

Commercial Heating Solutions



WALL HUNG BOILERS ▶

FLOOR STANDING BOILERS ▶

BOILER CASCADE SYSTEMS ▶

PLATE HEAT EXCHANGERS ▶

HEAT INTERFACE UNITS ▶

CYLINDERS & BUFFER VESSELS ▶

FLUE OPTIONS ▶



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Content correct at time of print.

High power commercial heating solutions

Vokèra by Riello is an industry leader in both domestic and commercial heating solutions.



Vokèra by Riello is committed to reducing energy consumption with a focus on producing products that meet with current standards as well as minimising the impact on the environment.

A rich heritage of innovation



Since 1922 Riello has been unrivalled in innovation for heating technology. Today, Riello is a market leader with a worldwide presence and continue its rich heritage of innovation for current and future generations to come.

At Vokèra by Riello, we pride ourselves on our ability to offer heating solutions from conception to completion and beyond. We work closely with system designers and installers to ensure the right products are specified for the environment they operate in. With a broad portfolio of solutions, from individual boilers to full centralised plant including heat interface units and renewable technology, Vokèra by Riello really are the professional choice.

RIELLO

Riello, a worldwide presence



Riello has built a truly worldwide presence, operating in over 60 countries via its strategic partnerships and efficient sales network, with offices in Europe, North America and Asia. There are also 8 production plants as well as a world-renowned dedicated combustion research centre.

Continual research, innovation and collaboration ensures that we are able to design and develop market-leading commercial heating technologies that establish new global standards in terms of performance, practicality, energy efficiency and sustainability.

We continue to place a great deal of emphasis on after sales support and technical training. In the UK alone, Vokèra by Riello offers 2 bespoke commercial training centres, covering the full spectrum of training required for installers who want to learn more about the servicing, maintenance and installation of our heating equipment.

Condexa Pro

One product, a thousand solutions

Condexa Pro is always the right solution

Condexa Pro is the principle element in a system that enables almost limitless configurations; ranging from simple 'standalone' solutions to modular cascade systems that can accommodate specific requirements with a range of accessories. The range incorporates 8 models (35 P, 50 P, 57 P, 70 P, 90, 100, 115, 135) with the 4 lower output models being equipped with an 'on-board' pump as standard.



RIELLO



Heat always available

The Condexa Pro can also be configured in a modular or cascade arrangement; the integrated logic-control enables a 'managing' and 'dependant' operation, allowing for the interchangeability of modules and to be isolated for routine servicing without disrupting continuity of operation.

The optional lower cover offers protection and provides additional insulation to the manifolds, whilst adding a sleek and attractive aesthetic attribute that typifies a clean and professional installation.



Less losses

Condexa Pro, as standard, is configured for open-flue applications; however optional 'room-sealed' kits are also available that enable each appliance to be re-configured for room-sealed applications (both concentric and twin pipe). This expands siting possibilities and can also reduce heat losses or cooling of the plant room, caused as a result of combustion air requirements.



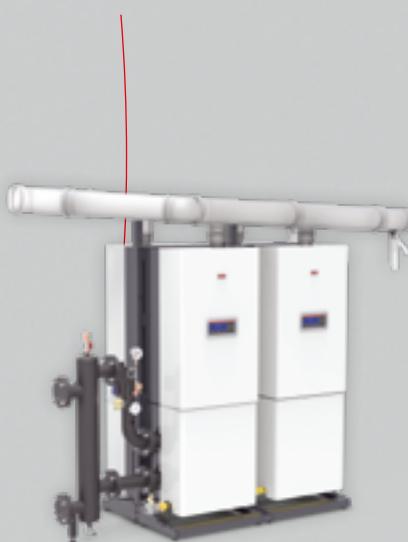
Weather no problem

It's inevitable that in certain circumstances there is no other option but to consider installing the appliance in an external location. With this eventuality in mind, an optional kit is available that raises the appliance IP rating from IPX4D to IPX5D for use in partially protected outdoor spaces.



Standalone

Each appliance can be used in a 'standalone' application using the supplied wall-mounting bracket. Or if required, can be attached to the optional free-standing rig which can also accommodate items such as external pump, plate heat-exchanger, etc. within the optional insulated lower cover.



Concentrated power

The cascade arrangements enable a clean interface between primary and secondary circuits using either a hydraulic separator or plate heat exchanger. The multitude of possible cascade configurations also include a 'back-to-back' option if floor space is tight. The back-to-back solution optimises the use of space whilst still permitting high outputs.



Safety on demand

Each Condexa Pro can be configured to incorporate the SA (standalone) kit or the safety kit within the underside of the appliance and if desired can be concealed behind the optional cover, thereby ensuring a clean and professional aesthetic appearance.



Watch the video...
[YouTube](#)



CONDEXA PRO

For the past decade, Condexa Pro has been a distinctive core element in the Riello commercial portfolio and synonymous with delivering high thermal efficiency and reliability. Nonetheless, our engineers set their sights on developing a completely new platform and structure that builds on the best attributes of an established product; to ensure the new Condexa Pro typifies the high standards and requirements of today's market.

Each component has been revised or redesigned in order to gain improvements; in particular the main heat exchanger has benefitted from an 18% reduction in surface temperature that immediately improves thermal stress and increases reliability. Emissions too, have been targeted in order to reduce any environmental impact, and these are now well within the already strict limits according to EN 15502 Class 6 NO_x.

In addition, a new range of complimentary accessories, BIM library and dynamic configurator have been created to provide a high level of support to both the installer and specifier, enabling them to easily and simply design systems to their bespoke requirements.

Knowing Condexa Pro

The new range of Condexa Pro wall-hung gas boilers can be installed individually or collectively, e.g. cascade; and have been specifically designed to take up less space and make it easier to replace existing units.

Condexa Pro encompasses an 8-model range stretching from 35 to 131kW, with the models up to 70kW benefiting from an on-board pump fitted as standard; whilst the higher output models can be equipped with an optional pump or 2-port valve. In modular (cascade) arrangement; the control logic enables the distribution and management of heat to various types of plant and systems. The wide range of flue accessories, also permit various flue system configurations; whilst 'standalone' units can be installed outdoors, if basic partial protection is available.

The hydraulic manifolds are located beneath the modular units thereby maintaining the overall appliance footprint to a minimum. Compact, versatile and sophisticated logic control are combined with our patented stainless steel heat exchanger that uses either single or double coil to enable a wide modulation range of heat delivery.

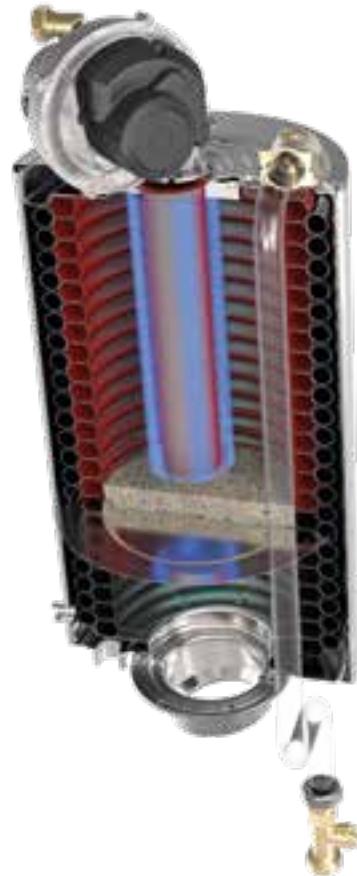
Excellence and flexibility

One of the strengths of the Condexa Pro, due to the wide range of accessories, is the extreme flexibility of the system; the basic unit can be transformed from a single standalone unit to a cascade module, from an internal unit to an outdoor unit, from an open-flued appliance to a room-sealed appliance, and so on; to give seemingly endless permutations and possibilities that can only help installers and specifiers to overcome any complex or difficult installation they might encounter.

The beating heart

The Condexa Pro heat engine lies at the heart of the system and has been designed in absolute unison with the premix burner. The resultant effect is a synergy of combustion and heat transfer - transforming the chemical energy within the fuel into thermal energy that is effortlessly transmitted to water. The heat exchanger is manufactured from high grade stainless steel in order to eliminate the possibility of any change to the structure or inherent reliability over time. The profile, the water pathway and flue pathway have all been optimised to limit losses and ensure the best possible transfer of heat.

This has resulted in consistent and uniform temperatures thereby enabling prolonged longevity and improved yield. The technical characteristics of the premix burner are such that the NO_x emissions are well below that required to meet Class 6 – according to EN 297.



The brain of the system

The Condexa Pro's electronic regulation is extremely sophisticated in its operation; it is required to quickly and accurately process information and data coming back from the plant and the system in order to ensure safe operation, optimal efficiency and user satisfaction.

The Condexa Pro logic control has been developed with particular emphasis placed on improving processing speed, detection efficiency and refinement of the calculation programs.

The operating logic for both 'managing' and 'dependant' modes is integrated within the same PCB, thereby maximising the flexibility of each appliance. The user interface incorporates a backlit LCD display which is intuitive, text-driven and pre-loaded with multiple languages.



Reducing Energy Consumption

Our Condexa Pro models 90, 100, 115 and 135 are listed on the ECA Energy Technology List (ETL), allowing end client businesses to claim tax relief on the boiler. For more info please email commercial@vokera.co.uk





Condexa Pro

Standalone and cascade solutions

Fully modulating condensing boilers. 8 models (35 P, 50 P, 57 P, 70 P, 90, 100, 115 & 135) offer versatile standalone and cascading solutions to meet commercial building demands.



5 Year Warranty



Cascade Up To 1.1MW



Gas or LPG



NO_x Class 6



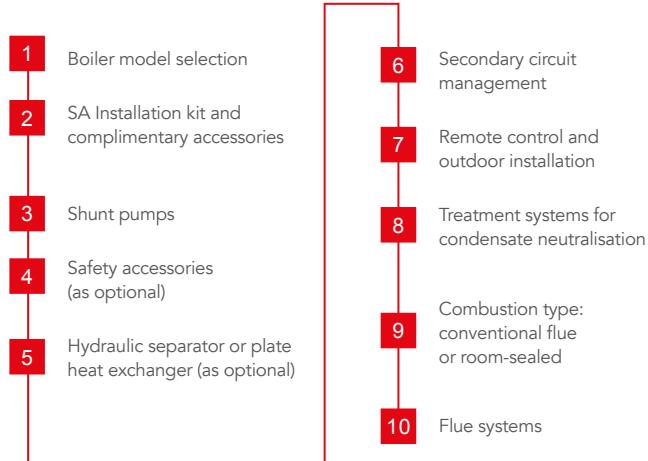
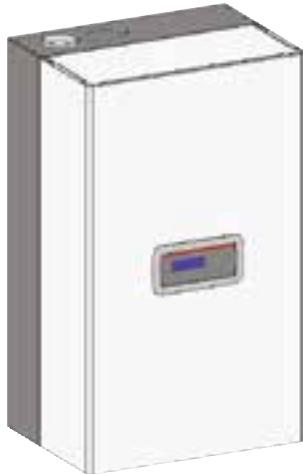
- New condensing heat exchanger in stainless steel
- Complete pre-mix combustion and low NO_x emissions: Class 6 (EN 15502)
- Possibility to cascade up to 1120kW (using the embedded 'Managing/Dependant' control logic)
- Thanks to our embedded 'Managing/Dependant' control logic, any boiler can be configured either as the 'Managing' or as a 'Dependant' boiler within the cascade (same product code)
- Built-in thermoregulation with external probe supplied as standard
- Possibility to combine Condexa Pro boilers in linear or back-to-back cascade applications
- Possibility to use either low energy pumps (also Δt logic) or 2-way valves on the primary circuit
- Modulating and modular power regulation
- Automatic burner ignition sequence reversal (at adjustable steps)
- Simultaneous control of two different circuits: DHW tank and high temperature
- Management of up to 16 zones through an optional kit
- Automatic summer/winter switch-over
- 'Anti-legionella' function as standard
- Suitable for remote control management (0-10V input or Modbus) via optional kit
- Availability of a wide range of accessories and flue options for complete configurations
- Can be converted to LPG through LPG kit supplied as standard
- Multi cascade configurations possible - contact Pre Sales support team for further details

Configuration guide for standalone and back-to-back applications

In this section we will show how to build the different applications of Condexa Pro, either in standalone or cascade configuration. Step by step you will be guided in the choice of different components and accessories, according to your installation needs.

A - Configuration guide for standalone application and accessories selection

For the selection of the components of the standalone configuration, please follow the flow chart below and refer to the relevant tables in the following pages.



Condexa Pro - standalone application

1 Boiler model selection

The Condexa Pro range consists of 8 models, listed in the following pages, that can be installed either as standalone or in cascade configuration (linear and back-to-back), totalling 148 configurations in all.

Condensing pre-mixed boiler - type B3

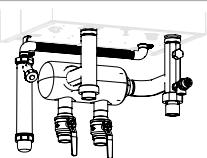
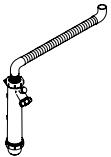
NG CODE	MODEL	DIMENSIONS H X W X D (mm)	FLUE GAS (Ømm)	OUTPUT MIN-MAX NCV* (GCV)**(kW)	CLASS
20115221	CONDEXA PRO 35 P	1000 X 600 X 435	80	9.0 - 34.9 (38.7)	A
20115222	CONDEXA PRO 50 P	1000 X 600 X 435	80	9.0 - 45.0 (50.0)	A
20115223	CONDEXA PRO 57 P	1000 X 600 X 435	80	14.0 - 57.0 (63.0)	A
20115224	CONDEXA PRO 70 P	1000 X 600 X 435	80	14.0 - 68.0 (76.0)	A
20115225	CONDEXA PRO 90	1000 X 600 X 435	110	19.4 - 90.0 (100.0)	-
20115226	CONDEXA PRO 100	1000 X 600 X 435	110	19.4 - 97.0 (108.0)	-
20115228	CONDEXA PRO 115	1170 X 600 X 435	110	22.4 - 112 (124.0)	-
20115229	CONDEXA PRO 135	1170 X 600 X 435	110	26.2 - 131 (146.0)	-

(*) NCV = Net Calorific Value or Lower Calorific Value (NCV)

(**) GCV = Gross Calorific Value or Higher Calorific Value (HCV)

Condexa Pro - standalone application

2 Standalone installation kit and complimentary accessories

CODE	DESCRIPTION	NOTES
20132778		EXTERNAL PROBE
20142219		SA INSTALLATION KIT FOR STANDALONE BOILER (1)(2)
20143981		SAFETY VALVE 5.4 BAR (3)
20133102		CONDENSATE DRAIN SYPHON KIT FOR STANDALONE BOILER (3)

(1) This kit is necessary for the standalone installation. It contains: Connection pipe kit (1x code 20131899), hydraulic separator kit for standalone boiler (1x code 20131897), condensate drain siphone (1x code 20133102), safety valve 5.4 bar (1x code 20143981) and 2 ball valves.

(2) **Note:** Condensate drain siphone (code 20133102) and safety valve (code 20143981) are not included in the boilers (except for Condexa Pro 35 P and 50 P).

(3) Supplied as standard with the models Condexa Pro 35 P and 50 P.

3 Shunt pumps

CODE	DESCRIPTION	NOTES
20125034		SHUNT PUMP KIT CONDEXA PRO 90-100-115 (A)(B)
20125035		SHUNT PUMP KIT CONDEXA PRO 135 (A)(C)
20125040		HIGH RESIDUAL HEAD SHUNT PUMP KIT CONDEXA PRO 135 (A)(4)

(A) On the models Condexa Pro 35 P - 50 P - 57 P - 70 P the shunt pump is already onboard.

(B) This shunt pump, that can be fitted within the boiler, offers a high residual head on Condexa Pro 90 and 100 and with these boilers it can be combined with the (optional) plate heat exchanger; if used with Condexa Pro 115, it can be combined with the (optional) hydraulic separator but not with the plate heat exchanger.

(C) If combined with Condexa Pro 135, this shunt pump can be fitted within the boiler and offers a 'regular' residual head; if using this shunt pump with the Condexa Pro 135, we recommend using the (optional) hydraulic separator. This pump is also suitable as high residual head for the Condexa Pro 115 and must be fitted if/when the (optional) plate heat exchanger is used with the Condexa Pro 115.

(4) This shunt pump cannot be fitted within the boiler and is required when using the Condexa Pro 135 with the (optional) plate heat exchanger.

4 Safety accessories (optional)

CODE	DESCRIPTION	NOTES
20131898	SAFETY KIT FOR STANDALONE BOILER	(5)
20131899	PIPE KIT FOR CONNECTION TO THE HYDRAULIC SEPARATOR, FOR STANDALONE BOILER	(6)

(5) It contains all safety devices, including the 1/2" safety valve and the 1" gas safety cut-off valve.

(6) Compatible only with Condexa Pro 35 P.

5 Hydraulic separator or plate heat exchanger (optional)

CODE	DESCRIPTION	NOTES
20131897	HORIZONTAL HYDRAULIC SEPARATOR KIT FOR STANDALONE BOILER	
20133224	HYDRAULIC SEPARATOR COVER	
20132368	PLATE HEAT EXCHANGER KIT FOR STANDALONE BOILERS CONDEXA PRO 35 P - 50 P	(7)
20132369	PLATE HEAT EXCHANGER KIT FOR STANDALONE BOILERS CONDEXA PRO 57 P - 70 P	(7)
20132370	PLATE HEAT EXCHANGER KIT FOR STANDALONE BOILERS CONDEXA PRO 90 - 100	(7)
20132371	PLATE HEAT EXCHANGER KIT FOR STANDALONE BOILERS CONDEXA PRO 115	(7)
20132372	PLATE HEAT EXCHANGER KIT FOR STANDALONE BOILERS CONDEXA PRO 135	(7)
20136823	FLOW-RETURN CONNECTION KIT FOR DIRECT INSTALLATION (FROM SAFETY KIT AND WITHOUT HYDRAULIC SEPARATOR)	(D)
20139239	EXPANSION VESSEL KIT FOR STANDALONE BOILER CONDEXA PRO 35 P - 50 P	

(7) It includes plate heat exchanger, connection pipes and supporting rig; for the plate heat exchanger it is always necessary a pump with a high residual head.

(D) This kit is compatible with all Condexa Pro models in case of presence of 'safety kit', without need of hydraulic separator.

Condexa Pro - standalone application

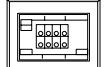
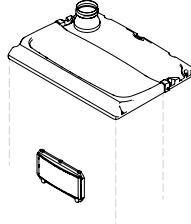
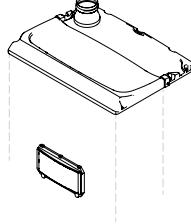
6 Secondary circuit management

CODE	DESCRIPTION	NOTES
4030036		PROBE FOR SECONDARY CIRCUIT / DHW CYLINDER (A)
20136713		3-WAY VALVE KIT FOR DHW PRODUCTION FOR CONDEXA PRO 35 P
20130811		ELECTRONIC MANAGEMENT KIT FOR SINGLE DIRECT ZONE OR ADDITIONAL MIXED ZONE (MAX 16) (B)

(A) This probe is necessary for the cylinder or for the management of the secondary circuit, by aligning the temperature to the one set on the primary circuit.

(B) This kit includes the probe that is necessary for the mixed zone.

7 Remote control and outdoor installation

CODE	DESCRIPTION	NOTES
20132367		REMOTE CONTROL KIT WITH DISPLAY TOUCH SCREEN 7" FOR CONDEXA PRO (8)
20132365		KIT IPX5D FOR OUTDOOR INSTALLATION 35÷70
20128135		KIT IPX5D FOR OUTDOOR INSTALLATION 90÷135

(8) It allows the programming by hour of the DHW cylinder and of the additional zones.

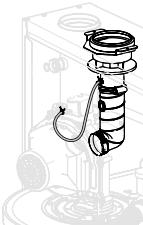
8 Treatment systems for condensate neutralisation

CODE	DESCRIPTION	NOTES
20011135		CONDENSATE NEUTRALISER HN2 (WITH PUMP) - UP TO 320kW (C)
20011126		CONDENSATE NEUTRALISER N2 UP TO 450kW

(C) With condensate pump.

Condexa Pro - flues for standalone application

9 Combustion type: conventional flue or room-sealed

CODE	DESCRIPTION	NOTES
20131665	 TRANSFORMATION KIT (TYPE C) FOR CONDEXA PRO 35 P - 50 P - 57 P - 70 P	
20131668	 TRANSFORMATION KIT (TYPE C) FOR CONDEXA PRO 90 - 100 - 115 - 135	

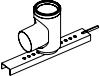
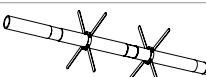
10 Flue systems

Ø80mm flue system for Condexa Pro 35 P - 50 P - 57 P - 70 P

CODE	DESCRIPTION	NOTES
20137503	 Ø80, 45° BEND	
20137506	 Ø80, 90° BEND	
20137508	 Ø80 EXTENSION L=500mm	
20137509	 Ø80 EXTENSION L=1000mm	
20137511	 Ø80 EXTENSION L=2000mm	
20137517	 Ø80 HORIZONTAL FLUE TERMINAL L=985mm	
20137515	 Ø80 AIR INLET HORIZONTAL TERMINAL L=662mm	

Condexa Pro - flues for standalone application

Ø80mm flue system for inside chimney installation Condexa Pro 35 P - 50 P - 57 P - 70 P

CODE	DESCRIPTION	NOTES
20132504		Ø80 SUPPORT CHIMNEY KIT
20132505		Ø80 PIPE SPACERS FOR INSIDE CHIMNEY
20132506		Ø80 STRAIGHT INSPECTION PIPE
20132508		Ø80 CHIMNEY COVER
20132517		Ø80 SHELF SUPPORT KIT FOR CONDENSATE TRAP
20132510		Ø80 FLEXIBLE/RIGID CONNECTION (M)
20132511		Ø80 FLEXIBLE/FLEXIBLE CONNECTION (F/F)
20132512		Ø80 RIGID/FLEXIBLE CONNECTION (F)
20132518		DRAIN SYPHON KIT
20132513		Ø80 T-CONNECTION KIT
20132514		Ø80 T-CONNECTION TAP FOR CONDENSATE TRAP
20132509		Ø80 FLEXIBLE EXTENSION - L=12.5M WITH 8 SPACERS
20131271		Ø80 CHIMNEY COVER FOR RIGID/FLEXIBLE SYSTEM

\varnothing 110mm flue system for Condexa Pro 90 - 100 - 115 - 135

CODE		DESCRIPTION	NOTES
20131202		\varnothing 110, 90° BEND WITH INSPECTION	
20131205		\varnothing 110, 45° BEND	
20131208		\varnothing 110, 90° BEND	
20131210		\varnothing 110 EXTENSION L=1000mm	
20131218		\varnothing 110 T-CONNECTION KIT WITH CONDENSATE TRAP	
20131221		\varnothing 110 T-CONNECTION KIT WITH CHIMNEY SUPPORT AND CONDENSATE TRAP	
20131222		\varnothing 110 T-CONNECTION KIT	
20131225		\varnothing 110 CHIMNEY COVER WITH END CAP	

For all Condexa Pro models

CODE		DESCRIPTION	NOTES
20131270		REAR SPACER FRAME KIT FOR WALL-HUNG APPLICATION	(9)

(9) Kit necessary only for rear concentric flue system.

Condexa Pro - concentric flue system

Ø60/100mm concentric flue system for Condexa Pro 35 P - 50 P - 57 P - 70 P⁽¹⁰⁾

CODE	DESCRIPTION	NOTES
20133345		FLUE ADAPTER FROM TWIN FLUE Ø80/80 TO CONCENTRIC FLUE Ø60/100 (10)
20133346		Ø60/100 HORIZONTAL FLUE TERMINAL (10)

(10) Check the maximum flue lengths by consulting the Pre Sales support team and the technical data sheet; codes necessary with room-sealed combustion kit "type C".

Ø80/125mm concentric flue system for Condexa Pro 35 P - 50 P - 57 P - 70 P⁽¹⁰⁾

CODE	DESCRIPTION	NOTES
20131055		FLUE ADAPTER FROM TWIN FLUE Ø80/80 TO CONCENTRIC FLUE Ø80/125
20131054		Ø80/125, 45° BEND
20131083		Ø80/125, 90° BEND
20131095		Ø80/125, 90° BEND WITH INSPECTION
20131084		Ø80/125 EXTENSION L=500mm
20131085		Ø80/125 EXTENSION L=1000mm
20131113		Ø80/125 ROOF TERMINAL FLUE
20131115		Ø125 TILE FOR PITCHED ROOF (25-45% SLOPE)
20131098		Ø80/125 HORIZONTAL FLUE TERMINAL
20132520		Ø80/125 FLUE CONNECTION ELEMENT

(10) Check the maximum flue lengths by consulting the Pre Sales support team and the technical data sheet; codes necessary with room-sealed combustion kit "type C".

Ø110/160 mm concentric flue system for Condexa Pro 90 - 100 - 115 - 135⁽¹⁰⁾

CODE	DESCRIPTION	NOTES
20131059		FLUE ADAPTER FROM TWIN FLUE Ø110/110 TO CONCENTRIC FLUE Ø110/160
20131036		Ø110/160, 45° BEND
20131040		Ø110/160, 90° BEND
20131046		Ø110/160 EXTENSION L=500mm
20131050		Ø110/160 EXTENSION L=1000mm
20131145		Ø160 TILE FOR PITCHED ROOF (25-45% SLOPE)
20131147		Ø110/160, 90° BEND WITH INSPECTION

(10) Check the maximum flue lengths by consulting the Pre Sales support team and the technical data sheet; codes necessary with room-sealed combustion kit "type C".

Condexa Pro - Maximum flue lengths and straight length equivalents

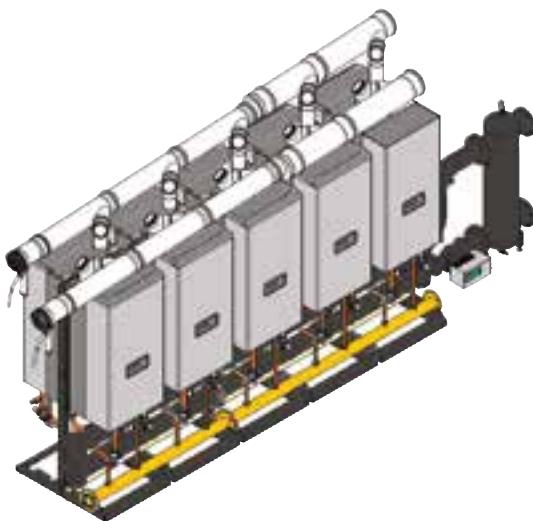
BOILER MODEL	SINGLE PIPE		TWIN PIPE		CONCENTRIC		
	80mm	110mm	80mm+80mm	110mm+110mm	60/100mm	80/125mm	110/160mm
35 P	30M	-	15M +15M	-	15M	15M	-
50 P	30M	-	15M +15M	-	10M	15M	-
57 P	30M	-	15M +15M	-	10M	15M	-
70 P	30M	-	15M +15M	-	10M	15M	-
90	-	30M	-	15M +15M	-	-	15M
100	-	30M	-	15M +15M	-	-	15M
115	-	30M	-	15M +15M	-	-	15M
135	-	30M	-	15M +15M	-	-	15M

FLUE SYSTEM	EQUIVALENT LENGTHS OF BENDS	
	45° BEND	90° BEND
80mm	1.5M	3.0M
110mm	1.5M	3.0M
60/100mm	1.5M	3.0M
80/125mm	2.0M	6.0M
110/160mm	2.0M	6.0M

Condexa Pro - cascade application

B - Configuration guide for cascade application and accessories selection

For the selection of the components for the cascade configuration, please follow the flow chart below by referring to the relevant tables in the following pages.



- 1 Boiler model selection
- 2 Complimentary accessories
- 3 Configuration selection: linear or back-to-back cascade
- 4 Rig selection
- 5 Shunt pumps 2-way motorised valves
- 6 Connection pipes
- 7 Hydraulic (flow/return) - gas - condensate manifolds
- 8 Primary circuit pumps - hydraulic extensions for safety kit
- 9 Hydraulic separator or plate heat exchanger
- 10 Secondary circuit management
- 11 Remote control and outdoor installation
- 12 Treatment systems for condensate neutralisation
- 13 Room-sealed transformation kit
- 14 Flue systems

1 Boiler model selection

Output table of cascade systems, obtained by combining boiler model/quantity

MODEL	CONDEXA PRO 35 P	CONDEXA PRO 50 P	CONDEXA PRO 57 P	CONDEXA PRO 70 P	CONDEXA PRO 90	CONDEXA PRO 100	CONDEXA PRO 115	CONDEXA PRO 135
BOILER HEAT INPUT(HI) kW	34.9	50	57	68	90	97	112	131
QUANTITY OF BOILERS	TOTAL CASCADE HEAT INPUT(HI) kW							
2	70	100	114	136	180	194	224	262
3	105	150	171	204	270	291	336	393
4	140	200	228	272	360	388	448	524
5	175	250	285	340	450	485	560	655
6	209	300	342	408	540	582	672	786
7	244	350	399	476	630	679	784	917
8	279	400	456	544	720	776	896	1048
9	314	450	513	612	810	873	1008	NA
10	349	500	570	680	900	970	1120	NA

Solution featuring the minimum number of boilers.

Solution featuring the same output via a higher number of boilers and therefore a higher modulation ratio.

Solution featuring the same output and the maximum modulation ratio.

NA Solution not available.

ATTENTION: The boilers combined in a cascade MUST have the same output. It is not possible to cascade boilers with different outputs.

2 Complimentary accessories

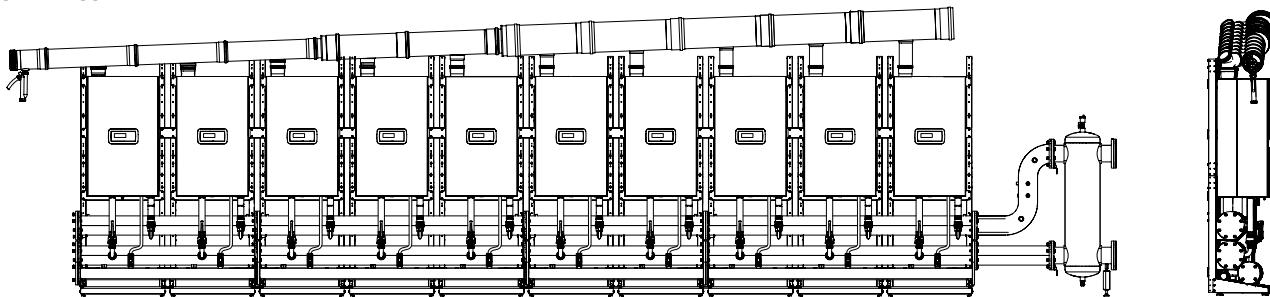
CODE		DESCRIPTION	NOTES
20132778		EXTERNAL PROBE	(11)
20133518		PRIMARY CIRCUIT PROBE	(11)
20131267		CONDENSATE DRAIN SYPHON KIT FOR CASCADING BOILER	(12)

(11) 1 piece for each cascade system to connect to the managing boiler.

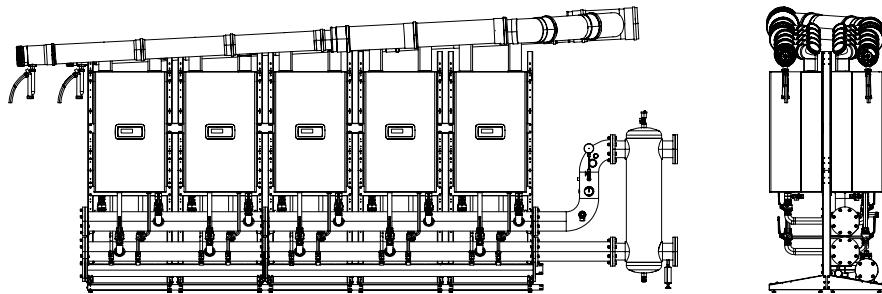
(12) 1 piece for each boiler of the cascade (quantity = number of boilers).

3 Configuration selection between linear or back-to-back cascade, according to your needs

3.1 Linear



3.2 Back-to-back ^(A)



(A) To enable the connection to a unique flue pipe, use the Y connections by choosing them in the section "Cascade application _ Flue Systems".

Condexa Pro - cascade application

4 Rig selection

4.1 Linear cascade configuration

CODE	DESCRIPTION	NOTES
20131663	 RIG FOR LINEAR CASCADE CONFIGURATION	

LINEAR CASCADE	
QUANTITY OF BOILERS	RIG QUANTITY CODE 20131663
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10

4.2 Back-to-back cascade configuration

CODE	DESCRIPTION	NOTES
20131663	 RIG FOR LINEAR CASCADE CONFIGURATION	
20131664	 TRANSFORMATION RIG KIT FOR BACK-TO-BACK CASCADE CONFIGURATION	

BACK-TO-BACK CASCADE		
QUANTITY OF BOILERS	RIG QUANTITY CODE 20131663	TRANSFORMATION RIG KIT QUANTITY CODE 20131664
2	1	1
3	2	2
4	2	2
5	3	3
6	3	3
7	4	4
8	4	4
9	5	5
10	5	5

5 Shunt pumps 2-way motorised valves ^(A)

CODE	DESCRIPTION	NOTES
20125034	SHUNT PUMP KIT CONDEXA PRO 90-100-115	(13)
20125035	SHUNT PUMP KIT CONDEXA PRO 135	(B)
20125040	HIGH RESIDUAL HEAD SHUNT PUMP KIT CONDEXA PRO 135	(14)
20125037	2-WAY VALVE KIT FOR CONDEXA PRO 90 - 100 - 115 - 135	(15)

(A) On the models Condexa Pro 35 P - 50 P - 57 P - 70 P the pump is already onboard.

(B) Compatible as a high residual head pump for Condexa Pro 115.

(13) To be ordered for each boiler of the cascade configuration (quantity = number of boilers); pump to be installed inside the boiler.

(14) To be ordered for each boiler of the cascade configuration (quantity = number of boilers); pump to be installed outside the boiler.

(15) To be ordered for each boiler of the cascade configuration (quantity = number of boilers); valve to be installed inside the boiler.
The valves are to be used as an alternative to the shunt pumps and require a circulator on the primary circuit (to be selected from table 8).

6 Connection pipes

6.1 Linear cascade configuration

CODE	DESCRIPTION	NOTES
20130658	CONNECTION PIPES WITHOUT BALL VALVES FOR CONDEXA PRO 35 P - 50 P - 57 P - 70 P - 90 - 100 - 115 - 135	(16)
20131124	CONNECTION PIPES WITH BALL VALVES FOR CONDEXA PRO 35 P - 50 P - 57 P - 70 P - 90 - 100 - 115 - 135	(16)
20131122	CONNECTION PIPES SUITABLE FOR SAFETY KIT FOR CONDEXA PRO 35 P - 50 P - 57 P - 70 P - 90 - 100 - 115 - 135	(A)
20131121	CONNECTION PIPES WITHOUT BALL VALVES FOR CONDEXA PRO 135 (OUTSIDE PUMP)	(17)
20131125	CONNECTION PIPES WITH BALL VALVES FOR CONDEXA PRO 135 (OUTSIDE PUMP)	(17)
20131123	CONNECTION PIPES SUITABLE FOR SAFETY KIT FOR CONDEXA PRO 135 (OUTSIDE PUMP)	(17)(A)

(A) The "connection pipes suitable for safety kit" enable individual modules to be isolated in order to carry out maintenance, while the other modules can continue to operate.

(16) To be ordered for each boiler of the cascade configuration (quantity = number of boilers) with pump or valve installed inside the boiler.

(17) To be ordered for each boiler of the cascade configuration (quantity = number of boilers) with pump installed outside the boiler.

Condexa Pro - cascade application

6.2 Back-to-back cascade configuration

CODE	DESCRIPTION	NOTES
20130658		CONNECTION PIPES WITHOUT BALL VALVES FOR CONDEXA PRO 35 P - 50 P - 57 P - 70 P - 90 - 100 - 115 - 135 (18)
20131124		CONNECTION PIPES WITH BALL VALVES FOR CONDEXA PRO 35 P - 50 P - 57 P - 70 P - 90 - 100 - 115 - 135 (18)
20131122		CONNECTION PIPES SUITABLE FOR SAFETY KIT FOR CONDEXA PRO 35 P - 50 P - 57 P - 70 P - 90 - 100 - 115 - 135 (18)(A)
20131121		CONNECTION PIPES WITHOUT BALL VALVES FOR CONDEXA PRO 135 (OUTSIDE PUMP) (19)
20131125		CONNECTION PIPES WITH BALL VALVES FOR CONDEXA PRO 135 (OUTSIDE PUMP) (19)
20131123		CONNECTION PIPES SUITABLE FOR SAFETY KIT FOR CONDEXA PRO 135 (OUTSIDE PUMP) (19)(A)
20131787		CONNECTION PIPES WITHOUT BALL VALVES FOR CONDEXA PRO 35 P - 50 P - 57 P - 70 P - 90 - 100 - 115 - 135 BACK-TO-BACK (20)
20131791		CONNECTION PIPES WITH BALL VALVES FOR CONDEXA PRO 35 P - 50 P - 57 P - 70 P - 90 - 100 - 115 - 135 BACK-TO-BACK (20)
20131789		CONNECTION PIPES SUITABLE FOR SAFETY KIT FOR CONDEXA PRO 35 P - 50 P - 57 P - 70 P - 90 - 100 - 115 - 135 BACK-TO-BACK (20)(A)
20131788		CONNECTION PIPES WITHOUT BALL VALVES FOR CONDEXA PRO 135 (OUTSIDE PUMP) BACK-TO-BACK (21)
20131792		CONNECTION PIPES WITH BALL VALVES FOR CONDEXA PRO 135 (OUTSIDE PUMP) BACK-TO-BACK (21)
20131790		CONNECTION PIPES SUITABLE FOR SAFETY KIT FOR CONDEXA PRO 135 (OUTSIDE PUMP) BACK-TO-BACK (21)(A)

(A) The "connection pipes suitable for safety kit" enable individual modules to be isolated in order to carry out maintenance, while the other modules can continue to operate.

(18) To be ordered for each boiler located on the manifold side, with pump or valve installed inside the boiler.

(19) To be ordered for each boiler located on the manifold side, with pump or valve installed outside the boiler.

(20) To be ordered for each boiler located on the opposite side of the manifolds, with pump or valve installed inside the boiler.

(21) To be ordered for each boiler located on the opposite side of the manifolds, with pump or valve installed outside the boiler.

7 Hydraulic flow/return manifolds - gas manifolds - condensate manifolds

CODE	DESCRIPTION	NOTES
20133220	FLANGED 3" HYDRAULIC MANIFOLD Ø80 + THREADED 2" GAS MANIFOLD KIT FOR 1 RIG CASCADE	(22)
20130220	FLANGED 3" HYDRAULIC MANIFOLD Ø80 + THREADED 2" GAS MANIFOLD KIT FOR 2 RIGS CASCADE (UP TO 485kW)	(23)
20130221	FLANGED 3" HYDRAULIC MANIFOLD Ø80 + THREADED 2" GAS MANIFOLD KIT FOR 3 RIGS CASCADE (UP TO 485kW)	(23)
20130222	FLANGED 5" HYDRAULIC MANIFOLD Ø125 + FLANGED 3" GAS MANIFOLD Ø80 KIT FOR 2 RIGS CASCADE (FROM 486kW TO 1120kW)	(24)
20130223	FLANGED 5" HYDRAULIC MANIFOLD Ø125 + FLANGED 3" GAS MANIFOLD Ø80 KIT FOR 3 RIGS CASCADE (FROM 486kW TO 1120kW)	(24)
20132377	HYDRAULIC FLOW/RETURN MANIFOLD COVER	
20070903	3" BLIND FLANGES KIT	(A)
20082190	3" FLANGES KIT	
20070907	5" BLIND FLANGES KIT	(A)
20082191	5" FLANGES KIT	

(A) Allow to close the gas manifold on one side and the two hydraulic manifolds.

(22) To be used for the back-to-back cascade configuration with 2 boilers. It includes flanged 3" flow-return hydraulic manifold Ø80, threaded 2" gas manifold, condensate drain manifold.

(23) To be used at maximum power up to 485kW. It includes flanged 3" flow-return hydraulic manifolds Ø80, threaded 2" gas manifold, condensate drain manifold.

(24) To be used at maximum power over 485kW. It includes flanged 5" flow-return hydraulic manifolds Ø125, threaded 3" gas manifold Ø80, condensate drain manifold.

Condexa Pro - cascade application

Matching table of manifolds diameter with heat input of boilers in cascade

MODEL	CONDEXA PRO 35 P	CONDEXA PRO 50 P	CONDEXA PRO 57 P	CONDEXA PRO 70 P	CONDEXA PRO 90	CONDEXA PRO 100	CONDEXA PRO 115	CONDEXA PRO 135
BOILER HEAT INPUT (HI) kW	35	50	57	68	90	97	112	131
QUANTITY OF BOILERS	TOTAL CASCADE INPUT (kW) / HYDRAULIC MANIFOLDS DIAMETER (INCH)							
2	70/3"	100/3"	114/3"	136/3"	180/3"	194/3"	224/3"	262/3"
3	105/3"	150/3"	171/3"	204/3"	270/3"	291/3"	336/3"	393/3"
4	140/3"	200/3"	228/3"	272/3"	360/3"	388/3"	448/3"	524/5"
5	175/3"	250/3"	285/3"	340/3"	450/3"	485/3"	560/5"	655/5"
6	209/3"	300/3"	342/3"	408/3"	540/5"	582/5"	672/5"	786/5"
7	244/3"	350/3"	399/3"	476/3"	630/5"	679/5"	784/5"	917/5"
8	279/3"	400/3"	456/3"	544/5"	720/5"	776/5"	896/5"	1048/5"
9	314/3"	450/3"	513/5"	612/5"	810/5"	873/5"	1008/5"	NA
10	349/3"	500/5"	570/5"	680/5"	970/5"	970/5"	1120/5"	NA

Matching table of manifold codes with quantity of boilers in linear cascade configuration

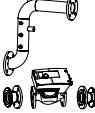
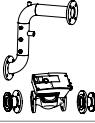
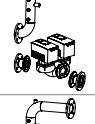
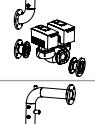
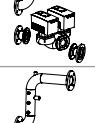
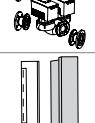
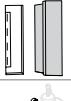
MODEL	CONDEXA PRO 35 P	CONDEXA PRO 50 P	CONDEXA PRO 57 P	CONDEXA PRO 70 P	CONDEXA PRO 90	CONDEXA PRO 100	CONDEXA PRO 115	CONDEXA PRO 135
BOILER HEAT INPUT (HI) kW	35	50	57	68	90	97	112	131
QUANTITY OF BOILERS	SELECTION OF HYDRAULIC MANIFOLDS CODES FOR LINEAR CASCADE CONFIGURATIONS							
2	1 × 20130220	1 × 20130220	1 × 20130220	1 × 20130220	1 × 20130220	1 × 20130220	1 × 20130220	1 × 20130220
3	1 × 20130221	1 × 20130221	1 × 20130221	1 × 20130221	1 × 20130221	1 × 20130221	1 × 20130221	1 × 20130221
4	2 × 20130220	2 × 20130220	2 × 20130220	2 × 20130220	2 × 20130220	2 × 20130220	2 × 20130220	2 × 20130222
5	1 × 20130220 1 × 20130221	1 × 20130220 1 × 20130221	1 × 20130220 1 × 20130221	1 × 20130220 1 × 20130221	1 × 20130220 1 × 20130221	1 × 20130220 1 × 20130221	1 × 20130222 1 × 20130221	1 × 20130222 1 × 20130223
6	2 × 20130221	2 × 20130221	2 × 20130221	2 × 20130221	2 × 20130223	2 × 20130223	2 × 20130223	2 × 20130223
7	2 × 20130220 1 × 20130221	2 × 20130220 1 × 20130221	2 × 20130220 1 × 20130221	2 × 20130220 1 × 20130221	2 × 20130222 1 × 20130223			
8	1 × 20130220 2 × 20130221	1 × 20130220 2 × 20130221	1 × 20130220 2 × 20130221	1 × 20130222 2 × 20130223				
9	3 × 20130221	3 × 20130221	3 × 20130223	3 × 20130223	3 × 20130223	3 × 20130223	3 × 20130223	NA
10	2 × 20130220 2 × 20130221	2 × 20130222 2 × 20130223	NA					

Matching table of manifold codes with quantity of boilers in back-to-back cascade configuration

MODEL	CONDEXA PRO 35 P	CONDEXA PRO 50 P	CONDEXA PRO 57 P	CONDEXA PRO 70 P	CONDEXA PRO 90	CONDEXA PRO 100	CONDEXA PRO 115	CONDEXA PRO 135
BOILER HEAT INPUT (HI) KW	35	50	57	68	90	97	112	131
QUANTITY OF BOILERS	SELECTION OF HYDRAULIC MANIFOLDS CODES FOR BACK-TO-BACK CASCADE CONFIGURATIONS							
2	1 × 20133220	1 × 20133220	1 × 20133220	1 × 20133220	1 × 20133220	1 × 20133220	1 × 20133220	1 × 20133220
3	1 × 20130220	1 × 20130220	1 × 20130220	1 × 20130220	1 × 20130220	1 × 20130220	1 × 20130220	1 × 20130220
4	1 × 20130220	1 × 20130220	1 × 20130220	1 × 20130220	1 × 20130220	1 × 20130220	1 × 20130220	1 × 20130222
5	1 × 20130221	1 × 20130221	1 × 20130221	1 × 20130221	1 × 20130221	1 × 20130221	1 × 20130223	1 × 20130223
6	1 × 20130221	1 × 20130221	1 × 20130221	1 × 20130221	1 × 20130223	1 × 20130223	1 × 20130223	1 × 20130223
7	2 × 20130220	2 × 20130220	2 × 20130220	2 × 20130220	2 × 20130222	2 × 20130222	2 × 20130222	2 × 20130222
8	2 × 20130220	2 × 20130220	2 × 20130220	2 × 20130222	2 × 20130222	2 × 20130222	2 × 20130222	2 × 20130222
9	1 × 20130220 1 × 20130221	1 × 20130220 1 × 20130221	1 × 20130222 1 × 20130223	NA				
10	1 × 20130220 1 × 20130221	1 × 20130222 1 × 20130223	NA					

Condexa Pro - cascade application

8 Primary circuit pumps - hydraulic extension for safety kit

CODE	DESCRIPTION	NOTES
20070910		HYDRAULIC EXTENSION 3" FOR SAFETY KIT. IT ALLOWS THE CONNECTION BETWEEN LOW LOSS HEADER AND PLATE HEAT EXCHANGER
20070912		HYDRAULIC EXTENSION 5" FOR SAFETY KIT. IT ALLOWS THE CONNECTION BETWEEN LOW LOSS HEADER AND PLATE HEAT EXCHANGER
20132873		SHUNT PUMP KIT FOR PRIMARY LOOP UP TO 270kW (25)
20070699		SHUNT PUMP KIT FOR PRIMARY LOOP UP TO 485kW (25)
20070701		SHUNT PUMP KIT FOR PRIMARY LOOP UP TO 580kW (25)
20070702		SHUNT PUMP KIT FOR PRIMARY LOOP UP TO 1120kW (25)
20132874		TWIN HEAD PUMP KIT FOR PRIMARY LOOP UP TO 270kW (25)
20070703		TWIN HEAD PUMP KIT FOR PRIMARY LOOP UP TO 485kW (25)
20070704		TWIN HEAD PUMP KIT FOR PRIMARY LOOP UP TO 580kW (25)
20070705		TWIN HEAD PUMP KIT FOR PRIMARY LOOP UP TO 1120kW (25)
20045865		COMMUNICATION MODULE
20071190		SAFETY KIT (WATER SAFETY VALVE AND SAFETY GAS CUT-OFF VALVE NOT INCLUDED)
20023104		WATER SAFETY VALVE UP TO 460kW (5.4 BAR 3/4" F)
20023106		WATER SAFETY VALVE UP TO 580kW (5.4 BAR 1" F)

(25) It includes hydraulic manifold for low loss header and safety kit; to be used together with connection pipes suitable for safety kit with 2-way valve.

CODE	DESCRIPTION	NOTES
20009486		SAFETY GAS CUT-OFF VALVE - ØG.1" - T=97°C - CAPILLARY TUBE L = 5M (26)
20009482		SAFETY GAS CUT-OFF VALVE - ØG.1"1/2 - T= 97°C - CAPILLARY TUBE L = 5M (27)
20009483		SAFETY GAS CUT-OFF VALVE - ØG.2" - T= 97°C - CAPILLARY TUBE L = 5M (28)
20061640		SAFETY GAS CUT-OFF VALVE - ØG.3" - T= 97°C - CAPILLARY TUBE L = 5M (29)

(26) Suggested up to 131kW heat input, calculated by considering gas supply pressure = 20 mbar.

(27) Suggested up to 230kW heat input, calculated by considering gas supply pressure = 20 mbar.

(28) Suggested up to 580kW heat input, calculated by considering gas supply pressure = 20 mbar.

(29) Suggested up to 1150kW heat input, calculated by considering gas supply pressure = 20 mbar.

Note: The maximum power allowance of the safety cut-off valve is determined by assuming a dynamic gas (working) pressure of 20 mbar is available.

Selection table of safety valves

TOTAL CASCADE HEAT INPUT HI (kW)	0 ÷ 460	461 ÷ 580	581 ÷ 920	921 ÷ 1160
Q.TY x SAFETY VALVE DIAMETER	1 × 3/4"	1 × 1"	2 × 3/4"	2 × 1"
Q.TY x CODE	1 × CODE 20023104	1 × CODE 20023106	2 × CODE 20023104	2 × CODE 20023106

9 Hydraulic separator or plate heat exchanger

CODE	DESCRIPTION	NOTES
20009467		5" HYDRAULIC HEADER/SEPARATOR - UP TO 485kW (CAN BE MATCHED WITH 3"MANIFOLDS) (30)
20069073		10" HYDRAULIC SEPARATOR INT - UP TO 580kW (THAT CAN BE MATCHED WITH 5"MANIFOLDS) (31)
20069074		10" HYDRAULIC SEPARATOR INT - UP TO 1120kW (THAT CAN BE MATCHED WITH 5"MANIFOLDS) (32)
20132373		CONNECTION KIT FOR PLATE HEAT EXCHANGER (DN80 3"MANIFOLDS SIDE/DN50 ON PLATE HEAT EXCHANGER SIDE) (33)
20132375		CONNECTION KIT FOR PLATE HEAT EXCHANGER (DN125 5"MANIFOLDS SIDE/DN65 PLATE HEAT EXCHANGER SIDE) (33)
20132376		CONNECTION KIT FOR PLATE HEAT EXCHANGER (DN125 5"MANIFOLDS SIDE /DN100 PLATE HEAT EXCHANGER SIDE) (33)

(30) To be used with maximum power up to 485kW in combination with 3" manifolds.

(31) To be used with maximum power over 485kW and up to 580kW in combination with 5" manifolds.

(32) To be used with maximum power over 580kW and up to 1120kW in combination with 5" manifolds.

(33) Connection kit with plate heat exchangers SP. For the selection of the SP heat exchanger size, please consult the Pre Sales support team.

Condexa Pro - cascade application

10 Secondary circuit management (central heating and DHW preparation)

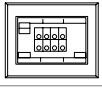
CODE		DESCRIPTION	NOTES
4030036		PROBE KIT FOR SECONDARY CIRCUIT OR DHW CYLINDER	(A)
20130811		ELECTRONIC KIT FOR MANAGEMENT OF SINGLE DIRECT ZONE OR ADDITIONAL MIXED ZONE (MAX 16)	(34)

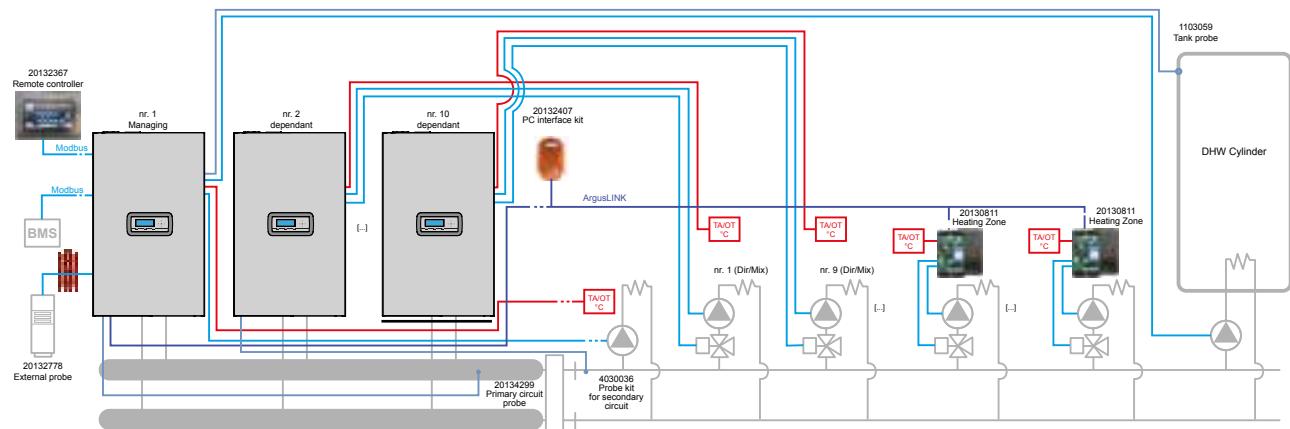
(A) This probe is necessary for the tank or for the management of the secondary circuit, by aligning the temperature to the one set on the primary circuit. The probe is also required to manage additional 'mixed' zones if/when 'dependant' boilers* are being used to manage those 'mixed' zones.

(34) Kit necessary when the number of the heating zones, direct or mixed, is higher than the number of the 'dependant' boilers*; it includes the probe (code 4030036) necessary for the mixed zones.

(*) 'Dependant' boilers are defined as all the boilers of the cascade except the one managing the cascade, defined 'managing' boiler.

11 Remote control and outdoor installation

CODE		DESCRIPTION	NOTES
20132367		REMOTE CONTROL KIT WITH DISPLAY TOUCH SCREEN 7" FOR CONDEXA PRO	



12 Treatment systems for condensate neutralisation

CODE	DESCRIPTION	NOTES
4031811		CONDENSATE NEUTRALISER HN2 (WITH PUMP) - UP TO 270kW (A)
4031810		CONDENSATE NEUTRALISER N2 UP TO 450kW
4031812		CONDENSATE NEUTRALISER N3 - 450 TO 1500kW
4031813		CONDENSATE NEUTRALISER HN3 (WITH PUMP) - 270 TO 750kW (A)

(A) Supplied with extraction pump.

Maintenance and service complimentary items for all Condexa Pro models - standalone and cascade configurations

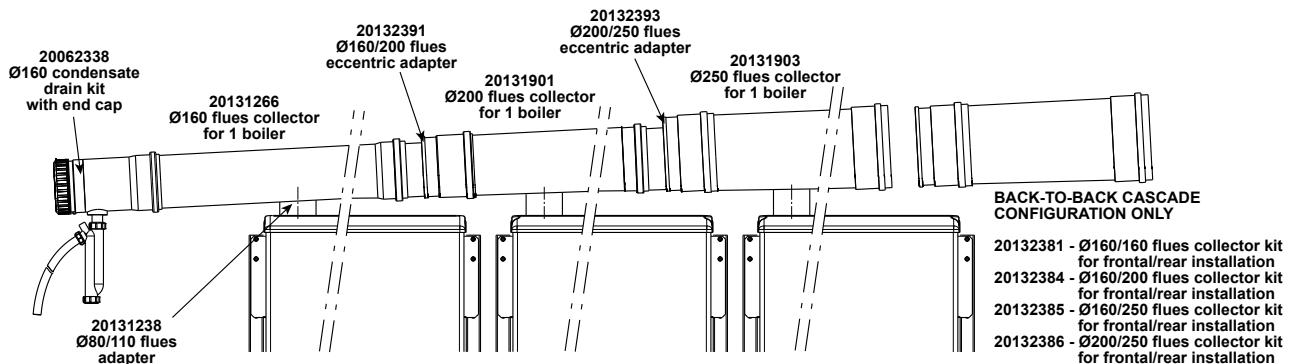
CODE	DESCRIPTION	NOTES
20132407		INTERFACE KIT FOR PC

13 Room-sealed transformation kit (Type C)

CODE	DESCRIPTION	NOTES
20131665		TRANSFORMATION KIT (TYPE C) FOR CONDEXA PRO 35 P - 50 P - 57 P - 70 P
20131668		TRANSFORMATION KIT (TYPE C) FOR CONDEXA PRO 90 - 100 - 115 - 135

Condexa Pro - cascade application - flue systems

14 Flue systems



For the models Condexa Pro 35 P - 50 P - 57 P - 70 P

CODE		DESCRIPTION	NOTES
20131238		Ø80/110 FLUE ADAPTER	
20164632		NON RETURN VALVE	(A)

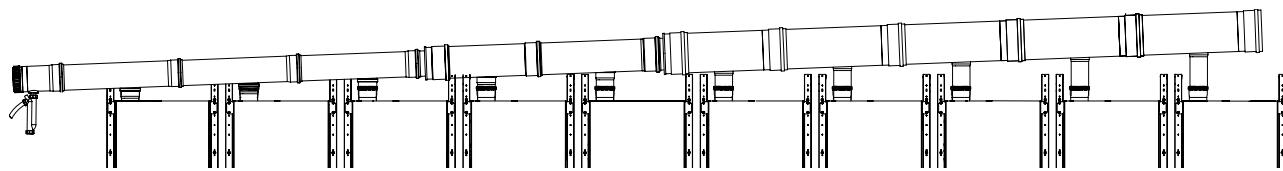
(A) Mandatory for 35P and 50P in cascade

Ø160/200/250mm flue collectors for all Condexa Pro models

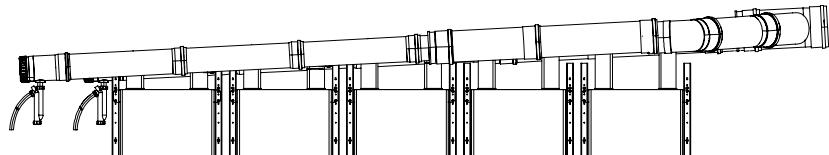
CODE		DESCRIPTION	NOTES
20062338		Ø160 CONDENSATE DRAIN KIT WITH END CAP	
20131266		Ø160 FLUE COLLECTOR FOR 1 BOILER	
20132391		Ø160/200 FLUE ECCENTRIC ADAPTER	
20131901		Ø200 FLUE COLLECTOR FOR 1 BOILER	
20132393		Ø200/250 FLUE ECCENTRIC ADAPTER	
20131903		Ø250 FLUE COLLECTOR FOR 1 BOILER	
20062333		END CAP Ø160	
20062335		END CAP Ø200	
20132381		Ø160/160 FLUE COLLECTOR KIT FOR BACK-TO-BACK INSTALLATION	

CODE	DESCRIPTION	NOTES
20132384		Ø160/200 FLUE COLLECTOR KIT FOR BACK-TO-BACK INSTALLATION
20132385		Ø160/250 FLUE COLLECTOR KIT FOR BACK-TO-BACK INSTALLATION
20132386		Ø200/250 FLUE COLLECTOR KIT FOR BACK-TO-BACK INSTALLATION
20132389		Ø225/250 FLUE COLLECTOR KIT FOR BACK-TO-BACK INSTALLATION

Linear cascade configuration - max 10 boilers



Back-to-back cascade configuration - max 5 + 5 boilers



Matching table of flue collector diameter with quantity of boilers on a single collector

MODEL	CONDEXA PRO 35 P	CONDEXA PRO 50 P	CONDEXA PRO 57 P	CONDEXA PRO 70 P	CONDEXA PRO 90	CONDEXA PRO 100	CONDEXA PRO 115	CONDEXA PRO 135
BOILER HEAT INPUT (kW)	35	50	57	68	90	97	112	131
QUANTITY OF BOILERS	FLUE / AIR COLLECTOR DIAMETER							
1	Ø160	Ø160	Ø160	Ø160	Ø160	Ø160	Ø160	Ø160
2	Ø160	Ø160	Ø160	Ø160	Ø160	Ø160	Ø160	Ø160
3	Ø160	Ø160	Ø160	Ø160	Ø160	Ø160	Ø160	Ø160
4	Ø160	Ø160	Ø160	Ø160	Ø160	Ø160	Ø160	Ø200
5	Ø160	Ø160	Ø160	Ø160	Ø200	Ø200	Ø200	Ø200
6	Ø160	Ø160	Ø160	Ø160	Ø200	Ø200	Ø200	Ø250
7	Ø160	Ø160	Ø160	Ø200	Ø200	Ø200	Ø250	Ø250
8	Ø160	Ø160	Ø200	Ø200	Ø250	Ø250	Ø250	Ø250
9	Ø160	Ø200	Ø200	Ø200	Ø250	Ø250	Ø250	NA
10	Ø160	Ø200	Ø200	Ø200	Ø250	Ø250	Ø250	NA

For flue pipe and accessories from the cascade flue collector, please see page 66.

Condexa Pro - cascade application - flue systems

Matching table of flue collector codes with quantity of boilers in linear cascade configuration

MODEL	CONDEXA PRO 35 P	CONDEXA PRO 50 P	CONDEXA PRO 57 P	CONDEXA PRO 70 P	CONDEXA PRO 90	CONDEXA PRO 100	CONDEXA PRO 115	CONDEXA PRO 135
BOILER HEAT INPUT (kW)	35	50	57	68	90	97	112	131
QUANTITY OF BOILERS	FLUE COLLECTOR CODES FOR LINEAR CASCADE CONFIGURATION							
2	2X20131238 1X20062338 2X20131266	2X20131238 1X20062338 2X20131266	2X20131238 1X20062338 2X20131266	2X20131238 1X20062338 2X20131266	1X20062338 2X20131266	1X20062338 2X20131266	1X20062338 2X20131266	1X20062338 2X20131266
3	3X20131238 1X20062338 3X20131266	3X20131238 1X20062338 3X20131266	3X20131238 1X20062338 3X20131266	3X20131238 1X20062338 3X20131266	1X20062338 3X20131266	1X20062338 3X20131266	1X20062338 3X20131266	1X20062338 3X20131266
4	4X20131238 1X20062338 4X20131266	4X20131238 1X20062338 4X20131266	4X20131238 1X20062338 4X20131266	4X20131238 1X20062338 4X20131266	1X20062338 4X20131266	1X20062338 4X20131266	1X20062338 4X20131266	1X20062338 3X20131266 1X20132391 1X20131901
5	5X20131238 1X20062338 5X20131266	5X20131238 1X20062338 5X20131266	5X20131238 1X20062338 5X20131266	5X20131238 1X20062338 5X20131266	1X20062338 4X20131266 1X20132391 1X20131901	1X20062338 4X20131266 1X20132391 1X20131901	1X20062338 4X20131266 1X20132391 1X20131901	1X20062338 3X20131266 1X20132391 1X20131901
6	6X20131238 1X20062338 6X20131266	6X20131238 1X20062338 6X20131266	6X20131238 1X20062338 6X20131266	6X20131238 1X20062338 6X20131266	1X20062338 4X20131266 1X20132391 2X20131901	1X20062338 4X20131266 1X20132391 2X20131901	1X20062338 4X20131266 1X20132391 2X20131901	1X20062338 3X20131266 1X20132391 2X20131901 1X20132393 1X20131903
7	7X20131238 1X20062338 7X20131266	7X20131238 1X20062338 7X20131266	7X20131238 1X20062338 7X20131266	7X20131238 1X20062338 6X20131266 1X20132391 1X20131901	1X20062338 4X20131266 1X20132391 3X20131901	1X20062338 4X20131266 1X20132391 3X20131901	1X20062338 4X20131266 1X20132391 3X20131901	1X20062338 3X20131266 1X20132391 2X20131901 1X20132393 2X20131903
8	8X20131238 1X20062338 8X20131266	8X20131238 1X20062338 8X20131266	8X20131238 1X20062338 7X20131266	8X20131238 1X20062338 6X20131266	1X20062338 4X20131266 1X20132391 3X20131901	1X20062338 4X20131266 1X20132391 3X20131901	1X20062338 4X20131266 1X20132391 3X20131901	1X20062338 3X20131266 1X20132391 2X20131901 1X20132393 3X20131903
9	9X20131238 1X20062338 9X20131266	9X20131238 1X20062338 8X20131266	9X20131238 1X20062338 7X20131266	9X20131238 1X20062338 6X20131266	1X20062338 4X20131266 1X20132391 3X20131901	1X20062338 4X20131266 1X20132391 3X20131901	1X20062338 4X20131266 1X20132391 3X20131901	NA
10	10X20131238 1X20062338 10X20131266	10X20131238 1X20062338 8X20131266	10X20131238 1X20062338 7X20131266	10X20131238 1X20062338 6X20131266	1X20062338 4X20131266 1X20132391 3X20131901	1X20062338 4X20131266 1X20132391 3X20131901	1X20062338 4X20131266 1X20132391 3X20131901	NA

Note: in case of room-sealed combustion (type C) the quantities shown in the table must be doubled.

Matching table of flue collector codes with quantity of boilers in back-to-back cascade configuration

MODEL	CONDEXA PRO 35 P	CONDEXA PRO 50 P	CONDEXA PRO 57 P	CONDEXA PRO 70 P	CONDEXA PRO 90	CONDEXA PRO 100	CONDEXA PRO 115	CONDEXA PRO 135
BOILER HEAT INPUT(HI) KW	35	50	57	68	90	97	112	131
QUANTITY OF BOILERS	FLUE COLLECTOR CODES FOR BACK-TO-BACK CASCADE CONFIGURATION							
2	2X20131238 2X20062338 2X20131266 1X20132381	2X20131238 2X20062338 2X20131266 1X20132381	2X20131238 2X20062338 2X20131266 1X20132381	2X20131238 2X20062338 2X20131266 1X20132381	2X20062338 2X20131266 1X20132381	2X20062338 2X20131266 1X20132381	2X20062338 2X20131266 1X20132381	2X20062338 2X20131266 1X20132381
3	3X20131238 2X20062338 3X20131266 1X20132381	3X20131238 2X20062338 3X20131266 1X20132381	3X20131238 2X20062338 3X20131266 1X20132381	3X20131238 2X20062338 3X20131266 1X20132381	2X20062338 3X20131266 1X20132381	2X20062338 3X20131266 1X20132381	2X20062338 3X20131266 1X20132381	2X20062338 3X20131266 1X20132381
4	4X20131238 2X20062338 4X20131266 1X20132381	4X20131238 2X20062338 4X20131266 1X20132381	4X20131238 2X20062338 4X20131266 1X20132381	4X20131238 2X20062338 4X20131266 1X20132381	2X20062338 4X20131266 1X20132381	2X20062338 4X20131266 1X20132381	2X20062338 4X20131266 1X20132381	2X20062338 4X20131266 1X20132384
5	5X20131238 2X20062338 5X20131266 1X20132381	5X20131238 2X20062338 5X20131266 1X20132381	5X20131238 2X20062338 5X20131266 1X20132381	5X20131238 2X20062338 5X20131266 1X20132381	2X20062338 5X20131266 1X20132384	2X20062338 5X20131266 1X20132384	2X20062338 5X20131266 1X20132384	2X20062338 5X20131266 1X20132384
6	6X20131238 2X20062338 6X20131266 1X20132381	6X20131238 2X20062338 6X20131266 1X20132381	6X20131238 2X20062338 6X20131266 1X20132381	6X20131238 2X20062338 6X20131266 1X20132381	2X20062338 6X20131266 1X20132384	2X20062338 6X20131266 1X20132384	2X20062338 6X20131266 1X20132384	2X20062338 6X20131266 1X20132385
7	7X20131238 2X20062338 7X20131266 1X20132381	7X20131238 2X20062338 7X20131266 1X20132381	7X20131238 2X20062338 7X20131266 1X20132381	7X20131238 2X20062338 7X20131266 1X20132384	2X20062338 7X20131266 1X20132384	2X20062338 7X20131266 1X20132384	2X20062338 7X20131266 1X20132385	2X20062338 5X20131266 2X20132391 2X20131901 1X20132386
8	8X20131238 2X20062338 8X20131266 1X20132381	8X20131238 2X20062338 8X20131266 1X20132381	8X20131238 2X20062338 8X20131266 1X20132384	8X20131238 2X20062338 8X20131266 1X20132384	2X20062338 8X20131266 1X20132385	2X20062338 8X20131266 1X20132385	2X20062338 8X20131266 1X20132385	2X20062338 6X20131266 2X20132391 2X20131901 1X20132386
9	9X20131238 2X20062338 9X20131266 1X20132381	9X20131238 2X20062338 9X20131266 1X20132384	9X20131238 2X20062338 9X20131266 1X20132384	9X20131238 2X20062338 9X20131266 1X20132384	2X20062338 3X20131266 2X20132391 2X20131901 1X20132386	2X20062338 3X20131266 2X20132391 2X20131901 1X20132386	2X20062338 3X20131266 2X20132391 2X20131901 1X20132386	NA
10	10X20131238 2X20062338 10X20131266 1X20132381	10X20131238 2X20062338 10X20131266 1X20132385	10X20131238 2X20062338 10X20131266 1X20132385	10X20131238 2X20062338 10X20131266 1X20132385	2X20062338 4X20131266 1X20132386	2X20062338 4X20131266 1X20132386	2X20062338 4X20131266 1X20132386	NA

Note: in case of room-sealed combustion (type C) the quantities shown in the table must be doubled.

STEEL PRO POWER

Steel Pro Power is the new modular floor-standing gas condensing system, conceived and developed with the aim of maximizing flexibility and simplicity of installation, ensuring the continuity of service typical of modular systems.

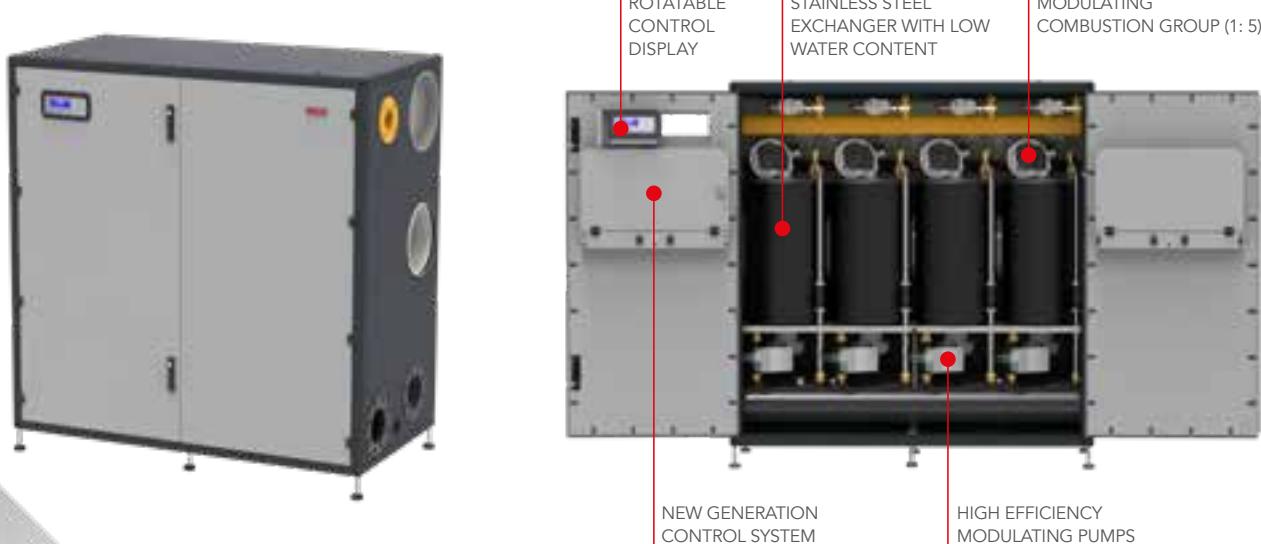
With **Steel Pro Power** a wide range of accessories are offered, as this can be installed either in single configuration (from 114 up to 540kW) or in cascade (from 655 up to 1310kW).

The cabinets, consisting of an anodised aluminium frame assembly and painted panels containing 2,3 or 4 heat engines (depending on the model) are available in two different versions: with low-energy modulating pumps (type P) or with 2-way valves (type V). All the models are internally equipped with hydraulic, gas, condensate and flue exhaust manifolds.

The power supplied by the individual modules is managed with the new electronics control, compatible with the Modbus protocol. Advanced operating logic ensures optimal management, as well as, allowing the distribution of heat in a precise manner to the various circuits.

Compactness, versatility and electronic management, coupled to the new patented double-acting stainless steel heat exchanger and the premixed burner with wide modulation range, make **Steel Pro Power** an extremely efficient and low pollutant system.

To help the designer in identifying the best solution, Riello has developed configuration software to support the selection process of the specific accessories required for this system.



Configuration

Standalone

- Possibility of flue exhaust / air and hydraulic connections on either the right or on the left
- Simplified maintenance operations thanks to the rotatable control display
- Simplified wiring via dedicated terminal block
- Open or room sealed combustion (with accessory kit)

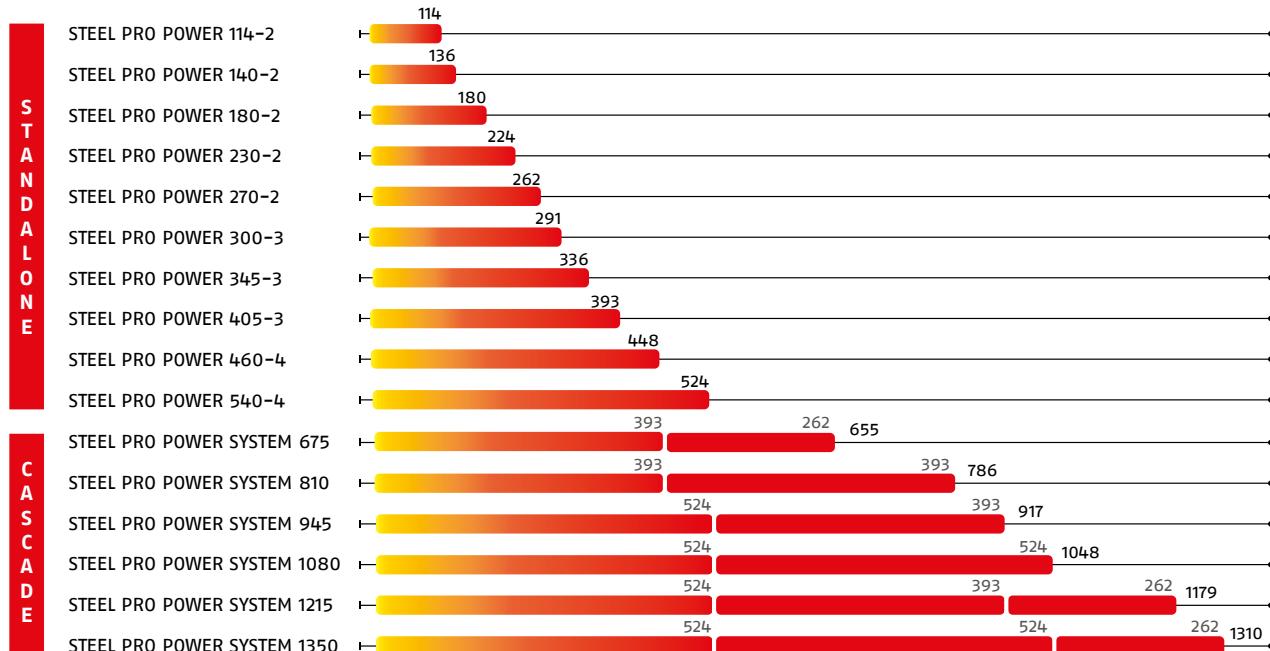


Cascade

- Couple up to 10 heat engines
- Modulation ratio up to 1:50
- Side-to-side installation



Steel Pro Power is available in the following versions and heat inputs:





Steel Pro Power

The new modular system

Steel Pro Power is the new modular floor-standing gas condensing system, conceived and developed with the aim of maximizing flexibility and simplicity of installation.



5 Year Warranty



Up To 1.3MW



Pre-Built Unit



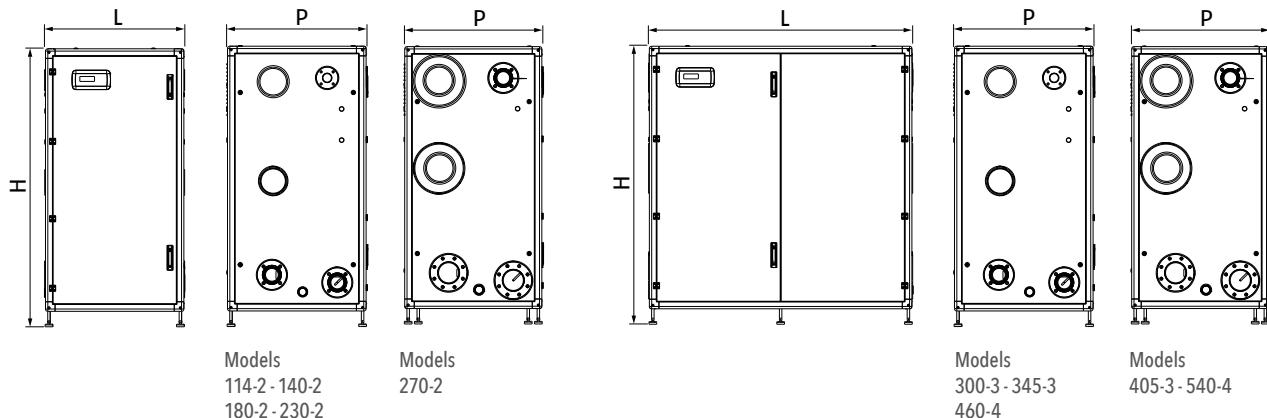
NO_x Class 6

- In conformity with Directive 2009/125/EC
- Condensing modular thermal units for indoor applications (outdoor with optional kit) composed of painted technical cabinet, heat engines from 57kW up to 131kW and system accessories
- Low emissions, NO_x class 6 (EN 15502)
- Linear or curved climatic adjustment, in combination with the external probe
- Management of the cascade of the modules inside the cabinet
- Management of boiler cascades with Managing / Dependant logic
- Power control for operation at Δt constant
- ACS production management and direct circuit
- Possibility of system expansion through accessory control additional heating zones (direct / mixed)

- Modulating pumps control (PWM / 0-10 V)
- Remote management via Modbus
- External power control via 0-10 V input
- Multilingual menu, multi-level tree
- Management of user profiles protected by a password
- Large backlit screen, 255x80 pixels
- Management of weekly time schedules
- Boiler error history



Steel Pro Power has small dimensions facilitating installation and handling operations.



MODEL		114-2	140-2	180-2	230-2	270-2	300-3	345-3	405-3	460-4	540-4
RATED HEAT INPUT PCI	KW	114	136	180	223.2	262	291	334.8	393	446.4	524
	KCAL/H	98088	117017	154876	191917	225430	250382	287876	338145	383835	450860
NOMINAL HEAT OUTPUT 80-60 °C	KW	111.4	134	176.6	219.6	258	285.9	329.4	387	439.2	516
	KCAL/H	95851	115296	151950	188948	221989	245994	283423	332983	377897	443977
NOMINAL HEAT OUTPUT MAX 50-30 °C	KW	123.8	147.8	194.8	242.2	284.2	315.3	363.6	426.3	484.4	568.4
	KCAL/H	106520	127170	167610	208394	244532	271291	312849	366797	416788	489063
REDUCED HEAT INPUT PCI	KW	13.7	13.7	19.4	22.4	26.3	19.4	22.4	26.3	22.4	26.3
	KCAL/H	11788	11788	16692	19273	22629	16692	19273	22629	19273	22629
REDUCED HEAT OUTPUT 80/60 °C	KW	13.5	13.5	19.2	22.1	26.0	19.2	22.1	26.0	22.1	26.0
	KCAL/H	11616	11616	16520	19015	22371	16520	19015	22371	19015	22371
REDUCED HEAT OUTPUT 50/30 °C	KW	14.9	14.9	21.1	24.5	28.9	21.1	24.5	28.9	24.5	28.9
	KCAL/H	12820	12820	18155	21080	24866	18155	21080	24866	21080	24866
USEFUL EFFICIENCY AT NOMINAL HEAT OUTPUT 80-60 °C (PCI)	%	97.72	98.53	98.11	98.40	98.47	98.25	98.40	98.47	98.40	98.47
COMBUSTION EFFICIENCY	%	99.0	99.0	99.0	99.3	99.3	99.0	99.3	99.3	99.3	99.3
USEFUL EFFICIENCY AT NOMINAL HEAT OUTPUT 50/30 °C (PCI)	%	108.6	108.1	108.3	108.6	108.3	108.2	108.6	108.3	108.6	108.3
USEFUL EFFICIENCY AT REDUCED HEAT OUTPUT 50/30 °C (PCI)	%	109.3	109.3	109.2	110	110	109.2	110	110	110	110
USEFUL EFFICIENCY 30% 50/30 °C (PCI)	%	109.4	109.3	108.9	108.9	109.4	108.9	108.9	109.4	108.9	109.4
ELECTRICAL CONSUMPTION AT FULL LOAD	W	198	264	460	706	964	951	1059	1446	1412	1928
POWER SUPPLY	V-HZ						230-50				
INDEX OF PROTECTION	IP						X4D				
MAXIMUM WORKING PRESSURE	BAR						6				
MAXIMUM OPERATING TEMPERATURE	°C						100				
FLUE GAS MASS AT MAX-MIN POWER (G20)	G/S	53-6	64-6	84-9	104-10	122-12	136-9	156-10	183-12	208-10	245-12
NOX							CLASS 6				
HEIGHT	H	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
WIDTH	L	900	900	900	900	900	1800	1800	1800	1800	1800
DEPTH	P	890	890	890	890	890	890	890	890	890	890
NET WEIGHT	KG	270	270	280	300	350	450	490	540	560	600

Technical Data

DESCRIPTION	POWER [KW]			EFFICIENCY %			NOTES	LANGUAGE	CODE
	USEFUL 80°/60° MAX	USEFUL 50°/30° MAX	MIN-MAX	NET HEAT INPUT	USEFUL PN (50°/30°)	USEFUL 30% PN (50°/30°)			
INDOOR UNITS - MODULATING PUMP VERSION									
STEEL PRO POWER 114-2 P	111.4	123.8	13.7-114	97.7	108.6	109.4	(1)	IT/EN	20138572
STEEL PRO POWER 140-2 P	134.0	147.8	13.7-136	98.5	108.1	109.3	(1)	IT/EN	20138573
STEEL PRO POWER 180-2 P	176.6	194.8	19.4-180	98.1	108.3	108.9	(1)	IT/EN	20138574
STEEL PRO POWER 230-2 P	219.6	242.2	22.4-223.2	98.4	108.6	108.9	(1)	IT/EN	20138575
STEEL PRO POWER 270-2 P	258.0	284.2	26.3-262	98.5	108.3	109.4	(1)(4)	IT/EN	20138576
STEEL PRO POWER 300-3 P	285.9	315.3	19.4-291	98.2	108.2	108.9	(2)	IT/EN	20138577
STEEL PRO POWER 345-3 P	329.4	363.6	22.4-334.8	98.4	108.6	108.9	(2)	IT/EN	20138578
STEEL PRO POWER 405-3 P	387.0	426.3	26.3-393	98.5	108.3	109.4	(2)(4)	IT/EN	20138579
STEEL PRO POWER 460-4 P	439.2	484.4	22.4-446.4	98.4	108.6	108.9	(3)	IT/EN	20138580
STEEL PRO POWER 540-4 P	516.0	568.4	26.3-524	98.5	108.3	109.4	(3)(4)	IT/EN	20138581

DESCRIPTION	POWER [KW]			EFFICIENCY %			NOTES	LANGUAGE	CODE
	USEFUL 80°/60° MAX	USEFUL 50°/30° MAX	MIN-MAX	NET HEAT INPUT	USEFUL PN (50°/30°)	USEFUL 30% PN (50°/30°)			
INDOOR UNITS - 2 WAY VALVE VERSION									
STEEL PRO POWER 114-2 V	111.4	123.8	13.7-114	97.7	108.6	109.4	(1)	IT/EN	20138582
STEEL PRO POWER 140-2 V	134.0	147.8	13.7-136	98.5	108.1	109.3	(1)	IT/EN	20138583
STEEL PRO POWER 180-2 V	176.6	194.8	19.4-180	98.1	108.3	108.9	(1)	IT/EN	20138584
STEEL PRO POWER 230-2 V	219.6	242.2	22.4-223.2	98.4	108.6	108.9	(1)	IT/EN	20138585
STEEL PRO POWER 270-2 V	258.0	284.2	26.3-262	98.5	108.3	109.4	(1)(4)	IT/EN	20138586
STEEL PRO POWER 300-3 V	285.9	315.3	19.4-291	98.2	108.2	108.9	(2)	IT/EN	20138587
STEEL PRO POWER 345-3 V	329.4	363.6	22.4-334.8	98.4	108.6	108.9	(2)	IT/EN	20138588
STEEL PRO POWER 405-3 V	387.0	426.3	26.3-393	98.5	108.3	109.4	(2)(4)	IT/EN	20138589
STEEL PRO POWER 460-4 V	439.2	484.4	22.4-446.4	98.4	108.6	108.9	(3)	IT/EN	20138590
STEEL PRO POWER 540-4 V	516.0	568.4	26.3-524	98.5	108.3	109.4	(3)(4)	IT/EN	20138591

(1) Model with 2 thermal elements.

(2) Model with 3 thermal elements.

(3) Model with 4 thermal elements.

(4) Models that can be used for cascade systems.

Configuration guide

Standalone heat input

DESCRIPTION	STEEL PRO POWER									
	114-2	140-2	180-2	230-2	270-2	300-3	345-3	405-3	460-4	540-4
RATED HEAT INPUT kW	114	136	180	224	262	291	336	393	448	524

Cascade system heat input

DESCRIPTION	HEAT INPUT kW	STEEL PRO POWER 270-2 P/270-2 V			STEEL PRO POWER 405-3 P/405-3 V			STEEL PRO POWER 540-4 P/540-4 V		
		N. OF UNITS								
STEEL PRO POWER SYSTEM 675	655	1			1			-		
STEEL PRO POWER SYSTEM 810	786		-		2			-		
STEEL PRO POWER SYSTEM 945	917		-		1			1		
STEEL PRO POWER SYSTEM 1080	1048		-			-		2		
STEEL PRO POWER SYSTEM 1215	1179	1			1			1		
STEEL PRO POWER SYSTEM 1350	1310	1				-		2		

System configuration guide and accessories selection

- | | |
|----|--|
| 1 | Boiler |
| 2 | Sealed combustion transformation kits |
| 3 | Hydraulic interception of thermal modules |
| 4 | Manifolds, safety kits and hydraulic accessories |
| 5 | Hydraulic separators/plate heat exchangers |
| 6 | Auxiliary accessories for technical box |
| 7 | Auxiliary accessories for outdoor installation |
| 8 | Secondary circuit management accessories |
| 9 | Treatment systems for condensate neutralisation |
| 10 | Complements for maintenance and service |



2 Sealed combustion transformation kit

DESCRIPTION	CODE
Ø50/80 MM AIR ADAPTER	20145144
AIR HOSE KIT FOR FAN/COLLECTOR CONNECTION Ø160 MM	20145141
AIR HOSE KIT FOR FAN/MANIFOLD CONNECTION Ø300 MM	20145137
AIR MANIFOLD FOR Ø160 MM MODELS - FOR MODELS WITH 2 THERMAL MODULES	20145185
AIR MANIFOLD FOR Ø160 MM MODELS - FOR MODELS WITH 3-4 THERMAL MODULES	20145186
AIR MANIFOLD FOR Ø300 MM MODELS - FOR MODELS WITH 3-4 THERMAL MODULES	20145187
AIR MANIFOLD FOR Ø300 MM MODELS - FOR MODELS WITH 3-4 THERMAL MODULES	20145189

Matching table of sealed transformation kit codes in relation to the unit model

DESCRIPTION	KIT CODE/QUANTITY						
	20145144	20145141	20145144	20145185	20145186	20145187	20145189
STEEL PRO POWER 114-2	2X	2X		1X			
STEEL PRO POWER 140-2	2X	2X		1X			
STEEL PRO POWER 180-2		2X		1X			
STEEL PRO POWER 230-2		2X		1X			
STEEL PRO POWER 270-2			2X			1X	
STEEL PRO POWER 300-3		3X			1X		
STEEL PRO POWER 345-3		3X			1X		
STEEL PRO POWER 405-3			3X				1X
STEEL PRO POWER 460-4		4X			1X		
STEEL PRO POWER 540-4			4X				1X
STEEL PRO POWER SYSTEM 675			5X			1X	1X
STEEL PRO POWER SYSTEM 810			6X				2X
STEEL PRO POWER SYSTEM 945			7X				2X
STEEL PRO POWER SYSTEM 1080			8X				2X
STEEL PRO POWER SYSTEM 1215			9X			1X	2X
STEEL PRO POWER SYSTEM 1350			10X			1X	2X

3 Hydraulic interception of thermal modules

DESCRIPTION	NOTES	CODE
2-WAY VALVE KIT FOR HYDRAULIC INTERCEPTION KIT	(1)	20145169

(1) To be ordered in number equal to number of modules in the system.

4 Manifolds, safety kits and hydraulic accessories

DESCRIPTION	NOTES	CODE
JUNCTION KIT FOR CASCADE (FUME Ø300 - AIR Ø300 - CONDENSATION Ø50)		20157593
JUNCTION KIT FOR CASCADE WITH SPACER (150 MM)	(1)	20145237
SAFETY VALVE UP TO 460 KW (5.4 BAR ØG.¾" F)		20023104
SAFETY VALVE UP TO 580 KW (5.4 BAR ØG.1" F)		20023106
SAFETY KIT	(2)	20071190
FLANGED DN80/THREADED ØG.2" ADAPTER KIT FOR VALVE		20146852
GAS SHUT OFF VALVE - ØG.1"	(3)(4)	20009486
GAS SHUT OFF VALVE - ØG.1" ½	(4)(5)	20009482
GAS SHUT OFF VALVE - ØG.2"	(4)(6)	20009483
GAS SHUT OFF VALVE - ØG.3"	(4)(7)	20061640
FLANGED 2" DN50 PN6/THREADED ØG.2" ADAPTER KIT FOR VALVE		20094187
FLANGED 3" DN80 PN6/FLANGED ØG.3" DN80 PN16 ADAPTER KIT FOR VALVE		20161191
3"/2" FLANGED REDUCTION KIT (DN80/DN50)		20145184
5"/3" FLANGED REDUCTION KIT (DN125/DN80)		20145183
3" BLIND FLANGES KIT		20070903
5" BLIND FLANGES KIT		20070907
3" FLANGE		20082190
5" FLANGE		20082191
SHUNT SINGLE PUMP KIT UP TO 270 KW		20159242
SHUNT SINGLE PUMP KIT UP TO 485 KW		20159243
SHUNT SINGLE PUMP KIT UP TO 580 KW		20159253
SHUNT SINGLE PUMP KIT UP TO 1310 KW		20159254
SHUNT TWIN PUMP KIT UP TO 270 KW		20159257
SHUNT TWIN PUMP KIT UP TO 485 KW		20159258
SHUNT TWIN PUMP KIT UP TO 580 KW		20159259
SHUNT TWIN PUMP KIT UP TO 1310 KW		20159260
3" HYDRAULIC FLOW MANIFOLD		20145172
5" HYDRAULIC FLOW MANIFOLD		20145177
3" HYDRAULIC RETURN MANIFOLD		20145181
5" HYDRAULIC RETURN MANIFOLD		20145182

(1) Includes connections H₂O 5" - Gas 3" - Fumes Ø300 - Condensation Ø50.

(2) It does not include a safety valve and gas shut off valve

(3) Recommended up to a maximum power of 131 kW, calculated considering gas supply pressure = 20 mbar.

(4) Operating temperature at 97 ° C - Capillary tube 5 m.

(5) Recommended up to maximum power of 230 kW, calculated considering gas supply pressure = 20 mbar.

(6) Recommended up to a maximum power of 580 kW, calculated considering gas supply pressure = 20 mbar.

(7) Recommended up to maximum power of 1310 kW, calculated considering gas supply pressure = 20 mbar.

NOTE: to calculate the maximum permissible power, with different pressure supply from 20 mbar, contact the pre-sales service.

5 Hydraulic separators/plate heat exchangers

DESCRIPTION	NOTES	CODE
5" HYDRAULIC SEPARATOR - UP TO 485 KW		20145255
10" HYDRAULIC SEPARATOR - UP TO 1310 KW		20145260
CONNECTION KIT FOR PLATE HEAT EXCHANGER DN80 (Ø3")/DN50		20146827
CONNECTION KIT FOR PLATE HEAT EXCHANGER DN125 (Ø5")/DN65		20146828
CONNECTION KIT FOR PLATE HEAT EXCHANGER DN125 (Ø5")/DN100		20146829
RIGHT TECHNICAL BOX WITH HYDRAULIC SEPARATOR UP TO 485 KW	(1)	20145247
RIGHT TECHNICAL BOX WITH HYDRAULIC SEPARATOR UP TO 1310 KW	(1)	20145250
LEFT TECHNICAL BOX WITH HYDRAULIC SEPARATOR UP TO 485 KW	(1)	20145252
LEFT TECHNICAL BOX WITH HYDRAULIC SEPARATOR UP TO 1310 KW	(1)	20145254
RIGHT TECHNICAL BOX FOR PLATE HEAT EXCHANGER UP TO 485 KW		20146830
RIGHT TECHNICAL BOX FOR PLATE HEAT EXCHANGER UP TO 800 KW		20146831
RIGHT TECHNICAL BOX FOR PLATE HEAT EXCHANGER UP TO 1310 KW		20146832
LEFT TECHNICAL BOX FOR PLATE HEAT EXCHANGER UP TO 485 KW		20146833
LEFT TECHNICAL BOX FOR PLATE HEAT EXCHANGER UP TO 800 KW		20146835
LEFT TECHNICAL BOX FOR PLATE HEAT EXCHANGER UP TO 1310 KW		20146836
RIGHT/LEFT TECHNICAL BOX FOR SINGLE/TWIN PUMP HOUSING 270/485 KW	(2)(3)	20158562
RIGHT/LEFT TECHNICAL BOX FOR SINGLE/TWIN PUMP HOUSING 580/1310 KW	(2)(3)	20158564

(1) Contain the hydraulic separator within them.

(2) Only for "V" versions.

(3) They do not contain the circulator inside them.

Matching table of cascade unit connection in relation to the unit model

DESCRIPTION	DIRECT CONNECTION
	20157593
STEEL PRO POWER 675	1X
STEEL PRO POWER 810	1X
STEEL PRO POWER 945	1X
STEEL PRO POWER 1080	1X
STEEL PRO POWER 1215	2X
STEEL PRO POWER 1350	2X

DESCRIPTION	CONNECTION WITH SPACERS (150MM)
	20145237
STEEL PRO POWER 675	1X
STEEL PRO POWER 810	1X
STEEL PRO POWER 945	1X
STEEL PRO POWER 1080	1X
STEEL PRO POWER 1215	2X
STEEL PRO POWER 1350	2X

Matching table of safety devices in relation to the unit model

DESCRIPTION	SAFETY KIT	SAFETY VALVES	VALVES		
			MANDATORY ACCESSORIES		
			ACCESSORIES TO BE SELECTED ACCORDING TO INSTALLATION		WITH TECHNICAL BOX
STEEL PRO POWER 114-2	1X	1X	2007190	SAFETY KIT	
STEEL PRO POWER 140-2	1X	1X	20023104	SAFETY VALVE UP TO 460kW (5.4 BAR ØG.3/4" F)	
STEEL PRO POWER 180-2	1X	1X	20009486	SAFETY VALVE UP TO 580kW (5.4 BAR ØG.1" F)	
STEEL PRO POWER 230-2	1X	1X	20009486	GAS SHUT OFF VALVE - ØG.1"	
STEEL PRO POWER 270-2	1X	1X	20009482	GAS SHUT OFF VALVE - ØG.1 1/2"	
STEEL PRO POWER 300-3	1X	1X	20009483	GAS SHUT OFF VALVE - ØG.2"	
STEEL PRO POWER 345-3	1X	1X	20061640	GAS SHUT OFF VALVE - ØG.3"	
STEEL PRO POWER 405-3	1X	1X			
STEEL PRO POWER 460-4	1X	1X			
STEEL PRO POWER 540-4	1X		1X		
STEEL PRO POWER SYSTEM 675	1X	2X			1X
STEEL PRO POWER SYSTEM 810	1X	2X			1X
STEEL PRO POWER SYSTEM 945	1X	2X			1X
STEEL PRO POWER SYSTEM 1080	1X	3X			1X
STEEL PRO POWER SYSTEM 1215	1X	3X			1X
STEEL PRO POWER SYSTEM 1350	1X	3X			1X
			20145184	3"/2" FLANGED REDUCTION KIT(DN80/DN50)	
			20094187	FLANGED 2" DN50 PN6/THREADED ØG.2"	
			20161191	FLANGED 3" DN80 PN6/FLANGED ØG.3" DN80 PN16 ADAPTER KIT	
			20146852	FLANGED DN80/THREADED ØG.2" ADAPTER KIT	

Matching table of flange, hydraulic reduction codes in relation to the unit model

DESCRIPTION	20145183	20070903	20082190	20070907	20082191
STEEL PRO POWER 114-2		1X	2X		
STEEL PRO POWER 140-2		1X	2X		
STEEL PRO POWER 180-2		1X	2X		
STEEL PRO POWER 230-2		1X	2X		
STEEL PRO POWER 270-2	2X(*)		2X	1X	
STEEL PRO POWER 300-3		1X	2X		
STEEL PRO POWER 345-3		1X	2X		
STEEL PRO POWER 405-3	2X(*)		2X	1X	
STEEL PRO POWER 460-4		1X	2X		
STEEL PRO POWER 540-4				1X	2X
STEEL PRO POWER SYSTEM 675				1X	2X
STEEL PRO POWER SYSTEM 810				1X	2X
STEEL PRO POWER SYSTEM 945				1X	2X
STEEL PRO POWER SYSTEM 1080				1X	2X
STEEL PRO POWER SYSTEM 1215				1X	2X
STEEL PRO POWER SYSTEM 1350				1X	2X

(*) Accessories necessary for the hydraulic connection to technical box.

Matching table of circulation in relation to the "V" unit model

DESCRIPTION	PRIMARY SINGLE PUMP KIT				PRIMARY TWIN PUMP KIT			
	20159242	20159243	20159253	20159254	20159257	20159258	20159259	20159260
STEEL PRO POWER 114-2	•				•			
STEEL PRO POWER 140-2	•				•			
STEEL PRO POWER 180-2	•				•			
STEEL PRO POWER 230-2	•				•			
STEEL PRO POWER 270-2	•				•			
STEEL PRO POWER 300-3		•				•		
STEEL PRO POWER 345-3		•				•		
STEEL PRO POWER 405-3		•				•		
STEEL PRO POWER 460-4		•				•		
STEEL PRO POWER 540-4			•				•	
STEEL PRO POWER SYSTEM 675				•				•
STEEL PRO POWER SYSTEM 810				•				•
STEEL PRO POWER SYSTEM 945				•				•
STEEL PRO POWER SYSTEM 1080				•				•
STEEL PRO POWER SYSTEM 1215				•				•
STEEL PRO POWER SYSTEM 1350				•				•

Matching table of safety devices in relation to the unit model

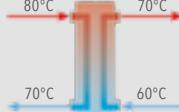
DESCRIPTION	RIGHT/LEFT TECHNICAL BOX FOR SINGLE/TWIN PUMP HOUSING UP TO 485 KW	RIGHT/LEFT TECHNICAL BOX FOR SINGLE/TWIN PUMP HOUSING FROM 580 TO 1310 KW
	20158562	20158564
STEEL PRO POWER 114-2	•	
STEEL PRO POWER 140-2	•	
STEEL PRO POWER 180-2	•	
STEEL PRO POWER 230-2	•	
STEEL PRO POWER 270-2	•	
STEEL PRO POWER 300-3	•	
STEEL PRO POWER 345-3	•	
STEEL PRO POWER 405-3	•	
STEEL PRO POWER 460-4	•	
STEEL PRO POWER 540-4		•
STEEL PRO POWER SYSTEM 675		•
STEEL PRO POWER SYSTEM 810		•
STEEL PRO POWER SYSTEM 945		•
STEEL PRO POWER SYSTEM 1080		•
STEEL PRO POWER SYSTEM 1215		•
STEEL PRO POWER SYSTEM 1350		•

Matching table of safety devices in relation to the unit model

DESCRIPTION	WITHOUT TECHNICAL BOX						WITH TECHNICAL BOX		
	LEFT/RIGHT SIDE INSTALLATION			LEFT SIDE INSTALLATION		RIGHT SIDE INSTALLATION			
	3" CONNECTIONS UP TO 485 KW	5" CONNECTIONS UP TO 1310 KW	3" HYDRAULIC FLOW MANIFOLD	5" HYDRAULIC FLOW MANIFOLD	3" HYDRAULIC RETURN MANIFOLD	5" HYDRAULIC RETURN MANIFOLD	LEFT TECHNICAL BOX FOR HYDRAULIC SEPARATOR UP TO 485 KW	LEFT TECHNICAL BOX FOR HYDRAULIC SEPARATOR UP TO 1310 KW	RIGHT TECHNICAL BOX FOR HYDRAULIC SEPARATOR UP TO 485 KW
STEEL PRO POWER 114-2	•	20145255	•	20145260	•	20145172	•	20145252	•
STEEL PRO POWER 140-2	•				•				•
STEEL PRO POWER 180-2	•		•		•		•		•
STEEL PRO POWER 230-2	•		•		•		•		•
STEEL PRO POWER 270-2	•		•		•		•		•
STEEL PRO POWER 300-3	•		•		•		•		•
STEEL PRO POWER 345-3	•		•		•		•		•
STEEL PRO POWER 405-3	•		•		•		•		•
STEEL PRO POWER 460-4	•		•		•		•		•
STEEL PRO POWER 540-4			•		•		•		•
STEEL PRO POWER SYSTEM 675			•		•		•		•
STEEL PRO POWER SYSTEM 810			•		•		•		•
STEEL PRO POWER SYSTEM 945			•		•		•		•
STEEL PRO POWER SYSTEM 1080			•		•		•		•
STEEL PRO POWER SYSTEM 1215			•		•		•		•
STEEL PRO POWER SYSTEM 1350			•		•		•		•

Plate heat exchanger combinations for nominal or maximum boiler flow operation

($\Delta t = 10^\circ\text{C}$ average between primary and secondary)

DESCRIPTION	PLATE HEAT EXCHANGER $\Delta T_{ML} = 10^\circ\text{C}$	
	ITEM	REF.
		
STEEL PRO POWER 114-2	•	20140410 SP 35 - DN50/25 (25A)N
STEEL PRO POWER 140-2	•	20140411 SP 35 - DN50/31 (31A)N
STEEL PRO POWER 180-2	•	20140413 SP 35 - DN50/39 (39A)N
STEEL PRO POWER 230-2	•	20140414 SP 35 - DN50/45 (45A)N
STEEL PRO POWER 270-2	•	20140415 SP 35 - DN50/49 (49A)N
STEEL PRO POWER 300-3	•	20140416 SP 35 - DN50/57 (57A)N
STEEL PRO POWER 345-3	•	20140418 SP 35 - DN50/65 (65A)N
STEEL PRO POWER 405-3	•	20140419 SP 35 - DN50/75 (75A)N
STEEL PRO POWER 460-4	•	20014231 SP 40 - DN65/59 (59A)N
STEEL PRO POWER 540-4	•	20140426 SP 40 - DN65/75 (75A)N
STEEL PRO POWER SYSTEM 675	•	20140427 SP 40 - DN65/93 (93A)N
STEEL PRO POWER SYSTEM 810	•	20140435 SP 60 - DN100/51 (51A)N
STEEL PRO POWER SYSTEM 945	•	20140437 SP 60 - DN100/59 (59A)N
STEEL PRO POWER SYSTEM 1080	•	20140438 SP 60 - DN100/65 (65A)N
STEEL PRO POWER SYSTEM 1215	•	20140439 SP 60 - DN100/73 (73A)N
STEEL PRO POWER SYSTEM 1350	•	

Note: once the exchanger has been selected it is necessary to associate the accessories shown in the "Hydraulic accessories selection table for heat exchanger installation".

Plate heat exchanger combinations for nominal or maximum boiler flow operation

($\Delta t = 7.2^\circ\text{C}$ average between primary and secondary)

DESCRIPTION	PLATE HEAT EXCHANGER $\Delta\text{ML} = 7.2^\circ\text{C}$	
	ITEM NUMBER	TYPE
	20140412	SP 35 - DN5035 (35A)N
	20140413	SP 35 - DN5039 (39A)N
	20140415	SP 35 - DN5049 (49A)N
	20140418	SP 35 - DN5065 (65A)N
	20140419	SP 35 - DN5075 (75A)N
STEEL PRO POWER 114-2	•	SP 35 - DN5081 (81A)N
STEEL PRO POWER 140-2	•	SP 35 - DN5093 (93A)N
STEEL PRO POWER 180-2	•	SP 35 - DN50105 (105A)N
STEEL PRO POWER 230-2	•	SP 35 - DN50121 (121A)N
STEEL PRO POWER 270-2	•	SP 40 - DN6599 (99A)N
STEEL PRO POWER 300-3		SP 40 - DN65121 (121A)N
STEEL PRO POWER 345-3		SP 40 - DN65145 (145A)N
STEEL PRO POWER 405-3		SP 60 - DN10073 (73A)N
STEEL PRO POWER 460-4		SP 60 - DN10085 (85A)N
STEEL PRO POWER 540-4		SP 60 - DN10097 (97A)N
STEEL PRO POWER SYSTEM 675		
STEEL PRO POWER SYSTEM 810		
STEEL PRO POWER SYSTEM 945		
STEEL PRO POWER SYSTEM 1080		
STEEL PRO POWER SYSTEM 1215		
STEEL PRO POWER SYSTEM 1350		

Note: once the exchanger has been selected, it is necessary to associate the accessories shown in the "Hydraulic accessories selection table for heat exchanger installation".

Matching table of hydraulic accessories for heat exchanger installation in relation to the unit model

DESCRIPTION	WITHOUT TECHNICAL BOX			WITH TECHNICAL BOX		
	20146827 CONNECTION KIT FOR PLATE HEAT EXCHANGER DN80 (03")/DN50	20146828 CONNECTION KIT FOR PLATE HEAT EXCHANGER DN125 (05")/DN65	20146829 CONNECTION KIT FOR PLATE HEAT EXCHANGER DN125 (05")/DN100	LEFT SIDE INSTALLATION 20146833 LEFT TECHNICAL BOX FOR PLATE HEAT EXCHANGER UP TO 485 kW	RIGHT SIDE INSTALLATION 20146830 RIGHT TECHNICAL BOX FOR PLATE HEAT EXCHANGER UP TO 485 kW	RIGHT SIDE INSTALLATION 20146831 RIGHT TECHNICAL BOX FOR PLATE HEAT EXCHANGER UP TO 800 kW
STEEL PRO POWER 114-2	•					
STEEL PRO POWER 140-2	•					
STEEL PRO POWER 180-2	•					
STEEL PRO POWER 230-2	•					
STEEL PRO POWER 270-2	•					
STEEL PRO POWER 300-3	•					
STEEL PRO POWER 345-3	•					
STEEL PRO POWER 405-3	•					
STEEL PRO POWER 460-4	•					
STEEL PRO POWER 540-4		•		•		•
STEEL PRO POWER SYSTEM 675		•		•		•
STEEL PRO POWER SYSTEM 810		•		•		•
STEEL PRO POWER SYSTEM 945			•		•	•
STEEL PRO POWER SYSTEM 1080			•		•	•
STEEL PRO POWER SYSTEM 1215			•		•	•
STEEL PRO POWER SYSTEM 1350			•		•	•

6 Auxiliary accessories for technical box

DESCRIPTION	NOTES	CODE
AIR/FLUE MANIFOLD TECHNICAL BOX Ø160 MM L = 900 MM	(1)	20147030
AIR/FLUE MANIFOLD TECHNICAL BOX Ø300 MM L = 900 MM	(1)	20147028
AIR/FLUE MANIFOLD TECHNICAL BOX Ø160 MM L = 1800 MM	(1)	20157595
AIR/FLUE MANIFOLD TECHNICAL BOX Ø300 MM L = 1800 MM	(1)	20157598
"S" FLUE MANIFOLD TECHNICAL BOX Ø300 MM L = 1800 MM (SP60-DN100)	(1)	20157599
BANDS FOR CRANE LIFTING HANDLING		20146844
HANDLING WHEELS	(2)	20146845
INTERNAL LIGHT EMERGENCY AND SERVICE KIT		20146846

(1) To be used as indicated in the tables below.

(2) To be used during installation.

Open chamber boiler configuration

SELECTION TABLE	EXHAUST FLUE SIDE	TECHNICAL BOX SIDE
TABLE A	RIGHT	RIGHT
	LEFT	LEFT
COLLECTORS NOT NECESSARY	LEFT	RIGHT
	RIGHT	LEFT

Table A

CHAMBER TYPE	CODE AND NUMBER OF THE AIR/FUME MANIFOLD		TECHNICAL BOX FOR CIRCULATOR (ONLY "V" VERSIONS)		TECHNICAL BOX FOR HYDRAULIC SEPARATOR		TECHNICAL BOX FOR HEAT EXCHANGER	
	OPEN CHAMBER		ROOM SEALED		OPEN CHAMBER		OPEN CHAMBER	
	20147030	20147028	20147030	20147028	20147030	20147028	20157595	20157598
STEEL PRO POWER 114-2	1X		2X		1X	2X	1X	2X
STEEL PRO POWER 140-2	1X		2X		1X	2X	1X	2X
STEEL PRO POWER 180-2	1X		2X		1X	2X	1X	2X
STEEL PRO POWER 230-2	1X		2X		1X	2X	1X	2X
STEEL PRO POWER 270-2 (*)								
STEEL PRO POWER 300-3	1X		2X		1X	2X	1X	2X
STEEL PRO POWER 345-3	1X		2X		1X	2X	1X	2X
STEEL PRO POWER 405-3 (*)								
STEEL PRO POWER 460-4	1X		2X		1X	2X	1X	2X
STEEL PRO POWER 540-4		1X		2X	1X	2X	1X	2X
STEEL PRO POWER SYSTEM 675		1X		2X	1X	2X	1X	2X
STEEL PRO POWER SYSTEM 810		1X		2X	1X	2X	1X	2X
STEEL PRO POWER SYSTEM 945		1X		2X	1X	2X		(**)
STEEL PRO POWER SYSTEM 1080		1X		2X	1X	2X		(**)
STEEL PRO POWER SYSTEM 1215		1X		2X	1X	2X		(**)
STEEL PRO POWER SYSTEM 1350		1X		2X	1X	2X		(**)

NOTE: to be used only if the fume outlet side is the same as the hydraulic outlet side.

(*) Models not predisposed for the exhaust fumes from the technical box side, but only from the boiler side.

(**) In case of a technical box with plate heat exchanger and sealed installation, the air intake must take place on the boiler side and not on the technical box side. In this case also for the pump technical box, if present, is necessary to adopt only one code 20147028.

Table A

CHAMBER TYPE CODE AND NUMBER OF THE AIR/FUME MANIFOLD	TECHNICAL BOX FOR CIRCULATOR (ONLY "V" VERSIONS)		TECHNICAL BOX FOR HYDRAULIC SEPARATOR		TECHNICAL BOX FOR HEAT EXCHANGER	
	OPEN CHAMBER		ROOM SEALED		OPEN CHAMBER	
	20147030	20147028	20147030	20147028	20147030	20147028
STEEL PRO POWER 114-2	1X		1X		1X	
STEEL PRO POWER 140-2	1X		1X		1X	
STEEL PRO POWER 180-2	1X		1X		1X	
STEEL PRO POWER 230-2	1X		1X		1X	
STEEL PRO POWER 270-2 (*)						
STEEL PRO POWER 300-3	1X		1X		1X	
STEEL PRO POWER 345-3	1X		1X		1X	
STEEL PRO POWER 405-3 (*)						
STEEL PRO POWER 460-4	1X		1X		1X	
STEEL PRO POWER 540-4		1X	1X		1X	
STEEL PRO POWER SYSTEM 675		1X	1X		1X	
STEEL PRO POWER SYSTEM 810		1X	1X		1X	
STEEL PRO POWER SYSTEM 945		1X	1X		1X	
STEEL PRO POWER SYSTEM 1080		1X	1X		1X	
STEEL PRO POWER SYSTEM 1215		1X	1X		1X	
STEEL PRO POWER SYSTEM 1350		1X	1X		1X	

7 Auxiliary accessories for outdoor installation

DESCRIPTION	CODE
KIT IPX5D DISPLAY COVERAGE	20146843
KIT IPX5D UPPER COVERAGE FOR OUTDOOR INSTALLATION L = 900 MM	20146841
KIT IPX5D UPPER COVERAGE FOR OUTDOOR INSTALLATION L = 1800 MM	20146842
OUTDOOR INSULATION KIT FOR 3" BLIND FLANGES	20146953
OUTDOOR INSULATION KIT FOR 5" BLIND FLANGES	20146954

NOTE: to be used only in the case of outdoor installation.

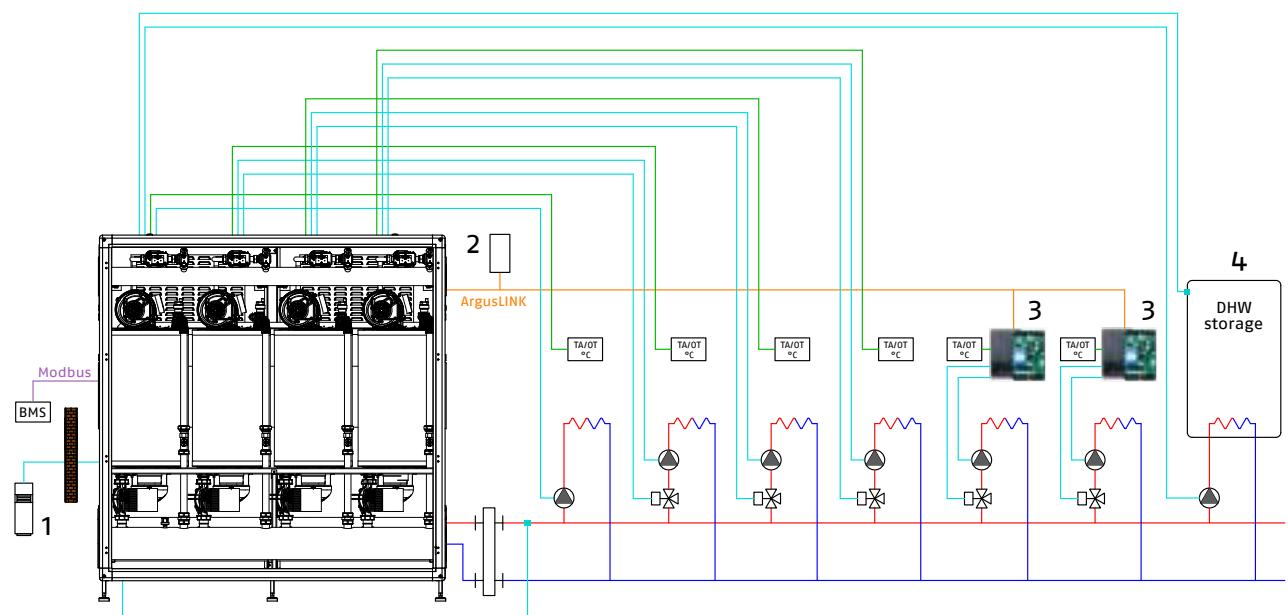
Matching table of box + display covers selection table for outdoor installation in relation to the "P" type unit model

DESCRIPTION	CONFIGURATION WITH TECHNICAL BOX FOR HYDRAULIC SEPARATOR					CONFIGURATION WITH TECHNICAL BOX FOR PLATE HEAT EXCHANGER				
	20146841	20146842	20146843	20146953	20146954	20146841	20146842	20146843	20146953	20146954
STEEL PRO POWER 114-2 P	2X		1X	1X		1X	1X	1X	1X	
STEEL PRO POWER 140-2 P	2X		1X	1X		1X	1X	1X	1X	
STEEL PRO POWER 180-2 P	2X		1X	1X		1X	1X	1X	1X	
STEEL PRO POWER 230-2 P	2X		1X	1X		1X	1X	1X	1X	
STEEL PRO POWER 270-2 P	2X		1X		1X				1X	
STEEL PRO POWER 300-3 P	1X	1X	1X	1X		2X	1X	1X		
STEEL PRO POWER 345-3 P	1X	1X	1X	1X		2X	1X	1X		
STEEL PRO POWER 405-3 P	1X	1X	1X		1X	2X	1X			1X
STEEL PRO POWER 460-4 P	1X	1X	1X	1X		2X	1X	1X		
STEEL PRO POWER 540-4 P	1X	1X	1X		1X	2X	1X			1X
STEEL PRO POWER SYSTEM 675	2X	1X	2X		1X	1X	2X	2X		1X
STEEL PRO POWER SYSTEM 810	1X	2X	2X		1X	3X	2X			1X
STEEL PRO POWER SYSTEM 945	1X	2X	2X		1X	3X	2X			1X
STEEL PRO POWER SYSTEM 1080	1X	2X	2X		1X	3X	2X			1X
STEEL PRO POWER SYSTEM 1215	2X	2X	3X		1X	1X	3X	3X		1X
STEEL PRO POWER SYSTEM 1350	2X	2X	3X		1X	1X	3X	3X		1X

DESCRIPTION	CONFIGURATION WITH TECHNICAL BOX FOR HYDRAULIC SEPARATOR					CONFIGURATION WITH TECHNICAL BOX FOR PLATE HEAT EXCHANGER				
	20146841	20146842	20146843	20146953	20146954	20146841	20146842	20146843	20146953	20146954
STEEL PRO POWER 114-2 V	3X		1X	1X		2X	1X	1X	1X	
STEEL PRO POWER 140-2 V	3X		1X	1X		2X	1X	1X	1X	
STEEL PRO POWER 180-2 V	3X		1X	1X		2X	1X	1X	1X	
STEEL PRO POWER 230-2 V	3X		1X	1X		2X	1X	1X	1X	
STEEL PRO POWER 270-2 V	3X		1X		1X	2X	1X	1X		1X
STEEL PRO POWER 300-3 V	2X	1X	1X	1X		1X	2X	1X	1X	
STEEL PRO POWER 345-3 V	2X	1X	1X	1X		1X	2X	1X	1X	
STEEL PRO POWER 405-3 V	2X	1X	1X		1X	1X	2X	1X		1X
STEEL PRO POWER 460-4 V	2X	1X	1X	1X		1X	2X	1X	1X	
STEEL PRO POWER 540-4 V	2X	1X	1X		1X	1X	2X	1X		1X
STEEL PRO POWER SYSTEM 675	3X	1X	2X		1X	2X	2X			1X
STEEL PRO POWER SYSTEM 810	2X	2X	2X		1X	1X	3X	2X		1X
STEEL PRO POWER SYSTEM 945	2X	2X	2X		1X	1X	3X	2X		1X
STEEL PRO POWER SYSTEM 1080	2X	2X	2X		1X	1X	3X	2X		1X
STEEL PRO POWER SYSTEM 1215	3X	2X	3X		1X	2X	3X	3X		1X
STEEL PRO POWER SYSTEM 1350	3X	2X	3X		1X	2X	3X	3X		1X

8 Secondary circuit management accessories

DESCRIPTION	CODE
EXTERNAL PROBE	20132778
PROBE FOR DHW CYLINDER/SECONDARY CIRCUIT	4030036
ELECTRONIC MANAGEMENT KIT FOR SINGLE DIRECT OR ADDITIONAL MIXED ZONE (MAX 16)	20130811



1. External probe
2. Interface kit for PC
3. Electronic management kit for single direct or additional mixed zone
4. Cylinder probe

9 Treatment systems for condensate neutralisation

DESCRIPTION	NOTES	CODE
CONDENSATE NEUTRALISER N2 UP TO 450 KW		4031810
CONDENSATE NEUTRALISER N3 FROM 450 TO 1500 KW		4031812
CONDENSATE NEUTRALISER HN2 UP TO 270 KW	(1)	4031811
CONDENSATE NEUTRALISER HN3 FROM 270 TO 750 KW	(1)	4031813

(1) Equipped with condensate pump.

10 Complements for maintenance and service

DESCRIPTION	CODE
INTERFACE KIT FOR PC	20132407



Condexa Pro AI 1000 Box
Fully modulating condensing boiler

Pre-built, fully tested plug and play cabinet solution. Standalone unit featuring built-in hydronic header & multi-zone kit - for internal or external applications.



5 Year Warranty



Up To 125kW



Pre-Built Unit



Riello
Combustion

- Single heat exchanger (124.9kW @ 50/30°C)
- Built-in controls
- Compact dimensions
- 4 Star class A efficiency[†]
- Built-in hydraulic header, manifold, safety devices and flue collector
- LPG conversion kit included as standard
- Condenses even in high temperature systems
- Large heat exchanger surface area
 - copper & stainless steel
- Factory tested

CONDEXA PRO BOX AI 1000 SERIES - FOR INTERNAL AND EXTERNAL INSTALLATION					
CODE	MODEL DESCRIPTION	GAS	DIMENSIONS mm (H X W X D)	INPUT kW (HHV)	INPUT kW (NHHV)
WITH SHUNT PUMPS					
20067835	CONDEXA PRO AI 1000 INT	NG / LPG	1590 X 898 X 750	128	115
20067836	CONDEXA PRO AI 1000 EXT	NG / LPG	1640 X 898 X 750	128	115



Monitor and control – No need for a Building Management System*

*In some cases.

[†]According to EEC 92/42

SPECIFICATIONS		CONDEXA PRO BOX 1001 P INT/EXT	
BOILER TYPE (EN 297)		B23, B53, B53P, C13, C33, C53, C63	
CE HOMOLOGATION NUMBER		0085CL0333	
DIMENSIONS AND CONNECTIONS			
BOILER DIMENSIONS INT MODEL (H X W X D)	mm	1590 X 898 X 750	
BOILER DIMENSIONS EXT MODEL (H X W X D)	mm	1640 X 898 X 750	
DRY WEIGHT	kg	140	
WATER CONTENT	l	27	
WATER MANIFOLD	in	2"	
GAS MANIFOLD	in	1"	
FLUE MANIFOLD	mm	110	
CONDENSATE DRAIN	mm	50	
POWER AND EFFICIENCY			
HEAT INPUT REF. HHV (MIN - MAX)	kW	25.5 - 127.8	
HEAT INPUT REF. NHV (MIN - MAX)	kW	23 - 115	
USEFUL HEAT OUTPUT (80/60°C)	kW	113.4	
USEFUL HEAT OUTPUT (50/30°C)	kW	124.9	
USEFUL HEAT OUTPUT (60/40°C)	kW	119.8	
CONDENSATE PRODUCTION PER HOUR 100% (50/30°C) - GAS G20	l	17.2	
USEFUL EFFICIENCY REF NHV (80/60°C)	%	98.6	
USEFUL EFFICIENCY REF NHV (50/30°C)	%	108.6	
USEFUL EFFICIENCY REF NHV TM=50°C (60/40°C)	%	104.2	
USEFUL EFFICIENCY AT 30% REF NHV (80/60°C)	%	99.2	
USEFUL EFFICIENCY AT 30% REF NHV (50/30°C)	%	109	
USEFUL EFFICIENCY AT 30% REF NHV TM=50°C (60/40°C)	%	105	
LOSSES THROUGH THE CASING (TM=70°C)	%	0.1	
EFFICIENCY ACCORDING TO EUROPEAN DIRECTIVE EEC 92/42		4 STAR	
GAS RATES			
GAS CAPACITY (MIN - MAX)	G20	Sm3/h	2.4 - 11.8
GAS CAPACITY (MIN - MAX)	G30	kg/h	1.7 - 8.4
GAS CAPACITY (MIN - MAX)	G31	kg/h	1.6 - 8.2
CONSUMPTION AND ELECTRICAL POWER			
GAS CATEGORY		II2H3+	
CONSUMPTION METHANE (G20)	m³/h	2.4 / 12.2	
POWER SUPPLY		230V - 50Hz	
MAXIMUM ELECTRICAL POWER	kW	0.25	
COMBUSTION DATA			
MAX EXHAUST RESIDUAL MANOMETRIC HEAD FOR EACH UNIT	Pa	800	
CARBON MONOXIDE CO (0% DI O2) (MIN - MAX)	mg/kW	23-130	
NITROGEN OXIDE NO _x CLASS (REF UNI-EN 297)		5	
HEATING CIRCUIT			
HEATING TEMPERATURE REGULATION (MIN/MAX)	°C	20 / 80	
WATER OPERATING PRESSURE (MAX/MIN)	bar(k	6 / 0.5 (500 / 50)	
MAX MANOMETRIC HEAD AT NOMINAL FLOW OF 5'500 L/H	Pa[m c a]	1500 [1.5]	

Flue options

Indoor flue options: Condexa Pro

INDOOR FLUE OPTIONS - FLUE SYSTEMS Ø160		
CODE	DESCRIPTION	DIAGRAM
29450245	250mm EXTENSION Ø160 (PPt)	
29450246	500mm EXTENSION Ø160 (PPt)	
29450247	1000mm EXTENSION Ø160 (PPt)	
29450248	2000mm EXTENSION Ø160 (PPt)	
29450257	INSPECTION T EXTENSION PIPE Ø160 (PPt)	
29450250	CONDENSATE DRAIN KIT Ø160 WITH END CAP	
29450249	CONDENSATE EXTENSION DRAIN PIPE Ø160	
29450251	15° BEND KIT Ø160	
29450252	30° BEND KIT Ø160 (PPt)	
29450253	45° BEND KIT Ø160 (PPt)	
29450254	87° BEND KIT Ø160 (PPt)	
29450256	INSPECTION BEND Ø160	
20032653	CHIMNEY KIT Ø160	
20060953	CHIMNEY COVER Ø160 WITH TERMINAL PIPE (INOX / PP UV BLACK)	
29450255	CHIMNEY SUPPORT WITH BEND Ø160 PPt, EPDM, MET	

INDOOR FLUE OPTIONS - FLUE SYSTEMS Ø160		
CODE	DESCRIPTION	DIAGRAM
20062448	T-CONNECTION Ø160 WITH CONDENSATE DRAIN	
20063419	T-CONNECTION Ø160 WITH CONDENSATE DRAIN AND CHIMNEY SUPPORT	
29450264	ECCENTRIC ADAPTER Ø160 - 125	
29450260	CONCENTRIC ADAPTER Ø160 F - 125 M	
29450345	WALL FEEDER Ø160/225 (STAINLESS STEEL)	
20062512	WALL COVER Ø160 (STAINLESS STEEL)	
29450266	OUTLET GRILL Ø160 (STAINLESS STEEL)	
20060948	PIPE SPACERS KIT Ø160 (PLASTIC) 5 PCS	
20062444	PIPE SPACERS KIT Ø160 (STAINLESS STEEL)	
20062510	TOOL Ø160	
29450239	SIPHON TRAP (PPt)	

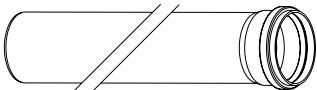
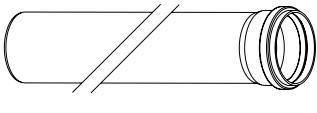
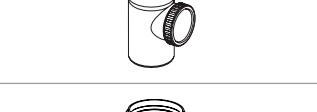
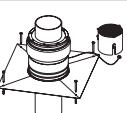
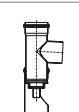
INDOOR FLUE OPTIONS - FLUE SYSTEMS Ø200

CODE	DESCRIPTION	DIAGRAM
29450270	250mm EXTENSION Ø200	
29450271	500mm EXTENSION Ø200	
29450272	1000mm EXTENSION Ø200	
29450273	2000mm EXTENSION Ø200	
29450282	INSPECTION T EXTENSION PIPE Ø200	
29450275	CONDENSATE DRAIN KIT Ø200 WITH END CAP	
29450274	CONDENSATE EXTENSION DRAIN PIPE Ø200	
29450276	15° BEND KIT Ø200	
29450277	30° BEND KIT Ø200	
29450278	45° BEND KIT Ø200	
29450279	87° BEND KIT Ø200	
29450281	INSPECTION BEND Ø200	
29450285	CHIMNEY COVER Ø200 WITH TERMINAL PIPE (INOX / PP UV BLACK)	
29450280	CHIMNEY SUPPORT WITH BEND Ø200 PPTL, EPDM, MET	
20062550	T-CONNECTION Ø200 WITH CONDENSATE DRAIN	

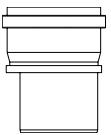
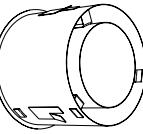
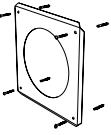
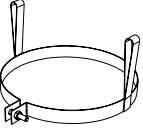
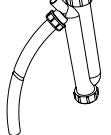
INDOOR FLUE OPTIONS - FLUE SYSTEMS Ø200

CODE	DESCRIPTION	DIAGRAM
20063420	T-CONNECTION Ø200 WITH CONDENSATE DRAIN AND CHIMNEY SUPPORT	
29450263	ECCENTRIC ADAPTER Ø200 - 160	
29450261	CONCENTRIC ADAPTER Ø200 - 160	
29450359	WALL FEEDER Ø200 (STAINLESS STEEL)	
20062574	WALL COVER Ø200 (STAINLESS STEEL)	
29450284	OUTLET GRILL Ø200 (STAINLESS STEEL)	
29450287	PIPE SPACERS KIT Ø200 (STAINLESS STEEL)	
20062563	TOOL Ø200	
29450239	SIPHON TRAP (PPTL)	

INDOOR FLUE OPTIONS - FLUE SYSTEMS Ø250

CODE	DESCRIPTION	DIAGRAM
29450389	250mm EXTENSION Ø250	
29450390	500mm EXTENSION Ø250	
29450391	1000mm EXTENSION Ø250	
29450392	2000mm EXTENSION Ø250	
29450401	INSPECTION T EXTENSION PIPE Ø250	
29450394	CONDENSATE EXTENSION DRAIN PIPE Ø250	
29450396	30° BEND KIT Ø250	
29450397	45° BEND KIT Ø250	
29450398	87° BEND KIT Ø250	
29450400	INSPECTION BEND 87° Ø250	
20450411	CHIMNEY COVER Ø250 WITH TERMINAL PIPE (INOX / PP UV BLACK)	
29450399	CHIMNEY SUPPORT WITH BEND Ø250 PPTI, EPDM, MET	
20062601	T-CONNECTION Ø250 WITH CONDENSATE DRAIN	
20063421	T-CONNECTION Ø250 WITH CONDENSATE DRAIN AND CHIMNEY SUPPORT	

INDOOR FLUE OPTIONS - FLUE SYSTEMS Ø250

CODE	DESCRIPTION	DIAGRAM
29450419	ECCENTRIC ADAPTER Ø200M - 250 F	
29450408	CONCENTRIC ADAPTER Ø200M - 250 F	
29450373	WALL FEEDER Ø250 (STAINLESS STEEL)	
20062635	WALL COVER Ø250 (STAINLESS STEEL)	
29450410	OUTLET GRILL Ø250 (STAINLESS STEEL)	
29450412	PIPE SPACERS KIT Ø250 (STAINLESS STEEL)	
20062604	TOOL Ø250	
29450239	SIPHON TRAP (PPTI)	

INDOOR FLUE OPTIONS - FLUE SYSTEMS Ø300

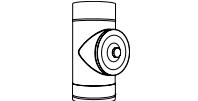
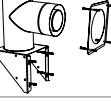
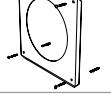
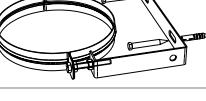
CODE	DESCRIPTION	DIAGRAM
20158581	ECCENTRIC ADAPTER Ø300-160 F	
20158580	CONCENTRIC ADAPTER Ø300-250 F	
20145293	45° BEND KIT Ø300 (PPtI)	
20145294	87° BEND KIT Ø300 (PPtI)	
20158567	INSPECTION BEND 87° Ø300 (PPtI)	
20145292	500mm EXTENSION Ø300	
20145295	1000mm EXTENSION Ø300	
20145296	2000mm EXTENSION Ø300	

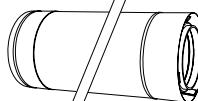
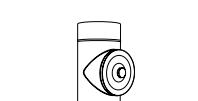
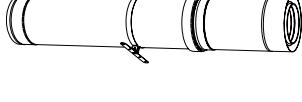
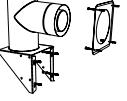
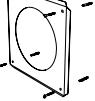
INDOOR FLUE OPTIONS - FLUE SYSTEMS Ø300

CODE	DESCRIPTION	DIAGRAM
20145290	INSPECTION T EXTENSION PIPE Ø300 (PPtI)	
20158569	CHIMNEY SUPPORT WITH BEND Ø300 (PPtI)	
20158566	CONDENSATE EXTENSION DRAIN PIPE Ø300 (PPtI)	
20158572	T-CONNECTION Ø300 WITH CONDENSATE DRAIN AND CHIMNEY SUPPORT	
20158571	T-CONNECTION Ø300 WITH CONDENSATE DRAIN	

Flue options

Outdoor flue options: Condexa Pro & Steel Pro Power

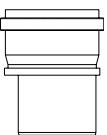
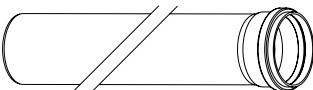
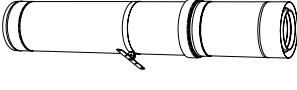
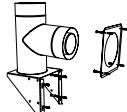
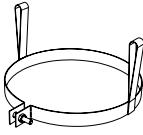
OUTDOOR FLUE OPTIONS - FLUE SYSTEMS Ø160 (PP) - Ø225 (STAINLESS STEEL)		
CODE	DESCRIPTION	DIAGRAM
29450331	500mm EXTENSION Ø160-225 (PP-INOX)	
29450332	1000mm EXTENSION Ø160-225 (PP-INOX)	
29450333	INSPECTION PIPE Ø160-225 (PP-INOX)	
29450334	15° BEND KIT Ø160-225 (PP-INOX)	
29450335	30° BEND KIT Ø160-225 (PP-INOX)	
29450336	45° BEND KIT Ø160-225 (PP-INOX)	
29450337	87° BEND KIT Ø160-225 (PP-INOX)	
29450342	1000mm PIPE FOR TERMINAL Ø160-225 (PP-INOX)	
29450340	TERMINAL Ø160-225 (PP-INOX)	
29450338	CHIMNEY SUPPORT KIT Ø160-225 PPTI, EPDM, MET	
29450345	WALL FEEDER Ø160-225 (INOX)	
29450330	WALL COVER Ø225 (PP-INOX)	
29450266	OUTLET GRILL Ø160 (INOX)	
29450339	EXTERNAL CHIMNEY BRACKET Ø225 (INOX)	

OUTDOOR FLUE OPTIONS - FLUE SYSTEMS Ø200 (PP) - Ø300 (STAINLESS STEEL)		
CODE	DESCRIPTION	DIAGRAM
29450347	500mm EXTENSION Ø200-300 (PP-INOX)	
29450348	1000mm EXTENSION Ø200-300 (PP-INOX)	
29450349	INSPECTION PIPE Ø200-300 (PP-INOX)	
29450350	15° BEND KIT Ø200-300 (PP-INOX)	
29450351	30° BEND KIT Ø200-300 (PP-INOX)	
29450352	45° BEND KIT Ø200-300 (PP-INOX)	
29450353	87° BEND KIT Ø200-300 (PP-INOX)	
29450356	1000mm PIPE FOR TERMINAL Ø200-300 (PP-INOX)	
29450335	TERMINAL Ø200-300 (PP-INOX)	
29450357	CHIMNEY SUPPORT KIT Ø200-300 PPTI, EPDM, MET	
29450346	WALL COVER Ø300 (INOX)	

OUTDOOR FLUE OPTIONS - FLUE SYSTEMS Ø250 (PP) - Ø350 (STAINLESS STEEL)

CODE	DESCRIPTION	DIAGRAM
29450361	500mm EXTENSION Ø250 - 350 (PP-INOX)	
29450362	1000mm EXTENSION Ø250 - 350 (PP-INOX)	
29450371	INSPECTION PIPE Ø250 - 350 (PP-INOX)	
29450363	45° BEND KIT Ø250 - 350 (PP-INOX)	
29450365	87° BEND KIT Ø250 - 350 (PP-INOX)	
29450367	1000mm PIPE FOR TERMINAL Ø250 - 350 (PP-INOX)	
29450368	TERMINAL Ø250 - 350 (PP-INOX)	
29450370	CHIMNEY SUPPORT KIT Ø250 - 350 PPtI, EPDM, MET	
29450360	WALL COVER Ø350 (INOX)	

OUTDOOR FLUE OPTIONS - FLUE SYSTEMS Ø300 (PP) - Ø350MM (STAINLESS STEEL)

CODE	DESCRIPTION	DIAGRAM
20158598	ECCENTRIC ADAPTER Ø300/350 - Ø250/300	
20158600	45° BEND KIT Ø300-350 (PP-INOX)	
20158601	500mm EXTENSION Ø300-350 (PP-INOX)	
20158602	1000mm EXTENSION Ø300-350 (PP-INOX)	
20158603	INSPECTION PIPE Ø300-350 (PP-INOX)	
20158604	1000mm PIPE FOR TERMINAL Ø300-350 (PP-INOX)	
20158605	TERMINAL Ø300-350 (PP-INOX)	
20158606	CHIMNEY SUPPORT KIT Ø300-350 (PP-INOX)	
20158594	CONDENSATE EXTENSION DRAIN PIPE Ø300-350 (PP-INOX)	
20158577	TOOL Ø300	

Flue & accessory notes

Commercial cylinders & buffer vessels

Immersion heaters

Compatible with cylinders from 1500 to 3000 litres and buffer vessels STOR and STOR H.

IMMERSION HEATERS				
CODE	MODEL	OUTPUT	SIZE	WARRANTY
4383270	SINGLE-PHASE IMMERSION KIT	1.5kW	1.5"	2 YEARS
4383271	SINGLE-PHASE IMMERSION KIT	2.2kW	1.5"	2 YEARS
4383272	SINGLE-PHASE IMMERSION KIT	3.0kW	1.5"	2 YEARS
20079908	SINGLE-PHASE IMMERSION KIT	6.0kW	1.5"	2 YEARS
20020707	THREE-PHASE IMMERSION KIT	3.8kW	1.5"	2 YEARS

IDRA N DS AND IDRA DS N

- Maximum working temperature 99°C
- Twin coil heat exchanger
- Double magnesium anode included

IDRA DS AND IDRA N DS - TWIN COIL CYLINDERS				
CODE	MODEL	DIMENSIONS (H X Ø)	CAPACITY	WARRANTY
20117883	IDRA DS 430 N	1630 X 755mm	433 LITRES	2 YEARS
20117884	IDRA DS 550 N	1980 X 755mm	546 LITRES	2 YEARS
20132278	IDRA DS 750 N	1870 X 1000mm	716 LITRES	2 YEARS
20132881	IDRA DS 1000 N	2195 X 1000mm	875 LITRES	2 YEARS
20136241	IDRA N DS 1500	2120 X 1200mm	1449 LITRES	2 YEARS
20136242	IDRA N DS 2000	2405 X 1300mm	2054 LITRES	2 YEARS



IDRA N DS IDRA DS N

IMMERSION HEATERS AND ACCESSORIES IDRA DS N			
CODE	DESCRIPTION	CODE	DESCRIPTION
20119911	1.5kW SINGLE-PHASE FLANGED IMMERSION KIT	20055206	1/2" ELECTRICAL ANODE KIT
20119912	2.2kW SINGLE-PHASE FLANGED IMMERSION KIT	20123850	CYLINDER THERMOMETER KIT
20119913	3kW SINGLE-PHASE FLANGED IMMERSION KIT	20123849	BEND KIT FOR RECIRCULATION
20119914	3.8kW THREE-PHASE FLANGED IMMERSION KIT	20123851	BEND KIT FOR ELECTRICAL ANODE (RECIRCULATION ONLY)
20123853	ELECTRICAL ANODE KIT WITHOUT ELECTRICAL PLUG		

IDRA PLUS DS

- Maximum working temperature 99°C
- Three flanges
- Double magnesium anode included

IDRA PLUS DS CYLINDER AND ACCESSORIES				
CODE	MODEL	DIMENSIONS (H X Ø)	CAPACITY	WARRANTY
20136280	IDRA PLUS DS 1000	2205 X 990mm	955 LITRES	2 YEARS
20136282	IDRA PLUS DS 1500	2470 X 1300mm	1990 LITRES	2 YEARS
20136285	IDRA PLUS DS 2000	2185 X 1200mm	1430 LITRES	2 YEARS
20052796	IDRA PLUS DS 3000	2730 X 1450mm	2959 LITRES	2 YEARS
CODE	DESCRIPTION	DIMENSIONS (L X Ø)	WATER CONTENT	WARRANTY
20055205	TIN COATED COPPER COIL KIT 2.63m ² - 53kW	580 X 200mm	1.74 LITRES	2 YEARS
4838089	TIN COATED COPPER COIL KIT 4.54m ² - 91kW	750 X 200mm	3.56 LITRES	2 YEARS
4838087	TIN COATED COPPER COIL KIT 6.34m ² - 127kW	980 X 200mm	5.1 LITRES	2 YEARS



IDRA PLUS DS

IDRA MS

- Single coil heat exchanger
- Sacrificial magnesium anode included
- Enameled (double layer) steel solar cylinder

IDRA MS SINGLE COIL CYLINDER

CODE	MODEL	DIMENSIONS (H X Ø)	CAPACITY	WARRANTY
20015340	IDRA MS 550	1980 X 755mm	556 LITRES	2 YEARS



IDRA MS

HYBRID STOR

- Triple coil buffer vessel
- Ideal for heating and DHW production
- DHW coil in AISI 316L stainless steel

HYBRID STOR TRIPLE COIL BUFFER VESSELS

CODE	MODEL	DIMENSIONS (H X Ø)	CAPACITY	WARRANTY
20051862	HYBRID STOR 430	1650 X 810mm	407 LITRES	2 YEARS
20051863	HYBRID STOR 4550	2000 X 810mm	520 LITRES	2 YEARS
20051864	HYBRID STOR 750	1855 X 1000mm	732 LITRES	2 YEARS
20051866	HYBRID STOR 1000	2180 X 1000mm	898 LITRES	2 YEARS



HYBRID STOR

STOR M AND STOR

- Designed for forced circulation solar systems to supplement the heating system
- Not suitable for DHW storage. Production of DHW through an additional heat exchanger module. (Ask Vokèra Pre Sales support team for advice)
- Eight fittings for the use of different types of heat generators optimising stratification
- STOR M models are supplied with heat exchange solar coil and insulation as standard
- Additional heat exchange solar coils can be installed via a standard flange on STOR models
- Insulation is delivered separately from the STOR models

STOR M AND STOR BUFFER VESSELS

CODE	MODEL	DIMENSIONS (H X Ø)	CAPACITY	WARRANTY
20055207	STOR 300M WITH COIL	1635 X 700mm	283 LITRES	2 YEARS
20055208	STOR 500M WITH COIL	1775 X 850mm	489 LITRES	2 YEARS
20136264	STOR 1000M WITH COIL	2190 X 990mm	1000 LITRES	2 YEARS
20136265	STOR 1500M WITH COIL	2165 X 1200mm	1449 LITRES	2 YEARS
20136258	STOR 2000	2480 X 1300mm	2054 LITRES	2 YEARS
20001409	STOR 3000	2720 X 1450mm	2960 LITRES	2 YEARS
20001410	STOR 5000	2870 X 1800mm	5055 LITRES	2 YEARS
CODE	DESCRIPTION	DIMENSIONS (L X Ø)	WATER CONTENT	WARRANTY
20055205*	TIN COATED COPPER COIL KIT 2.63m ² - 53kW	580 X 200mm	1.74 LITRES	2 YEARS
4838089*	TIN COATED COPPER COIL KIT 4.54m ² - 91kW	750 X 200mm	3.56 LITRES	2 YEARS
4838087*	TIN COATED COPPER COIL KIT 6.34m ² - 127kW	980 X 200mm	5.1 LITRES	2 YEARS



STOR M and STOR

STOR H

- Ideal for use with heat pumps, solar thermal and biomass boilers
- Integrates into systems where a Vokèra boiler works as the auxiliary heat generator
- Possibility to integrate an immersion heater

STOR H HOT/COLD WATER STORAGE CYLINDER

CODE	MODEL	DIMENSIONS (H X Ø)	CAPACITY	WARRANTY
20056180	STOR H 200	1395 X 550mm	203 LITRES	2 YEARS
20056181	STOR H 300	1560 X 600mm	283 LITRES	2 YEARS
20056182	STOR H 400	1540 X 700mm	399 LITRES	2 YEARS
20056183	STOR H 500	1840 X 700mm	483 LITRES	2 YEARS



STOR H

*Only to be used with STOR 2000, 3000 and 5000 buffer vessels.

HEAT INTERFACE UNIT RANGE

The heat interface unit range, the HIU Pro, is an integral part of our full-plant offering. Our range covers both Indirect HIUs which separates a dwelling, for example, from a primary central plant circuit, as well as, Direct HIUs that utilise the water from the system.



HIU Pro i20N & i30N

Indirect range - insulated enclosure

- Two plate heat exchangers; one separating the system, the second for DHW production
- DHW controlled by thermostatic and 2-way proportional valves which ensure instantaneous DHW at the right temperature avoiding waste and delay
- Easy installation, ready to be connected
- Suitable for apartments, houses and centralised heating systems



HIU Pro i20P & i30P

Indirect range

- Two plate heat exchangers; one separating the system, the second for DHW production
- DHW controlled by thermostatic and 2-way proportional valves which ensure instantaneous DHW at the right temperature avoiding waste and delay
- Easy installation, ready to be connected
- Suitable for apartments, houses and centralised heating systems



HIU Pro d20P & d30P

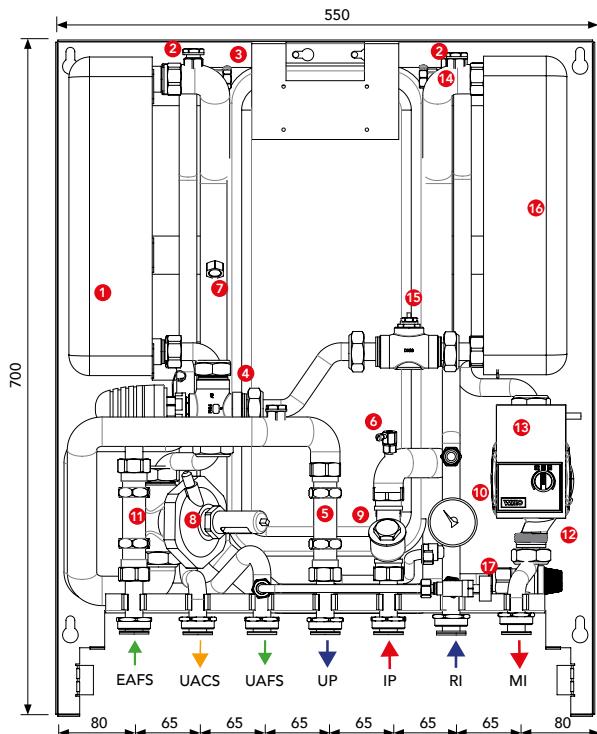
Direct range

- One plate heat exchanger for instantaneous DHW production
- High heat exchanger performance
- Minimal risk of limescale
- Easy installation, ready to be connected
- Suitable for apartments, houses and centralised heating systems

Accessories for full heating and cold water energy metering; both MBUS and Ultrasonic (additional, see accessories on page 82).
Energy Data Loggers and Energy Data Software available.

Dimensions

HIU Pro i20P/N & i30P/N

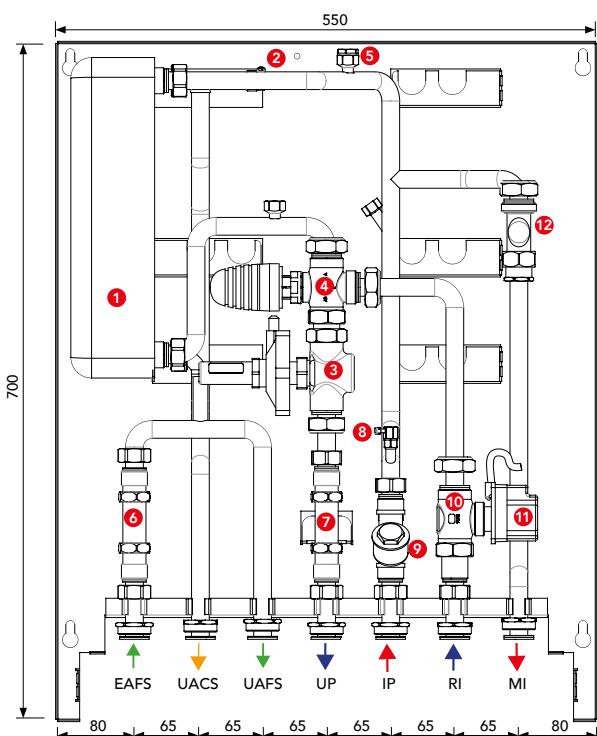


1. Brazed plate iron steel heat exchanger (DHW circuit)
2. Manual air vent valve
3. Sensor pocket for thermostatic valve primary circuit (DHW side)
4. Thermostatic valve primary circuit (DHW side)
5. Fitting piece for heat meter ¾" M-110mm
6. Sensor pocket for heat meter
7. Sensor pocket for differential valve
8. Differential valve (heating circuit pressure stabiliser)
9. Filter
10. Manometer
11. Fitting piece for cold water meter ¾" M-110mm
12. Safety valve heating circuit (3 bar)
13. High efficiency pump type Wilo YONOS PARA 15/6
14. Sensor pocket for thermostatic valve primary side (heating side)
15. 2-way valve primary side (heating side)
16. Brazed plate iron steel heat exchanger (heating circuit)*
17. Loading tap

*Plate heat exchangers insulated on i20P & i30P

UP	Primary circuit return
IP	Primary circuit supply
UACS	Domestic hot water
UAFC	Domestic cold water return
EAFC	Domestic cold water supply
MI	Heating supply
RI	Heating return
UAFS	Domestic cold water return

HIU Pro d20P & d30P

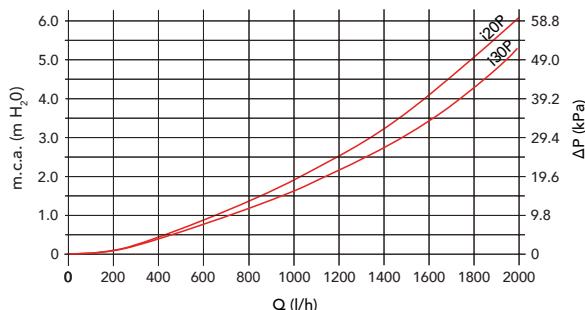


1. Brazed plate iron steel heat exchanger
2. Sensor pocket for thermostatic valve (DHW exit)
3. Differential valve 5÷30 KPa
4. 3-way proportional thermostatic valve
5. Manual air vent valve
6. Fitting piece for cold water meter ¾" M-110mm
7. Fitting piece for heat meter ¾" M-110mm (heat meter available in the following versions: single-jet with M-Bus, radio and ultrasonic)
8. Sensor pocket for heat meter
9. Filter
10. 2-way ON/OFF valve
11. Electric actuator 230V or 24V (supplied separately)
12. Lockshield valves

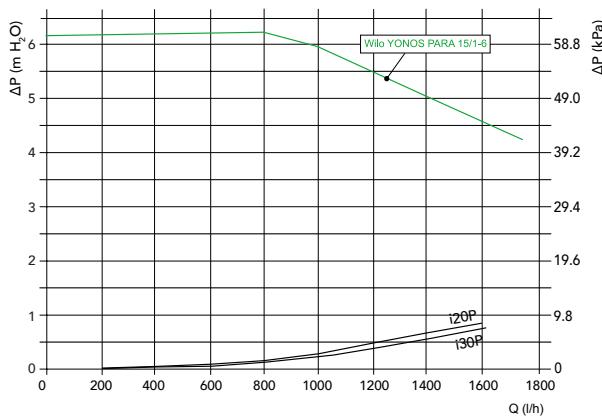
UP	Primary circuit return
IP	Primary circuit supply
UACS	Domestic hot water
UAFC	Domestic cold water return
EAFC	Domestic cold water supply
MI	Heating supply
RI	Heating return
UAFS	Domestic cold water return

Technical data domestic water (HIU Pro i30P/N) - 0.708 m²

PRIMARY CIRCUIT FLOW RATE	PRIMARY CIRCUIT SUPPLY TEMP	$\Delta T 35^\circ\text{C}(10/45^\circ\text{C})$		$\Delta T 40^\circ\text{C}(10/50^\circ\text{C})$		$\Delta T 45^\circ\text{C}(10/55^\circ\text{C})$	
		HEAT EXCHANGER MAX CAPACITY	FLOWRATE	HEAT EXCHANGER MAX CAPACITY	FLOWRATE	HEAT EXCHANGER MAX CAPACITY	FLOWRATE
M3/H	°C	kW	L/MIN	kW	L/MIN	kW	L/MIN
0.8	55	26.1	10.7	20.2	7.4	-	-
1	55	31.1	12.7	24.2	8.7	-	-
1.2	55	35.7	14.6	27.5	9.9	-	-
1.4	55	40.3	16.5	30.5	11.0	-	-
0.8	60	32.2	13.2	28.2	10.2	22.3	7.1
1	60	38.8	15.9	33.5	12.1	26.4	8.4
1.2	60	44.9	18.4	38.5	13.6	30.1	9.6
1.4	60	50.4	20.7	43.2	15.6	33.6	10.7
0.8	65	39.1	16.0	34.6	12.5	30.5	9.7
1	65	46.4	19.0	41.5	14.9	36.5	11.6
1.2	65	53.5	21.9	47.9	17.3	41.5	13.2
1.4	65	60.0	24.8	54.0	19.5	46.4	14.9
0.8	70	43.3	17.8	40.5	14.6	37.0	11.9
1	70	52.4	21.6	48.7	17.6	44.3	14.2
1.2	70	61.0	25.1	56.5	20.4	51.1	16.4
1.4	70	69.3	28.5	64.0	23.1	57.6	18.5
0.8	75	48.8	20.0	46.0	16.6	43.3	13.8
1	75	58.6	24.0	55.6	20.0	52.1	16.6
1.2	75	68.4	28.0	64.7	23.3	60.3	19.2
1.4	75	78.0	32.2	73.4	26.5	67.8	21.8
0.8	80	53.5	22.0	51.3	12.5	48.6	15.6
1	80	65.1	26.8	62.1	22.4	58.7	18.8
1.2	80	76.2	31.4	72.5	26.1	68.3	21.9
1.4	80	86.8	35.8	82.5	29.7	77.4	24.8
0.8	85	58.4	24.0	56.4	20.3	54.0	17.3
1	85	71.2	29.3	68.4	24.7	65.4	21.0
1.2	85	83.5	34.4	80.1	28.9	76.3	24.5
1.4	85	95.3	40.0	91.3	32.9	86.7	27.8



Pressure loss heating circuit



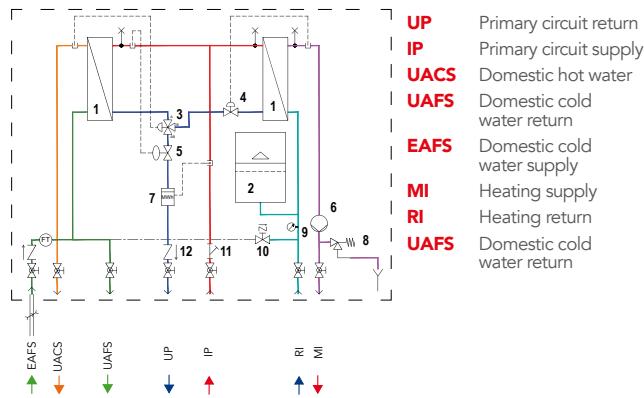
Max working pressure DHW circuit: 6 bar

Max pressure domestic water: 0.2 bar

Heat exchanger material: stainless steel AISI 316 - 20/30 plates

If the hardness of the water exceeds 25° fH, it should be treated at the inlet to the central heating system, so as to prevent fouling caused by hard water or corrosion due to aggressive water. Remember that even small deposits measuring just a few millimetres in thickness will cause, due to their low thermal conductivity, a reduction in performance on the DHW side.

Hydraulic circuit: HIU Pro i20P/N & i30P/N



Technical data

HIU Pro d20P & d30P

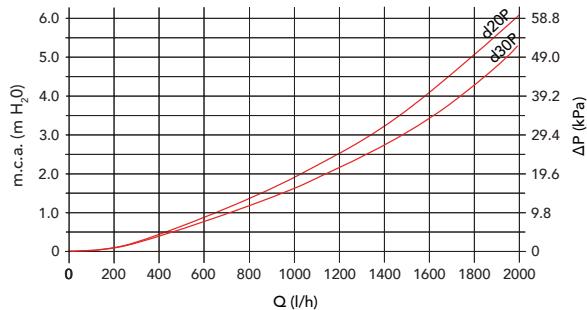
TECHNICAL DATA		HIU PRO d20P & d30P		TECHNICAL DATA		HIU PRO d20P & d30P	
MAX TEMPERATURE		85°C		DIMENSIONS BUILT-IN VERSION (LXHxD)		570 X 800 X 160mm	
PRIMARY CIRCUIT MAX. FLOW RATE		1400 L/H		DIMENSIONS WALL HUNG VERSION (LXHxD)		550 X 700 X 165mm	
NECESSARY PRIMARY HEAD		6M H ² O		WEIGHT (INCLUDING CONNECTION JIG)		23kg	
MAX PRESSURE		10 BAR		MODULE SUPPLY		230V AC	
DIFFERENTIAL VALVE		5 - 30 KPA		HEAT METER (OPTIONAL)		1.5 MC/H	
PRIMARY HYDRAULIC CONNECTION		M-F 1" - 3/4"		TYPE OF FLUID		H ² O	
HEATING HYDRAULIC CONNECTION		M-F 1" - 3/4"		MAIN COMPONENT MATERIAL		MS58, CU	
CONNECTIONS DCW		M-F 1" - 3/4"					

Technical data domestic water (HIU Pro d20P) - 0.455 m²

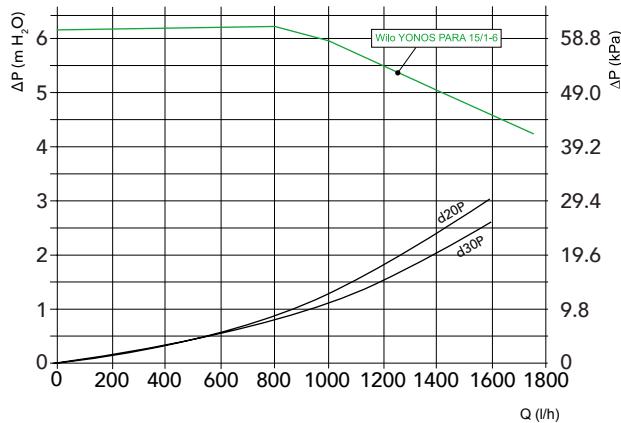
PRIMARY CIRCUIT FLOW RATE	PRIMARY CIRCUIT SUPPLY TEMP	HEAT EXCHANGER MAX CAPACITY	ΔT 35°C(10/45°C)		ΔT 40°C(10/50°C)		ΔT 45°C(10/55°C)	
			M3/H	°C	kW	L/MIN	kW	L/MIN
0.8	55	23.02		9.50	17.57	6.30	-	-
1	55	27.12		11.20	20.39	7.30	-	-
1.2	55	30.90		12.70	22.93	8.20	-	-
1.4	55	34.36		14.14	25.26	9.10	-	-
0.8	60	29.10		12.00	24.85	9.00	19.10	6.10
1	60	34.47		14.20	29.25	10.55	22.20	7.10
1.2	60	39.53		16.30	33.26	12.00	24.90	8.00
1.4	60	44.23		18.21	36.99	13.33	27.40	8.80
0.8	65	38.00		15.60	31.07	11.20	26.70	8.60
1	65	45.30		18.60	36.85	13.29	31.40	10.10
1.2	65	51.26		22.00	42.20	15.20	35.70	11.50
1.4	65	57.67		22.00	47.20	17.00	36.90	12.70
0.8	70	39.88		16.42	36.80	13.27	33.13	10.63
1	70	47.82		19.69	43.88	15.82	39.24	12.60
1.2	70	55.28		22.00	50.49	18.20	44.89	14.40
1.4	70	66.50		27.20	62.34	20.44	50.16	16.09
0.8	75	47.80		19.50	42.20	15.22	39.40	12.65
1	75	57.44		23.50	50.56	18.23	46.70	15.00
1.2	75	66.30		27.20	59.50	21.30	53.40	17.10
1.4	75	75.30		30.00	67.20	23.80	59.91	19.22
0.8	80	51.90		20.90	47.43	17.10	44.56	14.29
1	80	62.10		25.40	57.00	20.55	53.29	17.09
1.2	80	71.50		28.50	67.80	24.10	61.47	19.72
1.4	80	80.50		30.00	76.20	27.40	69.19	22.10
0.8	85	56.20		23.10	52.49	18.93	49.86	15.09
1	85	68.20		27.80	63.80	22.90	59.85	19.20
1.2	85	79.10		30.00	73.70	26.50	69.24	22.20
1.4	85	90.20		30.00	83.20	30.00	78.12	25.00

Technical data domestic water (HIU Pro d30P) - 0.708 m²

PRIMARY CIRCUIT FLOW RATE	PRIMARY CIRCUIT SUPPLY TEMP	$\Delta T 35^\circ\text{C}(10/45^\circ\text{C})$		$\Delta T 40^\circ\text{C}(10/50^\circ\text{C})$		$\Delta T 45^\circ\text{C}(10/55^\circ\text{C})$	
M3/H	°C	kW	L/MIN	kW	L/MIN	kW	L/MIN
0.8	55	26.1	10.7	20.2	7.4	-	-
1	55	31.1	12.7	24.2	8.7	-	-
1.2	55	35.7	14.6	27.5	9.9	-	-
1.4	55	40.3	16.5	30.5	11.0	-	-
0.8	60	32.2	13.2	28.2	10.2	22.3	7.1
1	60	38.8	15.9	33.5	12.1	26.4	8.4
1.2	60	44.9	18.4	38.5	13.6	30.1	9.6
1.4	60	50.4	20.7	43.5	15.6	33.6	10.7
0.8	65	39.1	16.0	34.6	12.5	30.5	9.7
1	65	46.4	19.0	41.5	14.9	36.5	11.6
1.2	65	53.5	21.9	47.9	17.3	41.5	13.2
1.4	65	60.0	24.8	54.0	19.5	46.4	14.9
0.8	70	43.3	17.8	40.5	14.6	37.0	11.9
1	70	52.4	21.6	48.7	17.6	44.3	14.2
1.2	70	61.0	25.1	56.5	20.4	51.1	16.4
1.4	70	69.3	28.5	64.0	23.1	57.6	18.5
0.8	75	48.8	20.0	46.0	16.6	43.3	13.8
1	75	58.6	24.0	55.6	20.0	52.1	16.6
1.2	75	68.4	28.0	64.7	23.3	60.3	19.2
1.4	75	78.0	32.2	73.4	26.5	67.8	21.8
0.8	80	53.5	22.0	51.3	12.5	48.6	15.6
1	80	65.1	26.8	62.1	22.4	58.7	18.8
1.2	80	76.2	31.4	72.5	26.1	68.3	21.9
1.4	80	86.8	35.8	82.5	29.7	77.4	24.8
0.8	85	58.4	24.0	56.4	20.3	54.0	17.3
1	85	71.2	29.3	68.4	24.7	65.4	21.0
1.2	85	83.5	34.4	80.1	28.9	76.3	24.5
1.4	85	95.3	40.0	91.3	32.9	86.7	27.8



Pressure loss heating circuit



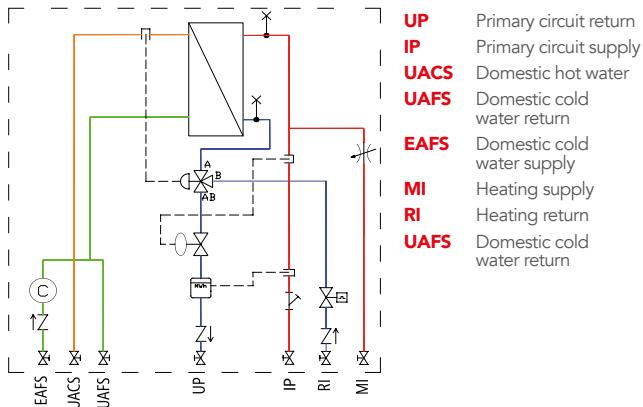
Max working pressure DHW circuit: 6 bar

Max pressure domestic water: 0.2 bar

Heat exchanger material: stainless steel AISI 316 - 20/30 plates

If the hardness of the water exceeds 25° fH, it should be treated at the inlet to the central heating system, so as to prevent fouling caused by hard water or corrosion due to aggressive water. Remember that even small deposits measuring just a few millimetres in thickness will cause, due to their low thermal conductivity, a reduction in performance on the DHW side.

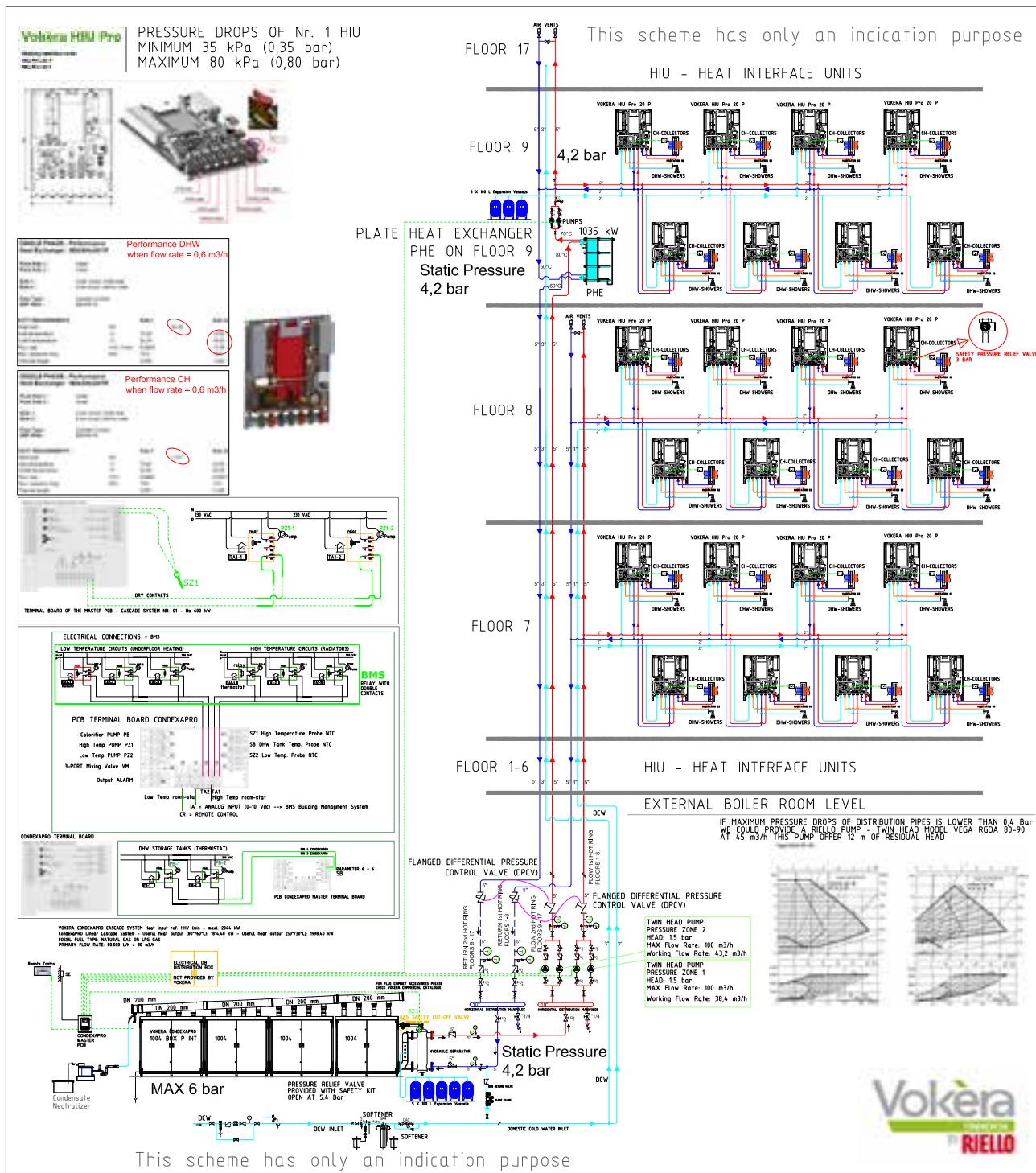
Hydraulic circuit: HIU Pro d20P & d30P



HIU Pro accessories & components

HIU PRO COMPONENTS & ACCESSORIES		
	HIU PRO BOX AND COVER	BOTH INDIRECT & DIRECT MODELS
	HIU PRO BOX	IN-WALL WITH COVER DOOR RAL 9010 (570 X 800 X 160mm)
	HIU PRO COVER	WALL MOUNTED COVER RAL 9010 (550 X 700 X 165mm)
	COVER BRACKETS	STAND OFF BRACKETS FOR COVER ONLY
	INSTALLATION PARTS	BOTH INDIRECT & DIRECT MODELS
	CONNECTION JIG	CONNECTION VALVES AND GASKETS ASSEMBLY
	KIT H50 INSULATED PIPING KIT	FOR CONNECTION OF THE PRIMARY CIRCUIT PIPE UPWARD (ONLY WITH COVER BRACKETS)
	INSTALLATION PARTS	FOR i20P & i30P
	FILLING KIT	SYSTEM LOADING KIT
	THERMOSTATIC KIT	FOR i20P & i30P
KIT 20-50°C		THERMOSTATIC ACTUATOR & SAFETY THERMOSTAT
KIT 40-70°C		THERMOSTATIC ACTUATOR & SAFETY THERMOSTAT
KIT CLIMA		FOR i20P & i30P
KIT CLIMA		ELECTRICAL SERVOMOTOR, DIGITAL REGULATOR LAGO BASIC 1001, DIGITAL REMOTE CONTROLLER LAGO FB, SAFETY THERMOSTAT 50°C
	EYRON ENERGY METER	BOTH INDIRECT AND DIRECT MODELS
	EYRON ULTRA CFMUS	MBUS ULTRASONIC ENERGY METER
	EYRON ULTRA CFRUS	RADIO ULTRASONIC ENERGY METER
	WATER METER C-VOL AFS 3/4" M	SINGLE-JET METER WITH DRY DIAL FOR COLD DOMESTIC WATER WITH PULSE OUTPUT
	ELECTRIC ACTUATOR	BOTH INDIRECT AND DIRECT MODELS
	230V	NC/FC 2 WIRES + AUX - 170N
	230V	NC/FC 4 WIRES + AUX - 170N
	24V	NC/FC 4 WIRES + AUX - 170N
	DATA	BOTH INDIRECT AND DIRECT MODELS
	CDB32	DATA LOGGER CENTRALISED READING MBUS USB
	CDB60	DATA LOGGER CENTRALISED READING MBUS USB
	CBD120	DATA LOGGER CENTRALISED READING MBUS USB
	CBD250	DATA LOGGER CENTRALISED READING MBUS USB
	DATA ENERGY	SOFTWARE FOR READING DATA LOGGERS
	CDM60	DATA LOGGER REMOTE CENTRALISED READING (MODEM GPRS MBUS SIM CARD)
	CDM120	DATA LOGGER REMOTE CENTRALISED READING (MODEM GPRS MBUS SIM CARD)
	CDM250	DATA LOGGER REMOTE CENTRALISED READING (MODEM GPRS MBUS SIM CARD)

Example design incorporating HIU



Pre Sales & training

From concept to completion and beyond

Vokèra by Riello are leading the way in commercial and renewable heating installations with a variety of successful projects, including leisure complexes, swimming pools, hotels, offices, schools, medical institutions, care homes, churches and in conjunction with district heating schemes (incl. heat interface units).

Sizing and supplying full package solutions regardless of system power

Regardless of the size of your project our Pre Sales support team will provide you with the advice and guidance you need to ensure the most reliable and efficient product solution is specified. Support will differ from project to project depending on the level of support required from our Pre Sales support team. We are versatile in our approach and will adapt to the requirements of each project whether the client or project designer/engineer requires basic advice or full assistance in designing the system – we are here to help.

The Pre Sales support team are available to attend on site surveys, evaluations and assistance/support, as well as offer installer training, with our Technical Service team offering our manufacturer's commissioning to ensure our products are operating as they should.

System design service

Dependent on your requirements we provide a bespoke specification report for projects that utilise our Pre Sales support team. The use of advanced software, such as TSOL and RETscreen, enables us to provide realistic projections on the potential system efficiency, ensuring the most reliable and efficient system is specified. The report also includes a CAD design (BIM models are available – please contact us for details), system efficiency analysis and a compete bill of materials.

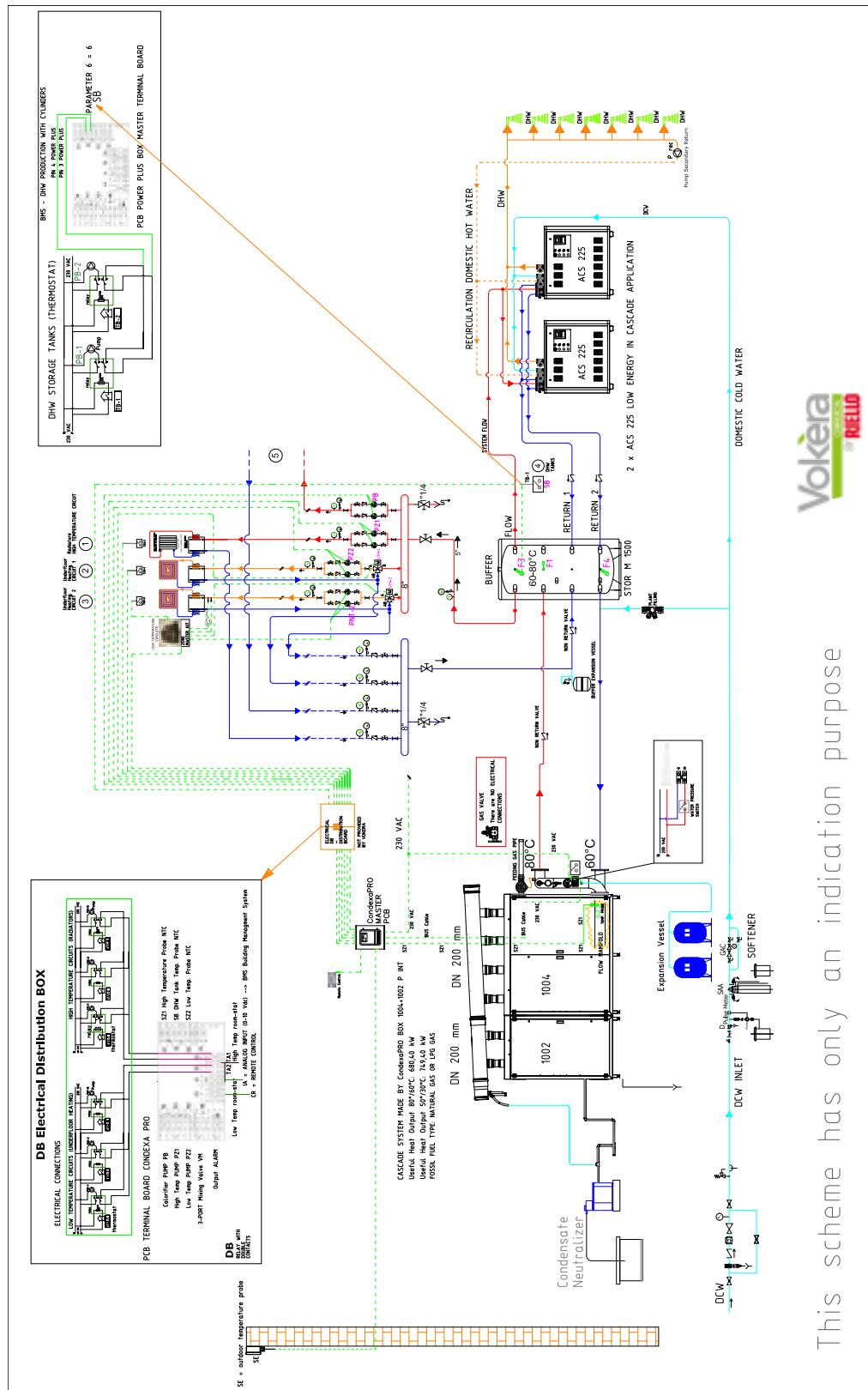
CPDs and technical presentation training to consulting engineers is also offered by our Pre Sales support team – please contact us for more details.

Training

Vokèra by Riello offer a wide selection of training from basic product information to installation, servicing, maintenance and commissioning. With Centre of Excellence training centres at our Head Office in London and at our dedicated training centre in Bradford we can cater for all manner of training requirements for our products. We also have affiliated training centres throughout the UK (please contact us for more details).

For more information on training please contact our Training Department on **0844 391 0999** (option 5) or email training@vokera.co.uk

Example of a Pre Sales CAD drawing, which is supplied with a complete bill of materials



Notes

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