





APEN GROUP SPA is a leading manufacturer of heating systems, who is active both in national and international ambits.

#### Our Vision

We consider 'caring for the environment' (environment, persons, relationships, cooperation) our way towards the excellence.

#### Our Mission

Designing and manufacturing of HVAC products for buildings that stand out for their quality and for their compliance with environmental standards (low polluting emissions, high efficiencies and minimum consumption) working with a team of people who shares with us passion, harmony, bravery, transparency and ethic in relationships.



## A leading company in Industry

With a covered surface of about 11.000 m<sup>2</sup>, APEN GROUP SPA constitutes the central core around which work many small companies.

The whole production is the result of an accurate job on development, quality and research for the future.

Many are the distinguishing competences that the company has made own and that guarantee its continuous success.

The presence of a family and managing team assures coherence when defining company policies and speediness in decisions.

An IBM AS400 operating system fully integrated with a net of personal computers with Windows Server, manages the whole organisation, assuring easiness and promptness in intercompany communications.

The website [www.apengroup.com](http://www.apengroup.com) and e-mail [apen@apengroup.com](mailto:apen@apengroup.com), allow easily communicating with all entities outside the company (e.g. customers, suppliers, associations).

A qualified team of engineers and researchers, these committees for the development of standards UNICIG, researches and develops products using CAD computer systems, translating into production the best that you obtained from the research, studying cutting-edge technical and manufacturing solutions.





### Caring for Environment

Environment protection is essential for present and next generations' quality of life.

APEN GROUP's challenge is investing in research and development activities, which grant the design and the production of environment friendly products.

Such a concern is well resumed in the current slogan "Apen Group caring for environment" and it involves all the company organization: from research of suppliers and partners who share this same goal, to staff personnel, natural source optimization and definition of any prevention control and correction so to respect the fixed quality goals and environment deference.



## Certified Quality

APEN GROUP S.p.A. ranges among the first Italian companies to be certified by an industry-wide acknowledging system at European level. We have been audited and certified to be in compliance with the quality standards defined in UNI EN ISO 9001:2015 protocol.

### Certification has been obtained for

The design, manufacturing, marketing and service of hybrid systems, of warm air heaters, condensation heaters and exchangers, condensing boilers, water fan units, air de-stratifiers, air handling central units, and burners.

The commitment to quality took by the company dates back to the beginning of our history, and it is confirmed by the following milestones: In 1988 APEN GROUP was certified by DVGW Deutscher Verein Des Gas Und Wasserfaches E.V. and it was approved as a trading partner for suspended heaters in Germany. Then approvals for the sale of these heaters in other markets followed, such as France, Switzerland, the Netherlands, and Belgium.

In 1995 all the gas-fired appliances we manufacture were certified according to EC Directives.

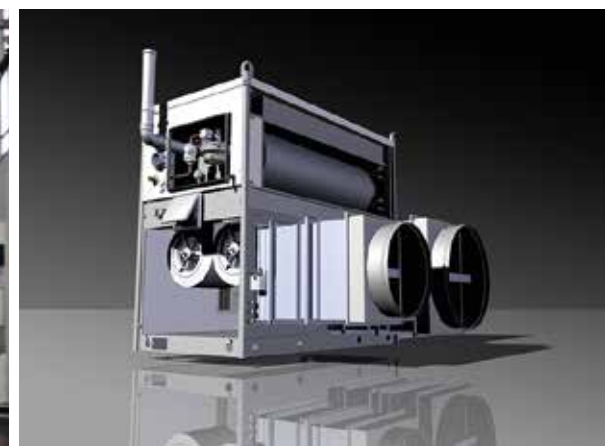
In 1991 we were the first Italian company in the HVAC industry to be registered in accordance with UNI EN ISO 9003 requirements.

In 1993 the auditing was extended to include compliance with UNI EN ISO 9002 standards.

In 2003, we were acknowledged to be compliant with UNI EN ISO 9001:2000, and the registration was confirmed in 2006.

In 2013 the Board of Directors has adopted the **organizational model 231**.

In 2017 we obtained the certification in compliance with the UNI EN ISO 9001:2015.





#### Customers oriented

350 Technical Support Centres care with attention and competence maintenance and prompt intervention for all APEN GROUP's products.

A service that goes towards the customer identifying itself with the satisfaction even of special requirements. APEN GROUP meets any kind of design needs realising customized products.

A flexible productive organisation, the presence of technological advanced machineries for the sheet metal processing, allow saving on costs in relation to the price/quality ratio. Another important advantage, because APEN GROUP means a big potentiality in terms of, not only technological but also commercial and industrial development.

Summarizing table of the requirements with relevant temporarily steps of entering into force:

STEP	Starting from	Seasonal EfficiencyErP ( $h_{s,h}$ )	Nox Emissions
1. "ErP 2018"	01/01/2018	$\geq 72\%$	
	26/09/2018	$\geq 72\%$	100 mg/kWh (180 mg/kWh*)
2. "ErP 2021"	01/01/2021	$\geq 78\%$	70 mg/kWh (150 mg/kWh*)

The EU/2281/2016 regulation establishes a framework for the setting of ecodesign requirements for energy-related products, with regard to ecodesign requirements for air heating products.

Warm air heaters enter in the application field of the above-mentioned regulation. The regulation disciplines 2 fundamental requirements:

- Seasonal Efficiencies
- Nox Emissions



## RANGE OF SUSPENDED WARM AIR HEATERS AND WARM AIR HEATING MODULES

Range	Regulation of burner	Efficiency of combustion (min-max)*	Seasonal Efficiency ErP (hs,h)**	ERP 2018	ERP 2021
Series Kondensa (LK) and PCH heating modules	Modulating and condensing	97% - 109%	92%	✓	✓
Series AH Sport	Modulating and condensing	97% - 109%	92%	✓	✓
Series Rapid (LR)	Hi/low	92% - 94%	72,5%	✓	X
Series Plus (LP)	Modulating	92% - 94%	73,5%	✓	X



### RANGE OF FLOORSTANDING WARM AIR HEATER

The range of Apen Group's Floorstanding Warm Air Heater Series K and R is compliant with ErP Regulation concerning seasonal efficiency. The exact value of seasonal Efficiency depends on the working field of the combined burner.

ApenGroup's pricelist and the Instruction manual of the product show the value of the seasonal efficiency with the combination with the main brands of burners with forced air available on the market. Those values are listed in the "Burner Matching Table".

To obtain the compliance of the Nox Emssions required by the regulation, Burner matching has been performed according to the following criteria: burner in class 3 for NOx according to EN676, with emissions of less than 80 mg/kWh.

## MARKETING

The EU regulation 2281/2016, differentiates from other Ecodesign regulations and do not foresee the Energetic (Ecolabel) Labelling. To help the customer and the designers identifying the Erp product, ApenGroup has introduced on its own products two identifying products:



The BLUE logo indicates the product compliant to requirements of the Regulation UE/2281/2016 starting from 01/01/2021 while the GREEN logo identifies the products compliant to requirements valid starting from 01/01/2018.

Furthermore since 21/04/2018, ALL ApenGroup's products are certified "GAR" (Gas Appliances Regulation - EU/426/2016), see relevant certificates.



Number KIP-15758/G Scope Regulation (EU) 2016/426  
 Issue date 08-05-2018 Module B  
 Expire date 07-05-2028  
 PIN 0476CQ0451 Report 150500451/5  
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## EU TYPE-EXAMINATION CERTIFICATE

Kiwa Cermet Italia declares that the products type:

gas-fired air heaters

Trade mark: **APEN GROUP**

Models: as specified in the **Annex 1**

Placed on the market by **APEN GROUP S.p.A.**

Via Isonzo 1, 20060 Pessano con Bornago  
(MI) Italia

meet the essential requirements as described in the

**Regulation (EU) 2016/426 relating to appliances burning gaseous fuels.**

Appliance type: B<sub>23</sub>, B<sub>23P</sub>, C<sub>13</sub>, C<sub>23</sub>, C<sub>43</sub>, C<sub>53</sub>, C<sub>63</sub>

Countries: AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,  
HR, HU, IE, IS, IT, LT, LU, LV, MK, MT, NO, NL, PL, PT, RO,  
SE, SI, SK, TR

Related to the following gas groups: as specified in the **Annex 1**

The assessment test have been performed using the following standards as guidelines:

Applicable to models series PCH – LK – LKC  
EN 1020:2009, EN 1196:2011

Applicable to models series PRH – LR – LRC – LPC – LP  
EN 1020:2009

The validity of this certificate can be verified on request at the following e-mail address: [info@kiwa.it](mailto:info@kiwa.it)

This certificate will expire if there have been any changes to the product that may have an impact on compliance with the requirements of the Directive. This certificate will expire if there have been any updates and/or changes to the Technical Standards applicable unless specifically approved by Kiwa Cermet Italia.

Chief Operating Officer  
Giampiero Blicreidi

*[Signature]*



SGQ N° 007A  
SGA N° 219D  
PRD N° 066B  
FSM N° 004E  
PRS N° 089C



Organismo Notificato n. 0476

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GASTEC



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## EU TYPE-EXAMINATION CERTIFICATE

### ANNEX 1

Models:

PCH 020	PCH 034	PCH 045	PCH 065	PCH 080	PCH 105	PCH 130
PCH 132	PCH 160	PCH 162	PCH 210	PCH 212	PCH 320	PCH 420
LK 020	LK 034	LK 045	LK 065	LK 080	LK 105	
LKC 020	LKC 034	LKC 045	LKC 065	LKC 080	LKC 105	
PRH 015	PRH 024	PRH 034	PRH 042	PRH 052	PRH 072	PRH 102
PRH 144	PRH 152	PRH 202	PRH 204	PRH 310	PRH 410	
LR 015	LR 024	LR 034	LR 042	LR 052	LR 072	LR 102
LRC 015	LRC 024	LRC 034	LRC 042	LRC 052	LRC 072	LRC 102
LP 015	LP 024	LP 034	LP 042	LP 052	LP 072	LP 102
LPC 015	LPC 024	LPC 034	LPC 042	LPC 052	LPC 072	LPC 102

The models could be followed by a suffix "xx" (means country of destination) can be added to the appliance's name.

Gas groups:

Group	mbar	Group	mbar	Group	mbar
E	20	Esi, E(S)	20/25	Lw	20
H	20/25	Er, E(R)	20/25	B	20; 25
L	25	LS	13	B/P	30; 50
LL	25	S	25	P	30; 37; 50
EK	20/25				

The above gas groups can be combined according to the standard EN437:2009 and national situation of countries.

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GASTEC



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## EU TYPE-EXAMINATION CERTIFICATE

Kiwa Cermet Italia declares that the products type:

Gas fired non domestic forced convection air heaters, type

Trade mark: **APEN GROUP**

Models: *as specified in the Annex 1*

Placed on the market by **APEN GROUP S.p.A.**

Via Isonzo, 1 - 20060 Pessano con Bornago  
(MI) Italia

meet the essential requirements as described in the

**Regulation (EU) 2016/426 relating to appliances burning gaseous fuels.**

Appliance type: B<sub>23P</sub>

Countries: AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,  
HR, HU, IE, IS, IT, LT, LU, LV, MK, MT, NO, NL, PL, PT, RO,  
SE, SI, SK, TR

Related to the following gas groups:

Appliance categories depend on the used forced draught burner

The assessment test have been performed using the following standards as  
guidelines:

EN 1020:2009

The validity of this certificate can be verified on request at the following e-mail address: [info@kiwa.it](mailto:info@kiwa.it)

This certificate will expire if there have been any changes to the product that may have an impact on compliance with the requirements of the Directive. This certificate will expire if there have been any updates and/or changes to the Technical Standards applicable unless specifically approved by Kiwa Cermet Italia.

Chief Operating Officer  
Giampiero Balcredi



SGQ N° 007A  
SGA N° 010D  
PQD N° 005B  
FSM N° 004E  
FES N° 009C



Organismo Notificato n. 0476

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## EU TYPE-EXAMINATION CERTIFICATE

### ANNEX 1

#### Appliance model list

PKA032N	PKE032N	EMS032N	-
PKA035N	PKE035N	EMS035N	GH7580
PKA060N	PKE060N	EMS060N	GH7680
PKA100N	PKE100N	EMS100N	-
PKA120N	PKE120N	EMS120N	GH7780
PKA140N	PKE140N	EMS140N	GH7880
PKA190N	PKE190N	EMS190N	GH7980
PKA250N	PKE250N	EMS250N	GH8080
PKA320N	PKE320N	EMS320N	GH8180
PKA420N	PKE420N	EMS420N	GH8280
PKA550N	PKE550N	EMS550N	GH8380
PKA700N	PKE700N	EMS700N	GH8480
PKA900N	PKE900N	EMS900N	GH8580
PKA1M2N	PKE1M2N	EMS1M2N	GH8680
PKA032K	PKE032K	EMS032K	GHK7580
PKA060K	PKE060K	EMS060K	GHK7680
PKA100K	PKE100K	EMS100K	GHK7780
PKA140K	PKE140K	EMS140K	GHK7880
PKA190K	PKE190K	EMS190K	GHK7980
PKA250K	PKE250K	EMS250K	GHK8080
PKA320K	PKE320K	EMS320K	GHK8180
PKA420K	PKE420K	EMS420K	GHK8280
PKA550K	PKE550K	EMS550K	GHK8380
PKA700K	PKE700K	EMS700K	GHK8480
PKA900K	PKE900K	EMS900K	GHK8580
PKA1M2K	PKE1M2K	EMS1M2K	GHK8680
PKA032R	PKE032R	EMS032R	GHR7580
PKA060R	PKE060R	EMS060R	GHR7680
PKA100R	PKE100R	EMS100R	GHR7780
PKA140R	PKE140R	EMS140R	GHR7880
PKA190R	PKE190R	EMS190R	GHR7980
PKA250R	PKE250R	EMS250R	GHR8080
PKA320R	PKE320R	EMS320R	GHR8180
PKA420R	PKE420R	EMS420R	GHR8280
PKA550R	PKE550R	EMS550R	GHR8380
PKA700R	PKE700R	EMS700R	GHR8480
PKA900R	PKE900R	EMS900R	GHR8580



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 Regulation (EU) No. 813/2013  
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 PIN 0476CR1226

## EC TYPE EXAMINATION CERTIFICATE

Kiwa Cermet Italia, notified body for council Directive 92/42/EEC, hereby declares that according to article 4 of commission regulation (EU) No. 813/2013 the products

Central heating condensing boilers

Trade mark: **APEN GROUP**

Models: AKY032xx, AKY034xx, AKY050xx, AKY070xx, AKY100xx, HY434xx, HY534xx

xx: indicates the code country

Placed on the market by **Apen Group S.P.A.**

via Isonzo, 1  
 20060 Pessano con Bornago (MI) - Italy

Have achieved the following (see Annex 1) full and part load efficiencies.

The assessment test have been performed using the following standards as guidelines:

EN 15502-1:2012 + A1:2015, EN 15502-2-1:2012+A1:2016

The validity of this certificate can be verified on request at the following e-mail address: info@kiwa.it

This certificate will expire if there have been any changes to the product that may have an impact on compliance with the requirements of the Directive, as well as on updates and / or changes to the Technical Standards applicable unless specifically approved by Kiwa Cermet Italia

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GASTEC

Chief Operating Officer  
 Giampiero Belcredi

*Giampiero Belcredi*



Organismo Notificato n. 0476

SGQ N° 007A  
 SGA N° 0100  
 PRD N° 0608  
 FSM N° 0042  
 PRS N° 089C

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## EC TYPE EXAMINATION CERTIFICATE

### ANNEX 1

#### Models:

	AKY032xx	AKY034xx, HY434xx, HY534xx	AKY050xx	AKY070xx
$\eta_{100}$	96,5 %	98,3 %	96,8 %	97,5 %
$\eta_{10}$	107,3 %	108,9 %	106,7 %	107,5 %
$\eta_s$	86,9 %	88,5 %	87,2 %	87,8 %
$\eta_l$	96,6 %	98,1 %	96,1 %	96,8 %
$P_d$	29,9 kW	34,2 kW	47,4 kW	63,4 kW
$P_l$	10,0 kW	11,4 kW	15,7 kW	21,0 kW
C.Heater?	No	No	No	No
B <sub>1</sub> Boiler?	No	No	No	No
Type of boiler:	Condensing	Condensing	Condensing	Condensing

	AKY100xx
$\eta_{100}$	97,6 %
$\eta_{10}$	108,1 %
$\eta_s$	87,1 %
$\eta_l$	97,3 %
$P_d$	92,8 kW
$P_l$	31,1 kW
C.Heater?	No
B <sub>1</sub> Boiler?	No
Type of boiler:	Condensing

#### Note:

$\eta_{100}$  = At rated heat output and high-temperature regime - NCV (\*)  
 $\eta_{10}$  = At 30 % of rated heat output and low-temperature regime - NCV (\*\*)  
 $\eta_s$  = At rated heat output and high-temperature regime - GCV (\*)  
 $\eta_l$  = At 30 % of rated heat output and low-temperature regime - GCV (\*\*)  
 $P_d$  = At rated heat output and high-temperature regime (\*)  
 $P_l$  = At 30 % of rated heat output and low-temperature regime (\*\*)  
 C.Heater = Combination heater (Yes = with domestic hot water production / No = Heating system only)  
 B<sub>1</sub> Boiler = B<sub>1</sub> according CEN/TR 1749:2014  
 Type of boiler = "Condensing Boiler" or "Low Temperature Boiler" or Other Boiler"

Efficiency's values have been measured with gas G20.

(n.L. = not tested)

(\*) High-temperature regime means 60 °C return temperature at heater inlet and 80 °C feed temperature at heater outlet.

(\*\*) Low temperature means for condensing boilers 30 °C, for low-temperature boilers 37 °C and for other heaters 50 °C return temperature (at heater inlet).

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