ApenGroup®

AQUAPUMP HYBRID

Outdoor monobloc unit
Heat pump + Boiler

ApenGroup®

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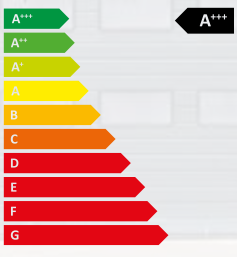
OUTDOOR MONOBLOC UNIT
ELECTRIC HEAT PUMP + GAS BOILER

SMART X EASY OR SMART X WEB

ELECTRONIC WATER FAN HEATERS

CLASS A++



ApenGroup

AQUAPUMP HYBRID
Outdoor monobloc unit electronic heat pump + gas boiler

AQUAPUMP HYBRID, INTEGRATED HEAT PUMP AND CONDENSING BOILER

AquaPump Hybrid is an outdoor monobloc unit designed to produce hot and cold water using renewable energy. It is a hybrid system in one product, the only one on the market in a one-package configuration.

Particular attention has been paid to:

- The environment, guaranteeing very low polluting emissions.
- Savings thanks to high efficiency and low energy consumption.
- Design, where originality and reliability become product standards.

It always ensures optimal heating and air conditioning standards in any type of environment.

RENEWABLE ENERGIES AND ENERGY SAVING

The key factor in the development of the AquaPump Hybrid project was the study of an integrated control system capable of independently managing the operation of the heat pump or the boiler, as stand-alone units, or both at the same time in order to generate energy savings and cost-effectiveness, maximising the use of renewable energy. The system adjustment flexibility allows using this technology both for high temperature and medium or low temperature systems.

FIELDS OF APPLICATION

- Labs
- Public buildings
- Offices
- Supermarkets
- Restaurants
- Bar
- Shopping malls
- Shops and Showrooms
- Gyms

A+++ CLASS

The A+++ energy class, as per 811/2013 ECOLABEL EU regulation, derives from the sum of the efficiencies of the latest generation condensing boiler, the heat pump with inverter and the Smart X Web intelligent control. The final label highlights the overall performance of the system.

HYBRID SYSTEM AND ELECTRONIC FAN HEATER

In case of high temperature systems, an AB fan heater has been designed to be matched with a Hybrid system characterised by high exchange surfaces with high efficiency batteries, double fan with automatic speed control, direct current brushless motor and condensate collection tray for use in cooling operation.

SMART OPERATION WITH INTELLIGENT CONTROL

The system, condensing boiler and hydronic heat pump with inverter (already assembled electrically and hydraulically with refrigerant circuit R32, closed and tested), is managed by Smart X Easy or Smart X Web control. The touch-screen controls act as a stand-alone chronothermostat.

SMALL DIMENSIONS FOR HIGH POWER

The entire monobloc system (boiler + heat pump) has the same dimensions as a heat pump, the inverter technology and the new generation of compressors and fans, the result of the latest research of the global manufacturers of these components, allows to reach new levels of noiselessness.

PLUG AND PLAY INSTALLATION

The AquaPump Hybrid is a plug and play product with integrated regulation. The installer is aided in his installation work by a system that is already assembled, adjusted and with the values already set.
All that is required is the hydraulic connection of the water supply and return to the system, the connection of the gas line and that of the power supply. And then you can plug it in.

AQUAPUMP HYBRID

TECHNICAL FEATURES

CONDENSING BOILER

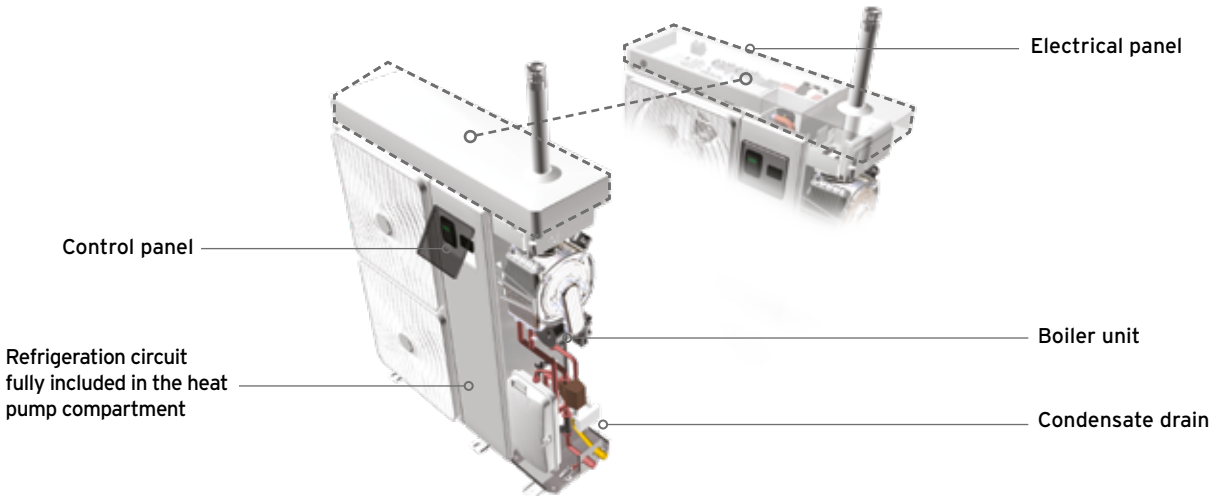
- Premixed burner with low NOx polluting emissions, class 6 according to EN15502-1.
- Low carbon stainless steel heat exchanger.
- Electronic equipment and microprocessor with self-testing that manages all burner control and verification operations.
- CE approval in accordance with product directives.

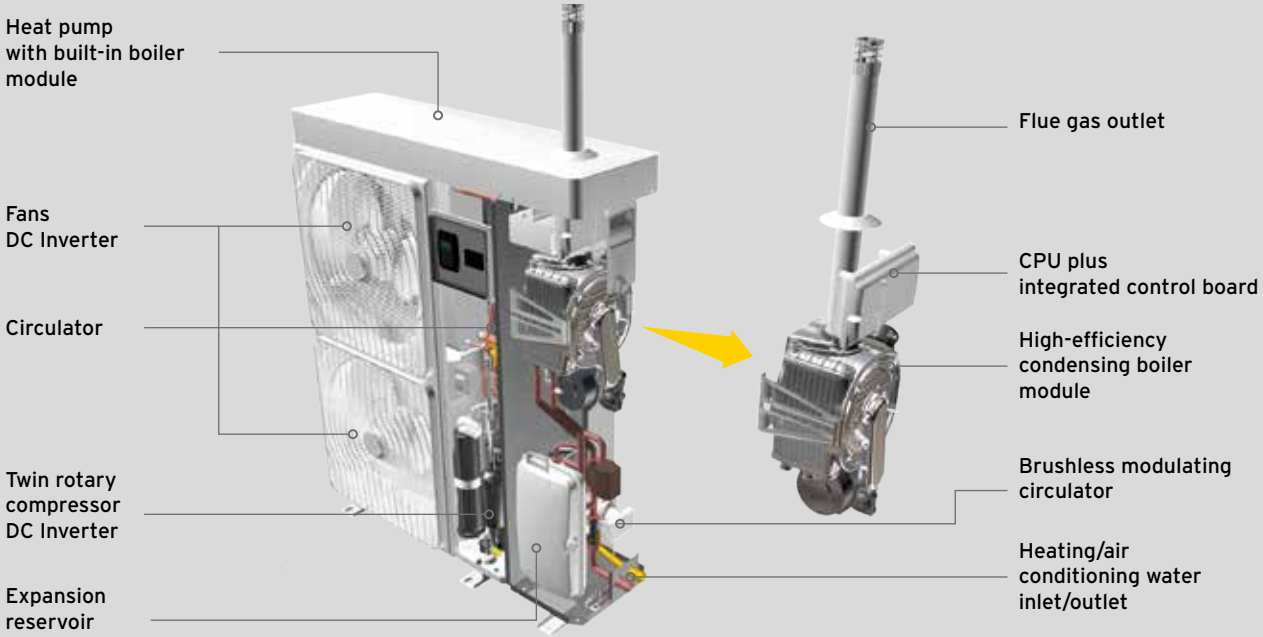
INVERTER HEAT PUMP:

- DC inverter fan motor.
- Twin Rotary DC inverter compressor with permanent magnets.
- R32 Refrigerant gas.
- Source heat exchanger with finned battery with copper tubes and aluminium fins with hydrophilic treatment.

HYDRAULIC CIRCUIT:

- Pressure gauge and probe to control the system pressure.
- NTC probes for water regulation.
- Hydraulic circuit temperature control thermometer.
- Flow meter for measuring the system water flow rate.
- Brushless circulator with DC motor with variable flow rate and built-in automatic air separator (degasser).
- 90°C Safety thermostat.
- 3 bar system safety valve.
- IPX5D Protection degree.
- 10-litre expansion reservoir.





SMART X EASY AND SMART X WEB CONTROL

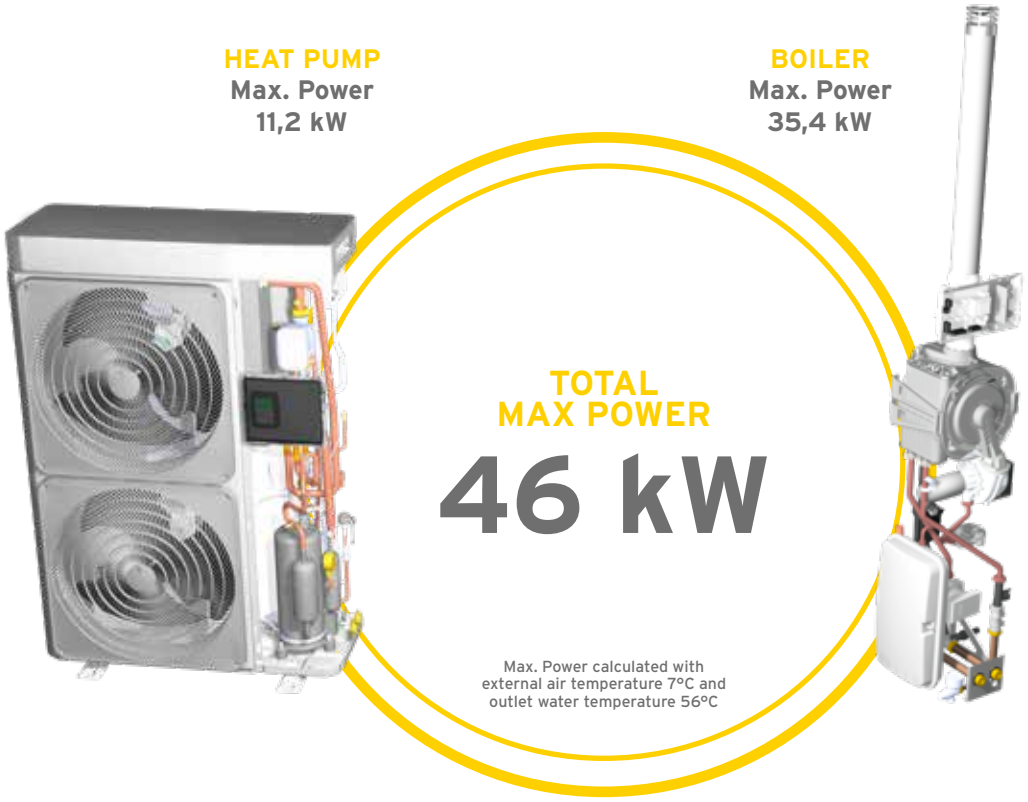
The Apen Group remote control of the new Smart X Easy or Smart X Web series acts as a stand-alone chronothermostat and can be used in a system that controls a zone in which one up to a maximum of 15 machines can be installed at the same time.
Connection via 4 polarised cables is very simple.

Installation can be built-in or flush with the wall. It is possible to install up to 3 remote probes in addition to the one on board the control.
The controls are easy to use thanks to a 4.3" colour display and a very intuitive management menu.
The user program is multilingual (9 languages).

The simplicity of connection, the clear and intuitive management menu and the possibility of reading up to 4 temperature points within the controlled zone make these chronothermostats versatile and suitable for different needs and types of system.

HEAT PUMP OR BOILER?

The single system, condensing boiler and hydronic heat pump with inverter (already assembled electrically and hydraulically with R32 refrigerant circuit, closed and tested), is managed by Smart X Easy or Smart X Web control.
These controls give priority to air-water heat pump operation. The condensing boiler starts operating automatically only when the temperature conditions around the system do not guarantee the possibility of making the best use of renewable energy, or when the power required from the system is greater than the power supplied by the heat pump.
The modulation of the operating power of both technologies is regulated in such a way as to always favour heat pump operation; each system operates with a dedicated regulation curve and with different delivery set-points that work according to the chosen mode of operation.
In order to optimise the heat pump performance, it is possible to choose to work with the optimum economy, by setting an external temperature limit (for example +3°C) below which heat pump operation is deactivated.
For systems with availability of electrical energy from renewable sources (photovoltaic), the heat pump can be set to operate with colder external temperatures, even below 0°C, already equipped as standard with an antifreeze kit.



ELECTRONIC FAN HEATERS

TECHNICAL FEATURES

- High-efficiency three-row finned exchange battery.
- Electronic fans with integrated inverter.
- Automatic air vent valve.
- Louvres with adjustable horizontal blades.
- IP54 Protection degree.

STANDARD ACCESSORIES

- Rotatable wall mounting shelf and paper template for drilling.
- Stainless steel hoses with Ø 1" for connecting the fan heater to the boiler, length 500mm.
- Condensate collection tray for use in cooling mode.

In winter operation, the ventilation speed is adjusted automatically according to the inlet water temperature.
In air-conditioning operation, the ventilation speed is fixed and programmable.

FAN HEATERSIN COOLING MODE

The fan heaters are designed to house a condensate collection tray, which can be fitted at any time, even after wall installation.

ROTATABLE SHELF AS STANDARD

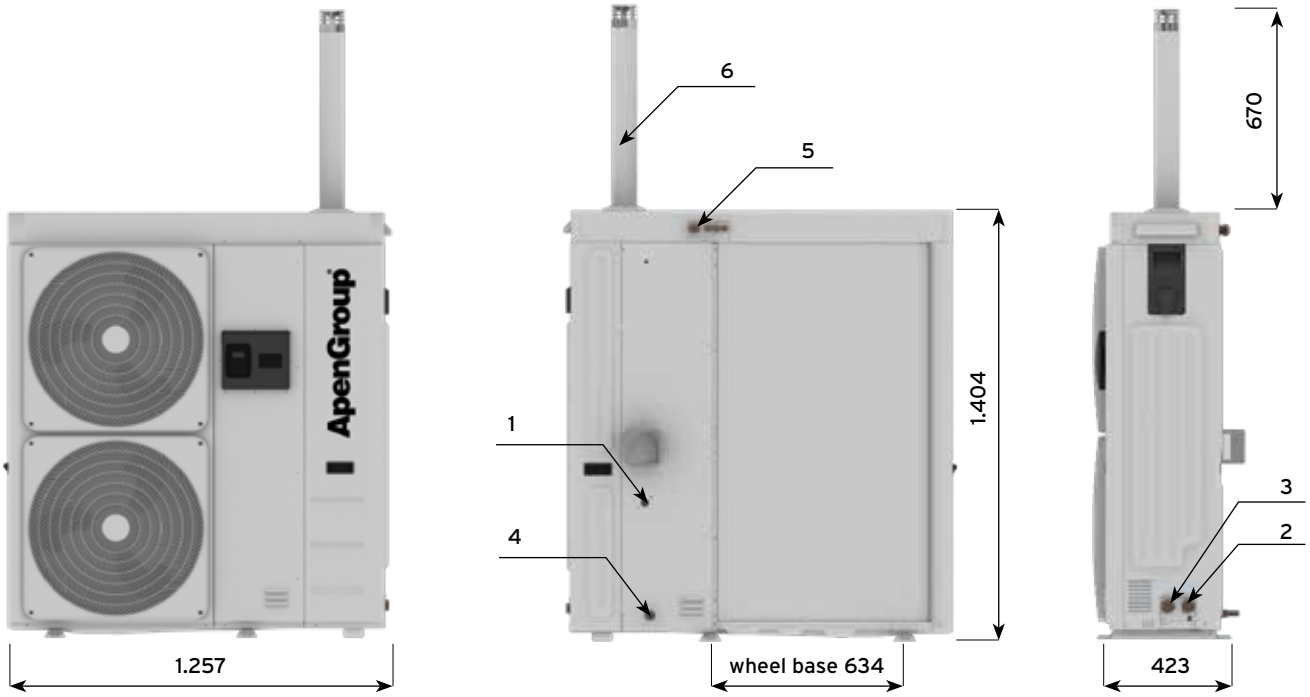
The fan heaters are fitted as standard with a rotatable shelf. Thanks to its particular conformation, this shelf allows to satisfy the multiple requirements of installation.

- Easy and quick fixing on: walls, pillars, beams or other suitable supporting structures.
- Possibility of orienting the indoor unit and the relative air flow, according to the characteristics of the environment to be heated and the user's needs.

ADVANTAGES

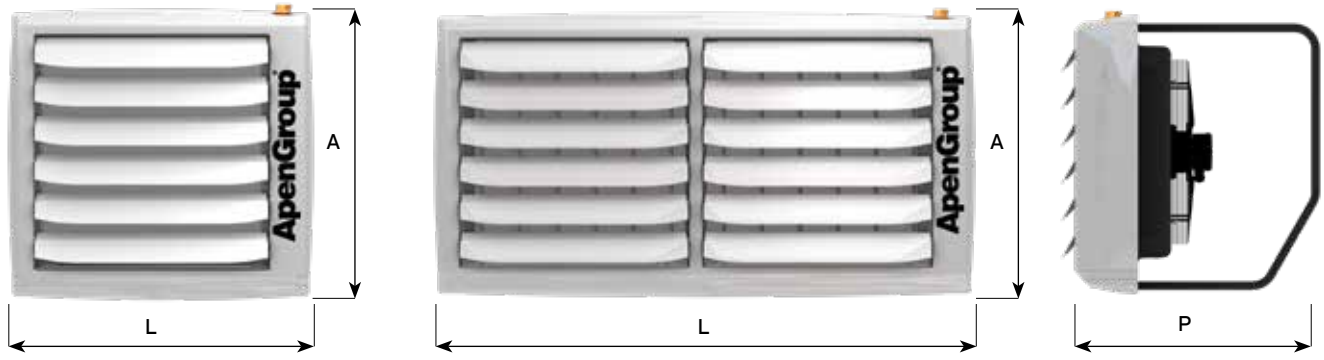
- Greater aeraulic efficiency thanks to the presence of an integrated inverter.
- Reduction of electricity consumption.
- Greater environmental comfort, which is maintained by adapting the air flow to the thermal load.
- In the summer period, thanks to the possibility of modulating the rotation speed, condensation drops are not dragged into the environment.
- Greater silence.
- Continuous speed regulation carried out via 0-10 V signal.

AQUAPUMP HYBRID / DIMENSIONS



Description		Dimensions
1	Gas supply	G3/4"
2	Water recircularion	G1"
3	Water delivery	G1"
4	Condensate drain	Ø19 mm
5	Electrical connections	PG09 x 2 + PG13 x 1
6	Flue exhaust chimney	Ø 80 mm

ELECTRONIC FAN HEATERS / DIMENSIONS



Model	Width	Height	Depth
	mm	mm	mm
AB018IT-HYN	765	730	595
AB034IT-HYN	1,390	730	595

MANDATORY ACCESSORIES

SMART X EASY AND SMART X WEB CHRONOTERMOSTATS

Code	Description
G29500	SMART X EASY Chronotermostat
G29700	SMART X WEB Chronotermostat

NOTE: 5th Class as per European Commision Notification 2014/C 207/29

MANDATORY SMART X ACCESORY
Aqua Pump Hybrid **can only work coupled with remote control touch screen SMART**, which runs the combined operation of the two technologies making up the machine through the communication protocol MOD-BUS RTU.

THE CONTROL IS AVAILABLE IN THE SMART X EASY OR SMART X WEB VERSION
Upon request you may have the remote control in the Smart X Web configuration, which gives the ability to interface the control of the machine with a PC.
FOR EACH SMART X CONTROL IT IS NECESSARY TO PURCHASE A TEMPERATURE PROBE.

EXTERNAL PROBE

Code	Description
G23300	Room/external temperature probe for climate control

NOTE: For information, consult the instruction manual.

ACCESSORIES ON REQUEST

TEMPERATURE PROBE KIT

Code	Description
C08600	Immersion temperature probe kit + 1/4 “well G
G23300	Wire probe

ANTIFREEZE SYSTEM

Code	Description
C11101*	Antifreeze valve
C07200-05	Glycol can with antifreeze Alphi 11 (5 liters)
C07200-25	Glycol can with antifreeze Alphi 11 (25 liters)

NOTA: the use of a passive anti-freeze system is necessary.
* 2 valves are required for each HYN machine.

THREE-WAY MOTORIZED BALL DIVERTER VALVE

Code	Description
C11400	Motorized three-way deviating ball-valve

It allows the automatic deviation of the heat-transfer fluid between the air-conditioning line and the water-sanitary line. It is suitable for coupling with the hybrid system to manage the heating line and the sanitary line, it can be combined with any 3-contact control for complete control during opening and closing phase.

THERMAL BUFFER TANK

Code	Description
APSS-050	Thermal buffer tank 50 lt.
APSS-100	Thermal buffer tank 100 lt.

THERMAL BUFFER TANK FOR DHW DOMESTIC HOT WATER PRODUCTION

Code	Description
APST1-300	Thermal buffer tank for DHW production 300 lt.
APST1-500	Thermal buffer tank for DHW production 500 lt.

TECHNICAL DATA: AQUAPUMP HYN SYSTEM

GENERAL TECHNICAL DATA OF AQUAPUMP HYBRID		HYN432	HYN532
Seasonal space heating energy efficiency [Reg.813/2013/EC]*		150,6%	150,6%
Energy efficiency class [Reg.811/2013/EC]*		A+++	A+++
Heating performances			
Maximum rated power	kW	14,1 (HP) + 35,4 (Boiler)	
Cooling performances			
Maximum rated power	kW	14,0	
Electrical Characteristics			
Power supply		230V/1/50Hz	400V/3P+N+T/50Hz
Maximum power consumption	kW	6,6	6,6
Maximum absorbed current	A	28,6	9,5
Protection Rating		IPX4D	IPX4D
Hydraulic circuit			
Maximum circulator power	W	140 (HP) + 78 (Boiler)	
Expansion reservoir	l	10,0	
Expansion reservoir pre-charge pressure	bar	1,3	
Pressione Maximum working pressure di esercizio	bar	3,0	
Water content	l	4,7	4,7
Minimum system water content (1)	l	20	20
Size and weight			
Delivery/return connections - UNI ISO 7/1	Ø	G 1" M	G 1" M
Gas connection	Ø	G 3/4" M	G 3/4" M
Dimensions (WxHxD)	mm	1258x1402x448	1258x1402x448
Max package dimensions (WxHxD)	mm	1430x1546x690	1430x1546x690
Weight with packaging	kg	187	187
Noise			
Sound pressure (2)	dB(A)	68	68

(*) Package efficiency: HP + temperature control + boiler. Under average climatic conditions at medium temperatures.
1. The presence of the boiler with anti-freeze system allows the number of defrosting cycles to be limited.
2. Sound pressure level on a free field (1 m), according to ISO 3744:2010.

HYN432 and HYN532 PERFORMANCES

External air temperature	Heat pump ON Output	ON Boiler Output	Output	HYN T H_2O	Flow rate
°C	kW	kW	kW	°C	l/h
-7	10,9	35,4	46,3	53	3300
-2	11,2	35,4	46,6	53	3300
2	12,7	35,4	48,1	53	3300
7	13,6	35,4	49	53	3300
12	14,4	35,4	49,8	53	3300

TECHNICAL DATA: BOILER

BOILER TECHNICAL DATA			HYN432	HYN532
Type of equipment			B23P - C63 (1)	
EC Approval		P.I.N.	0476CR1226	
Seasonal space heating energy efficiency - [Reg.813/2013/EC] (2)			91,8	
Energy efficiency class [Reg.811/2013/EC]			A	
NOx class [EN 15502-1]			6	
Boiler yields				
	Symbol*		Max. - Min.	
Burner heat output [Hi]	Pn	kW	34,8 - 6,8	
Useful heat output [Hi] [80/60°C]	P4	kW	33,6 - 6,6	
Useful heat output [Hi] [50/30°C]		kW	36,5 - 7,2	
Useful heat output at 30% of load [Hi] [50/30°C]	P1	kW	11,3	
Useful heat output [Hi] [72/45°C]	Pn	kW	35,4 - 7,0	
Useful efficiency [Hi] [80/60°C]	η4	%	96,6 - 96,5	
Useful efficiency [Hi] [50/30°C]		%	104,8 - 105,8	
Useful efficiency at 30% of Pn [Hi]	η1	%	107,7	
Useful efficiency [Hi] [72/45°C]		%	101,8 - 103,5	
Flue losses with burner on [Qn; 80/60°C]		%	2,7	
Heat loss in standby [EN15502-2]	Pstand-by	kW	0,073	
Flue losses with burner off		%	0,1	
Housing losses [Taverage=60°C]		%	0,35	
Condensate MAX quantity [72/45°C]		l/h	1,3	
Condensate MAX quantity [50/30°C]		l/h	3,6	
Flue gas emissions				
Carbon monoxide - CO - [3% of O_2] - [80/60°C] - Pn (3)		mg/kWh	95	
Carbon monoxide - CO - [0% of O_2] (4)		ppm	38	
Nitrogen oxides - NOx - [Hi] [0% di O_2] (4)			40ppm - 23mg/kWh	
Nitrogen oxides - NOx - [Hs] [0% di O_2] (4)			36ppm - 20mg/kWh	
Flue gas temperature (5)		°C	60	40
Pressure available at the flue		Pa	110	
Electrical Characteristics				
Boiler supply voltage		V	230V-50 Hz monofase	
Rated power		W	125	48
Electric power of auxiliary components (excluding circulator)	elmax	W	75	14
Electric power of auxiliary components at 30% of load (excluding circulator)	elmin	W	15	
Electric power of auxiliary components in standby	PSB	W	5	

(*) Abbreviation compliant with reg. EU/811/2013.
1 The boiler is supplied as standard with C63 configuration; other configurations are possible using accessories available from our catalogue.
2 Reg. EU/813/2013 art.2 point 20. It is calculated starting from the weighted average of useful efficiency at the rated heat output and of the useful efficiency at 30% of rated heat output, expressed in %. For calculation purposes, the efficiency value is referred to the higher calorific value [Hs].
3 Value referred to cat. H (gas G20) with Burner for Switzerland setting.
4 CO and NOx values refer to the average weighted value of emission between maximum and minimum rated heat output according to the product standard. Values referred to cat. H (gas G20).
5 With water temperature 50°C-30°C

TECHNICAL DATA: HEAT PUMP

HEAT PUMP TECHNICAL DATA		HYN432	HYN532
Seasonal space heating energy (medium - low temperature weather conditions) [Reg.813/2013/EC]*		176%	176%
Energy efficiency class (medium - low temperature weather conditions) [Reg.811/2013/EC]*		A+++	A+++
Seasonal space heating energy (medium temperature weather conditions) [Reg.813/2013/EC]*		130%	130%
Energy efficiency class (medium temperature weather conditions) [Reg.811/2013/EC]*		A++	A++
Electrical Characteristics			
Power supply		230V/1/50Hz	400V/3P+N+T/50Hz
Maximum power consumption	kW	6.6	6.6
Maximum absorbed current	A	28.6	9.5
Maximum current consumption with antifreeze kit	A	29.2	9.7
Cooling			
Cooling capacity (1)	kW	6.87 / 12.1	
Absorbed power (1)	kW	3.53	
E.E.R. (1)	W/W	3.25	
Cooling capacity (2)	kW	9.17 / 14.7	
Absorbed power (2)	kW	2.59	
E.E.R. (2)	W/W	5.4	
Heating			
Heat output (3)	kW	7.54 / 15.2	
Absorbed power (3)	kW	2.91	
C.O.P. (3)	W/W	4.85	
Heat output (4)	kW	7.23 / 14.6	
Absorbed power (4)	kW	3.55	
C.O.P. (4)	W/W	3.82	
Compressor			
Type/Number		Twin rotary DC inverter / 1	
Refrigerant oil (type / quantity)	l	ESTER OIL VG74, 1.4	
Fan motor			
Type / Number		DC Brushless / 2	
Refrigerant			
Type / Quantity / CO_2 equivalent	[-] - kg - ton $CO_{2eq.}$	R32 / 3.20 / 2.2	
Design pressure (high/low) heating mode	bar	42.8 / 1.3	
Design pressure (high/low) cooling mode	bar	42.8 / 3.5	

(*) Relating to HP only
1. external air temp. 35°C; in/out water temp. 12/7°C
2. external air temp. 35°C, in/out water temp. 23/18°C
3. external air temp. 7°C dry bulb /6°C wet bulb; in/out water temp. 30/35°C
4. external air temp. 7°C dry bulb /6°C wet bulb; in/out water temp. 40/45°C

TECHNICAL DATA: HEAT PUMP

IN HEATING MODE

HYN432 and HYN532

External Air Temp.	Tout											
	25 °C			30 °C			35 °C			40 °C		
°C	kWt	kWe	COP	kWt	kWe	COP	kWt	kWe	COP	kWt	kWe	COP
-15	10,9	3,72	2,92	10,8	4,05	2,66	10,8	4,05	2,66	10,8	4,78	2,25
-10	10,7	3,23	3,31	10,7	3,55	3,00	10,6	3,90	2,73	10,7	4,27	2,49
-7	10,9	3,01	3,62	10,8	3,31	3,26	10,7	3,63	2,95	10,7	4,00	2,68
-2	11,2	2,65	4,25	11,5	3,08	3,72	11,4	3,41	3,34	11,3	3,73	3,02
2	12,4	2,41	5,16	12,5	2,81	4,46	13,0	3,24	4,02	12,5	3,46	3,62
7	14,3	2,24	6,36	14,1	2,56	5,51	14,1	2,91	4,85	13,9	3,23	4,30
12	15,0	1,83	8,20	14,9	2,18	6,83	14,7	2,48	5,94	14,6	2,83	5,15
15	15,0	1,69	8,85	14,8	1,99	7,44	14,7	2,33	6,31	14,5	2,66	5,47
20	14,9	1,42	10,50	14,7	1,70	8,66	14,6	2,01	7,25	14,4	2,64	5,44
25	-	-	-	15,0	1,40	10,70	15,0	1,71	8,75	14,7	1,99	7,38
30	-	-	-	16,0	1,26	12,70	15,9	1,57	10,10	15,5	1,86	8,33

HYN432 and HYN532

External Air Temp.	Tout											
	45 °C			50 °C			55 °C			60 °C		
°C	kWt	kWe	COP	kWt	kWe	COP	kWt	kWe	COP	kWt	kWe	COP
-15	10,8	5,29	2,05	-	-	-	-	-	-	-	-	-
-10	10,5	4,55	2,31	10,5	4,93	2,13	10,3	5,12	2,01	-	-	-
-7	10,7	4,36	2,44	10,7	4,83	2,21	10,6	5,05	2,09	10,5	5,28	1,99
-2	11,2	4,08	2,74	11,1	4,43	2,51	11,0	4,72	2,33	10,9	5,01	2,17
2	12,7	3,92	3,24	12,4	4,21	2,95	12,4	4,57	2,71	12,4	4,93	2,52
7	13,6	3,55	3,82	13,6	4,00	3,41	13,4	4,35	3,09	13,3	4,70	2,82
12	14,4	3,19	4,52	14,1	3,53	4,00	14,0	3,92	3,56	13,8	4,30	3,20
15	14,4	3,00	4,80	14,0	3,32	4,23	14,0	3,70	3,77	16,9	4,09	3,40
20	14,4	2,64	5,44	14,0	2,92	4,80	14,1	3,32	4,24	14,1	3,72	3,80
25	14,5	2,28	6,36	14,5	2,63	5,51	14,1	2,90	4,87	13,8	3,17	4,34
30	15,3	2,18	7,02	15,1	2,52	6,02	14,8	2,84	5,23	14,5	3,16	4,60

Performance referred to instantaneous power according to EN14511:2018 without defrosting contribution..

IN COOLING MODE

HYN432 and HYN532

External Air Temp.	Tout								
	5 °C			7 °C			10 °C		
°C	kWt	kWe	EER	kWt	kWe	EER	kWt	kWe	EER
20	10,4	2,02	5,14	11,3	2,05	5,53	12,3	2,02	6,08
25	10,8	2,51	4,30	11,6	2,51	4,62	12,7	2,55	5,01
30	11,2	3,07	3,65	12,0	3,19	3,77	13,1	3,23	4,05
35	10,9	3,48	3,13	11,5	3,53	3,25	12,8	3,59	3,56
40	10,3	3,80	2,70	10,9	3,88	2,82	11,9	3,96	3,02
45	9,6	4,12	2,32	10,2	4,20	2,43	11,2	4,30	2,61

HYN432 and HYN532

External Air Temp.	Tout								
	12 °C			15 °C			18 °C		
°C	kWt	kWe	EER	kWt	kWe	EER	kWt	kWe	EER
20	13,1	1,87	7,04	14,4	1,64	8,81	15,6	1,61	9,71
25	13,3	2,30	5,76	14,0	1,93	7,26	15,1	1,89	7,98
30	13,3	2,85	4,69	13,7	2,27	6,05	14,8	2,26	6,53
35	12,9	3,19	4,04	13,1	2,58	5,06	14,0	2,59	5,40
40	12,1	3,53	3,43	12,4	2,89	4,28	13,3	2,91	4,55
45	11,3	3,86	2,94	11,5	3,19	3,61	12,4	3,23	3,86

Performance referred to instantaneous power according to EN14511: 2018.

TECHNICAL DATA: ELECTRONIC FAN HEATERS

AB018IT-HYN: HEATING

Water T. at coil inlet	Air T. at coil inlet	INPUT voltage	Air flow rate	Output power	Current power	Blow distance	Sound pressure	Heat output	Water flow rate	Water pressure loss
°C	°C	V	m³/h	W	A	m	dB(A)	kW	l/h	kPa
53	15	10	3.900	315	2,10	21,2	53,83	25,84	1.650	30
		7	2.440	115	0,80	15,4	45,98	19,12	1.650	30
		3	620	16	0,15	7,3	27,13	6,97	1.650	30

AB018IT-HYN: AIR CONDITIONING

7	27	6	1.940	73	0,54	13,2	42,50	7,43	1.165	11
								5,37*	1.165	
		5	1.430	48	0,36	11,1	38,83	6,43	1.165	11
								4,51*	1.165	
		4	980	31	0,22	9,0	34,12	5,27	1.165	11
								3,59*	1.165	
		3	620	16	0,15	7,3	27,13	4,03	1.165	11
								2,67*	1.165	

* Sensitive heat output

AB034IT-HYN: HEATING

Water T. at coil inlet	Air T. at coil inlet	INPUT voltage	Air flow rate	Output power	Current power	Blow distance	Sound pressure	Heat output	Water flow rate	Water pressure loss
°C	°C	V	m³/h	W	A	m	dB(A)	kW	l/h	kPa
53	15	10	7.950	635	4,16	22,3	56,83	46,3	3.300	9
		7	4.985	232	1,63	16,0	48,98	35,8	3.300	9
		3	1.265	31	0,26	7,4	30,13	13,9	3.300	9

AB034IT-HYN: AIR CONDITIONING

7	27	6	3.960	145	1,04	13,8	45,50	15,17	2.330	9
								10,96*	2.330	
		5	2.925	91	0,74	11,6	41,83	13,15	2.330	9
								9,22*	2.330	
		4	2.000	52	0,42	9,5	37,12	10,78	2.330	9
								7,34*	2.330	
		3	1.265	31	0,26	7,4	30,13	8,23	2.330	9
								5,46*	2.330	

* Sensitive heat output

SMART X SYSTEM

REMOTE CHRONOTHERMOSTATS

ADVANCED ELECTRONICS

WATER FAN HEATERS

AIR DESTRATIFIERS

GUARANTEED EFFICIENCY

GAS CONDENSING BOILERS

WALL-MOUNTED HEATERS

SMART X SYSTEM
Remote chronothermostats

SMART X EASY AND SMART X WEB CONTROLS

Being touch-screen chronothermostats, the Apen Group Smart X Easy and Smart X Web control all Apen Group products, guaranteeing operation with maximum efficiency and minimum energy consumption.

These user-friendly controls allow a wide choice of adjustments and a clear reading of the operating parameters as well as the resolution of any technical interventions.

PRODUCT CONTROL

- AKN gas condensing boilers.
- AQUAPUMP HYBRID system, hybrid heat pump with gas boiler.
- AX-EC electronic water fan heaters.
- QUEEN-EC Air destratifiers.
- LK wall-mounted condensing warm air heaters.
- LRP wall-mounted warm air heaters.
- AH and AH-SPORT modular heating units.
- PK and PK-SPORT floor standing warm air heaters.

SIMPLE INSTALLATION

Connection via 2 power cables and 2 modbus cables is very simple. Installation can be built-in or flush with the wall.

TOUCH SCREEN TECHNOLOGY

The controls are easy to use thanks to a 4.3" colour TFT display and a very intuitive management menu. The user program is multilingual (9 languages).

MULTITASKING CONTROL

It acts as a stand-alone chronothermostat and can be used by one to a maximum of 15 machines simultaneously.

SMART X WEB

With the Smart X Web version (through the connection to an intranet network) it is possible to carry out the complete management of the plant remotely via browser on a computer or via http address.

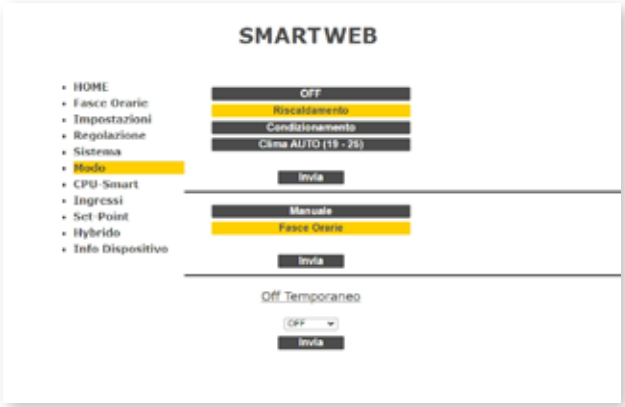
CONTROL VERSATILITY

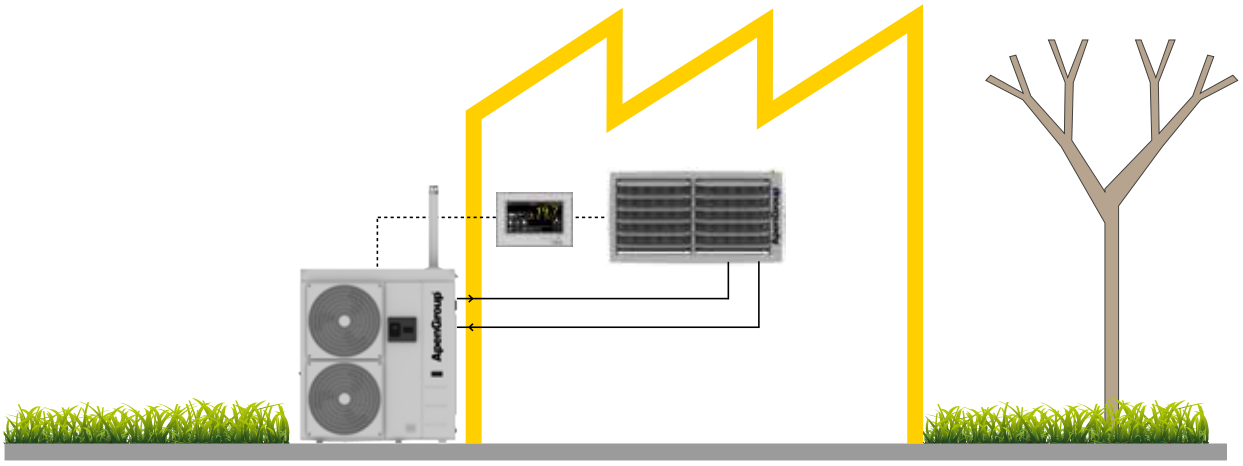
It is possible to install up to 3 remote probes in addition to the one on board the control.

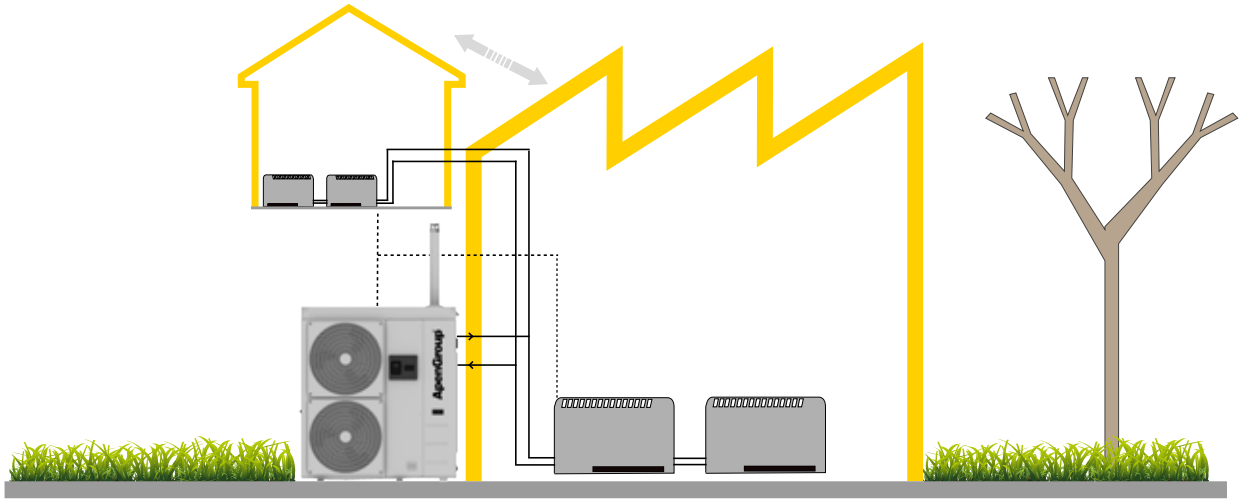
FAN MODE

Ventilation mode management for combination of AX-EC water fan heaters with AKN boilers.

EXAMPLES OF OPERATION OF THE SMART X WEB VIA BROWSER ON A COMPUTER







Heat pump
AquaPump

Smart X Easy
Smart X Web

Tertiary
industrial type
building

Comercial
type building

Indoor water
fan heater

Fan coil

APEN GROUP S.p.A.
Via Isonzo, 1 - Pessano con Bornago
20042 (Milano) - Italy
Tel +39 02 95 96 931 Fax +39 02 95 74 27 58
www.apengroup.com apen@apengroup.com

Cod. X01810GB ed. 2307