 |
| Type | - | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X |
| Nominal heat output (Pn) | kW | 12 | 23 | 26 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 90 | 92 | 92 |
| Seasonal energy efficiency class of ambient heating | - | A | A | A |
| Nominal heat input (Qn) | kW | 12,0 | 23,7 | 26,4 |
| Reduced heat input (Qr) | kW | 2,0 | 3,0 | 3,3 |
| Nominal heat output (80-60°C) (Pn) | kW | 11,7 | 22,8 | 25,5 |
| Reduced heat output (80-60°C) (Pr) | kW | 1,8 | 2,8 | 3,1 |
| Heat output (50-30°C) | kW | 12,6 | 24,9 | 28,0 |
| Reduced heat output (50-30°C) | kW | 2,1 | 3,2 | 3,5 |
| Useful efficiency at nominal input (80-60°C) | % | 97,1 | 96,3 | 96,7 |
| Useful efficiency at nominal input (50-30°C) | % | 105,1 | 105,1 | 105,9 |
| Useful efficiency at 30% (30°C return) | % | 106,0 | 107,2 | 107,5 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 | 20-78 |
| CH maximum working temperature | °C | 83 | 83 | 83 |
| Heating expansion vessel capacity | l | 9 | 9 | 9 |
| DHW nominal heat input | kW | 18,0 | 27,3 | 30,4 |
| DHW minimum heat input | kW | 2,0 | 3,0 | 3,3 |
| DHW nominal heat output (ΔT 30°C) | kW | 18,4 | 27,4 | 29,2 |
| DHW temperature range | °C | 35-65 (*) | 35-65 (*) | 35-65 (*) |
| DHW maximum working temperature | °C | 65 (*) | 65 (*) | 65 (*) |
| NOx emission class | - | 6 | 6 | 6 |
| Casing heat loss with burner on at nominal heat input | % | 0,26 | 1.28 | 1.11 |
| Casing heat loss with burner off | % | 0,55 | 0,26 | 0.27 |
| Chimney heat loss with burner on at nominal heat input | % | 2,64 | 2.45 | 2.19 |
| Air-flue ΔT at nominal heat input | °C | 57,9 | 61 | 60 |
| Flue gas flow at nominal heat input | g/s | 8,25 | 12,43 | 13,93 |
| CO2 at nominal heat input of heating (Natural gas) | % | 9 | 9 | 9 |
| CO2 at nominal heat input of heating (Propane) | % | 10 | 10 | 10 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 75 | 83 | 84 |
| Circulation pump power input (ERP) | W | 41 | 41 | 41 |
| Electric protection rating | IP | IPX4D | IPX4D | IPX4D |
| Air intake/flue gas vent pipe diameter | mm | 80+80<br>100/60 | 80+80<br>100/60 | 80+80<br>100/60 |

(*) with water heater probe connected

# TECHNICAL SPECIFICATIONS OF CONDENSING BOILERS

| Technical specifications | um | Minorca |
|---|---|---|
| Model | - | KC 24 |
| Type | - | B23-B23P-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X |
| Seasonal energy efficiency of ambient heating (ηs) V version | % | A |
| Seasonal energy efficiency of ambient heating (ηs) Z version | % | XL |
| Seasonal energy efficiency class of ambient heating | - | 85 |
| Water heating energy efficiency (ηwh) V version | % | A |
| Nominal heat input (Qn) | kW | 20,0 |
| Reduced heat input (Qr) | kW | 5,0 |
| Nominal heat output (80-60°C) (Pn) | kW | 19,5 |
| Reduced heat output (80-60°C) (Pr) | kW | 4,8 |
| Heat output (50-30°C) | kW | 21,0 |
| Reduced heat output (50-30°C) | kW | 5,4 |
| Useful efficiency at nominal input (80-60°C) | % | 97,3 |
| Useful efficiency at nominal input (50-30°C) | % | 105,3 |
| Useful efficiency at 30% (30°C return) | % | 109,6 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 |
| CH maximum working temperature | °C | 83 |
| Heating expansion vessel capacity | l | 7 |
| DHW nominal heat input | kW | 24,0 |
| DHW minimum heat input | kW | 5,0 |
| DHW nominal heat output (ΔT 30°C) | kW | 23,4 |
| DHW circuit working pressure (min-max) | bar | 0,5-6,0 |
| Specific DHW flow ΔT=25K | l/min | 14,6 |
| Specific DHW flow ΔT=30K | l/min | 12,2 |
| Qualification of domestic hot water | - | * * |
| DHW temperature range | °C | 35-57 |
| DHW maximum working temperature | °C | 62 |
| NOx emission class | - | 6 |
| Casing heat loss with burner on at nominal heat input | % | 0,64 |
| Casing heat loss with burner off | % | 0,255 |
| Chimney heat loss with burner on at nominal heat input | % | 2,06 |
| Air-flue ΔT at nominal heat input | °C | 47,7 |
| Flue gas flow at nominal heat input | g/s | 10,7 |
| CO2 at nominal heat input of heating (Natural gas) | % | 9,3 ± 0,3 |
| CO2 at nominal heat input of heating (Propane) | % | 10.0 ± 0.3 |
| Power supply voltage/frequency | V/Hz | 230/50 |
| Maximum power consumption (ERP) | W | 85 |
| Circulation pump power input (ERP) | W | 41 |
| Electric protection rating | IP | IPX4D |
| Air intake/flue gas vent pipe diameter | mm | 80+80<br>100/60 |

# TECHNICAL SPECIFICATIONS OF CONDENSING BOILERS

| Technical specifications | um | Minorca |
|---|---|---|
| Model | - | KR 24 |
| Type | - | B23-B23P-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X |
| Seasonal energy efficiency of ambient heating (ηs) V version | % | A |
| Nominal heat input (Qn) | kW | 20,0 |
| Reduced heat input (Qr) | kW | 5,0 |
| Nominal heat output (80-60°C) (Pn) | kW | 19,5 |
| Reduced heat output (80-60°C) (Pr) | kW | 4,8 |
| Heat output (50-30°C) | kW | 21,0 |
| Reduced heat output (50-30°C) | kW | 5,4 |
| Useful efficiency at nominal input (80-60°C) | % | 97,3 |
| Useful efficiency at nominal input (50-30°C) | % | 105,3 |
| Useful efficiency at 30% (30°C return) | % | 109,6 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 |
| CH maximum working temperature | °C | 83 |
| Heating expansion vessel capacity | l | 7 |
| DHW nominal heat input | kW | 24,0 |
| DHW minimum heat input | kW | 5,0 |
| DHW nominal heat output (ΔT 30°C) | kW | 23,4 |
| DHW temperature range | °C | 35-65 (*) |
| DHW maximum working temperature | °C | 65 (*) |
| NOx emission class | - | 6 |
| Casing heat loss with burner on at nominal heat input | % | 0,64 |
| Casing heat loss with burner off | % | 0,255 |
| Chimney heat loss with burner on at nominal heat input | % | 2,06 |
| Air-flue ΔT at nominal heat input | °C | 47,7 |
| Flue gas flow at nominal heat input | g/s | 10,7 |
| CO2 at nominal heat input of heating (Natural gas) | % | 9,3 ± 0,3 |
| CO2 at nominal heat input of heating (Propane) | % | 10.0 ± 0.3 |
| Power supply voltage/frequency | V/Hz | 230/50 |
| Maximum power consumption (ERP) | W | 85 |
| Circulation pump power input (ERP) | W | 41 |
| Electric protection rating | IP | IPX4D |
| Air intake/flue gas vent pipe diameter | mm | 80+80<br>100/60 |

(*) with water heater probe connected

# TECHNICAL SPECIFICATIONS OF CONDENSING BOILERS

| Technical specifications | um | Minorca |
|---|---|---|
| Model | - | KRB 24 |
| Type | - | B23-B23P-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X |
| Seasonal energy efficiency of ambient heating (ηs) V version | % | A |
| Nominal heat input (Qn) | kW | 20,0 |
| Reduced heat input (Qr) | kW | 5,0 |
| Nominal heat output (80-60°C) (Pn) | kW | 19,5 |
| Reduced heat output (80-60°C) (Pr) | kW | 4,8 |
| Heat output (50-30°C) | kW | 21,0 |
| Reduced heat output (50-30°C) | kW | 5,4 |
| Useful efficiency at nominal input (80-60°C) | % | 97,3 |
| Useful efficiency at nominal input (50-30°C) | % | 105,3 |
| Useful efficiency at 30% (30°C return) | % | 109,6 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 |
| CH maximum working temperature | °C | 83 |
| Heating expansion vessel capacity | l | 7 |
| DHW nominal heat input | kW | 24,0 |
| DHW minimum heat input | kW | 5,0 |
| DHW nominal heat output (ΔT 30°C) | kW | 23,4 |
| DHW temperature range | °C | 35-65 (*) |
| DHW maximum working temperature | °C | 65 (*) |
| NOx emission class | - | 6 |
| Casing heat loss with burner on at nominal heat input | % | 0,64 |
| Casing heat loss with burner off | % | 0,255 |
| Chimney heat loss with burner on at nominal heat input | % | 2,06 |
| Air-flue ΔT at nominal heat input | °C | 47,7 |
| Flue gas flow at nominal heat input | g/s | 10,7 |
| CO2 at nominal heat input of heating (Natural gas) | % | 9,3 ± 0,3 |
| CO2 at nominal heat input of heating (Propane) | % | 10.0 ± 0.3 |
| Power supply voltage/frequency | V/Hz | 230/50 |
| Maximum power consumption (ERP) | W | 85 |
| Circulation pump power input (ERP) | W | 41 |
| Electric protection rating | IP | IPX4D |
| Air intake/flue gas vent pipe diameter | mm | 80+80<br>100/60 |

(*) with water heater probe connected

# TECHNICAL SPECIFICATIONS OF CONDENSING BOILERS

| Technical specifications | um | Itaca | Itaca | Itaca | Itaca | Itaca |
|---|---|---|---|---|---|---|
| Model | - | CH KR 45 | CH KR 60 | CH KR 85 | CH KR 120 | CH KR 150 |
| Type | - | C13-C33-C43-C53-C63-C83-C93-C13X-C33X-C43X-C63X-C93X-B23-B23P-C(10)-C(11) | C13-C33-C43-C53-C63-C83-C93-C13X-C33X-C43X-C63X-C93X-B23-B23P-C(10)-C(11) | C13-C33-C43-C53-C63-C83-C93-C13X-C33X-C43X-C63X-C93X-B23-B23P-C(10)-C(11) | C13-C33-C43-C53-C63-C83-C93-C13X-C33X-C43X-C63X-C93X-B23-B23P-C(10)-C(11) | C13-C33-C43-C53-C63-C83-C93-C13X-C33X-C43X-C63X-C93X-B23-B23P-C(10)-C(11) |
| Nominal heat output (Pn) | kW | 39 | 58 | 78 | 111 | 136 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 92 | 93 | 93 | 93 | 93 |
| Seasonal energy efficiency class of ambient heating | - | A | A | - | - | - |
| Nominal heat input (Qn) | kW | 40,0 | 60,0 | 81,0 | 115,0 | 140,0 |
| Reduced heat input (Qr) | kW | 4,0 | 6,0 | 9,0 | 11,5 | 22,5 |
| Nominal heat output (80-60°C) (Pn) | kW | 38,5 | 58,3 | 77,8 | 111,3 | 135,7 |
| Reduced heat output (80-60°C) (Pr) | kW | 3,8 | 5,8 | 8,5 | 11,1 | 21,6 |
| Heat output (50-30°C) | kW | 41,5 | 62,8 | 84,8 | 122,0 | 148,7 |
| Reduced heat output (50-30°C) | kW | 4,3 | 6,5 | 9,7 | 12,4 | 23,9 |
| Useful efficiency at nominal input (80-60°C) | % | 97,1 | 97,1 | 96,1 | 96,8 | 96,9 |
| Useful efficiency at nominal input (50-30°C) | % | 105,3 | 104,6 | 104,8 | 106,1 | 106,2 |
| Useful efficiency at 30% (30°C return) | % | 108,2 | 108,4 | 108,3 | 108,6 | 108,4 |
| Heating circuit working pressure (min-max) | bar | 3 | 3.5 | 5 | 5 | 5 |
| CH temperature setting range | °C | 20-85 | 20-85 | 20-85 | 20-85 | 20-85 |
| CH maximum working temperature | °C | 90 | 90 | 90 | 90 | 90 |
| DHW nominal heat input | kW | 40,0 | 60,0 | 81,0 | 115,0 | 140,0 |
| DHW minimum heat input | kW | 4,0 | 6,0 | 9,0 | 11,5 | 22,5 |
| DHW nominal heat output (ΔT 30°C) | kW | 38,5 | 58,3 | 77,8 | 111,3 | 135,7 |
| NOx emission class | - | 6 | 6 | 6 | 6 | 6 |
| Casing heat loss with burner on at nominal heat input | % | 0,15 | 0.25 | 1.12 | 0.6 | 0.76 |
| Casing heat loss with burner off | % | 0.21 | 0.17 | 0.141 | 0.084 | 0.09 |
| Chimney heat loss with burner on at nominal heat input | % | 2,80 | 2.65 | 2.8 | 2.59 | 2.34 |
| Air-flue ΔT at nominal heat input | °C | 57 | 57 | 45.3 | 54 | 52.6 |
| Flue gas flow at nominal heat input | g/s | 18,98 | 27,25 | 37,2 | 52,7 | 64,2 |
| CO2 at nominal heat input of heating (Natural gas) | % | 9.2 | 9.1 | 9 | 9 | 9 |
| CO2 at nominal heat input of heating (Propane) | % | 10.3 | 10.3 | 10 | 10.2 | 10.2 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 | 230/50 | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 94 | 119 | 156 | 251 | 310 |
| Electric protection rating | IP | X4D | X4D | X4D | X4D | X4D |
| Air intake/flue gas vent pipe diameter | mm | 80+80<br>80/125 | 80+80<br>80/125 | 80+80<br>80/125 | 100+100<br>100/150 | 100+100<br>100/150 |

(*) with water heater probe connected
(**) with comfort function disabled.

# TECHNICAL SPECIFICATIONS OF CONDENSING BOILERS

| Technical specifications | um | Giava | Giava | Giava | Giava |
|---|---|---|---|---|---|
| Model | - | KRB 12 | KRB 24 | KRB 28 | KRB 32 |
| Type | - | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X |
| Nominal heat output (Pn) | kW | 12 | 23 | 25 | 29 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 90 | 91 | 91 | 92 |
| Seasonal energy efficiency of ambient heating (ηs) V version | % | 90 | 91 | 91 | 91 |
| Seasonal energy efficiency of ambient heating (ηs) Z version | % | 90 | 91 | 91 | 91 |
| Seasonal energy efficiency class of ambient heating | - | A | A | A | A |
| Stated load profile | - | XL | XL | XL | XL |
| Water heating energy efficiency (ηwh) | % | 83 | 80 | 82 | 81 |
| Water heating energy efficiency (ηwh) V version | % | 83 | 80 | 82 | 81 |
| Water heating energy efficiency (ηwh) Z version | % | 83 | 80 | 82 | 80 |
| Energy efficiency class of water heating | - | A | A | A | A |
| Nominal heat input (Qn) | kW | 12,0 | 23,7 | 26,4 | 30,4 |
| Reduced heat input (Qr) | kW | 2,0 | 3,0 | 3,3 | 4,2 |
| Nominal heat output (80-60°C) (Pn) | kW | 11,6 | 22,9 | 25,4 | 29,4 |
| Reduced heat output (80-60°C) (Pr) | kW | 1,8 | 2,7 | 3,0 | 3,9 |
| Heat output (50-30°C) | kW | 12,6 | 24,9 | 27,9 | 32,3 |
| Reduced heat output (50-30°C) | kW | 2,1 | 3,22 | 3,58 | 4,4 |
| Useful efficiency at nominal input (80-60°C) | % | 97,1 | 96,7 | 96,4 | 96,8 |
| Useful efficiency at nominal input (50-30°C) | % | 105,1 | 105,1 | 105,5 | 106,2 |
| Useful efficiency at 30% (30°C return) | % | 106,0 | 106,5 | 107,0 | 108,3 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 | 20-78 | 20-78 |
| CH maximum working temperature | °C | 83 | 83 | 83 | 83 |
| Heating expansion vessel capacity | l | 10 | 10 | 10 | 10 |
| DHW expansion vessel capacity | l | 5 | 5 | 5 | 5 |
| DHW nominal heat input | kW | 18,0 | 27,3 | 30,4 | 34,5 |
| DHW minimum heat input | kW | 2,0 | 3,0 | 3,3 | 4,2 |
| DHW nominal heat output (ΔT 30°C) | kW | 17,5 | 26,8 | 29,3 | 33,4 |
| DHW circuit working pressure (min-max) | bar | 0,5-6,0 | 0,5-6,0 | 0,5-6,0 | 0,5-6,0 |
| Specific DHW flow ΔT=25K | l/min | 23,4 | 26,4 | 27 | 28,1 |
| Specific DHW flow ΔT=30K | l/min | 19,5 | 22 | 22,5 | 23,4 |
| Qualification of domestic hot water | - | *** | *** | *** | *** |
| DHW temperature range | °C | 35-65 | 35-65 | 35-65 | 35-65 |
| DHW maximum working temperature | °C | 65 | 65 | 65 | 65 |
| NOx emission class | - | 6 | 6 | 6 | 6 |
| Casing heat loss with burner on at nominal heat input | % | 0,40 | 0,61 | 1,13 | 0,87 |
| Casing heat loss with burner off | % | 0,53 | 0,21 | 0,2 | 0,19 |
| Chimney heat loss with burner on at nominal heat input | % | 2,50 | 2,69 | 2,47 | 2,33 |
| Air-flue ΔT at nominal heat input | °C | 57,9 | 61 | 60 | 60 |
| Flue gas flow at nominal heat input | g/s | 8,25 | 12,43 | 13,93 | 15,81 |
| CO2 at nominal heat input of heating (Natural gas) | % | 9 | 9 | 9 | 9 |
| CO2 at nominal heat input of heating (Propane) | % | 10 | 10 | 10 | 10 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 80 | 88 | 90 | 98 |
| Maximum power absorption - version V (ERP) | W | 164 | 172 | 175 | 183 |
| Maximum power absorption - version Z (ERP) | W | 213 | 221 | 224 | 232 |
| Circulation pump power input (ERP) | W | 46 | 46 | 46 | 46 |
| Electric protection rating | IP | IPX5D | IPX5D | IPX5D | IPX5D |
| Air intake/flue gas vent pipe diameter | mm | 80+80<br>100/60 | 80+80<br>100/60 | 80+80<br>100/60 | 80+80<br>100/60 |

# TECHNICAL SPECIFICATIONS OF CONDENSING BOILERS

| Technical specifications | um | Madeira Solar | Madeira Solar | Madeira Solar | Madeira Solar |
|---|---|---|---|---|---|
| Model | - | KRBS 12 | KRBS 24 | KRBS 28 | KRBS 32 |
| Type | - | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X |
| Nominal heat output (Pn) | kW | 12 | 23 | 25 | 29 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 90 | 91 | 91 | 93 |
| Seasonal energy efficiency of ambient heating (ηs) V version | % | 90 | 91 | 91 | 93 |
| Seasonal energy efficiency of ambient heating (ηs) Z version | % | 90 | 91 | 91 | 92 |
| Seasonal energy efficiency class of ambient heating | - | A | A | A | A |
| Stated load profile | - | XXL | XXL | XXL | XXL |
| Water heating energy efficiency (ηwh) | % | 91 | 91 | 91 | 89 |
| Water heating energy efficiency (ηwh) V version | % | 90 | 91 | 91 | 88 |
| Water heating energy efficiency (ηwh) Z version | % | 90 | 90 | 90 | 88 |
| Energy efficiency class of water heating | - | A | A | A | A |
| Nominal heat input (Qn) | kW | 12,0 | 23,7 | 26,4 | 30,4 |
| Reduced heat input (Qr) | kW | 2,0 | 3,0 | 3,3 | 4,2 |
| Nominal heat output (80-60°C) (Pn) | kW | 11,6 | 22,9 | 25,4 | 29,4 |
| Reduced heat output (80-60°C) (Pr) | kW | 1,8 | 2,7 | 3,0 | 3,9 |
| Heat output (50-30°C) | kW | 12,6 | 24,9 | 27,9 | 32,3 |
| Reduced heat output (50-30°C) | kW | 2,1 | 3,22 | 3,58 | 4,4 |
| Useful efficiency at nominal input (80-60°C) | % | 97,1 | 96,7 | 96,4 | 96,8 |
| Useful efficiency at nominal input (50-30°C) | % | 105,1 | 105,1 | 105,5 | 106,2 |
| Useful efficiency at 30% (30°C return) | % | 106,0 | 106,5 | 107,0 | 108,3 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 | 20-78 | 20-78 |
| CH maximum working temperature | °C | 83 | 83 | 83 | 83 |
| Heating expansion vessel capacity | l | 10 | 10 | 10 | 10 |
| DHW expansion vessel capacity | l | 12 | 12 | 12 | 12 |
| Solar expansion vessel capacity | l | 18 | 18 | 18 | 18 |
| DHW nominal heat input | kW | 18,0 | 27,3 | 30,4 | 34,5 |
| DHW minimum heat input | kW | 2,0 | 3,0 | 3,3 | 4,2 |
| DHW nominal heat output (ΔT 30°C) | kW | 17,5 | 26,8 | 29,3 | 33,4 |
| DHW circuit working pressure (min-max) | bar | 0,5-6,0 | 0,5-6,0 | 0,5-6,0 | 0,5-6,0 |
| Specific DHW flow ΔT=25K | l/min | 28,3 | 28,3 | 30,4 | 31,6 |
| Specific DHW flow ΔT=30K | l/min | 23,6 | 23,6 | 25,3 | 26,3 |
| Qualification of domestic hot water | - | *** | *** | *** | *** |
| DHW temperature range | °C | 35-65 | 35-65 | 35-65 | 35-65 |
| DHW maximum working temperature | °C | 65 | 65 | 65 | 65 |
| NOx emission class | - | 6 | 6 | 6 | 6 |
| Casing heat loss with burner on at nominal heat input | % | 0,40 | 0,61 | 1,13 | 0,87 |
| Casing heat loss with burner off | % | 0,53 | 0,21 | 0,20 | 0,19 |
| Chimney heat loss with burner on at nominal heat input | % | 2,50 | 2,69 | 2,47 | 2,33 |
| Air-flue ΔT at nominal heat input | °C | 57,9 | 61 | 60 | 60 |
| Flue gas flow at nominal heat input | g/s | 8,25 | 12,43 | 13,93 | 15,81 |
| CO2 at nominal heat input of heating (Natural gas) | % | 9 | 9 | 9 | 9 |
| CO2 at nominal heat input of heating (Propane) | % | 10 | 10 | 10 | 10 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 95 | 103 | 106 | 114 |
| Maximum power absorption - version V (ERP) | W | 181 | 189 | 191 | 199 |
| Maximum power absorption - version Z (ERP) | W | 230 | 238 | 240 | 199 |
| Circulation pump power input (ERP) | W | 46 | 46 | 46 | 46 |
| Electric protection rating | IP | IPX5D | IPX5D | IPX5D | IPX5D |
| Air intake/flue gas vent pipe diameter | mm | 80+80<br>100/60 | 80+80<br>100/60 | 80+80<br>100/60 | 80+80<br>100/60 |

# TECHNICAL SPECIFICATIONS OF CONDENSING BOILERS

| Technical specifications | um | Madeira Solar Compact | Madeira Solar Compact |
|---|---|---|---|
| Model | - | KBS 24 | KBS 32 |
| Type | - | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X | B23-B23P-B33-C13-C33-C43-C53-C63-C83-C13X-C33X-C43X-C53X-C63X-C83X-C93-C93X |
| Nominal heat output (Pn) | kW | 23 | 29 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 91 | 93 |
| Seasonal energy efficiency of ambient heating (ηs) V version | % | 91 | 93 |
| Seasonal energy efficiency of ambient heating (ηs) Z version | % | 91 | 92 |
| Seasonal energy efficiency class of ambient heating | - | A | A |
| Stated load profile | - | XL | XXL |
| Water heating energy efficiency (ηwh) | % | 85 (**) | 87 (**) |
| Water heating energy efficiency (ηwh) V version | % | 84 (**) | 87 (**) |
| Water heating energy efficiency (ηwh) Z version | % | 84 (**) | 86 (**) |
| Energy efficiency class of water heating | - | A | A |
| Nominal heat input (Qn) | kW | 23,7 | 30,4 |
| Reduced heat input (Qr) | kW | 3,0 | 4,2 |
| Nominal heat output (80-60°C) (Pn) | kW | 22,9 | 29,4 |
| Reduced heat output (80-60°C) (Pr) | kW | 2,7 | 3,9 |
| Heat output (50-30°C) | kW | 24,9 | 32,3 |
| Reduced heat output (50-30°C) | kW | 3,22 | 4,4 |
| Useful efficiency at nominal input (80-60°C) | % | 96,7 | 96,8 |
| Useful efficiency at nominal input (50-30°C) | % | 105,1 | 106,2 |
| Useful efficiency at 30% (30°C return) | % | 106,5 | 108,3 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 20-78 | 20-78 |
| CH maximum working temperature | °C | 83 | 83 |
| Heating expansion vessel capacity | l | 10 | 10 |
| DHW expansion vessel capacity | l | 12 | 12 |
| Solar expansion vessel capacity | l | 12 | 12 |
| DHW nominal heat input | kW | 27,3 | 34,5 |
| DHW minimum heat input | kW | 3,0 | 4,2 |
| DHW nominal heat output (ΔT 30°C) | kW | 27,4 | 33,4 |
| DHW circuit working pressure (min-max) | bar | 0,5-6,0 | 0,5-6,0 |
| Specific DHW flow ΔT=25K | l/min | 16,1 | 19,4 |
| Specific DHW flow ΔT=30K | l/min | 13,4 | 16,2 |
| Qualification of domestic hot water | - | *** | *** |
| DHW temperature range | °C | 35-65 | 35-65 |
| DHW maximum working temperature | °C | 65 | 65 |
| NOx emission class | - | 6 | 6 |
| Casing heat loss with burner on at nominal heat input | % | 0,61 | 0,87 |
| Casing heat loss with burner off | % | 0,21 | 0,19 |
| Chimney heat loss with burner on at nominal heat input | % | 2,69 | 2,33 |
| Air-flue ΔT at nominal heat input | °C | 61 | 60 |
| Flue gas flow at nominal heat input | g/s | 12,43 | 15,81 |
| CO2 at nominal heat input of heating (Natural gas) | % | 9 | 9 |
| CO2 at nominal heat input of heating (Propane) | % | 10 | 10 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 105 | 115 |
| Maximum power absorption - version V (ERP) | W | 189 | 199 |
| Maximum power absorption - version Z (ERP) | W | 238 | 249 |
| Circulation pump power input (ERP) | W | 46 | 46 |
| Electric protection rating | IP | IPX5D | IPX5D |
| Air intake/flue gas vent pipe diameter | mm | 80+80<br>100/60 | 80+80<br>100/60 |

(**) with comfort function disabled.

# ATMOSPHERIC BOILERS

## WALL-HUNG BOILERS <35KW



## BASE-PLATE BOILERS FOR BLOWN-AIR BURNERS



## BURNERS



## FUEL OVERVIEW



## TECHNICAL SPECIFICATIONS OF ATMOSPHERIC BOILERS

# FORMENTERA PRO CTN

WALL-HUNG GAS BOILER WITH OPEN CHAMBER AND NATURAL DRAUGHT WITH INSTANT DHW PRODUCTION AND LOW NOX EMISSIONS

- **Water-cooled hyper-stoichiometric atmospheric gas burner with low NOx emissions**
- **Controls to manage two different types of thermal solar systems fitted as standard**
- **Ambient temperature can be set from the boiler if an external probe is installed**
- **NTC temperature probe on flow and return lines**
- **26-plate DHW heat exchanger**
- Multifunction relay for connection to systems with zone valves or to solar plant or to remote alarm signal
- Installation flexibility thanks to IPX5D electrical protection degree
- Mono-thermal primary heat exchanger
- Virtual room temperature control with weather compensation via external temperature probe (option)
- Heating expansion vessel - 7 litres
- By-pass

**Available in the following models:**

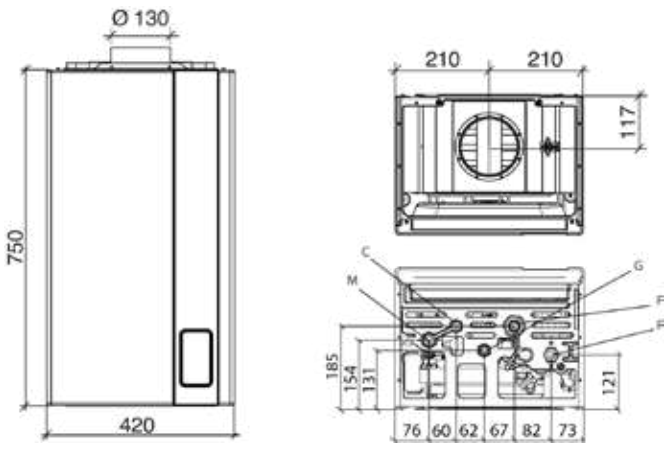
24 28

**TOUCH SCREEN INTERFACE**

- *User interface Touch screen*
- *DHW and heating temperature setting*
- *Operating mode setting*
- *Thermal solar plant status display*

| Model | Gas type | Code | Heat output (kW) | | Energy efficiency class | | W x H x D (mm) | Gross weight (Kg) |
|---|---|---|---|---|---|---|---|---|
| | | | Nominal Pn | DHW (ΔT 30°C) | Room heating | Heating DHW | | |
| **PRO CTN 24** | NATURAL GAS | KFNXX2CN24 | 23,4 | 23,4 | C | B XL | 420x750x315 | 35,5 |
| | PROPANE | KFNXX6CN24 | | | | | | |
| **PRO CTN 28** | NATURAL GAS | KFNXX2CN28 | 26,9 | 26,9 | C | B XL | 420x750x315 | 36,00 |
| | PROPANE | KFNXX6CN28 | | | | | | |

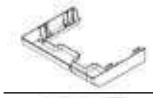
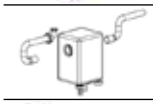
## DIMENSIONS AND CONNECTION CENTRE DISTANCES




**M** CH system flow (3/4")
**C** DHW outlet (1\2")
**G** Gas inlet (1/2")
**F** Cold water inlet (1/2")
**R** CH system return (3/4")

| Technical specifications | um | PRO CTN 24 | PRO CTN 28 |
|---|---|---|---|
| Nominal heat output (Pn) | kW | 23 | 27 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 80 | 79 |
| Water heating energy efficiency (ηwh) | % | 76 | 74 |
| Nominal heat input (Qn) | kW | 25,5 | 29,5 |
| Nominal heat output (80-60°C) (Pn) | kW | 23,4 | 26,9 |
| Useful efficiency at nominal input (80-60°C) | % | 91,7 | 91,1 |
| Useful efficiency at 30% (30°C return) | % | 93,9 | 93,2 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 35-78 | 35-78 |
| Heating expansion vessel capacity | l | 7 | 7 |
| DHW circuit working pressure (min-max) | bar | 0,5-6,0 | 0,5-6,0 |
| Specific DHW flow ΔT=30K | l/min | 11,3 | 12,5 |
| DHW temperature range | °C | 35-57 | 35-57 |
| NOx emission class | - | 6 | 6 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 57 | 56 |
| Electric protection rating | IP | X5D | X5D |

For other technical specifications, see from page 90 - Maximum length of flue gas venting, see page 124

| Item | Description | Code |
|---|---|---|
|  | Pipes and taps cover | 0COPETUB03 |
|  | Remote control, ErP V class (118x85x32 mm) | 0CREMOTO04 |
|  | Hydrocyclonic and magnetic filter ¾"(3,000 l/hour) | 0FILTIMP00 |
|  | Dirt separator kit | 0KITDEFA00 |
|  | Flow - return cold water 90° taps kit | 0KITIDBA11 |
|  | Tap kit with filter | 0KITRUBI04 |

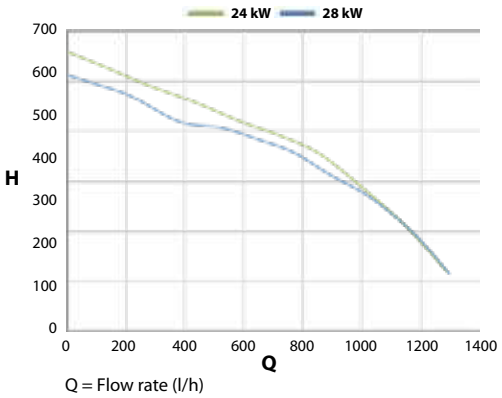
| Item | Description | Code |
|---|---|---|
|  | Electric kit for complex solar plant management | 0KITSOLC08 |
|  | Electrical kit for zone management with external probe | 0KITZONE05 |
|  | Protective liquid for domestic mixed metal plants (0.5 l bottle) | 0PROTIMP00 |
|  | Universal mild cleaning product (0.5 l bottle) | 0PROTIMP01 |
|  | Temperature probe for solar plants | PSPTMILL00 |

For other accessories, see from page 123

## How to increase energy efficiency?

Discover the most suitable solution

| Regulation device | | Code | PRO CTN 24 | PRO CTN 28 |
|---|---|---|---|---|
| **Option 1** | External probe | **0SONDAES01** | 79% | 78% |
| **Option 2** | Ambient probe | **0SONDAMB02** | 79% | 78% |
| **Option 3** | Remote control | **0CREMOTO04** | 80% | 79% |
| **Option 4** | Remote control and external probe | **0CREMOTO04** + **0SONDAES01** | 81% | 80% |




Q = Flow rate (l/h)
H = Available head (mbar)

# ANTEA PRO CTN

WALL-HUNG GAS BOILER WITH OPEN CHAMBER AND NATURAL DRAUGHT WITH INSTANT DHW PRODUCTION AND LOW NOX EMISSIONS

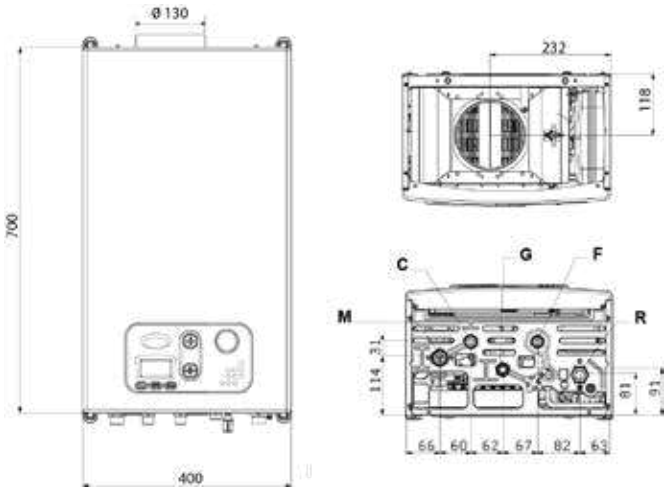
- **Water-cooled hyper-stoichiometric atmospheric gas burner with low NOx emissions**
- **Ultra-compact size**
- **LCD user interface with diagnostics**
- **Ambient temperature can be set from the boiler if an external probe is installed**
- **Mono-thermal primary heat exchanger**
- Heating expansion vessel - 7 litres
- Multifunction relay for connection to systems with zone valves or to solar plant or to remote alarm signal
- Stainless steel plate DHW heat exchanger
- Hydraulic unit in composite material
- Anti-fast, anti-freeze, pump anti-seizing, pump post-circulation and flue cleaning functions
- NTC temperature probe on flow and return lines
- Ready for connection to remote control

**Available in the following models:**

24

| Model | Gas type | Code | Heat output (kW) | | Energy efficiency class | | W x H x D (mm) | Gross weight (Kg) |
|---|---|---|---|---|---|---|---|---|
| | | | Nominal Pn | DHW (ΔT 30°C) | Room heating | Heating DHW | | |
| **PRO CTN 24** | NATURAL GAS<br>PROPANE | KAHXX2CN24<br>KAHXX6CN24 | 22,3 | 22,3 | C | B XL | 400x700x250 | 25,5 |

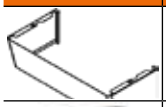
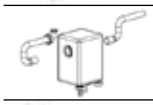
## DIMENSIONS AND CONNECTION CENTRE DISTANCES




**M** CH system flow (3/4")
**C** DHW outlet (1\2")
**G** Gas inlet (1/2")
**F** Cold water inlet (1/2")
**R** CH system return (3/4")

| Technical specifications | um | PRO CTN 24 |
|---|---|---|
| Nominal heat output (Pn) | kW | 22 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 80 |
| Water heating energy efficiency (ηwh) | % | 77 |
| Nominal heat input (Qn) | kW | 24,5 |
| Nominal heat output (80-60°C) (Pn) | kW | 22,3 |
| Useful efficiency at nominal input (80-60°C) | % | 91,2 |
| Useful efficiency at 30% (30°C return) | % | 93,2 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 |
| CH temperature setting range | °C | 35-78 |
| Heating expansion vessel capacity | l | 7 |
| DHW circuit working pressure (min-max) | bar | 0,5-6,0 |
| Specific DHW flow ΔT=30K | l/min | 9,3 |
| DHW temperature range | °C | 35-57 |
| NOx emission class | - | 6 |
| Power supply voltage/frequency | V/Hz | 230/50 |
| Maximum power consumption (ERP) | W | 57 |
| Electric protection rating | IP | X4D |

For other technical specifications, see from page 91 - Maximum length of flue gas venting, see page 124

| Item | Description | Code |
|---|---|---|
|  | Compact wall pipe cover | 0COPETUB00 |
|  | Remote control, ErP V class (118x85x32 mm) | 0CREMOTO04 |
|  | Dirt separator kit | 0KITDEFA00 |
|  | Flow - return cold water 90° taps kit | 0KITIDBA11 |
|  | Basic hydr. kit for basic compact unit | 0KITIDBA13 |
|  | Plus hydr. kit for basic compact unit | 0KITIDBA14 |

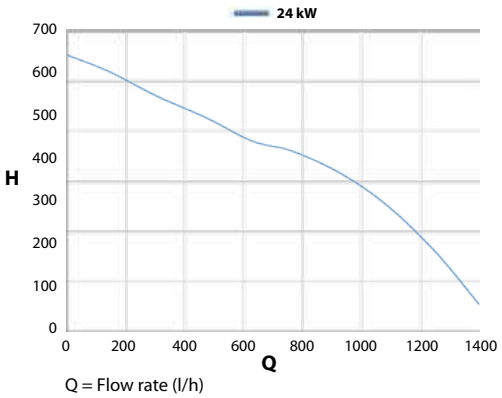
| Item | Description | Code |
|---|---|---|
|  | Tap kit with filter | 0KITRUBI04 |
|  | Kit for connection to solar plant | 0KITSOLC07 |
|  | Electric kit for complex solar plant management | 0KITSOLC08 |
|  | Electrical kit for zone management with external probe | 0KITZONE05 |
|  | External probe (60x45x31 mm) | 0SONDAES01 |

For other accessories, see from page 123

## How to increase energy efficiency?

Discover the most suitable solution

| Regulation device | | Code | PRO CTN 24 |
|---|---|---|---|
| **Option 1** | External probe | **0SONDAES01** | 78% |
| **Option 2** | Ambient probe | **0SONDAMB02** | 78% |
| **Option 3** | Remote control | **0CREMOTO04** | 79% |
| **Option 4** | Remote control and external probe | **0CREMOTO04** + **0SONDAES01** | 80% |




Q = Flow rate (l/h)
H = Available head (mbar)

# RODI DUAL 70-1300

CH ONLY BASE-PLATE BOILER

FOR OPERATION WITH DIESEL AND GAS BLOWN AIR BURNERS ONLY

- **Flue gas pipes boiler body in steel with flame inversion furnace**
- **Very thick steel flue gas pipes and with helical turbulators**
- **Front door with reversible opening**
- Maximum operating pressure: 6 bar, higher pressure values available upon request
- Control and management electric panel (to be ordered separately) in the standard version (C) with two-stage burner control, heating circulation pump control, recirculation pump control, external water heater pre-setting, operating and alarm signals; moreover the multi-zone version (PC) is equipped with a control for three zone pumps
- Rear door that can be opened for flue gas pipe inspection and cleaning
- Casings in powder coated metal sheet

Boiler models from HR 70 to HR 350 cannot be used for room heating pursuant to the Erp Directive.

**Available in the following models:**

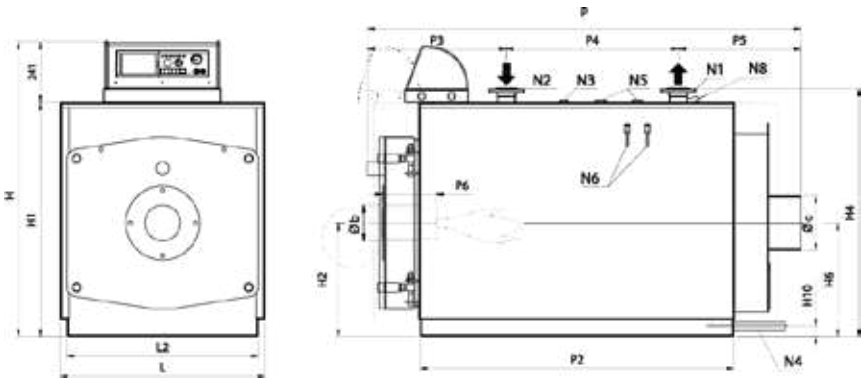
da 70 a 1300

| Model | Code | Power | | W x H x D (mm) | Gross weight (Kg) |
|---|---|---|---|---|---|
| | | max (kW) | min (kW) | | |
| **70** | * | 70 | 35 | 750x1030x1055 | 216 |
| **80** | * | 80 | 40 | 750x1030x1055 | 216 |
| **90** | * | 90 | 45 | 750x1030x1195 | 258 |
| **100** | * | 100 | 50 | 750x1030x1195 | 258 |
| **120** | * | 120 | 60 | 750x1030x1195 | 258 |
| **150** | * | 150 | 75 | 800x1080x1440 | 346 |
| **200** | * | 200 | 100 | 800x1080x1440 | 346 |
| **250** | * | 250 | 125 | 800x1180x1690 | 431 |
| **300** | * | 300 | 150 | 900x1180x1690 | 475 |
| **350** | * | 350 | 175 | 900x1180x1940 | 542 |
| **400** | CRPxxGNB4A | 420 | 210 | 940x1190x1872 | 584 |
| **500** | CRPxxGNB5A | 500 | 250 | 1160x1380x1950 | 853 |
| **620** | CRPxxGNB6C | 620 | 310 | 1160x1380x2240 | 963 |
| **750** | CRPxxGNB7F | 750 | 375 | 1290x1510x2255 | 1205 |
| **850** | CRPxxGNB8F | 850 | 425 | 1290x1510x2255 | 1205 |
| **950** | CRPxxGNB9F | 950 | 475 | 1290x1510x2500 | 1417 |
| **1020** | CRPxxGNB1K | 1020 | 510 | 1440x1660x2500 | 1843 |
| **1200** | CRPxxGNB1M | 1200 | 600 | 1440x1660x2500 | 1843 |
| **1300** | CRPxxGNB1N | 1300 | 650 | 1440x1660x2500 | 1843 |

N.B.: The electric panel is supplied separately and must be assembled by the installing technician

*** Codes are issued by the pre-sales department.**

## DIMENSIONS AND CONNECTION CENTRE DISTANCES




**N1** Boiler flow
**N2** Boiler return
**N3** Equipment connection
**N4** System filling and draining connection
**N5** Connection for safety valve/s
**N6** Bulb holders
**N8** Control holder

Electric panels

| Electric panels model 70 ÷ 1300 kW | Code |
|---|---|
| Standard electric panel 620 ÷ 1,300 C 30 | 0QUADELE24 |
| Multizone electric panel 620 ÷ 1,300 PC 30 | 0QUADELE25 |

| Model | Dimensions | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | H | H1 | H2 | H6 | H10 | L | L2 | P | P2 | P3 | P4 | P5 | P6 |
| | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm |
| 70 | 1030 | 855 | 415 | 415 | 54.5 | 750 | 700 | 1055 | 630 | 413 | 240 | 402 | 200-250 |
| 80 | 1030 | 855 | 415 | 415 | 54.5 | 750 | 700 | 1055 | 630 | 413 | 240 | 402 | 200-250 |
| 90 | 1030 | 855 | 415 | 415 | 54.5 | 750 | 700 | 1195 | 755 | 513 | 265 | 417 | 200-250 |
| 100 | 1030 | 855 | 415 | 415 | 54.5 | 750 | 700 | 1195 | 755 | 513 | 265 | 417 | 200-250 |
| 120 | 1030 | 855 | 415 | 415 | 54.5 | 750 | 700 | 1195 | 755 | 513 | 265 | 417 | 200-250 |
| 150 | 1080 | 905 | 440 | 440 | 54.5 | 800 | 750 | 1440 | 1000 | 513 | 475 | 452 | 200-250 |
| 200 | 1080 | 905 | 440 | 440 | 54.5 | 800 | 750 | 1440 | 1000 | 513 | 475 | 452 | 200-250 |
| 250 | 1180 | 1005 | 440 | 440 | 54.5 | 800 | 750 | 1690 | 1250 | 513 | 725 | 452 | 200-250 |
| 300 | 1180 | 1005 | 490 | 490 | 54.5 | 900 | 850 | 1690 | 1295 | 523 | 700 | 467 | 200-250 |
| 350 | 1180 | 1005 | 490 | 490 | 54.5 | 900 | 850 | 1940 | 1500 | 523 | 980 | 437 | 200-250 |
| 400 | 1190 | 1015 | 500 | 500 | 50 | 940 | 890 | 1872 | 1502 | 600 | 850 | 422 | 230-280 |
| 500 | 1380 | 1205 | 610 | 610 | 60 | 1160 | 1110 | 1950 | 1502 | 663 | 850 | 437 | 270-320 |
| 620 | 1380 | 1205 | 610 | 610 | 60 | 1160 | 1110 | 2240 | 1792 | 663 | 1150 | 427 | 270-320 |
| 750 | 1510 | 1335 | 675 | 675 | 60 | 1290 | 1240 | 2255 | 1753 | 704 | 1100 | 451 | 270-320 |
| 850 | 1510 | 1335 | 675 | 675 | 60 | 1290 | 1240 | 2255 | 1753 | 704 | 1100 | 451 | 270-320 |
| 950 | 1510 | 1335 | 675 | 675 | 60 | 1290 | 1240 | 2500 | 2003 | 704 | 1200 | 596 | 270-320 |
| 1020 | 1660 | 1485 | 750 | 750 | 60 | 1440 | 1390 | 2500 | 2003 | 704 | 1200 | 596 | 270-320 |
| 1200 | 1660 | 1485 | 750 | 750 | 60 | 1440 | 1390 | 2500 | 2003 | 704 | 1200 | 596 | 270-320 |
| 1300 | 1660 | 1485 | 750 | 750 | 60 | 1440 | 1390 | 2500 | 2003 | 704 | 1200 | 596 | 270-320 |

| Model | Connections | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Øb | ØC | N1 | N2 | N3 | N4 | N5 | N6 |
| | mm | mm | DN/in | DN/in | DN/in | in | in | in |
| 70 | 130 | 200 | 50 | 50 | 1″ | 1″ | | 1/2″ |
| 80 | 130 | 200 | 50 | 50 | 1″ | 1″ | | 1/2″ |
| 90 | 130 | 200 | 50 | 50 | 1″ | 1″ | | 1/2″ |
| 100 | 130 | 200 | 50 | 50 | 1″ | 1″ | | 1/2″ |
| 120 | 130 | 200 | 50 | 50 | 1″ | 1″ | | 1/2″ |
| 150 | 160 | 250 | 50 | 50 | 1″ | 1″ | | 1/2″ |
| 200 | 160 | 250 | 50 | 50 | 1″ | 1″ | | 1/2″ |
| 250 | 160 | 250 | 50 | 50 | 1″ | 1″ | | 1/2″ |
| 300 | 180 | 250 | 65 | 65 | 1″ | 1″ | | 1″1/2 |
| 350 | 180 | 250 | 65 | 65 | 1″ | 1″ | | 1″1/2 |
| 400 | 225 | 250 | 80 | 80 | 1″ | 1″ | 1″1/4 (1) | 1″1/2 |
| 500 | 225 | 300 | 80 | 80 | 1″ | 1″1/4 | 1″1/4 | 1″1/2 |
| 620 | 225 | 300 | 80 | 80 | 1″ | 1″1/4 | 1″1/4 | 1″1/2 |
| 750 | 280 | 350 | 100 | 100 | 1″ | 1″1/4 | 1″1/2 | 1″1/2 |
| 850 | 280 | 350 | 100 | 100 | 1″ | 1″1/4 | 1″1/2 | 1″1/2 |
| 950 | 280 | 350 | 100 | 100 | 1″ | 1″1/4 | 1″1/2 | 1″1/2 |
| 1020 | 280 | 400 | 125 | 125 | 1″ | 1″1/4 | 1″1/2 | 1″1/2 |
| 1200 | 280 | 400 | 125 | 125 | 1″ | 1″1/4 | 1″1/2 | 1″1/2 |
| 1300 | 280 | 400 | 125 | 125 | 1″ | 1″1/4 | 1″1/2 | 1″1/2 |

(1) One connection only

| Item | Description | Code |
|---|---|---|
|  | Remote control for thermoregulation control unit (temperature regulation), ErP VI class (87x87x31 mm) | 0CREMOTO00 |
|  | Remote control for thermoregulation control unit, ErP V class (146x97x34 mm) | 0CREMOTO01 |

| Item | Description | Code |
|---|---|---|
|  | Thermoregulation control unit kit for two-stage burners, ErP II class (147x97x74 mm) | 0KITCEEL04 |
|  | Temperature probe for thermoregulation control unit and electric panels (kf/spf) (6x6x50 mm, with 3m cable) | 0SONDASO00 |

For other accessories, see page 123

# RODI DUAL 1400-3500

CH ONLY BASE-PLATE BOILER

- **Flue gas pipes boiler body in steel with flame inversion furnace**
- **Very thick steel flue gas pipes and with helical turbulators**
- **Front door with reversible opening**
- Maximum operating pressure: 6 bar, higher pressure values available upon request
- Control and management electric panel (to be ordered separately) in the standard version (C) with two-stage burner control, heating circulation pump control, recirculation pump control, external water heater pre-setting, operating and alarm signals; moreover the multi-zone version (PC) is equipped with a control for three zone pumps
- Rear door that can be opened for flue gas pipe inspection and cleaning

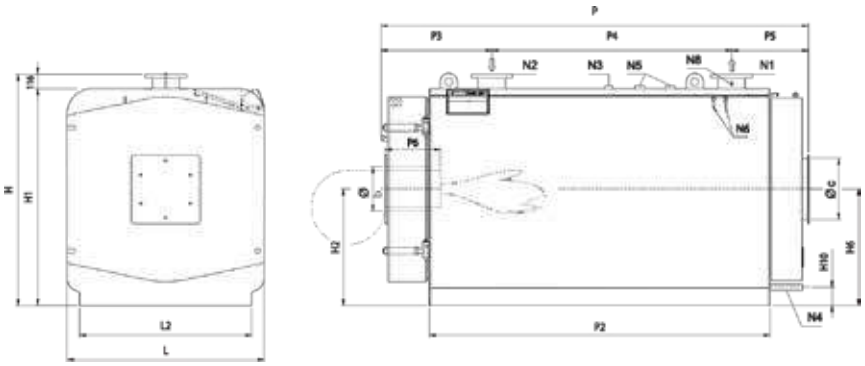
**Available in the following models:**

da 1400 a 3500

| Model | Code | Power | | W x H x D (mm) | Gross weight (Kg) |
|---|---|---|---|---|---|
| | | max (kW) | min (kW) | | |
| **1400** | CRPxxGNB1O | 1400 | 700 | 1470x1746x2886 | 2600 |
| **1600** | CRPxxGNB1Q | 1600 | 800 | 1470x1746x2886 | 2600 |
| **1800** | CRPxxGNB1S | 1800 | 900 | 1470x1746x3096 | 2750 |
| **2000** | CRPxxGNB2K | 2000 | 1000 | 1600x1876x3220 | 3650 |
| **2400** | CRPxxGNB2O | 2400 | 1200 | 1600x1876x3480 | 3900 |
| **3000** | CRPxxGNB3K | 3000 | 1500 | 1870x2146x3480 | 5200 |
| **3500** | CRPxxGNB3P | 3500 | 1750 | 1870x2146x3935 | 5700 |

N.B.: The electric panel is supplied separately and must be assembled by the installing technician

## DIMENSIONS AND CONNECTION CENTRE DISTANCES




**N1** Boiler flow
**N2** Boiler return
**N3** Equipment connection
**N4** System filling and draining connection
**N5** Connection for safety valve/s
**N6** Bulb holders
**N8** Control holder

Electric panels

| Electric panels model 1400 ÷ 3500 kW | Code |
|---|---|
| Standard electric panel C30 | 0QUADELE24 |
| Multizone electric panel PC 30 | 0QUADELE25 |

| Model | Dimensions | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | H | H1 | H2 | H6 | H10 | L | L2 | P | P2 | P3 | P4 | P5 | P6 |
| | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm |
| 1400 | 1746 | 1630 | 880 | 880 | 150 | 1470 | 1270 | 2886 | 2300 | 831 | 1300 | 755 | 350-400 |
| 1600 | 1746 | 1630 | 880 | 880 | 150 | 1470 | 1270 | 2886 | 2300 | 831 | 1300 | 755 | 350-400 |
| 1800 | 1746 | 1630 | 880 | 880 | 150 | 1470 | 1270 | 3096 | 2510 | 771 | 1850 | 475 | 450-500 |
| 2000 | 1876 | 1760 | 945 | 945 | 150 | 1600 | 1400 | 3220 | 2510 | 903 | 1550 | 767 | 450-500 |
| 2400 | 1876 | 1760 | 945 | 945 | 150 | 1600 | 1400 | 3480 | 2770 | 903 | 1950 | 627 | 450-500 |
| 3000 | 2146 | 2030 | 1080 | 1080 | 150 | 1870 | 1670 | 3480 | 2770 | 903 | 2050 | 527 | 450-500 |
| 3500 | 2146 | 2030 | 1080 | 1080 | 150 | 1870 | 1670 | 3935 | 3225 | 903 | 2050 | 982 | 450-500 |

| Model | Connections | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Øb | ØC | N1 | N2 | N3 | N4 | N5 | N6 |
| | mm | mm | DN/in | DN/in | DN/in | in | in | in |
| 1400 | 320 | 400 | 150 | 150 | 1″ | 1″1/4 | 1″1/2 | 1/2″ |
| 1600 | 320 | 400 | 150 | 150 | 1″ | 1″1/4 | 1″1/2 | 1/2″ |
| 1800 | 320 | 400 | 150 | 150 | 1″ | 1″1/4 | 1″1/2 | 1/2″ |
| 2000 | 360 | 500 | 200 | 200 | 1″ | 1″1/4 | 2″ | 1/2″ |
| 2400 | 360 | 500 | 200 | 200 | 1″ | 1″1/4 | 2″ | 1/2″ |
| 3000 | 400 | 550 | 200 | 200 | 1″ | 1″1/4 | 2″ | 1/2″ |
| 3500 | 400 | 550 | 200 | 200 | 1″ | 1″1/4 | 2″ | 1/2″ |

| Item | Description | Code |
|---|---|---|
|  | Remote control for thermoregulation control unit (temperature regulation), ErP VI class (87x87x31 mm) | 0CREMOTO00 |
|  | Remote control for thermoregulation control unit, ErP V class (146x97x34 mm) | 0CREMOTO01 |

| Item | Description | Code |
|---|---|---|
|  | Thermoregulation control unit kit for two-stage burners, ErP II class (147x97x74 mm) | 0KITCEEL04 |
|  | Temperature probe for thermoregulation control unit and electric panels (kf/spf) (6x6x50 mm, with 3m cable) | 0SONDASO00 |

For other accessories, see page 123

# RODI DUAL HR 70-1300

CH ONLY BASE-PLATE BOILER

FOR OPERATION WITH GAS BLOWN AIR BURNERS ONLY

- **Flue gas pipes boiler body in steel with flame inversion furnace**
- **Very thick steel flue gas pipes and with helical turbulators**
- **Front door with reversible opening**
- Patented heat recovery unit in extruded aluminium
- Maximum operating pressure: 6 bar, higher pressure values available upon request
- Casings in powder coated metal sheet
- Control and management electric panel (to be ordered separately) in the standard version (C) with two-stage burner control, heating circulation pump control, recirculation pump control, external water heater pre-setting, operating and alarm signals; moreover the multi-zone version (PC) is equipped with a control for three zone pumps
- Rear door that can be opened for flue gas pipe inspection and cleaning

Boiler models from HR 70 to HR 350 cannot be used for room heating pursuant to the Erp Directive.

**Available in the following models:**

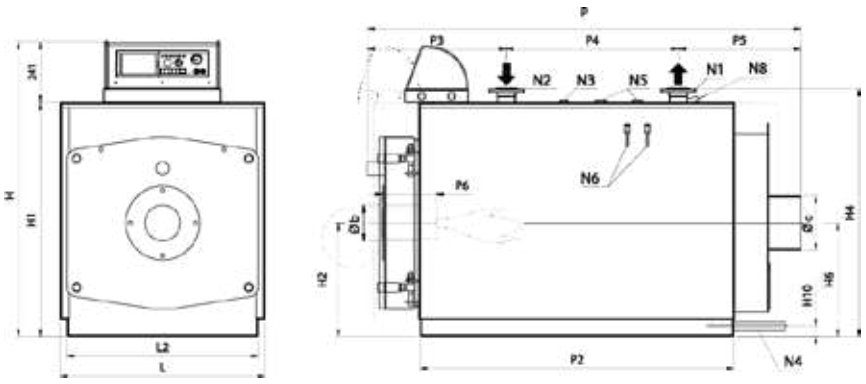
da 70 a 1300

| Model | Code | Power | | W x H x D (mm) | Gross weight (Kg) |
|---|---|---|---|---|---|
| | | max (kW) | min (kW) | | |
| **HR 70** | * | 70 | 35 | 750x1030x1055 | 222 |
| **HR 80** | * | 80 | 40 | 750x1030x1055 | 222 |
| **HR 90** | * | 90 | 45 | 750x1030x1195 | 266 |
| **HR 100** | * | 100 | 50 | 750x1030x1195 | 266 |
| **HR 120** | * | 120 | 60 | 750x1030x1195 | 266 |
| **HR 150** | * | 150 | 75 | 800x1080x1440 | 357 |
| **HR 200** | * | 200 | 100 | 800x1080x1440 | 357 |
| **HR 250** | * | 250 | 125 | 800x1180x1690 | 442 |
| **HR 300** | * | 300 | 150 | 900x1180x1690 | 489 |
| **HR 350** | * | 350 | 175 | 900x1180x1940 | 558 |
| **HR 400** | CRSxxGNB4A | 420 | 210 | 940x1190x1872 | 600 |
| **HR 500** | CRSxxGNB5A | 500 | 250 | 1160x1380x1950 | 871 |
| **HR 620** | CRSxxGNB6C | 620 | 310 | 1160x1380x2240 | 981 |
| **HR 750** | CRSxxGNB7F | 750 | 375 | 1290x1510x2255 | 1230 |
| **HR 850** | CRSxxGNB8F | 850 | 425 | 1290x1510x2255 | 1230 |
| **HR 950** | CRSxxGNB9F | 950 | 475 | 1290x1510x2500 | 1446 |
| **HR 1020** | CRSxxGNB1K | 1020 | 510 | 1440x1660x2500 | 1880 |
| **HR 1200** | CRSxxGNB1M | 1200 | 600 | 1440x1660x2500 | 1880 |
| **HR 1300** | CRSxxGNB1N | 1300 | 650 | 1440x1660x2500 | 1880 |

N.B.: The electric panel is supplied separately and must be assembled by the installing technician

*** Codes are issued by the pre-sales department.**

## DIMENSIONS AND CONNECTION CENTRE DISTANCES




**N1** Boiler flow
**N2** Boiler return
**N3** Equipment connection
**N4** System filling and draining connection
**N5** Connection for safety valve/s
**N6** Bulb holders
**N8** Control holder

Electric panels

| Electric panels model HR 70÷1300 kW | Code |
|---|---|
| Standard electric panel C30 | 0QUADELE24 |
| Multizone electric panel PC 30 | 0QUADELE25 |

| Model | Dimensions | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | H | H1 | H2 | H6 | H10 | L | L2 | P | P2 | P3 | P4 | P5 | P6 |
| | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm |
| HR 70 | 1030 | 855 | 415 | 415 | 54.5 | 750 | 700 | 1055 | 630 | 413 | 240 | 402 | 200-250 |
| HR 80 | 1030 | 855 | 415 | 415 | 54.5 | 750 | 700 | 1055 | 630 | 413 | 240 | 402 | 200-250 |
| HR 90 | 1030 | 855 | 415 | 415 | 54.5 | 750 | 700 | 1195 | 755 | 513 | 265 | 417 | 200-250 |
| HR 100 | 1030 | 855 | 415 | 415 | 54.5 | 750 | 700 | 1195 | 755 | 513 | 265 | 417 | 200-250 |
| HR 120 | 1030 | 855 | 415 | 415 | 54.5 | 750 | 700 | 1195 | 755 | 513 | 265 | 417 | 200-250 |
| HR 150 | 1080 | 905 | 440 | 440 | 54.5 | 800 | 750 | 1440 | 1000 | 513 | 475 | 452 | 200-250 |
| HR 200 | 1080 | 905 | 440 | 440 | 54.5 | 800 | 750 | 1440 | 1000 | 513 | 475 | 452 | 200-250 |
| HR 250 | 1180 | 1005 | 440 | 440 | 54.5 | 800 | 750 | 1690 | 1250 | 513 | 725 | 452 | 200-250 |
| HR 300 | 1180 | 1005 | 490 | 490 | 54.5 | 900 | 850 | 1690 | 1295 | 523 | 700 | 467 | 200-250 |
| HR 350 | 1180 | 1005 | 490 | 490 | 54.5 | 900 | 850 | 1940 | 1500 | 523 | 980 | 437 | 200-250 |
| HR 400 | 1190 | 1015 | 500 | 500 | 50 | 940 | 890 | 1872 | 1502 | 600 | 850 | 422 | 230-280 |
| HR 500 | 1380 | 1205 | 610 | 610 | 60 | 1160 | 1110 | 1950 | 1502 | 663 | 850 | 437 | 270-320 |
| HR 620 | 1380 | 1205 | 610 | 610 | 60 | 1160 | 1110 | 2240 | 1792 | 663 | 1150 | 427 | 270-320 |
| HR 750 | 1510 | 1335 | 675 | 675 | 60 | 1290 | 1240 | 2255 | 1753 | 704 | 1100 | 451 | 270-320 |
| HR 850 | 1510 | 1335 | 675 | 675 | 60 | 1290 | 1240 | 2255 | 1753 | 704 | 1100 | 451 | 270-320 |
| HR 950 | 1510 | 1335 | 675 | 675 | 60 | 1290 | 1240 | 2500 | 2003 | 704 | 1200 | 596 | 270-320 |
| HR 1020 | 1660 | 1485 | 750 | 750 | 60 | 1440 | 1390 | 2500 | 2003 | 704 | 1200 | 596 | 270-320 |
| HR 1200 | 1660 | 1485 | 750 | 750 | 60 | 1440 | 1390 | 2500 | 2003 | 704 | 1200 | 596 | 270-320 |
| HR 1300 | 1660 | 1485 | 750 | 750 | 60 | 1440 | 1390 | 2500 | 2003 | 704 | 1200 | 596 | 270-320 |

| Model | Connections | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Øb | ØC | N1 | N2 | N3 | N4 | N5 | N6 |
| | mm | mm | DN/in | DN/in | DN/in | in | in | in |
| HR 70 | 130 | 200 | 50 | 50 | 1″ | 1″ | - | 1/2″ |
| HR 80 | 130 | 200 | 50 | 50 | 1″ | 1″ | - | 1/2″ |
| HR 90 | 130 | 200 | 50 | 50 | 1″ | 1″ | - | 1/2″ |
| HR 100 | 130 | 200 | 50 | 50 | 1″ | 1″ | - | 1/2″ |
| HR 120 | 130 | 200 | 50 | 50 | 1″ | 1″ | - | 1/2″ |
| HR 150 | 160 | 250 | 50 | 50 | 1″ | 1″ | - | 1/2″ |
| HR 200 | 160 | 250 | 50 | 50 | 1″ | 1″ | - | 1/2″ |
| HR 250 | 160 | 250 | 50 | 50 | 1″ | 1″ | - | 1/2″ |
| HR 300 | 180 | 250 | 65 | 65 | 1″ | 1″ | - | 1″1/2 |
| HR 350 | 180 | 250 | 65 | 65 | 1″ | 1″ | - | 1″1/2 |
| HR 400 | 225 | 250 | 80 | 80 | 1″ | 1″ | 1″1/4 (1) | 1″1/2 |
| HR 500 | 225 | 300 | 80 | 80 | 1″ | 1″1/4 | 1″1/4 | 1″1/2 |
| HR 620 | 225 | 300 | 80 | 80 | 1″ | 1″1/4 | 1″1/4 | 1″1/2 |
| HR 750 | 280 | 350 | 100 | 100 | 1″ | 1″1/4 | 1″1/2 | 1″1/2 |
| HR 850 | 280 | 350 | 100 | 100 | 1″ | 1″1/4 | 1″1/2 | 1″1/2 |
| HR 950 | 280 | 350 | 100 | 100 | 1″ | 1″1/4 | 1″1/2 | 1″1/2 |
| HR 1020 | 280 | 400 | 125 | 125 | 1″ | 1″1/4 | 1″1/2 | 1″1/2 |
| HR 1200 | 280 | 400 | 125 | 125 | 1″ | 1″1/4 | 1″1/2 | 1″1/2 |
| HR 1300 | 280 | 400 | 125 | 125 | 1″ | 1″1/4 | 1″1/2 | 1″1/2 |

(1) One connection only

| Item | Description | Code |
|---|---|---|
|  | Remote control for thermoregulation control unit (temperature regulation), ErP VI class (87x87x31 mm) | 0CREMOTO00 |
|  | Remote control for thermoregulation control unit, ErP V class (146x97x34 mm) | 0CREMOTO01 |

| Item | Description | Code |
|---|---|---|
|  | Remote control for thermoregulation control unit, ErP V class (146x97x34 mm) | 0CREMOTO01 |
|  | Thermoregulation control unit kit for two-stage burners, ErP II class (147x97x74 mm) | 0KITCEEL04 |
|  | Temperature probe for thermoregulation control unit and electric panels (kf/spf) (6x6x50 mm, with 3m cable) | 0SONDASO00 |

N.B.: One of the electric panels should be purchased separately and must be assembled by the installing technician.
For other accessories, see page 123

# RODI DUAL HR 1400-3500

CH ONLY BASE-PLATE BOILER

FOR OPERATION WITH GAS BLOWN AIR BURNERS ONLY

- **Flue gas pipes boiler body in steel with flame inversion furnace**
- **Very thick steel flue gas pipes and with helical turbulators**
- **Front door with reversible opening**
- Patented heat recovery unit in extruded aluminium
- Maximum operating pressure: 6 bar, higher pressure values available upon request
- Control and management electric panel (to be ordered separately) in the standard version (C) with two-stage burner control, heating circulation pump control, recirculation pump control, external water heater pre-setting, operating and alarm signals; moreover the multi-zone version (PC) is equipped with a control for three zone pumps
- Rear door that can be opened for flue gas pipe inspection and cleaning

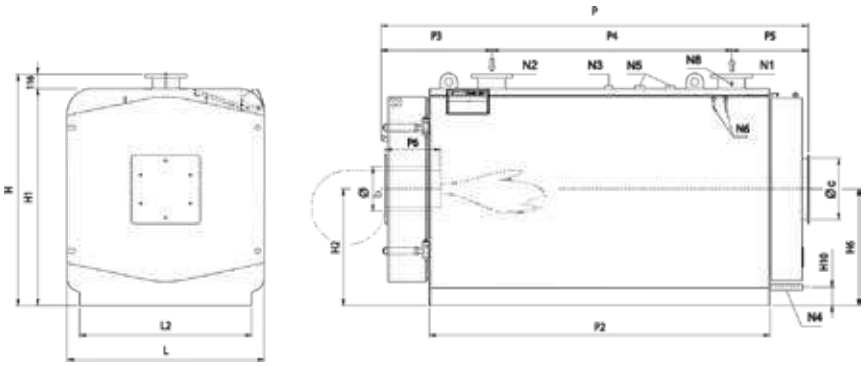
**Available in the following models:**

da 1400 a 3500

| Model | Code | Power | | W x H x D (mm) | Gross weight (Kg) |
|---|---|---|---|---|---|
| | | max (kW) | min (kW) | | |
| **HR 1400** | CRSxxGNB1O | 1400 | 700 | 1470x1746x2886 | 2665 |
| **HR 1600** | CRSxxGNB1Q | 1600 | 800 | 1470x1746x2886 | 2665 |
| **HR 1800** | CRSxxGNB1S | 1800 | 900 | 1470x1746x3096 | 2815 |
| **HR 2000** | CRSxxGNB2K | 2000 | 1000 | 1600x1876x3220 | 3730 |
| **HR 2400** | CRSxxGNB2O | 2400 | 1200 | 1600x1876x3480 | 3980 |
| **HR 3000** | CRSxxGNB3K | 3000 | 1500 | 1870x2146x3480 | 5306 |
| **HR 3500** | CRSxxGNB3P | 3500 | 1750 | 1870x2146x3935 | 5806 |

N.B.: The electric panel is supplied separately and must be assembled by the installing technician

## DIMENSIONS AND CONNECTION CENTRE DISTANCES




| | |
|---|---|
| **N1** | Boiler flow |
| **N2** | Boiler return |
| **N3** | Equipment connection |
| **N4** | System filling and draining connection |
| **N5** | Connection for safety valve/s |
| **N6** | Bulb holders |
| **N8** | Control holder |

Electric panels

| Electric panels model HR 1400÷3500 kW | Code |
|---|---|
| Standard electric panel C30 | 0QUADELE24 |
| Multizone electric panel PC 30 | 0QUADELE25 |

| Model | Dimensions | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | H | H1 | H2 | H6 | H10 | L | L2 | P | P2 | P3 | P4 | P5 | P6 |
| | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm |
| HR 1400 | 1746 | 1630 | 880 | 880 | 150 | 1470 | 1270 | 2886 | 2300 | 831 | 1300 | 755 | 350-400 |
| HR 1600 | 1746 | 1630 | 880 | 880 | 150 | 1470 | 1270 | 2886 | 2300 | 831 | 1300 | 755 | 350-400 |
| HR 1800 | 1746 | 1630 | 880 | 880 | 150 | 1470 | 1270 | 3096 | 2510 | 771 | 1850 | 475 | 450-500 |
| HR 2000 | 1876 | 1760 | 945 | 945 | 150 | 1600 | 1400 | 3220 | 2510 | 903 | 1550 | 767 | 450-500 |
| HR 2400 | 1876 | 1760 | 945 | 945 | 150 | 1600 | 1400 | 3480 | 2770 | 903 | 1950 | 627 | 450-500 |
| HR 3000 | 2146 | 2030 | 1080 | 1080 | 150 | 1870 | 1670 | 3480 | 2770 | 903 | 2050 | 527 | 450-500 |
| HR 3500 | 2146 | 2030 | 1080 | 1080 | 150 | 1870 | 1670 | 3935 | 3225 | 903 | 2050 | 982 | 450-500 |

| Model | Dimensions | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | H | H1 | H2 | H6 | H10 | L | L2 | P | P2 | P3 | P4 | P5 | P6 |
| | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm |
| HR 1400 | 1746 | 1630 | 880 | 880 | 150 | 1470 | 1270 | 2886 | 2300 | 831 | 1300 | 755 | 350-400 |
| HR 1600 | 1746 | 1630 | 880 | 880 | 150 | 1470 | 1270 | 2886 | 2300 | 831 | 1300 | 755 | 350-400 |
| HR 1800 | 1746 | 1630 | 880 | 880 | 150 | 1470 | 1270 | 3096 | 2510 | 771 | 1850 | 475 | 450-500 |
| HR 2000 | 1876 | 1760 | 945 | 945 | 150 | 1600 | 1400 | 3220 | 2510 | 903 | 1550 | 767 | 450-500 |
| HR 2400 | 1876 | 1760 | 945 | 945 | 150 | 1600 | 1400 | 3480 | 2770 | 903 | 1950 | 627 | 450-500 |
| HR 3000 | 2146 | 2030 | 1080 | 1080 | 150 | 1870 | 1670 | 3480 | 2770 | 903 | 2050 | 527 | 450-500 |
| HR 3500 | 2146 | 2030 | 1080 | 1080 | 150 | 1870 | 1670 | 3935 | 3225 | 903 | 2050 | 982 | 450-500 |

| Item | Description | Code |
|---|---|---|
|  | Remote control for thermoregulation control unit (temperature regulation), ErP VI class (87x87x31 mm) | 0CREMOTO00 |
|  | Remote control for thermoregulation control unit, ErP V class (146x97x34 mm) | 0CREMOTO01 |

| Item | Description | Code |
|---|---|---|
|  | Thermoregulation control unit kit for two-stage burners, ErP II class (147x97x74 mm) | 0KITCEEL04 |
|  | Temperature probe for thermoregulation control unit and electric panels (kf/spf) (6x6x50 mm, with 3m cable) | 0SONDASO00 |

For other accessories, see page 123

# PYRÓS 1G

SINGLE-STAGE DIESEL BLOWN AIR BURNERS

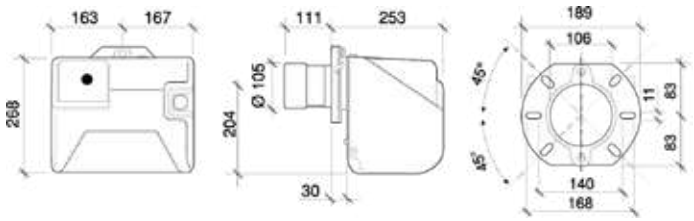
- **Air damper adjustable on the front side with graduated scale**
- **900 mm hoses supplied as standard**
- **Die-cast aluminium flange and gasket supplied as standard**
- **High noiselessness**
- Die-cast aluminium burner body
- ABS sound-proofing casing
- Connection to the boiler with 7-pin plug
- Diesel pre-heater
- Combustion head with stainless steel ring

| Model | Code | Heat output | Gross weight |
|---|---|---|---|
| | | kW | Kg |
| **1 GTF 6** | BPGxx0D660 | 57,6 | 19,00 |
| **1 GTF 7** | BPGxx0D770 | 68,6 | 19,00 |
| **1 GTF 8** | BPGxx0D885 | 80,6 | 19,00 |

| Technical specifications | um | 1 GTF 6 | 1 GTF 7 | 1 GTF 8 |
|---|---|---|---|---|
| Fuel | - | diesel: viscosity= 1.4°E, Hi= 42.7 MJ/kg (10200 kcal/kg) T= 20°C | | |
| Heat output range | kW (kg/h) | 55,7÷113 (4,7 ÷ 9,5) | 55,7÷113 (4,7 ÷ 9,5) | 55,7÷113 (4,7 ÷ 9,5) |
| Pre-adjustment heat input | kW | 57,6 | 68,6 | 80,6 |
| Nozzle: make / type | - | Delavan W, B - Steinen Q - Danfoss S | | |
| Nozzle | USgal/h | 1,10 | 1,35 | 1,65 |
| Nozzle: angle / cone | - | 60°B | 60°B | 60°B |
| Diesel consumption (± 4%)* | kg/h | 4,86 | 5,8 | 6,8 |
| Diesel adjustment pressure* | bar | 12 | 11 | 11 |
| Air flow adjustment* | - | 3,2 | 4,5 | 5,75 |
| Combustion head adjustment* | - | 2,0 | 2,5 | 2,5 |
| CO2 value* | % | 12,5 | 12,5 | 12,5 |
| Maximum counterpressure* | Pa | 125 | 115 | 110 |
| Combustion head diameter (B) | mm | 105 | 105 | 105 |
| Combustion head length (A) | mm | 111 | 111 | 111 |
| Pump pressure range | bar | 8 ÷ 15 | 8 ÷ 15 | 8 ÷ 15 |
| Pump vacuum (max.) | bar | -0,4 | -0,4 | -0,4 |
| Power supply | - | single-phase 230 V - 50 Hz | | |
| Motor condenser | µF | 5 | 5 | 5 |
| Power absorption | kW | 0,160 | 0,160 | 0,160 |
| Motor current | A | 1,3 | 1,3 | 1,3 |
| Electric protection | - | IP 40 | IP 40 | IP 40 |

* IMPORTANT: The specified values and characteristics refer to factory calibration settings of the burner.

## DIMENSIONS AND CONNECTION CENTRE DISTANCES



# PYRÓS DUAL 1G

SINGLE-STAGE DIESEL BLOWN AIR BURNERS

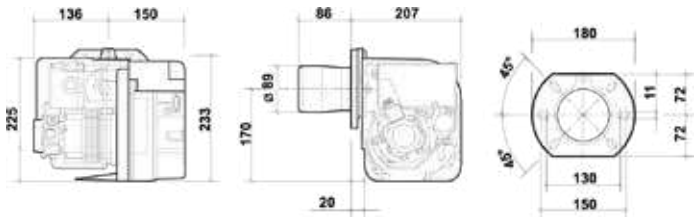
- **Air damper adjustable on the front side with graduated scale**
- **900 mm hoses supplied as standard**
- **Die-cast aluminium flange and gasket supplied as standard**
- **High noiselessness**
- Die-cast aluminium burner body
- ABS sound-proofing casing
- Connection to the boiler with 7-pin plug
- Diesel pre-heater
- Combustion head with stainless steel ring

| Model | Code | Heat output | Gross weight |
|---|---|---|---|
| | | kW | Kg |
| **1 GTFR 3** | BPBI00A327 | 26,6 | 13,50 |
| **1 GTFR 4** | BPBI00A338 | 36,3 | 13,50 |
| **1 GTF 5** | BPBI00A550 | 47,2 | 13,50 |

| Technical specifications | um | 1 GTFR 3 | 1 GTFR 4 | 1 GTF 5 |
|---|---|---|---|---|
| Fuel | - | diesel: viscosity= 1.4°E, Hi= 42.7 MJ/kg (10200 kcal/kg) T= 20°C | | |
| Heat output range | kW (kg/h) | 19 ÷ 33,5 (1,6 ÷ 2,8) | 21,4 ÷ 41,5 (1,8 ÷ 3,5) | 33,2 ÷ 53,4 (2,8 ÷ 4,5) |
| Pre-adjustment heat input | kW | 26,6 | 36,3 | 47,2 |
| Nozzle: make / type | - | Delavan W, B - Steinen Q - Danfoss S | | |
| Nozzle | USgal/h | 0,65 | 0,85 | 1,00 |
| Nozzle: angle / cone | - | 60°W | 60°W | 60°B |
| Diesel consumption (± 4%)* | kg/h | 2,3 | 3,1 | 4 |
| Diesel adjustment pressure* | bar | 12,5 | 12 | 12 |
| Air flow adjustment* | - | 3 | 4,6 | 3,8 |
| Combustion head adjustment* | - | Fixed | | |
| CO2 value* | % | 12,5 | 12,5 | 12,5 |
| Maximum counterpressure* | Pa | 370 | 320 | 300 |
| Combustion head diameter (B) | mm | 89 | 89 | 89 |
| Combustion head length (A) | mm | 86 | 86 | 86 |
| Pump pressure range | bar | 8 ÷ 15 | 8 ÷ 15 | 8 ÷ 15 |
| Pump vacuum (max.) | bar | -0,4 | -0,4 | -0,4 |
| Diesel pre-heater | W | 55 | 55 | - |
| Power supply | - | single-phase 230 V - 50 Hz | | |
| Motor condenser | µF | 4,5 | 4,5 | 4,5 |
| Power absorption | kW | 0,215 | 0,215 | 0,16 |
| Motor current | A | 0,7 | 0,7 | 0,7 |
| Electric protection | - | IP 40 | IP 40 | IP 40 |

* IMPORTANT: The specified values and characteristics refer to factory calibration settings of the burner.

## DIMENSIONS AND CONNECTION CENTRE DISTANCES



# PYRÓS 1M

SINGLE-STAGE GAS BLOWN AIR BURNERS FOR LOW AND MEDIUM-PRESSURE BOILERS

- **Natural gas or LPG operation**
- **Air damper adjustable on the front side with graduated scale**
- **Die-cast aluminium flange and gasket supplied as standard**
- **High noiselessness**
- Die-cast aluminium burner body
- ABS sound-proofing casing
- Connection to the boiler with 7-pin plug
- Connection to the gas train with 6-pin plug
- Air pressure switch
- Stainless steel combustion head

| Model | Gas type | Code | Pre-adjustment heat input | Gross weight |
|---|---|---|---|---|
| | | | kW | Kg |
| **1 MTF 50** | NATURAL GAS | BPMxx2E650 | 18 ÷ 52 | 11,0 |
| | LPG | BPMxx3E650 | | |
| **1 MTF 100** | NATURAL GAS | BPMxx2E91A | 46 ÷ 93 | 15,0 |
| | LPG | BPMxx3E91A | | |

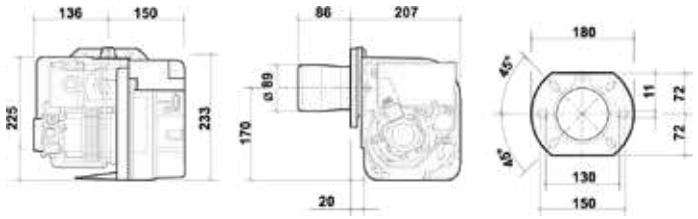
| Model | Code | Connection diameter | | Coupling | Gross weight |
|---|---|---|---|---|---|
| | | Mains | Burner | | Kg |
| **MB - DLE 403** | 0RAMPGAS00 | G ½ | G ½ | 1 MTF 50 | 1,70 |
| **MB - DLE 405** | 0RAMPGAS01 | G ½ | G ½ | 1 MTF 50 - 1 MTF 100 | 3,00 |
| **MB - DLE 407** | 0RAMPGAS02 | G ½ | G ½ | 1 MTF 100 | 3,10 |

Class A Group 2 Gas Trains pursuant to EN 88 and EN 161 with: gas filter, minimum gas pressure switch, safety valve, pressure stabilizer, single-stage regulation valve.

| Technical specifications | um | 1 MTF 50 | 1 MTF 100 |
|---|---|---|---|
| Heat input * | kW | 18 ÷ 52 | 46 ÷ 93 |
| | kcal/h | 15.480 ÷ 44.720 | 39.560 ÷ 79.980 |
| Gas type | - | G 20 | G 20 |
| Heating capacity** | MJ/m3 | 34,02 | 34,02 |
| | kcal/cu m | 8127 | 8127 |
| Density** | kg/cu m | 0,68 | 0,68 |
| Maximum flow rate** | m3/h | 5,38 | 9,6 |
| Gas pressure at maximum power | mbar | 4,5 | 4,6 |
| Power supply | - | 50 Hz ~ 230 V | 50 Hz ~ 230 V |
| Electric motor: inrush current | A | 2,2 | 2,6 |
| Electric motor: operating current | A | 0,64 | 0,77 |
| Control equipment | - | 557 SE | 557 SE |
| Electric power | W | 150 | 180 |
| Sound pressure | dBA | 58 | 63 |
| Gas train connection | - | G 1/2 | G 3/4 |
| Electric protection | - | IP 40 | IP 40 |

* Reference conditions: ambient temperature 20°C - 1013 mbar
** Standard reference conditions: temperature 15°C - 1013 mbar

DIMENSIONS AND CONNECTION CENTRE DISTANCES




| Dimensions (mm) | 1 MTF 50 | 1 MTF 100 |
|---|---|---|
| A | 249 | 275 |
| B | 285 | 326 |
| C | 186 | 208 |
| D | 138 | 142 |
| E | 91 | 105 |
| F | 100 | 110 |
| G | 303 | 355 |
| H | 96 | 123 |
| I | 170 | 185 |
| L | 140 | 160 |

# FUEL OVERVIEW

| Country | | Category | Gas | Pressure |
|---|---|---|---|---|
| Belgium | BE | II2E+3+ | G20 | 20 |
| | | | G25 | 25 |
| | | | G30 | 28-30 |
| | | | G31 | 37 |
| Belarus | BY | II2H3+ | G20 | 20 |
| | | | G20 | 13 |
| | | | G30 | 28-30 |
| | | | G31 | 37 |
| Bulgaria | BG | II2H3B/P | G20 | 20 |
| | | | G30 | 30 |
| | | | G31 | 30 |
| France | FR | II2E+3+ | G20 | 20 |
| | | | G25 | 25 |
| | | | G30 | 28-30 |
| | | | G31 | 37 |
| Germany | DE | II2ELL3B/P | G20 | 20 |
| | | | G25 | 20 |
| | | | G30 | 50 |
| | | | G31 | 50 |
| Greece | GR | II2H3+ | G20 | 20 |
| | | | G30 | 28-30 |
| | | | G31 | 37 |

| Country | | Category | Gas | Pressure |
|---|---|---|---|---|
| England | GB | II2H3+ | G20 | 20 |
| | | | G30 | 28-30 |
| | | | G31 | 37 |
| Portugal | PT | II2H3+ | G20 | 20 |
| | | | G30 | 28-30 |
| | | | G31 | 37 |
| Chzech Republic | CZ | II2H3+ | G20 | 20 |
| | | | G30 | 28-30 |
| | | | G31 | 37 |
| Romania | RO | II2H3B/P | G20 | 20 |
| | | | G30 | 30 |
| | | | G31 | 30 |
| Slovakia | SK | II2H3B/P | G20 | 20 |
| | | | G30 | 30 |
| | | | G31 | 30 |
| Hungary | HU | II2HS3B/P | G20 | 25 |
| | | | G25.1 | 25 |
| | | | G30 | 30 |
| | | | G31 | 30 |

# TECHNICAL SPECIFICATIONS OF ATMOSPHERIC BOILERS

| Technical specifications | um | Formentera | Formentera |
|---|---|---|---|
| Model | - | PRO CTN 24 | PRO CTN 28 |
| Type | - | B11BS | B11BS |
| Nominal heat output (Pn) | kW | 23 | 27 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 80 | 79 |
| Seasonal energy efficiency class of ambient heating | - | C | C |
| Stated load profile | - | XL | XL |
| Water heating energy efficiency (ηwh) | % | 76 | 74 |
| Energy efficiency class of water heating | - | B | B |
| Nominal heat input (Qn) | kW | 25,5 | 29,5 |
| Reduced heat input (Qr) | kW | 10,0 | 12,5 |
| Nominal heat output (80-60°C) (Pn) | kW | 23,4 | 26,9 |
| Reduced heat output (80-60°C) (Pr) | kW | 8,8 | 11,2 |
| Useful efficiency at nominal input (80-60°C) | % | 91,7 | 91,1 |
| Useful efficiency at 30% (30°C return) | % | 93,9 | 93,2 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 | 0,5-3,0 |
| CH temperature setting range | °C | 35-78 | 35-78 |
| CH maximum working temperature | °C | 83 | 83 |
| Heating expansion vessel capacity | l | 7 | 7 |
| DHW nominal heat input | kW | 25,5 | 29,5 |
| DHW minimum heat input | kW | 10,0 | 12,5 |
| DHW nominal heat output (ΔT 30°C) | kW | 23,4 | 26,9 |
| DHW minimum heat output (ΔT 30°C) | kW | 8,8 | 11,2 |
| DHW circuit working pressure (min-max) | bar | 0,5-6,0 | 0,5-6,0 |
| Specific DHW flow ΔT=25K | l/min | 13,6 | 15 |
| Specific DHW flow ΔT=30K | l/min | 11,3 | 12,5 |
| DHW temperature range | °C | 35-57 | 35-57 |
| DHW maximum working temperature | °C | 62 | 62 |
| NOx emission class | - | 6 | 6 |
| Casing heat loss with burner on at nominal heat input | % | 2,15 | 2,51 |
| Casing heat loss with burner off | % | 0,69 | 065 |
| Chimney heat loss with burner on at nominal heat input | % | 6,19 | 6,44 |
| Air-flue ΔT at nominal heat input | °C | 86 | 93 |
| Flue gas flow at nominal heat input | g/s | 18,9 | 20,1 |
| CO2 at nominal heat input of heating (Natural gas) | % | 5,3 | 5,8 |
| CO2 at nominal heat input of heating (Propane) | % | 6,6 | 6,0 |
| Power supply voltage/frequency | V/Hz | 230/50 | 230/50 |
| Maximum power consumption (ERP) | W | 57 | 56 |
| Circulation pump power input (ERP) | W | 41 | 41 |
| Electric protection rating | IP | X5D | X5D |

(*) with water heater probe connected
(**) with comfort function disabled.

# TECHNICAL SPECIFICATIONS OF ATMOSPHERIC BOILERS

| Technical specifications | um | Antea |
|---|---|---|
| Model | - | PRO CTN 24 |
| Type | - | B11BS |
| Nominal heat output (Pn) | kW | 22 |
| Seasonal energy efficiency of ambient heating (ηs) | % | 80 |
| Seasonal energy efficiency class of ambient heating | - | C |
| Stated load profile | - | XL |
| Water heating energy efficiency (ηwh) | % | 77 |
| Energy efficiency class of water heating | - | B |
| Nominal heat input (Qn) | kW | 24,5 |
| Reduced heat input (Qr) | kW | 12,0 |
| Nominal heat output (80-60°C) (Pn) | kW | 22,3 |
| Reduced heat output (80-60°C) (Pr) | kW | 10,8 |
| Useful efficiency at nominal input (80-60°C) | % | 91,2 |
| Useful efficiency at 30% (30°C return) | % | 93,2 |
| Heating circuit working pressure (min-max) | bar | 0,5-3,0 |
| CH temperature setting range | °C | 35-78 |
| CH maximum working temperature | °C | 83 |
| Heating expansion vessel capacity | l | 7 |
| DHW nominal heat input | kW | 24,5 |
| DHW minimum heat input | kW | 12,0 |
| DHW nominal heat output (ΔT 30°C) | kW | 22,3 |
| DHW minimum heat output (ΔT 30°C) | kW | 10,8 |
| DHW circuit working pressure (min-max) | bar | 0,5-6,0 |
| Specific DHW flow ΔT=25K | l/min | 11.2 |
| Specific DHW flow ΔT=30K | l/min | 9,3 |
| DHW temperature range | °C | 35-57 |
| DHW maximum working temperature | °C | 62 |
| NOx emission class | - | 6 |
| Casing heat loss with burner on at nominal heat input | % | 2,97 |
| Casing heat loss with burner off | % | 0,62 |
| Chimney heat loss with burner on at nominal heat input | % | 5,83 |
| Air-flue ΔT at nominal heat input | °C | 82 |
| Flue gas flow at nominal heat input | g/s | 16,7 |
| CO2 at nominal heat input of heating (Natural gas) | % | 5,8 |
| CO2 at nominal heat input of heating (Propane) | % | 6,6 |
| Power supply voltage/frequency | V/Hz | 230/50 |
| Circulation pump power input (ERP) | W | 41 |
| Electric protection rating | IP | X4D |

(*) with water heater probe connected
(**) with comfort function disabled.

# THERMAL SOLAR

## COLLECTORS



## SYSTEMS



## THERMAL SOLAR UNITS



## ACCESSORIES

# HW 20 SOLAR COLLECTOR

THERMAL SOLAR FLAT-PLATE COLLECTOR FOR VERTICAL, OUTDOOR AND RECESSED INSTALLATION

Available while supplies last

- **High-efficiency aluminium absorber**
- **Copper piping**
- **Laser welding**
- **Aluminium tank-frame**
- **Rock wool insulation with a thickness of 40 mm**
- Tempered clear glass with low iron content
- Possibility to connect up to 5 collectors in series

| Data | um | HW20 |
|---|---|---|
| Total gross surface | m2 | 2,06 |
| Absorber surface | m2 | 1,84 |
| Absorbance | % | 95 |
| Emission | % | 5 |
| Glass transmittancy | % | 91 |
| Liquid content | litres | 0,81 |
| Maximum operating pressure | bar | 6 |
| Net weight | kg | 31,5 |
| Stagnation temperature | °C | 204 |
| Opening surface | m2 | 1,84 |
| η0 | - | 0,734 |
| α1 | - | 3,409 |
| α2 | - | 0,017 |
| IAM (K 50°) | - | 0,94 |
| External dimensions HC 25 (W x H x D) | mm | 2019 x 1019 x 89 |
| Code | - | PSHW200000 |

Package includes: collectors.

| Description | Code |
|---|---|
| Screw fitting kit for one HW 20 collector | PSKITCOL01 |
| Screw fitting kit for two HW 20 collectors | PSKITCOL02 |
| Screw fitting kit for three HW 20 collectors | PSKITCOL03 |
| Push-in fitting kit for a single HW 20 collector | PSKITCOL04 |
| HW 20 single collector recessed installation kit | PSKITCOP02 |
| HW 20 supplementary collector recessed installation kit | PSKITCOP03 |

| Description | Code |
|---|---|
| Single collector fixing kit, for installation on the roof | PSKMHW2001 |
| Single collector fixing kit, brackets for roofs with wood-blocks | PSKMHW2002 |
| Single collector fixing kit, brackets for roofs without wood-blocks | PSKMHW2003 |
| Single collector fixing kit, installation on roof with an inclination of 35° | PSKMHW2004 |
| Single collector fixing kit for roof covered with metal sheet | PSKMHW2005 |

# VLC 25 SOLAR COLLECTOR

THERMAL SOLAR FLAT-PLATE COLLECTOR FOR VERTICAL, OUTDOOR AND RECESSED ROOF INSTALLATION

- **High-efficiency aluminium absorber**
- **Copper piping**
- **Laser welding**
- **Aluminium tank-frame**
- **Rock wool insulation with a thickness of 50 mm and 50 kg/cu.m density**
- Tempered clear glass with low iron content
- Inlet/outlet with side connections at the top, size G1
- Single-resistance EPDM anti-UV seal
- Anodized bronze-coloured frame

| Data | um | VLC25 |
|---|---|---|
| Total gross surface | m2 | 2,57 |
| Absorber surface | m2 | 2,16 |
| Absorbance | % | 94 |
| Emission | % | 5 |
| Glass transmittancy | % | 90,5 |
| Liquid content | litres | 1,6 |
| Maximum operating pressure | bar | 10 |
| Net weight | kg | 41,6 |
| Stagnation temperature | °C | 198 |
| Opening surface | m2 | 2,29 |
| η0 | - | 0,763 |
| a1 | - | 3,322 |
| a2 | - | 0,018 |
| IAM (K 50°) | - | 0,96 |
| External dimensions HC 25 (W x H x D) | mm | 2077 x 1238x 100 |
| Code | - | PSVLC25000 |

Package includes: collectors and seals

| Description | Code |
|---|---|
| Single VCL 25 collector cover kit | PSKITCOP04 |
| Additional VCL 25 collector cover kit | PSKITCOP05 |
| Single collector fixing kit, for installation on the roof | PSKMVL2501 |
| Single collector fixing kit, brackets for roofs with wood-blocks | PSKMVL2502 |

| Description | Code |
|---|---|
| Single collector fixing kit, brackets for roofs without wood-blocks | PSKMVL2503 |
| Single collector fixing kit, installation on roof with an inclination of 35° | PSKMVL2504 |
| Single collector fixing kit for roof covered with metal sheet | PSKMVLC2505 |

# SULPACK EVO

SYSTEMS WITH FORCED CIRCUIT WITH HEAT INTEGRATED IN THE WATER HEATER

- **Solar collectors**
- **High thermal insulation glazed water heater**
- **Two-way hydraulic unit with high efficiency solar pump, factory assembled**
- **Hydraulic and safety accessories**
- ES solar expansion vessel
- Hose with bracket for tanks
- Thermostatic mixing valve
- Propylene glycol for solar plants
- Sealing gaskets

The system can be combined with wall-hung pre-mixed condensing boilers for sole heating. This solar system configuration requires you to position the water heater inside the building, preferably close to the heat power plant. By means of appropriate temperature probes which regulate its operation, a pump enables circulation of the liquid in the solar circuit.

| Technical specifications | um | HW 200 | PLUS HW 200 | HW 300 | VLC 200 | VLC 300 |
|---|---|---|---|---|---|---|
| Orientation | - | Vertical | | | | |
| Collectors | no. | 1 | 2 | 2 | 1 | 2 |
| Model | - | HW 20 | | VLC 25 | | |
| Water heater | - | WHPS BZ 200 DS | WHPS BZ 200 DS | WHPS BZ 300 DS | WHPS BZ 200 DS | WHPS BZ 300 DS |
| Water heater energy efficiency class | - | B | B | B | B | B |
| Water heater actual volume | l | 196 | 196 | 291 | 196 | 291 |
| Vbu | l | 67 | 67 | 85 | 67 | 85 |
| Losses in standby mode | W | 51 | 51 | 63 | 51 | 63 |
| Solar unit | - | 2 ways | | | | |
| Qnonsol (M) | kWh | 961,21 | 695 | 737 | 830,11 | 642,25 |
| Qnonsol (L) | kWh | 2019,8 | 1454,56 | 1452,72 | 1786,95 | 1205,4 |
| Qnonsol (XL) | kWh | 3534,85 | 2762,41 | 2732,38 | 3241,57 | 2325,67 |
| Qnonsol (XXL) | kWh | 4689,42 | 3828,02 | 3746,27 | 4371,35 | 3267,13 |
| Q circulation pump | W | 45 | | | | |
| Qaux | kWh | 90,7 | | | | |
| Qstand by | W | 0,08 | | | | |
| Expansion vessel | - | ES 18 | | | | |
| Propylene glycol to be mixed | kg | 10 | | | | |
| Code | - | PSPACKEV00 | PSPACKEV04 | PSPACKEV01 | PSPACKEV02 | PSPACKEV03 |

The systems do not include the retainers for roof installation, to be chosen among those specified for the different types of collectors, connection pipes and temperature probes. The solar control unit, if necessary, must be chosen among those indicated in the solar accessories in case you do not use a Fondital boiler set to manage the power solar system.

# SULPACK PRO

SYSTEMS WITH FORCED CIRCUIT WITH HEAT INTEGRATED IN THE WATER HEATER

- **Solar collectors**
- **Glazed water heater**
- **Two-way hydraulic unit with high-efficiency solar pump**
- **Hydraulic and safety accessories**
- ES solar expansion vessel
- RS additional solar tank
- Hose with bracket for tanks
- Thermostatic mixing valve
- Propylene glycol for solar plants
- Sealing gaskets

The system can be combined with wall-hung pre-mixed condensing boilers for sole heating. This solar system configuration requires you to position the water heater inside the building, preferably close to the heat power plant. By means of appropriate temperature probes which regulate its operation, a pump enables circulation of the liquid in the solar circuit.

| Technical specifications | um | HW 200 | VLC 200 | HW 300 | VLC 300 | HW 500 | VLC 500 |
|---|---|---|---|---|---|---|---|
| Orientation | - | Vertical | | | | | |
| Collectors | no. | 1 | 1 | 2 | 2 | 3 | 3 |
| Model | - | HW 20 | VLC 25 | HW 20 | VLC 25 | HW 20 | VLC 25 |
| Water heater | - | WHPS BNF 200 DS | | WHPS BNF 300 DS | | WHPS BNF 500 DS | |
| Water heater energy efficiency class | - | C | C | C | C | C | C |
| Water heater actual volume | l | 196 | 196 | 273 | 273 | 475 | 475 |
| Vbu | l | 67 | 67 | 85 | 85 | 130 | 130 |
| Losses in standby mode | W | 67 | 67 | 85 | 85 | 112 | 112 |
| Solar unit | - | 2 ways | | | | | |
| Qnonsol (M) | kWh | 1037,73 | 917,9 | 876 | 799 | 1061,94 | 929,2 |
| Qnonsol (L) | kWh | 2077,28 | 1854,12 | 1564,68 | 1332,76 | 1459,17 | 1305,07 |
| Qnonsol (XL) | kWh | 3581,14 | 3295,2 | 2821,42 | 2429,72 | 2385,32 | 2014,43 |
| Qnonsol (XXL) | kWh | 4731,11 | 4419,2 | 3863,98 | 3396,22 | 3262,71 | 2761,55 |
| Q circulation pump | W | 45 | | | | | |
| Qaux | kWh | 90,7 | | | | | |
| Qstand by | W | 0,08 | | | | | |
| Expansion vessel | - | ES 12 | ES 12 | ES 18 | ES 18 | ES 25 | ES 25 |
| Additional tank | - | RS 5 | RS 5 | RS 5 | RS 5 | RS 8 | RS 8 |
| Propylene glycol to be mixed | kg | 10 | | | | | |
| Code | - | PSPACKEX00 | PSPACKEX03 | PSPACKEX01 | PSPACKEX04 | PSPACKEX02 | PSPACKEX05 |

The systems do not include the retainers for roof installation, to be chosen among those specified for the different types of collectors, connection pipes and temperature probes. The solar control unit, if necessary, must be chosen among those indicated in the solar accessories in case you do not use a Fondital boiler set to manage the power solar system.

# SULPACK EASY

SYSTEMS WITH FORCED CIRCUIT WITH HEAT NOT INTEGRATED IN THE WATER HEATER

- **Solar collectors**
- **Glazed water heater**
- **One-way hydraulic unit with high efficiency solar pump**
- **Hydraulic and safety accessories**
- Sealing gaskets
- ES solar expansion vessel
- Hoses with brackets for tanks
- Thermostatic mixing valve
- Propylene glycol for solar plants

The system can be combined to wall-hung combination boilers with instantaneous production of domestic hot water, using the solar kit for instantaneous boilers. The systems do not include the retainers for roof installation, to be chosen among the systems specified for the different types of collectors and connection pipes.

| Technical specifications | - | HW 200 | HW 300 | HW 500 | VLC 200 | VLC 300 | VLC 500 |
|---|---|---|---|---|---|---|---|
| Orientation | - | Vertical | | | | | |
| Collectors | no. | 1 | 2 | 3 | 1 | 2 | 3 |
| Model | - | HW 20 | HW 20 | HW 20 | VLC 25 | VLC 25 | VLC 25 |
| Water heater | - | WHPS BNF 200 SS | WHPS BNF 300 SS | WHPS BNF 500 SS | WHPS BNF 200 SS | WHPS BNF 300 SS | WHPS BNF 500 SS |
| Water heater energy efficiency class | - | C | C | C | C | C | C |
| Water heater actual volume | l | 196 | 273 | 475 | 196 | 273 | 475 |
| Losses in standby mode | W | 67 | 85 | 112 | 67 | 85 | 112 |
| Solar unit | - | 1 way | | | | | |
| Qnonsol (M) | kWh | 910,57 | 800,53 | 1030,15 | 813,48 | 746,16 | 976,3 |
| Qnonsol (L) | kWh | 1895 | 1417,64 | 1344,72 | 1688 | 1208,15 | 1217,49 |
| Qnonsol (XL) | kWh | 3367,49 | 2620,11 | 2197,68 | 3091 | 2245,89 | 1856,34 |
| Qnonsol (XXL) | kWh | 4004,73 | 3637,97 | 3036,57 | 4199 | 3183,53 | 2562,6 |
| Q circulation pump | W | 45 | | | | | |
| Qaux | kWh | 90,7 | | | | | |
| Qstand by | W | 0,08 | | | | | |
| Expansion vessel | - | ES 12 | ES 18 | ES 25 | ES 12 | ES 18 | ES 25 |
| Propylene glycol to be mixed | kg | 10 | 10 | 10 | 10 | 10 | 10 |
| Code | - | PSPACKEY00 | PSPACKEY01 | PSPACKEY02 | PSPACKEY03 | PSPACKEY04 | PSPACKEY05 |

The systems do not include the retainers for roof installation, to be chosen among the systems specified for the different types of collectors, connection pipes and temperature probes. The solar control unit, if necessary, must be chosen among those indicated in the solar accessories in case you do not use a Fondital boiler set to manage the power solar system (for combination boilers only).

The Solar Kit for instant boilers allows you to bypass the boiler if water temperature from the solar tank is higher than 48 °C. It includes one unit integrating both a thermostatic deviating valve and an adjustable thermostatic mixing valve.
If you order the solar kit for boiler, when ordering a SULPACK EASY KIT, the mixing valve will not be supplied and will automatically be eliminated from the cost of the kit.

# SULPACK NATURAL PLUS

NATURAL CIRCULATION SYSTEMS

- **Solar collectors**
- **Glazed water heater**
- **Fastening system for tilted roof**
- **Hydraulic connection accessories**
- Heat transfer fluid circuit safety valve
- Double magnesium anode
- Domestic cold water input check and safety valve

The Sulpack Natural Plus system can be combined to Fondital combination boilers with instantaneous production of domestic hot water, using the solar kit for instantaneous boilers. The Solar Kit allows you to bypass the boiler if water temperature from the solar tank is higher than 48 °C.

| Technical specifications | um | 150 | 200 | 300 |
|---|---|---|---|---|
| Collectors | no. | 1 | 1 | 2 |
| Gross surface | m² | 2,12 | | |
| Liquid content | litres | 1,4 | | |
| Collector structure material | - | aluminium | | |
| Glass | type | low-iron | | |
| Thickness | mm | 3,2 | | |
| Insulation | type | mineral wool | | |
| Insulation thickness | mm | 40 | | |
| Size (W x L x H) | mm | 1040x2040x89 | | |
| Overall empty weight | kg | 42 | | |
| Opening surface | m² | 1,92 | | |
| η0 | - | 0,787 | | |
| α1 | - | 4,48 | | |
| α2 | - | 0,0079 | | |
| IAM | - | 0,9 | | |
| **Absorber** | | | | |
| Surface | m² | 1,91 | | |
| Material | type | aluminium | | |
| Finishing | type | selective | | |
| **Tank** | | | | |
| Water heater energy efficiency class | - | C | C | C |
| Dissipation S | - | 68 | 72 | 97 |
| Useful volume | litres | 152 | 198 | 282 |
| Heat exchanger | - | jacket | jacket | jacket |
| Heat transfer fluid capacity | litres | 8,5 | 12 | 18,8 |
| Insulation thickness | mm | 50 | 50 | 50 |
| Maximum operating pressure | bar | 6 | 6 | 6 |
| Internal finishing | type | enamelling | enamelling | enamelling |
| Corrosion protection | type | Anodic (double anode - Mg) | | |
| Empty weight | kg | 72 | 88 | 110 |
| Presetting for resistor | - | sì | sì | sì |
| Connections | - | G 3/4 | G 3/4 | G 3/4 |
| Total amount of heat transfer fluid in the system | litres | 11 | 14,5 | 22,5 |
| Code | - | PSPACTER06 | PSPACTER07 | PSPACTER08 |

| Water heater resistor (Power) | w | 750 | 1500 | 2500 | 3500 |
|---|---|---|---|---|---|
| Voltage | v | 230 | | | |
| Features | - | Resistor with G1 1/4 threading and thermostat | | | |
| Code | - | PSRESELE04 | PSRESELE05 | PSRESELE06 | PSRESELE07 |

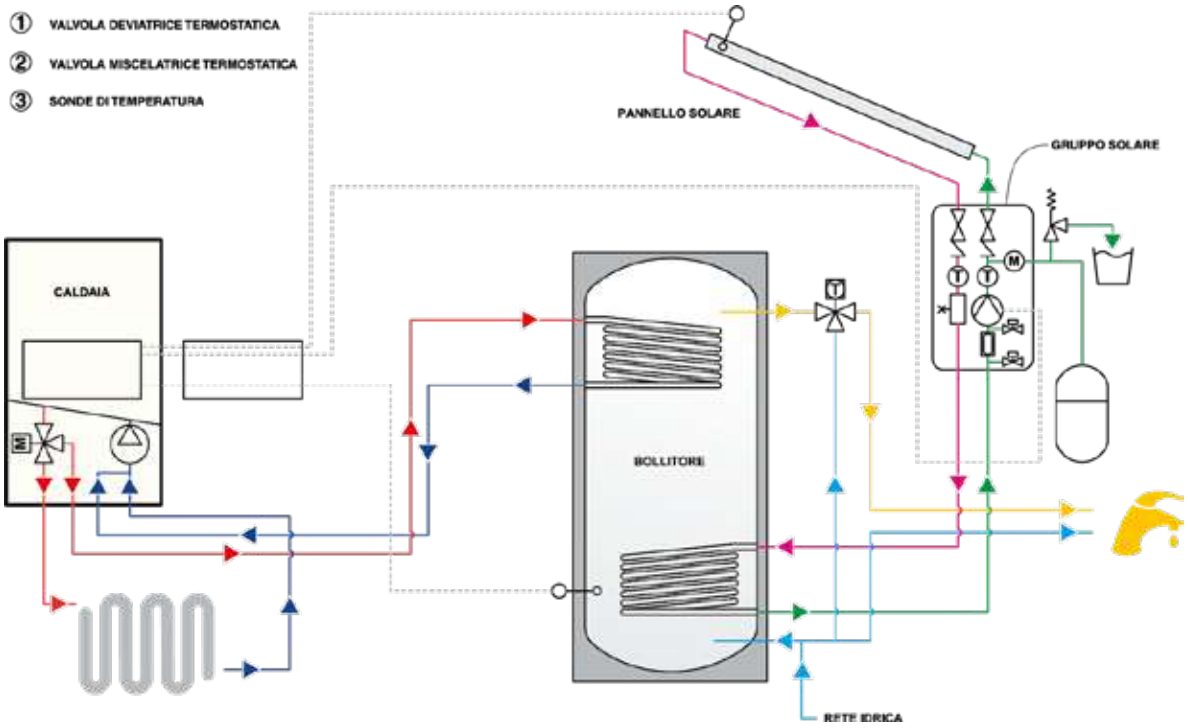
| Description | Code |
|---|---|
| Supplementary kit for flat roofs, mod. 150 | PSKITPAC00 |
| Supplementary kit for flat roofs, mod. 200 | PSKITPAC01 |

| Description | Code |
|---|---|
| Supplementary kit for flat roofs, mod. 300 | PSKITPAC02 |
| Sulpack natural plus pressure-temperature safety valve | PSVALSIC00 |

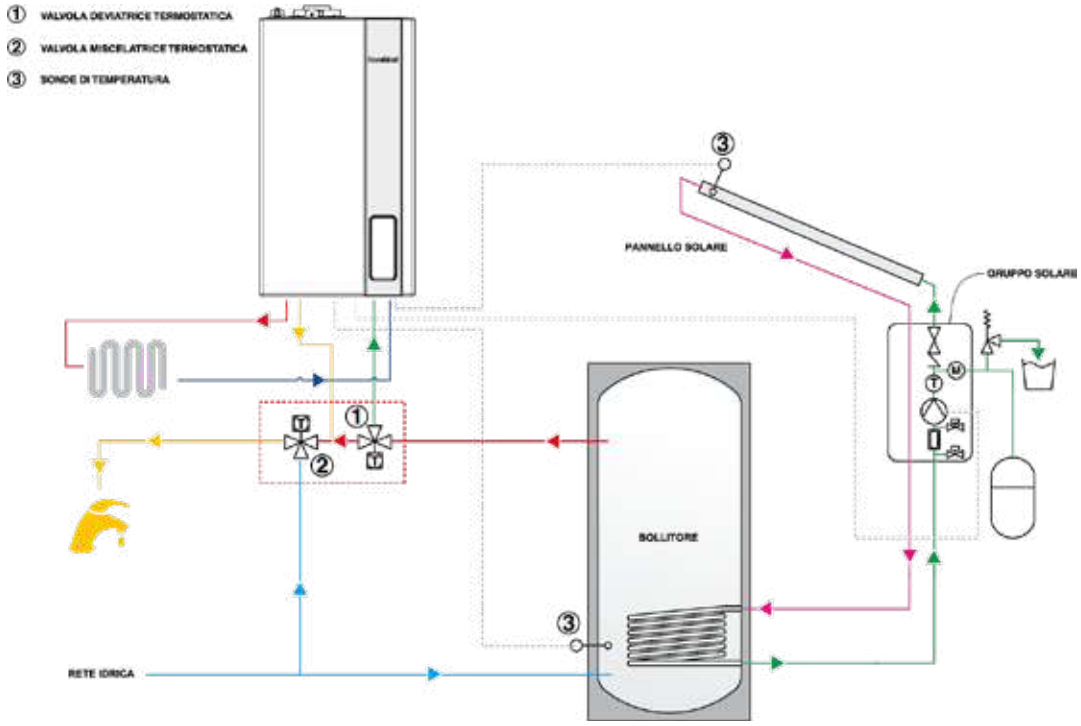
It can be combined with the following models:Itaca KC - Formentera KC

## EXAMPLES

Connection to a boiler with integrated deviating valve
**Sulpack Pro / Sulpack Evo**




Connection to combination instantaneous boiler
**Sulpack Easy**



# MADEIRA SOLAR KRBS

BASE-PLATE CONDENSING BOILER WITH DHW HEATER WITH DOUBLE COIL - COMPLETE WITH HYDRAULIC UNIT AND ELECTRONICS FOR THERMAL SOLAR MANAGEMENT

- **Standard ambient temperature probe**
- **Modulation ratio: 1:9**
- **CH water flow rate electronic control**
- **300-litre water heater with double coil**
- **Available in the KRBS version with a direct zone, in the KRBS-V version with one direct and one mixed integrated zones, and in the KRBS-Z version with one direct and two mixed integrated zones.**
- **Front door for immediate access to boiler**
- Thermosetting polymer-covered stainless steel heat exchanger
- Fully pre-mixed burner
- Hydraulic connections on the sides
- Heating expansion vessel - 10 litres
- 12-litre DHW expansion vessel
- 18-litre solar expansion vessel
- Additional 5-litre safety solar tank

For the technical data sheet, see page 48

**Available in the following models:**

12 24 28 32

# MADEIRA SOLAR COMPACT KBS

CONDENSING BASE-PLATE BOILER WITH INSTANT PRODUCTION OF DHW AND WITH SINGLE-COIL SOLAR DHW WATER HEATER. COMPLETED WITH HYDRAULIC UNIT AND ELECTRONICS FOR MANAGING THERMAL SOLAR

- **Modulation ratio: 1:9**
- **CH water flow rate electronic control**
- **170-litre water heater with single coil**
- **DHW thermostatic mixing valve**
- **Front door for immediate access to boiler**
- **Available in the KBS version with a direct zone, in the KBS-V version with one direct and one mixed integrated zones, and in the KBS-Z version with one direct and two mixed integrated zones.**
- Thermosetting polymer-covered stainless steel heat exchanger
- Fully pre-mixed burner
- Hydraulic connections on the sides
- Heating expansion vessel - 10 litres
- 12-litre DHW expansion vessel
- 12-litre solar expansion vessel

For the technical data sheet, see page 52

**Available in the following models:**

24 32

# ONE-WAY SOLAR UNIT

Flow regulator with 2-12 l/min flowmeter and integrated loading system

- Ball tap with built-in return thermometer and check valve
- Insulation in black EPP
- High efficiency solar circulation pump
- Solar safety valve calibrated at 6 bar
- Pressure gauge with 10 bar scale
- Expansion tank connection G ½
- Wall-mounted, steel bracket included

| SOLAR UNIT RS1 | | |
|---|---|---|
| Flow rate adjustment | l/min. | 2 ÷ 12 |
| Max. head | m | 7,5 |
| Max. power | w | 45 |
| Code | | PSGRUP0011 |

# TWO-WAY SOLAR UNIT

Flow regulator with 4-15 l/1' flowmeter and integrated loading system

- Built-in degasser with manual bleed valve
- Ball taps with built-in flow and return thermometers and check valve
- Insulation in black EPP
- High efficiency solar circulation pump
- Solar safety valve calibrated at 6 bar
- Pressure gauge with 10 bar scale
- Expansion tank connection G ½
- Wall-mounted, steel bracket included

| SOLAR UNIT MRS3 | | |
|---|---|---|
| Flow rate adjustment | l/min. | 4 ÷ 15 |
| Max. head | m | 7,5 |
| Max. power | w | 45 |
| Code | | PSGRUP0012 |

# SOLAR UNIT MRDP PLUS W

Flow regulator with 20-70 l/min. flowmeter and integrated loading system

- Ball taps with built-in flow and return thermometers and check valve
- Insulation in black EPP
- High efficiency solar circulation pump
- Solar safety valve calibrated at 6 bar
- Pressure gauge with 10 bar scale
- Expansion tank connection G ½
- Wall-mounted, steel bracket included

| SOLAR UNIT MRDP PLUS W | | |
|---|---|---|
| Flow rate adjustment | l/min. | 20 ÷ 70 |
| Max. head | m | 11 |
| Max. power | w | 140 |
| Code | | PSGRUP0010 |

# CIRCULATION PUMPS

High-efficiency circulation pumps for solar plants


| SOLAR CIRCULATION PUMP C6 | | |
|---|---|---|
| Maximum head | m | 5,4 |
| Max. power | w | 49 |
| Fan | no. | 3 |
| Fittings | - | 41 |
| Maximum ambient temperature | °C | 60 |
| Maximum temperature of solar fluid | °C | 110 |
| Code | | PSCIRCOLA7 |

# ADDITIONAL TANKS

Diaphragm-free tank with tank protection feature
White

| ADDITIONAL TANKS | | RS 5 | RS 8 | RS 12 |
|---|---|---|---|---|
| Capacity | litres | 5 | 8 | 12 |
| Diameter | mm | 160 | 200 | 270 |
| Height | mm | 270 | 280 | 264 |
| Fitting | - | 2 x G ¾ M | | |
| Max. pressure | bar | 10 | | |
| Code | | PSVASO0009 | PSVASO0010 | PSVASO0011 |

# EXPANSION VESSELS

Diaphragm for solar fluid for T max 100 °C.
White

| EXPANSION VESSELS | | ES 12 | ES 18 | ES 25 | ES 35 | ES 50 | ES 80 | ES 100 | ES 200 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity | litres | 12 | 18 | 25 | 35 | 50 | 80 | 105 | 200 |
| Diameter | mm | 270 | 270 | 300 | 380 | 380 | 450 | 500 | 600 |
| Height | mm | 264 | 350 | 392 | 377 | 525 | 608 | 665 | 812 |
| Fitting | - | G ¾ | | | | | G 1 | | |
| Max. pressure | bar | 10 | | | | | | | |
| Preload | bar | 2,5 | | | | | | | |
| Code | | PSVASO0001 | PSVASO0002 | PSVASO0003 | PSVASO0004 | PSVASO0005 | PSVASO0006 | PSVASO0007 | PSVASO0008 |

# ACCESSORIES FOR TANKS


| Item | Description | Code |
|---|---|---|
|  | STES 5 - 25: Universal mounting bracket for expansion vessels and additional tanks up to a capacity of 25 litres. | PSVASO0012 |
|  | STES 5 - 18: Wall mounting bracket with clamp for additional tanks and expansion vessels up to a capacity of 18 litres | PSVASO0014 |
|  | STES 35 - 50: Quick wall-mounting bracket for expansion vessels up to a capacity between 35 and 50 litres. | PSVASO0015 |
|  | FLEX 600: Hose for solar tanks, 600 mm long. | PSVASO0016 |
|  | STES 12 - 50 w/valve: Wall mounting bracket with double shut-off fitting for expansion vessels up to a capacity of 50 litres. Allows tank control without emptying the system. | PSVASO0017 |

# THERMOSTATIC DEVIATING VALVE

- Bronze external body
- Internal parts in special anti-scale plastic
- Automatic shut-off if no mixing cold water is available

| THERMOSTATIC MIXING VALVE | | |
|---|---|---|
| Fittings | - | G 1 M |
| Temperature range | °C | 35 - 50 |
| Maximum operating temperature | °C | 100 |
| Maximum flow rate | l/h | 1500 |
| Code | | PSVALMIX00 |

# THERMOSTATIC DEVIATING VALVE


- Brass external body
- Automatic shut-off if no mixing cold water is available

| THERMOSTATIC MIXING VALVE | | |
|---|---|---|
| Fittings | - | G 3/4 M |
| Temperature range | °C | 30 - 60 |
| Maximum operating temperature | °C | 85 |
| Maximum flow rate | l/h | 1000 |
| Code | | HCGEMMIS00 |

# THREE-WAY DEVIATING VALVE

Three-way deviating valve for solar plants with 3-wire auxiliary contact

| THREE-WAY DEVIATING VALVE | | |
|---|---|---|
| Fittings | - | G ¾ M |
| Maximum operating temperature | °C | 160 |
| Code | | PSVALDEV01 |

# SOLAR PROTECTION LIQUID

Propylene glycol-based fluid suitable for use in systems with solar panels
Protective, anti-freeze and anti-corrosive

| SOLAR PROTECTION LIQUID | | 10/170 | 20/170 | 30/170 |
|---|---|---|---|---|
| Quantity | litres | 10 | 20 | 30 |
| Minimum operating temperature | °C | - 28 | | |
| Maximum operating temperature | °C | 170 | 170 | 170 |
| Code | | PSPROSOL00 | PSPROSOL01 | PSPROSOL02 |

# CONCENTRATED SOLAR PROTECTION LIQUID

Concentrated monopropylene glycol-based antifreeze fluid, to be diluted in water

| CONCENTRATED SOLAR PROTECTION LIQUID | | | | | |
|---|---|---|---|---|---|
| Quantity | kg | 10 | 10 | 10 | 10 |
| Percentage of protection liquid in the system | % | 20 | 25 | 30 | 45 |
| Minimum temperature | °C | -8 | -12 | -15 | -28 |
| Code | | PSPROSOL04 | | | |

# FITTING FOR SOLAR PLANTS

- The FITTING KIT includes 4 swivel nut connectors, 4 seals, 4 O-rings.
- Hose flaring is made using a steel washer and a brass nipple, which are included in the kit
- The NIPPLE KIT includes brass nipples in 3-piece package

| FITTINGS FOR SOLAR PLANTS | Fitting kit for Tuboflex SS 12 | Fitting kit for Tuboflex SS 16 | Nipple kit G ½ for Tuboflex SS 12 | Nipple kit G ¾ for Tuboflex SS 16 |
|---|---|---|---|---|
| Code | PSTUBI0019 | PSTUBI0020 | PSTUBI0021 | PSTUBI0022 |

# PIPES FOR SOLAR PLANTS

Splittable double flexible pipe system in AISI 316 L stainless steel with insulation coating in EPDM closed cell foam

- External protection case in black polyethylene
- Silicone cable for two-wire collector probe (maximum operating temperature in continuous duty: 280°C)
- Maximum resistance to temperature values of 175°C for short periods
- It includes 4 swivel nut connectors, 4 seals, 4 O-rings
- Hose flaring is made using a steel washer and a brass nipple, which are included in the kit

| | | Stainless steel Tuboflex 12/20 | Stainless steel Tuboflex 12/25 | Stainless steel Tuboflex 16/20 | Stainless steel Tuboflex 16/25 |
|---|---|---|---|---|---|
| Diameter | mm | 12 | 12 | 146 | 16 |
| Length | m | 20 | 25 | 20 | 25 |
| Insulation thickness | mm | 13 | | | |
| Maximum working temperature in continuous duty | °C | 125 | | | |
| Code | | PSTUBI0015 | PSTUBI0016 | PSTUBI0017 | PSTUBI0018 |

# SOLAR KIT FOR COMBINATION BOILERS

Solar kit for combination instantaneous boilers; it can be combined with the boilers listed below for connection to the solar plants featuring forced circuit and natural circulation, with heat not integrated in the water heater SULPACK EASY and SULPACK NATURAL. The kit allows you to bypass the boiler if water temperature from the solar tank is higher than 48 °C and to adjust the maximum temperature of water delivered at the users/use points. Range of adjustment: 30 - 56 °C. Limit temperature for shutting off the flow if no cold water is available: 60 °C. Minimum operating pressure: 0.5 bar. Ideal operating pressure: 1 - 10 bar.

It includes:

- One thermostatic deviating valve and one mixing valve
- Connection pipes
- Shut-off taps as specified below: 0KITSOLC07: one straight ball tap G ½ for gas; two straight ball taps G ½ for hot water from solar storage tank and cold water

| SOLAR KITS | |
|---|---|
| System connection | Rear connections |
| Code | 0KITSOLC07 |

# TEMPERATURE PROBE

PT 1000 temperature probe for solar plants, suitable for all models of solar control unit

Heat paste supplied

| SOLAR PROBE | | |
|---|---|---|
| Bulb diameter | mm | 6 |
| Cable length | mm | 2,5 |
| Code | | PSPTMILL00 |

# SG2 SOLAR CONTROL UNIT

Control unit for managing 9 types of solar circuits.

- Load of a twin-coil water heater with heat being integrated from the boiler
- Management of a combined water heater
- Possibility to have two arrays of collectors
- Pre-set for thermal discharge
- Five probe inputs
- Two relay outputs
- Two adjustable temperature differentials
- Hysteresis settings
- One pulse input for heat metering
- Pump anti-seize function
- Possibility to control circulation pumps in PWM or 0-10V
- Wide LCD display showing system layout and probe current temperatures
- Charts showing the trend of the probe temperature reading in time
- Can be set for 10 types of systems

# SG3 SOLAR CONTROL UNIT

Control unit for managing 12 types of solar circuits.

- Load of a twin-coil water heater with heat being integrated from the boiler
- Management of two water heaters in cascade-type connection
- Management of a combined water heater
- Possibility to have two arrays of collectors
- Pre-set for thermal discharge
- Five probe inputs
- Two relay outputs
- One output for modulating solar pump
- Two adjustable temperature differentials
- Hysteresis settings
- One pulse input for heat metering
- Pump anti-seize function
- Collector protection function
- Function for water heater thermal discharge during the night with collector
- Heating pump post-circulation function
- Wide LCD display showing system layout and probe current temperatures
- Charts showing the trend of the probe temperature reading in time
- Can be set for 13 types of systems

| SOLAR ELECTRONIC CONTROL UNITS | SG2 | SG3 |
|---|---|---|
| Code | PSCENSO004 | PSCENSO005 |

The supply includes collector probe and water heater probe (both PT 1000) as well as the wall-mounting base.

# SYSTEM COMPONENTS

## WATER HEATERS



## GEMINI FLUSH-MOUNTED ZONE MODULES

# WHPS BNF DS

SOLAR WATER HEATER WITH DOUBLE COIL

- **Easy installation**
- **No inspection flange**
- **High efficiency and low operating costs**
- **Can be integrated with solar systems**
- **Fast storage with supply of abundant and continuous water**
- Insulation in stiff expanded polyurethane, CFC and HCFC free
- External case in white skay
- Magnesium protection anode
- DHW thermometer
- DHW recirculation
- Presetting for auxiliary resistor (thread G 1 1/2)

**Available with the following capacities (l):**

da 200 a 500

WHPS BNF DS is a water heater that can be combined with boilers for CH only, to produce domestic hot water, in porcelain-glass steel with double coil.

| Model | Code | Dissipation S | Useful volume | Backup volume | Energy efficiency class | Overall height | Outer diameter | Gross weight |
|---|---|---|---|---|---|---|---|---|
| | | w | litres | Vbu | | mm | mm | kg |
| **BNF 200 DS** | PSBOLLV064 | 67 | 196 | 67 | C | 1330 | 610 | 95 |
| **BNF 300 DS** | PSBOLLV065 | 85 | 273 | 85 | C | 1560 | 650 | 130 |
| **BNF 500 DS** | PSBOLLV066 | 112 | 475 | 130 | C | 1820 | 760 | 170 |

| Model | | BNF 200 DS | BNF 300 DS | BNF 500 DS |
|---|---|---|---|---|
| Nominal volume | litres | 200 | 300 | 500 |
| Maximum working pressure | bar | 10 | | |
| Maximum working temperature | °C | 95 | | |
| Auxiliary coil area | m2 | 0,5 | 0,9 | 0,9 |
| Solar coil area | m2 | 0,7 | 1,4 | 2,1 |
| Coil power (ΔT 35 K) | kW | 12 | 26 | 33 |
| Solar coil power (ΔT 35 K) | kW | 36 | 44 | 55 |
| Tilting height | mm | 1465 | 1690 | 1970 |
| Insulation thickness | mm | 50 | 50 | 55 |

| Item | Description | Code |
|---|---|---|
|  | Single electrode electronic anode - 200/300/500/1000 | 0ANOELET01 |
|  | Thermostat and thermometer kit | 0KTERMTE00 |

| Item | Description | Code |
|---|---|---|
|  | Resistor with G1 ½ threading and single-/three-phase power supply - 3kW | PSRESELE02 |
|  | Resistor with G1 ½ threading and single-/three-phase power supply - 4.5kW | PSRESELE03 |

# WHPS BNF SS

SOLAR WATER HEATER WITH SINGLE COIL

- **No inspection flange**
- **High efficiency and low operating costs**
- **Can be integrated with solar systems**
- **Fast storage with supply of abundant and continuous water**
- Insulation in stiff expanded polyurethane, CFC and HCFC free
- External case in white skay
- Magnesium protection anode
- DHW thermometer
- DHW recirculation
- Presetting for auxiliary resistor (thread G 1 1/2)

**Available with the following capacities (l):**

da 200 a 500

WHPS BNF SS is a water heater that can be combined with boilers for CH only, to produce domestic hot water, in porcelain-glass steel with single coil.

| Model | Code | Dissipation S | Useful volume | Energy efficiency class | Overall height | Outer diameter | Gross weight |
|---|---|---|---|---|---|---|---|
| | | w | litres | | mm | mm | kg |
| **BNF 200 SS** | PSBOLLV061 | 67 | 196 | C | 1329 | 610 | 90 |
| **BNF 300 SS** | PSBOLLV062 | 85 | 273 | C | 1560 | 650 | 115 |
| **BNF 500 SS** | PSBOLLV063 | 112 | 475 | C | 1818 | 760 | 155 |

| Model | | BNF 200 SS | BNF 300 SS | BNF 500 SS |
|---|---|---|---|---|
| Nominal volume | litres | 200 | 300 | 500 |
| Maximum working pressure | bar | 10 | | |
| Maximum working temperature | °C | 95 | | |
| Coil area | m2 | 1 | 1,4 | 2,1 |
| Coil power (ΔT 35 K) | kW | 36 | 44 | 55 |
| Tilting height | mm | 1465 | 1690 | 1966 |
| Insulation thickness | mm | 50 | 50 | 55 |

| Item | Description | Code |
|---|---|---|
|  | Single electrode electronic anode - 200/300/500/1000 | 0ANOELET01 |
|  | Thermostat and thermometer kit | 0KTERMTE00 |

| Item | Description | Code |
|---|---|---|
|  | Resistor with G1 ½ threading and single-/three-phase power supply - 3kW | PSRESELE02 |
|  | Resistor with G1 ½ threading and single-/three-phase power supply - 4.5kW | PSRESELE03 |

# WHPS BZ DS

SOLAR WATER HEATER WITH INTEGRATED SOLAR UNIT

- **Inspection flange**
- **Thicker 70 mm insulation**
- **Fast storage with supply of abundant and continuous water**
- **Can be integrated with solar systems**
- Insulation in stiff expanded polyurethane, CFC and HCFC free
- External case in white skay
- Magnesium protection anode for up to 1000 litre capacity
- Front inspection flange
- DHW recirculation
- Presetting for auxiliary resistor (thread G 1 1/2)

**Available with the following capacities (l):**

da 200 a 300

WHPS BZ DS is a water heater that can be combined with boilers for CH only, to produce domestic hot water, in porcelain-glass steel with double coil with integrated high-efficiency solar hydraulic unit.

| Model | Code | Dissipation S | Useful volume | Backup volume | Circulation pump power | Energy efficiency class | Overall height | Outer diameter | Gross weight |
|---|---|---|---|---|---|---|---|---|---|
| | | w | litres | Vbu | W | | mm | mm | kg |
| **BZ 200 DS** | AVBZ0MD200 | 51 | 196 | 67 | 45 | B | 1215 | 640 | 88 |
| **BZ 300 DS** | AVBZ0MD300 | 63 | 291 | 85 | 45 | B | 1615 | 640 | 117 |

| Model | | BZ 200 DS | BZ 300 DS |
|---|---|---|---|
| Nominal volume | litres | 200 | 300 |
| Maximum working pressure | bar | 10 | |
| Maximum working temperature | °C | 95 | |
| Auxiliary coil area | m2 | 0,7 | 1 |
| Solar coil area | m2 | 1 | 1,1 |
| Coil power (ΔT 35 K) | kW | 17 | 24 |
| Solar coil power (ΔT 35 K) | kW | 24 | 26 |
| Tilting height | mm | 1215 | 1615 |
| Insulation thickness | mm | 70 | 70 |

| Item | Description | Code |
|---|---|---|
|  | Single electrode electronic anode - 200/300/500/1000 | 0ANOELET01 |
|  | Thermostat and thermometer kit | 0KTERMTE00 |
|  | Resistor with G1 ½ threading and single-/three-phase power supply - 3kW | PSRESELE02 |

| Item | Description | Code |
|---|---|---|
|  | Resistor with G1 ½ threading and single-/three-phase power supply - 4.5kW | PSRESELE03 |
|  | Resistor with flange and single-phase power supply - 200/300/500 - 3kW | PSRESELE13 |

# WHPS BA SS

WATER HEATER THAT CAN BE COMBINED WITH BOILERS FOR SOLE HEATING, TO PRODUCE DOMESTIC HOT WATER, IN PORCELAIN-GLASS STEEL WITH SINGLE COIL

- **Inspection flange**
- **High efficiency and low operating costs**
- **Fast storage with supply of abundant and continuous water**
- **Can be integrated with solar systems**
- Insulation in soft expanded polyurethane, CFC and HCFC free
- External case in white skay
- Magnesium protection anode for up to 1000 litre capacity
- Protection electrodes with electronic device for 1500 and 2000 litre capacity
- Front inspection flange
- DHW recirculation
- Presetting for auxiliary resistor (thread G 1 1/2)
- Optional kit with flange and heating element for 200 - 300 - 500 models

**Available with the following capacities (l):**

da 200 a 2000

| Model | Code | Dissipation S | Useful volume | Energy efficiency class | Overall height | Outer diameter | Gross weight |
|---|---|---|---|---|---|---|---|
| | | w | litres | | mm | mm | kg |
| **BA 200 SS** | PSBOLLV054 | 67 | 196 | C | 1329 | 610 | 90 |
| **BA 300 SS** | PSBOLLV055 | 85 | 273 | C | 1560 | 650 | 115 |
| **BA 500 SS** | PSBOLLV056 | 112 | 475 | C | 1818 | 760 | 155 |
| **BA 1000 SS AE** | PSBOLLV069 | 142 | 930 | complying with Regulation 814/2013 | 2205 | 990 | 245 |
| **BA 2000 SS AE** | PSBOLLV070 | 162 | 1950 | complying with Regulation 814/2013 | 2470 | 1300 | 410 |

| Model | | BA 200 SS | BA 300 SS | BA 500 SS | BA 1000 SS | BA 2000 SS |
|---|---|---|---|---|---|---|
| Nominal volume | litres | 200 | 300 | 500 | 1000 | 2000 |
| Maximum working pressure | bar | 10 | | | | |
| Maximum working temperature | °C | 95 | | | | |
| Coil area | m2 | 1 | 1,4 | 2,1 | 4 | 4,5 |
| Coil power (ΔT 35 K) | kW | 36 | 44 | 55 | 120 | 135 |
| Tilting height | mm | 1465 | 1690 | 1966 | 2250 | 2705 |
| Insulation thickness | mm | 50 | 50 | 55 | 100 | 100 |

| Item | Description | Code |
|---|---|---|
|  | Single electrode electronic anode - 200/300/500/1000 | 0ANOELET01 |
|  | Thermostat and thermometer kit | 0KTERMTE00 |
|  | Resistor with G1 ½ threading and single-/three-phase power supply - 3kW | PSRESELE02 |

| Item | Description | Code |
|---|---|---|
|  | Resistor with G1 ½ threading and single-/three-phase power supply - 4.5kW | PSRESELE03 |
|  | Resistor with flange and single-phase power supply - 200/300/500 - 3kW | PSRESELE13 |

# WHPS BA DS

WATER HEATER THAT CAN BE COMBINED WITH BOILERS FOR SOLE HEATING, TO PRODUCE DOMESTIC HOT WATER, IN PORCELAIN-GLASS STEEL WITH DOUBLE COIL

- **Inspection flange**
- **High efficiency and low operating costs**
- **Fast storage with supply of abundant and continuous water**
- **Can be integrated with solar systems**
- Insulation in soft expanded polyurethane, CFC and HCFC free
- External case in white skay
- Magnesium protection anode for up to 1000 litre capacity
- Protection electrodes with electronic device for 1500 and 2000 litre capacity
- Front inspection flange
- DHW recirculation
- Three holders for temperature probes (standard for models 200 - 300 - 500), other models are preset for two holders (G 1/2 fitting)
- Ready for resistor with G 1 1/2 fitting for 1000 - 2000 models
- Optional kit with flange and heating element for 200 - 300 - 500 models

**Available with the following capacities (l):**

da 200 a 2000

| Model | Code | Dissipation S | Useful volume | Backup volume | Energy efficiency class | Overall height | Outer diameter | Gross weight |
|---|---|---|---|---|---|---|---|---|
| | | w | litres | Vbu | | mm | mm | kg |
| **BA 200 DS** | PSBOLLV050 | 67 | 196 | 67 | C | 1330 | 610 | 95 |
| **BA 300 DS** | PSBOLLV051 | 85 | 273 | 85 | C | 1560 | 650 | 130 |
| **BA 500 DS** | PSBOLLV052 | 112 | 475 | 130 | C | 1820 | 760 | 170 |
| **BA 1000 DS AE** | PSBOLLV067 | 142 | 930 | 350 | complying with Regulation 814/2013 | 2205 | 990 | 265 |
| **BA 2000 DS AE** | PSBOLLV068 | 186 | 1950 | 840 | complying with Regulation 814/2013 | 2470 | 1300 | 480 |

| Model | | BA 200 DS | BA 300 DS | BA 500 DS | BA 1000 DS | BA 2000 DS |
|---|---|---|---|---|---|---|
| Nominal volume | litres | 200 | 300 | 500 | 1000 | 2000 |
| Maximum working pressure | bar | 10 | | | | |
| Maximum working temperature | °C | 95 | | | | |
| Auxiliary coil area | m2 | 0,5 | 0,9 | 0,9 | 1,6 | 2 |
| Solar coil area | m2 | 0,7 | 1,4 | 2,1 | 3,4 | 4,5 |
| Coil power (ΔT 35 K) | kW | 12 | 26 | 33 | 42 | 57 |
| Solar coil power (ΔT 35 K) | kW | 36 | 44 | 55 | 98 | 135 |
| Tilting height | mm | 1465 | 1690 | 1970 | 2250 | 2600 |
| Insulation thickness | mm | 50 | 50 | 55 | 100 | 100 |

| Item | Description | Code |
|---|---|---|
|  | Single electrode electronic anode - 200/300/500/1000 | 0ANOELET01 |
|  | Thermostat and thermometer kit | 0KTERMTE00 |
|  | Resistor with G1 ½ threading and single-/three-phase power supply - 3kW | PSRESELE02 |

| Item | Description | Code |
|---|---|---|
|  | Resistor with G1 ½ threading and single-/three-phase power supply - 4.5kW | PSRESELE03 |
|  | Resistor with flange and single-phase power supply - 200/300/500 - 3kW | PSRESELE13 |

# WHPS DX

COMBINATION WATER HEATER FOR THE PRODUCTION OF HEATING HOT WATER ALONG WITH THE PRODUCTION OF DOMESTIC HOT WATER, MADE OF STEEL WITH PORCELAIN-GLASS COIL AND TANK-IN-TANK

- **Easy installation**
- **High efficiency and low operating costs**
- **Fast storage with supply of abundant and continuous water**
- **Can be integrated with solar systems**
- Upper DHW inspection flange
- Insulation in soft expanded polyurethane, CFC and HCFC free
- External case in white skay
- Magnesium protection anode for DHW tank
- DHW control probe
- DHW recirculation, 3 probes for heating, heating water thermometer, 9 connections for different uses (thread G 1 1/2)
- Auxiliary resistor (thread G 1 1/2)

**Available with the following capacities (l):**

500 1000 1500

| Model | Code | Dissipation S | Useful volume | Energy efficiency class | Overall height | Outer diameter | Gross weight |
|---|---|---|---|---|---|---|---|
| | | w | litres | | mm | mm | kg |
| **DX 500/180** | PSBOLLV023 | 69 | 318/170 | B | 1700 | 850 | 175,00 |
| **DX 1000/250** | PSBOLLV007 | - | - | - | 2030 | 990 | 250,00 |
| **DX 1500/300** | PSBOLLV008 | - | - | - | 2070 | 1200 | 315,00 |

| Model | | DX 500/180 | DX 1000/250 | DX 1500/300 |
|---|---|---|---|---|
| Nominal volume | litres | 500 | 1000 | 1500 |
| Maximum working pressure | bar | 6 | | |
| Maximum working temperature | °C | 95 | | |
| Coil area | m2 | 2,5 | 3 | 3,5 |
| Coil power (ΔT 35 K) | kW | 75 | 90 | 105 |
| Tilting height | mm | 1820 | 2180 | 2300 |
| Insulation thickness | mm | 100 | 100 | 100 |

| Item | Description | Code |
|---|---|---|
|  | Resistor with G1 ½ threading and single-/three-phase power supply - 3kW | PSRESELE02 |
|  | Resistor with G1 ½ threading and single-/three-phase power supply - 4.5kW | PSRESELE03 |

# WHPS PU S

PUFFER FOR HEATING SYSTEMS, IN STEEL, AVAILABLE EITHER WITH COIL, WITH OUTER COVERING IN WHITE SKAY

- **Easy installation**
- **High efficiency and low operating costs**
- **Can be integrated with solar systems**
- Insulation in soft expanded polyurethane, CFC and HCFC free
- External case in white skay
- Control probes and heating circuit connections

**Available with the following capacities (l):**

1000 2000 3000

| Model | Code | Total volume | Overall height | Outer diameter | Net weight |
|---|---|---|---|---|---|
| | | litres | mm | mm | kg |
| **PU 1000 S** | PSBOLLV014 | 1000 | 2080 | 990 | 180,00 |
| **PU 2000 S** | PSBOLLV015 | 2000 | 2195 | 1400 | 330,00 |
| **PU 3000 S** | PSBOLLV016 | 3000 | 2750 | 1450 | 430,00 |

| Model | | PU 1000 S | PU 2000 S | PU 3000 S |
|---|---|---|---|---|
| Nominal volume | litres | 1000 | 2000 | 3000 |
| Maximum working pressure | bar | 10 | | |
| Maximum working temperature | °C | 95 | | |
| Coil area | m2 | 3 | 4,2 | 4,2 |
| Coil power (80/60) | kW | 90 | 120 | 120 |
| Tilting height | mm | 2280 | 2710 | 2985 |
| Insulation thickness | mm | 100 | 100 | 100 |

# WHPF BM

WATER HEATER TO BE COMBINED WITH BOILERS FOR SOLE HEATING, TO PRODUCE DOMESTIC HOT WATER, WITH THREE-WAY VALVE

- **Easy installation**
- **High efficiency and low operating costs**
- **Fast storage with supply of abundant and continuous water**
- **Equipped with motorised three-way valve**
- Magnesium protection anode for DHW tank
- External case in white metal sheet
- Fitting trim in white ABS
- Internal coating: porcelain-glass
- External insulation in high density ecological polyurethane foam
- Regulation thermostat

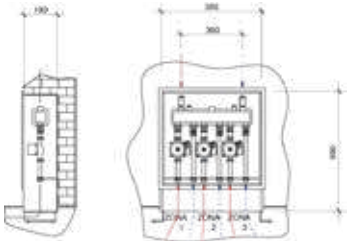
**Available with the following capacities (l):**

120 150 200

| Model | Code | Volume | Coil power | Overall height | Outer diameter | Gross weight |
|---|---|---|---|---|---|---|
| | | litres | kW | mm | mm | kg |
| **BM 120** | AVBMxx0120 | 120 | 29 | 1055 | 560 | 72,4 |
| **BM 150** | AVBMxx0150 | 150 | 38 | 1205 | 560 | 82,8 |
| **BM 200** | AVBMxx0200 | 200 | 49 | 1480 | 560 | 94,0 |

| Item | Description | Code |
|---|---|---|
|  | 5 litre expansion vessel kit | 0KVASEBO00 |

## GEMINI FLUSH-MOUNTED ZONE MODULES

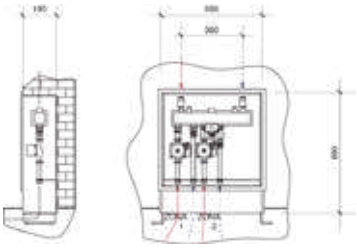


# GEMINI 3A

Flush-mounted zone module for managing three direct zones.

- Collector/hydraulic separator
- Electronic board for zone management
- External probe for "sliding temperature" operation
- Metal sheet box painted White Ral 9010
- Three direct circulation units with circulation pump and check valve installed to the return circuit
- ¾" connections

| Model | Code |
|---|---|
| **Gemini 3A** | 0KITZONE16 |



# GEMINI 2AB

Flush-mounted zone module with a direct and a mixed zone.

- Collector/hydraulic separator
- Electronic board for zone management
- External probe for "sliding temperature" operation
- Metal sheet box painted White Ral 9010
- Mixing unit at sliding temperature with 3-way mixing valve and rotary electric servo-control, circulation pump, check valve installed to the return circuit
- ¾" connections

| Model | Code |
|---|---|
| **Gemini 2AB** | 0KITZONE15 |

# FLUE FITTINGS AND ACCESSORIES

## FLUE FITTINGS



## ACCESSORIES

# FLUE SYSTEM TYPE B23

INTAKE AND VENT PIPES Ø 80

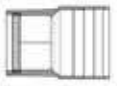
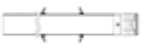



| No. | Item | Description | Code |
|---|---|---|---|
| 09 |  | Splitter kit Ø80+80 | 0KITSDOP00 |
| 10 |  | Extension M/F Ø80 L=1 m | 0PROLUNG00 |
| 11 |  | Extension M/F Ø80 L=0.5 m | 0PROLUNG01 |
| 13 |  | 90° elbow M/F Ø80 | 0CURVAXX02 |
| 15 |  | Suction opening Ø80 | 0GRIGASP01 |
| 16 |  | Flue vent chimney Ø80 H=138cm | 0CAMISCA00 |
| 18 |  | Flue vent terminal Ø80 L=1m | 0TERMSCA00 |
| 37 |  | Tile for tilted roof (flue output) | 0TEGTEIN00 |
| 43 |  | Wall rosette in silicone, ID Ø80 OD Ø170 | 0ROSPASI00 |

# FLUE SYSTEM TYPE B23

INTAKE AND VENT PIPES Ø 80-60




| No. | Item | Description | Code |
|---|---|---|---|
| 09 |  | Splitter kit Ø80+80 | 0KITSDOP00 |
| 10 |  | Extension M/F Ø80 L=1 m | 0PROLUNG00 |
| 11 |  | Extension M/F Ø80 L=0.5 m | 0PROLUNG01 |
| 13 |  | 90° elbow M/F Ø80 | 0CURVAXX02 |
| 15 |  | Suction opening Ø80 | 0GRIGASP01 |
| 16 |  | Flue vent chimney Ø80 H=138cm | 0CAMISCA00 |
| 18 |  | Flue vent terminal Ø80 L=1m | 0TERMSCA00 |
| 24 |  | Adapter Ø80/60 | 0RIDUZIO19 |
| 25 |  | Adapter M/F Ø 60-80 M/F | 0RIDUZIO10 |
| 28 |  | 90° elbow Ø60 | 0CURVAXX16 |
| 30 |  | Extension M/F Ø60 L=1m | 0PROLUNG16 |
| 32 |  | Extension M/F Ø60 L=0.5 m | 0PROLUNG18 |
| 36 |  | Flue vent terminal Ø60 L=1m | 0TERMSCA01 |
| 37 |  | Tile for tilted roof (flue output) | 0TEGTEIN00 |

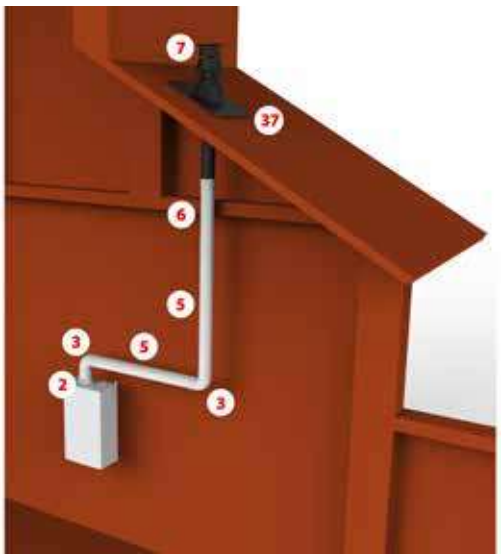
# FLUE SYSTEM TYPE C13

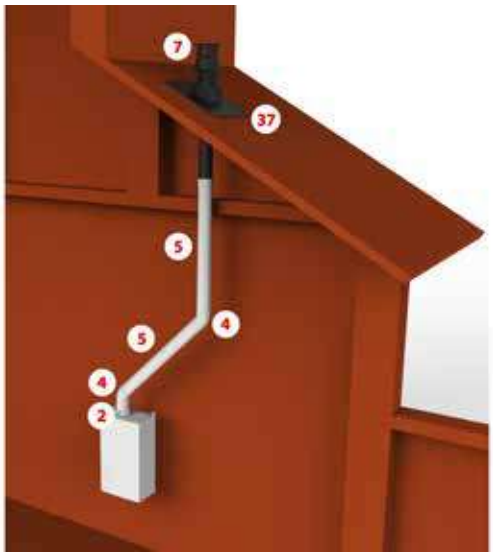
INTAKE AND VENT PIPES Ø 60/100

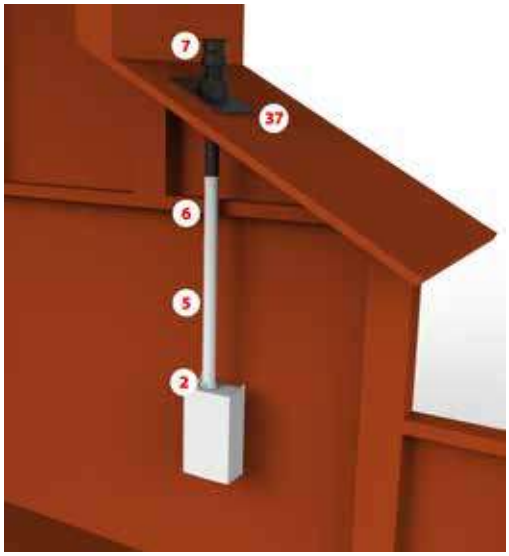

| No. | Item | Description | Code |
|---|---|---|---|
| 01 |  | Coaxial kit Ø 60/100 length 75cm | 0CONDASP00 |
| 02 |  | Coaxial fitting kit Ø60/100 | 0KITATCO00 |
| 03 |  | 90° elbow M/F coaxial Ø60/100 | 0CURVAXX05 |
| 05 |  | Coaxial extension M/F Ø60/100 L=1m | 0PROLUNG02 |
| 06 |  | Coaxial extension M/F Ø60/100 L=0.5m | 0PROLUNG03 |


# FLUE SYSTEM TYPE C33

INTAKE AND VENT PIPES Ø 60/100




| No. | Item | Description | Code |
|---|---|---|---|
| 02 |  | Coaxial fitting kit Ø60/100 | 0KITATCO00 |
| 03 |  | 90° elbow M/F coaxial Ø60/100 | 0CURVAXX05 |
| 04 |  | 45° elbow M/F coaxial Ø60/100 | 0CURVAXX04 |
| 05 |  | Coaxial extension M/F Ø60/100 L=1m | 0PROLUNG02 |
| 06 |  | Coaxial extension M/F Ø60/100 L=0.5m | 0PROLUNG03 |
| 07 |  | Coaxial flue kit Ø60/100 | 0KCAMASP00 |
| 37 |  | Tile for tilted roof (flue output) | 0TEGTEIN00 |

# FLUE SYSTEM TYPE C33

INTAKE AND VENT PIPES Ø 80

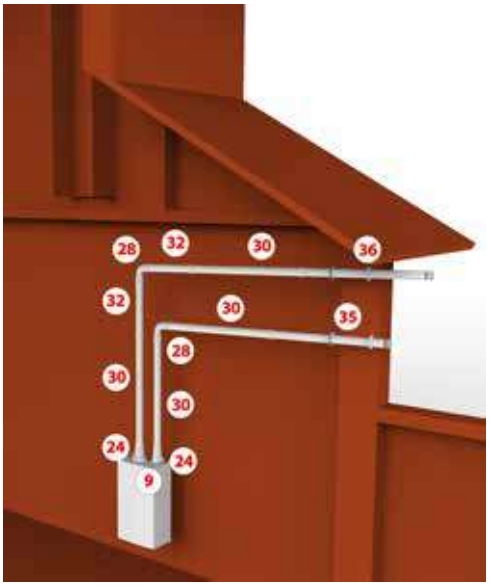


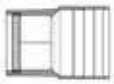
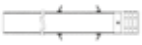
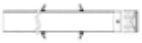

| No. | Item | Description | Code |
|---|---|---|---|
| 09 |  | Splitter kit Ø80+80 | 0KITSDOP00 |
| 10 |  | Extension M/F Ø80 L=1 m | 0PROLUNG00 |
| 11 |  | Extension M/F Ø80 L=0.5 m | 0PROLUNG01 |
| 13 |  | 90° elbow M/F Ø80 | 0CURVAXX02 |
| 15 |  | Suction opening Ø80 | 0GRIGASP01 |
| 17 |  | Flue gas intake/vent chimney Ø80+80 H=138.4cm | 0CAMIASP00 |
| 18 |  | Flue vent terminal Ø80 L=1m | 0TERMSCA00 |
| 19 |  | Tee kit for visual inspection and collecting condensate Ø80 | 0KITRACT00 |
| 23 |  | Tee M/M/F Ø80 | 0RACCORT00 |
| 37 |  | Tile for tilted roof (flue output) | 0TEGTEIN00 |
| 43 |  | Wall rosette in silicone, ID Ø80 OD Ø170 | 0ROSPASI00 |

# FLUE SYSTEM TYPE C33

## INTAKE AND VENT PIPES Ø 60

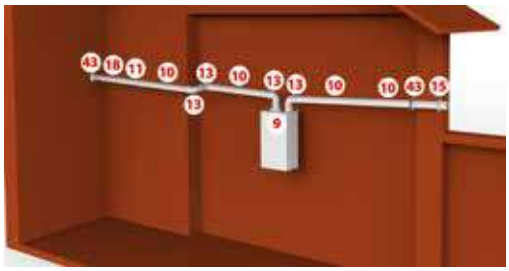


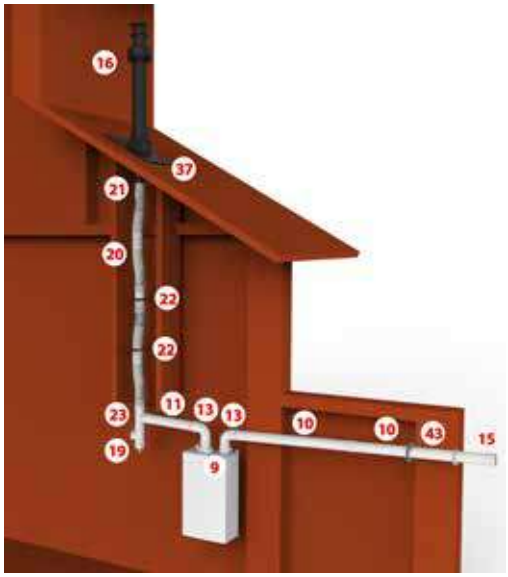



| No. | Item | Description | Code |
|---|---|---|---|
| 09 |  | Splitter kit Ø80+80 | 0KITSDOP00 |
| 17 |  | Flue gas intake/vent chimney Ø80+80 H=138.4cm | 0CAMIASP00 |
| 24 |  | Adapter Ø80/60 | 0RIDUZIO19 |
| 25 |  | Adapter M/F Ø 60-80 M/F | 0RIDUZIO10 |
| 28 |  | 90° elbow Ø60 | 0CURVAXX16 |
| 30 |  | Extension M/F Ø60 L=1m | 0PROLUNG16 |
| 31 |  | Extension M/F Ø60 L=2 m | 0PROLUNG17 |
| 32 |  | Extension M/F Ø60 L=0.5 m | 0PROLUNG18 |
| 33 |  | Tee M/M/F Ø60 | 0RACCORT06 |
| 34 |  | Condensate drain Ø60 | 0SCARCON03 |
| 35 |  | Air intake terminal Ø60 L=1m | 0TERMASP01 |
| 36 |  | Flue vent terminal Ø60 L=1m | 0TERMSCA01 |
| 37 |  | Tile for tilted roof (flue output) | 0TEGTEIN00 |

# FLUE SYSTEM TYPE C53

INTAKE AND VENT PIPES Ø 80



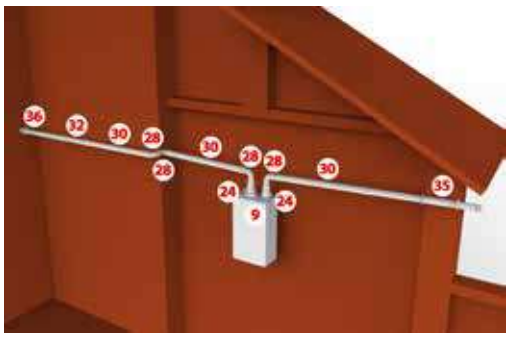





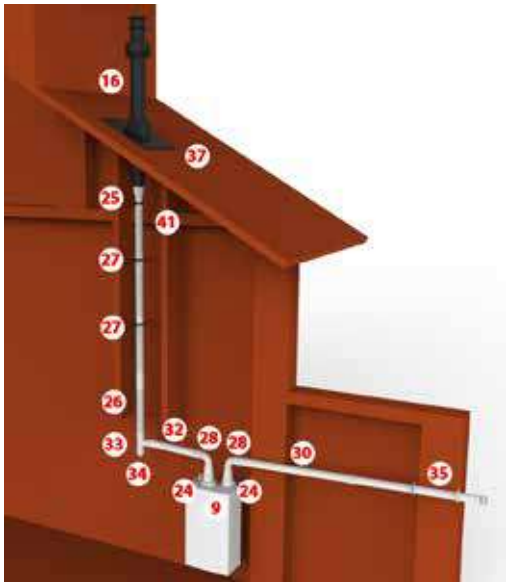
| No. | Item | Description | Code |
|---|---|---|---|
| 09 |  | Splitter kit Ø80+80 | 0KITSDOP00 |
| 10 |  | Extension M/F Ø80 L=1 m | 0PROLUNG00 |
| 11 |  | Extension M/F Ø80 L=0.5 m | 0PROLUNG01 |
| 13 |  | 90° elbow M/F Ø80 | 0CURVAXX02 |
| 15 |  | Suction opening Ø80 | 0GRIGASP01 |
| 16 |  | Flue vent chimney Ø80 H=138cm | 0CAMISCA00 |
| 18 |  | Flue vent terminal Ø80 L=1m | 0TERMSCA00 |
| 19 |  | Tee kit for visual inspection and collecting condensate Ø80 | 0KITRACT00 |
| 20 |  | Flexible pipe M/F Ø80 (20m roll) | 0TUBOFLE06 |
| 20 |  | Kit of adapters for flexible hose Ø80 | 0KADAFLE00 |
| 21 |  | Seal for flexible hose Ø80 | 0GUATRLA00 |
| 22 |  | Centring element for flexible hose Ø80 | 0CENTFLE00 |
| 23 |  | Tee M/M/F Ø80 | 0RACCORT00 |
| 37 |  | Tile for tilted roof (flue output) | 0TEGTEIN00 |
| 43 |  | Wall rosette in silicone, ID Ø80 OD Ø170 | 0ROSPASI00 |

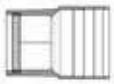
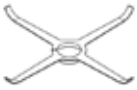
# FLUE SYSTEM TYPE C53

## INTAKE AND VENT PIPES Ø 60








| No. | Item | Description | Code |
|---|---|---|---|
| 09 |  | Splitter kit Ø80+80 | 0KITSDOP00 |
| 16 |  | Flue vent chimney Ø80 H=138cm | 0CAMISCA00 |
| 24 |  | Adapter Ø80/60 | 0RIDUZIO19 |
| 25 |  | Adapter M/F Ø 60-80 M/F | 0RIDUZIO10 |
| 26 |  | Flexible pipe M/F Ø60 (20m roll) | 0TUBOFLE07 |
| 26 |  | Kit of adapters for flexible hose Ø60 | 0KADAFLE01 |
| 27 |  | Centring element for flexible hose Ø60 | 0CENTFLE02 |
| 28 |  | 90° elbow Ø60 | 0CURVAXX16 |
| 30 |  | Extension M/F Ø60 L=1m | 0PROLUNG16 |
| 31 |  | Extension M/F Ø60 L=2 m | 0PROLUNG17 |
| 32 |  | Extension M/F Ø60 L=0.5 m | 0PROLUNG18 |
| 33 |  | Tee M/M/F Ø60 | 0RACCORT06 |
| 34 |  | Condensate drain Ø60 | 0SCARCON03 |
| 35 |  | Air intake terminal Ø60 L=1m | 0TERMASP01 |
| 36 |  | Flue vent terminal Ø60 L=1m | 0TERMSCA01 |
| 37 |  | Tile for tilted roof (flue output) | 0TEGTEIN00 |
| 41 |  | Twin-lip seal Ø60 | 0GUADOLA00 |

# CONCENTRIC FLUE FITTINGS FOR CONDENSING BOILERS Ø 60/100

| Nominal output | | | | 12 | 24 | 28 | 32 |
|---|---|---|---|---|---|---|---|
| Maximum pipe length | | | | 9 | 10 | 9 | 7 |
| No. | Item | Description | Code | Equivalent length | | | |
| | | | | (m) | (m) | (m) | (m) |
| 01 |  | Coaxial kit Ø 60/100 length 75cm | 0CONDASP00 | 1.5 | 1.5 | 1.5 | 1.5 |
| 02 |  | Coaxial fitting kit Ø60/100 | 0KITATCO00 | 0.5 | 0.5 | 0.5 | 0.5 |
| 03 |  | 90° elbow M/F coaxial Ø60/100 | 0CURVAXX05 | 0.5 | 0.5 | 0.5 | 0.5 |
| 04 |  | 45° elbow M/F coaxial Ø60/100 | 0CURVAXX04 | 0.5 | 0.5 | 0.5 | 0.5 |
| 05 |  | Coaxial extension M/F Ø60/100 L=1m | 0PROLUNG02 | 1 | 1 | 1 | 1 |
| 06 |  | Coaxial extension M/F Ø60/100 L=0.5m | 0PROLUNG03 | 0.5 | 0.5 | 0.5 | 0.5 |
| 07 |  | Coaxial flue kit Ø60/100 | 0KCAMASP00 | 1.5 | 1.5 | 1.5 | 1.5 |
| 08 |  | Elbow 90° and flange kit Ø60/100 | 0KCURFLA00 | 1 | 1 | 1 | 1 |
| 37 |  | Tile for tilted roof (flue output) | 0TEGTEIN00 | 0 | 0 | 0 | 0 |

# CONCENTRIC FLUE FITTINGS FOR CONDENSING BOILERS Ø 80/125

| Nominal output | | | | 12 | 24 | 28 | 32 | 45 | 60 |
|---|---|---|---|---|---|---|---|---|---|
| Maximum pipe length | | | | 30 | 30 | 30 | 30 | 16 | 14 |
| No. | Item | Description | Code | Equivalent length | | | | | |
| | | | | (m) | (m) | (m) | (m) | (m) | (m) |
| 106 |  | Coax. adapter kit D.60/100 to D.80/125 | 0KITADCO00 | 0.5 | 0.5 | 0.5 | 0.5 | 1 | 1 |
| 107 |  | Intake/condensate drain kit | 0KITASCA00 | 1.5 | 1.5 | 1.5 | 1.5 | 8 | 9 |
| 108 |  | 80/125 straight intake/vent tailpipe kit | 0KITASCA01 | 1.5 | 1.5 | 1.5 | 1.5 | 6 | 6.5 |
| 109 |  | Coaxial flue + flange kit | 0KITCACO00 | 1.5 | 1.5 | 1.5 | 1.5 | 7.5 | 8 |
| 110 |  | 80/125 flue kit | 0KITCACO01 | - | 1.5 | 1.5 | 1.5 | 6.5 | 7 |
| 111 |  | Coax. extension D.80/125 L=1m | 0PROLUNG04 | 1 | 1 | 1 | 1 | 1 | 1 |
| 112 |  | Coax. extension D.80/125 L=0.5m | 0PROLUNG05 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 113 |  | Coaxial M-F 45° elbow D. 80/125 | 0CURVAXX06 | 1 | 1 | 1 | 1 | 1 | 1 |
| 114 |  | Coaxial M-F 90° elbow D. 80/125 | 0CURVAXX07 | 0.5 | 0.5 | 0.5 | 0.5 | 1 | 1 |
| 115 |  | Extension for visual inspection d80/125 | 0TUBISPV05 | 1 | 1 | 1 | 1 | 1 | 1 |
| 116 |  | 90° elbow for visual inspection D. 80/125 | 0CURVISP05 | 1 | 1 | 1 | 1 | 1 | 1 |
| 118 |  | Coaxial flue gases starting kit 125/80 | 0ATTCOFL01 | - | - | - | - | 0<br>0,5 | 0<br>0,5 |
| 119 |  | 80/125 pipework plate kit | 0PIASINT01 | - | - | - | - | 0 | 0 |

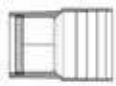
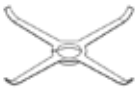
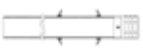
# CONCENTRIC FLUE FITTINGS FOR CONDENSING BOILERS Ø 100/150

| Nominal output | | | | 45 | 60 | 85 | 115 | 150 |
|---|---|---|---|---|---|---|---|---|
| Maximum pipe length | | | | 39 | 33 | 30 | 30 | 16 |
| No. | Item | Description | Code | Equivalent length | | | | |
| | | | | (m) | (m) | (m) | (m) | (m) |
| 117 |  | 150 / 100 concentric starter fitting kit | 0ATTCOFL00 | 0 | 0 | 0 | 0 | 0 |
| 120 |  | 100/150 coax. extension M/F L=250 | 0PROLUNG20 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 121 |  | 100/150 coax. extension M/F L=500 | 0PROLUNG21 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 122 |  | 100/150 coax. extension M/F L=1000 | 0PROLUNG22 | 1 | 1 | 1 | 1 | 1 |
| 123 |  | 100/150 coax. extension M/F L=2000 | 0PROLUNG23 | 2 | 2 | 2 | 2 | 2 |
| 124 |  | 100/150 90° M/F elbow | 0CURVAXX18 | 2.5 | 2.5 | 3 | 3 | 3 |
| 125 |  | 100/150 45° M/F elbow | 0CURVAXX19 | 0.5 | 1 | 1 | 1 | 1 |
| 126 |  | 100/150 coaxial 15° M/F elbow | 0CURVAXX20 | 3 | 0.5 | 0.5 | 0.5 | 0.5 |
| 127 |  | 100/150 coaxial 30° M/F elbow | 0CURVAXX21 | 0.5 | 1 | 1 | 1 | 1 |

# CONCENTRIC FLUE FITTINGS FOR CONDENSING BOILERS Ø 100/150

| Nominal output | | | | 45 | 60 | 85 | 115 | 150 |
|---|---|---|---|---|---|---|---|---|
| Maximum pipe length | | | | 39 | 33 | 30 | 30 | 16 |
| No. | Item | Description | Code | Equivalent length | | | | |
| | | | | (m) | (m) | (m) | (m) | (m) |
| 128 |  | 100/150 Tee fitting M/M/F cap | 0RACTTAP00 | 0.5 | 3 | 3.5 | 3.5 | 4 |
| 129 |  | 100/150 Tee fitting M/M/F 90° cap | 0RACTTAP01 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 130 |  | 100/150 Coaxial fitting M/M/F outlets | 0ATTCOVE07 | 0 | 0 | 0 | 0 | 0 |
| 131 |  | 100/150 Coaxial fitting M/M/F Pipe Fitting | 0ATTCOVE08 | 0 | 0 | 0 | 0 | 0 |
| 132 |  | 100/150 coaxial wall term. | 0TERMPAR00 | 6.5 | 7 | 7.5 | 8 | 8.5 |
| 133 |  | Adapter kit from 80/125 to 100/150 | 0RIDUZIO22 | 1.5 | 1.5 | 1.5 | - | - |
| 134 |  | 100/150 coaxial roof term. | 0TERMTET00 | 12.5 | 14 | 15 | 16 | 16.5 |
| 135 |  | 100/150 pipework plate kit | 0PIASINT00 | 0 | 0 | 0 | 0 | 0 |

# SPLIT FLUE FITTINGS FOR CONDENSING BOILERS Ø 60-60

| Nominal output | | | | 12 | | 24 | | 28 | | 32 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Maximum pipe length | | | | 24 | | 23 | | 23 | | 20 | |
| No. | Item | Description | Code | Equivalent length | | | | | | | |
| | | | | Flue gas (m) | Air (m) | Flue gas (m) | Air (m) | Flue gas (m) | Air (m) | Flue gas (m) | Air (m) |
| 24 |  | Adapter Ø80/60 | 0RIDUZIO19 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 25 |  | Adapter M/F Ø 60-80 M/F | 0RIDUZIO10 | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 26 |  | Flexible pipe M/F Ø60 (20m roll) | 0TUBOFLE07 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 26 |  | Kit of adapters for flexible hose Ø60 | 0KADAFLE01 | - | - | - | - | - | - | - | - |
| 27 |  | Centring element for flexible hose Ø60 | 0CENTFLE02 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 28 |  | 90° elbow Ø60 | 0CURVAXX16 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 29 |  | 45° elbow Ø60 | 0CURVAXX17 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 30 |  | Extension M/F Ø60 L=1m | 0PROLUNG16 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 31 |  | Extension M/F Ø60 L=2 m | 0PROLUNG17 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 32 |  | Extension M/F Ø60 L=0.5 m | 0PROLUNG18 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 33 |  | Tee M/M/F Ø60 | 0RACCORT06 | 0.5 | 0.5 | 0.5 | 0.5 | 1 | 1 | 1 | 1 |
| 34 |  | Condensate drain Ø60 | 0SCARCON03 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 35 |  | Air intake terminal Ø60 L=1m | 0TERMASP01 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 36 |  | Flue vent terminal Ø60 L=1m | 0TERMSCA01 | 4.5 | - | 4.5 | - | 4.5 | - | 4.5 | - |

# SPLIT FLUE FITTINGS FOR CONDENSING BOILERS Ø 80-80

| Nominal output | | | | 12 | | 24 | | 28 | | 32 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Maximum pipe length | | | | 102 | | 84 | | 91 | | 78 | |
| No. | Item | Description | Code | Equivalent length | | | | | | | |
| | | | | Flue gas (m) | Air (m) | Flue gas (m) | Air (m) | Flue gas (m) | Air (m) | Flue gas (m) | Air (m) |
| 09 |  | Splitter kit Ø80+80 | 0KITSDOP00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10 |  | Extension M/F Ø80 L=1 m | 0PROLUNG00 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 11 |  | Extension M/F Ø80 L=0.5 m | 0PROLUNG01 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 12 |  | Telescopic extension M/F Ø80 (0.34-0.45m) | 0PROLTEL01 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 13 |  | 90° elbow M/F Ø80 | 0CURVAXX02 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 14 |  | 45° elbow M/F Ø80 | 0CURVAXX01 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 15 |  | Suction opening Ø80 | 0GRIGASP01 | - | 2 | - | 2 | - | 2 | - | 3 |
| 16 |  | Flue vent chimney Ø80 H=138cm | 0CAMISCA00 | 5 | 0 | 5.5 | 0 | 5.5 | 0 | 6 | 0 |
| 17 |  | Flue gas intake/vent chimney Ø80+80 H=138.4cm | 0CAMIASP00 | 5 | 5 | 5.5 | 5.5 | 5.5 | 5.5 | 6 | 6 |
| 18 |  | Flue vent terminal Ø80 L=1m | 0TERMSCA00 | 4.5 | - | 5 | - | 5.5 | - | 5.5 | - |

# SPLIT FLUE FITTINGS FOR CONDENSING BOILERS Ø 80-80

| Nominal output | | | | 45 | | 60 | | 85 | |
|---|---|---|---|---|---|---|---|---|---|
| Maximum pipe length | | | | 25 | | 56 | | 20 | |
| No. | Item | Description | Code | Equivalent length | | | | | |
| | | | | Flue gas (m) | Air (m) | Flue gas (m) | Air (m) | Flue gas (m) | Air (m) |
| 09 |  | Splitter kit Ø80+80 | 0KITSDOP00 | - | - | - | - | - | - |
| 10 |  | Extension M/F Ø80 L=1 m | 0PROLUNG00 | 1 | 1 | 1 | 1 | 1 | 1 |
| 11 |  | Extension M/F Ø80 L=0.5 m | 0PROLUNG01 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 12 |  | Telescopic extension M/F Ø80 (0.34-0.45m) | 0PROLTEL01 | 1 | 1 | 1 | 1 | 1 | 1 |
| 13 |  | 90° elbow M/F Ø80 | 0CURVAXX02 | 1 | 1.5 | 1 | 1.5 | 1.5 | 1 |
| 14 |  | 45° elbow M/F Ø80 | 0CURVAXX01 | 0.5 | 1 | 0.5 | 1 | 1.5 | 1 |
| 15 |  | Suction opening Ø80 | 0GRIGASP01 | 6 | - | 6.5 | - | - | 7 |
| 16 |  | Flue vent chimney Ø80 H=138cm | 0CAMISCA00 | 0 | 5.5 | 0 | 6 | 6.5 | - |
| 17 |  | Flue gas intake/vent chimney Ø80+80 H=138.4cm | 0CAMIASP00 | 5.5 | 5.5 | 6 | 6 | 6.5 | 5 |
| 18 |  | Flue vent terminal Ø80 L=1m | 0TERMSCA00 | - | 5.5 | - | 6 | 6 | - |

# SPLIT FLUE FITTINGS FOR CONDENSING BOILERS Ø 80-80

| Nominal output | | | | 12 | | 24 | | 28 | | 32 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Maximum pipe length | | | | 102 | | 84 | | 91 | | 78 | |
| No. | Item | Description | Code | Equivalent length | | | | | | | |
| | | | | Flue gas (m) | Air (m) | Flue gas (m) | Air (m) | Flue gas (m) | Air (m) | Flue gas (m) | Air (m) |
| 19 |  | Tee kit for visual inspection and collecting condensate Ø80 | 0KITRACT00 | 1 | - | 1 | - | 1 | - | 1 | - |
| 20 |  | Flexible pipe M/F Ø80 (20m roll) | 0TUBOFLE06 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 20 |  | Kit of adapters for flexible hose Ø80 | 0KADAFLE00 | - | - | - | - | - | - | - | - |
| 21 |  | Seal for flexible hose Ø80 | 0GUATRLA00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 22 |  | Centring element for flexible hose Ø80 | 0CENTFLE00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 23 |  | Tee M/M/F Ø80 | 0RACCORT00 | 1 | 0.5 | 1 | 0.5 | 1 | 0.5 | 1 | 0.5 |
| 43 |  | Wall rosette in silicone, ID Ø80 OD Ø170 | 0ROSPASI00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 46 |  | Suction opening in AISI316 Stainless steel Ø80 H=30mm (for TFS boilers) | 0GRIASIN00 | - | 2 | - | 2 | - | 2 | - | 3 |
| 104 |  | Flanged flue gas starter fitting D 80 | 0PARTFUM01 | - | - | - | - | - | - | - | - |
| 105 |  | Air intake stub pipe + inspection | 0TRONASP00 | - | - | - | - | - | - | - | - |

# SPLIT FLUE FITTINGS FOR CONDENSING BOILERS Ø 80-80

| Nominal output | | | | 45 | | 60 | | 85 | |
|---|---|---|---|---|---|---|---|---|---|
| Maximum pipe length | | | | 25 | | 56 | | 20 | |
| No. | Item | Description | Code | Equivalent length | | | | | |
| | | | | Flue gas (m) | Air (m) | Flue gas (m) | Air (m) | Flue gas (m) | Air (m) |
| 19 |  | Tee kit for visual inspection and collecting condensate Ø80 | 0KITRACT00 | 0.5 | 1 | 0.5 | 1 | 1 | 1 |
| 20 |  | Flexible pipe M/F Ø80 (20m roll) | 0TUBOFLE06 | 1 | 1 | 1 | 1 | 1 | 1 |
| 20 |  | Kit of adapters for flexible hose Ø80 | 0KADAFLE00 | - | - | - | - | - | - |
| 21 |  | Seal for flexible hose Ø80 | 0GUATRLA00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 22 |  | Centring element for flexible hose Ø80 | 0CENTFLE00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 23 |  | Tee M/M/F Ø80 | 0RACCORT00 | 0.5 | 1 | 0.5 | 1 | 1 | 1 |
| 43 |  | Wall rosette in silicone, ID Ø80 OD Ø170 | 0ROSPASI00 | 0 | 0 | 0 | 0 | 0 | 0 |
| 46 |  | Suction opening in AISI316 Stainless steel Ø80 H=30mm (for TFS boilers) | 0GRIASIN00 | - | - | - | - | - | - |
| 104 |  | Flanged flue gas starter fitting D 80 | 0PARTFUM01 | - | 0 | - | 0 | 0 | - |
| 105 |  | Air intake stub pipe + inspection | 0TRONASP00 | 0 | - | 0 | - | - | 0 |

# SPLIT FLUE FITTINGS FOR CONDENSING BOILERS Ø 100-100

| Nominal output | | | | 45 | | 60 | | 85 | | 115 | | 150 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Maximum pipe length | | | | 169 | | 75 | | 62 | | 43 | | 34 | |
| No. | Item | Description | Code | Equivalent length | | | | | | | | | |
| | | | | Flue gas (m) | Air (m) | Flue gas (m) | Air (m) | Flue gas (m) | Air (m) | Flue gas (m) | Air (m) | Flue gas (m) | Air (m) |
| 48 |  | Centring element for flexible hose Ø100 | 0CENTFLE01 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 49 |  | 90° elbow with inspection M/F Ø100 | 0CURVAXX08 | 2 | 3 | 2 | 3 | 3.5 | 2.5 | 3.5 | 2.5 | 4 | 2.5 |
| 50 |  | 90° elbow M/F Ø100 | 0CURVAXX10 | 2 | 3 | 2 | 3 | 3.5 | 2.5 | 3.5 | 2.5 | 4 | 2.5 |
| 51 |  | 45° elbow M/F Ø100 | 0CURVAXX11 | 1.5 | 2.5 | 1.5 | 2.5 | 3 | 2 | 3 | 2 | 3 | 2 |
| 52 |  | Extension M/F Ø100 L=0.5 m | 0PROLUNG07 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 53 |  | Extension M/F Ø100 L=1 m | 0PROLUNG08 | 0.5 | 1 | 0.5 | 1 | 1 | 0.5 | 1 | 0.5 | 1 | 0.5 |
| 54 |  | Tee M/M/F Ø100 | 0RACCORT01 | 2.5 | 4 | 3 | 4.5 | 5 | 3 | 5 | 3.5 | 5.5 | 3.5 |
| 55 |  | Tee kit M/M/F Ø100 for visual inspection and draining condensate | 0RACCORT02 | 2.5 | 4 | 3 | 4.5 | 5 | 3 | 5 | 3.5 | 5.5 | 3.5 |
| 56 |  | Tee kit M/M/F Ø100 for visual inspection | 0RACCORT03 | 1.5 | 2 | 1.5 | 2.5 | 2.5 | 1.5 | 2.5 | 2 | 3 | 2 |
| 57 |  | Adapter Ø80/100 | 0RIDUZIO13 | 0 | 1.5 | 0 | 2 | 2 | 0 | - | - | - | - |
| 58 |  | Condensate drain kit Ø100 | 0SCARCON00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

# SPLIT FLUE FITTINGS FOR CONDENSING BOILERS Ø 100-100

| Nominal output | | | | 45 | | 60 | | 85 | | 115 | | 150 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Maximum pipe length | | | | 169 | | 75 | | 62 | | 43 | | 34 | |
| No. | Item | Description | Code | Equivalent length | | | | | | | | | |
| | | | | Flue gas (m) | Air (m) | Flue gas (m) | Air (m) | Flue gas (m) | Air (m) | Flue gas (m) | Air (m) | Flue gas (m) | Air (m) |
| 59 |  | Condensate drain trap with horizontal fitting | 0SIFCOND00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 60 |  | Condensate drain trap with vertical fitting | 0SIFCOND01 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 61 |  | Roof terminal Ø100 | 0TERCOIN01 | 5.5 | - | 6 | - | 6.5 | - | 7 | - | 7.5 | - |
| 62 |  | Air intake terminal Ø100 L=1m | 0TERMASP00 | - | 7.5 | - | 8.5 | - | 9 | - | 10 | - | 10.5 |
| 63 |  | Flue vent terminal Ø100 L=1m | 0TERMSCA03 | 6.5 | - | 7 | - | 7.5 | - | - | - | - | - |
| 64 |  | Vertical stub pipe with inspection M/F Ø100 L=140mm | 0TROSCAF01 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 |  | Flexible pipe M/F Ø100 (without seals, 20m roll) | 0TUBOFLE04 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 94 |  | Extension M/F Ø100 L=2 m | 0PROLUNG09 | 1.5 | 2 | 1.5 | 2 | 2 | 1.5 | 2 | 1.5 | 2 | 1.5 |
| 102 |  | Flanged flue gas starter fitting D 100 | 0PARTFUM00 | - | - | - | - | - | - | 0 | 0 | 0 | 0 |
| 103 |  | D100 Suction opening | 0GRIGASP02 | - | 7 | - | 8 | - | 8.5 | - | 9.5 | - | 10 |

# ACCESSORIES

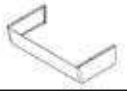
## THERMOREGULATION AND ELECTRONIC

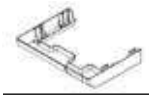
| Item | Description | Antea KC | Antea KR | Antea KRB | Formentera KC | Formentera KR | Formentera KRB | Giava KRB | Itaca CH KR | Itaca KB | Itaca KC | Itaca KR | Itaca KRB | MadeiraSolarCompact KBS | MadeiraSolar KRBS | Minorca KC | Minorca KR | Minorca KRB | Code |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | Remote control for thermoregulation control unit, ErP V class (146x97x34 mm) | | | | | | | | | | | | | | | | | | 0CREMOTO01 |
|  | Remote control, ErP V class (118x85x32 mm) | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | 0CREMOTO04 |
|  | Thermoregulation control unit kit for two-stage burners, ErP II class (147x97x74 mm) | | | | | | | | | | | | | | | | | | 0KITCEEL04 |
|  | Ambient temperature probe (12x12x20 mm, with 50cm cable) | | | | | | | ● | | ● | ● | ● | ● | ● | ● | ● | ● | ● | 0KITSAMB00 |
|  | Surge arrester kit | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | 0KITSCAR00 |
|  | Electric kit for complex solar plant management | ● | | ● | ● | | ● | | | | ● | | ● | | | | | | 0KITSOLC08 |
|  | Water heater temperature probe 3m | | ● | ● | | ● | ● | | ● | | | ● | ● | | | | ● | ● | 0KITSOND00 |
|  | Electrical kit for zone management with external probe | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | 0KITZONE05 |
|  | Cascade controlling probe | | | | | | | | ● | | | | | | | | | | 0KSONDCO00 |
|  | External probe | | | | | | | | ● | | | | | | | | | | 0KSONEST01 |
|  | Temperature probe for thermoregulation control unit and electric panels (kf/spf) (6x6x50 mm, with 3m cable) | | | | | | | | | | | | | | | | | | 0SONDASO00 |
|  | Electromechanical ambient thermostat, ErP I class (71x71x40 mm) | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | 0TERAMEL00 |

| Item | Description | Antea PRO CTN | Formentera PRO CTN | RodiDual 1400 3500 | RodiDual 70 1300 | RodiDual HR 1400 3500 | RodiDual HR 70 1300 | Code |
|---|---|---|---|---|---|---|---|---|
|  | Remote control for thermoregulation control unit (temperature regulation), ErP VI class (87x87x31 mm) | | | ● | ● | ● | ● | 0CREMOTO00 |
|  | Remote control for thermoregulation control unit, ErP V class (146x97x34 mm) | | | ● | ● | ● | ● | 0CREMOTO01 |
|  | Remote control, ErP V class (118x85x32 mm) | ● | ● | | | | | 0CREMOTO04 |
|  | Ambient chronothermostat week/day 300b class ErP I (119x82x33 mm) | ● | ● | ● | ● | ● | ● | 0CROAMSE00 |
|  | Thermoregulation control unit kit for two-stage burners, ErP II class (147x97x74 mm) | | | ● | ● | ● | ● | 0KITCEEL04 |
|  | Ambient temperature probe (12x12x20 mm, with 50cm cable) | | | | | | | 0KITSAMB00 |
|  | Surge arrester kit | ● | ● | ● | ● | ● | ● | 0KITSCAR00 |
|  | Electric kit for complex solar plant management | ● | ● | | | | | 0KITSOLC08 |
|  | Water heater temperature probe 3m | | | | | | | 0KITSOND00 |
|  | External probe | | | | | | | 0KSONEST01 |
|  | External probe (60x45x31 mm) | ● | ● | | | | | 0SONDAES01 |
|  | Flow probe for low temperature zone for climate control unit | | | ● | ● | ● | ● | 0SONDARI01 |
|  | Temperature probe for thermoregulation control unit and electric panels (kf/spf) (6x6x50 mm, with 3m cable) | | | ● | ● | ● | ● | 0SONDASO00 |
|  | Electromechanical ambient thermostat, ErP I class (71x71x40 mm) | ● | ● | ● | ● | ● | ● | 0TERAMEL00 |

# ACCESSORIES

## OUTDOOR INSTALLATION PARTIALLY PROTECTED AND OPTIONAL ACCESSORIES

| Item | Description | Formentera KC | Formentera KR | Formentera KRB | Itaca KB | Itaca KC | Itaca KR | Itaca KRB | Code |
|---|---|---|---|---|---|---|---|---|---|
|  | Coaxial air intake/flue gas venting connection for B23 type installations | ● | ● | ● | | ● | ● | ● | 0ATTCOVE06 |
|  | Pipes and taps cover | ● | ● | ● | | ● | ● | ● | 0COPETUB03 |
|  | Pipes and taps cover | | | | ● | | | | 0COPETUB05 |
|  | Metal fixing template | ● | ● | ● | | ● | ● | ● | 0DIMMECO11 |
|  | Metal template for KB boiler | | | | ● | | | | 0DIMMECO12 |
|  | Wall spacing kit | ● | ● | ● | | ● | ● | ● | 0DISTANZ00 |
|  | Outdoor cover kit with antifreeze protection kit | ● | ● | ● | | ● | ● | ● | 0KITCOPE01 |
|  | Outdoor cover kit | ● | ● | ● | | ● | ● | ● | 0KITCOPE02 |

| Item | Description | Formentera PRO CTN | Code |
|---|---|---|---|
|  | Pipes and taps cover | ● | 0COPETUB03 |
|  | Metal fixing template | ● | 0DIMMECO11 |
|  | Wall spacing kit | ● | 0DISTANZ00 |

# ACCESSORIES

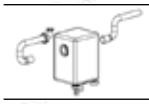
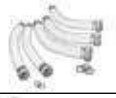
## SOLUTION AND TREATMENTS

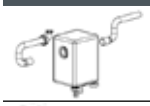
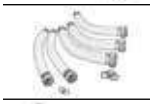
| Item | Description | Antea KC | Antea KR | Antea KRB | Formentera KC | Formentera KR | Formentera KRB | Giava KRB | Itaca CH KR | Itaca KB | Itaca KC | Itaca KR | Itaca KRB | MadeiraSolarCompact KBS | MadeiraSolar KRBS | Minorca KC | Minorca KR | Minorca KRB | Code |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | Hydrocyclonic and magnetic filter ¾"(3,000 l/hour) | ● | ● | ● | ● | ● | ● | ● | | ● | ● | ● | ● | ● | ● | ● | ● | ● | 0FILTIMP00 |
|  | Protective liquid for domestic mixed metal plants (0.5 l bottle) | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | 0PROTIMP00 |
|  | Universal mild cleaning product (0.5 l bottle) | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | 0PROTIMP01 |
|  | Protective liquid for domestic mixed metal plants (10 l bottle) | | | | | | | | ● | | | | | | | | | | 0PROTIMP02 |
|  | Universal mild cleaning product (10 l bottle) | | | | | | | | ● | | | | | | | | | | 0PROTIMP03 |
|  | Protective fluid for ¾" filter | ● | ● | ● | ● | ● | ● | ● | | ● | ● | ● | ● | ● | ● | ● | ● | ● | 0PROTIMP04 |

| Item | Description | Antea PRO CTN | Formentera PRO CTN | RodiDual 1400 3500 | RodiDual 70 1300 | RodiDual HR 1400 3500 | RodiDual HR 70 1300 | Code |
|---|---|---|---|---|---|---|---|---|
|  | Hydrocyclonic and magnetic filter ¾"(3,000 l/hour) | ● | ● | | | | | 0FILTIMP00 |
|  | Protective liquid for domestic mixed metal plants (0.5 l bottle) | ● | ● | | | | | 0PROTIMP00 |
|  | Universal mild cleaning product (0.5 l bottle) | ● | ● | | | | | 0PROTIMP01 |
|  | Protective liquid for domestic mixed metal plants (10 l bottle) | | | ● | ● | ● | ● | 0PROTIMP02 |
|  | Universal mild cleaning product (10 l bottle) | | | ● | ● | ● | ● | 0PROTIMP03 |
|  | Protective fluid for ¾" filter | ● | ● | | | | | 0PROTIMP04 |

# ACCESSORIES

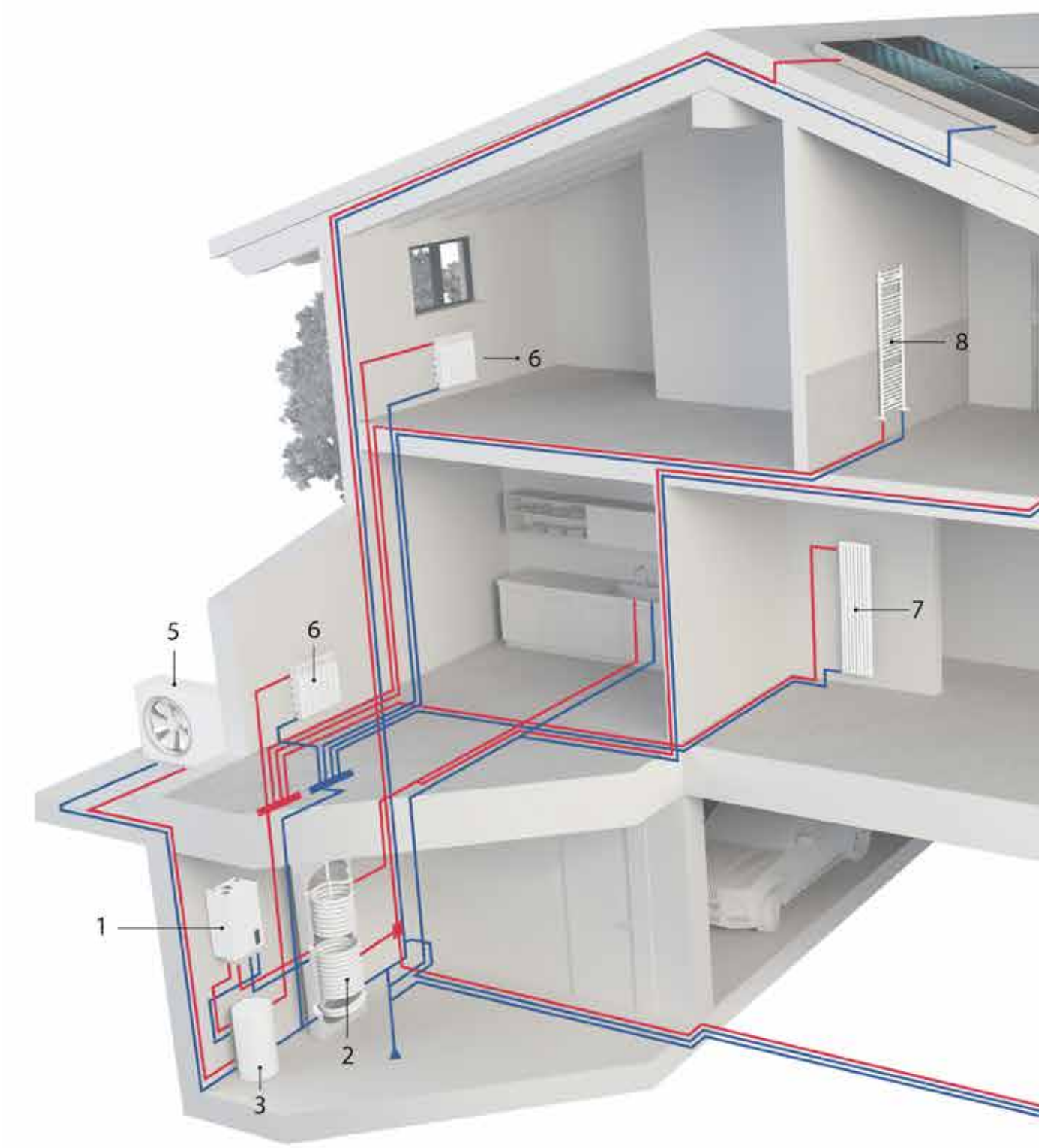
## HYDRAULIC

| Item | Description | Antea KC | Antea KR | Antea KRB | Formentera KC | Formentera KR | Formentera KRB | Giava KRB | Itaca CH KR | Itaca KB | Itaca KC | Itaca KR | Itaca KRB | MadeiraSolarCompact KBS | MadeiraSolar KRBS | Minorca KC | Minorca KR | Minorca KRB | Code |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | Condensate neutralizer kit (Pmax 350 kw) | | | | | | | | ● | | | | | | | | | | 0FILNECO01 |
|  | Condensate neutralizer kit (Pmax 85 kw) | | | | | | | | ● | | | | | | | | | | 0FILNECO03 |
|  | Dirt separator kit | ● | ● | ● | ● | ● | ● | ● | | ● | ● | ● | ● | ● | ● | ● | ● | ● | 0KITDEFA00 |
|  | Flow - return cold water 90° taps kit | ● | ● | | ● | ● | | | | ● | ● | ● | | | | ● | | | 0KITIDBA11 |
|  | Spare coated SS hose kit. N°2x3 ¾" L=0.260m - n° 3x½" L=0.520m | ● | ● | ● | ● | | | | | ● | ● | ● | ● | | | ● | | | 0KITIDTR00 |
|  | Tap kit with filter | ● | ● | ● | ● | ● | ● | | | ● | ● | ● | ● | | | ● | ● | ● | 0KITRUBI04 |
|  | Giava recirculation optional kit | | | | | | | ● | | | | | | | | | | | 0KRICIRC00 |
|  | DHW recirculation kit | | | | | | | | | | | | | | ● | | | | 0KRICIRC01 |
|  | Recirculation kit | | | | | | | | | ● | | | | | | | | | 0KRICIRC02 |
|  | Filter refill Pmax 350kW | | | | | | | | ● | | | | | | | | | | 0RICAFIL01 |
|  | Filter refill | | | | | | | | ● | | | | | | | | | | 0RICAFIL03 |

| Item | Description | Antea PRO CTN | Formentera PRO CTN | Code |
|---|---|---|---|---|
|  | Dirt separator kit | ● | ● | 0KITDEFA00 |
|  | Flow - return cold water 90° taps kit | ● | ● | 0KITIDBA11 |
|  | Spare coated SS hose kit. N°2x3 ¾" L=0.260m - n° 3x½" L=0.520m | ● | ● | 0KITIDTR00 |
|  | Tap kit with filter | ● | ● | 0KITRUBI04 |

# HEATING SYSTEM

1. BOILER
2. WATER HEATER
3. STORAGE TANK
4. SWIMMING POOL SYSTEM
5. HEAT PUMP
6. DIE-CAST RADIATOR



**7.** EXTRUDED RADIATOR

**8.** COOL TOWEL RADIATORS

**9.** THERMAL SOLAR

# Notes

# Notes

The manufacturer reserves the right to make any modifications deemed necessary without prior notification.

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fondital

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COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV
= ISO 9001 =

MADE IN ITALY

9PCEN03C525