

# ARCA

## caldaie

TECNOLOGIE PER L'AMBIENTE

# Pocket

Compact wall  
hung boiler

Micro  
processor

Brass  
Hydraulic set



# CE

EFFICIENCY MARKING

(92/42/CE)



A compact boiler  
of "quality"

*Pocket*

## The Range

**Natural Draught**



**Forced draught**



**Pocket 24 N**

Natural draught

Open chamber

Combined

Instantaneous

Available power 24,7 kW

Electronic ignition

Nat gas Art n°: ECOPK001P2

LPG Art n°: ECOPK051P2

**Pocket 24 F**

Forced draught

Sealed chamber

Combined

Instantaneous

Available power 25,3 Kw

Electronic ignition

Nat gas Art n°: ECOPK101P2

LPG Art n°: ECOPK151P2

**Pocket 28 F**

Forced draught

Sealed chamber

Combined

Instantaneous

Av.power25,3 kw

Electronic ignition

Nat gas Art n° : ECOPK201P2

LPG Art n°: ECOPK251P2



Pocket boiler is the new compact instantaneous wall-hung boiler for internals. It has been designed and developed in order to meet the market expectations for a smaller boiler where available space is limited.

Pocket with its 29,3 KW available (version 28 F over 25.000 Kcal/h) is one of the smallest and most energy efficient boilers in its market sector. The high technological performances are strengthened by the compactness and the reduced dimensions 720 x 400 x 300 mm.



## A compact and a complete hydraulic set

*Pocket*

### The hydraulics

The hydraulic set is made with brass mono-fusions integrated with reduced flow loading tap and standard by-pass.

The water – water exchanger with 12 plates allows a production of great quantity of sanitary water under a controlled temperature and a high resistance to the deposits of limestone.

### The combustion

A sole electrode of ignition – detecting placed on the 13 ramps burner and 10 seconds of post ignition (on the forced draught version) ensure the maximum efficiency of starting mode.

The combustion performance is over 92% CE Certification.

Efficiency marking (92/42/CE) \*\*\*



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## The electronics with microprocessor and self – diagnosis

A sole electronic board adjusts and controls all the boiler functions.

The continuous modulation of the flame both on heating and sanitary mode, helped by an electronic starting for all models, ensures a great comfort of utilisation and reduced consumptions to the end

users. The absence of pilot flame enables a save of about 1 m<sup>3</sup> of gas per a day. The function of self – diagnosis, by means of the flashing of luminous signals, detects with immediacy and accuracy possible technical faults.



## The plastics

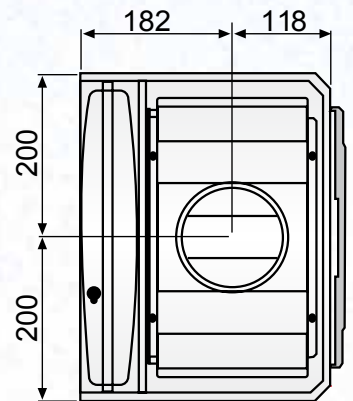
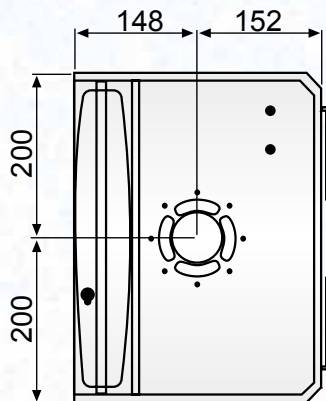
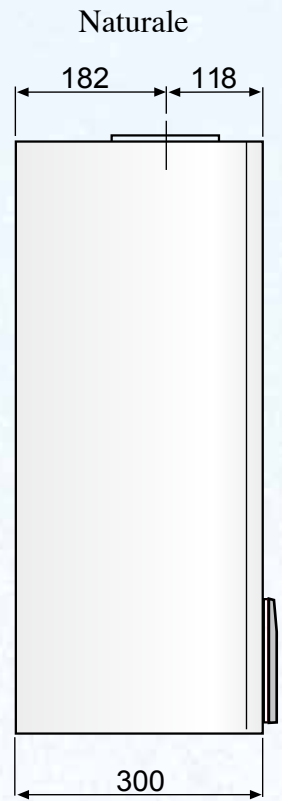
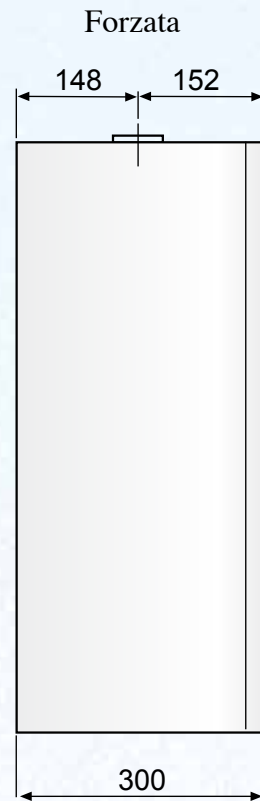
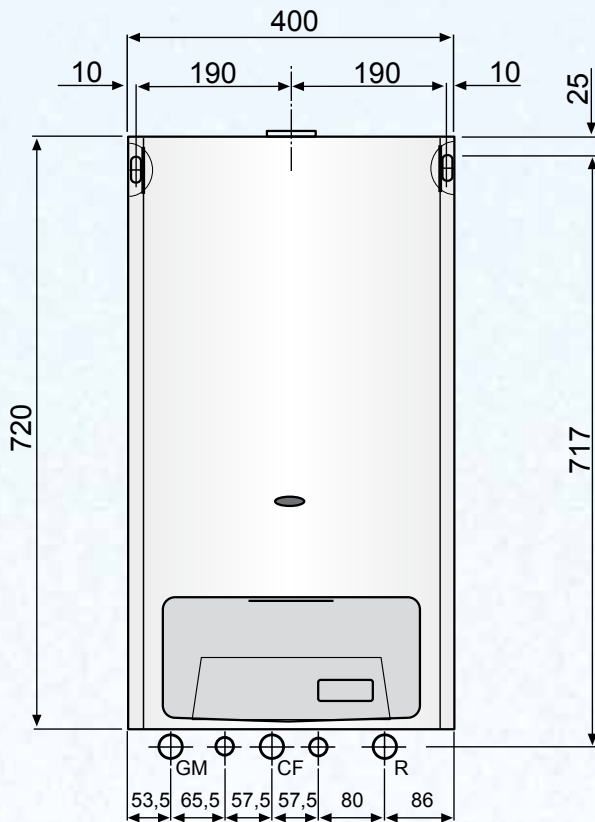
Control panel in Ip 44, approved by CE normative. The use of high density composite material (Magis G 101) in self – extinguish prevents the phenomenon of yellowing (a typical degeneration of ABS material).

The electric panel is put among the sheeted walls and that allows a strong resistance to the accidental crashes (inclusive transports).



# Hydraulic connections: discharges and dimensions

*Pocket*



- G gas inlet  $\frac{3}{4}$ "
- C warm water outlet  $\frac{1}{2}$ "
- F cold water inlet  $\frac{1}{2}$ "
- M heating flow  $\frac{3}{4}$ "
- R Heating return  $\frac{3}{4}$ "



## ARCA A brave choice: the product made in Italy

**STEP has an objective:** design and build reliable products with an high energetic efficiency for a real reduction of consumptions and of the ambient impact.

**STEP is the only producer with productive plants located only in Italy**, regularly visited by its installers / customers for training and updating sessions.

**STEP has chosen to do not invest in advertising to employ all the resources in the quality of its boilers**, distinguishing itself by an industrial context where the quality degeneration of the semi-durable products (washing machines, dishwashers, refrigerators, boilers, air-conditioners etc) is a generalized phenomena.

Thanks to such technical choices STEP can state to be the sole European producer to have ever proposed to the market only:

- **boilers with electronic ignition**, without pilot flame that implies an useless consumption of about 1 mc of gas per day;
- **traditional boilers with double exchanger**, one for heating made of copper and one for sanitary made of stainless steel, instead of a sole exchanger with bithermic function that as it is well known imply a quick deposit of limestone;
- **boilers with hydraulic set of brass** instead of hydraulic set made of plastic

## ARCA A philosophy against the stream: high-quality components

Nowadays we can state that the products of STEP have reached remarkable technological primates with boilers with digital control, refined design and with high reliability thanks to the valuable materials like copper, brass, stainless steel and aluminium, **avoiding the use of plastics for the functional parts of the product or the use of first price components made in countries where the is low labour cost.**

**STEP keeps the long term relationship with the customer using first quality level components.**

A part of the components, like the brass hydraulic set, is produced internally, while for the universal components like pump, exchanger, gas valve, are used standard versions of high quality which can be found on the market easily, this in favour of the end users.

## ARCA Customer protection: technical options and transparency

STEP, leader Italian producer of wall hung gas boilers and complex systems with more energy sources, considers the transparency toward its customers basic principle of its philosophy.

the choice to use standard components is aimed to adopt only parts of mass production, largely tested on the market and as a consequence very reliable: the maximum quality at the best price.

**This choice protects the customer who looks for the spare parts at the best possible prices, without binding him to expensive and not standard spare parts that cannot be find on the market;** this practice is widely adopted by a lot of competitors especially by German producers. STEP following the policy of the transparency has published the prices of the spare parts on its web-site.

**STEP designer and producer of boilers.**

STEP recommends to its customers to be very careful in the choice of the product: the philosophy of the most known foreign corporations is boasting "German technology" launching on the market products of poor quality, designed and produced in countries with low labour costs with the only goal to get the maximum profit in the short term.

STEP has never produced boilers of first price in the low quality segment of the market but **has always adopted the best technologies of combustion available on the market producing in their own factories.**

## Technical Details

Model	Unità	Pocket 24 N	Pocket 24 F	Pocket 28 F
		B11Bs	C12 - C32 - C42 - C52	C12 - C32 - C42 - C52
Normal thermal power	KW	27	27	31,5
Normal thermal power	Kcal/h	23.220	23.220	27.090
Nominal power	KW	24,7	25,3	29,3
Nominal power	Kcal/h	21.200	21.734	25.194
Useful efficiency	%	91,3	93,6	93
Minimum thermal power	KW	10,5	10,5	12,4
Minimum power	KW	9,4	9,6	11,3
Efficiency to reduced load	%	89,5	91,8	91,2
Gas capacity at P methane G20 (2E+)	m³/h	2,855	2,855	3,331
Methane G25 (2ELL)	m³/h	3,320	3,320	3,874
GPL G30 (3+)	Kg/h	2,128	2,128	2,482
GPL G31 (3P)	Kg/h	2,096	2,096	2,445
GAS CAPACITY of methane network G20(2E+)	mbar	20	20	20
Methane G25 (2ELL)	mbar	20	20	20
GPL G30 (3+)	mbar	29	29	29
GPL G31 (3P)	mbar	37	37	37
Smoke temperature	°C	115,3	126,7	131,4
CO2 (G20)	%	6	7,7	7,6
Warmth loss with burner working	%	6,8	6,1	6,5
Warmth loss with burner out	%	0,2	0,2	0,1
Heat loss to the shell (ΔT = 50°C)	%	1,9	0,3	0,5
Steam capacity	Nm³/h	58,7	47	55,5
<b>HEATING</b>				
Minimum heating set point	°C	35	35	35
Maximum heating set point	°C	90	90	90
Water quantity in the boiler	l	1,2	1,2	1,2
Water quantity in the expansion tank	l	7	7	7
Pressure of the expansion tank	bar	0,7	0,7	0,7
Minimum pressure in the primary circuit	bar	0,4	0,4	0,4
Max. pressure in the primary circuit	bar	3	3	3
Max. water quantity in the installation	l	150	150	150
<b>SANITARY</b>	<b>mbar</b>	<b>230</b>	<b>230</b>	<b>330</b>
Minimum sanitary set point				
Maximum sanitary set point	°C	30	30	30
Continuous hot water production	°C	60	60	60
ΔT = 25°C	l/min	14,1	14,5	16,8
Continuous hot water production	l/min	10,1	10,3	12,0
ΔT = 35°C	l	117,8	120,7	140
Water volume ΔT = 30°C during 10"	l/min	2,5	2,5	2,5
Minimum sanitary load	bar	8	8	8
Maximum sanitary pressure	bar	0,5	0,5	0,5
Minimum sanitary pressure	l	-	-	-
Water volume in the expansion tank	V/Hz	230/50	230/50	230/50
Feed tension	W	90	120	120
<b>Electric power</b>				
<b>CONNECTIONS</b>				
Heating connection	Inch	3/4"	3/4"	3/4"
Sanitary connection	Inch	3/4"	3/4"	3/4"
Gas connection	mm	720	720	720
Height	mm	300	300	300
Depth	mm	400	400	400
Width				
<b>WASTE PIPE LENGTH</b>				
Co - axial Ø 60 x 100 mm	m	min. 0,5 mt.	-	-
Twin flue Ø 80 mm	m	-	16	30
Twin flue Ø 60 mm	m	-	-	-
Weight	Kg	35	39	43
Protection level	IP	44	44	44
CE homologation		0068 **	0068 ***	0068 ***

ARCA srl declina ogni responsabilità per le possibili inesattezze contenute, se dovute ad errori di trascrizione o di stampa. Si riserva altresì il diritto di apportare ai propri prodotti quelle modifiche che si riterranno necessarie o utili, senza pregiudicarne le caratteristiche essenziali.

# ARCA

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TECNOLOGIE PER L'AMBIENTE

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