CATALOGUE - PRICE LIST 2016

HIGH PERFORMANCE CENTRAL HEATING SYSTEMS











HEATING SERIES BY | HITECSA

CATALOGUE - PRICE LIST 2016

HIGH PERFORMANCE CENTRAL-HEATING SYSTEMS



INTRODUCTION



HEATING SERIES BY HITECSA

Since 1961, we have been leaders in the manufacture of high-performance gas boilers and pre-built packaged Roof Top, Mini Roof Top and Skid heat production units in gas centralised installations. ADISA has its own Research and Development department, and its own 10,000 m² factory in Arenys de Mar, Barcelona. In July 2014, after its acquisition by Hitecsa, Adisa continues its commitment to offer high-performance energy solutions in the production of D.H.W. and heating.



ENERGY EFFICIENCY

RESPECT FOR THE ENVIRONMENT

COMPREHENSIVE SERVICE TO PROVIDE THE BEST HEATING SOLUTIONS







INTRODUCTION

SECTORS

We manufacture comprehensive heating systems, adapted solutions and high energy performance technical equipment for the following sectors:

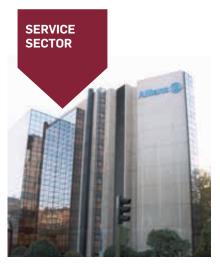




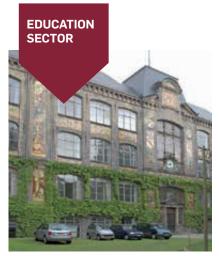














COUNTRIES WITH ADISA INSTALLATIONS

Adisa develops comprehensive heating solutions in various countries such as:

SPAIN, ITALY, FRANCE, BELGIUM, PORTUGAL, UNITED KINGDOM, IRELAND, NORWAY, ROMANIA, BULGARIA, UKRAINE, CROATIA, RUSSIA, EGYPT, VENEZUELA, DOMINICAN REPUBLIC...



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GENERAL TERMS OF SALES AND SERVICE

70

61







1.1 ADI BOILERS



- Range: ADI CD (condensing), ADI LT (low temperature), ADI HT (high temperature).
- High energy performance, maximum seasonal performance.
- Power between 70 and 904 kW.
- Compliant with current regulations, and Eco-Design Directives.







MAXIMUM SEASONAL PERFORMANCE

- Minimal thermal loss when on standby:
 - Double insulation: on the body as well as in the casing (LT and CD ranges).
 - Compact size: minimal area for loss.

Flow water temperature: constant or in relation to

- the outside temperature.
- Seasonal performance up to 108%
- (compliant with DIN 4708 part 8).

STANDARD MODULATING BURNER

- Variable speed fan (range maximum).
- Modulation from 30% of total power.
- Minimum electrical consumption, from 24 W.





Thermal requirements of the dwelling

Heat-generation system power

COMPACT DIMENSIONS AND REDUCED WEIGHT

Smaller size boiler rooms. Built-area saving. Lower cost.

230 kW in < 0.3 m²

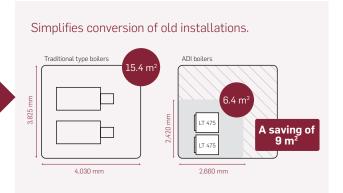
464 kW in < 0.76 m²

695 kW in < 1 m²

 $904 \text{ kW in} < 1.2 \text{ m}^2$

Enables conversions in locations with difficult access.

- Moved to final destination with a transpallets or similar vehicle.
- Cranes with a lower tare.
- Boilers up to 464 kW which enable access through doors, without the need to demolish walls, partitions...
- Thanks to their compact design they can be easily installed on roof-top terraces, in existing or new buildings.
- Frontal maintenance means a reduction in the side by side separation required between various boilers.



MINIMUM EMISSION OF CONTAMINANTS

Emissions below value limits of the Eco-Design regulation.

NOx class 5, NOx < 10 ppm

CO around 47 ppm

MAINTENANCE OPERATIONS SAVINGS

- Quick and easy maintenance.
- Less time required to extract the burner and check the combustion chamber.
- Uses the same setting and operational mode for both the 70 kW boiler and the 904 kW boiler.
- Many spare parts in common across the whole range.

COMPREHENSIVE ENERGY EFFICIENCY MANAGEMENT

Integrating into boilers joint control of generators, heating circuits and D.H.W., optimising the operation to achieve maximum energy efficiency as a whole.

Cascaded boilers:

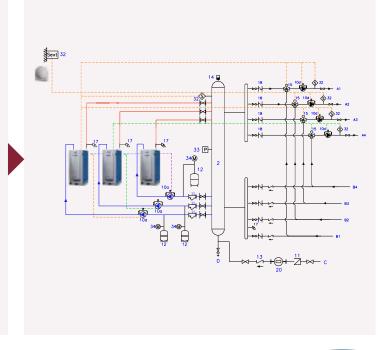
- In relation to the installation requirements.
- With boiler sequence inversion, to equate the number of working hours for each boiler.

Control of heating circuits by:

- 3-way valve control.
- Pump circuit control.
- Hourly/daily programming for each circuit.
- · Setpoint reduction (at night).

Control of domestic hot water D.H.W.:

- · Setpoint temperatures D.H.W.
- \bullet Antilegionella pasteurisation and frequency.



1.1 ADI BOILERS 1.1.1 ADI CD

Stainless-steel modulating gas condensing boiler.

1.1.1 ADI CD



HIGH EFFICIENCY
IN MINIMUM SPACES





MAIN FEATURES

- Stainless-steel heat exchanger.
- Power rating ranging from 70 to 904 kW.
- Seasonal performance up to 108%.
- Includes modulating burner from 30% power:
 - · Variable speed fan.
 - · Modulating gas valve.
- Includes PID control for boiler management and power modulation.
- Control of domestic hot water (D.H.W.) production, and antilegionella pasteurisation programming.
- Digital screen (different languages) to view:
 - · Operational information.
 - · Error messages.

PRODUCT BENEFITS

- High performance and energy saving.
- EC-Certified.
- High corrosion resistance at high temperatures.
- Low noise level:
 - Variable speed fan.
 - · Internal noise-insulating panels.
- Minimum electrical consumption, from 17 W.
- Ecological combustion NOx class 5. NOx < 10 ppm, CO around 47 ppm.
- Reduced and optimised weight and dimensions.
- Controllable from an external unit: 0...10 V.
- Compliant with Ecodesign directive (Erp Ready).

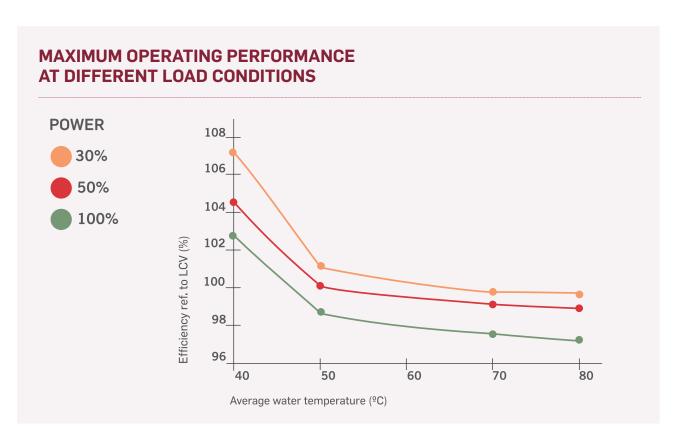
OPERATIONAL INFORMATION

- Water temperature:
 - Maximum discharge: nominal 86 °C (up to 90 °C).
 - · Minimum return: NO LIMIT.
- Maximum water pressure: 5 bar.
- Natural gas: nominal: 20 mbar, range: 17 to 45 mbar (if lower: inquire).
- Propane gas: inquire.
- Electricity:
 - 230 V, 50 Hz, single phase + earthed.
 - Higher than 790 kW: 380 V, 50 Hz, three phase + earthed.

SAFETY

- Hydraulic:
 - · Overheating.
 - · Pressure.
 - Water flow.
- Gas:
 - Safety pressure switch.
 - · Ionisation.
 - Double gas electric safety valve.
- Anti-freeze.





TECHNICAL SPECIFICATIONS

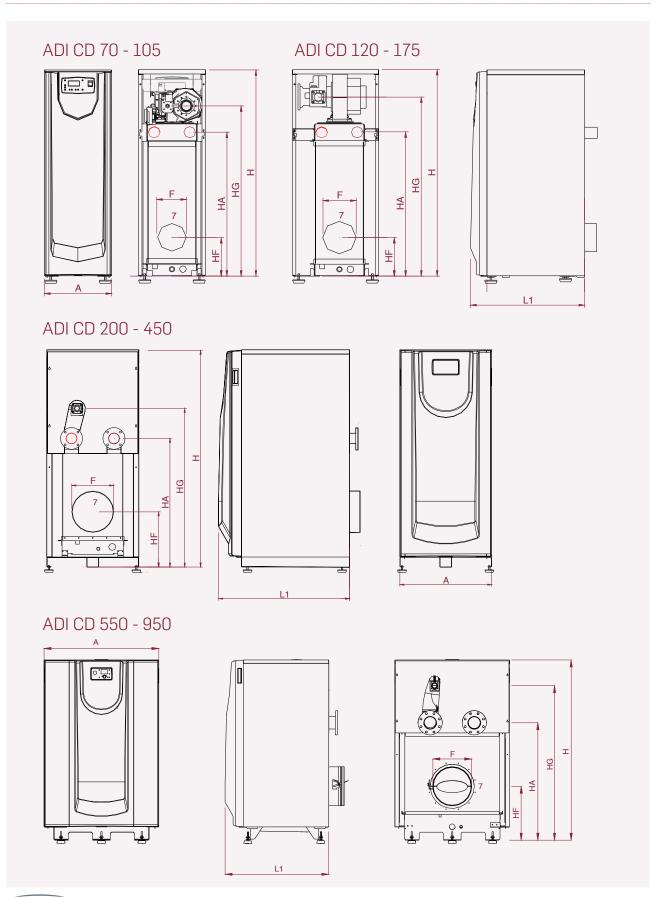
CODE	MODEL ADI CD	MAX. POWER OUTPUT T = 40 °C	MAX. POWER OUTPUT T = 70 °C	MIN. POWER OUTPUT T = 40 °C	WEIGHT WITHOUT WATER	WATER VOLUME	R. R. P.
		kW	kW	kW	Kg	litres	€
508403	70	71.2	70.5	23.3	110	30	4,579
508404	85	86.1	85	27.5	116	33	4,849
508405	105	105.6	104	34	120	34	5,256
508408	120	121.3	120	39	135	34	6,273
508409	175	163.4	161.8	52.3	138	35	7,750
508410	200	204.5	197.5	63.1	330	86	8,750
508411	250	244.7	241	77.4	350	90	10,045
508412	325	302.6	294	94.4	440	112	11,435
508413	375	358.7	354	113.6	445	118	13,962
508414	450	443.5	440	141	460	118	16,148
508415	550	535.5	530	173.8 - 230.9 *	480	120	19,027
508416	650	605	598	195.2 - 259.4 *	485	120	21,119
508417	750	682.4	675	220.1 - 292.4 *	485	120	22,818
508492	850	802.1	792.7	256.1	545	164	24,110
508493	950	904.1	892.3	380.9	545	164	25,419

Commissioning is not included in the price. Please, consult our Commercial Department.

* Gas minimum power can be adjusted up to 30% in the commissioning, depending on the installation conditions.

1.1 ADI BOILERS 1.1.1 ADI CD

OPTIMISED AND REDUCED DIMENSIONS



MODEL ADI CD	A	н	Li	F 7	НА	HF	HG
	mm	mm	mm	mm	mm	mm	mm
70	350	1,110	595	150	774	208	915
85	350	1,110	615	150	774	208	915
105	350	1,110	635	150	774	208	915
120	450	1,110	635	150	774	198	963
175	450	1,110	655	150	774	198	963
200	660	1,583	940	175	937	403	1,156
250	660	1,583	940	175	937	403	1,156
325	810	1,583	940	250	936	445	1,156
375	810	1,583	940	250	936	445	1,190
450	810	1,583	940	250	936	445	1,190
550	1,040	1,628	940	350	1,060	487	1,396
650	1,040	1,628	940	350	1,060	487	1,396
750	1,040	1,628	940	350	1,060	487	1,396
850	1,040	1,658	1,083	350	1,063	487	1,393
950	1,040	1,658	1,083	350	1,063	487	1,393

WATER AND GAS CONNECTIONS

MODEL ADI CD	WATER CONNECTION	GAS CONNECTION
70	Q" /bl d - d)	3/4"
85 - 175	2" (threaded)	1"
200 - 450	2"1/2	1"1//
550 - 950	4"	1"1/4

FRONT AND REAR VIEWS

Models ADI CD 175 and below.





Models ADI CD 200 and above.





1.1 ADI BOILERS 1.1.2 ADI LT

Low-temperature stainless-steel modulating gas boiler.

1.1.2 ADI LT

THE LOW TEMPERATURE BOILER WITH THE BEST PERFORMANCE







MAIN FEATURES

- Stainless-steel heat exchanger.
- Power rating ranging from 104 to 905 kW.
- Performance from 96 to 104% ref. to LCV.
- Includes modulating burner from 30% power.
 - · Variable speed fan.
 - · Modulating gas valve.
- Includes PID control for boiler management and power modulation.
- Control of domestic hot water (D.H.W.) production, and antilegionella pasteurisation programming.
- Digital screen (different languages) to view:
 - · Operational information.
 - · Error messages.

PRODUCT BENEFITS

- High performance and energy saving.
- EC-Certified.
- No minimum return temperature limit.
- High corrosion resistance at high temperatures.
- Low noise level:
 - · Variable speed fan.
 - Internal noise-insulating panels.
- Minimum electrical consumption, from 24 W.
- Ecological combustion NOx class 5.NOx < 10 ppm, CO around 47 ppm.
- Reduced and optimised weight and dimensions.
- Controllable from an external unit: 0...10 V.
- Compliant with Ecodesign directive (Erp Ready).

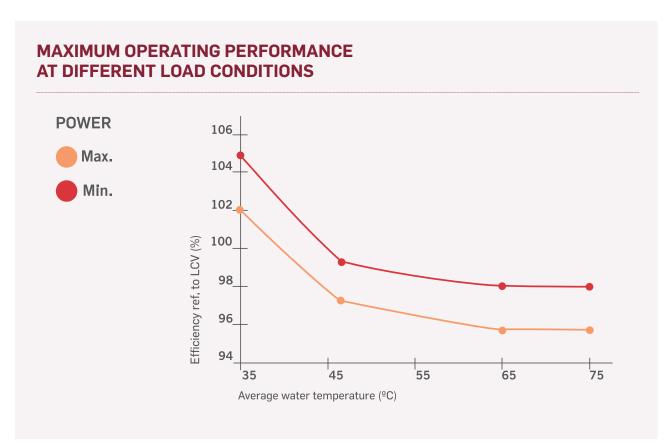
OPERATIONAL INFORMATION

- Water temperature:
 - Maximum discharge: nominal 86 °C (up to 90 °C).
 - · Minimum return: NO LIMIT.
- Maximum water pressure: 5 bar.
- Natural gas: nominal: 20 mbar, range: 17 to 45 mbar (if lower: inquire).
- Propane gas: inquire.
- Electricity:
 - 230 V, 50 Hz, single phase + earthed.
 - Higher than 790 kW: 380 V, 50 Hz, three phase + earthed.

SAFETY

- Hydraulic:
 - · Overheating.
 - · Pressure.
 - Water flow.
- Gas:
 - Safety pressure switch.
 - · Ionisation.
 - Double gas electric safety valve.
- Anti-freeze.





TECHNICAL SPECIFICATIONS

CODE	MODEL ADI LT	MAX. POWER OUTPUT T = 70 °C	MIN. POWER OUTPUT T = 40 °C	WEIGHT WITHOUT WATER	WATER VOLUME	R. R. P.
		kW	kW	Kg	litres	€
508431	105	104	34.4	110	30	5,077
508432	130	130	43.3	112	30	6,071
508443	150	149.3	49.3	123	33	7,138
508433	200	190	62.8	139	36	7,514
508490	250	230	76	330	76	8,950
508434	275	262	84.8	350	85	9,450
508435	325	322	104.9	440	99	11,100
508436	400	380	124.4	445	106	11,700
508437	475	464	151.8	460	118	13,339
508438	550	545	177.9 - 236.3 *	480	120	15,850
508439	650	616	200.7 - 266.6 *	485	120	16,950
508440	750	695	225.4 - 299.4 *	485	120	18,514
508441	850	804	259	545	164	19,550
508442	950	905	392.9	545	164	20,960

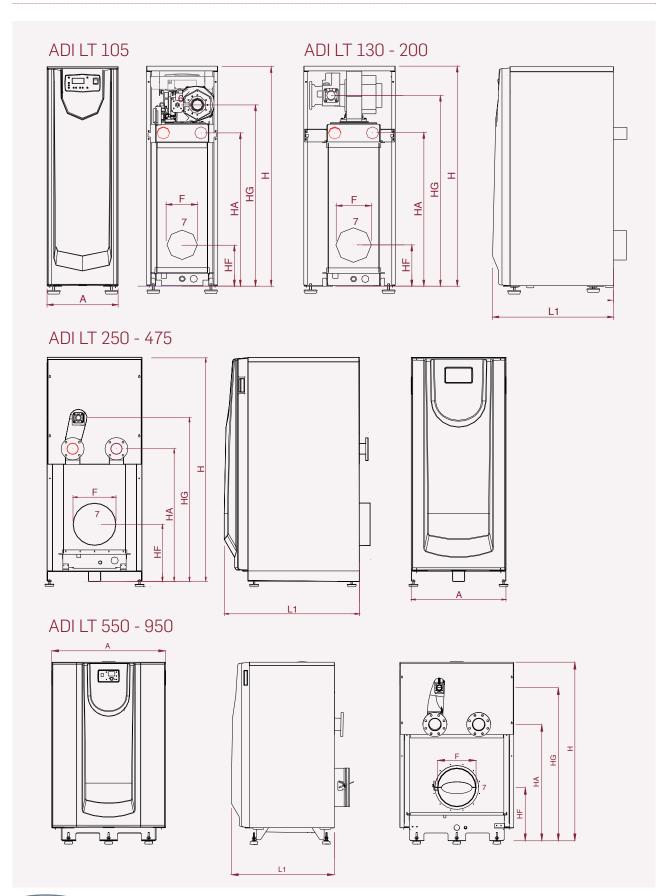
Commissioning is not included in the price. Please, consult our Commercial Department.

* Gas minimum power can be adjusted up to 30% in the commissioning, depending on the installation conditions.



1.1 ADI BOILERS 1.1.2 ADI LT

OPTIMISED AND REDUCED DIMENSIONS



MODEL ADI LT	A	Н	L1	F 7	НА	HF	HG
	mm	mm	mm	mm	mm	mm	mm
105	350	1,110	595	150	774	198	915
130	450	1,110	595	150	774	198	963
150	450	1,110	615	150	774	198	963
200	450	1,110	635	150	774	198	963
250	660	1,583	940	175	937	403	1,156
275	660	1,583	940	175	937	403	1,156
325	810	1,583	940	250	936	445	1,156
400	810	1,583	940	250	936	445	1,190
475	810	1,583	940	250	936	445	1,190
550	1,040	1,628	940	350	1,060	487	1,396
650	1,040	1,628	940	350	1,060	487	1,396
750	1,040	1,628	940	350	1,060	487	1,396
850	1,040	1,658	1,083	350	1,063	487	1,393
950	1,040	1,658	1,083	350	1,063	487	1,393

WATER AND GAS CONNECTIONS

MODEL ADI LT	WATER CONNECTION	GAS CONNECTION
105	0" (4	3/4"
130 - 200	2" (threaded)	1"
250 - 475	2"1/2	1"1//
550 - 950	4"	1"1/4

FRONT AND REAR VIEWS

Models ADI LT 200 and below.





Models ADI LT 250 and above.





1.1 ADI BOILERS

1.1.3 ADI HT

High temperature modulating gas boiler.

1.1.3 **ADI HT**

HIGHEST PERFORMANCE STANDARD

Boilers range just available for non-European countries.





MAIN FEATURES

- Power rating ranging from 104 to 905 kW.
- Performance from 95 to 97% ref. to LCV.
- Includes modulating burner from 30% power:
 - · Variable speed fan.
 - · Modulating gas valve.
- Includes PID control for boiler management and power modulation.
- Control of domestic hot water (D.H.W.) production, and antilegionella pasteurisation programming.
- Digital screen (different languages) to view:
 - Operational information.
 - · Error messages.

PRODUCT BENEFITS

- High performance and energy saving.
- EC-Certified.
- Low noise level:
 - · Variable speed fan.
 - Internal noise-insulating panels.
- Minimum electrical consumption, from 24 W.
- Ecological combustion NOx class 5.NOx < 10 ppm, CO around 47 ppm.
- Reduced and optimised weight and dimensions.
- Controllable from an external unit: 0...10 V.

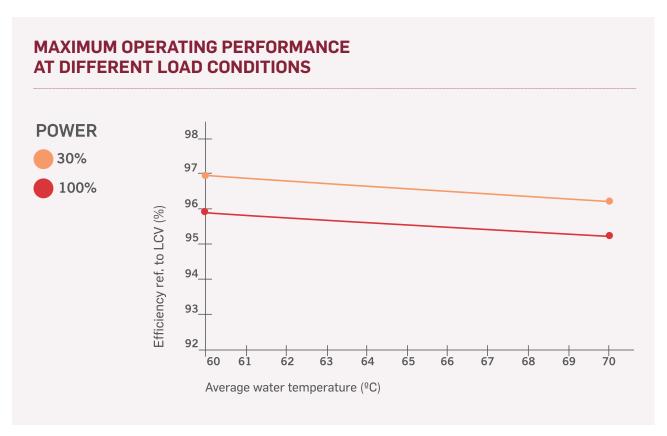
OPERATIONAL INFORMATION

- Water temperature:
 - Maximum discharge: nominal 86 °C (up to 90 °C).
 - Minimum return: 60 °C.
- Maximum water pressure: 5 bar.
- Natural gas: nominal: 20 mbar, range: 17 to 45 mbar (if lower: inquire).
- Propane gas: inquire.
- Electricity:
 - 230 V, 50 Hz, single phase + earthed.
 - Higher than 790 kW: 380 V, 50 Hz, three phase + earthed.

SAFETY

- Hydraulic:
 - · Overheating.
 - Pressure.
 - Water flow.
- Gas:
 - Safety pressure switch.
 - · Ionisation.
 - · Double gas electric safety valve.
- Anti-freeze.





TECHNICAL SPECIFICATIONS

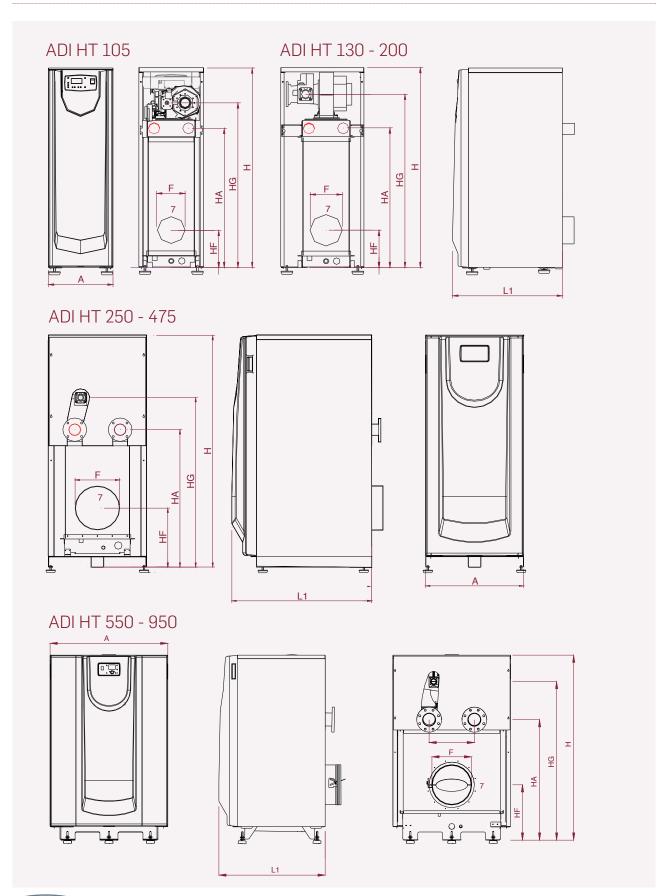
CODE	MODEL ADI HT	MAX. POWER OUTPUT T = 70 °C	MIN. POWER OUTPUT T = 60 °C	WEIGHT WITHOUT WATER	WATER VOLUME	R. R. P.
		kW	kW	Kg	litres	€
508418	105	104	31.9	110	30	4,661
508419	130	130	40	112	30	5,626
508420	150	149.3	45.7	123	33	6,582
508421	200	190	58.5	139	36	7,102
508422	250	230	70.3	330	76	8,544
508491	275	262	80.1	350	85	8,950
508423	325	322	98.4	440	99	10,400
508424	400	380	116	445	106	11,150
508425	475	464	141.6	460	118	12,355
508426	550	545	166.9 - 222.5 *	480	120	14,750
508427	650	616	187.7 - 250.2 *	485	120	16,176
508428	750	695	211.1 - 281.5 *	485	120	16,995
508429	850	804	244.5	545	164	17,600
508430	950	905	367.7	545	164	18,500

Commissioning is not included in the price. Please, consult our Commercial Department.

* Gas minimum power can be adjusted up to 30% in the commissioning, depending on the installation conditions.

1.1 ADI BOILERS 1.1.3 ADI HT

OPTIMISED AND REDUCED DIMENSIONS



MODEL ADI HT	A	Н	L1	F 7	НА	HF	HG
	mm	mm	mm	mm	mm	mm	mm
105	350	1,110	595	150	774	198	915
130	450	1,110	595	150	774	198	963
150	450	1,110	615	150	774	198	963
200	450	1,110	635	150	774	198	963
250	660	1,583	940	175	937	403	1,156
275	660	1,583	940	175	937	403	1,156
325	810	1,583	940	250	936	445	1,156
400	810	1,583	940	250	936	445	1,190
475	810	1,583	940	250	936	445	1,190
550	1,040	1,628	940	350	1,060	487	1,396
650	1,040	1,628	940	350	1,060	487	1,396
750	1,040	1,628	940	350	1,060	487	1,396
850	1,040	1,658	1,083	350	1,063	487	1,393
950	1,040	1,658	1,083	350	1,063	487	1,393

WATER AND GAS CONNECTIONS

MODEL ADI HT	WATER CONNECTION	GAS CONNECTION	
105	2" (************************************	3/4"	
130 - 200	2" (threaded)	1"	
250 - 475	2"1/2	1"1//	
550 - 950	4"	1"1/4	

FRONT AND REAR VIEWS

Models ADI HT 200 and below.





Models ADI HT 250 and above.



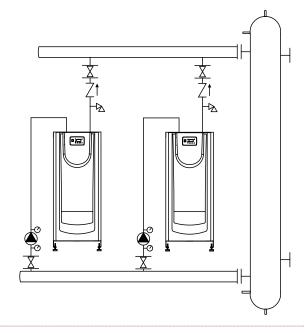


1.1 ADI BOILERS

1.1.4 ACCESSORIES

ADI boiler accessories.

1.1.4 ACCESSORIES



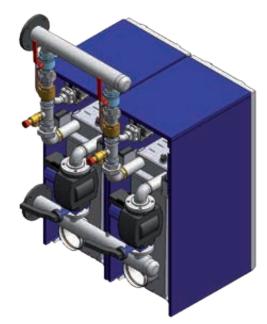
HYDRAULIC KIT FOR 1-2 ADI BOILERS

CHARACTERISTICS

- Complete kit of materials prepared for quick and easy installation.
- Simplifying hours of installation.
- Compatible with the vertical header kit.

INCLUDES

- Hydraulic flow-return header. Insulated.
- Boiler pump: high efficiency and variable speed (complies with Eco-Design directive).
- Boiler shut-off valve.
- Overpressure safety valve per boiler (4-bar).
- Non-return valve per boiler.



CODE	MATERIAL	DESCRIPTION	R. R. P.
			€
102756	HYDRAULIC KIT 1	For 1 or 2 boilers, models: · Up to 1 ADI CD 175 or ADI LT 200 boiler · Up to 2 ADI CD 175 or ADI LT 200 boilers ■ Hydraulic headers: 3" (compatible with 6" vertical low loss header).	6,161
102757	HYDRAULIC KIT 2	■ For 1 or 2 boilers, models: · Up to 1 ADI CD 450 or ADI LT 475 boiler · Up to 2 ADI CD 450 or ADI LT 475 boilers ■ Hydraulic headers: 4" (compatible with vertical low loss header).	7,542

The materials are supplied packaged and unassembled. Assembly to be carried out by customer.



VERTICAL LOW LOSS HEADER FOR 2 ADI BOILERS

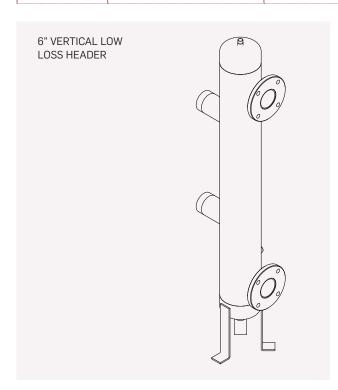
CHARACTERISTICS

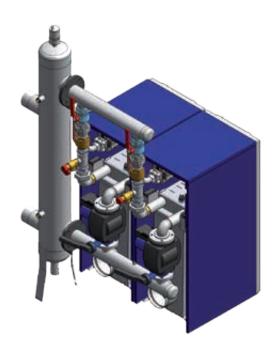
■ Common vertical low loss header for 1 or 2 ADI boilers.

INCLUDES

- Thermal insulation.
- 2 water connections, boiler part.
- 2 water connections, circuit part.
- Sleeves to connect: sensors, thermometers, pressure switches, air venting, emptying valve (materials not included).
- Compatible with hydraulic kits (see previous).
- Facilitates degassing.

CODE	MATERIAL	DESCRIPTION	R. R. P.
			€
102758	6" VERTICAL LOW LOSS HEADER	 For 1 or 2 boilers, models: Up to 1 ADI CD 175 or ADI LT 200 boiler Up to 2 ADI CD 175 or ADI LT 200 boilers Connections to boilers: 3" (flanges), (compatible with hydraulic kit). Connections to circuit: 3" (threaded). 	835
102759	12" VERTICAL LOW LOSS HEADER	■ For 1 or 2 boilers, models: · Up to 1 ADI CD 450 or ADI LT 475 boiler · Up to 2 ADI CD 450 or ADI LT 475 boilers ■ Connections to boilers: 4" (flanges), (compatible with hydraulic kit). ■ Connections to circuit: 4" (threaded).	1,474





1.1 ADI BOILERS

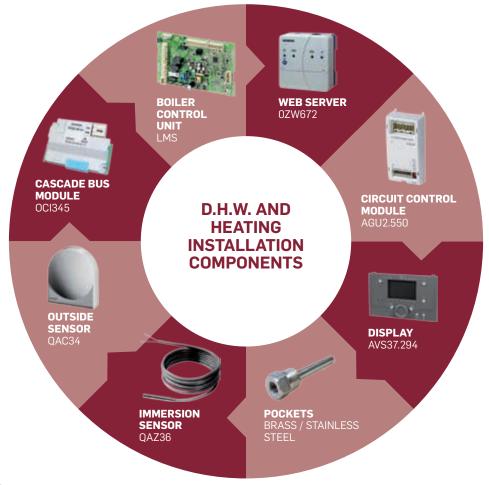
1.1.5 REGULATION AND CONTROL

Regulation and control add-ons for ADI CD, ADI LT an ADI HT boilers.

1.1.5 REGULATION AND CONTROL

OVERALL ENERGY EFFICIENCY MANAGEMENT

- The ADI boiler includes an advance control that manages the overall operation of the installation, optimising energy performance and reducing fuel consumption:
 - Integrated boiler, installation and circuit control.
 - Maximum savings and energy efficiency system.
 - Integrated master-slave type boiler sequence.
 - Continually adapts to power requirements of the installation.
- Controls the water temperature for the different circuits and requirements.
- Controls heating circuits (pump and mixing valve).
- Production of domestic hot water and antilegionella protection.



CONTROLS INCLUDED AS STANDARD IN THE BOILER

CONTROL	DESCRIPTION	SEE PAGE
LMS CONTROL UNIT	The control panel of the boiler is located in its upper front part.	28
MANAGING THE BOILER THROUGH AN EXTERNAL CONTROL UNIT	Each boiler includes a terminal block which allows a 0 10 V analogue signal.	28

OPTIONAL ITEMS

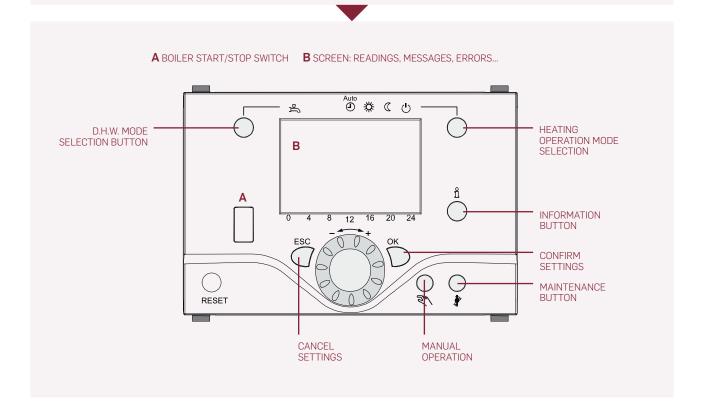
CODE	MATERIAL	DESCRIPTION	R.R.P.	SEE PAGE
			€	
100809	CASCADE/SEQUENCE BOILER KIT	Module OCI345 for cascaded boilers, with cable and connector (1 per boiler)	129	29
100036	FIRST HEATING CIRCUIT KIT	Module AGU2.550 to control a heating circuit (mixing valve and circulation pump). Includes bus cable AGU2.110 (code 100265) between the boiler and the extension modules and connectors. Temperature sensors not included.	245	30
102173	ADDITIONAL HEATING CIRCUIT KIT	Module AGU2.550 to control a heating circuit (mixing valve and circulation pump) with connectors. Temperature sensors not included.	215	30
100367	OUTSIDE TEMPERATURE SENSOR	Outside temperature sensor model QAC34 with temperature range -5070 °C with connector (1 x installation or set).	33	32
102174	FLUES TEMPERATURE SENSOR	Fume temperature sensor with sensor element NTC10k and temperature range 0 200 °C and 1m long cable, with connector and threaded piece included to install in the boiler fume outlet.	133	32
100113	IMMERSION TEMPERATURE SENSOR	Immersion temperature sensor model QAZ36 with sensor element NTC10k and temperature range 095 °C, 2m long cable and connector (immersion pocket not included).	25	32
102162	100mm BRASS POCKET	$100 \mathrm{mm}$ -long chrome plated brass pocket with $1/2$ " thread for the temperature sensor.	21	32
102165	150mm BRASS POCKET	$150 \mathrm{mm}$ -long chrome plated brass pocket with $1/2$ " thread for the temperature sensor.	24	32
101719	100mm STAINLESS-STEEL POCKET	100mm-long stainless-steel pocket with 1/2" thread for temperature sensor.	68	32
102760	WEB SERVER 1 BOILER	1 boiler and circuits.	857	38
102334	WEB SERVER 4 BOILERS	Up to 4 boilers and circuits.	1,383	38
102761	WEB SERVER 16 BOILERS	Up to 16 boilers and circuits.	1,912	38

1.1.5 REGULATION AND CONTROL

LMS CONTROL UNIT

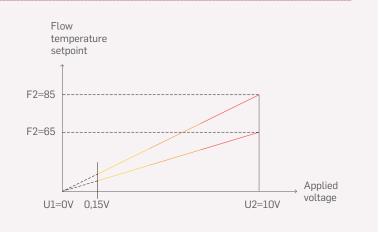
- Standard in all ADI boilers.
- Quick and easy operation via the rotary knob.
- Quick access to the main parameters.
- Text message reading.
- Control: cascaded boilers and circuits (heating, D.H.W.).
- Operation and state: boiler and circuits.
- Allows external signal: 0...10 V, without extra module.
- History of the last 20 blockages (lack of gas...).





MANAGING THE BOILER THROUGH AN EXTERNAL CONTROL UNIT

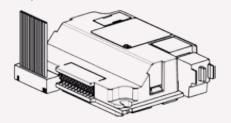
- Standard in all ADI boilers.
- Every boiler includes an analogue signal input of 0... 10 V for an external signal provided by a centralised control (or remote management).
- The signal manages the boiler or cascaded boilers setpoint temperature.
- Adjustable curve/slope of the flow temperature setpoint according to voltage applied.



CASCADE/SEQUENCE BOILER KIT

Module OCI345 for cascaded boilers, with cable y connector (1 per boiler).

- Adapts the power needed by the installation at any given time.
- Optimises the boilers' operation to always obtain the maximum performance.



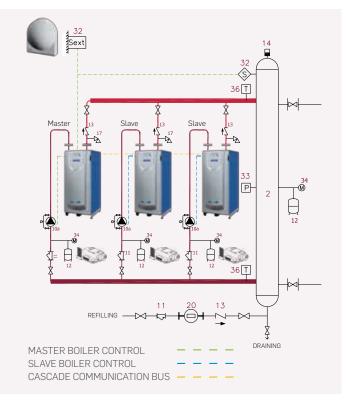
System drawing, example 1:

MANAGING VARIOUS BOILERS (SEQUENCE)

- Managing the boiler activation sequence.
- Boiler power modulation, optimising use and performance.
- Boiler sequence inversion, to equate the number of working hours per year.
- Option: if a boiler stops due to lack of demand, the boiler pump (10a) stops a few minutes later.

Options:

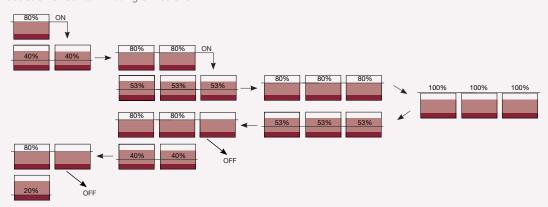
- ADI CD and ADI LT: Variable flow temperature depending on outside temperature (add outside sensor).
- ADI HT: constant flow temperature, without outside sensor.



Example of boiler power modulation and sequence (3 boilers installation)

Manages the longest boiler operating period at the minimum power to obtain:

- the maximum seasonal performance.
- the maximum fuel and economic savings.
- · reduction of contaminating emissions.



1.1 ADI BOILERS

1.1.5 REGULATION AND CONTROL

HEATING CIRCUITS KIT

FIRST HEATING CIRCUIT KIT

Module AGU2.550 to control a heating circuit (mixing valve and circulation pump). Includes bus cable AGU2.110 between the boiler and the extension modules and connectors. Sensors not included.

- Each boiler can control of 3 heating circuits with the three-way valve and circulation pump:
 - Control of the three-way valve and pump per circuit.
 - Operating times and vacations programmes per circuit.
 - Discharge temperature fixed or set in relation to outside conditions.
 - Winter-summer change, economy mode, anti-freeze, other functions...

The three-way valve control signal has 3 positions, 230V and 50Hz.

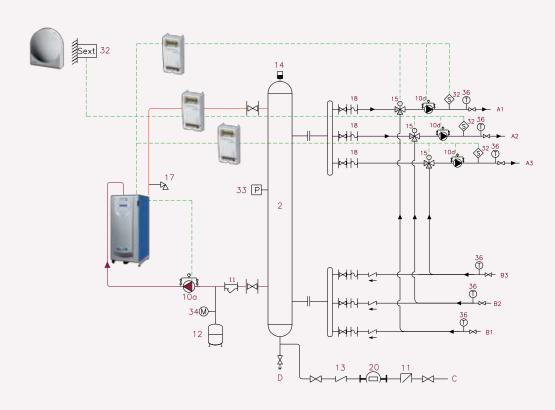


ADDITIONAL HEATING CIRCUIT KIT

Module AGU2.550 to control a heating circuit (mixing valve and circulation pump) with connectors. Sensors not included.

The second and third heating circuit, controlled from the boiler, use the same bus cable received with the first heating circuit kit. In this case, only the additional heating circuit kit is required.

The electric box inside each boiler has space and connectors available to connect up to 3 control kits per boiler for heating circuits.



System drawing, example 2:

BOILER MANAGEMENT AND TWO HEATING CIRCUITS + D.H.W.

Joint optimised management for boilers and circuits, to achieve maximum performance throughout the year.

Application examples

- Hotel with D.H.W. storage, housing community, hospital, etc.
- Consult our Technical Department on the application of this schematic according to the type of installation and consumption: installations with little D.H.W. storage or instant production...
- The boiler temperature setpoint (32bf) is obtained from the maximum setpoint of the various circuits managed.

Heating

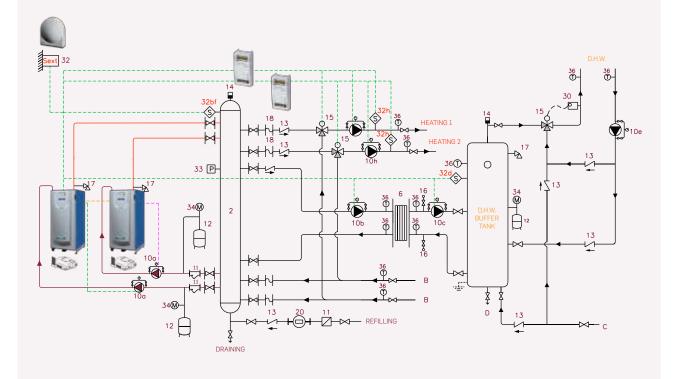
- When there is no D.H.W. consumption (buffer tank to required temperature, 32d), the boilers' temperature setpoint (32bf) will be similar (adjustable value) to the heating circuits (32h).
- In the months with less heating demand, the required heating temperature (32h) is low and, consequently, the boilers' temperature setpoint will be lower, increasing their performance. Applicable for: ADI LT and ADI CD.

D.H.W.

- When there is domestic hot water (D.H.W.) consumption, the boilers' temperature setpoint (32bf) changes to a higher value (adjustable) in compliance to the current antilegionella regulation.
- The three-way heating valve adjusts the temperature suitable (32h) for use and demand.

■ The control unit can be used for:

- Programming the pasteurisation of the legionella (in production) and its duration.
- · Starting/Stopping D.H.W. production pumps.



1.1 ADI BOILERS

1.1.5 REGULATION AND CONTROL

FLOW TEMPERATURE IN RELATION TO THE OUTSIDE TEMPERATURE

OUTSIDE TEMPERATURE SENSOR KIT

Outside temperature sensor model QAC34 with temperature range -50...70 °C with connector (1 x installation or set).

- Only applicable for low temperature and/or condensing boilers.
- If the installation has only one boiler, an outside sensor must be obtained in order for the flow temperature to relate to the outside. If there are several boilers, connect to the master boiler.
- This saves energy and fuel during the heating season thanks to automatic boiler control, that adjusts both the power (depending on consumption) and the flow temperature (depending on outside temperature).





Sensor QAC34

TEMPERATURE READING AND INSTALLATION ACCESSORIES

FLUES TEMPERATURE SENSOR KIT

Flues temperature sensor with sensor element NTC10k and temperature range 0... 200 °C and 1m-long cable, with connector and threaded piece included to install in the flues outlet of the boiler.

OUTSIDE TEMPERATURE SENSOR KIT

Outside temperature sensor model QAC34 with temperature range -50...70 $^{\circ}$ C with connector (1 x installation or set).

IMMERSION TEMPERATURE SENSOR KIT

Immersion temperature sensor model QAZ36 with element NTC10k and temperature range 0...95 °C, 2m-long cable and connector (immersion pocket not included).

100mm BRASS POCKET

100 mm-long chrome plated brass pocket with 1/2" thread for the temperature sensor.

150mm BRASS POCKET

150 mm-long chrome plated brass pocket with 1/2" thread for the temperature sensor.

100mm STAINLESS-STEEL POCKET

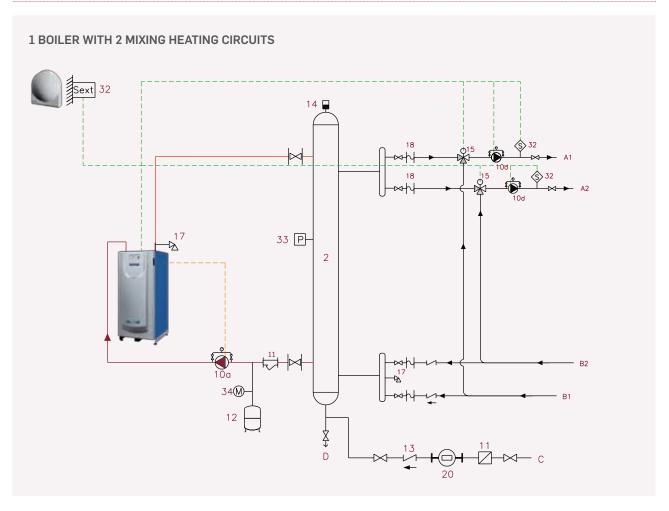
100 mm-long stainless-steel pocket with 1/2" thread for the temperature sensor.

Choose the required sensor pockets depending on the number of circuits and use (D.H.W. stainless steel pockets).



Sensor QAZ36

Examples of circuit accessories selection

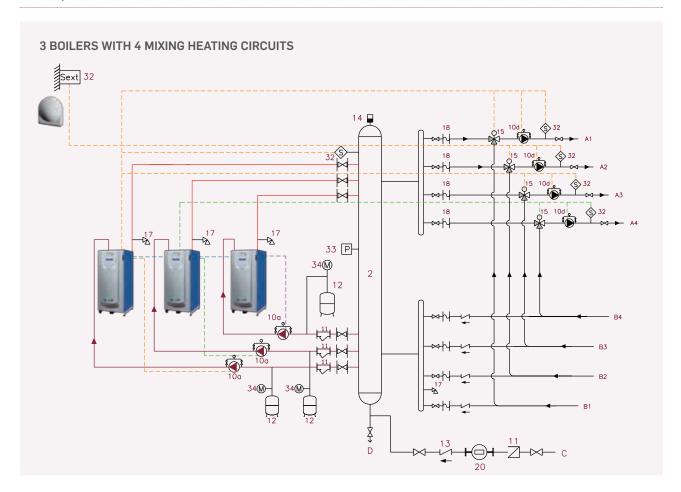


UNITS	REFERENCE	DESCRIPTION
1	BOILER	ADI boiler + common/inertia header.
1	FIRST HEATING CIRCUIT KIT	Module AGU2.550 to control a heating circuit (mixing valve and pump). Includes bus cable (AGU2.110) between boiler, modules and connectors. Temperature sensors not included.
1	ADDITIONAL HEATING CIRCUIT KIT	Module AGU2.550 to control a heating circuit (mixing valve and pump) with connectors. Temperature sensors not included.
2	IMMERSION TEMPERATURE SENSOR KIT	Immersion temperature sensor model QAZ36 with element sensor NTC10k and temperature range 095 °C and 2m-long cable and connector (immersion pocket not included).
1	OUTSIDE TEMPERATURE SENSOR KIT	Outside temperature sensor model QAC34 with temperature range -5070 °C with connector (1 x installation or set).

1.1 ADI BOILERS

1.1.5 REGULATION AND CONTROL

Examples of circuit accessories selection



UNITS	REFERENCE	DESCRIPTION
3	BOILER	ADI boiler + common/inertia header.
3	CASCADED BOILERS KIT	Module OCI345 for cascaded boilers, with cable and connector (1 per boiler).
2	FIRST HEATING CIRCUIT KIT	Module AGU2.550 to control a heating circuit (mixing valve and pump). Includes communication bus cable (AGU2.110) between the boiler and the extension modules and connectors. Temperature sensors not included.
2	ADDITIONAL HEATING CIRCUIT KIT	Module AGU2.550 to control a heating circuit (mixing valve and pump) with connectors. Temperature sensors not included.
5	IMMERSION TEMPERATURE SENSOR KIT	Immersion temperature sensor model QAZ36 with sensor element NTC10k and temperature range 095 °C and 2 m long cable and connector (immersion pocket not included).
1	OUTSIDE TEMPERATURE SENSOR KIT	Outside temperature sensor model QAC34 with temperature range -5070 °C with connector (1 x installation or set).

2 BOILERS WITH 2 MIXING HEATING CIRCUITS AND DOMESTIC HOT WATER 2 BOILERS WITH 2 MIXING HEATING CIRCUITS AND DOMESTIC HOT WATER

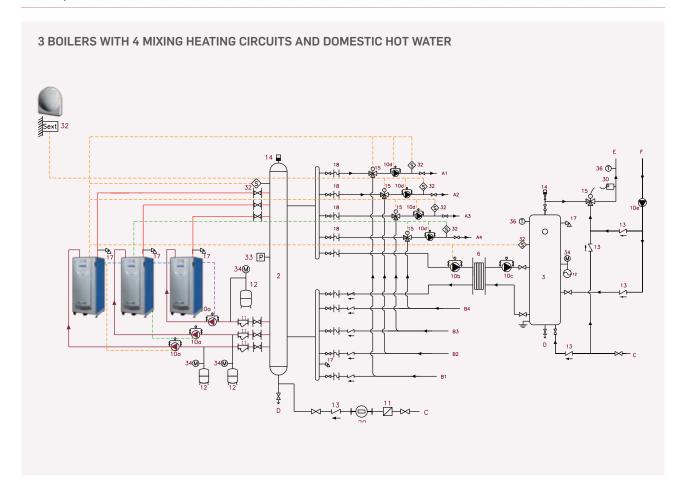
UNITS	REFERENCE	DESCRIPTION
2	BOILER	ADI boiler + common/inertia header.
2	CASCADED BOILERS KIT	Module OCI345 for cascaded boilers, with cable and connector (1 per boiler).
1	FIRST HEATING CIRCUIT KIT	Module AGU2.550 to control a heating circuit (mixing valve and pump). Includes bus cable (AGU2.110) between boiler, modules and connectors. Temperature sensors not included.
1	ADDITIONAL HEATING CIRCUIT KIT	Module AGU2.550 to control a heating circuit (mixing valve and pump) with connectors. Temperature sensors not included.
4	IMMERSION TEMPERATURE SENSOR KIT	Immersion temperature sensor model QAZ36 with sensor element NTC10k and temperature range 095 °C and 2 m long cable and connector (immersion pocket not included).
1	OUTSIDE TEMPERATURE SENSOR KIT	Outside temperature sensor model QAC34 with temperature range -5070 °C with connector (1 x installation or set).

HIGH-PERFORMANCE BOILERS FOR CENTRALISED INSTALLATIONS

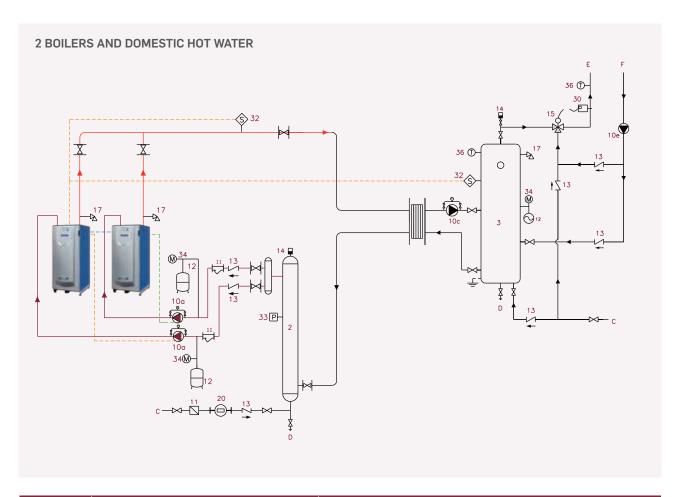
1.1 ADI BOILERS

1.1.5 REGULATION AND CONTROL

Examples of circuit accessories selection



UNITS	REFERENCE	DESCRIPTION
3	BOILER	ADI boiler + common/inertia header.
3	CASCADED BOILERS KIT	Module OCI345 for cascaded boilers, with cable and connector (1 per boiler).
2	FIRST HEATING CIRCUIT KIT	Module AGU2.550 to control a heating circuit (mixing valve and pump). Includes bus cable (AGU2.110) between boiler, modules and connectors. Temperature sensors not included.
2	ADDITIONAL HEATING CIRCUIT KIT	Module AGU2.550 to control a heating circuit (mixing valve and pump) with connectors. Temperature sensors not included.
6	IMMERSION TEMPERATURE SENSOR KIT	Immersion temperature sensor model QAZ36 with sensor element NTC10k and temperature range 095 °C and 2 m long cable and connector (immersion pocket not included).
1	OUTSIDE TEMPERATURE SENSOR KIT	Exterior temperature sensor model QAC34 with temperature range -5070 °C with connector (1 x installation or set).



UNITS	REFERENCE	DESCRIPTION
2	BOILER	ADI boiler + common/inertia header.
2	CASCADED BOILERS KIT	Module OCI345 for cascaded boilers, with cable and connector (1 per boiler).
2	IMMERSION TEMPERATURE SENSOR KIT	Immersion temperature sensor model QAZ36 with sensor element NTC10k and temperature range 095 °C and 2 m long cable and connector (immersion pocket not included).

1.1 ADI BOILERS

1.1.5 REGULATION AND CONTROL

WEB SERVER: REMOTE INSTALLATION MANAGEMENT VIA THE WEB

New control mechanism to monitor and manage remotely the ADI boilers and the installations through the most common internet browsers.

VERY EASY TO INSTALL AND USE

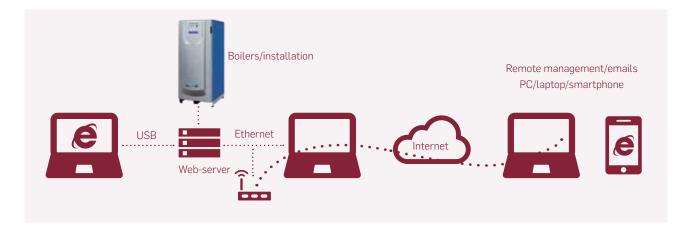
WITHOUT ANY SPECIFIC SOFTWARE

REMOTE INSTALLATION MANAGEMENT VIA THE WEB



- Remote supervision via computer, smartphone, tablet.
- Parameters, setpoints and information adjustment.
- Maintenance and preventative warnings.

- Sending repair, report and information emails.
- Fast return on investment.

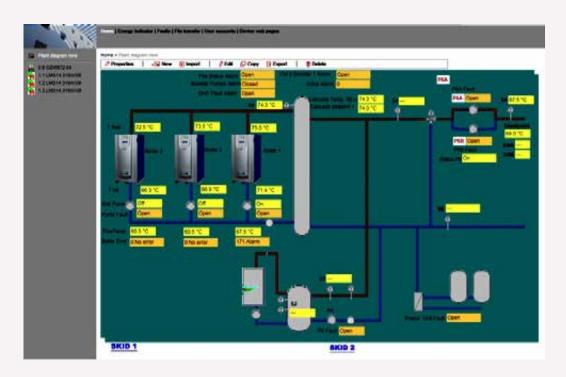


CHARACTERISTICS

- Control and monitoring of the installation through the web.
- Operating access via the internet.
- 3 different versions (1/4/16 devices):
 - 1 device: 1 boiler, 3 heating circuits and D.H.W.
 - 4 devices: up to 4 cascaded boilers, 12 heating circuits and D.H.W.
 - 16 devices: up to 16 boilers and the corresponding circuits.

 Each heating circuit: flow temperature reading, fixed setpoint or heating curve, time programme, pump start/stop, winter-summer, etc.
- 2 configurable digital inputs for additional error messages.
- Error messages on the screen of the web browser.
- Sending error messages to a maximum of 4 email recipients.
- Customized installation schematics with setpoints and readings.
- Importing technical data and creating links to web pages.
- Various levels of access.
- Recording and downloading the desired historic data.

Screen example of remote installation management via web server



INSTALLATION REQUIREMENTS

- Internet connection in the building, available to the installer.
- RJ45 Ethernet connection, CAT5 cable, 100m maximum.
- Computer/laptop connected to a router for configuration, maintenance and update tasks.

WEB SERVER 1

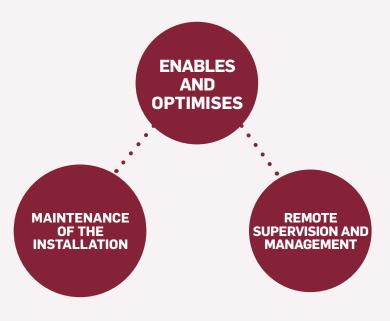
1 boiler and circuits.

WEB SERVER 4

Up to 4 boilers and circuits.

WEB SERVER 16

Up to 16 boilers and circuits.



Consult Web Server prices on page 27.



PRE-BUILT PACKAGED HEAT PRODUCTION UNITS









PRE-BUILT PACKAGED HEAT PRODUCTION UNITS

Pre-built packaged units for heat and domestic hot water production in centralised installations, with power rating up to 3,620 kW. Made to measure according to the needs of each installation, they are a complete solution offering the customer maximum flexibility and reliability, comprehensively tested in the ADISA factory prior to

shipping. They have become the best solution in new and reconverted installations, as they improve safety and achieve important energy, space, cost and running time savings.



"TURNKEY" PROJECT





The commercial technical team ADISA/HITECSA + CUSTOMER (engineering, installer, property, etc...) determine the requirements.



ADISA/HITECSA special offers team: optimised and personalised study of the installation: equipment and energy efficiency





1995

ADISA already manufactured and marketed in Europe the Roof Top unit.



1998

ADISA was the pioneer of the sector when it installed the first pre-built packaged Roof Top unit in Spain.



2015

More than 1,400 units installed in: Spain, Portugal, France, Belgium, United Kingdom, Italy, Norway, Egypt, Venezuela, Dominican Republic, etc. ratify our experience and leadership in this sector.



Manufacture and verification before delivery (ISO 9001).



Delivered in a single shipment. **Only one supplier.**



'Plug-and-Play': connection, adjustment and operation.

Pre-built packaged heat production unit, with gas boiler, for installation in outside areas.

2.1 **ROOF TOP**

HIGHER POWER **CUSTOMIZED SOLUTION**



MAIN FEATURES

- Produces heating and/or D.H.W. in centralised installations.
- Up to 3,620 kW with gas boilers in one casing.
- For outside installation.
- Self-supporting structure.
- Sectors: residential, hotel, commercial and service.
- External unit maintenance.

PRODUCT BENEFITS

- Prefabricated solution.
- High power (all in one casing).
- Maximum energy efficiency.
- Personalised units: flexible hydraulic design.
- Option to include buffer tank.
- Compact technology: smallest dimensions and lowest weight on the market.
- Operation and leak tests carried out at the factory prior to shipping.
- Savings in costs and installation time.



Quality control and comprehensive testing guaranteed at the factory, prior to shipping.



Large power installations for all types of buildings.



Easy to transport and place on site.

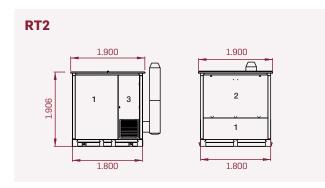


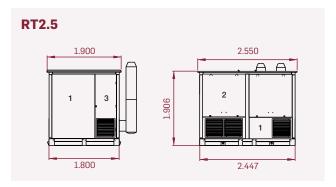
UNITS DIMENSIONS AND WEIGHT

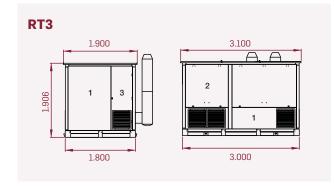
CODE	MODEL ROOF TOP	POWER	DIMENSIONS WIDTH x HEIGHT	WEIGHT WITHOUT WATER APPROX. (1)	WEIGHT WITH WATER APPROX. (1)	MAXIMUM NUMBER OF BOILERS	R. R. P.
		kW	m	Kg	Kg		€
see Mini RT 2.0	RT0	< 380	1.3 x 1.2	664	793	2	inquire
508447	RT2	< 464	1.8 x 1.8	1,300	1,980	2	inquire
508448	RT2.5	< 950	2.5 x 1.8	2,300	2,800	2	inquire
508449	RT3	< 1,810	3.0 x 1.8	2,950	3,500	2 to 3	inquire
508450	RT3.5	< 1,810	3.55 x 1.8	3,150	4,100	3	inquire
508451	RT4	< 2,715	4.2 x 1.8	4,150	5,075	4	inquire
508452	RT5	< 3,620	5.4 x 1.8	5,180	6,240	4	inquire

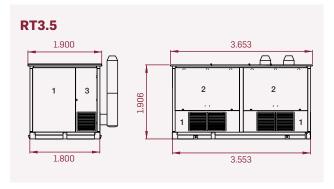
 $Commissioning is \ not \ included \ in \ the \ price. \ Please \ consult \ our \ Commercial \ Department.$

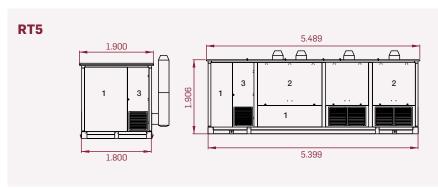
(1) Weights are only indicative and may vary depending on the equipment inside. Option for buffer tank within the Roof Top unit with special height casing. Or, a D.H.W. buffer tank, directly outside, hydronically connected to the Roof Top unit.











- 1. FIXED PANEL
- 2. FOLDING PANEL
- 3. ACCESS DOOR

FLEXIBLE DESIGN MADE TO MEASURE

HYDRAULIC

BOILERS

• 1 to 4 gas condensing boilers (ADI CD) or other ranges.



Heating

- 1 or multiple circuits.
- Simple or double pumps.
- With/without 3 way valves.



- With/without plate exchangers.
- · With/without D.H.W. buffer tanks.
- With/without pumps (simple/double).
- Legionella prevention.





ADAPTABLE TO THE NEEDS OF THE INSTALLATION

CONTROL

- **Has its own** set of equipment and circuits.
 - Boiler sequence and inversion.
 - · Optimises energy efficiency depending on consumption and use.
 - Legionella prevention: pasteurising buffer tank...
 - Option: remote supervision and management via the internet.
 - · Double pump cycle.
 - · Monitoring alarms.
- **Externally**: controllable by centralised/remote regulation system.

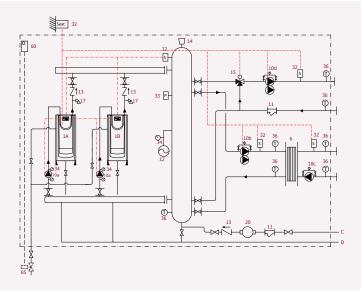




SAFETY

- Hydraulic: lack of water, anti-freeze, overpressure, expansion, automatic vents...
- Gas: detection.
- Electrical: electric cabinet with internal equipment protection.
- Equipment installed outside the building.





FOR EASY INSTALLATION

SMALLEST DIMENSIONS AND LOWEST WEIGHT ON THE MARKET.

■ Takes maximum advantage of useful construction surface.

950 kW in an area 2.5 x 1.8 m 3,620 kW in an area 5.5 x 1.8 m



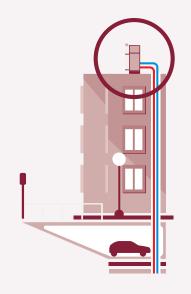


NEW BUILDING

- Easy to place on roof tops.
- Minimum weight, minimum effect on structure reinforcement.
- Saves surface area in car parks, shops, storerooms, etc.

CONVERSIONS

- Simplifies the conversion of old boiler rooms:
 - In lower basements or below.
 - In difficult access areas.
 - · With inadequate flues.
 - With forced ventilation.









Compact pre-built packaged heat production unit, with gas boiler, for installation in outside areas.

2.2 **MINI ROOF TOP 2.0**



COMPACT SOLUTION FOR **EFFICIENT INSTALLATIONS**



MAIN FEATURES

- Produces heating and/or D.H.W. in centralised installations.
- Power rating up to 524 kW.
- With 1 or 2 ADI CD boilers or other ranges.
- Reduced size and weight: from 1.3 x 1.2 m.
- Self-supporting structure.



PRODUCT BENEFITS

COMPLETE AND COMPACT SOLUTION

- Boilers with modulating burner.
- Sequence control (2 boilers).
- Pump per boiler, variable speed.
- Circuit: hydronic, gas.
- Safety:
 - Expansion vessel Lack of water
 - Overpressure safety valve
 Anti-freeze
- Electrical
 - Gas detection
- Electric cabinet.
- Lighting.
- Flues.

Units tested before they are shipped.

INSTALLATION SAVINGS

■ GAS/ECONOMY SAVINGS

• Modular boilers: completely variable to the installation demand.

ELECTRICAL SAVINGS

- High efficiency pumps (one per generator) stop when the boilers stop.
- · Boilers with low consumption variable speed motor-fan (from 48 W).

SPACE SAVINGS

· Reduced and optimised weight and dimensions.

HIGH ENERGY EFFICIENCY

- Boilers with condensing performance.
- Modulating burner with variable speed fan.
 Modular from 15% power (equipment with 2 boilers).
- Variable speed pumps (high efficiency).
- Control: boiler sequence and adjusting power to demand.
- Minimal electrical consumption.
- Option to have the flow temperature set according to outside temperature.



BASE CONFIGURATION

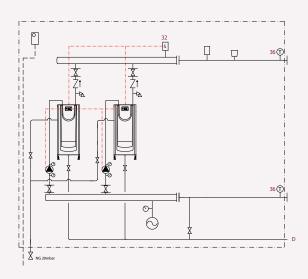
- 1 or 2 ADI boilers.
- Boiler pump.
- Sequence control (case: 2 boilers).
- Flow and return circuit: 3".
- Electric cabinet.
- Overpressure safety valve.
- Expansion vessel.Fume temperature.
- Gas detection.
- Lighting.

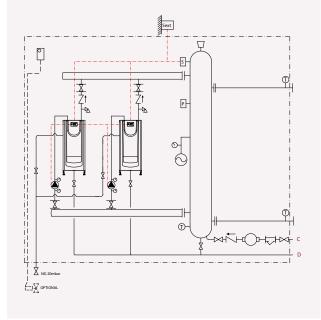
■ mRT-E1 Low loss header: vertical, insulated, with automatic air vents.

ADDITIONAL ACCESSORIES

- mRT-E2 Filling circuit.
- mRT-E3 Outside temperature sensor.
- **mRT-E4** Gas electric valve.

Note: for supply of mRT-E1 to E4, please specify on the order; mRT-E1 to E3: supplied installed inside the unit; mRT-E4: supplied separately, to be installed by the customer outside the unit.





TECHNICAL SPECIFICATIONS FOR CONDENSING UNITS

CODE	MODEL MINI ROOF TOP 2.0	TYPE BOILER	USEFUL POWER	BOILERS	BASE DIMENSION	WEIGHT WITHOUT WATER	WEIGHT WITH WATER	R. R. P.
			kW	number	m	Kg	Kg	€
508462	MINI RT 70 x 1 CD	COND.	70.5	1	1.3 x 1.2	446	512	inquire
508463	MINI RT 85 x 1 CD	COND.	85.0	1	1.3 x 1.2	448	517	inquire
508464	MINI RT 105 x 1 CD	COND.	104.0	1	1.3 x 1.2	459	531	inquire
508465	MINI RT 120 x 1 CD	COND.	120.0	1	1.3 x 1.2	475	547	inquire
508466	MINI RT 175 x 1 CD	COND.	161.8	1	1.3 x 1.2	490	570	inquire
509012	MINI RT 200 x 1 CD	COND.	197.5	1	1.3 x 1.2	665	752	inquire
509013	MINI RT 250 x 1 CD	COND.	241.0	1	1.3 x 1.2	686	776	inquire
508467	MINI RT 70 x 2 CD	COND.	141.0	2	1.3 x 1.2	576	677	inquire
508468	MINI RT 85 x 2 CD	COND.	170.0	2	1.3 x 1.2	580	687	inquire
508469	MINI RT 105 x 2 CD	COND.	208.0	2	1.3 x 1.2	602	715	inquire
508470	MINI RT 120 x 2 CD	COND.	240.0	2	1.3 x 1.2	634	747	inquire
508471	MINI RT 175 x 2 CD	COND.	323.6	2	1.3 x 1.2	664	793	inquire
509010	MINI RT 200 x 2 CD	COND.	395.0	2	1.8 x 1.8	1,810	2,230	inquire
509011	MINI RT 250 x 2 CD	COND.	482.0	2	1.8 x 1.8	1,855	2,285	inquire

Commissioning is not included in the price. Please consult our Commercial Department.

TECHNICAL SPECIFICATIONS OF LOW TEMPERATURE UNITS

CODE	MODEL MINI ROOF TOP 2.0	TYPE BOILER	USEFUL POWER	BOILERS	BASE DIMENSION	WEIGHT WITHOUT WATER	WEIGHT WITH WATER	R. R. P.
			kW	number	m	Kg	Kg	€
508472	MINI RT 105 x 1 LT	LOW TEMP.	104.0	1	1.3 x 1.2	446	512	inquire
508473	MINI RT 130 x 1 LT	LOW TEMP.	130.0	1	1.3 x 1.2	448	514	inquire
508474	MINI RT 150 x 1 LT	LOW TEMP.	149.0	1	1.3 x 1.2	459	528	inquire
508475	MINI RT 200 x 1 LT	LOW TEMP.	190.0	1	1.3 x 1.2	475	547	inquire
509017	MINI RT 250 x 1 LT	LOW TEMP.	230.0	1	1.3 x 1.2	665	742	inquire
509016	MINI RT 275 x 1 LT	LOW TEMP.	262.0	1	1.3 x 1.2	686	771	inquire
508476	MINI RT 105 x 2 LT	LOW TEMP.	208.0	2	1.3 x 1.2	576	677	inquire
508477	MINI RT 130 x 2 LT	LOW TEMP.	260.0	2	1.3 x 1.2	580	681	inquire
508478	MINI RT 150 x 2 LT	LOW TEMP.	298.0	2	1.3 x 1.2	602	709	inquire
508479	MINI RT 200 x 2 LT	LOW TEMP.	380.0	2	1.3 x 1.2	634	747	inquire
509015	MINI RT 250 x 2 LT	LOW TEMP.	460.0	2	1.8 x 1.8	1,810	2,210	inquire
509014	MINI RT 275 x 2 LT	LOW TEMP.	524.0	2	1.8 x 1.8	1,880	2,295	inquire

Commissioning is not included in the price. Please consult our Commercial Department.

Option to include the range of ADI HT boilers.

Additional accessories: inquire. Shared data: electrical supply: 230 V, 50 Hz, earthed single-phase and hydronic pressure: up to 4 bar.

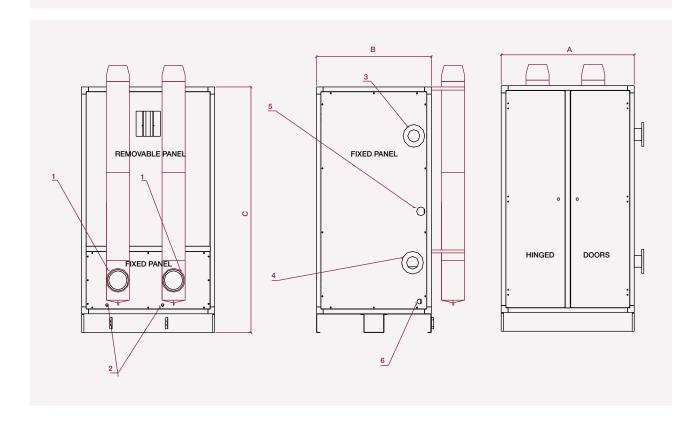


UNIT DIMENSIONS AND VIEWS 1.3 x 1.2 m

1. FLUES OUTLET 4. WATER RETURN: 3"

2. CONDENSATES OUTLET3. WATER DISCHARGE: 3"5. GAS6. FILLING

BASE (A x B): from 1,300 x 1,200 mm - HEIGHT (C): 2,000 mm



11 Mini Roof Top installation for a total power rating of 2,640 kW



Pre-built packaged heat generation unit, with gas boiler, for installation in boiler rooms.

2.3 **TERMI PACK SKID**

PREFABRICATED SOLUTION FOR INSIDE INSTALLATION



MAIN FEATURES

- Produces heating and/or D.H.W. in centralised installations.
- Up to 3,620 kW in one skid (expandable using various skids).
- For installations inside boiler rooms.
- Self-supporting structure: includes all necessary elements (boilers, pumps, gas, electrics, controls, safety items).
- Sectors: residential buildings, public centres, office buildings, commercial centres, hospitals, etc.

PRODUCT BENEFITS

- Self-supporting prefabricated solution.
- High power (all in one skid).
- Maximum yearly performance.
- Personalised units: made to measure, adapted to the installation and customer.
- Compact technology: smallest dimensions and lowest weight on the market.
- Operation and leak tests carried out at the factory prior to shipping.
- Start-up and operational safety simplicity.

OPERATIONAL INFORMATION

- Electrical supply: three-phase 380 V, neutral and earth, or single-phase 220 V, neutral and earth.
- Fuel: natural gas or propane.
- Hydronic pressure: 4 kg/cm² (for greater pressures: inquire).
- The boiler room where the platform is located must comply with current standards and regulations.
- The flues (at the cost of the installing company) must comply with local up to date standards.

CODE			DIMENSIONS LENGTH X WIDTH	R. R. P. (1)
		kW	m	€
509048	TERMI PACK 0	< 380	1.3 x 1.2	inquire
509006	TERMI PACK 2	< 464	1.8 x 1.8	inquire
509007	TERMI PACK 2.5	< 950	2.45 x 1.8	inquire
509008	TERMI PACK 3	< 1,810	3.0 x 1.8	inquire
508456	TERMI PACK 3.5	< 1,810	3.55 x 1.8	inquire
508457	TERMI PACK 4	< 2,715	4.2 x 1.8	inquire
509009	TERMI PACK 5	< 3,620	5.4 x 1.8	inquire

 $[\]ensuremath{\text{(1)}}\ \mathsf{Price}\ \mathsf{and}\ \mathsf{weight}\ \mathsf{according}\ \mathsf{to}\ \mathsf{internal}\ \mathsf{equipment}.$

Commissioning is not included in the price. Please consult our Commercial Department.

FLEXIBLE DESIGN MADE TO MEASURE

ADAPTED TO EACH INSTALLATION AND CUSTOMER

- No. of circuits.
- No. of boilers.
- Internal equipment.
- In-house or external control.



INCLUDES ADISA GAS BOILERS

- Maximum seasonal performance.
- Minimal contaminating emissions.

HYDRAULIC CIRCUIT ADAPTABLE TO EACH INSTALLATION

- Heating (1 or various circuits): with/without 3-way valve, with/without pumps (simple/double).
- D.H.W.: plate exchanger, with/without 3-way valve first circuit, pump first circuit, with/without pump second circuit.

INCLUDES CONTROL UNIT

- Optimises the operation of the boilers and the temperatures of the circuits to obtain the maximum energy (in option: external control).
 - Maximum seasonal performance boilers.
 - · High efficiency pumps.

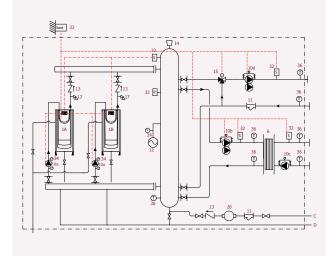
SAFETY

- Large capacity automatic vent.
- Water pressure switch.
- Water overpressure valves.
- Closed expansion vessel.
- Electrical protection components.
- Anti-freeze.

REMOTE CONTROL AND SUPERVISION OPTION

- Add the web server system to simply and easily manage the installation remotely.
- Controllable from the building's central control unit.

EXAMPLE OF POSSIBLE SYSTEM DRAWINGS





1,800 kW skids manufacturing process in our production facilities.

PRE-BUILT PACKAGED HEAT PRODUCTION UNITS

2.4 INTEGRATED ANTILEGIONELLA SOLUTION

Pre-built packaged unit for production of heating and D.H.W. continually pasteurised.

2.4 INTEGRATED ANTILEGIONELLA SOLUTION

2 IN 1 UNIT: PRODUCTION OF HEATING AND/OR D.H.W. WITH ANTI-LEGIONELLA SYSTEM



MAIN FEATURES

- Produces heating and/or D.H.W. continual pasteurisation.
- Continually eliminates the legionella bacteria.
- For installing outside or in boiler rooms.
- Prefabricated unit with self-supporting structure.
- Ideal solution for hospitals, nursing homes, sports centres, service sector, etc.

PRODUCT BENEFITS

- 2 in 1: in the same unit, D.H.W. production and y continual pasteurisation.
- Eradicates legionella before it contaminates the distribution network. The system is 100% natural.
- Buffer tank reduction/elimination.
- Saving in the area occupied thanks to its compact design: Easily integrates into any type of installation, old or new.
- Water, energy and maintenance operation savings.

UNIT	EXAMPLE	DIMENSIONS LENGTH X WIDTH	R. R. P.
		m	€
SKID (for inside)		2.45 x 1.8 3.0 x 1.8 3.55 x 1.8 4.2 x 1.8 5.4 x 1.8	inquire
ROOF TOP (for outside)		2.45 x 1.8 3.0 x 1.8 3.55 x 1.8 4.2 x 1.8 5.4 x 1.8	inquire
COMPACT VERSION (for inside)		1.9 x 1.0	inquire

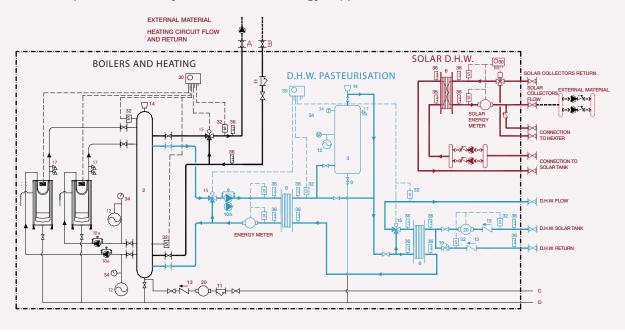
- Option of installing various units depending on requirements and installation circuits.
- Option for buffer tank within the Roof Top unit with special height casing.
- Compact version available for inside the D.H.W. production unit and continual pasteurisation (contact our commercial team).

Commissioning is not included in the price. Please consult our Commercial Department.



SYSTEM DRAWING: COMPREHENSIVE ANTILEGIONELLA D.H.W. AND HEATING SOLUTION

Unit with pasteurisation system with solar energy support.

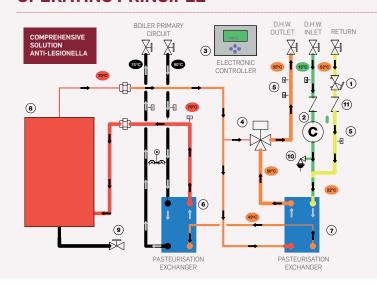


CONTROL AND REGULATION

- Optimal boiler management reducing gas consumption, water for D.H.W. and electricity.
- Easy integration with external or remote control systems.
- Option: remote supervision and management included via the web server.



OPERATING PRINCIPLE



- Cold water mixes with the D.H.W. return circuit.
- It pre-heats in the transfer exchanger (7).
- With the pasteurisation exchanger, its temperature increases to 70 °C (6).
- In the pasteurisation unit, the 70 °C temperature is maintained for at least two minutes. (8).
- This is used for pre-heating in the transfer exchanger (7) and lowering its temperature.
- By means of the three-way valve, it is sent to the distribution network at 55-60 °C.

PRE-BUILT PACKAGED HEAT PRODUCTION UNITS

2.4 INTEGRATED ANTILEGIONELLA SOLUTION

BENEFITS OF THE 2 IN 1 UNIT:

100% NATURAL



- Definitive and permanent legionella elimination in D.H.W. production.
- 100% natural system, heat treatment without chemical products: keeps initial physical-chemical properties of the D.H.W. destined for human consumption.
- For an entire building, it is important to eliminate the dead legs and points where the water is not moving, to balance and ensure correct circulation of the entire network.

ENERGY, SPACE AND COST SAVINGS

- Savings in D.H.W. (up to 10%) and gas (up to 8%) consumption with respect to the conventional storage solution with buffer tank. Fast return on investment.
- Reduction in costs and maintenance operations for buffer tanks deposits elimination (if applicable).
- Savings in servicing costs and cleaning the inside of the buffer tanks.
- Water saving by emptying buffer tanks.
- Compact unit: saving on-site space.



HIGH PERFORMANCE



- Range of power ratings between 70 and 3,620 kW with ADI gas boilers (inquire for higher power ratings).
- Maximum performance under any usage conditions.

2 IN 1 SOLUTION:

■ Comprehensive 2 in 1 solution; allows placement in the same boiler unit (high performance, low temperature or condensing), heating circuits, D.H.W., buffer tanks, solar support circuit, etc.



MADE-TO-MEASURE DESIGN

- Complete design adaptability depending on the installation requirements.
- Comprehensive consultancy throughout all phases of the project.



UNIT IS TOTALLY TESTED



Completely assembled, approved and operationally tested before leaving the factory.

A SINGLE SUPPLIER



Delivered in a single shipment and from one supplier for the entire set.

COMPREHENSIVE CONSULTANCY THROUGHOUT ALL PHASES OF THE PROJECT

- Engineering support at the initial design phase to maximise adaptation to the needs of the installation.
- Installation support during the unit manufacture and installation phase.
- Final user support for the operation and maintenance of the installation (own Technical Support Service).





INTERNATIONALLY RENOWNED



AWARDS UNITED KINGDOM

Industrial/Commercial Product of the Year

H&V News 2009 Awards in the heating and cooling category



AWARDS SPAIN

NAN first prize

NAN Architecture and Construction Awards 2009 in the heating and cooling category

Optimal energy efficiency of the installation during the entire operational cycle and with complete health safety.





DOMESTIC HOT WATER







3.1 BUFFER TANKS 3.1.1 HIDROINOX-EXT

Vertical stainless-steel D.H.W. storage tank for outdoor installation

3.1.1 **HIDROINOX-EXT**



SAVING USEFUL BUILT SURFACE SPACE. OUTDOOR INSTALLATION.



MAIN FEATURES

- Available volumes: 500-5,000 litres (Inquire for larger sizes).
- Stainless-steel buffer tank body, AISI 316:
 - Chemically de-scaled and cleaned.
 - Internal and external welds.
- Maximum working temperature: 90 °C.
- **Working pressure:** 6 bar (option: 8 bar).
- **Manhole:** DN 400 (for 1,000 litres and over).
- **Insulation:** Injected polyurethane (PU).
- Exterior finish in plastic.
- Includes permanent cathodic protection anode with titanium bars (no wear).

SUPPLY

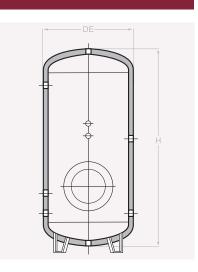
Includes:

- Stainless-steel vertical buffer tank.
- CORREX-UP permanent cathodic protection titanium anode.
- Manhole cover insulation (BR).
- Tank insulation against the elements.
- Titanium anodes protection from the elements.

THERMAL INSULATION

Compliant with future European Eco-Design Directives (minimal thermal loss).

CODE	MODEL	DE	Н	BR	R. R. P. 6 bar	R. R. P. 8 bar
	litres	mm	mm		€	€
509025	500	670	1,934	DN 250	3,592	3,693
509026	750	930	1,838	DN 250	5,237	5,328
509027	1,000	930	2,088	DN 400	5,860	6,325
508518	1,500	1,280	1,834	DN 400	8,366	9,147
508842	2,000	1,280	2,334	DN 400	9,712	11,282
509028	2,500	1,510	1,984	DN 400	12,264	15,024
509073	3,000	1,510	2,484	DN 400	13,994	16,886
509074	3,500	1,510	2,734	DN 400	14,919	18,966
509075	4,000	1,910	2,183	DN 400	17,280	20,648
509076	5,000	1,910	2,683	DN 400	19,111	22,331



Max. water pressure for 10 bar: inquire.



3.1 BUFFER TANKS 3.1.2 HIDROINOX

Vertical stainless-steel tank for D.H.W. storage.

3.1.2 **HIDROINOX**



MAIN FEATURES

- Available volumes: 500-5,000 litres (Inquire for larger sizes).
- Stainless-steel buffer tank body, AISI 316:
 - Chemically de-scaled and cleaned.
 - Internal and external welds.
- Maximum working temperature: 90 °C.
- **Working pressure:** 6 bar (option: 8 bar and 10 bar).
- Manhole: DN 400 (for 1,000 litres and over).
- **Insulation:** Injected polyurethane (PU). Compliant with future European Eco-Design Directives (thermal loss).
- Exterior finish in plastic.
- Includes permanent cathodic protection anode with titanium bars (no wear).

SUPPLY

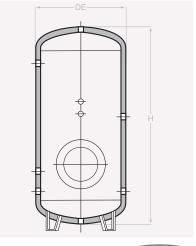
Includes:

- Stainless-steel vertical buffer tank.
- Permanent cathodic protection anode with titanium bars.
- Manhole cover insulation (BR).

THERMAL INSULATION

Compliant with future European Eco-Design Directives (minimal thermal loss).

CODE	MODEL	DE	н	BR	R. R. P. 6 bar	R. R. P. 8 bar	
	litres	mm	mm		€	€	
508515	500	670	1,934	DN 250	3,311	3,403	
508516	750	930	1,838	DN 250	4,554	4,713	
508517	1,000	930	2,088	DN 400	5,394	5,822	
508846	1,500	1,280	1,834	DN 400	7,769	8,441	
508519	2,000	1,280	2,334	DN 400	8,962	10,418	
508520	2,500	1,510	1,984	DN 400	11,329	13,887	
508521	3,000	1,510	2,484	DN 400	12,933	15,613	
508522	3,500	1,510	2,734	DN 400	13,773	17,523	
508523	4,000	1,910	2,183	DN 400	15,960	19,082	
508524	5,000	1,910	2,683	DN 400	17,657	20,642	



Max. water pressure for 10 bar: inquire.

3.1 BUFFER TANKS 3.1.3 INTERINOX

Vertical stainless-steel tank with removable tube bundle for D.H.W. production in combination with a generator.

3.1.3 **INTERINOX**



MAIN FEATURES

- Available volumes: 500-5,000 litres.
- Material:

Buffer tank body: stainless steel, AISI 316.

- Chemically de-scaled and cleaned.
- Internal and external welds.

Heat exchange tube bundle: stainless steel.

- Flange: DN 400 (from 1,000 litres, complies with standard).
- Removable to ease maintenance operations.
- For primary circuits with generators or boilers.

- Maximum continuous working temperature: 90 °C.
- Working pressure (primary and secondary circuit): 6 bar (secondary option: 8 bar).
- Permanent cathodic protection anode with titanium bars included.
- Insulation: Injected polyurethane (PU). Compliant with future European Eco-Design Directives (thermal loss).
- Exterior finished in plastic.

CODE	MODEL	DIAMETER	HEIGHT	FLANGE	POWER	PRODUCTION	CONTINUAL	MINIMUM FLOW	LOAD LOSS	R. R. P. 6 bar	R. R. P. 8 bar
	litres	mm	mm	tube assembly	kW (*)	l/1st hour (*)	l/h (*)	1º (l/h)	1º (m.c.a)	€	€
508525	500	670	1,934	DN 150	21	797	520	907	0.0020	3,409	3,703
508526	750	930	1,818	DN 200	35	1,207	850	1,487	0.0030	4,878	5,318
508527	1,000	930	2,068	DN 400	42	1,590	1,020	1,784	0.0050	5,646	6,106
508528	1,500	1,260	1,854	DN 400	59	2,372	1,450	2,537	0.0040	8,307	9,281
508529	2,000	1,260	2,354	DN 400	81	2,824	1,780	3,103	0.0080	9,570	10,997
508530	2,500	1,510	1,964	DN 400	100	3,958	2,450	4,287	0.0120	12,021	14,356
508531	3,000	1,510	2,464	DN 400	122	4,760	3,000	5,246	0.0190	13,756	16,407
508532	4,000	1,910	2,193	DN 400	162.7	6,347	4,000	6,996	0.0210	18,262	21,705
508533	5,000	1,910	2,693	DN 400	203.4	7,933	5,000	8,750	0.0390	21,375	24,150

^(*) Inquire for other power ratings.

OPTIONAL	R. R. P.
Additional manhole cover DN 400	€
Only included if requested on the initial order.	inquire

THERMAL INSULATION

Compliant with future European Eco-Design Directives (minimal thermal loss).

ACCESSORIES









Tanks for primary heating circuits or solar primary circuits.

4.1 HEAT INERTIAL TANK



MAIN FEATURES

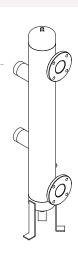
- The tank is made from steel sheet.
- Available volumes: from 100 to 5,000 litres (or low loss header).
- Includes thermal insulation.
- Maximum working temperature: 6 bar. (Inquire for higher values).
- Maximum temperature: 90 °C.
- Connections:
 - 2" to 6" flanges (Inquire for other dimensions).
 - Number of flanges, dimensions and distribution according to the requirements of each installer or engineering.

PRODUCT BENEFITS

- Low loss header.
- Increases the thermal inertia in the circuits that may require it:
 - Energy accumulation in the case of solar collectors.
 - Heat generators can operate with longer start/stop times
 - Depending on the distribution of the connections, it can work as a degasser.

LOW LOSS HEADER, INSULATED

CODE	DESCRIPTION	CONNECTIONS:	R. R. P.
			€
102758	6" vertical low loss header Up to 1 ADI CD 175 or ADI LT 200 boiler Up to 2 ADI CD 175 or ADI LT 200 boilers	To boilers: 3" (flanges) To circuit: 3" (thread)	835
102759	12" low loss header Up to 1 ADI CD 450 or ADI LT 475 boiler Up to 2 ADI CD 450 or ADI LT 475 boilers	To boilers: 4" (flanges) To circuit: 4" (thread)	1,474



INERTIAL TANK: MEDIUM/LARGE VOLUME

TABLE 1

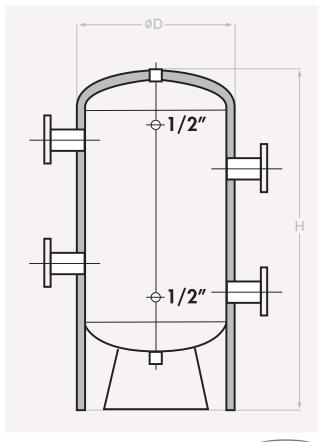
CODE	MODEL	DIAMETER (D)	HEIGHT (H)	INCLUDED AS STANDARD	R. R. P.
	litres	mm	mm		€
508972	100	550	1,000	4 x 1" R	743
508973	200	550	1,510	4 x 2" R	911
508974	300	600	1,870	4 x 3" R	1,180
508975	500	700	1,910	4 x DN80 B	1,525
508976	750	930	1,850	4 x DN80 B	2,175
508977	1,000	950	2,100	4 x DN80 B	2,473
508978	1,500	1,280	1,900	4 x DN100 B	3,585
508980	2,000	1,300	2,400	4 x DN100 B	4,016
508981	2,500	1,510	2,100	4 x DN100 B	4,591
508982	3,000	1,510	2,500	4 x DN100 B	5,131
508983	4,000	1,910	2,200	4 x DN100 B	7,097
508984	5,000	1,910	2,700	4 x DN100 B	7,820

The measurements and dimensions are indicative only and may change without prior notice.

TABLE 2

CODE	FLANGES	R. R. P.
	litres	€
102714	2"	85
102715	2 1/2	88
102716	3"	94
102717	4"	99
102718	5"	116
102719	6"	142

The total R. R. P. is calculated by adding the unit price of each required flange (table 2) and the value of the inertial tank (table 1).



Filter to catch sludge and rust in heating and/or cooling installations.

4.2 DIAMANTE FILTER

MECHANICAL AND MAGNETIC FILTRATION





MAIN FEATURES

- Double filtration system:
 - Mechanical: by means of a stainless-steel mesh of 80 microns (3).
 - Magnetic: by means of a mesh of metal bars with high Gauss magnets (2).
- Includes: manometers (8) and automatic air vent (7).
- Maximum working pressure: 10 bar.

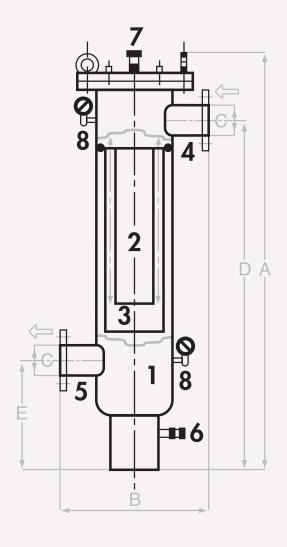
PRODUCT BENEFITS

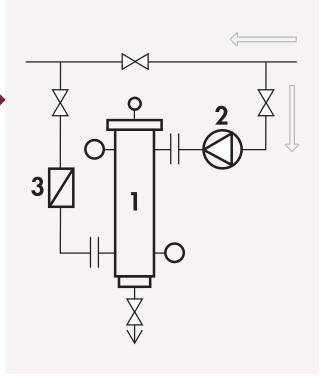
- Keeps installations free of sludge and rust caused by corrosion and oxidisation.
- Two filtration methods: mechanical and magnetic, which provide a double treatment for cleaning and prevention.
- Easy access from its upper part for cleaning.

CODE	MODEL DIAMANTE FILTER	A	В	D	E	FLANGE (C)	WEIGHT	FLOW	R. R. P.
		mm	mm	mm	mm	PN 10	Kg	max. m³/h	€
508765	BABY	870	419	656	266	DN 50	63	2.7	3,123
508766	JUNIOR I	960	419	766	281	DN 50	69	3.07	3,720
508767	JUNIOR II	1,230	419	1,006	281	DN 65	83	8	4,152
508768	SENIOR I	1,309	473	1,051	334	DN80	108	15	4,550
508769	SENIOR II	1,427	473	1,181	369	DN 100	118	20	4,861

OPERATIONAL INFORMATION

- It is installed in parallel at a point below the return of the installation, to catch the largest amount of sludge.
- The circulation pump (2) should be above 3 and 4 m.c.a. and be connected with a flow detector at the outlet (3) of the filter; it should also indicate when the filter needs cleaning.





- Mount the filter in derivation so that it does not obstruct the main flow should the filter become blocked.
- Install stopcocks for each connection.
- The filter is already fixed with a valve for emptying.
- Ensure constant flow through the filter using a pump or something similar.

4 ACCESSORIES 4.3 ADITRAT

Equipment for the chemical treatment of the refilling water in closed heating and/or cooling circuits.

4.3 **ADITRAT**

REFILLING WATERS
TREATMENT



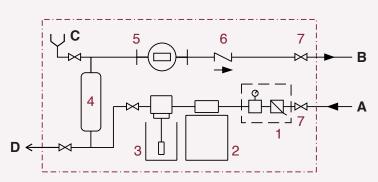
MAIN FEATURES

- Dimensions: base 800 x 680 mm, height 1,050 mm.
- Min./max. pressure: 2-4 bar.
- Maximum temperature: 45 °C.
- Min./max. flow: 20-1,500 litres.

PRODUCT BENEFITS

- Prevents the formation of oxides, sludge, calcifications and/or encrustations, etc., thus avoiding the premature deterioration of the whole installation.
- All the components are assembled and fixed on a base. Easy installation, operation and maintenance.

SCHEMATIC



- 1. PRESSURE REGULATOR + FILTER
- 2. WATER SOFTENER
- 3. DISPENSER AND CORROSION INHIBITOR
- 4. QUICK REFILLING TANK
- 5. WATER METER
- **6.** NON-RETURN VALVE
- 7. CUT OFF VALVES (3/4" CONNECTION)
- A. WATER INLET
- **B.** INSTALLATION CONNECTION
- C. CHEMICALS INLET
- **D.** EMPTYING

CODE	MODEL	R. R. P.
		€
508770	ADITRAT	4,243

The price includes: product, corrosion inhibitor (27 kg), salts for the water softener (25 kg).

GENERAL TERMS OF SALES AND SERVICE



5 GENERAL TERMS OF SALES AND SERVICE

PURPOSE AND FIELD OF APPLICATION

- The purpose of these General Terms of Sales and Services is to set forth the terms applying to any sale of any good(s) and/or service(s) by HIPLUS AIRE ACONDICIONADO S.L., hereafter HIPLUS, whose headquarters is located at: Masia Torrents 2, 08800 Vilanova i la Geltrú – Barcelona – Spain.
- 2. These terms apply to any heating equipment and associated service sold under the brand ADISA ('Heating Series' by HITECSA) by HIPLUS.
- 3. Any order implies full and total acceptance of these General Terms of Sales and Services. Any condition or clause to the contrary, or general purchasing terms of the Buyer, shall therefore be, in the absence of express written acceptance, non-opposable to HIPLUS. Acceptance of these General Terms by the Buyer constitutes a material condition without which HIPLUS would not have entered into an agreement with the Buyer.
- 4. The present General Terms of Sales and Services cancel and replace any former published or printed version in any ADISA documentation.

CATALOGUES AND DOCUMENTATIONS

ADISA documentation.

- Due to the rapidly changing technologies and standards, or security improvements, instructions of values provided by HIPLUS on any support media whatsoever have been given for information purposes only. HIPLUS reserves the right to make modifications, at any time and without prior notice, to their equipment or parts of equipment.
- 2. When HIPLUS makes an equipment selection based on information provided by the Buyer, HIPLUS will not be liable for errors which may result from inaccurate, vague or incomplete data provided to HIPLUS. The Buyer will be the only responsible to ensure that the proposed equipment feature actually correspond to his requirements, both in terms of performance and implementation feasibility.
- 3. The Buyer shall not amend markings affixed on the equipment or on its packing, nor add any marking, nor make any use of markings, logos and brand which is not expressly authorized by HIPLUS.

OFFERS AND ORDERS

- 1. The commercial offers established by HIPLUS have a maximum validity of 2 months.
- 2. The acceptance of a HIPLUS offer includes the acceptance of the present General Terms of Sales and Service and will be considered as a firm order and the Buyer shall not

- cancel it.
- 3. Every order is valid only after acceptation and written confirmation of HIPLUS headquarters. HIPLUS is not bound by orders placed unless written confirmation has been given by acknowledgement of order. HIPLUS reserves the right to accept or refuse any order within 10 days of order receipt date.
- 4. HIPLUS reserves the right, even after partial fulfillment of an order, to demand guarantee or cancel the order(s) after notification, or remaining portion of order(s) in progress, in the name of the Buyer, without indemnity whatsoever, in the following cases:
 - · Deterioration of Buyer's financial situation
 - Non-registration of documents and deeds at the commercial court registry
 - Lowering of Buyer's quote by HIPLUS or credit insurance to cover the sales amount
 - Change or modification of Buyer's financial or legal capacity
 - · More generally, change in Buyer's situation
- 5. When the equipment ordered has to be approved by organisms or control offices, reception and vacation expenses are always covered by the Buyer.

ORDER MODIFICATION AND CANCELLATION

- The Buyer shall check the acknowledgement of order and notice HIPLUS any error or omission within 48 hours maximum from reception. After this period of time, the order shall be considered as accepted by the Buyer and shall be binding for the Buyer.
- 2. Once accepted, the order shall not be amended nor cancelled without HIPLUS prior and express approval. If an order, or a part of it, is cancelled by the Buyer after being acknowledged, HIPLUS has the right to a monetary settlement equivalent to the cancelled amount.

MANUFACTURING TIMES AND DELIVERY CONDITIONS

- Except expressly stated otherwise, the manufacturing times are given as an indication. Consequently no delay penalty can be requested, except prior specific agreement at the time of the order.
- 2. Eventual manufacturing delays cannot justify, in any case, any order cancellation.
- 3. The manufacturing date mentioned on the acknowledgement of order may be extended when the manufacturing is delayed because of:
 - Lack of communication from the Buyer to HIPLUS of all the instructions necessary to the execution of the order

- · 'Force majeure' such as defined by custom authorities
- · Absence of payment or payment guarantee
- 4. For the equipment to be delivered outside the Spanish metropolitan territory, the delivery conditions are in accordance to the INCOTERM 2010 provisions, related to the transfer of risks and to the taking out of an insurance policy, available at the International Chamber of Commerce.
- The INCOTERM term inherent to each delivery is defined in the purchase order, with eventual transportation costs given as extra, and duly confirmed in the acknowledgement of order.
- 6. Delivery ex-works Arenys del Mar (EXW), with standard packing, is at no extra-cost.
- 7. For equipment whose withdrawal from HIPLUS factory is delayed for more than 14 days, for whatever reason not imputable to HIPLUS, storage costs will be invoiced at 5 € per m² and per week.

PRICES AND PAYMENT CONDITIONS

- 1. HIPLUS prices are tax free, EXW Arenys del Mar, basic packing included.
- 2. Special packing and transportation may be quoted specifically per project, as well as local equipment commissioning.
- 3. HIPLUS prices may be modified at any time without prior notification. Final contractual prices are confirmed in the acknowledgement of order.
- 4. To cover administrative expenses, all orders the amount of which is lower than 100 € will be charged for a lump sum of 100 € without taxes.
- 5. Our invoices are payable by bank wire to the account indicated by HIPLUS, net and without discount, in Euros or in the currency agreed upon in the order.
- Unless otherwise agreed in writing, payment of invoices must be made at maturity date, following the payment conditions agreed upon between HIPLUS and the Buyer for each order.
- 7. In case of delay in payment, the due sums will bear an interest based on the interest rate applied by the European Central Bank (ECB) to its most recent refinancing operations, increased by 8 percentage points with a contractual minimum sum of 40 €.
- The maturity of each payment cannot be delayed, under whatever reasons, even if litigious: any stoppage in payment invoice involves the immediate suspension, if not the cancellation, of the current orders and their associated foreseen warrantee.

WARRANTY

Conditions of application

- The contractual warranty is applicable only if the Buyer is fully up-to-date in his payment obligations toward HIPLUS.
- In order to benefit from the warranty, the Buyer must notify HIPLUS, without delay and by writing, of the faults attributed to the equipment and provide all the justifications.
- 3. The Buyer will permit HIPLUS to assess the faults, and to take remedial actions.
- 4. Furthermore, the Buyer will not, except if expressly agreed by HIPLUS, carried out himself the repair, or have it carried out by a third party.

Warranty period

- 1. HIPLUS equipment is guaranteed for parts only against manufacturing defects.
- 2. Its duration is 24 months from date of dispatch ex-factory.

Limits of liability

- 1. The warranty does not apply:
 - If problems occur from equipment or spare parts provided by the Buyer or from a design imposed by him
 - If the equipment and/or accessories have been modified by the Buyer or by a third party without HIPLUS prior approval
 - To wear parts, consumables and fluid refills, corrosion and abrasion due to conditions in which the equipment is used in contradiction to HIPLUS specifications, or to particular use of equipment not priory known to HIPLUS.
 - If the equipment is not installed in rules of art by authorized installer.
- The responsibility of HIPLUS is strictly limited to the obligations defined in the present general conditions.
 In particular, HIPLUS will have no obligation regarding any compensation, including non material or indirect damage.

APPLICABLE LAW - DISPUTES

- 1. All sales are submitted to the Spanish law.
- 2. Any litigation will be exclusively submitted to the Court of Vilanova i la Geltrú Barcelona Spain.

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January 2016

HIPLUS AIRE ACONDICIONADO S.L.

Masia Torrents, 2 Tel. +34 938 934 912 Fax +34 938 939 615 08800 Vilanova i la Geltrú Barcelona, Spain

www.adisaheating.com