03|2014
International Markets

Beretta

Product Catalogue

1950 > 2014

The history of Beretta began in September 1950 in Lecco, a small industrial town in Northern Italy. Over the years, Beretta concentrated its expertise in the field of residential heating, laying the foundations for what would become the company's specialty. With this strong know-how, in 1969 Beretta began producing floor-standing boilers for home heating. In 1973, as first in Italy, Beretta started to produce wall-hung gas boilers.

BERETTA

Specialists in residential heating for over forty years. Excellence and innovation, since always, for the comfort within millions of homes all over the world. Today Beretta confirms its growing trend in the residential heating and faces new challenges with the same enthusiasm and the same commitment of the beginnings. Because the excellence in the products and in the supplied services remain Beretta's key values.

EXCELLENCE

The great expertise gained over the years in the field of residential heating has made of Beretta a worldwide known brand, synonymous with quality and technology. Today, as in the beginnings, the pursuit of excellence in every activity and, more specifically, the constant attention to product and services represent Beretta core values.

RESIDENTIAL HEATING

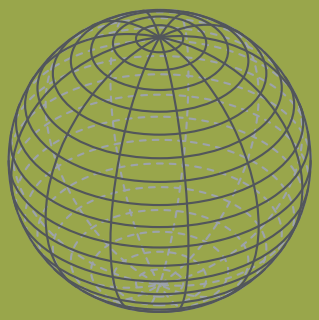
Specialists in residential heating systems: this is Beretta product mission. Nowadays Beretta confirms its vocation as a leading brand in residential heating and faces new challenges. To meet the heating and DHW requirements of medium to large-sized installations like schools, hotels, sports centres, Beretta has developed a complete range of products for light-commercial and commercial applications, both for new buildings and as a replacement. Furthermore, since always sensitive to environmental issues, Beretta offers new technologies and solutions that can combine, with maximum efficiency, new energy sources, always prioritizing renewables.

EFFICIENCY

With a strong focus on residential heating, Beretta product portfolio concentrates increasingly on solutions that maximize energy efficiency through the intelligent integration of several energy sources.

TERRITORY

Beretta customer-centered approach translates into a worldwide network of specialists: proximity, expertise, flexibility are Beretta key values. Beretta, over 40 years after the production of its first wall-hung gas boiler, is nowadays a worldwide known brand in the field of home heating solutions, synonymous with technology and quality. Our products are sold through Subsidiaries, Sales Partners and OEM Customers in over 30 countries, on all continents.



Beretta Italy

- Headquarters (Lecco)
- Research and Development Centre (Lecco)
- "Ateneo" Training Centre (Lecco)
- Over 500 Authorised Service Centres all over the country

Beretta International

Subsidiaries:

- China (Beijing)
- Poland (Torun)
- Romania (Bucarest)
- Spain (Barcelona)

Sales Partners and OEM Customers in over 30 countries on all continents

Production plants

- Italy (Morbegno)
- Poland (Torun)
- China (Shanghai)

TECHNOLOGY

Beretta has always shown an exceptional ability to foresee change and respond to the resulting evolutions in demand. Two examples of many past cases: Beretta was the first Italian company to produce wall-hung gas boilers and - with the Meteo boiler model - the first to produce a wall-hung boiler specifically designed for outdoor installation. A commitment to Progress which today increasingly takes an environmental slant, with a view to excellence and cutting-edge technology. Beretta solutions target improved energy efficiency and the reduction of emissions, both for the sustainability of the environment and to ensure all the comfort that millions of consumers are accustomed to demanding and receiving from Beretta products.

ATTENTION TO ENVIRONMENT

Beretta commitment is concrete and aims at an increasingly eco-sustainable future. This is why Beretta is already "ERP-Ready". For years, Beretta has been totally committed to a system logic which combines the intelligent use of several sustainable and renewable energy sources, in perfect harmony with the environment around us, for the home comfort of millions of consumers who use Beretta products every day.

ErP
ready

Beretta service

A CONSOLIDATED
KNOW-HOW
AT YOUR SERVICE

Passionate about Service

Today, as in the early days, Beretta takes great pride in the quality of its service. Our commitment to service, coupled with our policy of continuous innovation and technological excellence, means that when you choose a Beretta appliance, you are in safe hands.

After-sales service

Beretta puts a great deal of emphasis on after-sales service, with a central technical service team committed to supporting our Subsidiaries and Sales Partners worldwide to provide locally a qualified service.

Pre-sales service

The Beretta pre-sales service team, thanks to the consolidated know-how, gives advice on the whole portfolio of products to our Sales Parteners and Subsidiaries in the world, in order they can locally support engineers, architects, specifiers and developers in choosing the best solution for every project.

Technical training

All Beretta Sales Partners and Subsidiaries in the world organize locally technical training courses, focusing on the need of the installer and engineer to become familiar with Beretta products and to enable quick and simple installation or repair. Our technical training is structured to ensure you cover: the appliance range, installation, operation, wiring, flueing, benchmark, fault finding and commissioning.

Original spare-parts and accessories

For your complete peace of mind, the Beretta original spare parts and accessories are available at any of our Sales Partners and Subsidiaries all over the world.

Wherever you choose a Beretta product in the world, you will find a local service team able to ensure all technical support when needed.

RESIDENTIAL HEATING

Condensing boilers

Standard-efficiency boilers

Complementary items

SYSTEMS

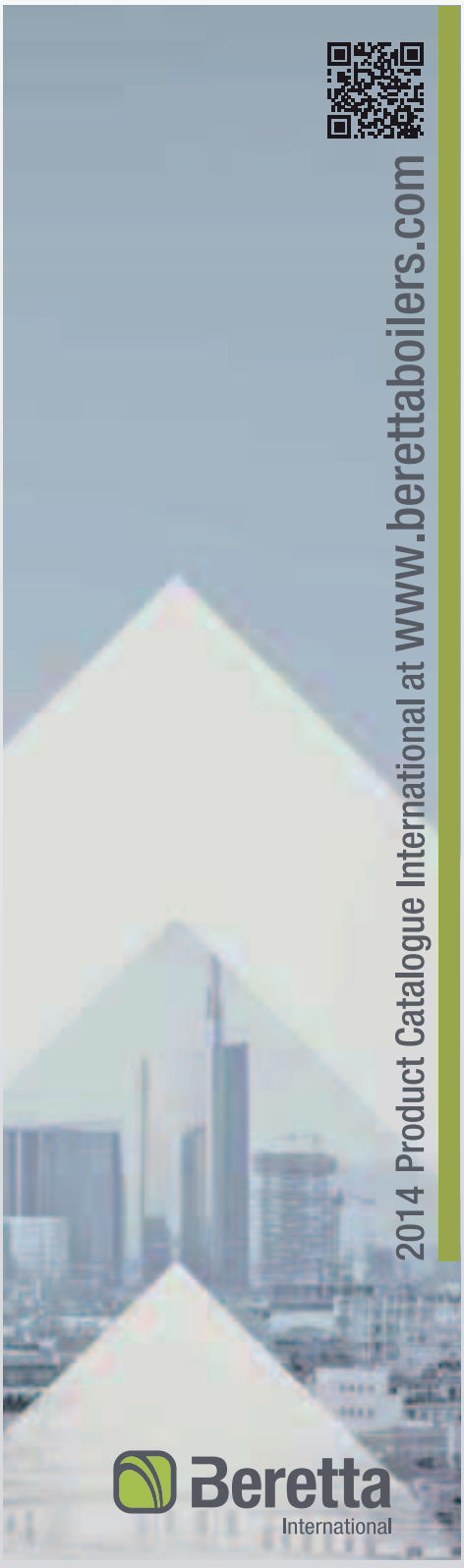
Modular condensing boilers

Heat pumps

Biomass boilers

Solar thermal

System diagrams



At www.berettaboilers.com
you will find our new
2014 Web Product Catalogue
for International Markets
and further information about
Beretta, our products and our services
for YOU.

We wish you a great navigation.

RESIDENTIAL HEATING

he BERETTA HI-EFFICIENCY

- **1 : 10 modulation**
- **A-Class Low Energy synchronous pump EEI < 0.23**, PWM controlled (6 metres) with different working options
- **Efficiency ★★★★** according to European Directive EEC 92/42
- The **RANGE RATED certification** allows to adapt the power of the boiler to the real thermal requests of the installation
- Low NOx (Class 5 according to European Directive UNI EN 483)
- Condensing heat-exchanger in extruded aluminium (Patent Pending) providing excellent thermal transfer
- High DHW comfort ★★★, according to Pr EN 13203
- Built-in thermoregulation with external probe supplied as standard
- Hydraulic connections cover supplied as standard
- Exclusive GREEN HE can be converted to LPG through LPG kit supplied as standard

Room-sealed

Efficiency ★★★★ Dir. 92/42/EEC

CODE	GAS	MODEL	DIMENSIONS H × W × D (mm)	CH INPUT MIN - MAX (kW)	DHW PRODUCTION (l/min. - Δt 25 °C)
Instantaneous combi boilers					
20044041	NG	EXCLUSIVE GREEN HE 25 C.S.I.	845 × 450 × 360	2.50 - 25	14
20044042	NG	EXCLUSIVE GREEN HE 35 C.S.I.	845 × 450 × 360	3.41 - 36	20
Heating only boilers *					
20044043	NG	EXCLUSIVE GREEN HE 25 R.S.I.	845 × 450 × 360	2.50 - 25	-
20044044	NG	EXCLUSIVE GREEN HE 35 R.S.I.	845 × 450 × 360	3.41 - 36	-

* The “heating only” models are supplied with a three-ways valve. Filling tap not available.

Specific accessories

Flues accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20027292	Ø80 twin system kit	20027555	Ø60/100 horizontal flue terminal

Comfort accessories

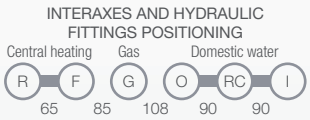
CODE	DESCRIPTION	CODE	DESCRIPTION
1103119	Remote control panel REC 07 with ITRF11 interface board	20059641	ALPHA DGT WIRELESS digital room thermostat
1103039	BE08 electronic board to control the main heating zone (to be used with remote control)	20059639	ALPHA DGT digital room thermostat
20050692	OMEGA WIRELESS modulating 7-day thermostat (WHITE) - ITRF11 interface needed (code 1221179)	20059644	ALPHA 7D WIRELESS 7-day digital room thermostat
20050693	OMEGA WIRELESS modulating 7-day thermostat (BLACK) - ITRF11 interface needed (code 1221179)	20063872	ALPHA 7D 7-day digital room thermostat
20050684	OMEGA modulating 7-day thermostat (WHITE) - ITRF11 interface needed (code 1221179)	1221179	ITRF11 OT+bus interface board
20050685	OMEGA modulating 7-day thermostat (BLACK) - ITRF11 interface needed (code 1221179)		

Hydraulic accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
1101989	Heating taps	20025113	Solar diverter mixing valve (combi models)
1101999	Heating taps with filter	1220599	Socket probe for DHW tank - 3 m wire (only R.S.I. models)
20082452	A-Class Low Energy synchronous pump, PWM controlled (7 metres)		

Special accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
1220639	Low temperature automatic resetting thermostat	20042454	Kit relé remote alarm



he BERETTA HI-EFFICIENCY

- **Built-in stainless steel DHW tank with magnesium anode**
- **1 : 10 modulation**
- **A-Class Low Energy synchronous pump,** PWM controlled (4 mt on 25 B.S.I. and 6 mt on 35 B.S.I.) with different working options
- **Efficiency ★★★★** according to European Directive EEC 92/42
- The **RANGE RATED certification** allows to adapt the power of the boiler to the real thermal requests of the installation
- Lowest electrical consumption (only 66 Watt on 25 B.S.I.)
- Low NOx (Class 5 according to European Directive UNI EN 483)
- Condensing heat-exchanger in extruded aluminium (Patent Pending) providing excellent thermal transfer
- High DHW comfort ★★★, according to Pr EN 13203
- Built-in thermoregulation with external probe supplied as standard
- IPX5D electrical protection
- Exclusive BOILER GREEN HE can be converted to LPG through LPG kit supplied as standard

Room-sealed

Efficiency ★★★★ Dir. 92/42/EEC

CODE	GAS	MODEL	DIMENSIONS H×W×D (mm)	CH INPUT MIN - MAX (kW)	DHW TANK CAPACITY (litres)
Combi boilers with built-in DHW tank					
20023094	NG	EXCLUSIVE BOILER GREEN HE 25 B.S.I.	950×600×450	2.50 - 25	60
20031609	NG	EXCLUSIVE BOILER GREEN HE 35 B.S.I.	950×600×450	3.5 - 35	60

Specific accessories

Flues accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20027292	Ø80 twin system kit	20027555	Ø60/100 horizontal flue terminal

Comfort accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
1103119	Remote control panel REC 07 with ITRF11 interface board	20059641	ALPHA DGT WIRELESS digital room thermostat
1103039	BE08 electronic board to control the main heating zone (to be used with remote control)	20059639	ALPHA DGT digital room thermostat
20050692	OMEGA WIRELESS modulating 7-day thermostat (WHITE) - ITRF11 interface needed (code 1221179)	20059644	ALPHA 7D WIRELESS 7-day digital room thermostat
20050693	OMEGA WIRELESS modulating 7-day thermostat (BLACK) - ITRF11 interface needed (code 1221179)	20063872	ALPHA 7D 7-day digital room thermostat
20050684	OMEGA modulating 7-day thermostat (WHITE) - ITRF11 interface needed (code 1221179)	1221179	ITRF11 OT+bus interface board
20050685	OMEGA modulating 7-day thermostat (BLACK) - ITRF11 interface needed (code 1221179)		

Hydraulic accessories

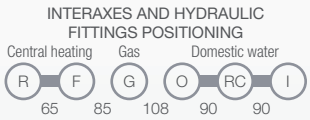
CODE	DESCRIPTION	CODE	DESCRIPTION
1101989	Heating taps	20032820	High head modulating circulator (7 metres)
1101999	Heating taps with filter	1103479	DHW recirculation kit
20082453	A-Class Low Energy synchronous pump, PWM controlled (7 metres)		

Special accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
1220639	Low temperature automatic resetting thermostat		

Condensing wall-hung boilers with built-in DHW tank

EXCLUSIVE BOILER GREEN



- **Built-in stainless steel DHW tank with magnesium anode.**
- **Efficiency ★★★★** according to European Directive EEC 92/42
- Low NOx (Class 5 according to European Directive UNI EN 483)
- Condensing heat-exchanger in extruded aluminum (Patent Pending) providing excellent thermal transfer
- Built-in thermoregulation with external probe supplied as standard
- Ideal for low-temperature heating installations
- High DHW comfort ★★★, according to Pr EN 13203
- Easy filling system directly from the control panel
- IPX5D electrical protection
- High head pump built-in as standard
- Compatible with the hydraulic separators Beretta CONNECT
- Exclusive BOILER GREEN can be converted to LPG through LPG kit (as option)

Room-sealed

Efficiency ★★★★ Dir. 92/42/EEC

CODE	GAS	MODEL	DIMENSIONS H×W×D (mm)	CH INPUT MIN - MAX (kW)	DHW TANK CAPACITY (litres)
Combi boilers with built-in DHW tank					
1150933	NG	EXCLUSIVE BOILER GREEN 30 B.S.I.	950×600×450	6 - 30	60

Specific accessories

Flues accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20027292	Ø80 twin system kit	20027555	Ø60/100 horizontal flue terminal

Comfort accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
1103119	Remote control panel REC 07 with ITRF11 interface board	20059641	ALPHA DGT WIRELESS digital room thermostat
1103039	BE08 electronic board to control the main heating zone (to be used with remote control)	20059639	ALPHA DGT digital room thermostat
20050692	OMEGA WIRELESS modulating 7-day thermostat (WHITE) - ITRF11 interface needed (code 1221179)	20059644	ALPHA 7D WIRELESS 7-day digital room thermostat
20050693	OMEGA WIRELESS modulating 7-day thermostat (BLACK) - ITRF11 interface needed (code 1221179)	20063872	ALPHA 7D 7-day digital room thermostat
20050684	OMEGA modulating 7-day thermostat (WHITE) - ITRF11 interface needed (code 1221179)	1221179	ITRF11 OT+bus interface board
20050685	OMEGA modulating 7-day thermostat (BLACK) - ITRF11 interface needed (code 1221179)		

Hydraulic accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
1101989	Heating taps	1102009	Ultra high head pump (7 metres)
1101999	Heating taps with filter	1103479	DHW recirculation kit

Special accessories

CODE	DESCRIPTION
1220639	Low temperature automatic resetting thermostat

- The **RANGE RATED certification** allows to adapt the power of the boiler to the real thermal requests of the installation
- **Efficiency ★★★★** according to European Directive EEC 92/42
- Low NOx (Class 5 according to European Directive UNI EN 483)
- Condensing heat-exchanger in extruded aluminium (Patent Pending) providing excellent thermal transfer
- Built-in thermoregulation (with external probe available as option)
- Ideal for low-temperature installations
- IPX5D electrical protection
- Built-in clapet for collective flue positive pressure chimney - non-return valve on flue side (feature available from end 2014)
- Compatible with the hydraulic separators Beretta CONNECT

Room-sealed

Efficiency ★★★★ Dir. 92/42/EEC

CODE	GAS	MODEL	DIMENSIONS H×W×D (mm)	CH INPUT MIN - MAX (kW)	DHW INPUT MIN - MAX (kW)	DHW PRODUCTION (l/min. - Δt 25 °C)
Instantaneous combi boilers						
20068937	NG	MYNUTE GREEN 25 C.S.I. E	780×400×358	6 - 25	6 - 25	14.3
20068942	LPG	MYNUTE GREEN 25 C.S.I. E	780×400×358	6 - 25	6 - 25	14.3
20068948	NG	MYNUTE GREEN 30 C.S.I. E	780×450×358	6 - 30	6 - 30	17.2
20068949	NG	MYNUTE GREEN 38 C.S.I. E	780×450×358	7 - 30	7 - 38	21.8
Heating only boilers						
20068933	NG	MYNUTE GREEN 12 R.S.I. E	780×400×358	2.5 - 12	2.5 - 12	-
20084045	NG	MYNUTE GREEN 15 R.S.I. E	780×400×358	3.5 - 15	3.5 - 15	-
20068940	NG	MYNUTE GREEN 25 R.S.I. E	780×400×358	6 - 25	6 - 25	-
20068950	NG	MYNUTE GREEN 35 R.S.I. E	780×400×358	7 - 34.6	7 - 34.6	-

Specific accessories

Flues accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20027292	Ø80 twin system kit	20027555	Ø60/100 horizontal flue terminal

Comfort accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20064543	Remote control panel REC 08 with connector	20059639	ALPHA DGT digital room thermostat
20050692	OMEGA WIRELESS modulating 7-day thermostat (WHITE)	20059644	ALPHA 7D WIRELESS 7-day digital room thermostat
20050693	OMEGA WIRELESS modulating 7-day thermostat (BLACK)	20063872	ALPHA 7D 7-day digital room thermostat
20050684	OMEGA modulating 7-day thermostat (WHITE)	1100799	Outdoor probe
20050685	OMEGA modulating 7-day thermostat (BLACK)	20000783	ITRF05 electronic board to control the main heating zone (to be used with remote control)
20059641	ALPHA DGT WIRELESS digital room thermostat		

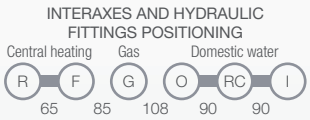
Hydraulic accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
1101989	Heating taps	20008794	Kit hydraulic connections (for welding)
1101999	Heating taps with filter	20051979	Kit hydraulic connections (with brass nipples)
1101979	High head pump (6 metres) - only model 12 kW	20025113	Solar diverter mixing valve (combi models)
1102009	Ultra high head pump (7 metres)		

Special accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
1220639	Low temperature automatic resetting thermostat	20049749	ITRF05 interface for alarm remotation

MYNUTE BOILER GREEN



- **Built-in stainless steel DHW tank with magnesium anode** (capacity: 45 lt. on 25 B.S.I. E model; 60 lt. on 32 B.S.I. E model)
- The **RANGE RATED certification** allows to adapt the power of the boiler to the real thermal requests of the installation
- **Efficiency ★★★★** according to European Directive EEC 92/42
- Low NOx (Class 5 according to European Directive UNI EN 483)
- Condensing heat-exchanger in extruded aluminium (Patent Pending) providing excellent thermal transfer
- Built-in thermoregulation (with external probe available as option)
- Ideal for low-temperature installations
- IPX5D electrical protection
- High head circulator (mod. 25-32 kW)
- Built-in clapet for collective flue positive pressure chimney - non-return valve on flue side (feature available from end 2014)
- Compatible with the hydraulic separators Beretta CONNECT

Room-sealed

Efficiency ★★★★ Dir. 92/42/EEC

CODE	GAS	MODEL	DIMENSIONS H×W×D (mm)	CH INPUT MIN - MAX (kW)	DHW INPUT MIN - MAX (kW)	DHW TANK CAPACITY (litres)
Combi boilers with built-in DHW tank						
20074589	NG	MYNUTE BOILER GREEN 25 B.S.I. E	950×600×450	6 - 25	6 - 25	45
20074847	NG	MYNUTE BOILER GREEN 32 B.S.I. E	950×600×450	6 - 25	6 - 32	60

Specific accessories

Flues accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20027292	Ø80 twin system kit	20027555	Ø60/100 horizontal flue terminal

Comfort accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20064543	Remote control panel REC 08 with connector	20059639	ALPHA DGT digital room thermostat
20050692	OMEGA WIRELESS modulating 7-day thermostat (WHITE)	20059644	ALPHA 7D WIRELESS 7-day digital room thermostat
20050693	OMEGA WIRELESS modulating 7-day thermostat (BLACK)	20063872	ALPHA 7D 7-day digital room thermostat
20050684	OMEGA modulating 7-day thermostat (WHITE)	1100799	Outdoor probe
20050685	OMEGA modulating 7-day thermostat (BLACK)	20000783	ITRF05 electronic board to control the main heating zone (to be used with remote control)
20059641	ALPHA DGT WIRELESS digital room thermostat		

Hydraulic accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
1101989	Heating taps	1102009	Ultra high head pump (7 metres)
1101999	Heating taps with filter	1103479	DHW recirculation kit

Special accessories

CODE	DESCRIPTION		
1220639	Low temperature automatic resetting thermostat	20049749	ITRF05 interface for alarm remotation

CIAO GREEN

- Compact dimensions and low lift weight enable a flexible installation with the boiler able to be sited almost anywhere in the home
- The **RANGE RATED certification** allows to adapt the power of the boiler to the real thermal requests of the installation
- **Efficiency ★★★★** according to European Directive EEC 92/42
- Reduces running costs by up to 35% more than a conventional boiler, helping to safeguard the environment
- Stylish and easy-to-use control panel with a digital display and 3-LEDs signalling the boiler working status and the self-diagnostic
- CIAO GREEN can be converted to LPG through specific LPG kit (as option)
- Installations 3CEP available with specific flue kit

Room-sealed

Efficiency ★★★★ Dir. 92/42/EEC

CODE	GAS	MODEL	DIMENSIONS H×W×D (mm)	CH INPUT MIN - MAX (kW)	DHW INPUT MIN - MAX (kW)	DHW PRODUCTION (l/min. - Δt 25 °C)
Instantaneous combi boilers						
20035994	NG	CIAO GREEN 25 C.S.I.	715×405×248	5 - 20	5 - 25	14.3
20066454	LPG	CIAO GREEN 25 C.S.I.	715×405×248	5 - 20	5 - 25	14.3
20062778	NG	CIAO GREEN 29 C.S.I.	715×405×248	6 - 25	6 - 29	16.6
Heating only boilers						
20062776	NG	CIAO GREEN 25 R.S.I.	715×405×248	5 - 20	5 - 25	-

Specific accessories

Flues accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20062932	Ø80 twin system kit	20027555	Ø60/100 horizontal flue terminal
20027300	Flue adapter from Ø60/100 to Ø80 (for B23 installation)	20044868	Ø 80/125 clapet kit in PP/MET with built-in condensate syphon for 3CEP

Comfort accessories

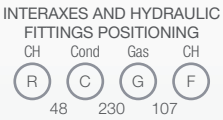
CODE	DESCRIPTION	CODE	DESCRIPTION
20064543	Remote control panel REC 08 with connector	20059641	ALPHA DGT WIRELESS digital room thermostat
20050692	OMEGA WIRELESS modulating 7-day thermostat (WHITE) - code 20008401 needed	20059639	ALPHA DGT digital room thermostat
20050693	OMEGA WIRELESS modulating 7-day thermostat (BLACK) - code 20008401 needed	20059644	ALPHA 7D WIRELESS 7-day digital room thermostat
20050684	OMEGA modulating 7-day thermostat (WHITE) - code 20008401 needed	20063872	ALPHA 7D 7-day digital room thermostat
20050685	OMEGA modulating 7-day thermostat (BLACK) - code 20008401 needed	20049748	Outdoor probe with connector
20008401	Connector kit for outdoor probe and remote control	20000783	ITRF05 electronic board to control the main heating zone (to be used with remote control)

Hydraulic accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
1101989	Heating taps	1102009	Ultra high head pump (7 metres)
1101999	Heating taps with filter	1220599	Socket probe for DHW tank - 3 m wire (only R.S.I. model)
20008794	Kit hydraulic connections (for welding)	20025113	Solar diverter mixing valve (combi models)
20008795	Kit hydraulic connections (with brass nipples)		

Special accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
1220639	Low temperature automatic resetting thermostat	20012595	Upper cover
20012594	Hydraulic connections lower cover	20049749	ITRF05 interface for alarm remotation
20084332	Dummy Ciao Green for POS		



- MYNUTE GREEN 50 R.S.I. is a high power condensing boiler, that can be configurated in different ways, according to your needs
- The **RANGE RATED certification** allows to adapt the power of the boiler to the real thermal requests of the installation
- **Efficiency ★★★★** according to European Directive EEC 92/42, reducing running costs by up to 35% more than a conventional boiler
- Low NOx (Class 5 according to European Directive UNI EN 483) the best European category in ecological terms, helping to safeguard the environment
- Condensing heat exchanger in extruded aluminium with radial design (Patent Pending) that allows to get the most from the combustion of the gas, whether NG or LPG
- Compact dimensions and low weight make MYNUTE GREEN 50 R.S.I. the ideal choice wherever you need to replace an old appliance in a narrow space
- User-friendly interface, providing a high number of settings to the installer
- Built-in thermoregulation with outdoor probe kit provided as standard
- Built-in interface board for second pump control
- LPG conversion kit available as an accessory

Room-sealed

Efficiency ★★★★ Dir. 92/42/EEC

CODE	GAS	MODEL	DIMENSIONS H×W×D (mm)	CH INPUT MIN - MAX (kW)
Heating only boiler				
20056275	NG	MYNUTE GREEN 50 R.S.I.	764×553×284	9 - 47

Specific kits and accessories

Beretta has developed a specific line of hydraulic and safety kits and components that enable different configurations of this boiler, according to your installation needs. Besides harmonizing perfectly with each other, MYNUTE GREEN 50 R.S.I. specific kits and components ensure maximum comfort and saving that are supplied only by a unique specialised supplier.

CODE	DESCRIPTION	CODE	DESCRIPTION
20028475	Hydraulic header/separator kit	20043895	Gas-safety cut-off valve
20028473	ISPESL hydraulic manifold	20028472	Taps for system without ISPESL safeties
20028474	ISPESL safety kit	20028027	Flue adapter kit from Ø80-80 to Ø60/100
20028478	Air intake kit for B23 installation (*)	20028029	Flue adapter kit from Ø80-80 to Ø80/125
1220599	Socket probe for DHW tank - 3 m wire	20044862	Ø 80 clapet kit in PP with built-in condensate syphon
20028476	3-ways valve kit for DHW tank	20029862	Frost-protection kit for condensate syphon

(*) Other flues configurations are possible as this boiler is homologated to work under many different installation types of the categories “B” and “C”.

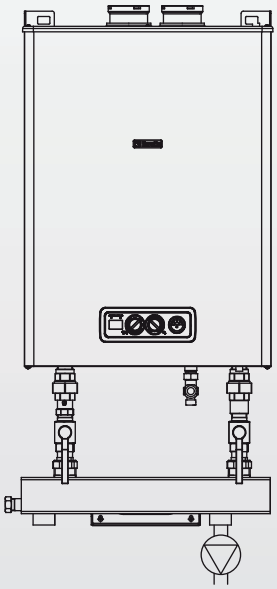
Comfort accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20050692	OMEGA WIRELESS modulating 7-day thermostat (WHITE)	20059639	ALPHA DGT digital room thermostat
20050693	OMEGA WIRELESS modulating 7-day thermostat (BLACK)	20059644	ALPHA 7D WIRELESS 7-day digital room thermostat
20050684	OMEGA modulating 7-day thermostat (WHITE)	20063872	ALPHA 7D 7-day digital room thermostat
20050685	OMEGA modulating 7-day thermostat (BLACK)	20062614	BE09 interface for alarm remotation
20059641	ALPHA DGT WIRELESS digital room thermostat		

BERETTA SUGGESTED CONFIGURATIONS

Beretta indicates in the following pages a selection of the most common configurations of MYNUTE GREEN 50 R.S.I., among which you can choose the one that best meets your installation requirements.

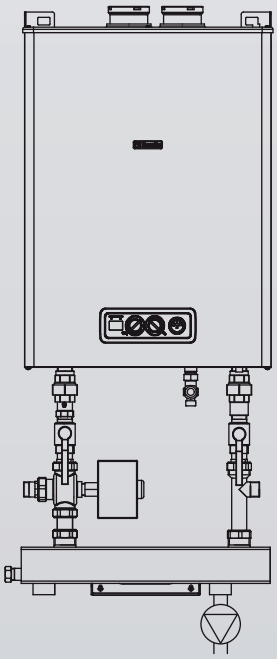
Configuration for central heating only



Description	Code	Q.ty
Mynute Green 50 R.S.I.	20056275	1
Taps for system	20028472	1
Hydraulic header / separator kit	20028475	1
Air intake kit for B23 (*)	20028478	1
Second pump kit for main CH	(**)	1

(*) Other flues configurations are possible as this boiler is homologated to work under many different installation types of the categories “B” and “C”.
(**) For sizing advice please contact Pre-Sales Department.

Configuration with 3-ways valve kit for DHW tank and central heating

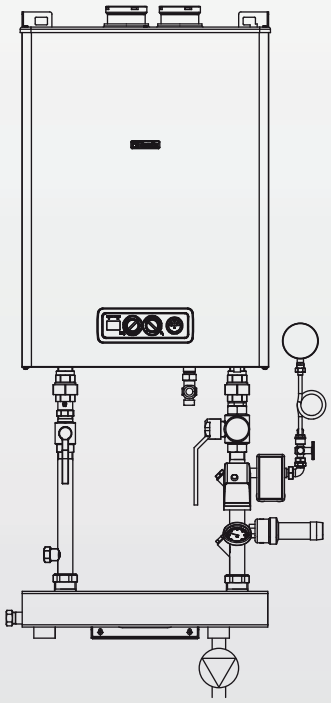


Description	Code	Q.ty
Mynute Green 50 R.S.I.	20056275	1
Taps for system	20028472	1
Hydraulic header/separator kit	20028475	1
Air intake kit for B23 (*)	20028478	1
“3-ways valve kit” for DHW tank	20028476	1
Socket probe for DHW tank - 3 m wire	1220599	1
Second pump kit for main CH	(**)	1

(*) Other flues configurations are possible as this boiler is homologated to work under many different installation types of the categories “B” and “C”.
(**) For sizing advice please contact Pre-Sales Department.

BERETTA SUGGESTED CONFIGURATIONS

Configuration for central heating only, with ISPESL safety kit

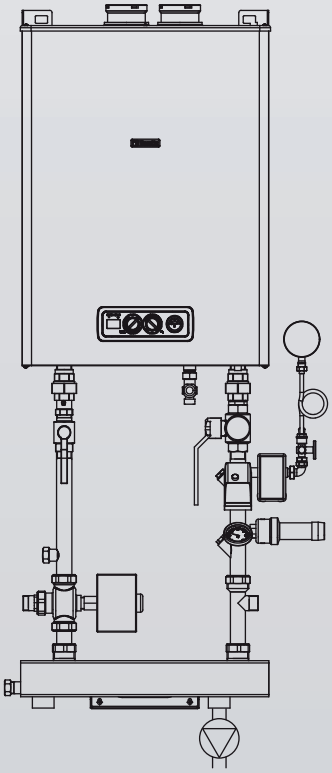


Description	Code	Q.ty
Mynute Green 50 R.S.I.	20056275	1
I.S.P.E.S.L. hydraulic manifold with taps	20028473	1
I.S.P.E.S.L. safety kit	20028474	1
Gas-safety cut-off valve	20043895	1
Hydraulic header / separator kit	20028475	1
Air intake kit for B23 (*)	20028478	1
Second pump kit for main CH	(**)	1

(*) Other flues configurations are possible as this boiler is homologated to work under many different installation types of the categories “B” and “C”.
(**) For sizing advice please contact Pre-Sales Department.

I.S.P.E.S.L. = Italian Safety Certification Institute.
I.S.P.E.S.L. safeties are compulsory only in Italy.

Configuration with 3-ways valve kit for DHW tank and central heating, with ISPESL safety kit



Description	Code	Q.ty
Mynute Green 50 R.S.I.	20056275	1
I.S.P.E.S.L. hydraulic manifold with taps	20028473	1
I.S.P.E.S.L. safety kit	20028474	1
Gas-safety cut-off valve	20043895	1
Hydraulic header / separator kit	20028475	1
Air intake kit for B23 (*)	20028478	1
“3-ways valve kit” for DHW tank	20028476	1
Socket probe for DHW tank - 3 m wire	1220599	1
Second pump kit for main CH	(**)	1

(*) Other flues configurations are possible as this boiler is homologated to work under many different installation types of the categories “B” and “C”.
(**) For sizing advice please contact Pre-Sales Department.

I.S.P.E.S.L. = Italian Safety Certification Institute.
I.S.P.E.S.L. safeties are compulsory only in Italy.

Condensing high-efficiency floor-standing boilers with built-in DHW tank

TOWER GREEN HE

NEW APRIL 2014

- **1:10 modulation**
- Low Energy auto-modulating system pumps (EEI<0,23)
- Built-in management of 3 different temperatures heating zones
- Low NOx (Class 5 according to European Directive UNI EN 483)
- Condensing heat exchanger (Patent Pending)
- Control panel featuring a wide display
- Built-in hydraulic header-separator
- 120 lt. built-in DHW tank
- 8 lt. built-in DHW expansion vessel
- Built-in thermoregulation on direct zone or by motorised valve on the circuit zone

Room-sealed

Efficiency ★★★★ Dir. 92/42/EEC

CODE	GAS	MODEL	DIMENSIONS H×W×D (mm)	CH INPUT MIN - MAX (kW)	DHW TANK CAPACITY (litres)
Combi boilers with built-in DHW tank					
20071817	NG	TOWER GREEN HE 35/120 B.S.I.	1540×600×610	3,5 - 35	120

Specific accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20027292	Ø80 twin system kit	1100279	WEEKLY 7-days programmable room thermostat
20027555	Ø60/100 horizontal flue terminal	1220639	Limit thermostat for low temperature installations
20083258	Additional direct zone kit	20084991	DHW recirculation kit with pump
20080038	Additional motorized mixed zone kit	20084750	kit check valves for CH and DHW
20083259	Remote control panel	20084990	Template kit for installation
20083900	kit for boiler interface remotation		

Additional zones configurations

ZONES	ADD. DIRECT ZONE (CODE 20083258)	ADD. MIXED ZONE (CODE 20080038)
1 direct zone + 1 mixed zone	-	no. 1
1 direct zone + 2 mixed zones	-	no. 2
2 direct zones	no. 1	-
3 direct zones	no. 2	-
2 direct zones + 1 mixed zone	no. 1	no. 1

Condensing high-efficiency floor-standing boilers with built-in DHW tank (specific for solar thermal systems)

TOWER GREEN HE S

NEW APRIL 2014

- **1:10 modulation**
- Low Energy auto-modulating system pumps (EEI<0,23)
- Possibility to manage up to 3 direct zones
- Low NOx (Class 5 according to European Directive UNI EN 483)
- Condensing heat exchanger (Patent Pending)
- Suitable for connection with solar thermal collectors
- Interface with wide display for complete management
- Pump for solar circuit as standard
- Flow-meter on solar circuit as standard
- Expansion vessel for solar circuit as standard
- Mixing valve as standard
- 200 lt. built-in DHW tank with double coil
- 8 lt. expansion vessel for DHW circuit as standard
- Built-in thermoregulation with external probe supplied as standard

Room-sealed

Efficiency ★★★★ Dir. 92/42/EEC

CODE	GAS	MODEL	DIMENSIONS H×W×D (mm)	CH INPUT MIN - MAX (kW)	DHW TANK CAPACITY (litres)
Combi boilers with built-in DHW tank					
20071816	NG	TOWER GREEN HE S 35/200 B.S.I.	1900×600×750	3,5 - 35	200 double coil

Specific accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20027292	Ø80 twin system kit	1100279	WEEKLY 7-days programmable room thermostat
20027555	Ø60/100 horizontal flue terminal	1220639	Limit thermostat for low temperature installations
20083258	Additional direct zone kit	20084749	DHW recirculation kit with pump
20080038	Additional motorized mixed zone kit	20084750	kit check valves for CH and DHW
20083259	Remote control panel	20084751	Template kit for installation
20083900	kit for boiler interface remotation		

Additional zones configurations

ZONES	ADD. DIRECT ZONE (CODE 20083258)	ADD. MIXED ZONE (CODE 20080038)
1 direct zone + 1 mixed zone	-	no. 1
1 direct zone + 2 mixed zones	-	no. 2
2 direct zones	no. 1	-
3 direct zones	no. 2	-
2 direct zones + 1 mixed zone	no. 1	no. 1

Condensing high efficiency floor-standing boilers with side DHW tank

TOWER GREEN HE COMPACT

NEW JULY 2014

- **1:10 modulation**
- Low Energy auto-modulating system pumps (EEI<0,23)
- Low NOx (Class 5 according to European Directive UNI EN 483)
- Condensing heat exchanger (Patent Pending)
- Built-in hydraulic header-separator
- 60 lt. built-in DHW tank
- 2 lt. expansion vessel for DHW circuit as standard
- Built-in thermoregulation with external probe supplied as standard

Room-sealed

Efficiency ★★★★ Dir. 92/42/EEC

CODE	GAS	MODEL	DIMENSIONS H×W×D (mm)	CH INPUT MIN - MAX (kW)	DHW TANK CAPACITY (litres)
Combi boilers with built-in DHW tank					
20084705	NG	TOWER GREEN HE 35/60 B.S.I.	850×600×610	3,5 - 35	60

Specific accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20027292	Ø80 twin system kit	1100279	WEEKLY 7-days programmable room thermostat
20027555	Ø60/100 horizontal flue terminal	1220639	Limit thermostat for low temperature installations
20083259	Remote control panel	NEW	Template kit for installation
20083900	kit for boiler interface remotation		

Condensing high-efficiency floor-standing boilers hybrid with built-in DHW tank

TOWER GREEN HE HYBRID

- **1:10 modulation**
- Management of different energy sources: condensing boiler, solar thermal, hydronic heat pump for heating and cooling
- Low NOx (Class 5 according to European Directive UNI EN 483)
- Low Energy auto-modulating system pumps (EEI<0,23)
- Built-in management of 3 different temperatures heating zones
- Suitable for connection with solar thermal panels and hydronic heat pump
- Interface with wide display for complete management
- 200 lt. built-in DHW tank with double coil
- 8 lt. expansion vessel for DHW circuit as standard
- Built-in thermoregulation with external probe supplied as standard

Room-sealed

Efficiency ★★★★ Dir. 92/42/EEC

CODE	GAS	MODEL	DIMENSIONS H×W×D (mm)	CH INPUT MIN - MAX (kW)	DHW TANK CAPACITY (litres)
Combi boilers with built-in DHW tank					
NEW	NG	TOWER GREEN HE HYBRID 35/200 B.S.I.	1900×600×750	3,5 - 35	200

Specific accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20027292	Ø80 twin system kit	1100279	WEEKLY 7-days programmable room thermostat
20027555	Ø60/100 horizontal flue terminal	1220639	Limit thermostat for low temperature installations
20083258	Additional direct zone kit	NEW	DHW recirculation kit with pump
20080038	Additional motorized mixed zone kit	NEW	kit check valves for CH and DHW
20083259	Remote control panel	NEW	Template kit for installation
20083900	kit for boiler interface remotation		

Additional zones configurations

ZONES	ADD. DIRECT ZONE (CODE 20083258)	ADD. MIXED ZONE (CODE 20080038)
1 direct zone + 1 mixed zone	-	no. 1
1 direct zone + 2 mixed zones	-	no. 2
2 direct zones	no. 1	-
3 direct zones	no. 2	-
2 direct zones + 1 mixed zone	no. 1	no. 1

Hydronic Unic pump matching with Tower Green he Hybrid

CODE	MODEL	DIMENSIONS H×W×D (mm)	RATED CAPACITY (1)/(2) (kW)	COP (1)/EER (2)
20053885	HYDRONIC UNIT 4	821×908×326	4,07 / 4,93	4,15 / 4,20
20053889	HYDRONIC UNIT 6	821×908×326	5,76 / 7,04	4,28 / 3,70
20053890	HYDRONIC UNIT 8	821×908×326	7,16 / 7,84	3,97 / 3,99

(1) outside air d.b. +7°C/ w.b. +6°C, water 30-35°C
(2) outside air d.b. +35°C/ w.b. +24°C, water 23-18°C

Solar collectors matching with Tower Green he Hybrid

CODE	MODEL	DESCRIPTION	DIMENSIONS H×L (mm)
20050314	SC-VF25	2,5 m² TRAY COLLECTOR	2078x1240
20050321	SCF-25N	2,5 m² FLAT COLLECTOR	2046x1186
20050326	SCF-20N	2 m² FLAT COLLECTOR	1856x1086
20050330	SCI-25N	2,5 m² INSET COLLECTOR	2033x1182
20050318	SCO-25N	2,5 m² HORIZONTAL COLLECTOR	1238x2076
20026324	SCV-25	2,5 m² VACUUM TUBES COLLECTOR	1730x1600

- Air/gas electronic combustion control = constant efficiency (on room-sealed models).
- Efficiency ★★★ according to European Directive EEC 92/42 (35 kW models only).
- Automatic room-temperature adjustment system (S.A.R.A. Booster).
- User-friendly and intuitive digital back-lit display.
- Easy filling system directly from the panel.
- "Comfort" functions.
- IPX5D electrical protection.
- Built-in thermoregulation (external probe as option).
- Hydraulic connections cover supplied as standard.
- Modulating fan (only on room-sealed models).

Room-sealed (modulating air / gas)

Efficiency ★★★ Dir. 92/42/EEC

CODE	GAS	MODEL	DIMENSIONS H × W × D (mm)	OUTPUT (kW)	DHW PRODUCTION (l/min. - Δt 25 °C)
Instantaneous combi boilers					
1150343	NG	EXCLUSIVE MIX 26 C.S.I.	805 × 400 × 332	26	15
1150673	NG	EXCLUSIVE MIX 30 C.S.I.	805 × 450 × 332	30	17
1150383	NG	EXCLUSIVE MIX 35 C.S.I.	805 × 500 × 332	35	20.2
Heating only boilers					
1150353	NG	EXCLUSIVE MIX 30 R.S.I.	805 × 450 × 332	30	-
20029161	NG	EXCLUSIVE MIX 35 R.S.I.	805 × 500 × 332	35	-

Conventional flue

CODE	GAS	MODEL	DIMENSIONS H × W × D (mm)	OUTPUT (kW)	DHW PRODUCTION (l/min. - Δt 25 °C)
Instantaneous combi boilers					
1150683	NG	EXCLUSIVE 24 C.A.I.	805 × 400 × 332	24	13.8
1150693	NG	EXCLUSIVE 28 C.A.I.	805 × 450 × 332	28	16.2
Heating only boilers					
1150703	NG	EXCLUSIVE 28 R.A.I.	805 × 450 × 332	28	-

Specific accessories

Flues accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
1220409	Ø80 twin flue system kit	20066929	Ø60/100 horizontal flue terminal (Al/PPu)

Comfort accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
1103119	Remote control panel REC 07 with ITRF11 interface board	20059641	ALPHA DGT WIRELESS digital room thermostat
1103299	PCB for multi-zone temperature management to be used with REC 07	20059639	ALPHA DGT digital room thermostat
20050692	OMEGA WIRELESS modulating 7-day thermostat (WHITE) - ITRF11 interface needed (code 1221179)	20059644	ALPHA 7D WIRELESS 7-day digital room thermostat
20050693	OMEGA WIRELESS modulating 7-day thermostat (BLACK) - ITRF11 interface needed (code 1221179)	20063872	ALPHA 7D 7-day digital room thermostat
20050684	OMEGA modulating 7-day thermostat (WHITE) - ITRF11 interface needed (code 1221179)	1221179	ITRF11 OT+bus interface board
20050685	OMEGA modulating 7-day thermostat (BLACK) - ITRF11 interface needed (code 1221179)	1100439	Outdoor temperature probe

Hydraulic accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
1101989	Central heating taps	1220599	Socket probe for DHW tank - 3 m wire (for R.A.I. and R.S.I. models)
1101999	Central heating taps with filter (for combi models)	20025113	Solar diverter mixing valve (models C.S.I./C.A.I.)
1101979	High head pump - 6 metres (models C.A.I. and 26/30 C.S.I.)		

Special accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20071580	Dummy Exclusive MIX for POS		

- **Primary heat exchanger in copper**.
- **DHW plate heat exchanger in stainless steel**.
- Efficiency ★★★ according to European Directive EEC 92/42 (24 C.S.I, 28 C.S.I, 28 R.S.I.).
- Two air inlet holes (right and left side).
- Expansion vessel 9 litres.
- 3-speed circulator 5 metres.
- Intuitive and easy-to-use control panel with backlit digital display.
- Built-in thermoregulation (external temperature probe as option).
- IPX5D electrical protection.
- Lower cover available as option (for 24 C.S.I., 28 C.S.I., 28 R.S.I. models).
- **Hydraulic connections, gas and DHW taps available as option**.

Room-sealed

Efficiency ★★★ Dir. 92/42/EEC

CODE	GAS	MODEL	DIMENSIONS H×W×D (mm)	OUTPUT (kW)	DHW PRODUCTION (l/min. - Δt 25 °C)
Instantaneous combi boilers					
20069385	NG	MYNUTE S 24 C.S.I.	740×400×336	24	13.9
20069386	LPG	MYNUTE S 24 C.S.I.	740×400×336	24	13.9
20069387	NG	MYNUTE S 28 C.S.I.	740×400×336	28	16
20069389	LPG	MYNUTE S 28 C.S.I.	740×400×336	28	16
20069392	NG	MYNUTE S 35 C.S.I.	780×505×336	35	20
Heating only boilers					
20069391	NG	MYNUTE S 28 R.S.I.	740×400×336	28	-
20069395	NG	MYNUTE S 35 R.S.I.	780×505×336	35	-

Conventional flue

CODE	GAS	MODEL	DIMENSIONS H×W×D (mm)	OUTPUT (kW)	DHW PRODUCTION (l/min. - Δt 25 °C)
Instantaneous combi boilers					
20074588	NG	MYNUTE S 24 C.A.I. E	740×400×336	24	13.9
20069390	NG	MYNUTE S 28 C.A.I. E	740×450×336	28	16.4

Specific accessories

Flues accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
1220409	Ø80 twin flue system kit	20066929	Ø60/100 horizontal flue terminal (Al/PPu)

Comfort accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20064543	Remote control panel REC 08 with connector	20059641	ALPHA DGT WIRELESS digital room thermostat
20050692	OMEGA WIRELESS modulating 7-day thermostat (WHITE) - code 20008401 needed	20059639	ALPHA DGT digital room thermostat
20050693	OMEGA WIRELESS modulating 7-day thermostat (BLACK) - code 20008401 needed	20059644	ALPHA 7D WIRELESS 7-day digital room thermostat
20050684	OMEGA modulating 7-day thermostat (WHITE) - code 20008401 needed	20063872	ALPHA 7D 7-day digital room thermostat
20050685	OMEGA modulating 7-day thermostat (BLACK) - code 20008401 needed	20049748	Outdoor probe with connector
20008401	Connector kit for outdoor probe and remote control	20000783	ITRF05 electronic board to control the main heating zone (to be used with remote control)

Hydraulic accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
1101989	Heating taps	20051629	Lower cover (only for 24 C.S.I., 28 C.S.I., 28 R.S.I. models)
1101999	Heating taps with filter	20008794	Kit hydraulic connections (for welding)
20025113	Solar diverter mixing valve (C.S.I. models)	20051979	Kit hydraulic connections (with brass nipples)
1101979	High head circulator (6 metres)	1220599	Socket probe for DHW tank - 3 m wire (only R.S.I. models)

INTERAXES AND HYDRAULIC FITTINGS POSITIONING

- **Primary heat exchanger in copper**.
- **DHW plate heat exchanger in stainless steel**.
- Efficiency ★★★ according to European Directive EEC 92/42.
- Two air inlet holes (right and left side).
- Expansion vessel 8 litres.
- 3-speed circulator 5 metres (4 metres single-speed on 20 kW version).
- Intuitive and easy-to-use control panel with backlit digital display.
- Built-in thermoregulation (external probe as option).
- IPX5D electrical protection.
- Frost protection kit till -10 °C available as option.
- Upper and lower cover available as option.
- **Hydraulic connections, gas and DHW taps available as option**.

Room-sealed

Efficiency ★★★ Dir. 92/42/EEC

CODE	GAS	MODEL	DIMENSIONS H × W × D (mm)	OUTPUT (kW)	DHW PRODUCTION (l/min. - Δt 25 °C)
Instantaneous combi boilers					
20068208	NG	CIAO S 20 C.S.I.	715 × 405 × 248	20	11.8
20068204	NG	CIAO S 24 C.S.I.	715 × 405 × 248	24	13.7
20068228	LPG	CIAO S 24 C.S.I.	715 × 405 × 248	24	13.7
Heating only boilers					
20068207	NG	CIAO S 24 R.S.I.	715 × 405 × 248	24	-

Specific accessories

Flues accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20049143	Ø80 twin system kit	20006596	90° bend kit Ø60/100 for replacement *
20066929	Ø60/100 horizontal flue terminal (Al/PPu)		

Comfort accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20064543	Remote control panel REC 08 with connector	20059641	ALPHA DGT WIRELESS digital room thermostat
20050692	OMEGA WIRELESS modulating 7-day thermostat (WHITE) - code 20008401 needed	20059639	ALPHA DGT digital room thermostat
20050693	OMEGA WIRELESS modulating 7-day thermostat (BLACK) - code 20008401 needed	20059644	ALPHA 7D WIRELESS 7-day digital room thermostat
20050684	OMEGA modulating 7-day thermostat (WHITE) - code 20008401 needed	20063872	ALPHA 7D 7-day digital room thermostat
20050685	OMEGA modulating 7-day thermostat (BLACK) - code 20008401 needed	20049748	Outdoor probe with connector
20008401	Connector kit for outdoor probe and remote control	20000783	ITRF05 electronic board to control the main heating zone (to be used with remote control)

Hydraulic accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
1101989	Heating taps	20025113	Solar diverter mixing valve (C.S.I. models)
1101999	Heating taps with filter	1101979	High head circulator (6 metres)
20008794	Kit hydraulic connections (for welding)	1220599	Socket probe for DHW tank - 3 m wire (only R.S.I. models)
20008795	Kit hydraulic connections (with brass nipples)		

Special accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20012594	Lower cover	20017044	Frost protection resistances kit till -10°C (C.S.I. models) **
20012595	Upper cover		

* To be used in case of replacement of old Mynute 24 C.S.I with CIAO S range only in case of concentric flue through wall.
** Together with the installation of the frost protection resistances kit (code 20017044), it is necessary to install the lower cover (code 20012594).

- Bithermic heat-exchanger.
- Efficiency ★★★ according to European Directive EEC 92/42 (on room-sealed models).
- Two air inlet holes (right and left side).
- Expansion vessel 8 litres.
- 4 metres single-speed circulator on 20-24 kW versions.
- 5 metres single-speed circulator on 28 kW versions.
- Intuitive and easy-to-use control panel with backlit digital display.
- Built-in thermoregulation (external probe as option).
- IPX5D electrical protection.
- Frost protection kit till -10 °C available as option.
- Upper and lower cover availbale as option (on 24 C.S.I. models).
- **Hydraulic connections, gas and DHW taps available as option**.

Room-sealed

Efficiency ★★★ Dir. 92/42/EEC

CODE	GAS	MODEL	DIMENSIONS H × W × D (mm)	OUTPUT (kW)	DHW PRODUCTION (l/min. - Δt 25 °C)
Instantaneous combi boilers					
20084048	NG	CIAO 20 C.S.I. e	715 × 405 × 248	20	11.8
20070516	NG	CIAO 24 C.S.I. e	715 × 405 × 248	24	13.7
20070521	LPG	CIAO 24 C.S.I. e	715 × 405 × 248	24	13.7
20070517	NG	CIAO 28 C.S.I. e	740 × 450 × 332	28	16.2
20070522	LPG	CIAO 28 C.S.I. e	740 × 450 × 332	28	16.2

Conventional flue

CODE	GAS	MODEL	DIMENSIONS H × W × D (mm)	OUTPUT (kW)	DHW PRODUCTION (l/min. - Δt 25 °C)
Instantaneous combi boilers					
20070518	NG	CIAO 24 C.A.I. e	740 × 400 × 332	24	13.6
20070520	NG	CIAO 28 C.A.I. e	740 × 450 × 332	28	16.3

Specific accessories

Flues accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20049143	Ø80 twin system kit	20006596	90° bend kit Ø60/100 for replacement *
20066929	Ø60/100 horizontal flue terminal (Al/PPu)		

Comfort accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20064543	Remote control panel REC 08 with connector	20059641	ALPHA DGT WIRELESS digital room thermostat
20050692	OMEGA WIRELESS modulating 7-day thermostat (WHITE) - code 20008401 needed	20059639	ALPHA DGT digital room thermostat
20050693	OMEGA WIRELESS modulating 7-day thermostat (BLACK) - code 20008401 needed	20059644	ALPHA 7D WIRELESS 7-day digital room thermostat
20050684	OMEGA modulating 7-day thermostat (WHITE) - code 20008401 needed	20063872	ALPHA 7D 7-day digital room thermostat
20050685	OMEGA modulating 7-day thermostat (BLACK) - code 20008401 needed	20049748	Outdoor probe with connector
20008401	Connector kit for outdoor probe and remote control	20000783	ITRF05 electronic board to control the main heating zone (to be used with remote control)

Hydraulic accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
1101989	Heating taps	20025113	Solar diverter mixing valve (C.S.I. models)
1101999	Heating taps with filter	1101979	High head circulator - 6 metres (for 24 C.S.I model)
20008794	Kit hydraulic connections (for welding)	1101769	High head circulator - 6 metres (for 24 C.A.I., 28 C.A.I./C.S.I. models)
20008795	Kit hydraulic connections (with brass nipples)		

Special accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20012594	Lower cover (only for CIAO 24 C.S.I)	20017044	Frost protection resistances kit till -10°C (only for CIAO 24 C.S.I) **
20012595	Upper cover (only for CIAO 24 C.S.I)		

* To be used in case of replacement of old Mynute 24 C.S.I with CIAO 24 C.S.I. only in case of concentric flue through wall.
** Together with the installation of the frost protection resistances kit (code 20017044), it is necessary to install the lower cover (code 20012594).

MYNUTE BOILER

NEW

- **Built-in stainless steel DHW tank with magnesium anode** (capacity: 45 lt. on 24/45 B.S.I. model; 60 lt. on 28/60 B.S.I. and B.A.I. models).
- Primary heat exchanger in copper.
- Efficiency ★★★ according to European Directive EEC 92/42
- Built-in thermoregulation (with external probe available as option).
- IPX5D electrical protection.
- Compatible with the hydraulic separators Beretta CONNECT.
- Expansion vessel 10 litres, DHW expansion vessel 2 litres
- 3-speed circulator 5 metres
- Intuitive and easy-to-use control panel with backlit digital display.
- **Hydraulic connections, gas and DHW taps available as option**.

Room-sealed

Efficiency ★★★ Dir. 92/42/EEC

CODE	GAS	MODEL	DIMENSIONS H × W × D (mm)	OUTPUT (kW)	DHW TANK CAPACITY (litres)
Combi boiler with built-in DHW tank					
20071344	NG	MYNUTE BOILER 28/60 B.S.I.	940 × 600 × 465	28	60
20071343	NG	MYNUTE BOILER 24/45 B.S.I.	940 × 600 × 465	24	45

Conventional flue

CODE	GAS	MODEL	DIMENSIONS H × W × D (mm)	OUTPUT (kW)	DHW TANK CAPACITY (litres)
Combi boiler with built-in DHW tank					
20074642	NG	MYNUTE BOILER 28/60 B.A.I.	940 × 600 × 465	28	60

Specific accessories

Flues accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
1220409	Ø80 twin flue system kit	20066929	Ø60/100 horizontal flue terminal (Al/PPu)

Comfort accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20064543	Remote control panel REC 08 with connector	20059641	ALPHA DGT WIRELESS digital room thermostat
20050692	OMEGA WIRELESS modulating 7-day thermostat (WHITE) - code 20008401 needed	20059639	ALPHA DGT digital room thermostat
20050693	OMEGA WIRELESS modulating 7-day thermostat (BLACK) - code 20008401 needed	20059644	ALPHA 7D WIRELESS 7-day digital room thermostat
20050684	OMEGA modulating 7-day thermostat (WHITE) - code 20008401 needed	20063872	ALPHA 7D 7-day digital room thermostat
20050685	OMEGA modulating 7-day thermostat (BLACK) - code 20008401 needed	20049748	Outdoor probe with connector
20008401	Connector kit for outdoor probe and remote control	20000783	ITRF05 electronic board to control the main heating zone (to be used with remote control)

Hydraulic accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
1101989	Heating taps	1101979	High head circulator - 6 metres
1101999	Heating taps with filter	1221209	Multi-zones electronic board to be used with REC05

- High quality cast-iron heat-exchanger.
- Electronic ignition with ionization flame control.
- Possibility of multi-zones circuits management with external connections.
- IP40 electrical protection.
- Suitable for connection with Beretta DHW tanks.
- Can be converted to LPG through LPG kit (supplied as standard).

Conventional flue

CODE	GAS	MODEL	DIMENSIONS H × W × D (mm)	OUTPUT (kW)
Heating only boilers				
442943	NG	NOVELLA 31 R.A.I.	850 × 450 × 675	34.4
443043	NG	NOVELLA 45 R.A.I.	850 × 600 × 720	50
443053	NG	NOVELLA 55 R.A.I. *	850 × 450 × 712	61
443063	NG	NOVELLA 64 R.A.I. *	850 × 450 × 795	70.5
443073	NG	NOVELLA 71 R.A.I. **	850 × 450 × 878	79

* In addition to the boilers Novella 55 R.A.I. e Novella 64 R.A.I. **it is necessary** to order the code 480213: anti-refouleur kit Ø180 mm.
** In addition to the boiler Novella 71 R.A.I. **it is necessary** to order the code 480214: anti-refouleur kit Ø200 mm.

Specific accessories

Flues accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
480213	Anti-refouleur kit Ø 180 mm (for Novella 55 R.A.I. and 64 R.A.I.)	480214	Anti-refouleur kit Ø 200 mm (for Novella 71 R.A.I.)

Comfort accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20050692	OMEGA WIRELESS programmable 7-day thermostat (WHITE) - to be used in type ON/OFF	20059639	ALPHA DGT digital room thermostat
20050693	OMEGA WIRELESS programmable 7-day thermostat (BLACK) - to be used in type ON/OFF	20059644	ALPHA 7D WIRELESS 7-day digital room thermostat
20050684	OMEGA programmable 7-day thermostat (WHITE) - to be used in type ON/OFF	20063872	ALPHA 7D 7-day digital room thermostat
20050685	OMEGA programmable 7-day thermostat (BLACK) - to be used in type ON/OFF	1100689	Multi-zones electrical kit with circulators or valves
20059641	ALPHA DGT WIRELESS digital room thermostat		

Hydraulic accessories

CODE	DESCRIPTION
1100269	High head circulator

Special accessories

CODE	DESCRIPTION
20051957	Electric connections kit (only for BV tanks)

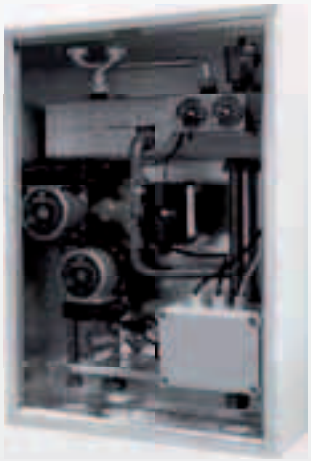
NEW JUNE 2014

- Low Energy auto-modulating pumps (EEI<0,23)
- 3-way electronic mixing valve (Connect AT/BT and AT/BT2).
- Independent climatic bends setting for each zone (Connect AT/BT and AT/BT2).
- Electronic management board supplied as standard.
- Limit thermostat for low temperature installations.
- Specifically designed for INDOOR or OUTOOR in-box installations (IPX4D electrical protection).

CODE	MODEL	DIMENSIONS H×W×D (mm)
High flow installations management		
20083968	CONNECT 1D LE *	see BOX
Two direct zones		
20083969	CONNECT 2D LE *	see BOX
Three direct zones		
20083970	CONNECT 3D LE *	see BOX
One high temperature zone and one low temperature zone - Electronic mixing valve		
20083971	CONNECT AT/BT LE *	see BOX
One high temperature zone and two low temperature zones - Electronic mixing valve		
20083972	CONNECT AT/BT2 LE *	see BOX
One high temperature zone and one low temperature zone - Thermostatic manual mixing valve		
20084765	CONNECT BASE MIX 1 LE *	see BOX
One high temperature zone and two low temperature zones - Thermostatic manual mixing valve		
20084766	CONNECT BASE MIX 2 LE *	see BOX

* It can be matched with all Beretta condensing and standard-efficiency wall-hung and floor-standing boilers. In case of use in LINK mode (using the OT+bus protocol) when connected to the boilers Exclusive GREEN/Exclusive GREEN HE/ Exclusive boiler GREEN/Exclusive Boiler GREEN HE, it is necessary to use the bus protocol interface code 1221179.

20007305	BOX for CONNECT (for installation)	720×400×160



- 3-way electronic mixing valve.
- Independent climatic bends setting for each zone (Connect AT/BT and AT/BT2).
- Electronic management board supplied as standard.
- Limit thermostat for low temperature installations.
- IPX4D electrical protection.

CODE	MODEL	DIMENSIONS H × W × D (mm)
One high temperature zone and one low temperature zone - Electronic mixing valve		
1102539	CONNECT AT/BT *	616 × 440 × 115
20000674	CONNECT MIX STAND-ALONE **	616 × 440 × 115

* To be matched only with the condensing wall-hung boilers of the series Exclusive Boiler GREEN / Exclusive Boiler GREEN HE / Exclusive GREEN HE.
** It can be matched with all Beretta condensing and standard-efficiency wall-hung and floor-standing boilers (room thermostat connection only).

One high temperature zone and two low temperature zones - Electronic mixing valve		
20015064	CONNECT AT/BT2 **	see BOX

** It can be matched with all Beretta condensing and standard-efficiency wall-hung and floor-standing boilers. In case of use in LINK mode (using the OT+bus protocol) when connected to the boilers Exclusive GREEN/Exclusive GREEN HE/ Exclusive boiler GREEN/Exclusive Boiler GREEN HE, it is necessary to use the bus protocol interface code 1221179.

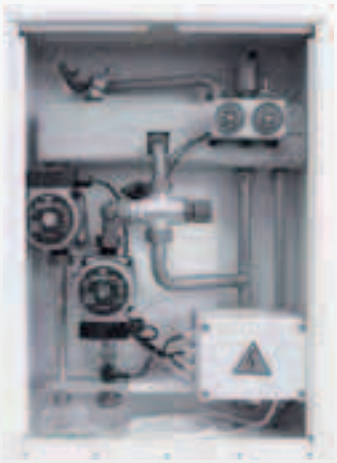
20007305	BOX for CONNECT *** (for installation)	720 × 400 × 160

*** To be used with the versions CONNECT AT/BT2 and CONNECT BASE MIX 2.

High flow installations management		
1102549	CONNECT AP *	616 × 440 × 155

* To be matched only with the condensing wall-hung boilers of the series Exclusive Boiler GREEN / Exclusive Boiler GREEN HE / Exclusive GREEN HE.

CONNECT BASE



- Thermostatic manual mixing valve.
- Limit thermostat kit for low temperature installations supplied as standard.
- IPX4D electrical protection.
- Connect BASE can be matched with all Beretta wall-hung and floor-standing boilers, both condensing and standard-efficiency.

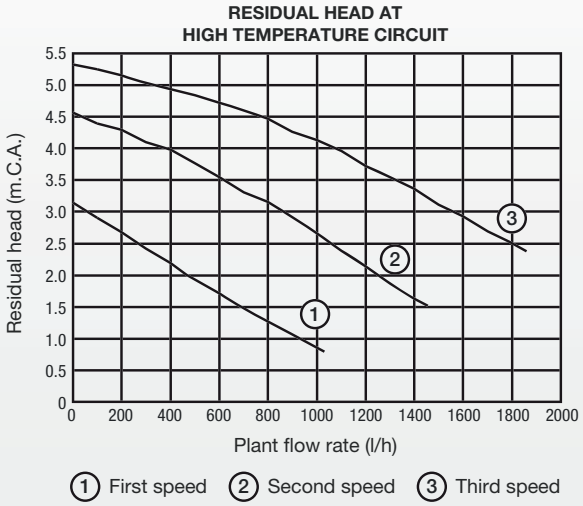
CODE	MODEL	DIMENSIONS H × W × D (mm)
One high temperature zone and one low temperature zone - Thermostatic manual mixing valve		
1102519	CONNECT BASE MIX 1	616 × 440 × 115
One high temperature zone and two low temperature zones - Thermostatic manual mixing valve		
20007260	CONNECT BASE MIX 2	see BOX

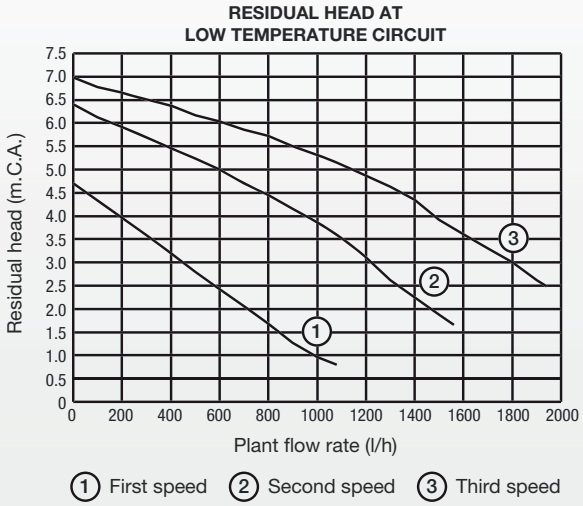
For the installation of the CONNECT BASE MIX2 **it is necessary** to buy the BOX for installation, code 20007305.

20007305	BOX for CONNECT ** (for installation)	720 × 400 × 160

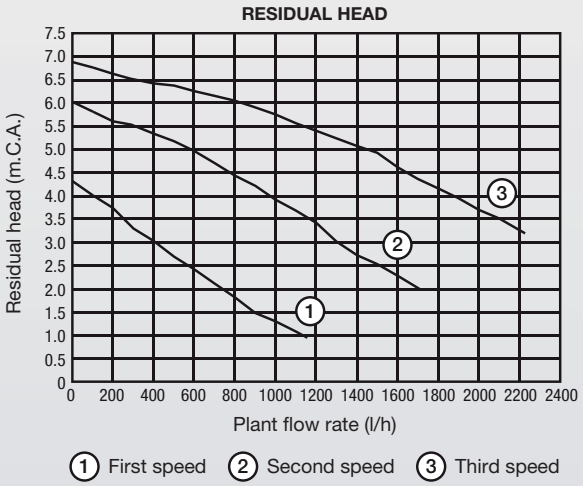
** To be used with the CONNECT AT/BT2 and the CONNECT BASE MIX2.

Connect AT/BT - Base MIX1

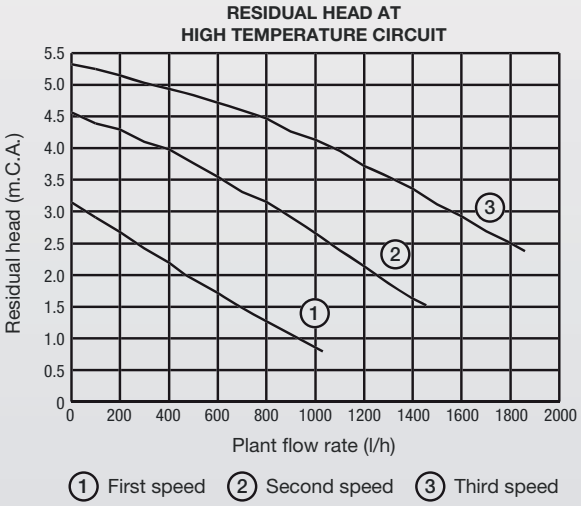




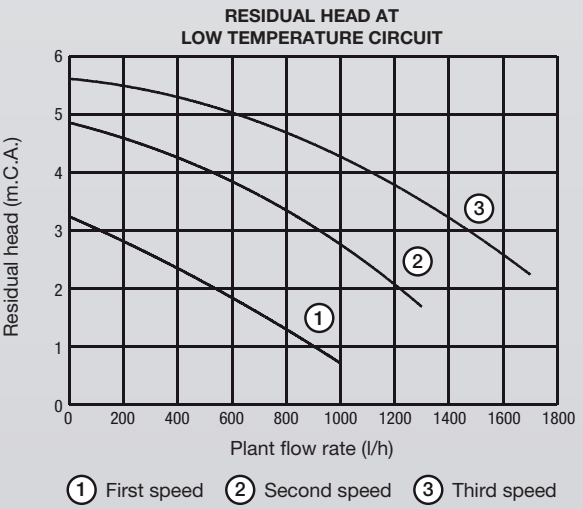
Connect AP



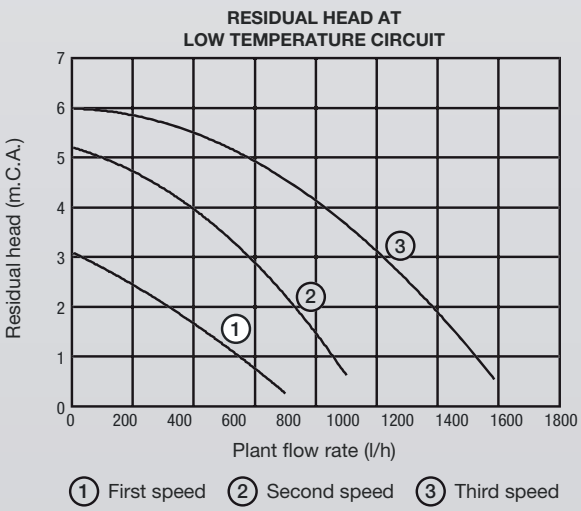
Connect AT/BT2 - Base MIX 2



Connect AT/BT2



Connect Base MIX 2



- Enamelled DHW tank, ideal to be matched with Beretta wall-hung boilers R.A.I./R.S.I. (“only heating” models).
- Supplied with high thermal-exchange coil.
- Magnesium anode supplied as standard.
- DHW safety-valve supplied as standard.
- DHW expansion vessel available as optional.
- DHW connections and filling tap kit available as optional.
- Control board with thermostat available as optional.

CODE	MODEL	DIMENSIONS H × Ø (mm)	DHW TANK CAPACITY (litres)
20050723	BV 120	723 × 560	120
20050725	BV 160	923 × 560	160

Specific accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
1220599 *	Socket probe	20053293	Control board kit with thermostat
20050731 *	DHW expansion vessel 4 litres	696109	Vertical hydraulic connection
20050732 *	DHW connections and filling tap kit	696119	Remote hydraulic connection

* Beretta recommended accessories with BV tanks.

IDRA M 60

- Stailess-steel DHW tank, capacity 60 litres, ideal to be matched with the wall-hung boilers R.S.I and R.A.I. ('only heating' models).
- Designed for wall-hung installation.
- Supplied with high thermal transfer coil.
- Magnesium anode supplied as standard.
- Tank probe supplied as standard.

CODE	MODEL	DIMENSIONS H × Ø (mm)	DHW TANK CAPACITY (litres)
1150319	IDRA M 60	925 × 450 × 360	60 (stainless steel)

Specific accessories

CODE	DESCRIPTION
1150329	Expansion vessel
20025113	Solar diverter mixing valve

CODE	DESCRIPTION
1103479	DHW recirculation kit

DHW-tanks for floor-standing boilers
AQUAPLUS

- Ideal to be matched with floor-standing boilers of Novella series.
- DHW-tank in enamelled steel.
- Designed for aside installion.
- High-exchange thermal capacity coil.
- Electrical interface kit total shut-off, supplied as standard.
- DHW circulator as standard.
- Magnesium anode as standared.
- Summer/winter selector as standard.

CODE	MODEL	DIMENSIONS H × W × D (mm)	MAX INPUT (kW)	TANK CAPACITY (litres)
1100759	AQUAPLUS 120	850 × 600 × 600	28.9	120

Specific accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
696369	Hydraulic connections	696359	Expansion vessel

REMOTE CONTROL PANELS REC 07 AND REC 08

REC 07

REC 08

- Allow the complete remote control of the boiler via OT+bus protocol.
- Boiler parametres setting (including service setting).
- Displayed operating mode.
- 7-day programmable room thermostat with two temperature levels.

CODE	MODEL	TYPE	DIMENSIONS H × W × D (mm)
20064543	REC 08	Remote control with connector	95 × 80 × 25
20001776	REC 08	Remote control	95 × 80 × 25
1103109	REC 07	Advanced remote control with ITRF11	95 × 145 × 25
1103119	REC 07	Advanced remote control	95 × 145 × 25

OMEGA / OMEGA WIRELESS

- Modulating 7-day programmable room thermostat (in 30-minutes steps).
- Selectable working mode according to the boiler: ON/OFF room thermostat or boiler remote control via OT+ bus protocol.
- Pre-set heating programme.
- 4 modes of operation: auto, holiday, off, party.
- 3-temperature selections – comfort, economy, frost.
- DHW temperature adjustment (only on remote control mode).
- Selectable ON/OFF hysteresis.
- Icon displays include: boiler status, service reminder, boiler reset, boiler fault code and fault history.
- Permanent outside temperature displayed (if external sensor kit installed).
- Room-temperature self-regulation function: as the target room temperature is achieved, the Omega control regulates the boiler temperature, thereby avoiding overheating the room.
- Available also in black version.

Additional features on **Omega Wireless**

- Wireless for a flexible installation (pre-cabled).
- 40-metre range.
- Receiver can be mounted to wall (screws and plugs included) or mounted to the side of the boiler (magnetic strips included).

ATTENTION: In case of installation in working mode “remote boiler via OT+ bus protocol”, special connection kits are required. See for each boiler the specific accessories page.

CODE	MODEL	TYPE	DIMENSIONS H × W × D (mm)
20050684	OMEGA - white	Modulating room-thermostat 7-day	86 × 140 × 20
20050685	OMEGA - black	Modulating room-thermostat 7-day	86 × 140 × 20
20050692	OMEGA WIRELESS - white	Modulating room-thermostat 7-day wireless	86 × 140 × 20
20050693	OMEGA WIRELESS - black	Modulating room-thermostat 7-day wireless	86 × 140 × 20

ALPHA 7D / ALPHA 7D WIRELESS

NEW

- 7-day programmable room thermostat (in 60-minutes steps).
- Built-in heating programme.
- 4 modes of operation: auto, advance, off, party.
- 3-temperature selections – comfort, economy, frost.
- Visual boiler 'ON' indicator.
- Selectable ON/OFF hysteresis.
- Low battery indicator.
- Summer function for cooling mode (separator relay needed) – on Alpha 7D only.

Additional features on **Alpha 7D Wireless**

- Wireless for a flexible installation (pre-cabled).
- 40-metre range.
- Receiver can be mounted to wall (screws and plugs included) or mounted to the side of the boiler (magnetic strips included).

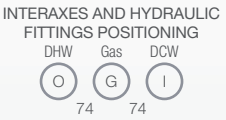
CODE	MODEL	TYPE	DIMENSIONS H×W×D (mm)
20063872	ALPHA 7D	Digital room-thermostat 7-day	86×86×20
20059644	ALPHA 7D WIRELESS	Digital room-thermostat 7-day wireless	86×86×20

ALPHA DGT / ALPHA DGT WIRELESS

NEW

- Room thermostat control (5°C - 35°C temperature range).
- Large, easy to read digital display.
- Tactile and easy to rotate selector dial.
- Simple installation.
- Selectable ON/OFF hysteresis.
- Wireless version for flexible installation (model Alpha DGT Wireless).

CODE	MODEL	TYPE	DIMENSIONS H×W×D (mm)
20059639	ALPHA DGT	Digital room-thermostat	86×86×20
20059641	ALPHA DGT WIRELESS	Digital room-thermostat wireless	86×86×20



- Room-sealed fan-assisted water-heater.
- Electronic modulation flame.
- Temperature selector.
- Operating mode and anomalies led indicators.
- Frost protection kit (optional).
- Electrical supply 230 V.
- IPX4D electrical protection.

Room-sealed

CODE	GAS	MODEL	DIMENSIONS H × W × D (mm)	OUTPUT (kW)	DHW PRODUCTION (l/min. - Δt 25 °C)
Ionisation flame - Electronic ignition					
1100173	NG	IDRABAGNO 13 ESI	640 × 400 × 246	22.5	13
1100175	LPG	IDRABAGNO 13 ESI	640 × 400 × 246	22.5	13
1100183	NG	IDRABAGNO 17 ESI	640 × 400 × 246	29	17
1100185	LPG	IDRABAGNO 17 ESI	640 × 400 × 246	29	17

For installations of IDRABAGNO ESI in low temperature conditions (till -14°C), the following specific frost protection kits with covers are available: code 1100489 for 13 ESI - code 1100479 for 17 ESI.

Specific accessories

CODE	DESCRIPTION
1100749	Air box twin flue kit
1100019	Standard collector Ø 60-100
1100499	Hydraulic taps
1100519	Gas straight tap

CODE	DESCRIPTION
1100509	Right-angle tap Idrabagno ESI
1100489	Frost protection resistances kit with cover (model 13 ESI)
1100479	Frost protection resistances kit with cover (model 17 ESI)

FONTE AP/AE

INTERAXES AND HYDRAULIC FITTINGS POSITIONING 11 AP/AE

INTERAXES AND HYDRAULIC FITTINGS POSITIONING 14 AP/AE

- Conventional-flue water-heater.
- Continuous flame modulation feature.
- Gas-saver function.
- Intuitive and user-friendly control panel, with DHW temperature selector.
- 1.5 V battery ignition (AE models).

Conventional flue

CODE	GAS	MODEL	DIMENSIONS H × W × D (mm)	OUTPUT (kW)	DHW PRODUCTION (l/min. - Δt 25 °C)
Pilote flame - Piezoelectric ignition					
20015354	NG	FONTE 11 AP	592 × 314 × 245	18.5	11
20015355	LPG	FONTE 11 AP	592 × 314 × 245	18.5	11
20015368	NG	FONTE 14 AP	650 × 363 × 245	23.2	14
20015369	LPG	FONTE 14 AP	650 × 363 × 245	23.2	14
Ionisation flame - Battery ignition					
20015356	NG	FONTE 11 AE	592 × 314 × 245	18.5	11
20015367	LPG	FONTE 11 AE	592 × 314 × 245	18.5	11
20015370	NG	FONTE 14 AE	650 × 363 × 245	23.5	14
20015371	LPG	FONTE 14 AE	650 × 363 × 245	23.5	14

Specific accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20020922	Hydraulic connections kit with DHW tap - Fonte 11 AP/AE	20020923	Hydraulic connections kit with DHW tap - Fonte 14 AP/AE

MAXIMUM FLUE LENGTHS TABLE

Condensing wall-hung boilers

MAX FLUE LENGTHS

	Concentric horizontal		Twin	
	60/100	80/125	80-80	Flue configuration approval
Exclusive GREEN HE 25 C.S.I./R.S.I.	7.85m	14.85m	32m+32m	B23P-B53P-C13-C13x-C23-C33-C33x-C43-C43x-C53-C53x-C63-C63x-C83-C83x-C93-C93x
Exclusive GREEN HE 35 C.S.I./R.S.I.	7.85m	14.85m	40m+40m	
Exclusive BOILER GREEN HE 25 B.S.I.	7.85m	14.85m	32m+32m	B23P-B53P-C13-C33-C43-C53-C93
Exclusive BOILER GREEN HE 35 B.S.I.	7.85m	14.85m	40m+40m	
Exclusive BOILER GREEN 30 B.S.I.	7.80m	18m	35m+35m	B23P-B53P-C13-C13x-C23-C33-C33x-C43-C43x-C53-C53x-C63-C63x-C83-C83x
Mynute GREEN 12 R.S.I. E	7.85m	14.85m	60m+60m	B23P-B53P-C13-C13x-C23-C33-C33x-C43-C43x-C53-C53x-C63-C63x-C83-C83x-C93-C93x
Mynute GREEN 15 R.S.I. E	7.85m	14.85m	50m+50m	
Mynute GREEN 25 C.S.I./R.S.I./B.S.I. E	7.85m	14.85m	36m+36m	
Mynute GREEN 30 C.S.I. E	7.85m	14.85m	30m+30m	
Mynute GREEN 38 C.S.I./R.S.I. E	3.85m	10m	30m+30m	
Ciao GREEN 25 C.S.I./R.S.I.	5.85m	15.3m	45m+45m	
Ciao GREEN 29 C.S.I.	4.85m	12.8m	40m+40m	
Mynute GREEN 50 R.S.I.	1.85m	4.85m	20m+20m	

Condensing floor-standing boilers

MAX FLUE LENGTHS

	Concentric horizontal		Twin	
	60/100	80/125	80-80	Flue configuration approval
Tower GREEN HE 35/120 B.S.I.	7.85m	14.85m	40m+40m	B23P-B53P-C13-C13x-C23-C33-C33x-C43-C43x-C53-C53x-C63-C63x-C83-C83x
Tower GREEN HE S 35/200 B.S.I.	7.85m	14.85m	40m+40m	
Tower GREEN HE 35/60 B.S.I.	7.85m	14.85m	40m+40m	
Tower GREEN HE HYBRID 35/200 B.S.I.	7.85m	14.85m	40m+40m	

Standard efficiency wall-hung boilers

MAX FLUE LENGTHS

	Concentric horizontal		Twin	
	60/100	80/125	80-80	Flue configuration approval
Exclusive MIX 26 C.S.I.	3.40m	N.A.	15m+15m	C12-C12x-C22-C32-C32x-C42-C42x-C52-C52x-C62-C62x-C82-C82x
Exclusive MIX 30 C.S.I./R.S.I.	3.40m	N.A.	14m+14m	
Exclusive MIX 35 C.S.I./R.S.I.	2.00m	4.26m	6m+6m	C12-C12x-C22-C32-C32x-C42-C42x-C62-C62x-C82-C82x
Mynute S 24 C.S.I.	4.25m	N.A.	20m+20m	B22P-B52P-C12-C12x-C22-C32-C32x-C42-C42x-C52-C52x-C62-C62x-C82-C82x-C92-C92x
Mynute S 28 C.S.I./R.S.I.	3.40m	N.A.	14.5m+14.5m	
Mynute S 35 C.S.I./R.S.I.	2.30m	5.85m	8m+8m	
Ciao S C.S.I./R.S.I.	4.25m	12.40m	16m+16m	
Ciao 20 C.S.I. e	4.25m	12.40m	10m+10m	B22P-B52P-C12-C12x-C22-C32-C32x-C42-C42x-C52-C52x-C62-C62x-C82-C82x
Ciao 24 C.S.I. e	4.25m	12.40m	16m+16m	
Ciao 28 C.S.I. e	3.40m	N.A.	14m+14m	
Mynute Boiler 24/45 B.S.I.	4.25m	10,5	20m+20m	
Mynute Boiler 28/60 B.S.I.	3.40m	8,5	17m+17m	

Istantaneous water heaters

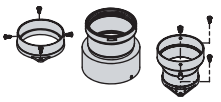
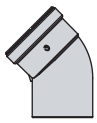
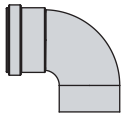
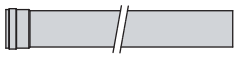
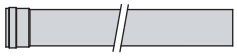
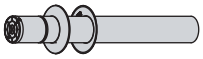
MAX FLUE LENGTHS

	Concentric horizontal		Twin	
	60/100	80/125	80-80	Flue configuration approval
Idrabagno ESI	3.50m	N.A.	8m+8m	B32-C12-C12x-C22-C32-C32x-C42-C42x-C52-C52x-C62-C62x-C82-C82x

Losses

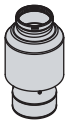
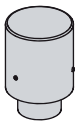
	Concentric horizontal		Twin	
	60/100	80/125	80-80	
45° bend standard efficiency	1.0m	1.4m	1.2m	
90° bend standard efficiency	1.5m	2.2m	1.7m	
45° bend condensing	1.3m	1.0m	1.0m	
90° bend condensing	1.6m	1.5m	1.5m	

Ø80 twin flue system in plastic (PP) for condensing boilers

	WALL-HUNG BOILERS						FLOOR-STANDING BOILERS	
	Exclusive GREEN HE	Exclusive BOILER GREEN / HE	Mynute GREEN	Ciao GREEN	Mynute GREEN 50 R.S.I.		Tower GREEN HE	
code 20062932 NEW  Ø80 TWIN SYSTEM KIT				○				
code 20027292  Ø80 TWIN SYSTEM KIT	○	○	○				○	
code 20027266  45° Ø80 BEND	○	○	○	○	○		○	
code 20027262  90° Ø80 BEND	○	○	○	○	○		○	
code 20027219  EXTENSION 500 mm Ø80	○	○	○	○	○		○	
code 20027222  EXTENSION 1000 mm Ø80	○	○	○	○	○		○	
code 20027226  EXTENSION 2000 mm Ø80	○	○	○	○	○		○	
code 20027272  HORIZONTAL FLUE TERMINAL Ø80 L = 985 mm	○	○	○	○	○		○	
code 20027276  AIR INLET HORIZONTAL TERMINAL Ø80 L = 662 mm	○	○	○	○	○		○	

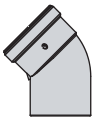
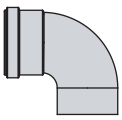
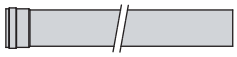
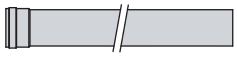
Due to exposition to sunlight, the colour of the material (PP) may be altered.

Ø80 twin flue system in plastic (PP) for condensing boilers

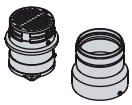
	WALL-HUNG BOILERS						FLOOR-STANDING BOILERS	
	Exclusive GREEN HE	Exclusive BOILER GREEN / HE	Mynute GREEN	Ciao GREEN	Mynute GREEN 50 R.S.I.		Tower GREEN HE	
code 20027300  FLUE ADAPTER Ø60/100 TO Ø80 FOR B23 INSTALLATION WITH AIR INLET	○	○	○	○			○	
code 20027195  FLUE ADAPTER Ø60-80 for INSTALLATION TYPE B23 AND AIR INLET	○	○	○	○			○	
code 1100229  SPACERS FOR PIPE Ø80 (4 pcs. pack)	○	○	○	○	○		○	
code 20028478  AIR INLET KIT FOR INSTALLATION TYPE B23					○			

Due to exposition to sunlight, the colour of the material (PP) may be altered.

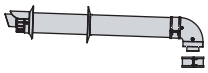
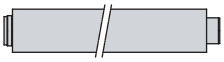
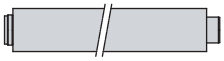
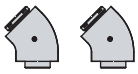
Ø80 twin flue system in aluminium for condensing boilers

	WALL-HUNG BOILERS						FLOOR-STANDING BOILERS	
	Exclusive GREEN HE	Exclusive BOILER GREEN / HE	Mynute GREEN	Ciao GREEN	Mynute GREEN 50 R.S.I.		Tower GREEN HE	
code 1102019  Ø80 TWIN SYSTEM KIT	○	○	○	○			○	
code 1101899  45° Ø80 BEND	○	○	○	○	○		○	
code 1101909  90 °Ø80 BEND	○	○	○	○	○		○	
code 1101929  EXTENSION 500 mm Ø80	○	○	○	○	○		○	
code 1101939  EXTENSION 1000 mm Ø80	○	○	○	○	○		○	
code 1101949  EXTENSION 2000 mm Ø80	○	○	○	○	○		○	
code 1101969  HORIZONTAL FLUE TERMINAL Ø80	○	○	○	○	○		○	
code 1100139  AIR INLET TERMINAL Ø80	○	○	○	○	○		○	

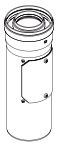
Ø80 twin flue system in aluminium for condensing boilers

	WALL-HUNG BOILERS	Exclusive GREEN HE	Exclusive BOILER GREEN / HE	Mynute GREEN	Ciao GREEN	Mynute GREEN 50 R.S.I.	FLOOR-STANDING BOILERS	Tower GREEN HE
code 1102279  FLUE ADAPTER Ø80 WITH AIR INLET		○		○				
code 20014659  FLUE ADAPTER Ø80 WITH AIR INLET		○	○	○	○			○
code 1100229  SPACERS FOR PIPE Ø80 (4 pcs. pack)		○	○	○	○	○		○

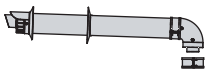
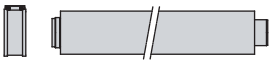
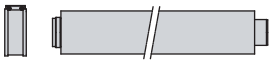
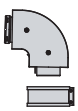
Ø60/100 concentric flue system in plastic (PP/PPu) for condensing boilers

	WALL-HUNG BOILERS					FLOOR-STANDING BOILERS	
	Exclusive GREEN HE	Exclusive BOILER GREEN / HE	Mynute GREEN	Ciao GREEN	Mynute GREEN 50 R.S.I.	Tower GREEN HE	
code 20027212  Ø60/100 VERTICAL FLUE TERMINAL Ø125 EXTERNAL STRAIGHT PIPE	○	○	○	○	○	○	
code 20027555  Ø60/100 HORIZONTAL FLUE TERMINAL	○	○	○	○	○	○	
code 20027161  CONCENTRIC EXTENSION 500 mm, Ø60/100	○	○	○	○	○	○	
code 20027166  CONCENTRIC EXTENSION 1000 mm, Ø60/100	○	○	○	○		○	
code 20027179  CONCENTRIC EXTENSION 2000 mm, Ø60/100	○	○	○	○		○	
code 20027192  45° Ø60/100 CONCENTRIC BEND	○	○	○	○	○	○	
code 20027185  45° Ø60/100 CONCENTRIC BEND (2 pcs.)	○	○	○	○	○	○	
code 20027201  90° Ø60/100 CONCENTRIC BEND	○	○	○	○	○	○	
code 20041110  CONCENTRIC BEND 90° Ø60/100 FOR REAR FLUE EXIT				○			

Ø60/100 concentric flue system in plastic (PP/PPu) for condensing boilers

	WALL-HUNG BOILERS						FLOOR-STANDING BOILERS	
	Exclusive GREEN HE	Exclusive BOILER GREEN / HE	Mynute GREEN	Ciao GREEN	Mynute GREEN 50 R.S.I.		Tower GREEN HE	
code 1100069  PITCHED ROOF TILE FOR VERTICAL FLUE Ø125	○	○	○	○	○		○	
code 1100059  FLAT ROOF TILE FOR VERTICAL FLUE Ø125	○	○	○	○	○		○	
code 1100129  SPACERS FOR PIPE Ø100 (4 pcs. pack)	○	○	○	○	○		○	
code 20028027  FLUE ADAPTER KIT FROM Ø80-80 TO Ø60/100					○			
code 20027209  Ø60/100 EXTENTION WITH INSPECTION DOOR	○	○	○	○	○		○	

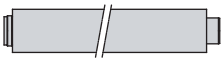
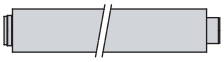
Ø60/100 concentric flue system in PP/Met for condensing boilers

	WALL-HUNG BOILERS						FLOOR-STANDING BOILERS	
	Exclusive GREEN HE	Exclusive BOILER GREEN / HE	Mynute GREEN	Ciao GREEN	Mynute GREEN 50 R.S.I.		Tower GREEN HE	
code 1101889  Ø60/100 VERTICAL FLUE TERMINAL Ø125 EXTERNAL STRAIGHT PIPE	○	○	○	○			○	
code 1101879  Ø60/100 HORIZONTAL FLUE TERMINAL	○	○	○	○			○	
code 1101839  CONCENTRIC EXTENSION 500 mm, Ø60/100	○	○	○	○			○	
code 1101849  CONCENTRIC EXTENSION 1000 mm, Ø60/100	○	○	○	○			○	
code 1101859  CONCENTRIC EXTENSION 2000 mm, Ø60/100	○	○	○	○			○	
code 1101809  45° Ø60/100 CONCENTRIC BEND	○	○	○	○			○	
code 1101819  90° Ø60/100 CONCENTRIC BEND	○	○	○	○			○	

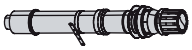
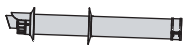
Ø 60/100 concentric flue system in PP/Met for condensing boilers

	WALL-HUNG BOILERS						FLOOR-STANDING BOILERS	
	Exclusive GREEN HE	Exclusive BOILER GREEN / HE	Mynute GREEN	Ciao GREEN	Mynute GREEN 50 R.S.I.		Tower GREEN HE	
code 1100069  PITCHED ROOF TILE FOR VERTICAL FLUE Ø 125	○	○	○	○			○	
code 1100059  FLAT ROOF TILE FOR VERTICAL FLUE Ø 125	○	○	○	○			○	
code 1100129  SPACERS FOR PIPE Ø 100 (4 pcs. pack)	○	○	○	○			○	

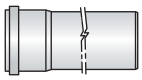
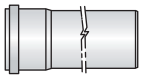
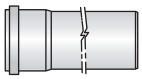
Ø 80/125 concentric flue system in PP/Met for condensing boilers

	WALL-HUNG BOILERS						FLOOR-STANDING BOILERS	
	Exclusive GREEN HE	Exclusive BOILER GREEN / HE	Mynute GREEN	Ciao GREEN	Mynute GREEN 50 R.S.I.		Tower GREEN HE	
code 1101599  45° Ø 80/125 CONCENTRIC BEND	○	○	○	○	○		○	
code 1101609  90° Ø 80/125 CONCENTRIC BEND	○	○	○	○	○		○	
code 1101619  CONCENTRIC EXTENSION 500 mm, Ø 80/125	○	○	○	○	○		○	
code 1101629  CONCENTRIC EXTENSION 1000 mm, Ø 80/125	○	○	○	○	○		○	
code 1101639  CONCENTRIC EXTENSION 2000 mm, Ø 80/125	○	○	○	○	○		○	
code 1101649  90° CONCENTRIC BEND with INSPECTION DOOR Ø 80/125	○	○	○	○	○		○	
code 1101659  CONCENTRIC EXTENSION with INSPECTION DOOR Ø 80/125	○	○	○	○	○		○	
code 20044868  Ø 80/125 CLAPET KIT IN PP/ MET with BUILT-IN CONDENSATE SYPHON for 3CEP				○				

Ø80/125 concentric flue system in PP/Met for condensing boilers

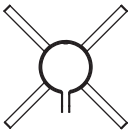
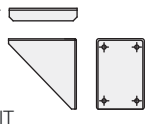
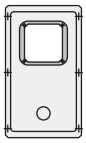
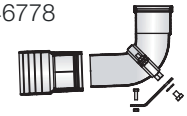
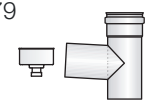
	WALL-HUNG BOILERS						FLOOR-STANDING BOILERS	
	Exclusive GREEN HE	Exclusive BOILER GREEN / HE	Mynute GREEN	Ciao GREEN	Mynute GREEN 50 R.S.I.		Tower GREEN HE	
code 20082272  Ø80/125 VERTICAL FLUE TERMINAL in PP/PPu; Ø125 EXTERNAL STRAIGHT PIPE	○	○	○	○	○		○	
code 1101679  Ø80/125 HORIZONTAL FLUE TERMINAL in PP/PPu	○	○	○	○	○		○	
code 1101689  SPACERS Ø80/125 (5 pcs. pack)	○	○	○	○	○		○	
code 1100069  PITCHED ROOF TILE FOR VERTICAL FLUE Ø125	○	○	○	○	○		○	
code 1100059  FLAT ROOF TILE FOR VERTICAL FLUE Ø125	○	○	○	○	○		○	
code 1102269  FLUE ADAPTER from Ø60/100 to Ø80/125	○	○	○	○			○	
code 20028029  FLUE ADAPTER KIT FROM Ø80-80 TO Ø80/125					○			

Ø60 flue range in plastic (PP) for inside-chimney installation, specific for condensing boilers

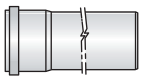
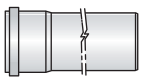
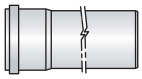
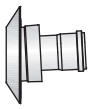
	WALL-HUNG BOILERS					FLOOR-STANDING BOILERS	
	Exclusive GREEN HE	Exclusive BOILER GREEN / HE	Mynute GREEN	Ciao GREEN	Mynute GREEN 50 R.S.I.	Tower GREEN HE	
code 20046763  45° Ø60 BEND	○	○	○	○		○	
code 20046760  90 °Ø60 BEND	○	○	○	○		○	
code 20046768  EXTENSION 500 mm Ø60	○	○	○	○		○	
code 20046770  EXTENSION 1000 mm Ø60	○	○	○	○		○	
code 20046771  EXTENSION 2000 mm Ø60	○	○	○	○		○	
code 20046772  Ø60/100 VERTICAL FLUE TERMINAL PP/PPu Ø100 EXTERNAL STRAIGHT PIPE	○	○	○	○		○	

FLUE OPTIONS

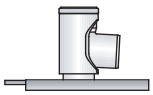
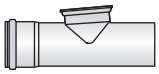
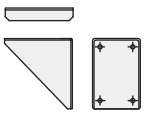
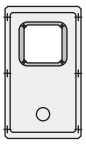
Ø60 flue range in plastic (PP) for inside-chimney installation, specific for condensing boilers

	WALL-HUNG BOILERS						FLOOR-STANDING BOILERS	
	Exclusive GREEN HE	Exclusive BOILER GREEN / HE	Mynute GREEN	Ciao GREEN	Mynute GREEN 50 R.S.I.		Tower GREEN HE	
code 20046773  3 SPACERS KIT FOR INSIDE-CHIMNEY Ø60	○	○	○	○			○	
code 20046774  SHELF SUPPORT KIT FOR INSIDE-CHIMNEY	○	○	○	○			○	
code 20046775  CHIMNEY FRONT COVER KIT	○	○	○	○			○	
code 20046777  5 HOSE CLAMPS KIT Ø60	○	○	○	○			○	
code 20046778  CHIMNEY CONNECTION KIT Ø80-60 WITH BEND 90° Ø60	○	○	○	○			○	
code 20046779  T-CONNECTION Ø60 with CONDENSATE TRAP	○	○	○	○			○	
code 20046782  CONDENSATE SYPHON KIT	○	○	○	○			○	

Ø80 flue range in plastic (PP) for inside-chimney installation, specific for condensing boilers

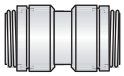
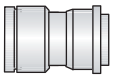
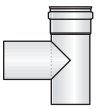
	WALL-HUNG BOILERS					FLOOR-STANDING BOILERS	
	Exclusive GREEN HE	Exclusive BOILER GREEN / HE	Mynute GREEN	Ciao GREEN	Mynute GREEN 50 R.S.I.	Tower GREEN HE	
code 1101299  45° Ø80 BEND	○	○	○	○	○	○	
code 1101309  90 ° Ø80 BEND	○	○	○	○	○	○	
code 1101319  EXTENSION 500 mm Ø80	○	○	○	○	○	○	
code 1101329  EXTENSION 1000 mm Ø80	○	○	○	○	○	○	
code 1101339  EXTENSION 2000 mm Ø80	○	○	○	○	○	○	
code 1101349  Ø80/125 CHIMNEY ADAPTER	○	○	○	○	○	○	
code 20044862  Ø 80 CLAPET KIT IN PP with BUILT-IN CONDENSATE SYPHON					○		

Ø80 flue range in plastic (PP) for inside-chimney installation, specific for condensing boilers

	WALL-HUNG BOILERS					FLOOR-STANDING BOILERS	
	Exclusive GREEN HE	Exclusive BOILER GREEN / HE	Mynute GREEN	Ciao GREEN	Mynute GREEN 50 R.S.I.		Tower GREEN HE
code 1101389  CHIMNEY SUPPORT KIT Ø80	○	○	○	○	○		○
code 1101399  PIPE SPACERS	○	○	○	○	○		○
code 1101409  Ø80 INSPECTION EXTENSION	○	○	○	○	○		○
code 1101419  Ø80 ROOF TILE	○	○	○	○	○		○
code 1101519  SHELF SUPPORT KIT FOR CONDENSATE TRAP	○	○	○	○	○		○
code 1101529  CHIMNEY FRONT COVER KIT	○	○	○	○	○		○

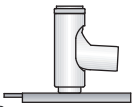
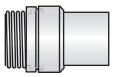
FLUE OPTIONS

Ø80 flue range in plastic (PP) for inside-chimney installation, specific for condensing boilers

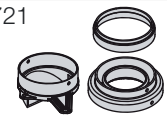
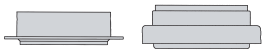
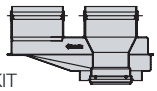
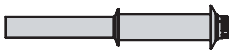
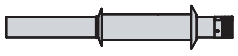
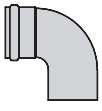
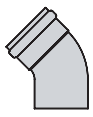
	WALL-HUNG BOILERS						FLOOR-STANDING BOILERS	
	Exclusive GREEN HE	Exclusive BOILER GREEN / HE	Mynute GREEN	Ciao GREEN	Mynute GREEN 50 R.S.I.		Tower GREEN HE	
code 1101449  FLEXIBLE/FLEXIBLE CONNECTION Ø80 F/F	○	○	○	○	○		○	
code 1101459  FLEXIBLE/RIGID CONNECTION Ø80 F	○	○	○	○	○		○	
code 1101539  CONDENSATE SYPHON KIT	○	○	○	○	○		○	
code 1101479  T-CONNECTION Ø60	○	○	○	○	○		○	
code 1101489  CONDENSATE TRAP CAP FOR T-CONNECTION Ø60	○	○	○	○	○		○	
code 1101499  T-CONNECTION Ø80	○	○	○	○	○		○	

FLUE OPTIONS

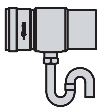
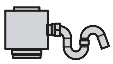
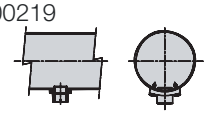
Ø80 flue range in plastic (PP) for inside-chimney installation, specific for condensing boilers

	WALL-HUNG BOILERS					FLOOR-STANDING BOILERS	
	Exclusive GREEN HE	Exclusive BOILER GREEN / HE	Mynute GREEN	Ciao GREEN	Mynute GREEN 50 R.S.I.	Tower GREEN HE	
code 1101359  Ø60/100 CHIMNEY ADAPTER	○	○	○	○	○	○	
code 1101369  T-CONNECTION Ø60	○	○	○	○	○	○	
code 1101379  Ø60/80 ADAPTER	○	○	○	○	○	○	
code 1101429  Ø80 FLEXIBLE EXTENSION (12.5 m) with 8 SPACERS	○	○	○	○	○	○	
code 1101439  RIGID/FLEXIBLE CONNECTION Ø80 M	○	○	○	○	○	○	
code 1101509  CONDENSATE TRAP CAP FOR T-CONNECTION Ø80	○	○	○	○	○	○	

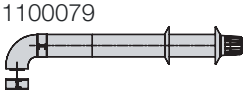
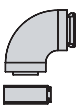
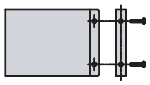
Ø80 twin flue system in aluminium for standard-efficiency boilers

	WALL-HUNG BOILERS								WATER-HEATERS	
	Exclusive C.S.I. / R.S.I.	Mynute S 24-28 C.S.I. / R.S.I.	Mynute S 35 C.S.I. / R.S.I.	Ciao S C.S.I. / R.S.I.	Ciao 24 C.S.I.	Ciao 28 C.S.I.	Mynute Boiler		Idrabagno ESI	
code 1220409  TWIN SYSTEM KIT	○	○				○	○			
code 20049143  TWIN SYSTEM KIT Ø80				○	○					
code 20058721  TWIN SYSTEM KIT			○							
code 1100549  TWIN SYSTEM KIT							○			
code 20067406  Ø80 AIR REGULATION FLANGE KIT	○	○	○	○	○	○	○		○	
code 1100749  FLUE ADAPTER KIT from Ø60/100 to Ø80-80	○	○	○	○	○	○	○		○	
code 1100139  AIR INLET HORIZONTAL TERMINAL Ø 80	○	○	○	○	○	○	○		○	
code 1100149  HORIZONTAL FLUE TERMINAL Ø80	○	○	○	○	○	○	○		○	
code 1100169  90° BEND Ø80 WITH GASKET	○	○	○	○	○	○	○		○	
code 1100159  45° BEND Ø80 WITH GASKET	○	○	○	○	○	○	○		○	

Ø80 twin flue system in aluminium for standard-efficiency boilers

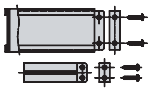
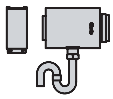
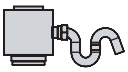
	WALL-HUNG BOILERS	Exclusive C.S.I. / R.S.I.	Mynute S 24-28 C.S.I. / R.S.I.	Mynute S 35 C.S.I. / R.S.I.	Ciao S C.S.I. / R.S.I.	Ciao 24 C.S.I.	Ciao 28 C.S.I.	Mynute Boiler	WATER-HEATERS	Idrabagno ESI
code 1100179  EXTENSION Ø80 (147 mm) with GASKET		○	○	○	○	○	○	○		○
code 1100189  EXTENSION Ø80 (500 mm) with GASKET		○	○	○	○	○	○	○		○
code 1100199  EXTENSION Ø80 (1000 mm) with GASKET		○	○	○	○	○	○	○		○
code 1100209  EXTENSION Ø80 (1950 mm) with GASKET		○	○	○	○	○	○	○		○
code 1100589  Ø80 CONDENSATE TRAP HORIZONTAL		○	○	○	○	○	○	○		
code 1100599  Ø80 CONDENSATE TRAP VERTICAL		○	○	○	○	○	○	○		
code 1100229  SPACERS FOR Ø80 PIPE (4 pcs. pack)		○	○	○	○	○	○	○		○
code 1100219  FLANGED SOCKET FOR INSPECTION Ø14 (2 pcs.)		○	○	○	○	○	○	○		○
code 20006571  FLUE ADAPTER Ø60/100 TO Ø80 FOR B23/B22 INSTALLATION WITH AIR INLET			○		○	○				

Ø60/100 concentric flue system in Al/Met for standard-efficiency boilers

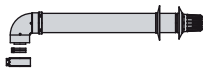
	WALL-HUNG BOILERS								WATER-HEATERS	
	Exclusive C.S.I. / R.S.I.	Mynute S 24-28 C.S.I. / R.S.I.	Mynute S 35 C.S.I. / R.S.I.	Ciao S C.S.I. / R.S.I.	Ciao 24 C.S.I.	Ciao 28 C.S.I.	Mynute Boiler		Idrabagno ESI	
code 1100029  Ø60/100 VERTICAL TERMINAL; Ø125 EXTERNAL STRAIGHT PIPE	○	○	○	○	○	○	○		○	
code 1100019  HORIZONTAL TERMINAL	○	○	○	○	○	○	○		○	
code 1100079  TELESCOPIC HORIZONTAL TERMINAL EXTENSIBLE FROM 500 TO 800 mm	○	○	○	○	○	○	○		○	
code 1100039  CONCENTRIC EXTENSION Ø60/100 (750 mm)	○	○	○	○	○	○	○		○	
code 1100049  CONCENTRIC EXTENSION Ø60/100 (1470 mm)	○	○	○	○	○	○	○		○	
code 20006596  90° BEND KIT Ø60/100 FOR REPLACEMENT				○*	○*					
code 1100089  90° CONCENTRIC BEND Ø60/100	○	○	○	○	○	○	○		○	
code 1100099  45° CONCENTRIC BEND Ø60/100	○	○	○	○	○	○	○		○	
code 1100119  CONNECTION CLIP KIT Ø 100 H 80 mm (4 pcs.)	○	○	○	○	○	○	○		○	

* To be used in case of replacement of old Mynute 24 C.S.I with CIAO S range and with CIAO 24 C.S.I. E, only in case of concentric flue through wall.

Ø60/100 concentric flue system in Al/Met for standard-efficiency boilers

	WALL-HUNG BOILERS	Exclusive C.S.I. / R.S.I.	Mynute S 24-28 C.S.I. / R.S.I.	Mynute S 35 C.S.I. / R.S.I.	Ciao S C.S.I. / R.S.I.	Ciao 24 C.S.I.	Ciao 28 C.S.I.	Mynute Boiler	WATER-HEATERS	Idrabagno ESI
code 1100109  CONNECTION CLIP KIT BOILER-FLUE Ø60/100		○	○	○	○	○	○	○		○
code 1100069  PITCHED ROOF TILE FOR VERTICAL FLUE Ø125		○	○	○	○	○	○	○		○
code 1100059  FLAT ROOF TILE FOR VERTICAL FLUE Ø125		○	○	○	○	○	○	○		○
code 1100579  CONDENSATE TRAP HORIZONTAL Ø60/100		○	○	○	○	○	○	○		
code 1220029  CONDENSATE TRAP VERTICAL Ø60/100		○	○	○	○	○	○	○		
code 1100129  PIPE SPACERS Ø100 (4 pcs)		○	○	○	○	○	○	○		○
code 1100009  FLANGED SOCKET FOR INSPECTION Ø14 FOR CONCENTRIC PIPE (2 pcs.)		○	○	○	○	○	○	○		○

Ø60/100 concentric flue system in Al/PPu for standard-efficiency boilers

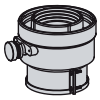
	WALL-HUNG BOILERS	Exclusive C.S.I. / R.S.I.	Mynute S 24-28 C.S.I. / R.S.I.	Mynute S 35 C.S.I. / R.S.I.	Ciao S C.S.I. / R.S.I.	Ciao 24 C.S.I.	Ciao 28 C.S.I.	Mynute Boiler
code 20066929 *  CONCENTRIC HORIZONTAL TERMINAL Ø60/100 IN Al/PPu		○	○	○	○	○	○	○
code 20066928  Ø60/100 VERTICAL FLUE TERMINAL; Ø125 EXTERNAL STRAIGHT PIPE		○	○	○	○	○	○	○
code 20066931  TELESCOPIC HORIZONTAL TERMINAL Ø60/100 IN Al/PPu EXTENSIBLE FROM 500 mm TO 800 mm		○	○	○	○	○	○	○
code 20066924  CONCENTRIC EXTENSION 1000 mm Ø60/100 IN Al/PPu		○	○	○	○	○	○	○
code 20066925  CONCENTRIC EXTENSION 2000 mm Ø60/100 IN Al/PPu		○	○	○	○	○	○	○
code 20066926  CONCENTRIC EXTENSION WITH INSPECTION DOOR Ø60/100 IN Al/PPu		○	○	○	○	○	○	○

* This component is available also as code 20070109, only for high volumes.

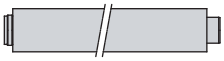
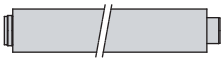
Ø60/100 concentric flue system in Al/PPu for standard-efficiency boilers

	WALL-HUNG BOILERS	Exclusive C.S.I. / R.S.I.	Mynute S 24-28 C.S.I. / R.S.I.	Mynute S 35 C.S.I. / R.S.I.	Ciao S C.S.I. / R.S.I.	Ciao 24 C.S.I.	Ciao 28 C.S.I.	Mynute Boiler
code 20066917  45° Ø60/100 CONCENTRIC BEND IN Al/PPu		○	○	○	○	○	○	○
code 20066918  90° Ø60/100 CONCENTRIC BEND IN Al/PPu		○	○	○	○	○	○	○
code 20066919  90° Ø60/100 CONCENTRIC BEND IN Al/PPu - FOR BOILER CONNECTION		○	○	○	○	○	○	○
code 20066921  90° Ø60/100 CONCENTRIC BEND IN Al/PPu WITH INSPECTION DOOR		○	○	○	○	○	○	○
code 20066922  90° Ø60/100 CONCENTRIC BEND IN Al/PPu WITH INSPECTION DOOR - FOR BOILER CONNECTION		○	○	○	○	○	○	○
code 20066923  CONCENTRIC EXTENSION 500 mm Ø60/100 IN Al/PPu		○	○	○	○	○	○	○

Ø80/125 concentric flue system in Al/Met for standard-efficiency boilers

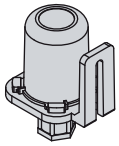
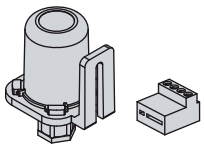
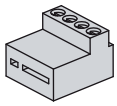
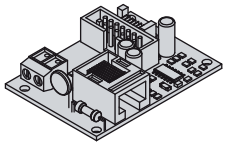
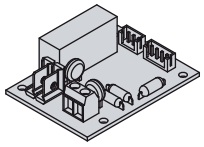
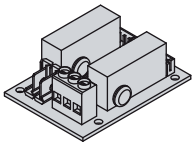
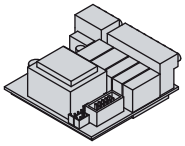
	WALL-HUNG BOILERS	Exclusive C.S.I. / R.S.I.	Mynute S 24-28 C.S.I. / R.S.I.	Mynute S 35 C.S.I. / R.S.I.	Ciao S C.S.I. / R.S.I.	Ciao 24 C.S.I.	Ciao 28 C.S.I.	Mynute Boiler
code 1103129  FLUE ADAPTER FROM Ø60/100 TO Ø80/125 WITH FLUE ANALYSIS POINT		○	○	○	○			○
code 1103139  45° Ø80/125 CONCENTRIC BEND		○	○	○	○			○
code 1103149  90° Ø80/125 CONCENTRIC BEND		○	○	○	○			○
code 1103159  HORIZONTAL TERMINAL Ø80/125 WITH Ø60/100 ADAPTER		○	○	○	○			○
code 1103169  VERTICAL TERMINAL Ø80/125 WITH Ø60/100 ADAPTER		○	○	○	○			○
code 1103179  CONCENTRIC EXTENSION 500 mm Ø80/125		○	○	○	○			○

Ø80/125 concentric flue system in Al/Met for standard-efficiency boilers

	WALL-HUNG BOILERS	Exclusive C.S.I. / R.S.I.	Mynute S 24-28 C.S.I. / R.S.I.	Mynute S 35 C.S.I. / R.S.I.	Ciao S C.S.I. / R.S.I.	Ciao 24 C.S.I.	Ciao 28 C.S.I.	Mynute Boiler
code 1103189  CONCENTRIC EXTENSION 1000 mm Ø80/125		○	○	○	○			○
code 1103199  CONCENTRIC EXTENSION 2000 mm Ø80/125		○	○	○	○			○
code 1103209  SYPHON FOR VERTICAL ADAPTER		○	○	○	○			○
code 1100059  FLAT ROOF TILE FOR VERTICAL FLUE Ø125		○	○	○	○			○
code 1100069  PITCHED ROOF TILE FOR VERTICAL FLUE Ø125		○	○	○	○			○
code 1101689  SPACERS Ø80/125 (5 pcs.)		○	○	○	○			○

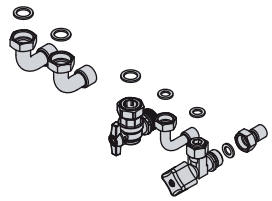
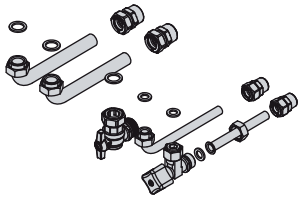
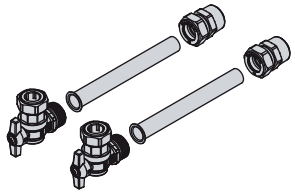
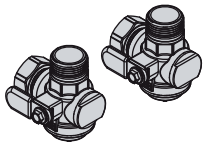
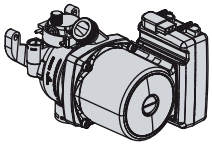
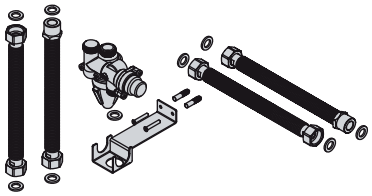
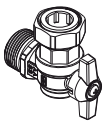
COMFORT ACCESSORIES

This page contains only some of Beretta accessories, in order to better illustrate them when useful. For the matching of the accessories with the boilers, please consult each boiler page.

	Outdoor probe	code 1100799
	Outdoor probe with connector	code 20049748
	Connector kit for outdoor probe and remote control	code 20008401
	ITRF11 OT+bus interface board	code 1221179
	ITRF05 electronic board to control the main heating zone to be used with remote control or supplementary heating pump (only AKL pcb)	code 20000783
	BE09 interface for alarm remotation	code 20062614
	BE08 electronic board to control the main heating zone (to be used with remote control)	code 1103039

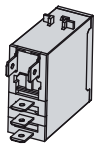
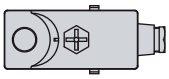
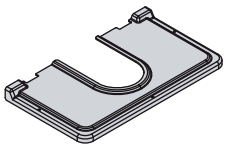
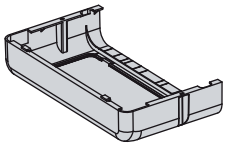
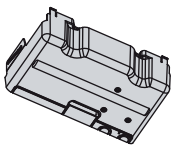
HYDRAULIC ACCESSORIES

This page contains only some of Beretta accessories, in order to better illustrate them when useful. For the matching of the accessories with the boilers, please consult each boiler page.

	Kit hydraulic connections (for welding)	code 20008794
	Kit hydraulic connections (with brass nipples)	code 20051979 code 20008795
	Heating taps	code 1101989
	Heating taps with filter	code 1101999
	A-Class Low Energy synchronous pump, PWM controlled (7 metres)	code 20032815
	Socket probe for DHW tank 3 m wire (R.A.I and R.S.I. models)	code 1220599
	Solar diverter mixing valve (C.S.I. models)	code 20025113
	Right-angle tap kit	code 1100509

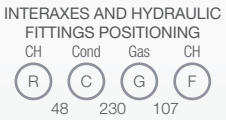
SPECIAL ACCESSORIES

This page contains only some of Beretta accessories, in order to better illustrate them when useful. For the matching of the accessories with the boilers, please consult each boiler page.

	Kit rele remote alarm	code 20042454
	Low temperature automatic resetting thermostat	code 1220639
	Upper cover	code 20012595
	Lower cover	code 20012594
	Lower cover	code 20051629

SYSTEMS

MYNUTE GREEN 50 R.S.I.



For stand-alone configurations see Beretta Residential Catalogue 2013

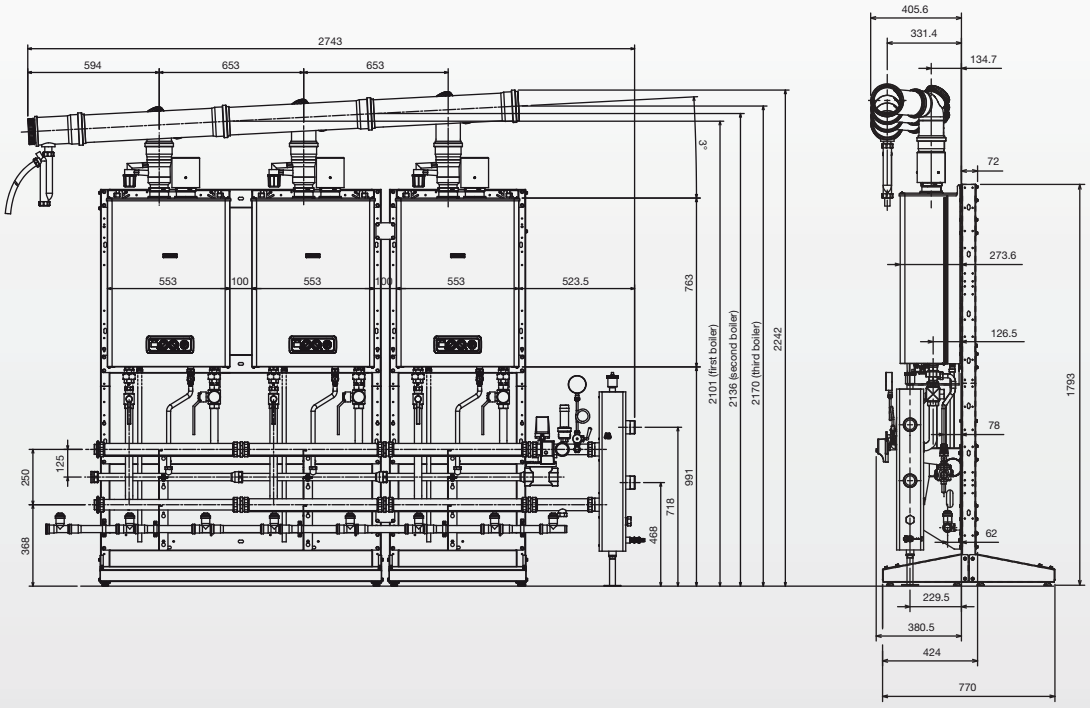
- MYNUTE GREEN 50 R.S.I. is a high power condensing boiler, that can be configurated in different ways, according to your needs.
- **NEW: Now available a full cascade system up to 200 kW**. The different cascade configurations are illustrated in the following pages.
- The **RANGE RATED certification** allows to adapt the power of the boiler to the real thermal requests of the installation.
- **Efficiency ★★★★** according to European Directive EEC 92/42, reducing running costs by up to 35% more than a conventional boiler.
- Minimum polluting emissions: class 5 perfomance (EN 483).
- Condensing heat-exchanger in extruded aluminium (Patent Pending) providing excellent thermal transfer.
- Built-in connection port OT-bus protocol for intelligent cascade control.
- LPG conversion kit available as an accessory.

Room-sealed

Efficiency ★★★★ Dir. 92/42/EEC

CODE	GAS	MODEL	DIMENSIONS H×W×D (mm)	CH INPUT MIN - MAX (kW)
Heating only boiler				
20056275	NG	MYNUTE GREEN 50 R.S.I.	764×553×284	9 - 47

SPECIFICATIONS		MYNUTE GREEN 50 RSI			
		single application	100 kW cascade	150 kW cascade	200 kW cascade
CH nominal heat input	kW	47	94	141	188
CH nominal heat output (80°-60°C)	kW	45,78	91,56	137,34	183,12
CH nominal heat output (50°-30°C)	kW	49,91	99,82	149,73	199,64
CH minimum heat input	kW	9	9	9	9
CH minimum heat output (80°-60°C)	kW	8,78	8,78	8,78	8,78
CH minimum heat output (50°-30°C)	kW	9,72	9,72	9,72	9,72
Efficiency class according European Directive EEC 92/42		★★★★			
Efficiency at max nominal output (80°-60°C)	%	97,40	97,40	97,40	97,40
Efficiency at min output (80°-60°C)	%	97,60	97,60	97,60	97,60
Efficiency at partial load 30% (47°C return)	%	102,50	102,50	102,50	102,50
Efficiency at max nominal output (50°-30°C)	%	106,20	106,20	106,20	106,20
Efficiency at min output (50°-30°C)	%	108	108	108	108
Efficiency at partial load 30% (30°C return)	%	108	108	108	108
Max power consumption	W	164	328	492	656
Central heating					
Maximum pressure - temperature	bar - °C	3 - 90	3 - 90	3 - 90	3 - 90
Minimum pressure for standard operation	bar	0,25÷0,45	0,25÷0,45	0,25÷0,45	0,25÷0,45
Adjustable CH water temperature range	°C	20÷80	20÷80	20÷80	20÷80



Example of linear free-standing cascade configuration (150 kW) with dimensions.

Hydraulic accessories and safety devices – linear cascade applications

CODE	DESCRIPTION	CODE	DESCRIPTION
20043895	gas-safety cut-off valve	20047606 *	rear mounting kit - 1 MYNUTE GREEN 50 R.S.I.
20060671	hydraulic header/separator kit for cascade applications	20047607 *	rear mounting kit - 2 MYNUTE GREEN 50 R.S.I.
20028623	hydraulic collectors kit for linear cascade applications - 1 boiler	20060670	ISPESL hydraulic manifold for cascade applications
20046101	support rig for 1 MYNUTE GREEN 50 R.S.I.	20060669	ISPESL safety kit
20046100	support rig for 2 MYNUTE GREEN 50 R.S.I.		

* To be used only in case of free-standing cascade applications (when the support rig is not fixed to the wall).

Electrical accessories and interfaces – cascade applications

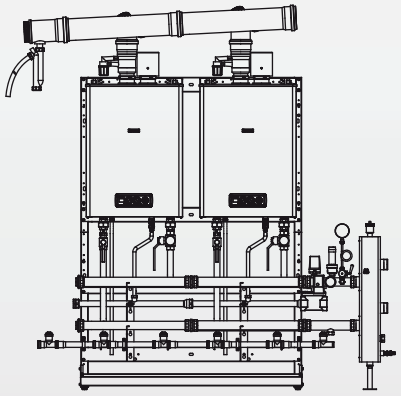
CODE	DESCRIPTION	CODE	DESCRIPTION
20028618	Control kit for cascade/solar system	4043013	Probe kit zones/DHW tank for cascade applications
20028617	Interface board for cascade application - 1 boiler	20008787	Solar probe kit for cascade applications
1220639	Limit thermostat for low temperature applications	20039196	CO safety sensor for boiler room
4043014	External probe kit for cascade applications		

Flue accessories – linear cascade applications

CODE	DESCRIPTION	CODE	DESCRIPTION
20028478	air-inlet kit for B23	20028625	flues collector kit for linear cascade applications - 3rd boiler
20028616	flues collector kit Ø 125 for linear cascade applications - 2 boilers		

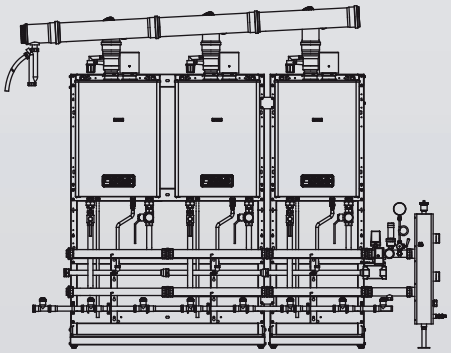
In linear free standing applications, cascades can reach max 150 kW, as illustrated in the following configurations.

100 kW linear free-standing cascade configuration *



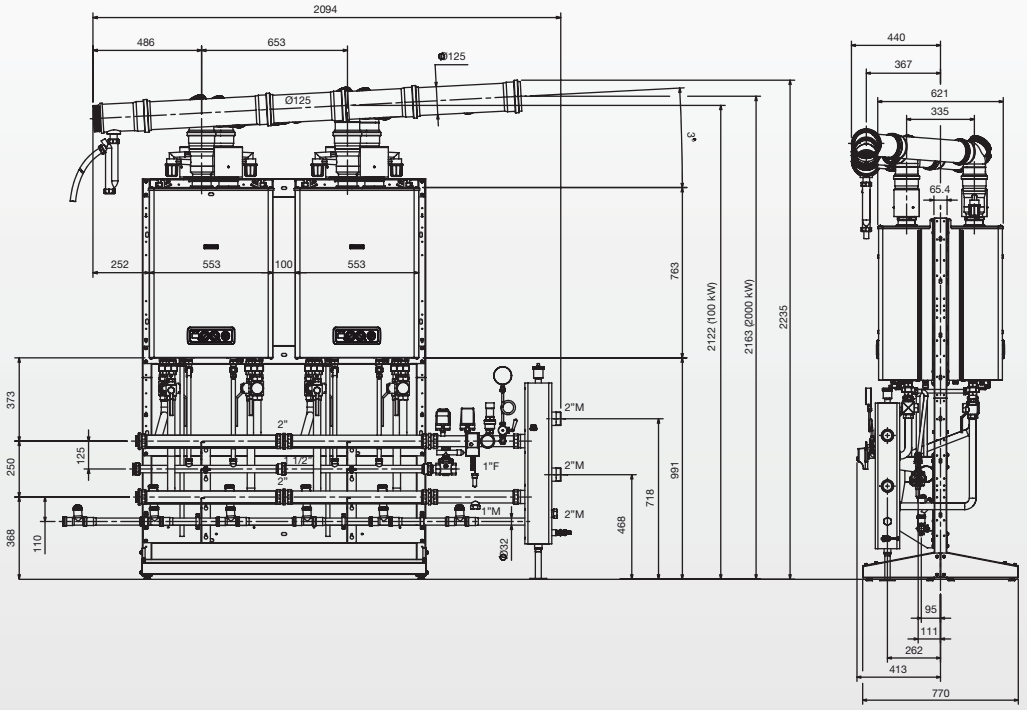
- 2 MYNUTE GREEN 50 R.S.I. (code 20056275)
- 1 gas-safety cut-off valve (code 20043895)
- 1 hydraulic header/separator kit for cascade applications (code 20060671)
- 2 hydraulic collectors kit for linear cascade applications - 1 boiler (code 20028623)
- 1 flues collector kit Ø 125 for linear cascade applications - 2 boilers (code 20028616)
- 2 air-inlet kit for B23 (code 20028478)
- 2 interface board for cascade applications - 1 boiler (code 20028617)
- 1 control kit for cascade-solar system (code 20028618)
- 1 external probe kit for cascade installation (code 4043014)
- 1 support rig for 2 MYNUTE GREEN 50 R.S.I. (code 20046100) **
- 1 ISPESL hydraulic manifold for cascade application (code 20060670) ***
- 1 ISPESL safety kit (code 20060669) ***

150 kW linear free-standing cascade configuration *



- 3 MYNUTE GREEN 50 R.S.I.0 (cod. 20056275)
- 1 gas-safety cut-off valve (code 20043895)
- 1 hydraulic header/separator kit for cascade applications (code 20060671)
- 3 hydraulic collectors kit for linear cascade applications - 1 boiler (code 20028623)
- 1 flues collector kit Ø 125 for linear cascade applications - 2 boilers (code 20028616)
- 3 air-inlet kit for B23 (code 20028478)
- 1 flues collector kit Ø 125 for linear cascade applications - third boiler (code 20028625)
- 3 interface board for cascade applications - 1 boiler (code 20028617)
- 1 control kit for cascade-solar system (code 20028618)
- 1 external probe kit for cascade applications (code 4043014)
- 1 support rig for 1 MYNUTE GREEN 50 R.S.I. (code 20046101) **
- 1 support rig for 2 MYNUTE GREEN 50 R.S.I. (code 20046100) **
- 1 ISPESL hydraulic manifold for cascade application (code 20060670) ***
- 1 ISPESL safety kit (code 20060669) ***

* In case of MYNUTE GREEN 50 R.S.I. cascade applications it is strongly recommended to use *CO safety-sensor for boiler room* (code 20039196).
** The support rig must be fixed to the wall. In case it is not possible to fix it to the wall, the *rear mounting kit for back-to back cascade - 1 MYNUTE GREEN 50 R.S.I.* (code 20047606) and the *rear mounting kit for back-to back cascade - 2 MYNUTE GREEN 50 R.S.I.* (code 20047607) must be used in addition.
*** Optional component. “I.S.P.E.S.L.” is an Italian Safety Certification Institute. This code is compulsory only in Italy.



Example of back-to-back cascade configuration (200 kW) with dimensions.

Hydraulic accessories and safety devices – back-to-back cascade applications

CODE	DESCRIPTION	CODE	DESCRIPTION
20043895	Gas-safety cut-off valve	20047606	Rear mounting kit - 1 MYNUTE GREEN 50 R.S.I.
20060671	Hydraulic header/separator kit for cascade applications	20047607	Rear mounting kit - 2 MYNUTE GREEN 50 R.S.I.
20060668	Back-to-back hydraulic collectors kit	20060670	ISPESL hydraulic manifold for cascade applications
20046101	Support rig for 1 MYNUTE GREEN 50 R.S.I.	20060669	ISPESL safety kit
20046100	Support rig for 2 MYNUTE GREEN 50 R.S.I.		

Electrical accessories and interfaces – cascade applications

CODE	DESCRIPTION	CODE	DESCRIPTION
20028618	Control kit for cascade/solar system	4043014	External probe kit for cascade applications
20028617	Interface board for cascade application - 1 boiler	4043013	Probe kit zones/DHW tank for cascade applications
20029862	Condensate syphon frost-protection kit	20008787	Solar probe kit for cascade applications
1220639	Limit thermostat for low temperature applications	20039196	CO safety sensor for boiler room

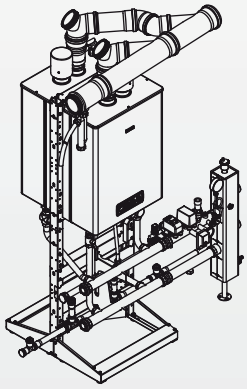
Flue accessories – back-to-back cascade applications

CODE	DESCRIPTION	CODE	DESCRIPTION
20028478	Air-inlet kit for B23	20060930	Flues collector kit - back-to back cascade/ 3rd boiler
20060916	Flues collector kit Ø 125 - back-to back cascade/2 boilers	20060935	Flues collector kit - back-to back cascade/ 4th boiler

MYNUTE GREEN 50 R.S.I. – BACK-TO-BACK CASCADE APPLICATIONS

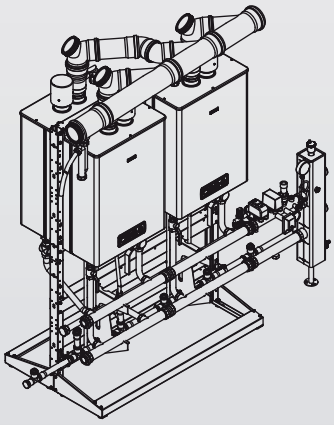
In back-to-back free-standing applications, cascades can reach max 200 kW, as illustrated in the following configurations.

100 kW back-to-back free-standing cascade configuration *



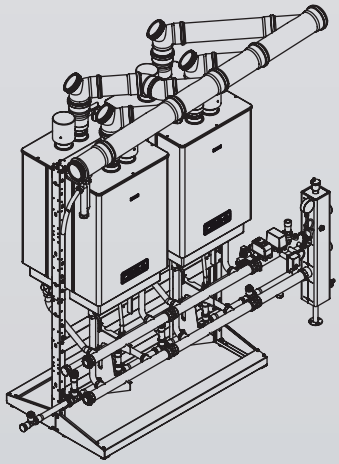
- 2 Mynute Green 50 R.S.I. (code 20056275)
- 1 gas-safety cut-off valve (code 20043895)
- 1 hydraulic header/separator kit for cascade applications (code 20060671)
- 1 back-to-back hydraulic collectors kit (code 20060668)
- 1 flues collector kit Ø 125 for back-to-back cascade - 2 boilers (code 20060916)
- 2 air-inlet kit for B23 (code 20028478)
- 2 interface board for cascade applications - 1 boiler (code 20028617)
- 1 control kit for cascade-solar system (code 20028618)
- 1 external probe kit for cascade installation (code 4043014)
- 1 support rig for 1 Mynute Green 50 R.S.I. (code 20046101)
- 1 rear mounting kit for back-to-back cascade - 1 MYNUTE GREEN 50 R.S.I. (code 20047606)
- 1 ISPESL hydraulic manifold for cascade application (code 20060670) **
- 1 ISPESL safety kit (code 20060669) **

150 kW back-to-back free-standing cascade configuration *



- 3 Mynute Green 50 R.S.I. (code 20056275)
- 1 gas-safety cut-off valve (code 20043895)
- 1 hydraulic header/separator kit for cascade applications (code 20060671)
- 1 back-to-back hydraulic collectors kit (code 20060668)
- 1 hydraulic collectors kit for cascade applications - 1 boiler (code 20028623)
- 1 flues collector kit Ø 125 for back-to-back cascade - 2 boilers (code 20060916)
- 1 flues collector kit for back-to-back cascade - 3rd boiler (code 20060930)
- 3 air-inlet kit for B23 (code 20028478)
- 3 interface board for cascade applications - 1 boiler (code 20028617)
- 1 control kit for cascade-solar system (code 20028618)
- 1 external probe kit for cascade installation (code 4043014)
- 1 support rig for 2 Mynute Green 50 R.S.I. (code 20046100)
- 1 rear mounting kit for back-to-back cascade - 2 MYNUTE GREEN 50 R.S.I. (code 20047607)
- 1 ISPESL hydraulic manifold for cascade application (code 20060670) **
- 1 ISPESL safety kit (code 20060669) **

200 kW back-to-back free-standing cascade configuration *



- 4 Mynute Green 50 R.S.I. (code 20056275)
- 1 gas-safety cut-off valve (code 20043895)
- 1 hydraulic header/separator kit for cascade applications (code 20060671)
- 2 back-to-back hydraulic collectors kit (code 20060668)
- 1 flues collector kit Ø 125 for back-to-back cascade - 2 boilers (code 20060916)
- 1 flues collector kit for back-to-back cascade - 3rd boiler (code 20060930)
- 1 flues collector kit for back-to-back cascade - 4th boiler (code 20060935)
- 4 air-inlet kit for B23 (code 20028478)
- 4 interface board for cascade applications - 1 boiler (code 20028617)
- 1 control kit for cascade-solar system (code 20028618)
- 1 external probe kit for cascade installation (code 4043014)
- 1 support rig for 2 Mynute Green 50 R.S.I. (code 20046100)
- 1 rear mounting kit for back-to-back cascade - 2 MYNUTE GREEN 50 R.S.I. (code 20047607)
- 1 ISPESL hydraulic manifold for cascade application (code 20060670) **
- 1 ISPESL safety kit (code 20060669) **

* In case of MYNUTE GREEN 50 R.S.I. cascade applications it is strongly recommended to use *CO safety-sensor for air-inlet* (code 20039196).
** Optional component. “I.S.P.E.S.L.” is an Italian Safety Certification Institute. This code is compulsory only in Italy.

- Efficiency ★★★★ according to European Directive EEC 92/42
- Minimum polluting emissions: class 5 (UNI EN 483)
- Pre-mix burner: low NOx emissions class 5 (UNI EN 483)
- Built-in thermoregulation with external probe supplied as standard
- Possibility to combine Power Plus boilers in cascade systems in wall-hung or free-standing installations
- Modulating and modular power regulation
- Automatic burner ignition sequence reversal
- Simultaneous control of three different circuits, each operating atdifferent temperatures (DHW tank, high-temperature, low-temperature)
- Automatic summer/winter reversal
- Anti-legionnaires' disease function (only available with remote control kit)
- Availability of a wide range of accessories for complete cascade configurations
- Can be converted to LPG with LPG kit (supplied as standard)

Open flue/Room-sealed through special kit — Efficiency ★★★★ Eur. Dir. EEC 92/42

Only heating boilers

CODE	GAS	MODEL	DIMENSIONS H x L x D (mm)	INPUT (kW) Hs	INPUT (kW) Hi
20019155	NG	POWER PLUS 50 MASTER*	1000 x 600 x 380	50	45
20019200	NG	POWER PLUS 100 MASTER**	1000 x 600 x 380	100	90
20019309	NG	POWER PLUS 100 SLAVE**	1000 x 600 x 380	100	90

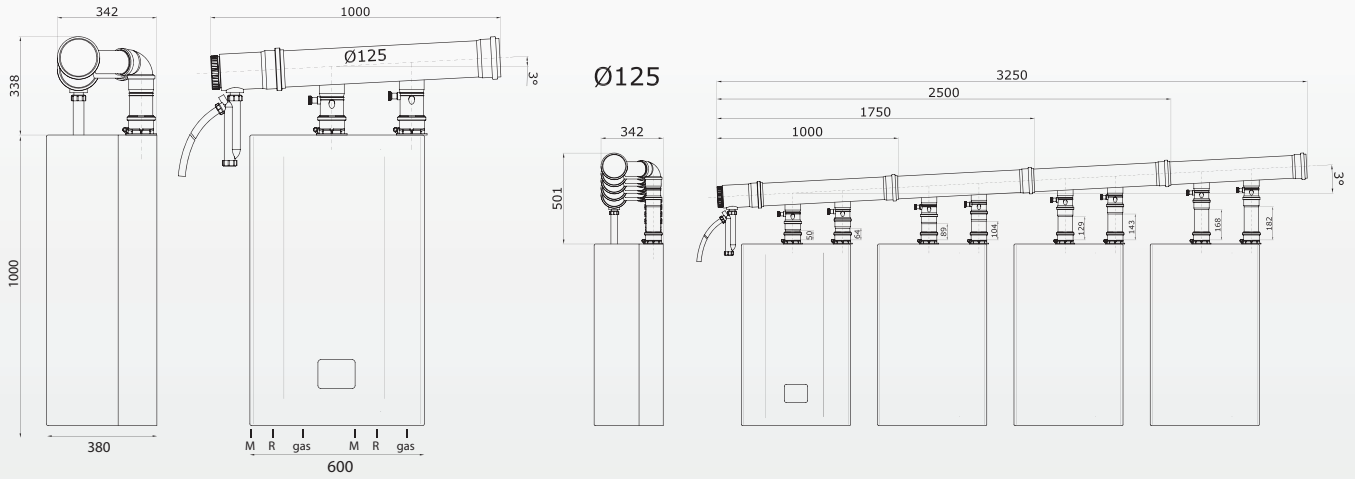
* The 50 kW model consists of one boiler unit
** The 100 kW models consist of two boiler units

Specific accessories

CODE	DESCRIPTION
4030311	flues collector kit ø125 for 50kW
4030312	flues collector kit ø125 for 100kW
20062337	condensate drain kit ø125 with end cap
20017306	flues collector kit for front/rear installation ø125/160
4030019	flues collector kit ø160 for 50kW
4030037	flues collector kit ø160 for 100kW
20062338	condensate drain kit ø160 with end cap
1102439	air connection kit to Power Plus 50 kW

CODE	DESCRIPTION
1102449	air connection kit to Power Plus 100 kW
1102379	remote control kit
1102869	low temperature kit
1103059	probe kit for DHW tank
1102579	blind flange 3" UNI 60/91 PN6 DN80
1102589	flange 3" UNI 2276-67 PN6 DN80
20071446	flue adapter ø 50-80
20016110	zones master kit

The whole range of accessories and flues for POWER PLUS applications is listed in this catalogue in the specific section (pages 98-103)

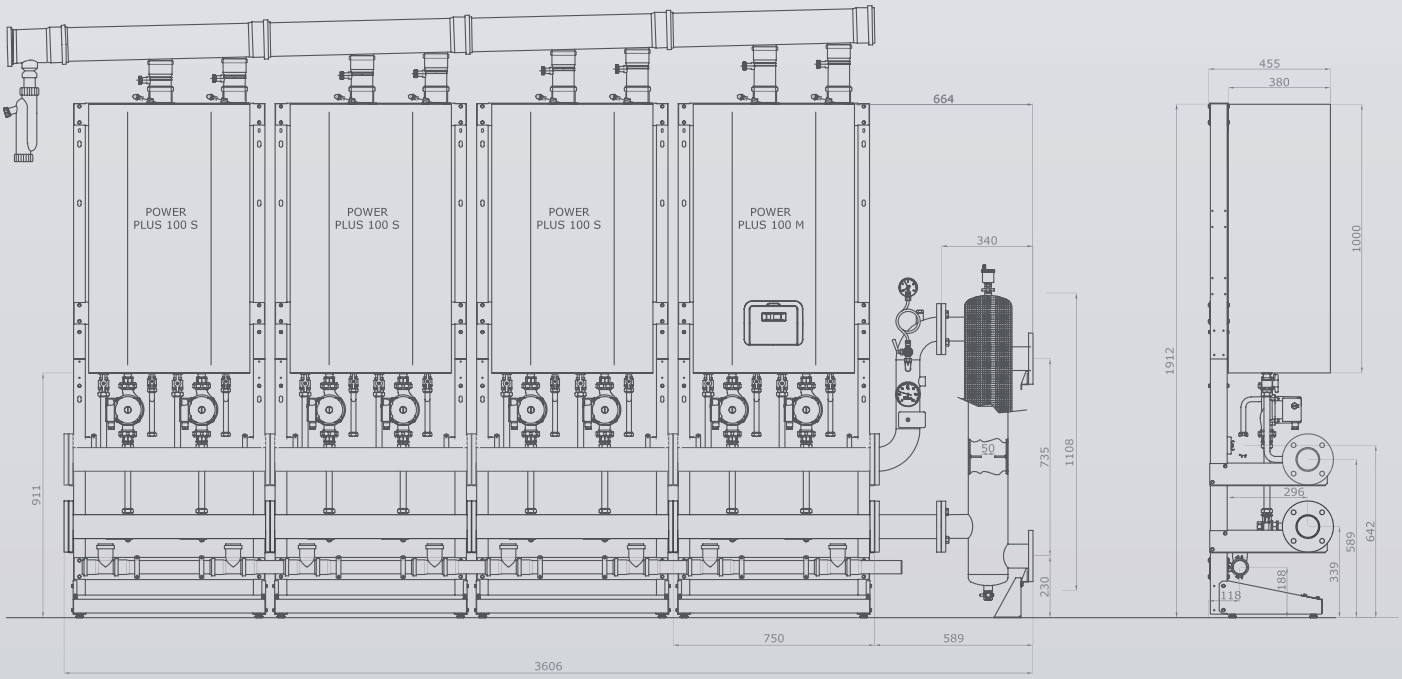


SPECIFICATIONS			Power Plus 50 M	Power Plus 100 M	Power Plus 100 S
Fuel			G20 - G25 - G2.350 - G27 - G30 - G31		
Appliance category			II2ELwLs3B/P - II2H3+ - I2E(S)B		
Type of appliance			B23 - B53 - C13x - C33x - C43x - C53x - C63 - C63x - C83		
Heat input ref. Hs (min - max)	G20	kW	16,3 - 50	16,3 - 100	16,3 - 100
Heat input ref. Hi (min - max)	G20	kW	15 - 45	15 - 90	15 - 90
Useful heat output (80°/60°C) (min - max)		kW	14,8 - 44,2	14,8 - 88,3	14,8 - 88,3
Useful heat output (50°/30°C) (min - max)		kW	16,3 - 48,5	16,3 - 96,8	16,3 - 96,8
Useful efficiency ref. Hi (80°C/60°C)		%	98,2	98,2	98,2
Useful efficiency ref. Hi (50°C/30°C)		%	107,7	107,7	107,7
Useful efficiency at 30% ref. Hi (80°C/60°C)		%	98,7		
Useful efficiency at 30% ref. Hi (50°C/30°C)		%	108,7		
Losses through the chimney with the burner operating		%	1,3		
Losses through the chimney with the burner off		%	0,1		
Losses through the casing (Tm=70°C)		%	0,5		
Flue gas temperature		°C	Return temp. 3 ÷ 5°C		
CO_2 at minimum - maximum	G20	%	9,0 - 9,0		
CO_2 at minimum - maximum	G30 - G31	%	10,4 - 10,4		
CO without air at minimum - maximum less than		mg/kWh	11 - 91		
NOx class			5		
Air flow rate	G20	Nm³/h	58,78	117,56	117,56
Air flow rate	G30 - G31	Nm³/h	58,59	117,18	117,18
Flue gas flow rate	G20	Nm³/h	71,04	142,08	142,08
Flue gas flow rate	G30 - G31	Nm³/h	71,76	143,52	143,52
Flue gas mass flow rate (max-min)	G20	gr/s	20,57 - 6,60	41,14 - 6,60	41,14 - 6,60
Flue gas mass flow rate (max-min)	G30 - G31	gr/s	20,52 - 6,85	41,04 - 6,85	41,04 - 6,85
Residual head of boiler fan without pipes	at min. heat output	Pa	50	50	50
	at max. heat output	Pa	560	560	560
Residual head of boiler fan downstream from choke (*)	at min. heat output	Pa	40	40	40
	at max. heat output	Pa	490	490	490
Minimum operating pressure, central heating		bar	0,5		
Maximum operating pressure, central heating		bar	6		
Maximum admissible temperature		°C	90		
Range of boiler water temperature settings (± 3 °C)		°C	20 - 80		
Water content		l	5	10	10
Power supply		V-Hz	230 - 50		
Electrical Power		W	80	160	160
Index of protection		IP	X0D		
Quantity of condensate		kg/h	7,2	14,4	14,4
Noise level at max / min heat output (**)		dBA	57,1/48,2	58,9/49,0	58,9/49,0
Gas capacity (min-max) G20		Sm³/h	1,52 - 4,76	1,52 - 9,52	1,52 - 9,52
Gas capacity (min-max) G30		kg/h	1,16 - 3,64	1,16 - 7,28	1,16 - 7,28
Gas capacity (min-max) G31		kg/h	1,14 - 3,57	1,14 - 7,14	1,14 - 7,14

(*) Measurements obtained using the clapet with which the boiler was homologated.
(**) Measurements taken at 1 m from the appliance, at a height of 1.5 m, with background noise of 36.5 dBA.

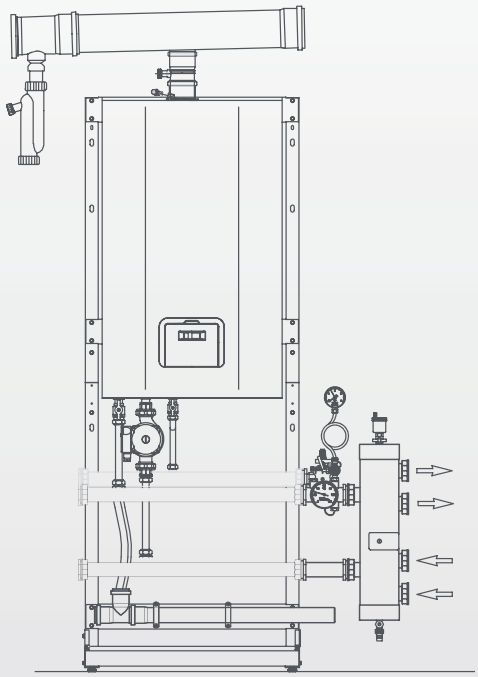
CODE	DESCRIPTION
20009472	Power Plus rig (front mounting)
20009474*	rear mounting kit for Power Plus free-standing rig
20018456	supports hydraulic manifold kit (without rig) from 150 kW
20017270**	ISPESL connection pipes kit - 100 kW
20017271	hydraulic header/separator - 100 kW
20017226	hydraulic manifold kit 100 kW for P.P. rig with blank end-flange
20009439	hydraulic manifold kit up to 400 kW for Power Plus rig
20009444	blank end-flange kit for hydraulic manifold (400 kW)
20009442	pump kit (front) for Power Plus rig
20075526	LOW ENERGY pump kit (front) for Power Plus rig
20009466	hydraulic header/separator (150 - 200 kW)
20009467	hydraulic header/separator (250-400 kW)
20009471	hydraulic manifold (150 - 400 kW)
20009475**	ISPESL safety kit (400 kW max.)
20009486	gas safety cut-off valve (100 kW max.)
20009482	gas safety cut-off valve (200 kW max.)
20009483	gas safety cut-off valve (400 kW max.)
4030311	flues collector kit Ø 125 for 50 kW
4030312	flues collector kit Ø 125 for 100 kW
20062337	condensate drain kit Ø 125 with end cap

* This component is recommended also for linear free-standing cascade installations to provide extra stability where needed.
** ISPESL optional component (ISPESL = Italian safety certification Institute).
The whole range of accessories and flues for POWER PLUS applications is listed in this catalogue in the specific POWER PLUS section (pages 98-103).



Example of 400 kW linear cascade

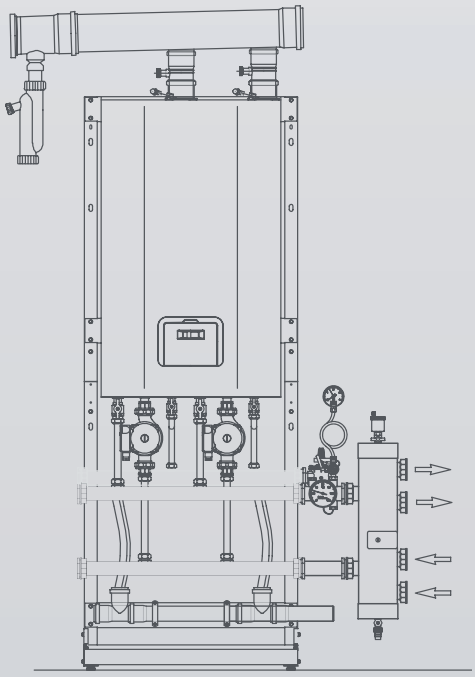
Stand alone configuration 50 kW



1 Power Plus 50 M (code 20019155)
1 remote control (code 1102379*)
1 Power Plus rig (front mounting) (code 20009472)
1 ISPESL connection pipes kit - 100 kW (code 20017270)
1 hydraulic header/separator - 100 kW (code 20017271)
1 hydraulic manifold kit 100 kW for Power Plus rig
with blank end-flange (code 20017226)
1 pump kit (front) for Power Plus rig (code 20009442)
or 1 LOW ENERGY pump kit (front) for Power Plus rig
1 ISPESL safety kit (400 kW max.) (code 20009475**)
1 gas safety cut-off valve (100 kW max.) (code 20009486*)
1 flues collector kit Ø 125 for 50 kW (code 4030311)
1 condensate drain kit Ø 125 with end cap (code 20062337)

* OPTIONAL component
** ISPESL optional component (ISPESL = Italian safety certification Institute)

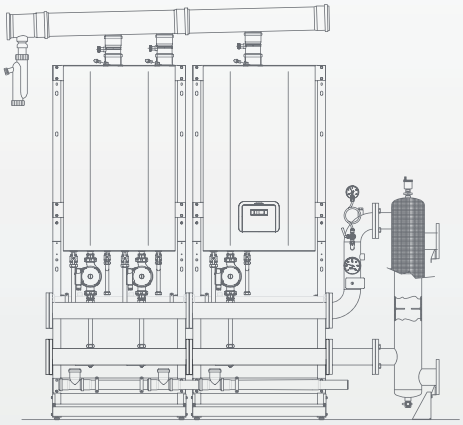
Stand alone configuration 100 kW



1 Power Plus 100 M (code 20019200)
1 remote control (code 1102379*)
1 Power Plus rig (front mounting) (code 20009472)
1 ISPESL connection pipes kit - 100 kW (code 20017270)
1 hydraulic header/separator - 100 kW (code 20017271)
1 hydraulic manifold kit 100 kW for Power Plus rig
with blank end-flange (code 20017226)
2 pump kit (front) for Power Plus rig (code 20009442)
or 2 LOW ENERGY pump kit (front) for Power Plus rig
1 ISPESL safety kit (400 kW max.) (code 20009475**)
1 gas safety cut-off valve (100 kW max.) (code 20009486*)
1 flues collector kit Ø 125 for 100 kW (code 4030312)
1 condensate drain kit Ø 125 with end cap (code 20062337)

* OPTIONAL component
** ISPESL optional component (ISPESL = Italian safety certification Institute)

Linear cascade configuration 150 kW

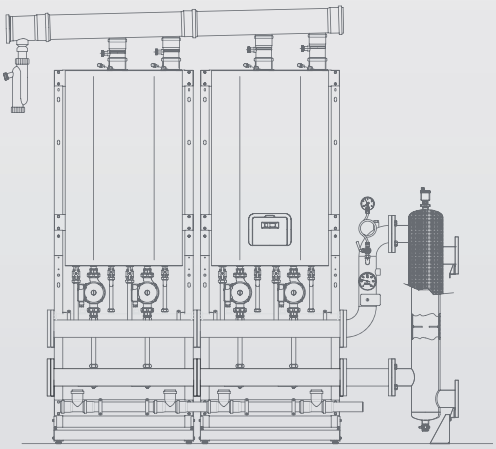


- 1 Power Plus 50 M (cod. 20019155)
- 1 Power Plus 100 S (code 20019309)

- 1 remote control (code 1102379*)
- 2 Power Plus rig (front mounting) (code 20009472)
- 2 hydraulic manifold kit up to 400 kW for Power Plus rig (code 20009439)
- 1 blank end-flange kit for hydraulic manifold (code 20009444)
- 3 pump kit (front) for Power Plus rig (code 20009442)
- or 3 LOW ENERGY pump kit (front) for Power Plus rig
- 1 hydraulic header/separator (150 - 200 kW) (code 20009466)
- 1 hydraulic manifold (150 - 400 kW)(code 20009471)
- 1 ISPESL safety kit (400 kW max.) (code 20009475**)
- 1 gas safety cut-off valve (200 kW max.) (code 20009482*)
- 1 flues collector kit Ø 125 for 50 kW (code 4030311)
- 1 flues collector kit Ø 125 for 100 kW (code 4030312)
- 1 condensate drain kit Ø 125 with end cap (code 20062337)

* OPTIONAL component
** ISPESL optional component (ISPESL = Italian safety certification Institute)

Linear cascade configuration 200 kW

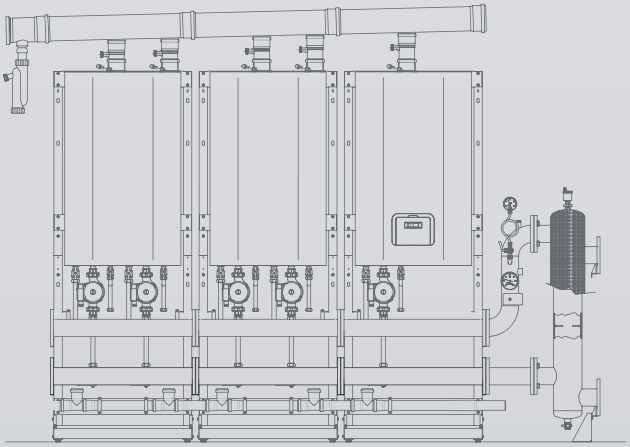


- 1 Power Plus 100 M (code 20019200)
- 1 Power Plus 100 S (code 20019309)

- 1 remote control (code 1102379*)
- 2 Power Plus rig (front mounting) (code 20009472)
- 2 hydraulic manifold kit up to 400 kW for Power Plus rig (code 20009439)
- 1 blank end-flange kit for hydraulic manifold (code 20009444)
- 4 pump kit (front) for Power Plus rig (code 20009442)
- or 4 LOW ENERGY pump kit (front) for Power Plus rig
- 1 hydraulic header/separator (150 - 200 kW) (code 20009466)
- 1 hydraulic manifold (150 - 400 kW)(code 20009471)
- 1 ISPESL safety kit (400 kW max.) (code 20009475**)
- 1 gas safety cut-off valve (200 kW max.) (code 20009482*)
- 2 flues collector kit Ø 125 for 100 kW (code 4030312)
- 1 condensate drain kit Ø 125 with end cap (code 20062337)

* OPTIONAL component
** ISPESL optional component (ISPESL = Italian safety certification Institute)

Linear cascade configuration 250 kW

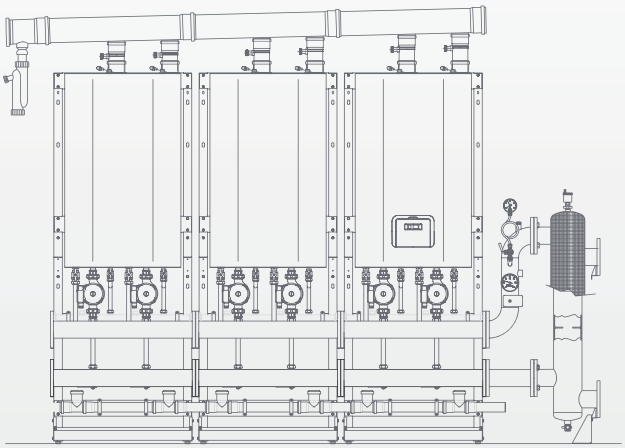


- 1 Power Plus 50 M (code 20019155)
- 2 Power Plus 100 S (code 20019309)

- 1 remote control (code 1102379*)
- 3 Power Plus rig (front mounting) (code 20009472)
- 3 hydraulic manifold kit up to 400 kW for Power Plus rig (code 20009439)
- 1 blank end-flange kit for hydraulic manifold (code 20009444)
- 5 pump kit (front) for Power Plus rig (code 20009442)
- or 5 LOW ENERGY pump kit (front) for Power Plus rig
- 1 hydraulic header/separator (250 - 400 kW)(code 20009467)
- 1 hydraulic manifold (150 - 400 kW)(code 20009471)
- 1 ISPESL safety kit (400 kW max.) (code 20009475**)
- 1 gas safety cut-off valve (400 kW max.) (code 20009483*)
- 1 flues collector kit Ø 125 for 50 kW (code 4030311)
- 2 flues collector kit Ø 125 for 100 kW (code 4030312)
- 1 condensate drain kit Ø 125 with end cap (code 20062337)

* OPTIONAL component
** ISPESL optional component (ISPESL = Italian safety certification Institute)

Linear cascade configuration 300 kW

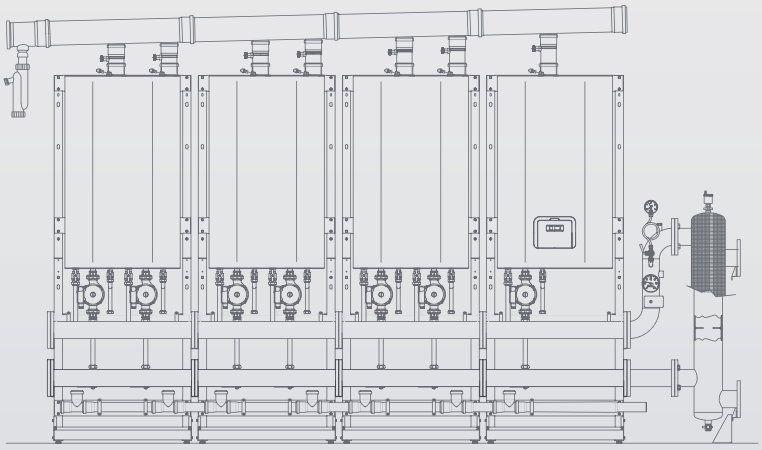


1 Power Plus 100 M (code 20019200)
2 Power Plus 100 S (code 20019309)

1 remote control (code 1102379*)
3 Power Plus rig (front mounting)(code 20009472)
3 hydraulic manifold kit up to 400 kW for Power Plus rig (code 20009439)
1 blank end-flange kit for hydraulic manifold (code 20009444)
6 pump kit (front) for Power Plus rig (code 20009442)
or 6 LOW ENERGY pump kit (front) for Power Plus rig
1 hydraulic header/separator (250 - 400 kW)(code 20009467)
1 hydraulic manifold (150 - 400 kW)(code 20009471)
1 ISPESL safety kit (400 kW max.)(code 20009475**)
1 gas safety cut-off valve (400 kW max.)(code 20009483*)
3 flues collector kit Ø 125 for 100 kW (code 4030312)
1 condensate drain kit Ø 125 with end cap (code 20062337)

* OPTIONAL component
** ISPESL optional component (ISPESL = Italian safety certification Institute)

Linear cascade configuration 350 kW

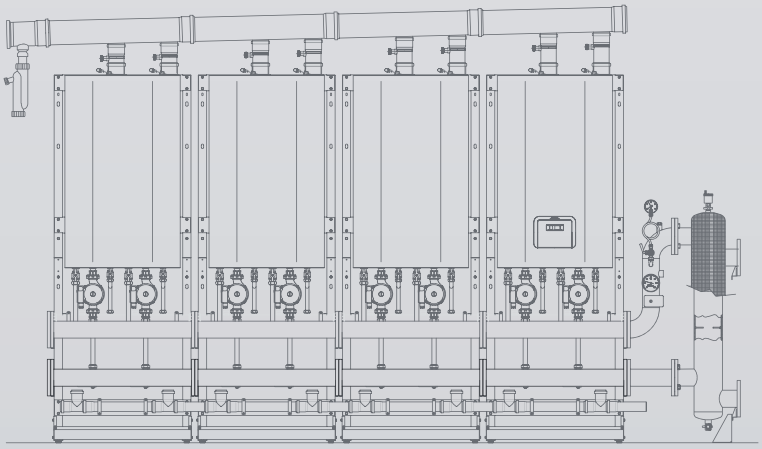


1 Power Plus 50 M (code 20019155)
3 Power Plus 100 S (code 20019309)

1 remote control (code 1102379*)
4 Power Plus rig (front mounting)(code 20009472)
4 hydraulic manifold kit up to 400 kW for Power Plus rig (code 20009439)
1 blank end-flange kit for hydraulic manifold (code 20009444)
7 pump kit (front) for Power Plus rig (code 20009442)
or 7 LOW ENERGY pump kit (front) for Power Plus rig
1 hydraulic header/separator (250-400 kW)(code 20009467)
1 hydraulic manifold (150 - 400 kW)(code 20009471)
1 ISPESL safety kit (400 kW max.)(code 20009475**)
1 gas safety cut-off valve (400 kW max.)(code 20009483*)
1 flues collector kit Ø 125 for 50 kW (code 4030311)
3 flues collector kit Ø 125 for 100 kW (code 4030312)
1 condensate drain kit Ø 125 with end cap (code 20062337)

* OPTIONAL component
** ISPESL optional component (ISPESL = Italian safety certification Institute)

Linear cascade configuration 400 kW



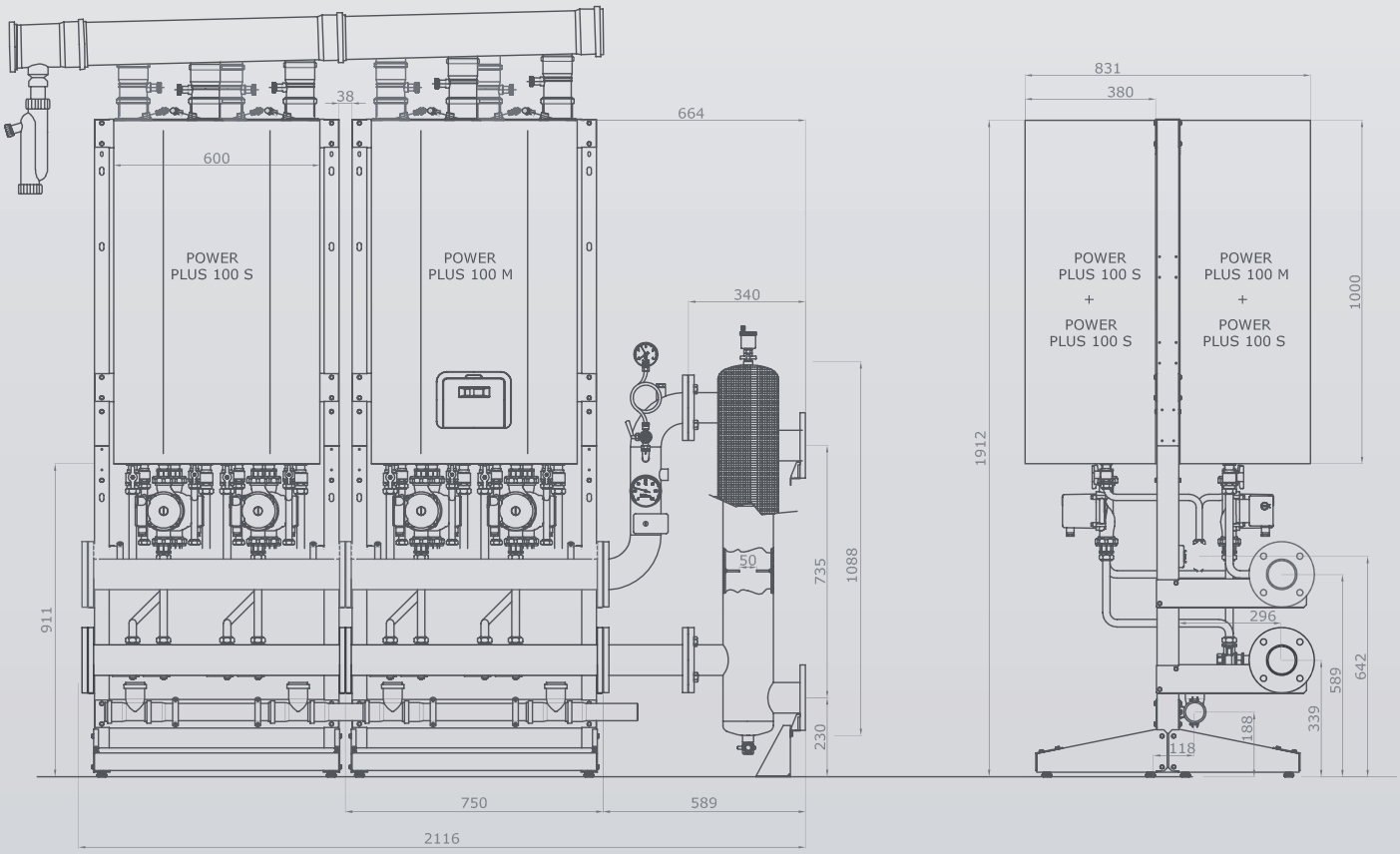
1 Power Plus 100 M (code 20019200)
3 Power Plus 100 S (code 20019309)

1 remote control (code 1102379*)
4 Power Plus rig (front mounting) (code 20009472)
4 hydraulic manifold kit up to 400 kW for Power Plus rig (code 20009439)
1 blank end-flange kit for hydraulic manifold (code 20009444)
8 pump kit (front) for Power Plus rig (code 20009442)
or 8 LOW ENERGY pump kit (front) for Power Plus rig
1 hydraulic header/separator (250 - 400 kW)(code 20009467)
1 hydraulic manifold (150 - 400 kW)(code 20009471)
1 ISPESL safety kit (400 kW max.) (code 20009475**)
1 gas safety cut-off valve (400 kW max.)(code 20009483*)
4 flues collector kit Ø 125 for 100 kW (code 4030312)
1 condensate drain kit Ø 125 with end cap (code 20062337)

* OPTIONAL component
** ISPESL optional component (ISPESL = Italian safety certification Institute)

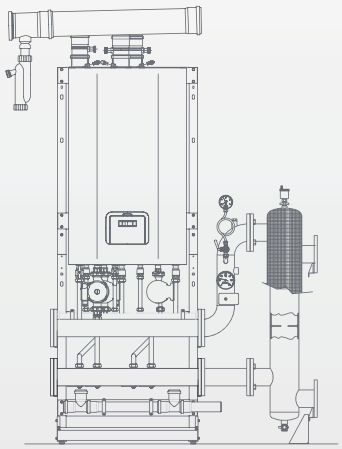
CODE	DESCRIPTION
20009472	Power Plus rig (front mounting)
20009474	rear mounting kit for Power Plus free-standing rig
20009439	hydraulic manifold kit up to 400 kW for Power Plus rig
20009444	blank end-flange kit for hydraulic manifold
20009442	pump kit (front) for Power Plus rig
20075526	LOW ENERGY pump kit (front) for Power Plus rig
20009443	pump kit (rear) for Power Plus rig
20075527	LOW ENERGY pump kit (rear) for Power Plus rig
20009466	hydraulic header/separator (150 - 200 kW)
20009467	hydraulic header/separator (250-400 kW)
20009471	hydraulic manifold (150 - 400 kW)
20009475**	ISPESL safety kit (400 kW max.)
20009486	gas safety cut-off valve (100 kW max.)
20009482	gas safety cut-off valve (200 kW max.)
20009483	gas safety cut-off valve (400 kW max.)
4030311	flues collector kit Ø 125 for 50 kW
4030312	flues collector kit Ø 125 for 100 kW
20062337	condensate drain kit Ø 125 with end cap
20017306	flues collector kit for frontal/rear installation

** ISPESL optional component (ISPESL = Italian safety certification Institute)
The whole range of accessories and flues for POWER PLUS applications is listed in this catalogue in the specific POWER PLUS section (pages 98-103)



Example of 400 kW back-to-back cascade

Back-to-back cascade configuration 150 kW

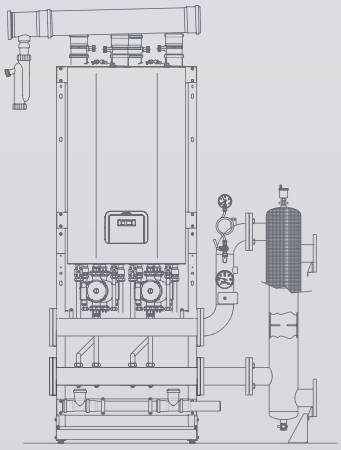


- 1 Power Plus 50 M (code 20019155)
- 1 Power Plus 100 S (code 20019309)
- 1 remote control (code 1102379*)

- 1 Power Plus rig (front mounting) (code 20009472)
- 1 rear mounting kit for Power Plus free-standing rig (code 20009474)
- 1 hydraulic manifold kit up to 400 kW for Power Plus rig (code 20009439)
- 1 blank end-flange kit for hydraulic manifold (code 20009444)
- 1 pump kit (front) for Power Plus rig (code 20009442)
  - or 1 LOW ENERGY pump kit (front) for Power Plus rig
- 2 pump kit (rear) for Power Plus rig (code 20009443)
  - or 2 LOW ENERGY pump kit (rear) for Power Plus rig
- 1 hydraulic header/separator (150 - 200 kW) (code 20009466)
- 1 hydraulic manifold (150 - 400 kW)(code 20009471)
- 1 ISPESL safety kit (400 kW max.) (code 20009475**)
- 1 gas safety cut-off valve (200 kW max.) (code 20009482*)
- 1 flues collector kit Ø 125 for 50 kW (code 4030311)
- 1 flues collector kit Ø 125 for 100 kW (code 4030312)
- 2 condensate drain kit Ø 125 with end cap (code 20062337)
- 1 flues collector kit for frontal/rear installation (code 20017306)

* OPTIONAL component
** ISPESL optional component (ISPESL = Italian safety certification Institute)

Back-to-back cascade configuration 200 kW

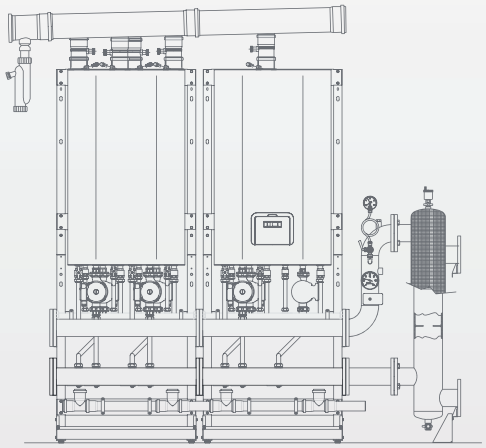


- 1 Power Plus 100 M (code 20019200)
- 1 Power Plus 100 S (code 20019309)
- 1 remote control (code 1102379*)

- 1 Power Plus rig (front mounting) (code 20009472)
- 1 rear mounting kit for Power Plus free-standing rig (code 20009474)
- 1 hydraulic manifold kit up to 400 kW for Power Plus rig (code 20009439)
- 1 blank end-flange kit for hydraulic manifold (code 20009444)
- 2 pump kit (front) for Power Plus rig (code 20009442)
  - or 2 LOW ENERGY pump kit (front) for Power Plus rig
- 2 pump kit (rear) for Power Plus rig (code 20009443)
  - or 2 LOW ENERGY pump kit (rear) for Power Plus rig
- 1 hydraulic header/separator (150 - 200 kW)(code 20009466)
- 1 hydraulic manifold (150 - 400 kW)(code 20009471)
- 1 ISPESL safety kit (400 kW max.) (code 20009475**)
- 1 gas safety cut-off valve (200 kW max.) (code 20009482*)
- 2 flues collector kit Ø 125 for 100 kW (code 4030312)
- 2 condensate drain kit Ø 125 with end cap (code 20062337)
- 1 flues collector kit for frontal/rear installation (code 20017306)

* OPTIONAL component
** ISPESL optional component (ISPESL = Italian safety certification Institute)

Back-to-back cascade configuration 250 kW

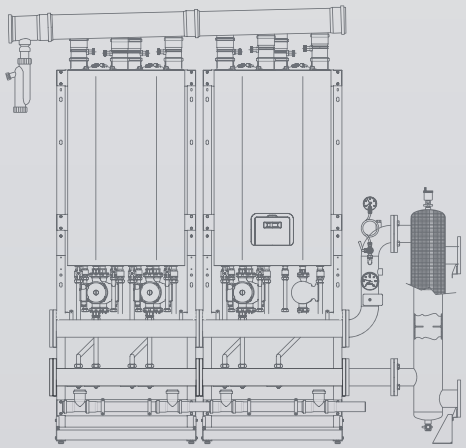


- 1 Power Plus 50 M (cod. 20019155)
- 2 Power Plus 100 S (cod. 20019309)
- 1 remote control (code 1102379*)

- 2 Power Plus rig (front mounting) (code 20009472)
- 2 rear mounting kit for Power Plus free-standing rig (code 20009474)
- 2 hydraulic manifold kit up to 400 kW for Power Plus rig (code 20009439)
- 1 blank end-flange kit for hydraulic manifold (code 20009444)
- 3 pump kit (front) for Power Plus rig (code 20009442)
  - or 3 LOW ENERGY pump kit (front) for Power Plus rig
- 2 pump kit (rear) for Power Plus rig (code 20009443)
  - or 2 LOW ENERGY Pump kit (rear) for Power Plus rig
- 1 hydraulic header/separator (250-400 kW)(code 20009467)
- 1 hydraulic manifold (150 - 400 kW)(code 20009471)
- 1 ISPESL safety kit (400 kW max.) (code 20009475**)
- 1 gas safety cut-off valve (400 kW max.)(code 20009483*)
- 1 flues collector kit Ø 125 for 50 kW (code 4030311)
- 2 flues collector kit Ø 125 for 100 kW (code 4030312)
- 2 condensate drain kit Ø 125 with end cap (code 20062337)
- 1 flues collector kit for frontal/rear installation (code 20017306)

* OPTIONAL component
** ISPESL optional component (ISPESL = Italian safety certification Institute)

Back-to-back cascade configuration 300 kW

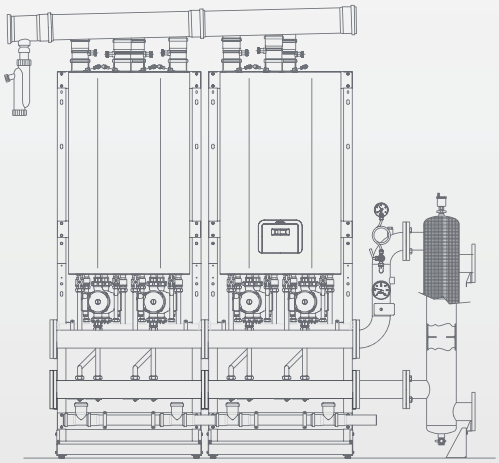


- 1 Power Plus 100 M (code 20019200)
- 2 Power Plus 100 S (code 20019309)
- 1 remote control (code 1102379*)

- 2 Power Plus rig (front mounting) (code 20009472)
- 2 rear mounting kit for Power Plus free-standing rig (code 20009474)
- 2 hydraulic manifold kit up to 400 kW for Power Plus rig (code 20009439)
- 1 blank end-flange kit for hydraulic manifold (code 20009444)
- 4 pump kit (front) for Power Plus rig (code 20009442)
  - or 4 LOW ENERGY pump kit (front) for Power Plus rig
- 2 pump kit (rear) for Power Plus rig (code 20009443)
  - or 2 LOW ENERGY pump kit (rear) for Power Plus rig
- 1 hydraulic header/separator (250-400 kW)(code 20009467)
- 1 hydraulic manifold (150 - 400 kW)(code 20009471)
- 1 ISPESL safety kit (400 kW max.)(code 20009475**)
- 1 gas safety cut-off valve (400 kW max.)(code 20009483*)
- 3 flues collector kit Ø 125 for 100 kW (code 4030312)
- 2 condensate drain kit Ø 125 with end cap (code 20062337)
- 1 flues collector kit for frontal/rear installation (code 20017306)

* OPTIONAL component
** ISPESL optional component (ISPESL = Italian safety certification Institute)

Back-to-back cascade configuration 350 kW

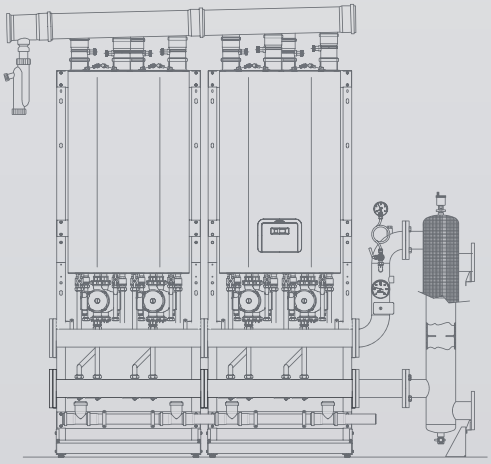


- 1 Power Plus 50 M (code 20019155)
- 3 Power Plus 100 S (code 20019309)
- 1 remote control (code 1102379*)

- 2 Power Plus rig (front mounting) (code 20009472)
- 2 rear mounting kit for Power Plus free-standing rig (code 20009474)
- 2 hydraulic manifold kit up to 400 kW for Power Plus rig (code 20009439)
- 1 blank end-flange kit for hydraulic manifold (code 20009444)
- 3 pump kit (front) for Power Plus rig (code 20009442)
  - or 3 LOW ENERGY pump kit (front) for Power Plus rig
- 4 pump kit (rear) for Power Plus rig (code 20009443)
  - or 4 LOW ENERGY pump kit (rear) for Power Plus rig
- 1 hydraulic header/separator (250-400 kW)(code 20009467)
- 1 hydraulic manifold (150 - 400 kW)(code 20009471)
- 1 ISPESL safety kit (400 kW max.)(code 20009475**)
- 1 gas safety cut-off valve (400 kW max.)(code 20009483*)
- 1 flues collector kit Ø 125 for 50 kW (code 4030311)
- 3 flues collector kit Ø 125 for 100 kW (code 4030312)
- 2 condensate drain kit Ø 125 with end cap (code 20062337)
- 1 flues collector kit for frontal/rear installation (code 20017306)

* OPTIONAL component
** ISPESL optional component (ISPESL = Italian safety certification Institute)

Back-to-back cascade configuration 400 kW



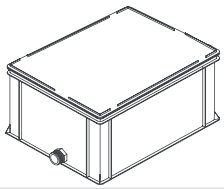
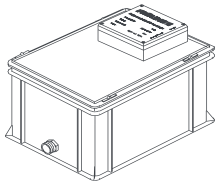
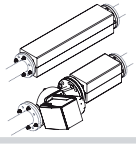
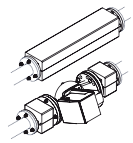
- 1 Power Plus 100 M (code 20019200)
- 3 Power Plus 100 S (code 20019309)
- 1 remote control (code 1102379*)

- 2 Power Plus rig (front mounting)(code 20009472)
- 2 rear mounting kit for Power Plus free-standing rig (code 20009474)
- 2 hydraulic manifold kit up to 400 kW for Power Plus rig (code 20009439)
- 1 blank end-flange kit for hydraulic manifold (code 20009444)
- 4 pump kit (front) for Power Plus rig (code 20009442)
  - or 4 LOW ENERGY pump kit (front) for Power Plus rig
- 4 pump kit (rear) for Power Plus rig (code 20009443)
  - or 4 LOW ENERGY pump kit (rear) for Power Plus rig
- 1 hydraulic header/separator (250-400 kW)(code 20009467)
- 1 hydraulic manifold (150 - 400 kW)(code 20009471)
- 1 ISPESL safety kit (400 kW max.) (code 20009475**)
- 1 gas safety cut-off valve (400 kW max.) (code 20009483*)
- 4 flues collector kit Ø 125 for 100 kW (code 4030312)
- 2 condensate drain kit Ø 125 with end cap (code 20062337)
- 1 flues collector kit for frontal/rear installation (code 20017306)

* OPTIONAL component
** ISPESL optional component (ISPESL = Italian safety certification Institute)

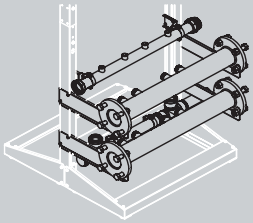
Beretta components and accessories for tailor-made installation solutions

The complete line of components and accessories developed by Beretta, hereafter listed and shown, in addition to the configurations proposed in this catalogue, allow you to compose also tailor-made Power Plus cascade applications.
By choosing all Beretta components, that harmonize perfectly with each other, your Power Plus system will assure you the maximum comfort and savings that are provided only by a unique specialized supplier.

CODE	DESCRIPTION	
1102379	Remote control	
1102869	Low temperature kit	
1103059	Probe kit for DHW tank	
20016110	Zone Master kit	
20073129	Mod-Bus interface (cables included)	
20046946	Interface kit for PC	
20011126	Condensate Neutralizer N2 up to 320 kW	
20011132	Condensate Neutralizer N3 up to 1250 kW	
20011135	Condensate Neutralizer HN2 (with pump) - up to 320 kW	
20011162	Condensate Neutralizer HN3 (with pump) - up to 1250 kW	
20021898	Primary loop pump < 270 kW (with connections and electronic injection pump type VegA RMDA 50-80)	
20021900	Primary loop pump < 450 kW (with connections and electronic injection pump type VegA RMDA 80-90)	

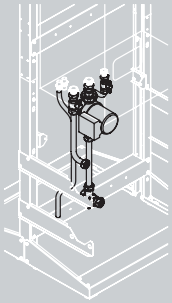
SPECIFIC COMPONENTS FOR POWER PLUS

20009439



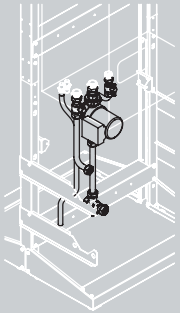
Hydraulic manifold kit up to 400 kW for Power Plus rig

20009442



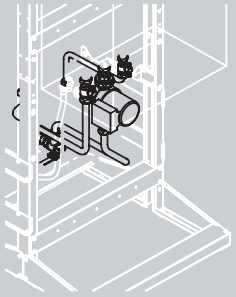
Pump kit (front) for Power Plus rig

20075526



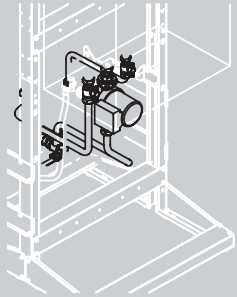
LOW ENERGY pump kit (front) for Power Plus rig

20009443



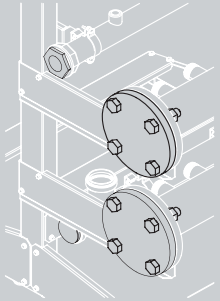
Pump kit (rear) for Power Plus rig

20075527



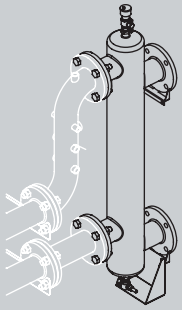
LOW ENERGY pump kit (rear) for Power Plus rig

20009444



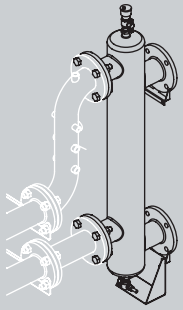
Blank end-flange kit for hydraulic manifold (400 kW)

20009466



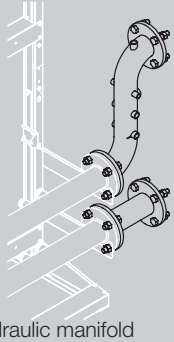
Hydraulic header/ separator (150-200 kW)

20009467



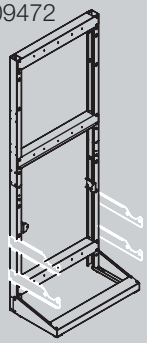
Hydraulic header/ separator (250-400 kW)

20009471



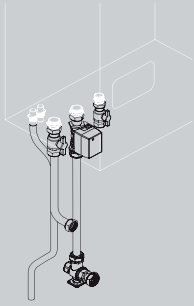
Hydraulic manifold (150-400kW)

20009472



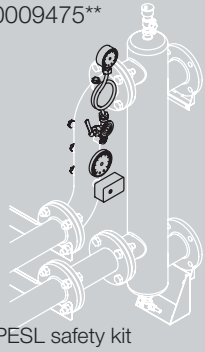
Power Plus rig (front mounting)

20041367



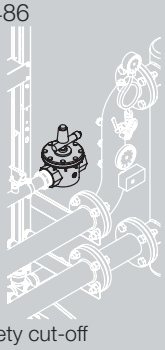
Two-ways-valve kit (only front mounting)

20009475**



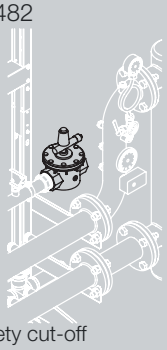
ISPESL safety kit (400 kW max.)

20009486



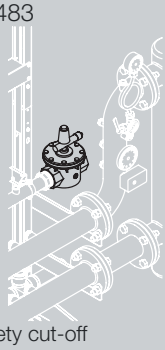
Gas safety cut-off valve (100 kW max.)

20009482



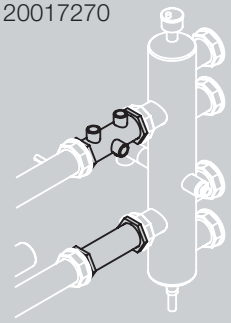
Gas safety cut-off valve (200 kW max.)

20009483



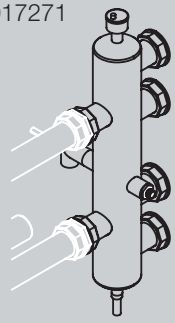
Gas safety cut-off valve (400 kW max.)

20017270



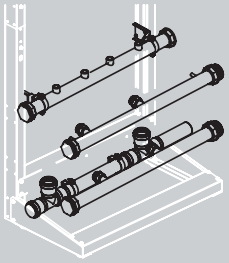
ISPESL connection pipes kit - 100 kW

20017271



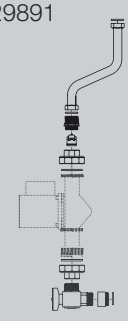
Hydraulic header/ separator - 100 kW

20017226



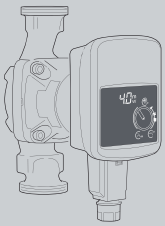
Hydraulic manifold kit 100 kW for P. P. rig with blank end-flange

10029891



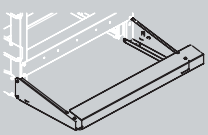
Connections kit for injection pump

20072821



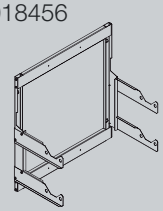
LOW ENERGY pump kit for secondary circuit

20009474*



Rear mounting kit for Power Plus free-standing rig

20018456



Supports hydraulic manifold kit (without rig) from 150 kW

1102579

Blind flange 3" UNI 60/91 PN6 DN80

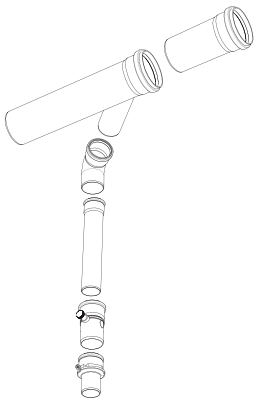
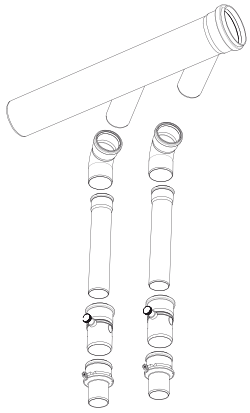
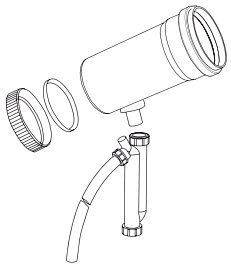
1102589

Flange 3" UNI 2276-67 PN6 DN80

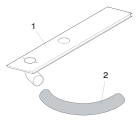
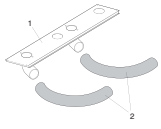
* This component is recommended also for linear free-standing cascade installations to provide extra stability where needed.

** It contains:
- temperature gauge
- pressure gauge
- pressure switch
- connection plug with valve

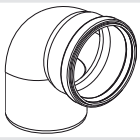
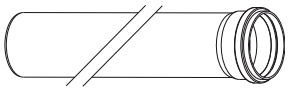
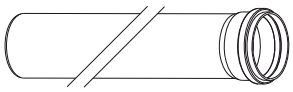
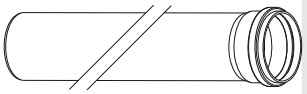
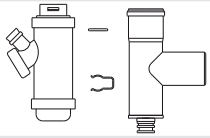
Flue Headers

CODE	DESCRIPTION	
4030311	Flues collector kit Ø 125 for 50 kW	
4030019	Flues collector kit Ø 160 for 50 kW	
20062323	Flues collector kit Ø 200 for 50 kW	
4030312	Flues collector kit Ø 125 for 100 kW	
4030037	Flues collector kit Ø 160 for 100 kW	
20062312	Flues collector kit Ø 200 for 100 kW	
20062337	Condensate drain kit Ø 125 with end cap	
20062338	Condensate drain kit Ø 160 with end cap	
20062340	Condensate drain kit Ø 200 with end cap	

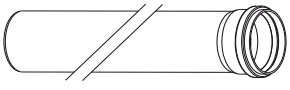
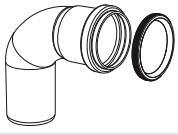
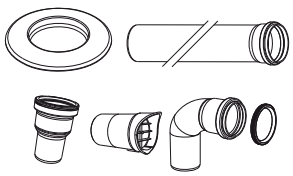
Room-sealed Kits

CODE	DESCRIPTION	
1102439	Air connection kit to Power Plus 50 kW	
1102449	Air connection kit to Power Plus 100 kW	

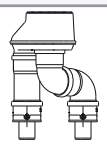
Indoor flue systems ø 50

CODE	DESCRIPTION	
20031841	45° bend Ø 50 (white PPS)	
20031840	90° bend Ø 50 (white PPS)	
20021607	Extension Ø 50, 250 mm (white PPS)	
20021608	Extension Ø 50, 500 mm (white PPS)	
20021609	Extension Ø 50, 1000 mm (white PPS)	
20031842	Condensate drain kit Ø 50 (white PPS)	
20027815	Non-return flue valve kit Ø 50/80 (PPtl) - clapet	
20071446	Flue adapter Ø 50/80 (PPtl)	

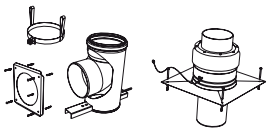
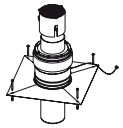
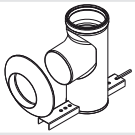
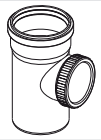
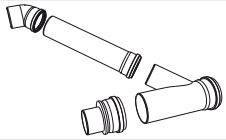
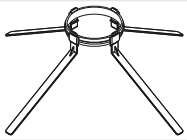
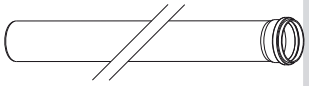
Indoor flue systems ø 60

CODE	DESCRIPTION	
20046016	Extension Ø 60, 640 mm (black PPS)	
20046015	87° Bend Ø 60 (black PPS)	
20046028	Air intake/flue drain kit Ø 60 (black PPS) (terminal UV protected)	

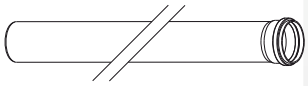
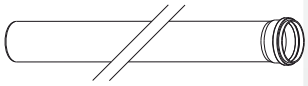
Indoor flue systems ø 80/125

CODE	DESCRIPTION	
20064739	Concentric flue adapter kit Ø 50/50 - 80/125 (PPtl)	

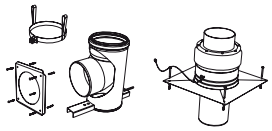
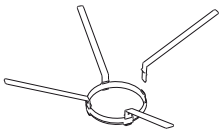
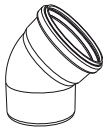
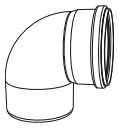
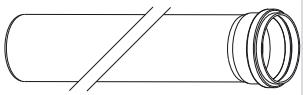
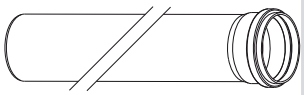
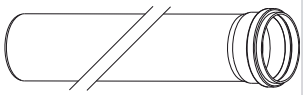
Indoor flue systems ø 125

CODE	DESCRIPTION	
20027816	Chimney kit Ø 125	
20037431	Chimney cover Ø 125 (PP & stainless steel)	
20037429	Chimney support Ø 125 (PPtl, EPDM, MET)	
20037424	Inspection extension Ø 125 (PPtl)	
20017306	Flues collector kit for frontal/rear installation (PPtl, for cascade back-to-back)	
20037426	Pipe spacers kit Ø 125 (PP), 5 pcs.	
20037396	45° bend kit Ø 125 (PPtl)	
20037405	90° bend kit Ø 125 (PPtl)	
20037413	Extension Ø 125, 500 mm (PPtl)	

Indoor flue systems ø 125

CODE	DESCRIPTION	
20037415	Extension Ø 125, 1000 mm (PPtl)	
20037416	Extension Ø 125, 2000 mm (PPtl)	

Indoor flue systems ø 160

CODE	DESCRIPTION	
20032653	Chimney kit Ø 160	
20060945	Inspection extension Ø 160 (PPtl)	
20060948	Pipe spacers kit Ø 160 (plastic), 5 pcs.	
20032646	45° bend kit Ø 160 (PPtl)	
20032644	90° bend kit Ø 160 (PPtl)	
20060940	Extension Ø 160, 500 mm (PPtl)	
20060941	Extension Ø 160, 1000 mm (PPtl)	
20060942	Extension Ø 160, 2000 mm (PPtl)	

- Floor-standing, modular condensing boilers complete with hydraulic collectors and hydraulic header/separator, gas collectors, flues collectors in plastic with clapet and condensate drain kit.
- Suitable only for stand-alone application.
- Stainless steel BOX with IPx4D protection and insulation, specifically designed for OUTDOOR installation.
- It can be installed INDOOR as well.
- Efficiency ★ ★ ★ ★ according to European Directive EEC 92/42.
- Minimum polluting emissions: class 5 (UNI EN 483).
- Climatic curves onboard.
- Flue temperature of only max 3°C above the return water temperature.
- Maximum ease of installation.
- All models are provided with a shunt pump for each heat-exchanger.
- Possibility to integrate the secondary pumps inside the BOX (as optional accessory, as shown below)

BOX for OUTDOOR or INDOOR installation — Efficiency ★★★★ Eur. Dir. EEC 92/42

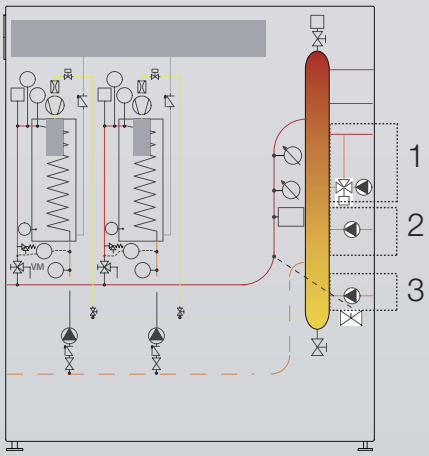
CODE	GAS	MODEL	DIMENSIONS H x L x D (mm)	INPUT (kW) Hs	INPUT (kW) Hi
20020976	NG	Power Plus Box SIS 85 M EXT	1530X1250X650	85	77
20020977	NG	Power Plus Box SIS 128 M EXT	1530X1250X650	128	115

Specific accessories

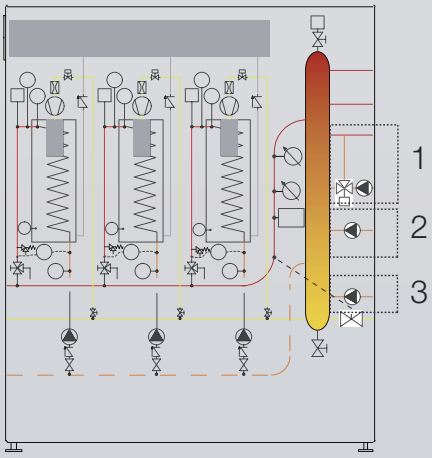
CODE	DESCRIPTION
20069666	Low temperature circuit kit (rif.1)
20069664	High temperature circuit it (rif.2)
20069667	DHW tank kit (rif.3)

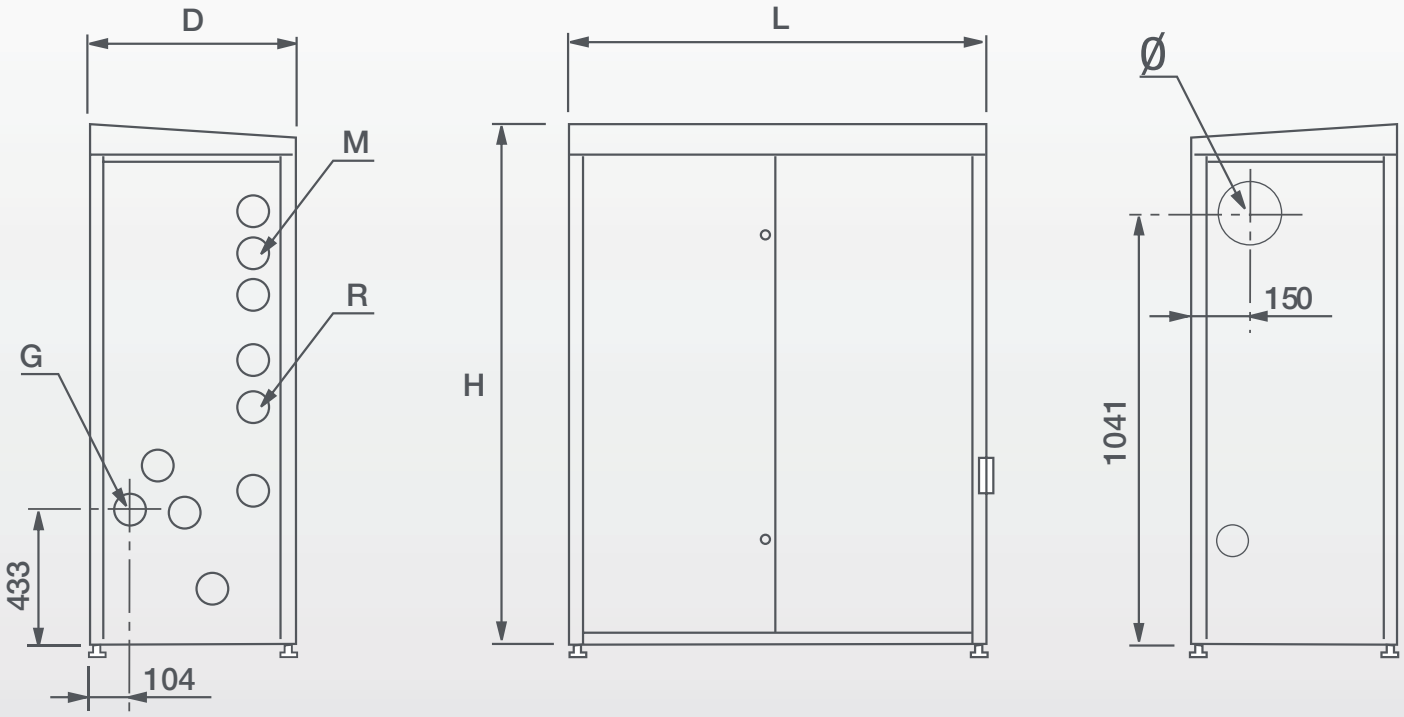
CODE	DESCRIPTION
20011175	system connections kit
20074999	plugs kit (2 pcs)

SIS 85 M EXT



SIS 128 M EXT





SPECIFICATIONS		Power Plus Box SIS 85 M EXT	Power Plus Box SIS 128 M EXT
Heat input (Hs)	kW	85,2	127,8
Heat input (Hi)	kW	76,7	115
Nominal heat output (80°-60°C)	kW	75,3	112,9
Nominal heat output (50°-30°C)	kW	82,5	123,8
Minimum heat input (Hs)	kW	16	16
Minimum heat input (Hi)	kW	14,4	14,4
Efficiency according European Directive EEC 92/42		★★★★	
Efficiency at nominal output (80°-60°C) (HI)	%	98,2	
Efficiency at nominal output (50°-30°C) (HI)	%	107,7	
Efficiency at partial load 30% (80°-60°C) (HI)	%	98,7	
Efficiency at partial load 30% (50°-30°C) (HI)	%	108,7	
Emissions			
NOx class		5	
CO d.a.f. min-max less than	mg/kWh	10/80	
flue gas temperature	°C	T return + MAX 2,5 °C	
Central heating			
Maximum pressure	bar	6	
Adjustable CH water temperature range	°C	20/80	
Max condensate production	l/h	11,1	16,6
Electrical			
Power supply	V-Hz	230-50	
Maximum power consumption	W	285	425
Dimensions, weight, gas			
Boiler dimensions (H x L x D)	mm	1530 x 1250 x 650	
Net weight (empty)	kg	180	220
Water content	l	19,4	24,3
Available gas versions		NG/LPG	
G/G1	Ø	2" / --	
M/R	Ø	2" / 2"	
Cond	mm	50	
Ø	mm	125	

- Floor-standing, modular condensing boilers complete with hydraulic collectors, gas collectors, flues collectors in plastic with clapet and condensate drain kit.
- Stainless steel BOX with IPx4D protection and insulation, specifically designed for outdoor installation.
- Efficiency ★★★★ according to European Directive EEC 92/42.
- Minimum polluting emissions: class 5 (UNI EN 483).
- Climatic curves onboard.
- Possibility to cascade more than one appliance to reach up to 3.000 kW.
- Electronic cascade control onboard.
- Flue temperature of only max 3°C above the return water temperature.
- Power Plus Box is available in two versions: with 2-ways valve or with shunt pump.
- The 250 and 300 models are compositions that come with a specific hydraulic separator already fitted. Therefore they should not be used for cascades.

BOX for OUTDOOR installation — Efficiency ★★★★ Eur. Dir. EEC 92/42

CODE	GAS	MODEL	DIMENSIONS H x L x D (mm)	INPUT (kW) Hs	INPUT (kW) Hi
With shunt pumps					
20020973	NG	Power Plus Box 150 M P EXT	1530X1250X650	150	135
20020974	NG	Power Plus Box 200 M P EXT	1530X1250X650	200	180
With 2-ways valves					
20074443	NG	Power Plus Box 150 M V EXT	1530X1250X650	150	135
20074445	NG	Power Plus Box 200 M V EXT	1530X1250X650	200	180
Expansion modular unit with shunt pumps					
20074446	NG	Power Plus Box 100 M P EXP EXT	1530X1250X650	100	90

The 250 and 300 models, listed below, are compositions that come with a specific hydraulic separator already fitted. Therefore they should not be used for cascades (see technical drawings on page 107).

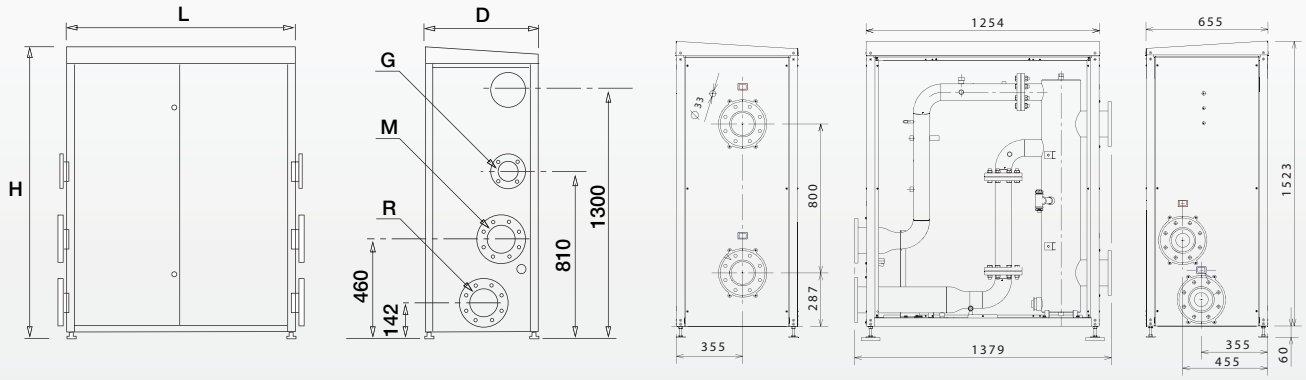
CODE	GAS	MODEL	DIMENSIONS H x L x D (mm)	INPUT (kW) Hs	INPUT (kW) Hi
With shunt pumps and box with hydraulic separator					
20074447	NG	Power Plus Box 250 M P EXT	1530X2500X650	250	225
20074448	NG	Power Plus Box 300 M P EXT	1530X2500X650	300	270

Specific accessories

CODE	DESCRIPTION
20075007	hydraulic separator for BOX EXT with primary loop pump max 200kW - right (CIRC)
20075011	hydraulic separator for BOX EXT with primary loop pump max 200kW - left (CIRC)
20069100	hydraulic separator for BOX EXT max 200kW with fitting pipes - right
20069094	hydraulic separator for BOX EXT max 200kW with fitting pipes - left
20069095	hydraulic separator for BOX EXT max 400kW with fitting pipes - right
20069097	hydraulic separator for BOX EXT max 400kW with fitting pipes - left

CODE	DESCRIPTION
20010062	hydraulic separator for BOX EXT max 720kW with fitting pipes - right
20010065	hydraulic separator for BOX EXT max 720kW with fitting pipes - left
20071942	hydraulic separator for BOX EXT max 600kW with fitting pipes - right
20071940	hydraulic separator for BOX EXT max 600kW with fitting pipes - left
20010998	Stainless steel BOX - empty
20074998	Junctions flue pipes

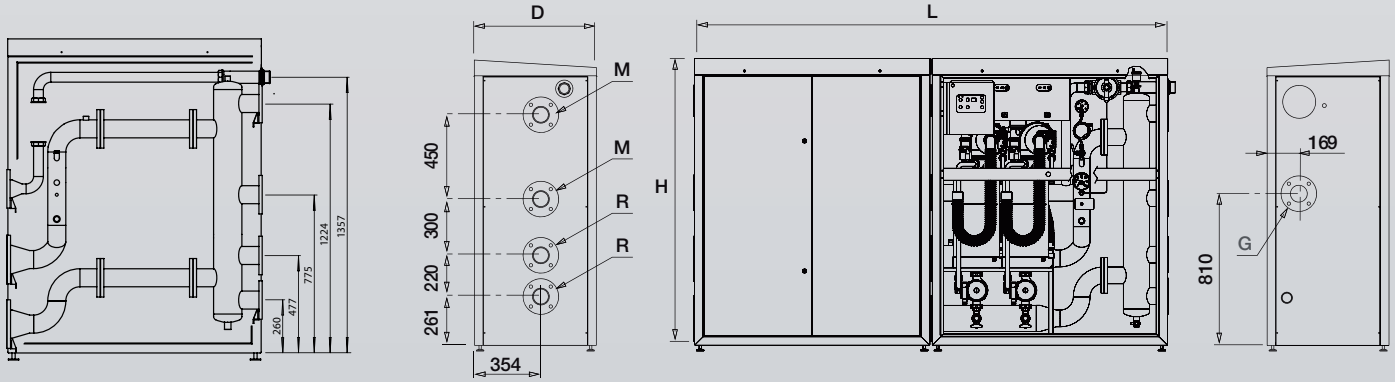
POWER PLUS BOX



SPECIFICATIONS		Power Plus Box 150 M P/V Ext	Power Plus Box 200 M P/V Ext	Power Plus Box 250 M P Ext	Power Plus Box 300 M P Ext	Power Plus Box 100 M P Exp Ext
Heat input (Hs)	kW	150	200	250	300	100
Heat input (Hi)	kW	135	188	225	270	89,9
Nominal heat output (80°-60°C)	kW	132,5	176,6	220,75	264,9	88,3
Nominal heat output (50°-30°C)	kW	145,3	193,6	242	290,6	96,8
Minimum heat input (Hs)	kW	16	16	16	16	16
Minimum heat input (Hi)	kW	14,4	14,4	14,4	14,4	14,4
Efficiency according European Directive EEC 92/42		★★★★				
Efficiency at nominal output (80°-60°C) (Hl)	%	98,2				
Efficiency at nominal output (50°-30°C) (Hl)	%	107,7	107,7	107,7	107,7	108,3
Efficiency at partial load 30% (80°-60°C) (Hl)	%	98,7	98,7	98,7	98,7	99,4
Efficiency at partial load 30% (50°-30°C) (Hl)	%	108,7				
Emissions						
NOx class		5				
CO d.a.f. min-max less than	mg/kWh	10/80				
flue gas temperature	°C	T return + MAX 2,5 °C				
Central heating						
Maximum pressure	bar	6				
Adjustable CH water temperature range	°C	20/80				
Max condensate production	l/h	20,7	27,6	34,6	41,5	13,8
Electrical						
Power supply	V-Hz	230-50				
Maximum power consumption*	W	648/255	912/340	1140	1368	456
Dimensions, weight, gas						
Boiler dimensions (H x L x D)	mm	1530x1250x650		1530x2500x650		1530x1250x650
Net weight (empty)	kg	290	320	470	500	180
Water content	l	50	55	60	65	15
Available gas versions		NG/LPG				
G/G1	Ø	3" / --		3" / 2"		3" / 2"
M/R	Ø	5" / 5"		3" / 3"		5" / 5" - 3" / 3"
Cond	mm	50				
Ø	mm	160				

* The double value refers to the versions with pump / with 2-way valve

Power Plus Box 250 M P EXT
Power Plus Box 300 M P EXT



POWER PLUS BOX

- Floor-standing, modular condensing boilers complete with hydraulic collectors, gas collectors, flues collectors in plastic with clapet and condensate drain kit.
- Painted steel BOX for INDOOR installations with ventilation air intake.
- Efficiency ★★★★ according to European Directive EEC 92/42.
- Minimum polluting emissions: class 5 (UNI EN 483).
- Climatic curves onboard.
- Possibility to cascade more than one appliance to reach up to 3.000 kW.
- Electronic cascade control onboard.
- Flue temperature of only max 3°C above the return water temperature.
- Power Plus Box is available in two versions: with 2-ways valve or with shunt pump.

BOX for INDOOR installation — Efficiency ★★★★ Eur. Dir. EEC 92/42

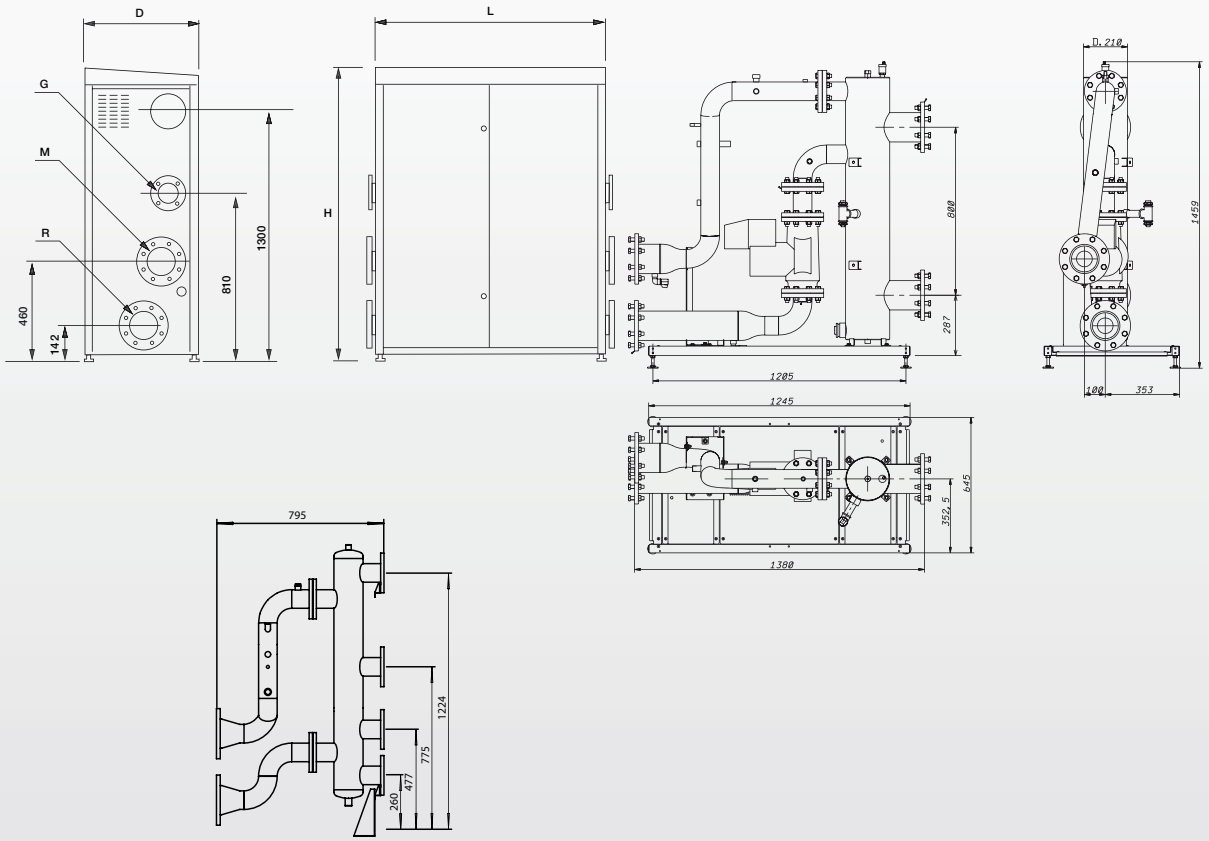
CODE	GAS	MODEL	DIMENSIONS H x L x D (mm)	INPUT (kW) Hs	INPUT (kW) Hi
With shunt pumps					
20074450	NG	Power Plus Box 150 M P INT	1480X1250X650	150	135
20074455	NG	Power Plus Box 200 M P INT	1480X1250X650	200	180
With 2-ways valves					
20074457	NG	Power Plus Box 150 M V INT	1480X1250X650	150	135
20074459	NG	Power Plus Box 200 M V INT	1480X1250X650	200	180

Specific accessories

CODE	DESCRIPTION
20075002	hydraulic separator for BOX INT with primary loop pump max 200kW - right (CIRC)
20075004	hydraulic separator for BOX INT with primary loop pump max 200kW - left (CIRC)
20075000	hydraulic separator for BOX INT max 200kW with fitting pipes - right
20075001	hydraulic separator for BOX INT max 200kW with fitting pipes - left
20073125	hydraulic separator for BOX INT max 400kW with fitting pipes - right

CODE	DESCRIPTION
20073126	hydraulic separator for BOX INT max 400kW with fitting pipes - left
20073304	hydraulic separator for BOX INT max 600kW with fitting pipes - right
20073305	hydraulic separator for BOX INT max 600kW with fitting pipes - left
20010996	hydraulic separator for BOX INT max 720kW with fitting pipes - right
20074998	Junctions flue pipes

POWER PLUS BOX



SPECIFICATIONS		Power Plus Box 150 M P/V INT	Power Plus Box 200 M P/V INT
Heat input (Hs)	kW	150	200
Heat input (Hi)	kW	135	188
Nominal heat output (80°-60°C)	kW	132,5	176,6
Nominal heat output (50°-30°C)	kW	145,3	193,6
Minimum heat input (Hs)	kW	16	16
Minimum heat input (Hi)	kW	14,4	14,4
Efficiency according European Directive EEC 92/42		★ ★ ★ ★	
Efficiency at nominal output (80°-60°C) (HI)	%	98,2	
Efficiency at nominal output (50°-30°C) (HI)	%	107,7	
Efficiency at partial load 30% (80°-60°C) (HI)	%	98,7	
Efficiency at partial load 30% (50°-30°C) (HI)	%	108,7	
Emissions			
NOx class		5	
CO d.a.f. min-max less than	mg/kWh	10/80	
Flue gas temperature	°C	T return + MAX 2,5 °C	
Central heating			
Maximum pressure	bar	6	
Adjustable CH water temperature range	°C	20/80	
Max condensate production	l/h	20,7	27,6
Electrical			
Power supply	V-Hz	230-50	
Maximum power consumption	W	648/255	912/340
Dimensions, weight, gas			
Boiler dimensions (H x L x D)	mm	1480 x 1250 x 650	
Net weight (empty)	kg	290	320
Water content	l	50	55
Available gas versions		NG/LPG	
G/G1	Ø	3” / --	
M/R	Ø	5” / 5”	
Cond	mm	50	
Ø	mm	160	

- Floor-standing, modular condensing boilers complete with 5" hydraulic collectors, 3" gas collector, flue outlets Ø 110mm and condensate drain kit.
- Painted steel BOX for indoor installations with ventilation air intake.
- Efficiency ★★★★ according to European Directive EEC 92/42.
- Minimum polluting emissions: class 5 (UNI EN 483).
- Climatic curves available with Master Control (accessory).
- Possibility to cascade up to 60 combustion units.
- Electronic cascade control managed by Master Control
- Flue temperature of only around 8°C above the return water temperature.
- Power Plus Box is available with shunt pumps.
- Clapet built-in.

BOX for INDOOR installation — Efficiency ★★★★ Eur. Dir. EEC 92/42

CODE	GAS	MODEL	DIMENSIONS H x L x D (mm)	INPUT (kW) Hs	INPUT (kW) Hi
With shunt pumps					
20067829	NG	Power Plus Box 1002 P INT	1590x900x750	256	230
20067830	NG	Power Plus Box 1003 P INT	1590x1700x750	384	345
20067831	NG	Power Plus Box 1004 P INT	1590x1700x750	511	460

Electronic control for cascade management

CODE	DESCRIPTION
20067837*	Master board (manages the thermal modules cascade; contains blind flanges kit and external probe)

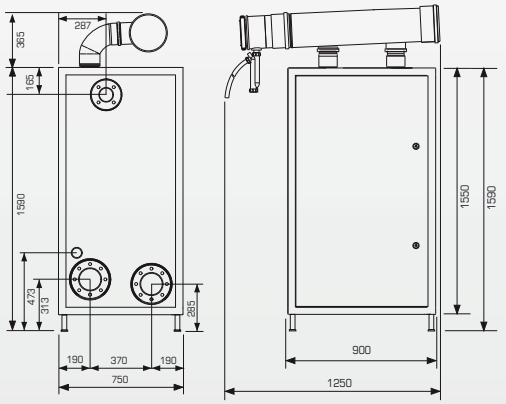
* It is compulsory to order a master board for each thermal modules cascade.

Specific accessories

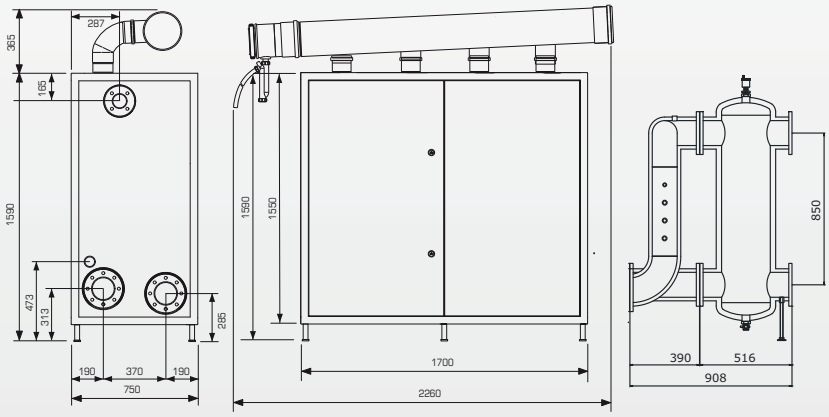
CODE	DESCRIPTION
20069767	Flues collector 4x110 - 1x200
20069769	Flues collector 3x110 - 1x200
20069771	Flues collector 1x110 - 1x200 (for 2-engines box purchase 2)
20062340	Condensate drain kit Ø 200 with end cap
20061638	Gas safety cut-off valve (580 kW max.)
20061640	Gas safety cut-off valve (1150 kW max.)
20076316	Extension kit Ø 110 with inspection
20061644	Safety kit

CODE	DESCRIPTION
1102379	Remote control kit
20069073	Hydraulic separator INT 100 ÷ 640 kW
20069075	Hydraulic manifold connection to low header and safety devices - right
20069074	Hydraulic separator INT MAX 1024 kW (suitable up to 10 engines)
20069075	Hydraulic manifold connection to low header and safety devices - right
20069073	Hydraulic separator INT 100 ÷ 640 kW
20069072	Hydraulic manifold connection to low header and safety devices - left
20069074	Hydraulic separator INT MAX 1024 kW (suitable up to 10 engines)
20069072	Hydraulic manifold connection to low header and safety devices - left

Power Plus Box 1002



Power Plus Box 1003 - Power Plus Box 1004



SPECIFICATIONS		Power Plus Box 1002 P INT	Power Plus Box 1003 P INT	Power Plus Box 1004 P INT
Boiler type		B23, B53, B53P, C13, C33, C53, C63		
CE Homologation Number		0085CL0333		
Number of burners		2 (x128 kW)	3 (x128 kW)	4 (x128 kW)
Dimension and Connections				
HxLxD	mm	1590x900x750	1590x1700x750	
Empty weight	kg	270	380	450
Content of water	l	70	112	132
Water manifold	in	5”		
Gas manifold	in	3”		
Flue manifold	mm	110		
Condensate drain	mm	50		
Power and Efficiency				
Heat input ref. HHV (min - max)	kW	25,5 - 255,6	25,5 - 383,4	25,5 - 511,2
Heat input ref. NHV (min - max)	kW	23 - 230	23 - 345	23 - 460
Useful heat output (80°/60°C)	kW	226,8	340,2	453,6
Useful heat output (50°/30°C)	kW	249,8	374,7	499,6
Useful heat output (60°/40°C)	kW	239,6	359,4	479,2
Condensate production per hour at 100% (50 - 30°C) - gas G20	kg/h	34,4	51,6	68,8
Useful efficiency ref. NHV (80°C/60°C)	%	98,6	98,6	98,6
Useful efficiency ref. NHV (50°C/30°C)	%	108,6	108,6	108,6
Useful efficiency ref. NHV Tm=50°C (60/40°C)	%	104,2	104,2	104,2
Useful efficiency at 30% ref. NHV (80°C/60°C)	%	99,2	99,2	99,2
Useful efficiency at 30% ref. NHV (50°C/30°C)	%	109	109	109
Useful efficiency at 30% ref. NHV Tm=50°C (60 – 40°C)	%	105	105	105
Losses through the casing (Tm=70°)	%	0,1	0,1	0,1
Efficiency Class 92/42 CEE		★ ★ ★ ★		
Consumption and electrical power				
Gas Category		II2H3+		
Consumption Methane (G20)	m3/h	2,43 / 24,3	2,43 / 36,5	2,43 / 48,7
Power supply		230V - 50Hz		
Maximum electrical power	kW	0,6	0,9	1,2
Combustion data				
Max exhaust residual manometric head for each unit	Pa	500		
Carbon monoxide CO (0% di O2) (min÷max)	mg/kWh	23 ÷130		
NOx class		5		
Heating circuit				
Heating temperature regulation (min / max)	°C	20 / 80		
Water operating pressure max/min	bar (kPa)	6 / 0,5 (600/50)		
Max manometric head at nominal flow of 5’500 l/h	Pa [m c.a.]	1500 [1,5]		

POWER PLUS BOX

- Floor-standing, modular condensing boilers complete with 5” hydraulic collectors flow and return, 3” gas collector, flue outlets Ø 110mm and condensate drain kit.
- Stainless-steel BOX for outdoor installations with ventilation air intake.
- Efficiency ★★★★ according to European Directive EEC 92/42.
- Minimum polluting emissions: class 5 (UNI EN 483).
- Climatic curves available with Master Control (accessory).
- Possibility to cascade up to 60 combustion units.
- Electronic cascade control managed by Master Control.
- Flue temperature of only around 8°C above the return water temperature.
- Power Plus Box is available with shunt pumps.
- Clapet built-in.

BOX for OUTDOOR installation — Efficiency ★★★★ Eur. Dir. EEC 92/42

CODE	GAS	MODEL	DIMENSIONS H x L x D (mm)	INPUT (kW) Hs	INPUT (kW) Hi
With shunt pumps					
20067832	NG	Power Plus Box 1002 P EXT	1637x900x750	256	230
20067833	NG	Power Plus Box 1003 P EXT	1637x1710x750	384	345
20067834	NG	Power Plus Box 1004 P EXT	1637x1710x750	511	460

Electronic control for cascade management

CODE	DESCRIPTION
20067837*	Master board (manages the thermal modules cascade; contains blind flanges kit and external probe)

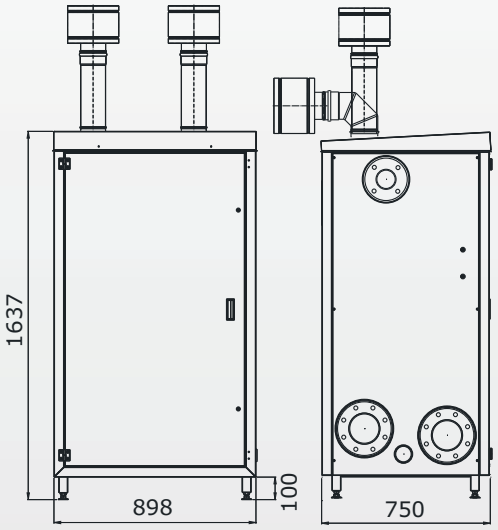
* It is compulsory to order a master board for each thermal modules cascade.

Specific accessories

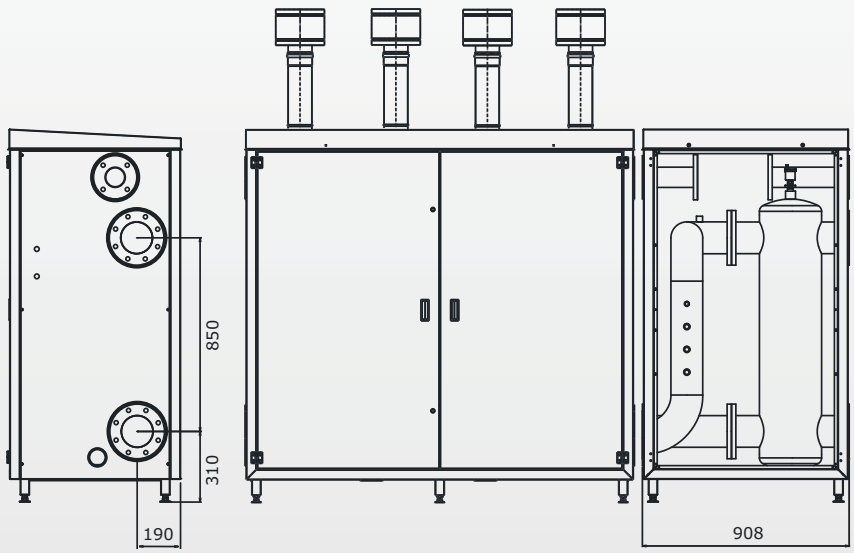
CODE	DESCRIPTION
20060817	Terminal chimney inox
20060819	Kit extention stainless steel 500 mm, Ø 110
20060820	Kit extention stainless steel 1000 mm, Ø 110
20060821	90° bend stainless steel, Ø 110
20061638	Gas safety cut-off valve (580 kW max.)
20061640	Gas safety cut-off valve (1150 kW max.)

CODE	DESCRIPTION
20061644	Safety kit
20060827	Hydraulic separator in BOX up to 640 kW - right
20060828	Hydraulic separator in BOX up to 640 kW - left
20060829	Hydraulic separator in BOX up to 1150 kW - right
20060830	Hydraulic separator in BOX up to 1150 kW - left

Power Plus Box 1002



Power Plus Box 1003 - Power Plus Box 1004



SPECIFICATIONS		Power Plus Box 1002 P EXT	Power Plus Box 1003 P EXT	Power Plus Box 1004 P EXT
Boiler type		B23, B53, B53P, C13, C33, C53, C63		
CE Homologation Number		0085CL0333		
Number of burners		2 (x128 kW)	3 (x128 kW)	4 (x128 kW)
Dimension and Connections				
HxLxD	mm	1637x900x750	1637x1710x750	
Empty weight	kg	270	380	450
Content of water	l	70	112	132
Water manifold	in	5”		
Gas manifold	in	3”		
Flue manifold	mm	110		
Condensate drain	mm	50		
Power and Efficiency				
Heat input ref. HHV (min - max)	kW	25,5 - 255,6	25,5 - 383,4	25,5 - 511,2
Heat input ref. NHV (min - max)	kW	23 - 230	23 - 345	23 - 460
Useful heat output (80°/60°C)	kW	226,8	340,2	453,6
Useful heat output (50°/30°C)	kW	249,8	374,7	499,6
Useful heat output (60°/40°C)	kW	239,6	359,4	479,2
Condensate production per hour at 100% (50 - 30°C) - gas G20	kg/h	34,4	51,6	68,8
Useful efficiency ref. NHV (80°C/60°C)	%	98,6	98,6	98,6
Useful efficiency ref. NHV (50°C/30°C)	%	108,6	108,6	108,6
Useful efficiency ref. NHV Tm=50°C (60/40°C)	%	104,2	104,2	104,2
Useful efficiency at 30% ref. NHV (80°C/60°C)	%	99,2	99,2	99,2
Useful efficiency at 30% ref. NHV (50°C/30°C)	%	109	109	109
Useful efficiency at 30% ref. NHV Tm=50°C (60 – 40°C)	%	105	105	105
Losses through the casing (Tm=70°)	%	0,1	0,1	0,1
Efficiency Class 92/42 CEE		★ ★ ★ ★		
Consumption and electrical power				
Gas Category		II2H3+		
Consumption Methane (G20)	m3/h	2,43 / 24,3	2,43 / 36,5	2,43 / 48,7
Power supply		230V - 50Hz		
Maximum electrical power	kW	0,6	0,9	1,2
Combustion data				
Max exhaust residual manometric head for each unit	Pa	500		
Carbon monoxide CO (0% di O2) (min÷max)	mg/kWh	23 ÷130		
NOx Class		5		
Heating circuit				
Heating temperature regulation (min / max)	°C	20 / 80		
Water operating pressure max/min	bar (kPa)	6 / 0,5 (600/50)		
Max manometric head at nominal flow of 5’500 l/h	Pa [m c.a.]	1500 [1,5]		

POWER PLUS BOX

OUTDOOR (EXT)

NEW

INDOOR (INT)

- Stand-alone floor standing condensing boiler 115 kW with pre-assembled hydronic header and multi-zones kit
- Painted steel BOX for indoor installations with ventilation air intake
- Stainless-steel BOX (inox) for outdoor installations with sloping top cover and ventilation air intake
- Efficiency ★ ★ ★ ★ according to European Directive EEC 92/42, ensuring low running costs
- Minimum polluting emissions: class 5 (UNI EN 483).
- Compact dimensions
- Ready for installation
- Power Plus Box 1001 is a floor-standing condensing boiler available in the following models:
  - Power Plus Box 1001 INT (for indoor installation, painted box)
  - Power Plus Box 1001 EXT (specific for outdoor installation, stainless-steel box).
- This compact boiler is ready for installation and consists of: boiler unit, A-Class modulating pump, hydraulic separator, ISPESL* hydraulic manifold with safety devices and flues collector
- Heat-generator also includes: system drain tap, exchangers drain tap, gas tap, condensate drain collector, safety valve, air vent, external probe, high and low temperature probes, domestic water probe and LPG conversion kit
- High flexibility of installation: possibility of managing one direct zone, one mixed zone and a DHW tank through the electronic board of the master boiler. Specific accessories are available to control more mixed zones

* ISPESL = Italian safety certification Institute

BOX for OUTDOOR and INDOOR installation — Efficiency ★★★★ Eur. Dir. EEC 92/42

CODE	GAS	MODEL	DIMENSIONS H x L x D (mm)	INPUT (kW) Hs	INPUT (kW) Hi
With shunt pumps					
20067835	NG	Power Plus Box 1001 INT (115 all inside)	1590x900x750	128	115
20067836	NG	Power Plus Box 1001 EXT (115 all inside)	1640x900x750	128	115

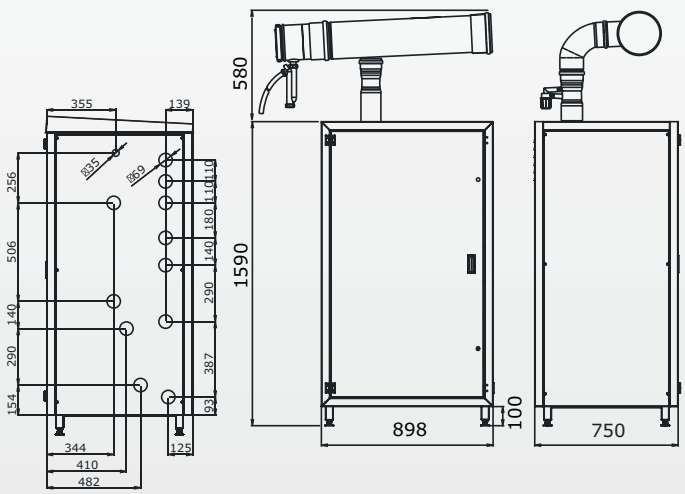
Note: the Power Plus Box 1001 INT/EXT comes with an embeded hydraulic separator up to 150 kW

Specific accessories

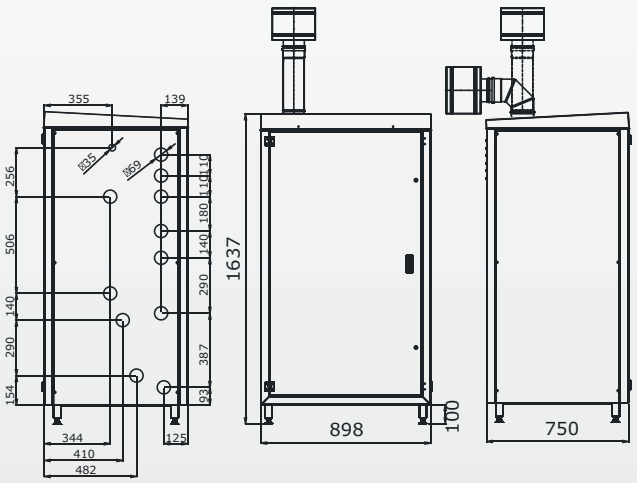
CODE	DESCRIPTION
20069664	High temperature circuit kit
20069666	Low temperature circuit kit
20069667	DHW tank kit
20011175	Systems connections kit

CODE	DESCRIPTION
1102379	Remote control kit
20016110	Zone Master kit
20074999	Plugs kit (2 pcs)

Power Plus Box 1001 INT (115 all inside)



Power Plus Box 1001 EXT (115 all inside)



SPECIFICATIONS		Power Plus Box 1001 INT Power Plus Box 1001 EXT
Boiler type		B23, B53, B53p
CE Homologation Number		0085CL0333
Dimension and Connections		
HxLxD (Power Plus Box 1001 INT)	mm	1590x898x750
HxLxD (Power Plus Box 1001 EXT)	mm	1637x898x750
Empty weight	kg	140
Content of water	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 at 100% (50 - 30°C) - gas G20	kg/h	17,2
Useful efficiency ref. NHV (80°C/60°C)	%	98,6
Useful efficiency ref. NHV (50°C/30°C)	%	108,6
Useful efficiency ref. NHV Tm=50°C (60/40°C)	%	104,2
Useful efficiency at 30% ref. NHV (80°C/60°C)	%	99,2
Useful efficiency at 30% ref. NHV (50°C/30°C)	%	109
Useful efficiency at 30% ref. NHV Tm=50°C (60 – 40°C)	%	105
Losses through the casing (Tm=70°)	%	0,1
Efficiency Class 92/42 CEE		★★★★
Consumption and electrical power		
Gas Category		II2H3+
Consumption Methane (G20)	m3/h	2,43 / 12,2
Power supply		230V - 50Hz
Maximum electrical power	kW	0,25
Combustion data		IPX4D (for STAINLESS STEEL version only)
Max exhaust residual manometric head for each unit	Pa	800
Carbon monoxide CO (0% di O2) (min÷max)	mg/kWh	23 ÷ 130
NOx class		5
Heating circuit		
Heating temperature regulation (min / max)	°C	20 ÷ 80
Water operating pressure max/min	bar (kPa)	6 / 0,5 (600/50)
Max manometric head at nominal flow of 5’500 l/h	Pa [m c.a.]	1500 [1,5]

HYDRONIC UNIT
12 / 12 T / 15 / 15 T

HYDRONIC UNIT
4 / 6 / 8

- High efficiency inverter heat pump with R410A.
- Ideal solution for heating, cooling and domestic hot water production.
- DC-inverter technology with twin rotary compressor (4 kW rotary).
- High COP and EER.
- Wide operating limits: -20°C in heating and 46°C in cooling.
- Water heating temperature up to 60°C.
- Advanced remote control provided as standard.
- Circulation pump and expansion vessel provided as standard
- Single phase alimentation for all sizes (models: 4 - 6 - 8 - 12 - 15).
- Three-phase alimentation for 12 kW and 15 kW available (models: 12 T - 15 T).
- Plug and play units with very compact dimensions.
- Low noise units.

Heating / cooling / DHW

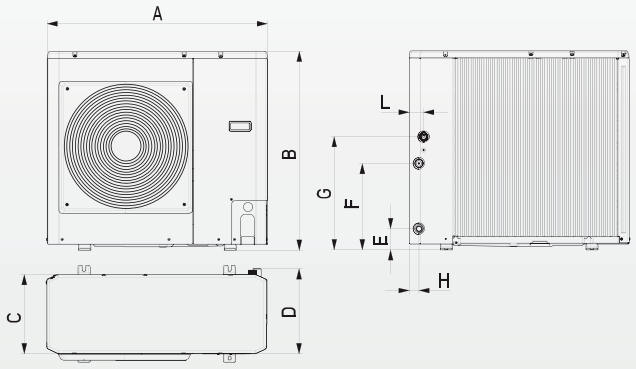
Inverter

CODE	DESCRIPTION	DIMENSIONS H×L×D (mm)	RATED CAPACITY (1)/(2) (kW)	COP (1) / EER (2)
20053885 *	HYDRONIC UNIT 4	821×908×326	4,07 / 4,93	4,15 / 4,20
20053889 *	HYDRONIC UNIT 6	821×908×326	5,76 / 7,04	4,28 / 3,70
20053890 *	HYDRONIC UNIT 8	821×908×326	7,16 / 7,84	3,97 / 3,99
20053891 *	HYDRONIC UNIT 12	1363×908×326	11,86 / 13,54	3,95 / 3,66
20053892 *	HYDRONIC UNIT 15	1363×908×326	14,46 / 16,04	4,09 / 3,85
20073706	HYDRONIC UNIT 12 T NEW	1363×908×326	12 / 13,50	4,30 / 4,15
20073707	HYDRONIC UNIT 15 T NEW	1363×908×326	15 / 16	4,20 / 3,81

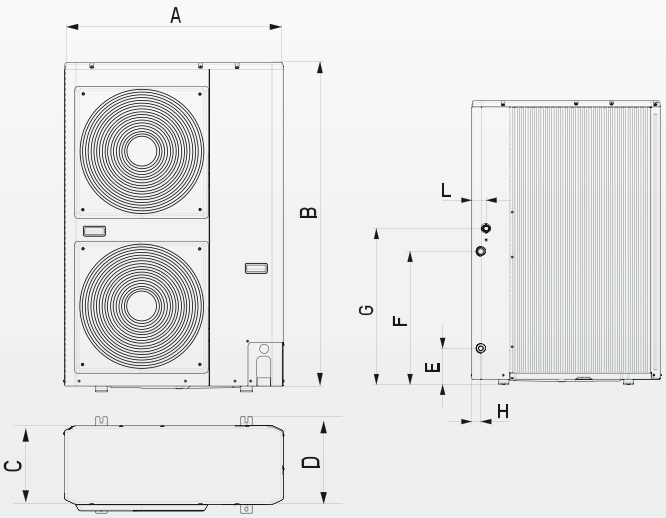
(1) outside air d.b. +7°C/ w.b. +6°C, water 30-35°C
(2) outside air d.b. +35°C/ w.b. +24°C, water 23-18°C

Specific accessories

CODE	DESCRIPTION
20028567	outdoor ambient temperature sensor (OAT)



HYDRONIC UNIT
4 / 6 / 8



HYDRONIC UNIT
12 / 12 T / 15 / 15 T

Overall dimensions

KEY		HYDRONIC UNIT 4	HYDRONIC UNIT 6	HYDRONIC UNIT 8	HYDRONIC UNIT 12	HYDRONIC UNIT 15	HYDRONIC UNIT 12 T	HYDRONIC UNIT 15 T
A	mm	908	908	908	908	908	908	908
B	mm	821	821	821	1363	1363	1363	1363
C	mm	326	326	326	326	326	326	326
D	mm	350	350	350	350	350	350	350
E	mm	87	87	87	174	174	174	174
F	mm	356	356	356	640	640	640	640
G	mm	466	466	466	750	750	750	750
H	mm	40	40	40	44	44	44	44
L	mm	60	60	60	69	69	69	69
Empty weight	kg	57	61	69	104	112	116	116

NUI

OAT

The advanced remote control NUI is provided as standard. The outdoor ambient temperature sensor (OAT) is available as an accessory. Together they allow the user to fully control the functioning of the machine and to adapt it to the real thermal requests of the installation. A number of special icons make the functioning status easily visible at a glance. NUI makes the life of the Service easier, because it allows the visualization of all the parameters of the circuit, thus helping in the troubleshooting.

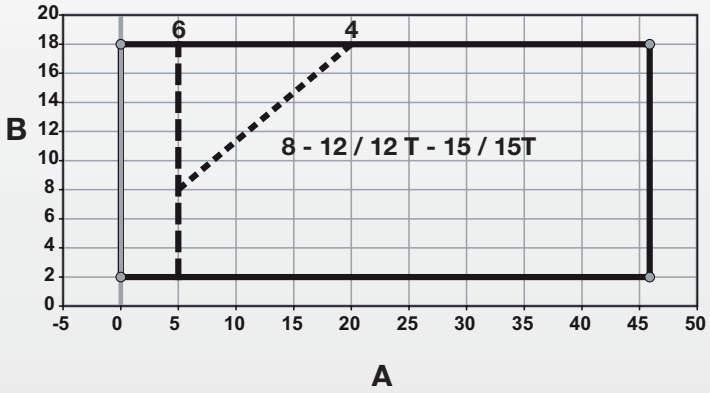
Technical specifications

MODEL		4	6	8	12	15	12 T	15 T
								Heating performance
Rated capacity (1)	kW	4,07	5,76	7,16	11,86	14,46	12	15
Absorbed power (1)	kW	0,98	1,35	1,80	3,00	3,54	2,79	3,57
COP (1)		4,15	4,28	3,97	3,95	4,09	4,30	4,20
Energy efficiency class (1)		A	A	B	B	A	A	A
Rated capacity (2)	kW	3,87	5,76	7,36	12,91	13,96	11,2	14,5
Absorbed power (2)	kW	1,19	1,89	2,31	4,26	4,32	3,39	4,33
COP (2)		3,26	3,05	3,19	3,03	3,23	3,30	3,35
Energy efficiency class (2)		A	B	B	B	A	A	A
Rated capacity (3)	kW	3,5	3,8	4,1	8	10,2	8,55	9,5
Absorbed power (3)	kW	1,13	1,23	1,31	2,6	3,29	2,69	3,02
COP (3)		3,1	3,1	3,1	3,1	3,1	3,17	3,15
Rated capacity (4)	kW	3,4	3,7	3,9	8	10,2	7,5	9,3
Absorbed power (4)	kW	1,31	1,42	1,48	3,08	3,92	2,78	3,50
COP (4)		2,6	2,6	2,6	2,6	2,6	2,70	2,65
Rated capacity (5)	kW	4,1	5,4	6,7	11,5	11,7	11,5	12
Absorbed power (5)	kW	1,51	2,09	2,91	4,64	4,18	3,95	4,21
COP (5)		2,71	2,58	2,30	2,48	2,80	2,80	2,85
								Cooling performance
Rated capacity (6)	kW	4,93	7,04	7,84	13,54	16,04	13,5	16
Absorbed power (6)	kW	1,17	1,90	1,96	3,70	4,17	3,25	4,20
EER (6)		4,2	3,7	3,99	3,66	3,85	4,15	3,81
Energy efficiency class (6)		A	B	B	B	A	A	A
Rated capacity (7)	kW	3,33	4,73	5,84	10,24	13,04	10,2	13
Absorbed power (7)	kW	1,10	1,58	1,96	3,46	4,42	3,40	4,47
EER (7)		3,02	3,00	2,98	2,96	2,95	3,00	2,91
ESEER (7)		4,5	4,6	4,4	4,3	4,4	4,3	4,4
Energy efficiency class (7)		B	B	B	B	B	B	B
								General information
Heating sound pressure (1)	dB(A)	42	42	44	47	48	48	48
Cooling sound pressure (7)	dB(A)	44	44	45	48	49	49	49
Refrigerant charge R410a	kg	1,195	1,35	1,81	2,45	3,39	3,385	3,385
Empty weight	kg	57	61	69	104	112	116	116
								Compressor
Technology		DC inverter						
Type		rotary	twin rotary					
								Fan
Quantity	n	1	1	1	2	2	2	2
Diameter	mm	495	495	495	495	495	495	495
								Hydraulic circuit
Expansion tank	l	2	2	2	3	3	3	3
Expansion tank precharge	kPa	100	100	100	100	100	100	100
Minimum water volume content	l	14	21	28	42	49	42	49
Maximum water volume content	l	65	65	65	95	95	95	95
Plate heat exchanger water content	l	0,8	0,8	1	2,3	2,3	2,3	2,3
Maximum working pressure	kPa	300	300	300	300	300	300	300
Minimum filling pressure	kPa	120	120	120	120	120	120	120
Water connections Diameter	inch	1M	1M	1M	1M	1M	1M	1M

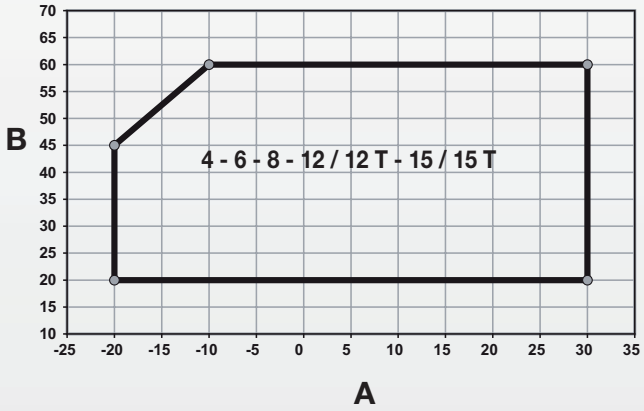
(1) Outside air d.b. + 7 °C / w.b. + 6 °C, water 35 – 30 °C
(2) Outside air + 7 °C / w.b. + 6 °C, water 45 – 40 °C
(3) Outside air d.b. + 2 °C / w.b. + 1 °C, water 35 – 30 °C
(4) Outside air d.b. + 2 °C / w.b. +1 °C, water 45 – 40 °C
(5) Outside air d.b. + 7 °C / w.b. + 6 °C, water 55 °C
(6) Outside air d.b. +35 °C / w.b. + 24 °C, water 18 – 23 °C
(7) Outside air d.b. + 35 °C, water 7 – 12 °C
- Sound pressure has been measured in the hemispheric field at 4m in front of the fan.
- This unit performances refer to the Directive UNI EN 14511; 2011.
- Fouling factor: 0,18×10 – 4 (m²K) / W.

OPERATING LIMITS

1



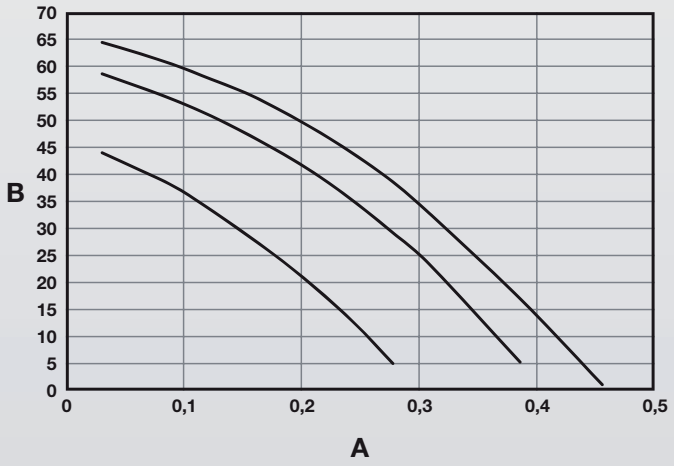
2



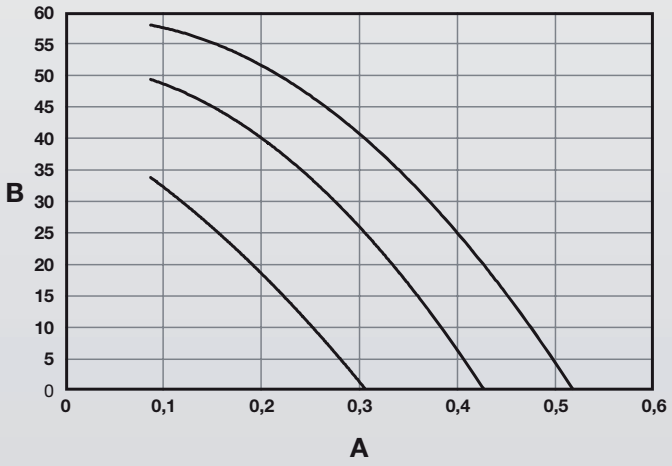
1 Cooling - 2 Heating - A Outdoor temperature (°C) - B Leaving water temperature (°C)

AVAILABLE STATIC PRESSURE

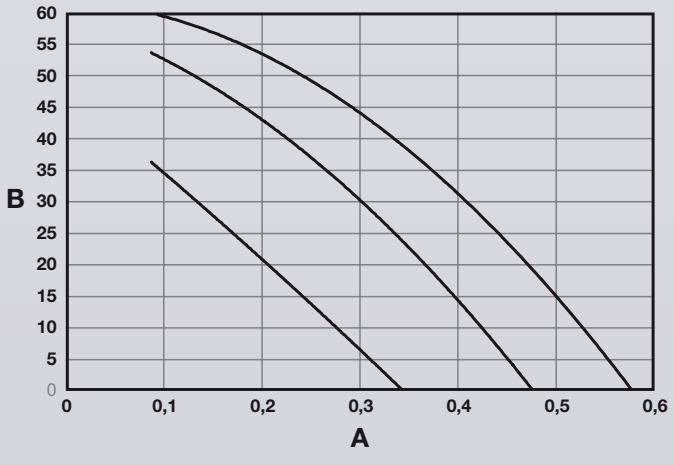
HYDRONIC UNIT 4



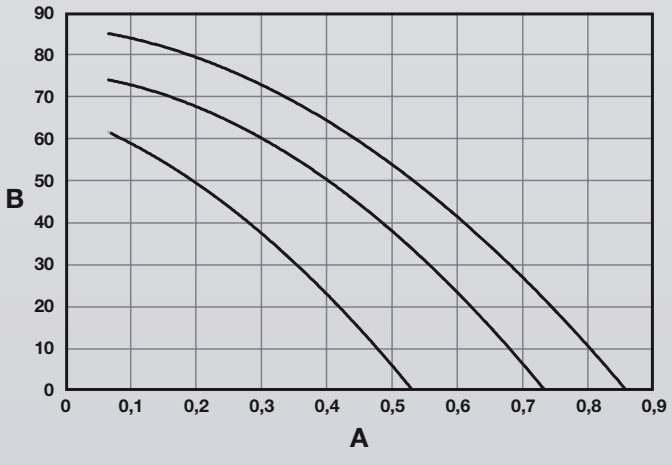
HYDRONIC UNIT 6



HYDRONIC UNIT 8



HYDRONIC UNIT 12 / 12 T - 15 / 15 T



Flow-rate and pressure head diagram
A Flow rate (l/s) - B Available static pressure (kPa)

- Air to water heat pump for DHW production with 260 liter tank
- 3 models available:
  - HP 260 ACS model with only heat pump.
  - HP 260 ACS S: heat pump with an auxiliary coil for boiler or solar panels back-up.
  - HP 260 ACS SC: heat pump with two auxiliary coils for both boiler and solar panels back up.
- Condenser externally wrapped to the boiler free from fouling and gas-water contamination.
- Tank in steel with two layers vitrification.
- Thermal insulation with injected polyurethane with high thickness.
- R134a refrigerant.
- Magnesium anode anti-corrosion.
- Electrical resistance provided as standard (1,5kW).
- Easy installation and low noise performance.
- Legionella cycle management through parameters.
- Outdoor temperature sensor for automatic insertion of the resistance with temperature not favorable to the heat pump.
- Remote ON/OFF for complete unit (Timer).
- Remote ON/OFF for electrical heater.
- 4 operating modes: STAND-BY, AUTOMATIC, MANUAL, ANTIBACTERICAL.

DHW

CODE	DESCRIPTION	DIMENSIONS H×Ø (mm)	HEATING CAPACITY (W)	C.O.P. (50°) (1)
20072807	HP 260 ACS	1845×660	2427	3,25
20072812	HP 260 ACS S	1845×660	2427	3,25
20072813	HP 260 ACS SC	1845×660	2427	3,25

(1) T air 15 C° - T water 15-50 °C

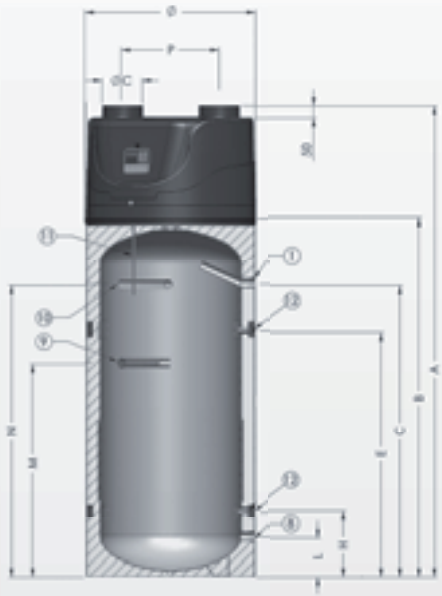
Technical specifications

		HP ACS	HP ACS S	HP ACS SC
Tank capacity	l	273	268	265
Surface auxiliary coil	m^2	-	1.5	0.6/1.5
Auxiliary coil water fl ow 80/60°C	m^3/h	-	1.6	0.6/1.6
Domestic hot water production 80/60°C - 10/45°C (DIN 4708)	m^3/h	-	1,1	0,4/1,1
Max working pressure tank	bar	6		
Max working pressure auxiliary coil	bar	10		
Power supply	V/Ph/Hz	230/1/50		
Max water temperature	°C	60		
Ambient Temperature (min/max)	°C	8/32		
Electric heater capacity	W	1500		
Heating capacity	W	2427		
Power input (average) (1)	W	639		
Refrigerant	tipo	R134a		
Refrigerant charge	g	950		
Noise level (2)	dB(A)	52		
C.O.P. (50°) (3)		3,25		
Air fl ow	m^3/h	450		
Max duct length	m	10		
Minimum duct diameter	mm	160		
Available pressure head	Pa	80		

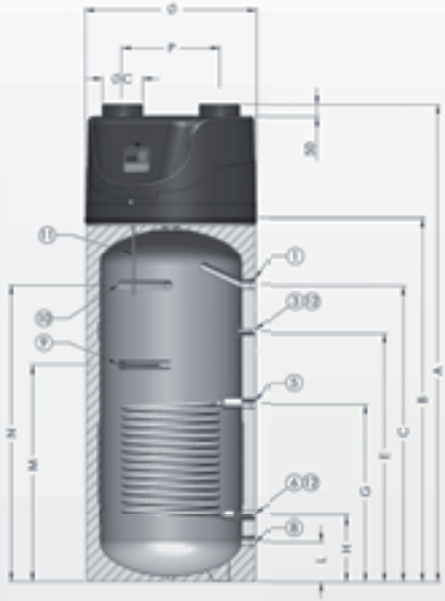
(1) At max temperature: 60°
(2) At 1 meter distance (free field not ducted)
(3) T air 15 C° - T water 15-50 °C

HP 260 ACS

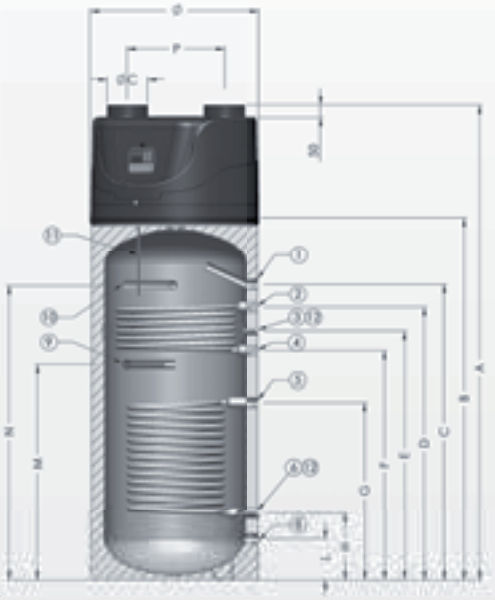
HP 260 ACS



HP 260 ACS S



HP 260 ACS SC



KEY		HP ACS	HP ACS S	HP ACS SC
A	mm	1845	1845	1845
B	mm	1410	1410	1410
C	mm	1150	1150	1150
D	mm	-	-	1060
E	mm	965	965	965
F	mm	-	-	890
G	mm	-	690	690
H	mm	-	255	255
I	mm	-	365	365
L	mm	155	155	155
M	mm	835	835	835
N	mm	1145	1145	1145
P	mm	425	425	425
Øc	mm	160	160	160
Ø	mm	660	660	660
Transport weight	kg	112	127	145

KEY	DESCRIPTION	
1	Outlet Hot water	Rp 1”
2	Outlet heating	Rp 1”
3	Recirculation	Rp 1/2”
4	Inlet heating	Rp 1”
5	Outlet solar	Rp 1”
6	Inlet solar	Rp 1”
7	Condensate drain	Ø 20 mm”
8	Inlet cold water	Rp 1
9	Electric heater	Rp 1”1/4
10	Anode	Rp 1” 1/4
11	Probe socket control L=300mm	Rp 1 1/2
12	Probe socket L=70mm	Ø 12 mm

Inertial cold/hot water storage tank
STOR H

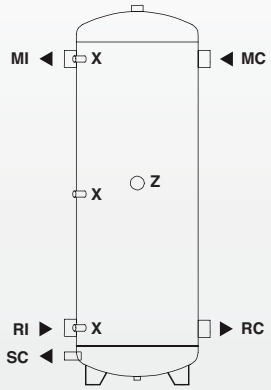
- Inertial cold/hot water storage tank, **ideal to be used in systems with heat pumps, solar thermal, biomass boilers**
- It can be easily fitted into systems where Beretta boilers work as an auxiliary heat generator
- The fittings are positioned at different heights for use in high and low temperature circuits
- Possibility to integrate an electrical resistance

CODE	DESCRIPTION	DIMENSIONS H × Ø (mm)	BUFFER TANK CAPACITY (litres)
20056180	STOR H 200	1.395 × 550	203
20056181	STOR H 300	1.560 × 600	283
20056182	STOR H 400	1.540 × 700	399
20056183	STOR H 500	1.840 × 700	483

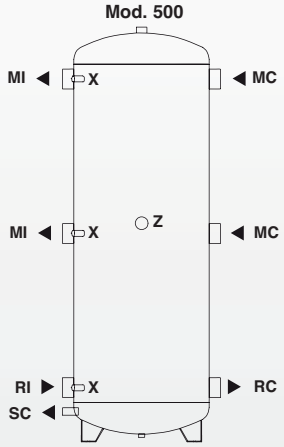
Specific accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20015431	single-phase electrical resistance kit 1,5 kW, 1” 1/2	4383272	single-phase electrical resistance kit 3 kW, 1” 1/2
4383271	single-phase electrical resistance kit 2,2 kW, 1” 1/2	20020707	three-phase electrical resistance kit 3,8 kW, 1” 1/2

Mod. 200 - 300 - 400



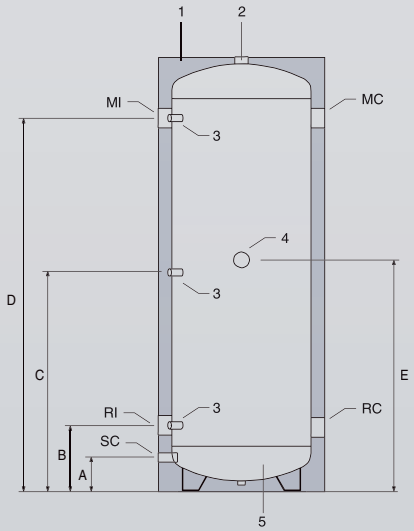
Mod. 500



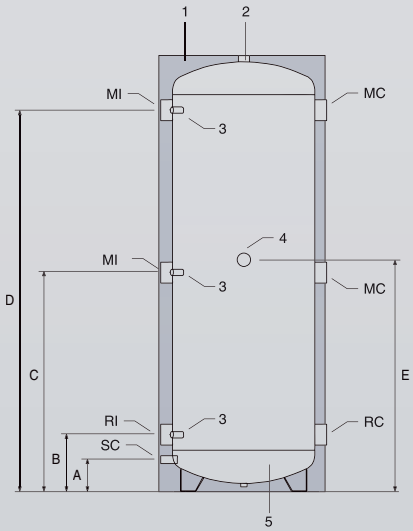
MI - Flow
RI - Return
CH
MC - Flow
RC - Return
boiler
SC - Drain
Z - Electrical heater fitting
X - Probes sockets

Specifications	STOR H 200	STOR H 300	STOR H 400	STOR H 500	
Buffer tank type	Not-enamelled				
Buffer tank lay-out	Vertical				
Buffer tank capacity	203	283	399	483	l
External diameter with insulation	550	600	700	700	mm
Height with insulation	1395	1560	1540	1840	mm
Insulation thickness	50				mm
Sockets for probe diameter	1/2"				
Tank maximum working pressure	6				bar
Tank maximum working temperature	90				°C
Heat losses	1,32	1,60	1,90	2,18	W/K
Net weight with insulation	45	55	95	95	kg
H - Height	1395	1560	1540	1840	mm
Ø - Diameter	550	600	700	700	mm
Net weight	45	55	95	100	kg
Gross weight (package included)	64	75	116	118	kg
1 - Insulation (polyurethane)	50				mm
2 - Vent valve fitting	1"1/4 F				Ø
3 - Probes sockets diameter	1/2" F				Ø
4 - Sleeve for electric heating element (not supplied)	1"1/2 F				Ø
5 - Buffer tank	-				
MI - Flow	1"1/2 F	2" F	2"1/2 F	2"1/2 F	Ø
RI - Return	1"1/2 F	2" F	2"1/2 F	2"1/2 F	Ø
SC - Drain	1/2" F	3/4" F	3/4" F	3/4" F	Ø
RC - CH return	1"1/2 F	2" F	2"1/2 F	2"1/2 F	Ø
MC - CH flow	1"1/2 F	2" F	2"1/2 F	2"1/2 F	Ø
A	105	120	135	135	mm
B	215	235	240	240	mm
C	705	785	775	925	mm
D	1200	1340	1310	1610	mm
E	750	830	820	970	mm

Mod. 200 - 300 - 400



Mod. 500



- Smoke circuits boiler for water production for heating circuit.
- External hopper for the combustible material.
- Combustible material: wood pellets - almond, hazelnut and pine shells* - olive husks*.
- NEVA BIO is available in three different versions, according to the control type: NEVA BIO L, NEVA BIO E, NEVA BIO T (see specifications below).
- Electronic control with Lambda sensor for combustible automatic ignition, fire maintenance and modulation; inverter for combustible material flow regulation (models NEVA BIO L).
- Electronic control for combustible automatic ignition, fire maintenance and modulation; inverter for combustible material flow regulation (models NEVA BIO E).
- Thermostatic control (models NEVA BIO T).
- Boiler shell in steel.
- Doors for internal inspections and boiler cleaning.
- Cast iron burner with mechanical feeding system.
- Variable speed screw for automatic feeding.
- Primary and secondary combustion air system.
- Rotary valve to prevent smokes return into the hopper (except NEVA BIO T).
- Turbolators to keep heat inside the tubes nest (except NEVA BIO T).
- Safety coil with thermal drain valve (except NEVA BIO T).

* Local rules and regulations must be observed, because of possible restrictions.

Biomass boilers with electronic control and Lambda sensor

NEVA BIO L

- Electronic control with Lambda sensor for combustible automatic ignition, fire maintenance and modulation; inverter for combustible material flow regulation
- All NEVA BIO L models conform to EN 303-5 2012

CODE	DESCRIPTION	DIMENSIONS H×W×D (mm)	HOPPER CAPACITY (lt)	CHIMNEY DIAMETER (mm)	OUTPUT (kW)	EFFICIENCY ** CLASS 3 (%)
20070308	NEVA BIO 20 L	1210×600×1380	140	160	20	88,26
20070312	NEVA BIO 30 L	1210×600×1530	140	160	30	88,23
20070314	NEVA BIO 40 L	1210×600×1680	140	160	40	88,14
20070315	NEVA BIO 60 L	1410×700×1740	190	200	60	88,43
20070316	NEVA BIO 80 L	1410×700×1990	190	200	80	88,32
20070326	NEVA BIO 100 L	1410×700×2240	190	200	100	88,20

** Efficiency measured while using only certified wood pellets.

NOTE: for all specific accessories, see page 127

Biomass boilers with electronic control

NEVA BIO E
- Electronic control for combustible automatic ignition, fire maintenance and modulation; inverter for combustible material flow regulation
- All NEVA BIO E models conform to EN 303-5 2012

CODE	DESCRIPTION	DIMENSIONS H×W×D (mm)	HOPPER CAPACITY (lt)	CHIMNEY DIAMETER (mm)	OUTPUT (kW)	EFFICIENCY ** CLASS 3 (%)
20070263	NEVA BIO 20 E	1210×600×1380	140	160	20	88,26
20070265	NEVA BIO 30 E	1210×600×1530	140	160	30	88,23
20070268	NEVA BIO 40 E	1210×600×1680	140	160	40	88,14
20070284	NEVA BIO 60 E	1410×700×1740	190	200	60	88,43
20070289	NEVA BIO 80 E	1410×700×1990	190	200	80	88,32
20070292	NEVA BIO 100 E	1410×700×2240	190	200	100	88,20

** Efficiency measured while using only certified wood pellets.

Biomass boilers with thermostatic control

NEVA BIO T
- Thermostatic control
- All NEVA BIO T models are only for extra-CE markets

CODE	DESCRIPTION	DIMENSIONS H×W×D (mm)	HOPPER CAPACITY (lt)	CHIMNEY DIAMETER (mm)	OUTPUT (kW)	EFFICIENCY ** CLASS 3 (%)
20069967	NEVA BIO 20 T	1210×600×1380	140	160	20	85,6
20069968	NEVA BIO 30 T	1210×600×1530	140	160	30	85,6
20069969	NEVA BIO 40 T	1210×600×1680	140	160	40	85,5
20069970	NEVA BIO 60 T	1410×700×1740	190	200	60	85,7
20070248	NEVA BIO 80 T	1410×700×1990	190	200	80	85,7
20070253	NEVA BIO 100 T	1410×700×2240	190	200	100	85,5

** Efficiency measured while using only certified wood pellets.

NOTE: for all specific accessories, see page 127

- Smoke circuits boiler for water production for heating circuit
- Compact dimensions thanks to built-in hopper for the combustible material
- Combustible material: wood pellets - almond, hazelnut and pine shells* - olive husks*
- NEVA BIO IN is available in two different versions, according to the control type: NEVA BIO L IN, NEVA BIO E IN (see specifications below)
- Boiler shell in steel
- Doors for internal inspections and boiler cleaning
- Cast iron burner with mechanical feeding system
- Variable speed screw for automatic feeding
- Primary and secondary combustion air system
- Rotary valve to prevent smokes return into the hopper
- Turbolators to keep heat inside the tubes nest
- Safety coil with thermal drain valve

* Local rules and regulations must be observed, because of possible restrictions.

Biomass boilers with electronic control and Lambda sensor

NEVA BIO L IN

- Electronic control with Lambda sensor for combustible automatic ignition, fire maintenance and modulation; inverter for combustible material flow regulation (models NEVA BIO L IN)
- All NEVA BIO L IN models conform to EN 303-5 2012

CODE	DESCRIPTION	DIMENSIONS H × W × D (mm)	HOPPER CAPACITY (lt)	CHIMNEY DIAMETER (mm)	OUTPUT (kW)	EFFICIENCY ** CLASS 3 (%)
20070327	NEVA BIO 20 L IN	1125 × 600 × 1060	65	160	20	88,26
20070328	NEVA BIO 30 L IN	1125 × 600 × 1210	65	160	30	88,23
20070329	NEVA BIO 40 L IN	1125 × 600 × 1360	65	160	40	88,14

** Efficiency measured while using only certified wood pellets.

Biomass boilers with electronic control

NEVA BIO E IN

- Electronic control for combustible automatic ignition, fire maintenance and modulation; inverter for combustible material flow regulation (models NEVA BIO E IN)
- All NEVA BIO E IN models conform to EN 303-5 2012

CODE	DESCRIPTION	DIMENSIONS H × W × D (mm)	HOPPER CAPACITY (lt)	CHIMNEY DIAMETER (mm)	OUTPUT (kW)	EFFICIENCY ** CLASS 3 (%)
20070295	NEVA BIO 20 E IN	1125 × 600 × 1060	65	160	20	88,26
20070296	NEVA BIO 30 E IN	1125 × 600 × 1210	65	160	30	88,23
20070297	NEVA BIO 40 E IN	1125 × 600 × 1360	65	160	40	88,14

** Efficiency measured while using only certified wood pellets.

Specific accessories for all models NEVA BIO L / E / T

CODE	DESCRIPTION	CODE	DESCRIPTION
20073509	Ash extractor device 20	20073511	Automatic filling system for combustible material
20074624	Ash extractor device 30	20073514	Fire protection system
20074625	Ash extractor device 40	20073516	Domestic hot water production module
20073540	Ash extractor device 60	20073518	Extension hopper 20-30-40
20074626	Ash extractor device 80	20073541	Extension hopper 60-80-100
20074627	Ash extractor device 100		

Specific accessories only for NEVA BIO T

CODE	DESCRIPTION	CODE	DESCRIPTION
20073989	Turbolators for NEVA BIO 20 T	20073993	Turbolators for NEVA BIO 60 T
20073990	Turbolators for NEVA BIO 30 T	20073994	Turbolators for NEVA BIO 80 T
20073992	Turbolators for NEVA BIO 40 T	20073995	Turbolators for NEVA BIO 100 T

Specific accessories for NEVA BIO IN L / E

CODE	DESCRIPTION
20073516	Domestic hot water production module

Forced circulation systems with flat collectors SCF-25N and IDRA MS/DS FI cylinder

FKP-SOL

Systems with 2,5 m² flat collectors

(20072844) FKP-SOL 150M/1

Systems composed by:

- (20050321) Flat collector SCF-25N (nr. 1)
- (20072888) Single coil cylinder IDRA MS 150 FI*
- (1150549) 5 kg glycol
- (1150489) 18 litres expansion vessel
- (1150499) Flexible pipe kit for expansion vessel
- (1150529) Thermostatic mixing valve 3/4”

(20083949) FKP-SOL 200/1 NEW

Systems composed by:

- Flat collector SCF-25N (nr. 1)
- Double coil cylinder IDRA DS 200 FI*
- 10 kg glycol
- 18 litres expansion vessel
- Flexible pipe kit for expansion vessel
- Thermostatic mixing valve 3/4”

(20083950) FKP-SOL 300/2 NEW

Systems composed by:

- Flat collectors SCF-25N (nr. 2)
- Double coil cylinder IDRA DS 300 FI*
- 10 kg glycol
- 18 litres expansion vessel
- Flexible pipe kit for expansion vessel
- Thermostatic mixing valve 3/4”

(20056025) FKP-SOL 400/3

Systems composed by:

- (20050321) Flat collector SCF-25N (nr. 1)
- (20050323) Flat collectors SCF-25N (nr. 2)
- (20026194) Double coil cylinder IDRA DS 430 FI*
- (1150549 and 1150559) 15 kg glycol
- (1150509) 24 litres expansion vessel
- (1150499) Flexible pipe kit for expansion vessel
- (1150529) Thermostatic mixing valve 3/4”

(20056026) FKP-SOL 500/4

Systems composed by:

- (20050323 x 2 pcs) Flat collectors SCF-25N (nr. 4)
- (20026196) Double coil cylinder IDRA DS 550 FI*
- (1150559 x 2 pcs) 20 kg glycol
- (1150519) 35 litres expansion vessel
- (1150529) Thermostatic mixing valve 3/4”

* Cylinder equipped with pre-installed hydraulic group (flow and return) and control box SUN B

To complete the installation it is necessary to buy the brackets for flat or pitched roof, according to the number of collectors.

FKP-SOL

Systems for flat and pitched roof

CODE	MODEL	NUMBER OF COLLECTORS	CYLINDER CAPACITY (litres)	COLLECTORS DIMENSIONS H x L (mm)	COLLECTOR TOTAL AREA (m^2)
20072844	FKP-SOL 150M/1	1	150 Single coil	2.046x1.221	2,43
20083949	FKP-SOL 200/1	1	200 Double coil	2.046x1.221	2,43
20083950	FKP-SOL 300/2	2	300 Double coil	2.046x2.442	4,86
20056025	FKP-SOL 400/3	3	430 Double coil	2.046x3.663	7,29
20056026	FKP-SOL 500/4	4	550 Double coil	2.046x4.884	9,72

To complete the installation it is necessary to buy, according to the number of collectors and to the kind of roof and installation, complete brackets kits for flat or pitched roof or inset flashing plates kits or undertile brackets kits.
The manual air vent (code 20026577) is not included in FKP-SOL systems. It is possible, alternatively, to use the solar filling pump (code 20001454).

Brackets for flat and pitched roof – complete kits for FKP-SOL systems

CODE	DESCRIPTION	CODE	DESCRIPTION
20009306	brackets kit for flat roof - 1 SCF-25N collector	20009312	brackets kit for pitched roof - 1 SCF-25N collector
20009307	brackets kit for flat roof - 2 SCF-25N collectors	20009313	brackets kit for pitched roof - 2 SCF-25N collectors
20009308	brackets kit for flat roof - 3 SCF-25N collectors	20009314	brackets kit for pitched roof - 3 SCF-25N collectors
20009309	brackets kit for flat roof - 4 SCF-25N collectors	20009315	brackets kit for pitched roof - 4 SCF-25N collectors

The ending fittings, code 20014661, to be put at the collector inlet-outlet and at the hydraulic group/cylinder inlet-outlet for the connection of copper pipes are included in the bracket kits. For the composition of brackets and flashing plates kits refer to the section dedicated to SCF-25N collector.

Inset flashing plates and undertile bracket – complete kits for FKP-SOL systems

CODE	DESCRIPTION	CODE	DESCRIPTION
20046059	inset flashing plate kit - 1 SCF-25N collector (tiles)	20016813	undertile bracket kit for pitched roof - 1 SCF-25N collector
20046060	inset flashing plate kit - 2 SCF-25N collectors (tiles)	20016814	undertile bracket kit for pitched roof - 2 SCF-25N collectors
20046061	inset flashing plate kit - 3 SCF-25N collectors (tiles)	20016815	undertile bracket kit for pitched roof - 3 SCF-25N collectors
20046062	inset flashing plate kit - 4 SCF-25N collectors (tiles)	20016816	undertile bracket kit for pitched roof - 4 SCF-25N collectors

The ending fittings, code 20014661, to be put at the collector inlet-outlet and at the hydraulic group/cylinder inlet-outlet for the connection of copper pipes are included in the bracket kits. For the composition of brackets and flashing plates kits refer to the section dedicated to SCF-25N collector.

Specific accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20001454	solar filling pump	20026577	manual air vent

For the complete range of accessories, please refer to the dedicated section.

Systems with 2 m² flat collectors

(20072982) F2-SOL 150M/1

Systems composed by:
- (20050326) Flat collector SCF-20N (nr. 1)
- (20009244) Control box SUN B
- (20072887) Single coil cylinder IDRA MS 150
- (20026145) Hydraulic group return
- (20009190) 2,5 kg glycol
- (1150489) 18 litres expansion vessel
- (1150529) Thermostatic mixing valve 3/4”
- (20027382) Connection kit for pump station with cylinder *

(20054255) F2-SOL 200/1

Systems composed by:
- (20050326) Flat collector SCF-20N (nr. 1)
- (20009244) Control box SUN B
- (20001224) Double coil cylinder IDRA DS 200
- (20026145) Hydraulic group return
- (20027382) Connection kit for pump station with cylinder
- (1150549) 5 kg glycol
- (1150489) 18 litres expansion vessel
- (1150529) Thermostatic mixing valve 3/4”

(20054256) F2-SOL 300/2

Systems composed by:
- (20050328) Flat collectors SCF-20N (nr. 2)
- (20009244) Control box SUN B
- (20001225) Double coil cylinder IDRA DS 300
- (20026145) Hydraulic group return
- (20027382) Connection kit for pump station with cylinder
- (1150549) 5 kg glycol
- (1150489) 18 litres expansion vessel
- (1150529) Thermostatic mixing valve 3/4”

(20054307) F2-SOL 400/3

Systems composed by:
- (20050326) Flat collector SCF-20N (nr. 1)
- (20050328) Flat collectors SCF-20N (nr. 2)
- (20009244) Control box SUN B
- (20001226) Double coil cylinder IDRA DS 430
- (20026145) Hydraulic group return
- (20027382) Connection kit for pump station with cylinder
- (20009190 and 1150559) 12,5 kg glycol
- (1150509) 24 litres expansion vessel
- (1150529) Thermostatic mixing valve 3/4”

(20054308) F2-SOL 500/4

Systems composed by:
- (20050328 x 2 pcs) Flat collectors SCF-20N (nr. 4)
- (20009244) Control box SUN B
- (20001227) Double coil cylinder IDRA DS 550
- (20026145) Hydraulic group return
- (20027382) Connection kit for pump station with cylinder
- (1150549 and 1150559) 15 kg glycol
- (1150509) 24 litres expansion vessel
- (1150529) Thermostatic mixing valve 3/4”

* This component is not included in the system code 20072982. **It must be ordered separately.**

To complete the installation it is necessary to buy the brackets for flat or pitched roof, according to the number of collectors.

Systems for flat and pitched roof

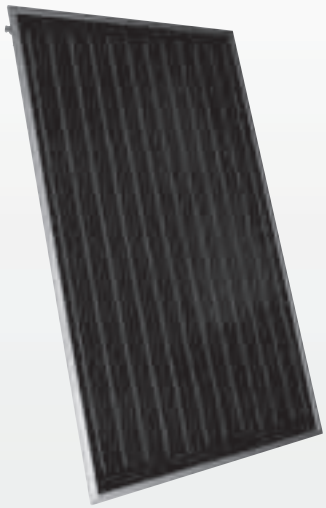
CODE	MODEL	NUMBER OF COLLECTORS	CYLINDER CAPACITY (litres)	COLLECTORS DIMENSIONS H x L (mm)	COLLECTOR TOTAL AREA (m^2)
20072982	F2-SOL 150M/1	1	150 Single coil	1.856x1.120	2,02
20054255	F2-SOL 200/1	1	200 Double coil	1.856x1.120	2,02
20054256	F2-SOL 300/2	2	300 Double coil	1.856x2.240	4,04
20054307	F2-SOL 400/3	3	430 Double coil	1.856x3.360	6,06
20054308	F2-SOL 500/4	4	550 Double coil	1.856x4.480	8,08

Brackets for flat and pitched roof – complete kits for SCF-20N

CODE	DESCRIPTION	CODE	DESCRIPTION
20009325	brackets kit for flat roof - 1 SCF-20N collector	20009331	brackets kit for pitched roof - 1 SCF-20N collector
20009326	brackets kit for flat roof - 2 SCF-20N collectors	20009332	brackets kit for pitched roof - 2 SCF-20N collectors
20009327	brackets kit for flat roof - 3 SCF-20N collectors	20009333	brackets kit for pitched roof - 3 SCF-20N collectors
20009328	brackets kit for flat roof - 4 SCF-20N collectors	20009334	brackets kit for pitched roof - 4 SCF-20N collectors

The ending fittings for connection to copper pipes and the fittings between collectors are included in the brackets kits.
In case of flexible stainless steel pipes, at the collector inlet-outlet you have to use the code 20007290, “fittings kit for flexible stainless steel pipes”, in addition to “complete kits” codes.

Tray collectors 2,5 m²
SC-VF25



- 2,5 m² tray collector
- Highly-selective finish of the aluminium absorber
- Anti-reflective glass
- Complete with anti-irradiation film
- Insulation in thick (50 mm) rock wool on the bottom side and (9 mm) on the lateral side
- Collector stagnation temperature: 201 °C
- Collector absorption: 95%
- Possibility of installing up to 6 collectors in a series
- Solar collector conforms to the EN 12975 standard
- 1" welded connections on the collector
- Possibility of "inset installation" on tiles
- SC-VF25 is certified by the prestigious Quality Label 'Solar Keymark'

CODE	MODEL	COLLECTOR DIMENSIONS H x L (mm)	COLLECTOR TOTAL AREA (m²)
20050314	SC-VF25	2.078x1.240	2,57

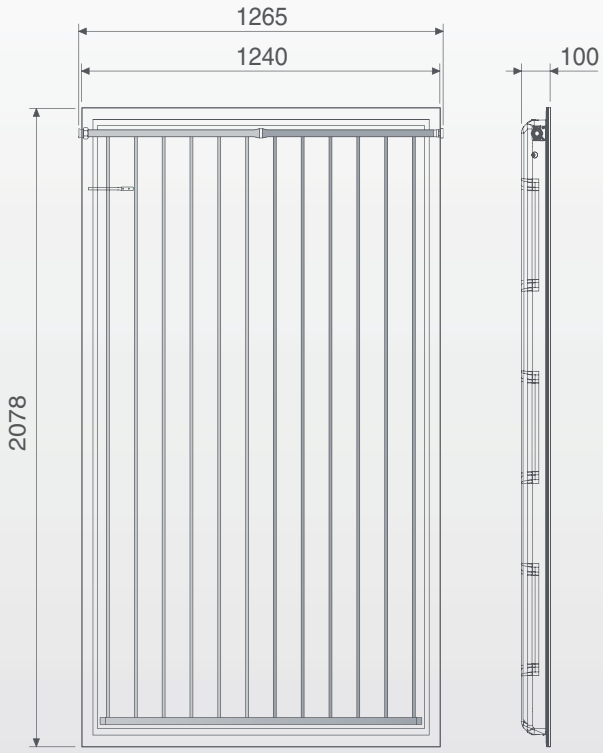
Packages

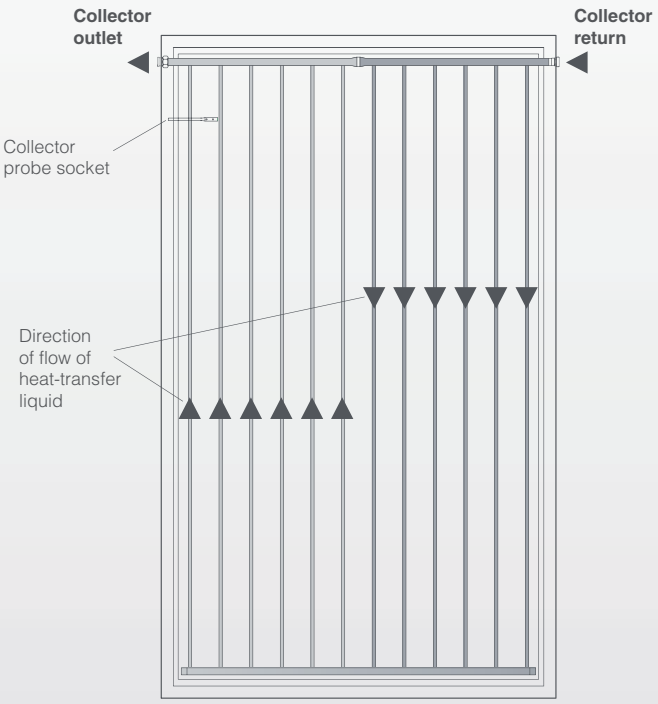
CODE	QUANTITY	CODE	QUANTITY
20050316	one package of 2 pcs SC-VF25 code 20050314	20050317	one package of 5 pcs SC-VF25 code 20050314

Brackets – Codes for SC-VF25

CODE	DESCRIPTION	CODE	DESCRIPTION
4383540	supporting bars kit - 1 SC-VF25 collector	20008757	connection fitting kit
4383541	supporting bars kit - 2 SC-VF25 collectors	20014661	fittings kit for copper pipes (connection with 2,5 m² tray or Al frame collectors, and with solar cylinder)
4383542	supporting bars kit - 3 SC-VF25 collectors	20001452	fittings kit for flexible stainless steel pipes (connection with 2,5 m² tray or Al frame collectors, and with solar cylinder)
20008317	fixing elements for flat roof SC-VF25 collector	20020853	inset flashing plates kit 1 SC-VF25 collector
20008292	fixing elements for pitched roof	20020854	inset flashing plates kit 2 SC-VF25 collectors
20013464	undertile fixing elements kit for pitched roof	20020855	additional flashing plates kit 1 SC-VF25 collector

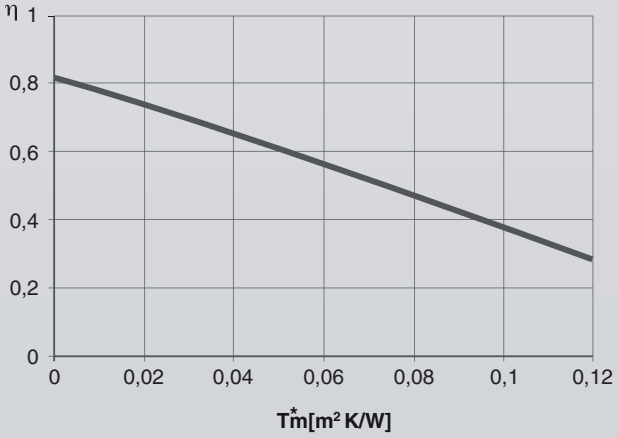
Choose brackets codes by consulting proper section (pages 134-135).



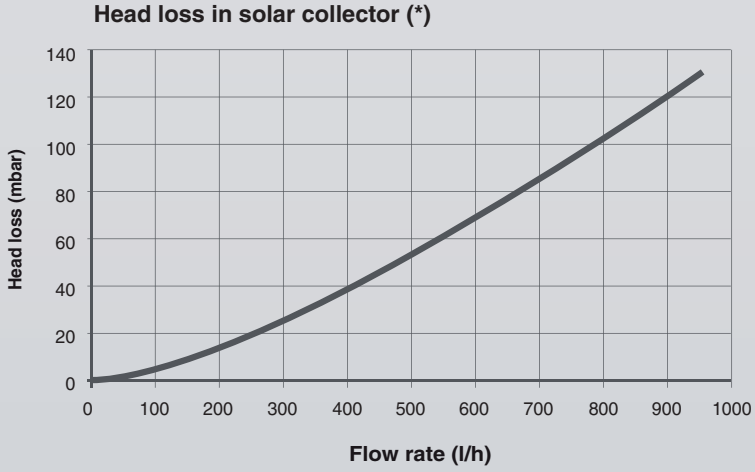


SPECIFICATIONS	TRAY COLLECTOR SC-VF25	
Total area	2,57	m²
Exposed area	2,30	m²
Effective absorption area	2,15	m²
Connections (M) – (F)	1”	-
Weight (empty)	45	kg
Liquid content	1,6	l
Recommended flow rate for m2 of collector	30	l/h
Glass thickness	4	mm
Absorption	~95	%
Emissions	4	%
Maximum permitted pressure	10	bar
Stagnation temperature	202	°C
Maximum number of collectors to be connected in a series	6	n°

Efficiency curve



Head loss in solar collector (*)



(*) Test referred to a 33,3% / 67,7% glycol-water mixture with a heat-transfer fluid temperature of 20°C.

Brackets for flat and pitched roof – complete kits for SC-VF25

CODE	DESCRIPTION	CODE	DESCRIPTION
20055493	brackets kit for flat roof 1 SC-VF25 collector	20055502	brackets kit for pitched roof 1 SC-VF25 collector
20055495	brackets kit for flat roof 2 SC-VF25 collectors	20055503	brackets kit for pitched roof 2 SC-VF25 collectors
20055496	brackets kit for flat roof 3 SC-VF25 collectors	20055504	brackets kit for pitched roof 3 SC-VF25 collectors
20055497	brackets kit for flat roof 4 SC-VF25 collectors	20055509	brackets kit for pitched roof 4 SC-VF25 collectors
20055498	brackets kit for flat roof 5 SC-VF25 collectors	20055505	brackets kit for pitched roof 5 SC-VF25 collectors
20055499	brackets kit for flat roof 6 SC-VF25 collectors	20055506	brackets kit for pitched roof 6 SC-VF25 collectors

The ending fittings, code 20014661, to be put at the collector inlet-outlet and at the hydraulic group/cylinder inlet-outlet for the connection of copper pipes are included in the brackets kits. For the composition of brackets kits for flat and pitched roof refer to the tables below.

Composition table of brackets kits for flat roof

CODE	DESCRIPTION	20055493 1 COLL. SC-VF25	20055495 2 COLL. SC-VF25	20055496 3 COLL. SC-VF25	20055497 4 COLL. SC-VF25	20055498 5 COLL. SC-VF25	20055499 6 COLL. SC-VF25
4383540	supporting bars kit - 1 SC-VF25 collector	1	-	-	-	-	-
4383541	supporting bars kit - 2 SC-VF25 collectors	-	1	-	2	1	-
4383542	supporting bars kit - 3 SC-VF25 collectors	-	-	1	-	1	2
20008317	fixing elements for flat roof SC-VF25 collector	2	2	3	5	6	7
20008757	connection fitting kit	-	-	-	1	1	1
20014661	fittings kit for copper pipes (connection with 2,5 m^2 tray or Al frame collectors, and with solar cylinder)	1	1	1	1	1	1

Composition table of brackets kits for pitched roof

CODE	DESCRIPTION	20055502 1 COLL. SC-VF25	20055503 2 COLL. SC-VF25	20055504 3 COLL. SC-VF25	20055509 4 COLL. SC-VF25	20055505 5 COLL. SC-VF25	20055506 6 COLL. SC-VF25
4383540	supporting bars kit - 1 SC-VF25 collector	1	-	-	-	-	-
4383541	supporting bars kit - 2 SC-VF25 collectors	-	1	-	2	1	-
4383542	supporting bars kit - 3 SC-VF25 collectors	-	-	1	-	1	2
20008292	fixing elements for pitched roof	2	2	3	5	6	7
20008757	connection fitting kit	-	-	-	1	1	1
20014661	fittings kit for copper pipes (connection with 2,5 m^2 tray or Al frame collectors, and with solar cylinder)	1	1	1	1	1	1

When using flexible stainless steel pipes, the codes referring to the complete kits are not suitable. In this case you must use the composition tables, replacing the code 20014661 by the code 20001452; the rest of the codes are the same.

Inset flashing plates and undertile brackets – complete kits for SC-VF25

CODE	DESCRIPTION	CODE	DESCRIPTION
20055517	inset flashing plates kit 1 SC-VF25 collector	20055511	undertile brackets kit for pitched roof 1 SC-VF25 collector
20055518	inset flashing plates kit 2 SC-VF25 collectors	20055512	undertile brackets kit for pitched roof 2 SC-VF25 collectors
20055519	inset flashing plates kit 3 SC-VF25 collectors	20055513	undertile brackets kit for pitched roof 3 SC-VF25 collectors
20055520	inset flashing plates kit 4 SC-VF25 collectors	20055514	undertile brackets kit for pitched roof 4 SC-VF25 collectors
20055521	inset flashing plates kit 5 SC-VF25 collectors	20055515	undertile brackets kit for pitched roof 5 SC-VF25 collectors
20055522	inset flashing plates kit 6 SC-VF25 collectors	20055516	undertile brackets kit for pitched roof 6 SC-VF25 collectors

The ending fittings, code 20014661, to be put at the collector inlet-outlet and at the hydraulic group/cylinder inlet-outlet for the connection of copper pipes are included in the brackets kits. For the composition of flashing plates and undertile brackets kits refer to the tables below.

Composition table of inset flashing plates kits

CODE	DESCRIPTION	20055517 1 COLL. SC-VF25	20055518 2 COLL. SC-VF25	20055519 3 COLL. SC-VF25	20055520 4 COLL. SC-VF25	20055521 5 COLL. SC-VF25	20055522 6 COLL. SC-VF25
20020853	inset flashing plates kit - 1 SC-VF25 collector	1	-	-	-	-	-
20020854	inset flashing plates kit - 2 SC-VF25 collectors	-	1	1	1	1	1
20020855	additional flashing plates kit - 1 SC-VF25 collector	-	-	1	2	3	4
20014661	fittings kit for copper pipes (connection with 2,5 m² tray or Al frame collectors, and with solar cylinder)	1	1	1	1	1	1

Composition table of undertile brackets kits for pitched roof

CODE	DESCRIPTION	20055511 1 COLL. SC-VF25	20055512 2 COLL. SC-VF25	20055513 3 COLL. SC-VF25	20055514 4 COLL. SC-VF25	20055515 5 COLL. SC-VF25	20055516 6 COLL. SC-VF25
4383540	supporting bars kit - 1 SC-VF25 collector	1	-	-	-	-	-
4383541	supporting bars kit - 2 SC-VF25 collectors	-	1	-	2	1	-
4383542	supporting bars kit - 3 SC-VF25 collectors	-	-	1	-	1	2
20013464	undertile fixing elements kit for pitched roof	2	2	3	5	6	7
20008757	connection fitting kit	-	-	-	1	1	1
20014661	fittings kit for copper pipes (connection with 2,5 m² tray or Al frame collectors, and with solar cylinder)	1	1	1	1	1	1

When using flexible stainless steel pipes, the codes referring to the complete kits are not suitable. In this case you must use the composition tables, replacing the code 20014661 by the code 20001452; the rest of the codes are the same.

- Aluminium frame collector with highly-selective aluminium absorber area
- Insulation in thick (40mm) rock wool
- Complete with anti-irradiation film
- Collector absorption: 95%
- Collector stagnation temperature: 201 °C
- Possibility of installing up to 6 collectors in a series
- Solar collector conforms to the EN 12975 standard
- 1" welded connections on the collector
- Possibility of "inset installation" on tiles and slate
- SCF-25N is certified by the prestigious Quality Label 'Solar Keymark'

CODE	MODEL	COLLECTOR DIMENSIONS H x L (mm)	COLLECTOR TOTAL AREA (m²)
20050321	SCF-25N	2.046x1.186	2,43

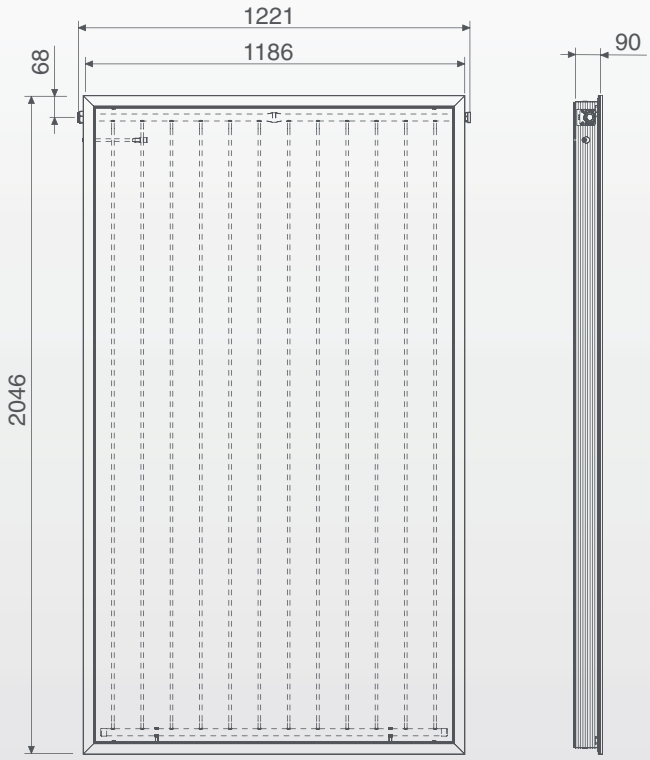
Packages

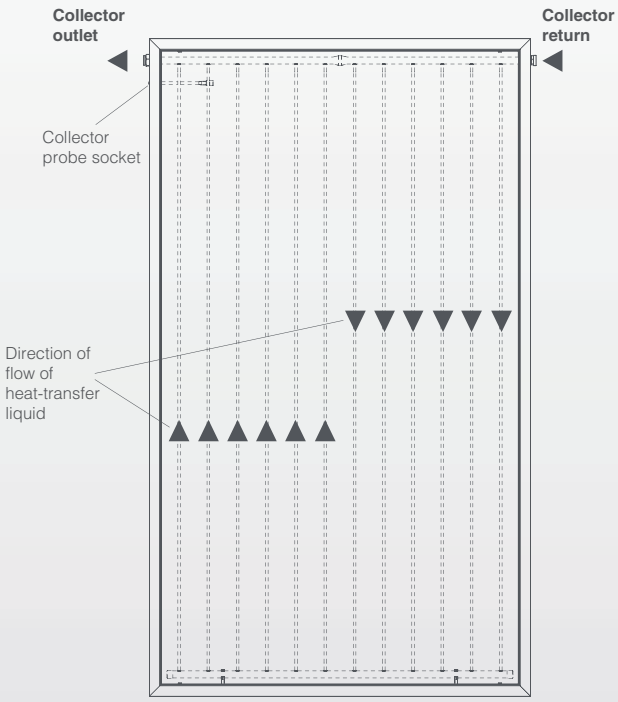
CODE	QUANTITY	CODE	QUANTITY
20050323	one package of 2 pcs SCF-25N code 20050321	20050324	one package of 5 pcs SCF-25N code 20050321

Brackets – Codes for SCF-25N

CODE	DESCRIPTION	CODE	DESCRIPTION
20008315	supporting bars kit - 1 SCF-25N collector	20001452	fittings kit for flexible stainless steel pipes (connection with 2,5 m² tray or Al frame collectors, and with solar cylinder)
20008322	supporting bars kit - 2 SCF-25N collectors	20010353	inset flashing plates kit 1 SCF-25N collector (tiles)
20008759	supporting bars kit - 3 SCF-25N collectors	20010393	inset flashing plates kit 2 SCF-25N collectors (tiles)
20008317	fixing elements for flat roof SCF-25N collector	20010447	additional flashing plates kit 1 SCF-25N collector (tiles)
20008292	fixing elements for pitched roof	20022309	inset flashing plates kit 1 SCF-25N collector (slate)
20013464	undertile fixing elements kit for pitched roof	20022310	inset flashing plates kit 2 SCF-25N collectors (slate)
20008757	connection fitting kit	20022311	additional flashing plates kit 1 SCF-25N collector (slate)
20014661	fittings kit for copper pipes (connection with 2,5 m² tray or Al frame collectors, and with solar cylinder)		

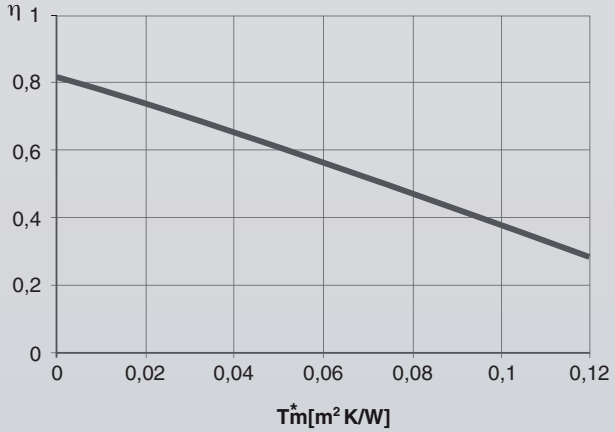
Choose brackets codes by consulting proper section (pages 138-141).



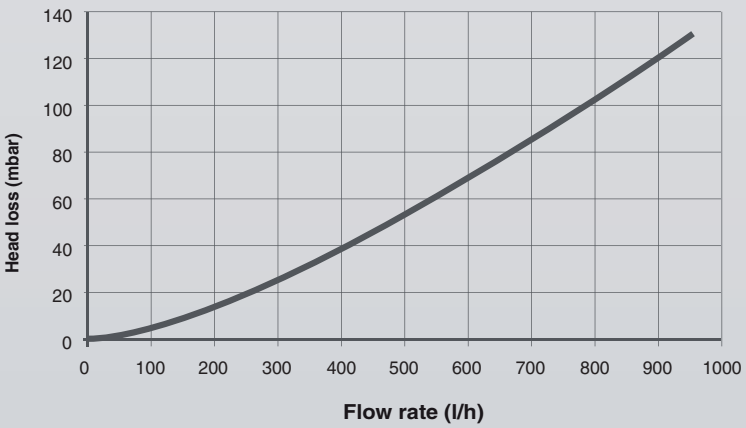


SPECIFICATIONS	FLAT COLLECTOR SCF-25N	
Total area	2,43	m²
Exposed area	2,20	m²
Effective absorption area	2,15	m²
Connections (M) – (F)	1”	-
Weight (empty)	36,5	kg
Liquid content	1,6	l
Recommended flow rate for m2 of collector	30	l/h
Glass thickness	3,2	mm
Absorption	~95	%
Emissions	~4	%
Maximum permitted pressure	10	bar
Stagnation temperature	201	°C
Maximum number of collectors to be connected in a series	6	n°

Efficiency curve



Head loss in solar collector (*)



(*) Test referred to a 33,3% / 67,7% glycol-water mixture with a heat-transfer fluid temperature of 20°C.

Brackets for flat and pitched roof – complete kits for SCF-25N

CODE	DESCRIPTION	CODE	DESCRIPTION
20009306	brackets kit for flat roof 1 SCF-25N collector	20009312	brackets kit for pitched roof 1 SCF-25N collector
20009307	brackets kit for flat roof 2 SCF-25N collectors	20009313	brackets kit for pitched roof 2 SCF-25N collectors
20009308	brackets kit for flat roof 3 SCF-25N collectors	20009314	brackets kit for pitched roof 3 SCF-25N collectors
20009309	brackets kit for flat roof 4 SCF-25N collectors	20009315	brackets kit for pitched roof 4 SCF-25N collectors
20009310	brackets kit for flat roof 5 SCF-25N collectors	20009316	brackets kit for pitched roof 5 SCF-25N collectors
20009311	brackets kit for flat roof 6 SCF-25N collectors	20009317	brackets kit for pitched roof 6 SCF-25N collectors

The ending fittings, code 20014661, to be put at the collector inlet-outlet and at the hydraulic group/cylinder inlet-outlet for the connection of copper pipes are included in the brackets kits. For the composition of brackets kits for flat and pitched roof refer to the tables below.

Composition table of brackets kits for flat roof

CODE	DESCRIPTION	20009306 1 COLL. SCF-25N	20009307 2 COLL. SCF-25N	20009308 3 COLL. SCF-25N	20009309 4 COLL. SCF-25N	20009310 5 COLL. SCF-25N	20009311 6 COLL. SCF-25N
20008315	supporting bars kit - 1 SCF-25N collector	1	-	-	-	-	-
20008322	supporting bars kit - 2 SCF-25N collectors	-	1	-	2	1	-
20008759	supporting bars kit - 3 SCF-25N collectors	-	-	1	-	1	2
20008317	fixing elements for flat roof SCF-25N collector	2	2	3	5	6	7
20008757	connection fitting kit	-	-	-	1	1	1
20014661	fittings kit for copper pipes (connection with 2,5 m² tray or Al frame collectors, and with solar cylinder)	1	1	1	1	1	1

Composition table of brackets kits for pitched roof

CODE	DESCRIPTION	20009312 1 COLL. SCF-25N	20009313 2 COLL. SCF-25N	20009314 3 COLL. SCF-25N	20009315 4 COLL. SCF-25N	20009316 5 COLL. SCF-25N	20009317 6 COLL. SCF-25N
20008315	supporting bars kit - 1 SCF-25N collector	1	-	-	-	-	-
20008322	supporting bars kit - 2 SCF-25N collectors	-	1	-	2	1	-
20008759	supporting bars kit - 3 SCF-25N collectors	-	-	1	-	1	2
20008292	fixing elements for pitched roof	2	2	3	5	6	7
20008757	connection fitting kit	-	-	-	1	1	1
20014661	fittings kit for copper pipes (connection with 2,5 m² tray or Al frame collectors, and with solar cylinder)	1	1	1	1	1	1

When using flexible stainless steel pipes, the codes referring to the complete kits are not suitable. In this case you must use the composition tables, replacing the code 20014661 by the code 20001452; the rest of the codes are the same.

Undertile brackets for pitched roof – complete kits for SCF-25N

CODE	DESCRIPTION	CODE	DESCRIPTION
20016813	undertile brackets kit for pitched roof 1 SCF-25N collector	20016816	undertile brackets kit for pitched roof 4 SCF-25N collectors
20016814	undertile brackets kit for pitched roof 2 SCF-25N collectors	20016817	undertile brackets kit for pitched roof 5 SCF-25N collectors
20016815	undertile brackets kit for pitched roof 3 SCF-25N collectors	20016818	undertile brackets kit for pitched roof 6 SCF-25N collectors

The ending fittings, code 20014661, to be put at the collector inlet-outlet and at the hydraulic group/cylinder inlet-outlet for the connection of copper pipes are included in the brackets kits. For the composition of undertile brackets kits refer to the table below.

Composition table of undertile brackets kits for pitched roof

CODE	DESCRIPTION	20016813 1 COLL. SCF-25N	20016814 2 COLL. SCF-25N	20016815 3 COLL. SCF-25N	20016816 4 COLL. SCF-25N	20016817 5 COLL. SCF-25N	20016818 6 COLL. SCF-25N
20008315	supporting bars kit - 1 SCF-25N collector	1	-	-	-	-	-
20008322	supporting bars kit - 2 SCF-25N collectors	-	1	-	2	1	-
20008759	supporting bars kit - 3 SCF-25N collectors	-	-	1	-	1	2
20013464	undertile fixing elements kit for pitched roof	2	2	3	5	6	7
20008757	connection fitting kit	-	-	-	1	1	1
20014661	fittings kit for copper pipes (connection with 2,5 m^2 tray or Al frame collectors, and with solar cylinder)	1	1	1	1	1	1

When using flexible stainless steel pipes, the codes referring to the complete kits are not suitable. In this case you must use the composition tables, replacing the code 20014661 by the code 20001452; the rest of the codes are the same.

Inset flashing plates for tile roofs – complete kits for SCF-25N

CODE	DESCRIPTION	CODE	DESCRIPTION
20046059	inset flashing plates kit for tile roofs - 1 SCF-25N collector	20046062	inset flashing plates kit for tile roofs - 4 SCF-25N collectors
20046060	inset flashing plates kit for tile roofs - 2 SCF-25N collectors	20046067	inset flashing plates kit for tile roofs - 5 SCF-25N collectors
20046061	inset flashing plates kit for tile roofs - 3 SCF-25N collectors	20046069	inset flashing plates kit for tile roofs - 6 SCF-25N collectors

The ending fittings, code 20014661, to be put at the collector inlet-outlet and at the hydraulic group/cylinder inlet-outlet for the connection of copper pipes are included in the brackets kits. For the composition of flashing plates kits refer to the table below.

Composition table of inset flashing plates kit for tile roofs

CODE	DESCRIPTION	20046059 1 COLL. SCF-25N	20046060 2 COLL. SCF-25N	20046061 3 COLL. SCF-25N	20046062 4 COLL. SCF-25N	20046067 5 COLL. SCF-25N	20046069 6 COLL. SCF-25N
20010353	inset flashing plates kit 1 SCF-25N collector (tiles)	1	-	-	-	-	-
20010393	inset flashing plates kit 2 SCF-25N collectors (tiles)	-	1	1	1	1	1
20010447	additional flashing plates kit 1 SCF-25N collector (tiles)	-	-	1	2	3	4
20014661	fittings kit for copper pipes (connection with 2,5 m^2 tray or Al frame collectors, and with solar cylinder)	1	1	1	1	1	1

When using flexible stainless steel pipes, the codes referring to the complete kits are not suitable. In this case you must use the composition tables, replacing the code 20014661 by the code 20001452; the rest of the codes are the same.

Inset flashing plates for slate roofs - complete kits for SCF-25N

CODE	DESCRIPTION	CODE	DESCRIPTION
20046072	inset flashing plates kit for slate roofs - 1 SCF-25N collector	20046075	inset flashing plates kit for slate roofs - 4 SCF-25N collectors
20046073	inset flashing plates kit for slate roofs - 2 SCF-25N collectors	20046076	inset flashing plates kit for slate roofs - 5 SCF-25N collectors
20046074	inset flashing plates kit for slate roofs - 3 SCF-25N collectors	20046078	inset flashing plates kit for slate roofs - 6 SCF-25N collectors

The ending fittings, code 20014661, to be put at the collector inlet-outlet and at the hydraulic group/cylinder inlet-outlet for the connection of copper pipes are included in the brackets kits. For the composition of flashing plates kits refer to the table below.

Composition table of inset flashing plates kit for slate roofs

CODE	DESCRIPTION	20046072 1 COLL. SCF-25N	20046073 2 COLL. SCF-25N	20046074 3 COLL. SCF-25N	20046075 4 COLL. SCF-25N	20046076 5 COLL. SCF-25N	20046078 6 COLL. SCF-25N
20022309	inset flashing plates kit 1 SCF-25N collector (slate)	1	-	-	-	-	-
20022310	inset flashing plates kit 2 SCF-25N collectors (slate)	-	1	1	1	1	1
20022311	additional flashing plates kit 1 SCF-25N collector (slate)	-	-	1	2	3	4
20014661	fittings kit for copper pipes (connection with 2,5 m^2 tray or Al frame collectors, and with solar cylinder)	1	1	1	1	1	1

When using flexible stainless steel pipes, the codes referring to the complete kits are not suitable. In this case you must use the composition tables, replacing the code 20014661 by the code 20001452; the rest of the codes are the same.

SCF-20N

- Aluminium frame collector with highly-selective aluminium absorber area
- Tempered solar glass with a high coefficient of energy transmission
- Complete with anti-irradiation film
- Insulation in thick (30mm) rock wool
- Collector absorption: 95%
- Collector stagnation temperature: 198 °C
- Possibility of installing up to 6 collectors in a series
- Collector for forced circulation systems
- Solar collector conforms to the EN 12975 standard
- SCF-20N is certified by the prestigious Quality Label 'Solar Keymark'

SCN-20S

- Aluminium frame collector with semi-selective absorber area
- Tempered solar glass with a high coefficient of energy transmission
- Complete with anti-irradiation film
- Insulation in thick (30mm) rock wool
- Collector stagnation temperature: 196 °C
- Possibility of installing up to 6 collectors in a series
- Collector for forced circulation systems, specifically designed for very sunny areas or houses primarily used in the summer
- Solar collector conforms to the EN 12975 standard
- SCN-20S is certified by the prestigious Quality Label 'Solar Keymark'

CODE	MODEL	COLLECTOR DIMENSIONS H x L (mm)	COLLECTOR TOTAL AREA (m²)
20050326	SCF-20N	1.856x1.086	2,02
20050346	SCN-20S	1.856x1.086	2,02

Packages

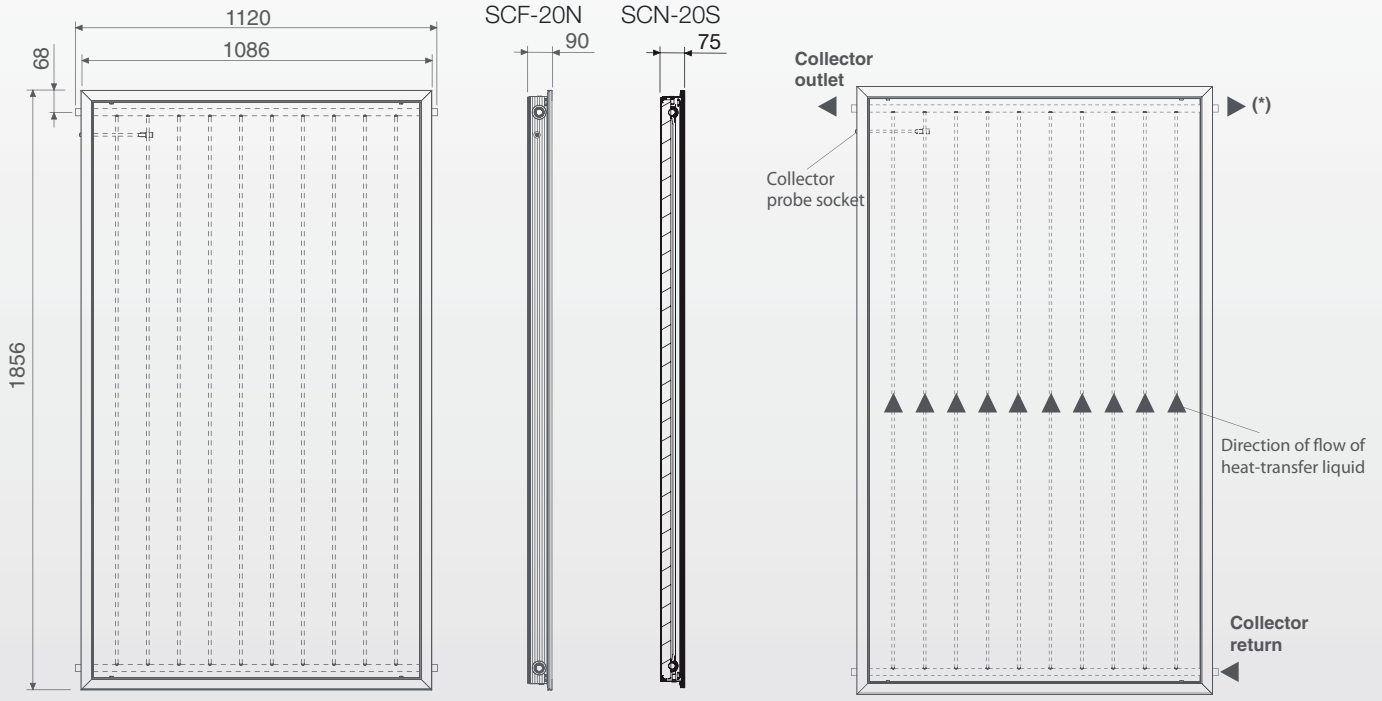
CODE	QUANTITY	CODE	QUANTITY
20050328	one package of 2 pcs SCF-20N	20050329	one package of 7 pcs SCF-20N
20050348	one package of 8 pcs SCN-20S		

Connection fittings between collectors are included in the brackets kit.

Brackets – Codes for SCF-20N and SCN-20S

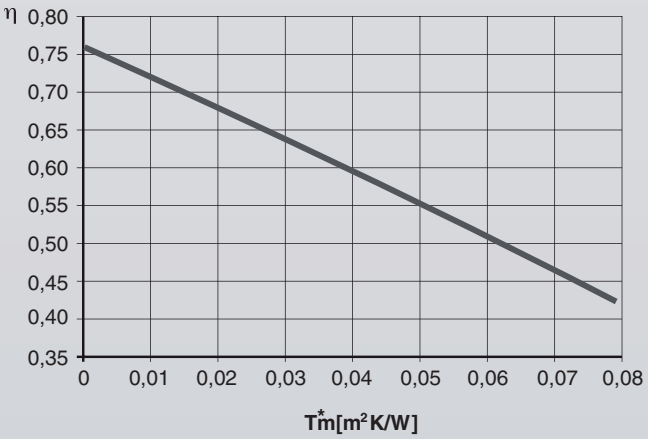
CODE	DESCRIPTION	CODE	DESCRIPTION
20008280	supporting bars kit - 1 SCF-20N collector	20007285	straight fittings kit to be tightened
20008302	supporting bars kit - 2 SCF-20N collectors	20007286	terminal fittings kit to be tightened
20008758	supporting bars kit - 3 SCF-20N collectors	20007278	elbow fittings kit to be tightened
20008281	fixing elements for flat roof SCF-20N collector	20007290	SCF-20N fittings kit for flexible stainless steel pipes
20008292	fixing elements for pitched roof	20013464	undertile fixing elements kit for pitched roof
20008757	connection fitting kit		

Choose brackets codes by consulting proper section (pages 144-145).

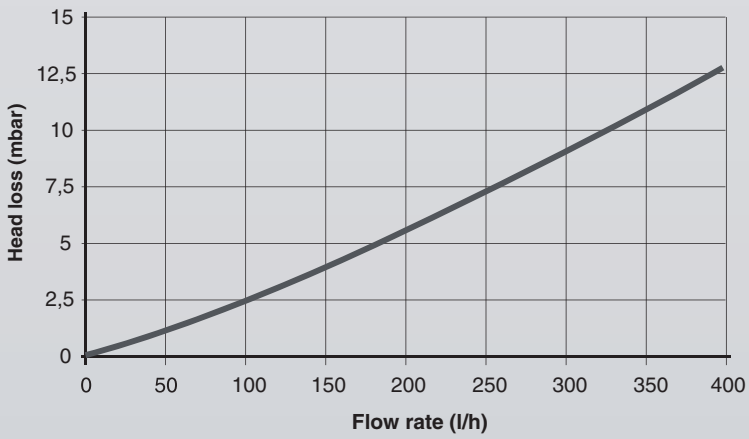


SPECIFICATIONS	FLAT COLLECTOR SCF-20N	FLAT COLLECTOR SCN-20S	
Total area	2,02		m²
Exposed area	1,81		m²
Effective absorption area	1,77		m²
Copper pipe connections	4 x Ø 22		mm
Weight (empty)	30		kg
Liquid content	1,5		l
Recommended flow rate for m2 of collector	30		l/h
Glass thickness	3,2		mm
Absorption	~95	~90	%
Emissions	~4	~5	%
Maximum permitted pressure	10		bar
Stagnation temperature	198	196	°C
Maximum number of collectors to be connected in a series	6		n°

Efficiency curve (**)



Head loss in solar collector (*)



(*) Test referred to a 40% / 60% glycol-water mixture with a heat-transfer fluid temperature of 50°C.
(**) SCF-20N: Optical efficiency absorber η 0,764 SCN-20S: Optical efficiency absorber η 0,734

Brackets for flat and pitched roof – complete kits for SCF-20N and SCN-20S

CODE	DESCRIPTION	CODE	DESCRIPTION
20009325	brackets kit for flat roof -1 SCF-20N collector	20009331	brackets kit for pitched roof 1 SCF-20N collector
20009326	brackets kit for flat roof - 2 SCF-20N collectors	20009332	brackets kit for pitched roof 2 SCF-20N collectors
20009327	brackets kit for flat roof - 3 SCF-20N collectors	20009333	brackets kit for pitched roof 3 SCF-20N collectors
20009328	brackets kit for flat roof - 4 SCF-20N collectors	20009334	brackets kit for pitched roof 4 SCF-20N collectors
20009329	brackets kit for flat roof - 5 SCF-20N collectors	20009335	brackets kit for pitched roof 5 SCF-20N collectors
20009330	brackets kit for flat roof - 6 SCF-20N collectors	20009336	brackets kit for pitched roof 6 SCF-20N collectors

The ending fittings for connection to copper pipes and the fittings between collectors are included in the brackets kits. In case of flexible stainless steel pipes, at the collector inlet-outlet you have to use the code 20007290, “fittings kit for flexible stainless steel pipes”, in addition to “complete kits” codes. For the composition of brackets kits for flat and pitched roof refer to the tables below.

Composition table of brackets kits for flat roof (SCF-20N and SCN-20S)

CODE	DESCRIPTION	20009325 1 COLL. SCF-20N	20009326 2 COLL. SCF-20N	20009327 3 COLL. SCF-20N	20009328 4 COLL. SCF-20N	20009329 5 COLL. SCF-20N	20009330 6 COLL. SCF-20N
20008280	supporting bars kit - 1 SCF-20N collector	1	-	-	-	-	-
20008302	supporting bars kit - 2 SCF-20N collectors	-	1	-	2	1	-
20008758	supporting bars kit - 3 SCF-20N collectors	-	-	1	-	1	2
20008281	fixing elements for flat roof SCF-20N collector	2	2	3	5	6	7
20008757	connection fitting kit	-	-	-	1	1	1
20007285	straight fittings kit to be tightened	1	2	3	4	5	6
20007286	terminal fittings kit to be tightened	1	1	1	1	1	1

Composition table of brackets kits for pitched roof (SCF-20N and SCN-20S)

CODE	DESCRIPTION	20009331 1 COLL. SCF-20N	20009332 2 COLL. SCF-20N	20009333 3 COLL. SCF-20N	20009334 4 COLL. SCF-20N	20009335 5 COLL. SCF-20N	20009336 6 COLL. SCF-20N
20008280	supporting bars kit - 1 SCF-20N collector	1	-	-	-	-	-
20008302	supporting bars kit - 2 SCF-20N collectors	-	1	-	2	1	-
20008758	supporting bars kit - 3 SCF-20N collectors	-	-	1	-	1	2
20008292	fixing elements for pitched roof	2	2	3	5	6	7
20008757	connection fitting kit	-	-	-	1	1	1
20007285	straight fittings kit to be tightened	1	2	3	4	5	6
20007286	terminal fittings kit to be tightened	1	1	1	1	1	1

Undertile brackets – complete kits for SCF-20N and SCN-20S

CODE	DESCRIPTION	CODE	DESCRIPTION
20020825	undertile brackets kit for pitched roof - 1 SCF-20N collector	20020828	undertile brackets kit for pitched roof - 4 SCF-20N collectors
20020826	undertile brackets kit for pitched roof - 2 SCF-20N collectors	20020829	undertile brackets kit for pitched roof - 5 SCF-20N collectors
20020827	undertile brackets kit for pitched roof - 3 SCF-20N collectors	20020830	undertile brackets kit for pitched roof - 6 SCF-20N collectors

The ending fittings for connection to copper pipes and the fittings between collectors are included in the brackets kits. In case of flexible stainless steel pipes, at the collector inlet-outlet you have to use the code 20007290, “fittings kit for flexible stainless steel pipes”, in addition to “complete kits” codes. For the composition of undertile brackets kits for pitched roof refer to the table below.

Composition table of undertile brackets kits for pitched roof (SCF-20N and SCN-20S)

CODE	DESCRIPTION	20020825 1 COLL. SCF-20N	20020826 2 COLL. SCF-20N	20020827 3 COLL. SCF-20N	20020828 4 COLL. SCF-20N	20020829 5 COLL. SCF-20N	20020830 6 COLL. SCF-20N
20008280	supporting bars kit - 1 SCF-20N collector	1	-	-	-	-	-
20008302	supporting bars kit - 2 SCF-20N collectors	-	1	-	2	1	-
20008758	supporting bars kit - 3 SCF-20N collectors	-	-	1	-	1	2
20013464	undertile fixing elements kit for pitched roof	2	2	3	5	6	7
20008757	connection fitting kit	-	-	-	1	1	1
20007285	straight fittings kit to be tightened	1	2	3	4	5	6
20007286	terminal fittings kit to be tightened	1	1	1	1	1	1

- Wood frame collector with highly-selective aluminium absorber area
- Insulation in thick (40mm) rock wool
- Complete with anti-irradiation film
- Collector absorption: 95%
- Collector stagnation temperature: 202 °C
- Possibility of installing up to 6 collectors in a series
- Solar collector conforms to the EN 12975 standard
- Suitable for ventilated roofs with an inclination between 20° and 65°
- SCI-25N is certified by the prestigious Quality Label 'Solar Keymark'

CODE	MODEL	COLLECTOR DIMENSIONS H x L (mm)	COLLECTOR TOTAL AREA (m²)
20050330	SCI-25N	2.033x1.182	2,40

Packages

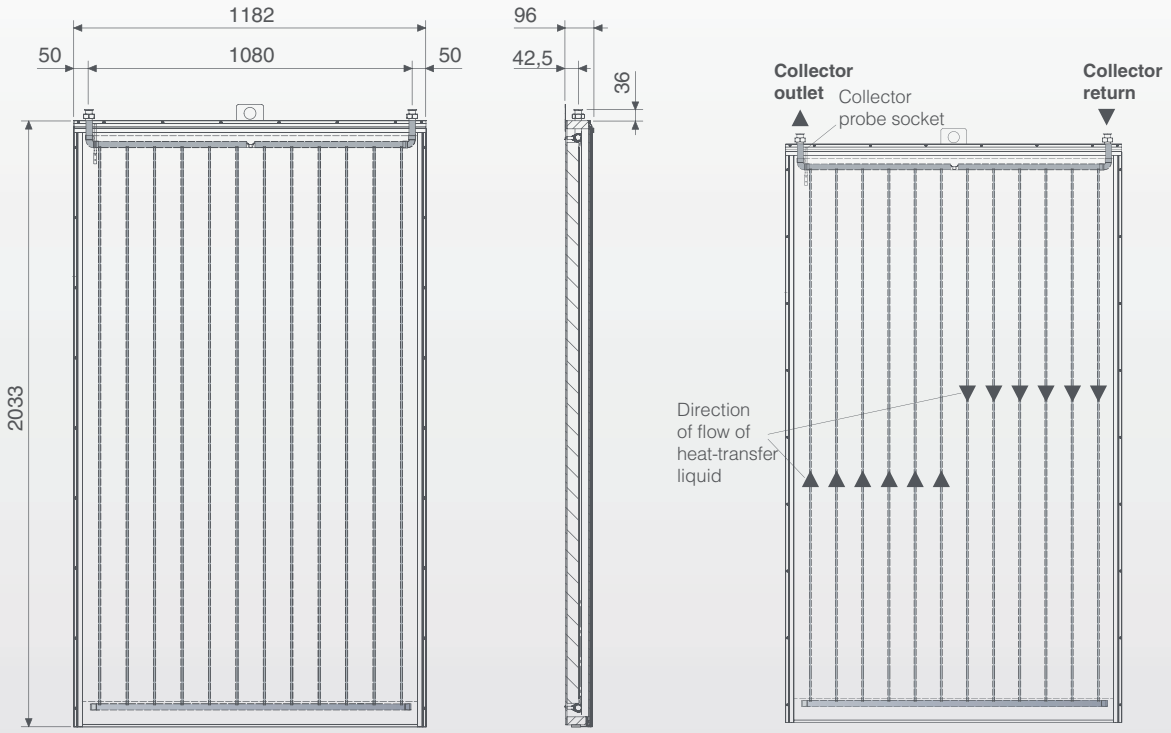
CODE	QUANTITY	CODE	QUANTITY
20050331	one package of 2 pcs SCI-25N code 20050330	20050332	one package of 7 pcs SCI-25N code 20050330

The manual air vent cannot be used with inset collectors; you have to use the solar filling pump (code 20001454), listed in the solar accessories section of this catalogue.

Flashing plates – Codes for SCI-25N

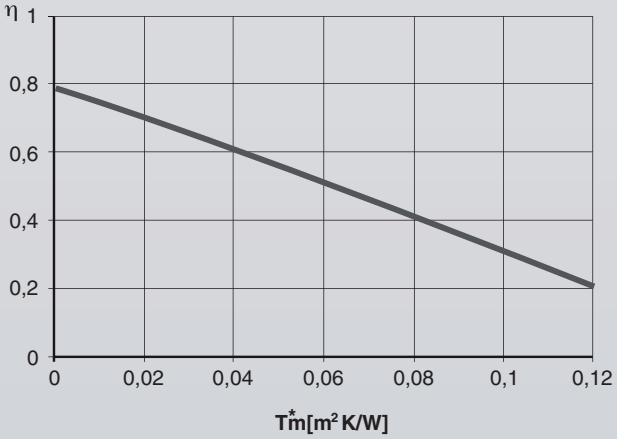
CODE	DESCRIPTION	CODE	DESCRIPTION
20019194	inset flashing plates kit - 1 SCI-25N collector	20019198	second row inset flashing plates kit SCI-25N collector
20019195	inset flashing plates kit - 2 SCI-25N collectors	20019199	additional second row inset flashing plates kit SCI-25N collector
20019196	additional flashing plates kit SCI-25N collector	20021321	fittings kit for copper pipes (connection with SCI-25N collector and with solar cylinder)
20019197	hydraulic connections kit for SCI-25N collector	20022233	fittings kit for flexible stainless steel pipes (connection with SCI-25N collector and with solar cylinder)

To select the flashing plates codes, consult the proper section (pages 148-149).

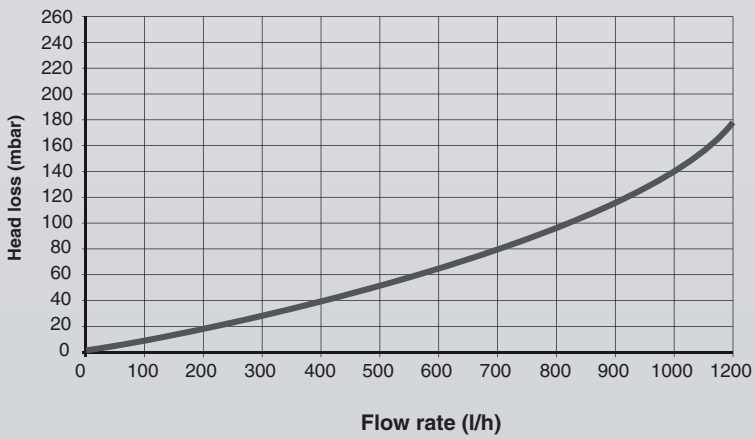


SPECIFICATIONS	INSET COLLECTOR SCI-25N	
Total area	2,40	m²
Exposed area	2,2	m²
Effective absorption area	2,15	m²
Connections (F) – (F)	1”	
Weight (empty)	43	kg
Liquid content	1,68	l
Recommended flow rate for m2 of collector	30	l/h
Glass thickness	3,2	mm
Absorption	~95	%
Emissions	~4	%
Maximum permitted pressure	10	bar
Stagnation temperature	202	°C
Maximum number of collectors to be connected in a series	6	n°

Efficiency curve



Head loss of solar collector (*)



(*) Test referred to a 40% / 60% glycol-water mixture with a heat-transfer fluid temperature of 50°C.

Inset flashing plates in a single row – complete kits for SCI-25N

CODE	DESCRIPTION	CODE	DESCRIPTION
20020406	inset flashing plates kit - 1 SCI-25N collector	20020410	inset flashing plates kit - 4 SCI-25N collectors
20020408	inset flashing plates kit - 2 SCI-25N collectors	20020411	inset flashing plates kit - 5 SCI-25N collectors
20020409	inset flashing plates kit - 3 SCI-25N collectors	20020412	inset flashing plates kit - 6 SCI-25N collectors

The ending fittings, code 20021321, to be put at the inlet-outlet of collectors and of hydraulic-group/cylinder, for connection to copper pipes, are included in the flashing plates kits. For the composition of flashing plate kits refer to the tables below.

Composition table of flashing plates kits – SCI-25N collectors – single row

CODE	DESCRIPTION	20020406 1 COLL. SCI-25N	20020408 2 COLL. SCI-25N	20020409 3 COLL. SCI-25N	20020410 4 COLL. SCI-25N	20020411 5 COLL. SCI-25N	20020412 6 COLL. SCI-25N
20019194	inset flashing plates kit - 1 SCI-25N collector	1	-	-	-	-	-
20019195	inset flashing plates kit - 2 SCI-25N collectors	-	1	1	1	1	1
20019196	additional flashing plates kit SCI-25N collector	-	-	1	2	3	4
20019197	hydraulic connections kit for SCI-25N collector	-	1	2	3	4	5
20021321	fittings kit for copper pipes (connection with SCI-25N collector and with solar cylinder)	1	1	1	1	1	1

When using flexible stainless steel pipes, the codes referring to the complete kits are not suitable. In this case you must use the composition tables, replacing the code 20021321 by the code 20022233; the rest of the codes are the same.

Inset flashing plates in a double row – complete kits for SCI-25N

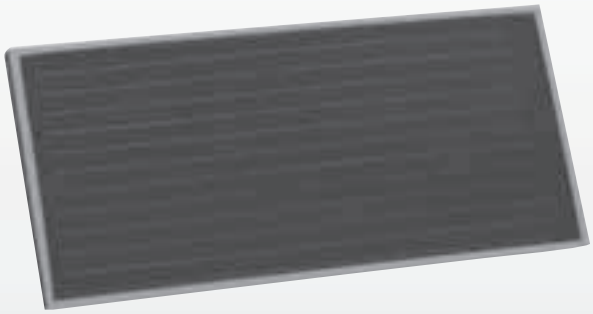
CODE	DESCRIPTION	CODE	DESCRIPTION
20020413	inset flashing plates kit - 4 SCI-25N collectors in a double row	20020416	inset flashing plates kit - 10 SCI-25N collectors in a double row
20020414	inset flashing plates kit - 6 SCI-25N collectors in a double row	20020417	inset flashing plates kit - 12 SCI-25N collectors in a double row
20020415	inset flashing plates kit - 8 SCI-25N collectors in a double row		

The ending fittings, code 20021321, to be put at the inlet-outlet of collectors and of hydraulic-group/cylinder, for connection to copper pipes, are included in the flashing plates kits. For the composition of flashing plate kits refer to the table below.

Composition table of flashing plates kits – SCI-25N collectors – double row

CODE	DESCRIPTION	20020413 4 COLL. SCI-25N	20020414 6 COLL. SCI-25N	20020415 8 COLL. SCI-25N	20020416 10 COLL. SCI-25N	20020417 12 COLL. SCI-25N
20019195	inset flashing plates kit - 2 SCI-25N collectors	1	1	1	1	1
20019196	additional flashing plates kit SCI-25N collector	-	1	2	3	4
20019197	hydraulic connections kit for SCI-25N collector	2	4	6	8	10
20019198	second row inset flashing plates kit SCI-25N collector	1	1	1	1	1
20019199	additional second row inset flashing plates kit SCI-25N collector	-	1	2	3	4
20021321	fittings kit for copper pipes (connection with SCI-25N collector and with solar cylinder)	1	1	1	1	1

When using flexible stainless steel pipes, the codes referring to the complete kits are not suitable. In this case you must use the composition tables, replacing the code 20021321 by the code 20022233; the rest of the codes are the same.



- Highly-selective aluminium absorber area
- Insulation in thick (50 mm) rock wool on the bottom side and (9 mm) on the lateral side
- Complete with anti-irradiation film
- Collector absorption: 95%
- Collector stagnation temperature: 206 °C
- Possibility of installing up to 6 collectors in a series
- Solar collector conforms to the EN 12975 standard
- 1" welded connections on the collector
- SCO-25N is certified by the prestigious Quality Label 'Solar Keymark'

CODE	MODEL	COLLECTOR DIMENSIONS H x L (mm)	COLLECTOR TOTAL AREA (m²)
20050318	SCO-25N	1.238x2.076	2,57

Packages

CODE	QUANTITY	CODE	QUANTITY
20050320	one package of 10 pcs SCO-25N code 20050318		

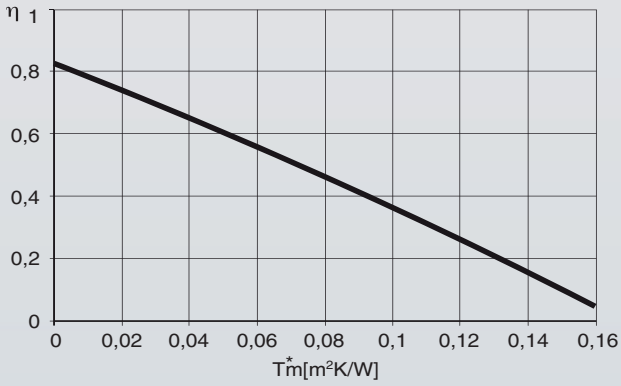
Brackets – Codes for SCO-25N

CODE	DESCRIPTION	CODE	DESCRIPTION
20015889	supporting bars kit - 1 SCO-25N collector	20013464	undertile fixing elements kit for pitched roof
20066873	supporting bars kit - 2 SCO-25N collectors	20014661	fittings kit for copper pipes (connection with 2,5 m² tray or Al frame collectors, and with solar cylinder)
20015891	fixing elements for flat roof for SCO-25N collector	20001452	fittings kit for flexible stainless steel pipes (connection with 2,5 m² tray or Al frame collectors, and with solar cylinder)
20008292	fixing elements kit for pitched roof	20029277	compensation joint kit

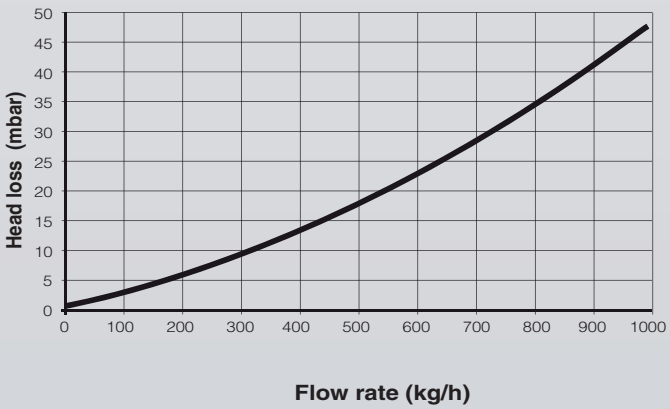
To select the brackets codes, consult the proper section (pages 152-153).

SPECIFICATIONS	HORIZONTAL FLAT COLLECTOR SCO-25N	
Total area	2,57	m²
Exposed area	2,30	m²
Effective absorption area	2,15	m²
Connections (M) – (F)	1”	
Weight (empty)	45	kg
Liquid content	1,6	l
Recommended flow rate for m2 of collector	30	l/h
Glass thickness	4	mm
Absorption	~95	%
Emissions	~4	%
Maximum permitted pressure	10	bar
Stagnation temperature	201	°C
Maximum number of collectors to be connected in a series	6	n°

Efficiency curve



Head loss in solar collectors (*)



(*) Test referred to a 40%/60% glycol-water mixture with a heat-transfer fluid temperature of 50°C.

Brackets for flat and pitched roof – complete kits for SCO-25N

CODE	DESCRIPTION	CODE	DESCRIPTION
20072847	brackets kit for flat roof - 1 SCO-25N collector	20072853	brackets kit for pitched roof - 1 SCO-25N collector
20072848	brackets kit for flat roof - 2 SCO-25N collectors	20072854	brackets kit for pitched roof - 2 SCO-25N collectors
20072849	brackets kit for flat roof - 3 SCO-25N collectors	20072855	brackets kit for pitched roof - 3 SCO-25N collectors
20072850	brackets kit for flat roof - 4 SCO-25N collectors	20072856	brackets kit for pitched roof - 4 SCO-25N collectors
20072851	brackets kit for flat roof - 5 SCO-25N collectors	20072858	brackets kit for pitched roof - 5 SCO-25N collectors
20072852	brackets kit for flat roof - 6 SCO-25N collectors	20072859	brackets kit for pitched roof - 6 SCO-25N collectors

The ending fittings, code 20014661, to be put at the inlet-outlet of collectors and of hydraulic group/cylinder for connection to copper pipes, are included in the brackets kits. For the composition of brackets kits for flat and pitched roof refer to the tables below.

Composition table of brackets kits for flat roof

CODE	DESCRIPTION	20072847 1 COLL. SCO-25N	20072848 2 COLL. SCO-25N	20072849 3 COLL. SCO-25N	20072850 4 COLL. SCO-25N	20072851 5 COLL. SCO-25N	20072852 6 COLL. SCO-25N
20015889	supporting bars kit - 1 SCO-25N collector	1	-	1	-	1	-
20066873	supporting bars kit - 2 SCO-25N collectors	-	1	1	2	2	3
20015891	fixing elements for flat roof for SCO-25N collector	2	3	5	6	8	9
20029277	compensation joint kit	-	1	2	3	4	5
20014661	fittings kit for copper pipes (connection with 2,5 m² tray or Al frame collectors, and with solar cylinder)	1	1	1	1	1	1

Composition table of brackets kits for pitched roof

CODE	DESCRIPTION	20072853 1 COLL. SCO-25N	20072854 2 COLL. SCO-25N	20072855 3 COLL. SCO-25N	20072856 4 COLL. SCO-25N	20072858 5 COLL. SCO-25N	20072859 6 COLL. SCO-25N
20015889	supporting bars kit - 1 SCO-25N collector	1	-	1	-	1	-
20066873	supporting bars kit - 2 SCO-25N collectors	-	1	1	2	2	3
20008292	fixing elements for pitched roof	2	3	5	6	8	9
20029277	compensation joint kit	-	1	2	3	4	5
20014661	fittings kit for copper pipes (connection with 2,5 m² tray or Al frame collectors, and with solar cylinder)	1	1	1	1	1	1

When using flexible stainless steel pipes, the codes referring to the complete kits are not suitable. In this case you must use the composition tables, replacing the code 20014661 by the code 20001452; the rest of the codes are the same.

Undertile brackets – complete kits for SCO-25N

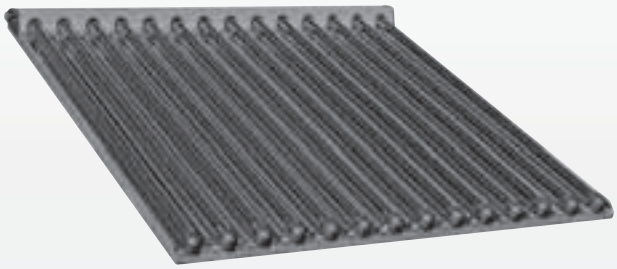
CODE	DESCRIPTION	CODE	DESCRIPTION
20072860	undertile brackets kit for pitched roof - 1 SCO-25N collector	20072864	undertile brackets kit for pitched roof - 4 SCO-25N collectors
20072861	undertile brackets kit for pitched roof - 2 SCO-25N collectors	20072865	undertile brackets kit for pitched roof - 5 SCO-25N collectors
20072863	undertile brackets kit for pitched roof - 3 SCO-25N collectors	20072866	undertile brackets kit for pitched roof - 6 SCO-25N collectors

The ending fittings, code 20014661, to be put at the inlet-outlet of collectors and of hydraulic group/cylinder for connection to copper pipes, are included in the brackets kits. For the composition of undertile brackets kits, refer to the table below.

Composition table of undertile brackets kits for pitched roof

CODE	DESCRIPTION	20072860 1 COLL. SCO-25N	20072861 2 COLL. SCO-25N	20072863 3 COLL. SCO-25N	20072864 4 COLL. SCO-25N	20072865 5 COLL. SCO-25N	20072866 6 COLL. SCO-25N
20015889	supporting bars kit - 1 SCO-25N collector	1	-	1	-	1	-
20066873	supporting bars kit - 2 SCO-25N collectors	-	1	1	2	2	3
20013464	undertile fixing elements kit for pitched roof	2	3	5	6	8	9
20029277	compensation joint kit	-	1	2	3	4	5
20014661	fittings kit for copper pipes (connection with 2,5 m^2 tray or Al frame collectors, and with solar cylinder)	1	1	1	1	1	1

When using flexible stainless steel pipes, the codes referring to the complete kits are not suitable. In this case you must use the composition tables, replacing the code 20014661 by the code 20001452; the rest of the codes are the same.



- High efficiency thanks to the high thermal insulation provided by vacuum tubes
- Highly-selective finish of the copper absorber
- Collector absorption: >94%
- Collector stagnation temperature: 268 °C
- Possibility of installing up to 6 collectors in a series
- Solar collector conforms to the EN 12975 standard
- SCV-25 is certified by the prestigious Quality Label 'Solar Keymark'

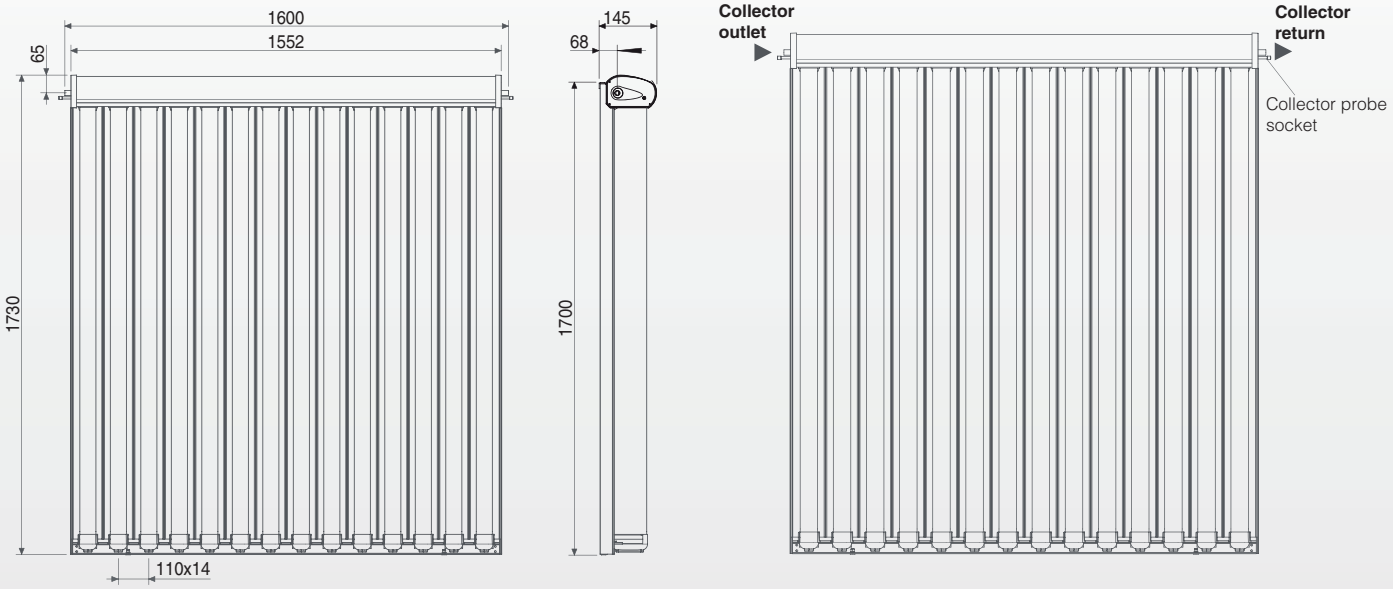
CODE	MODEL	COLLECTOR DIMENSIONS H x L (mm)	COLLECTOR TOTAL AREA (m²)
20026324	SCV-25	1.730x1.600	2,77

Note: SCV-25 evacuated tube collector must be used with inorganic glycol.

Brackets – Codes for SCV-25

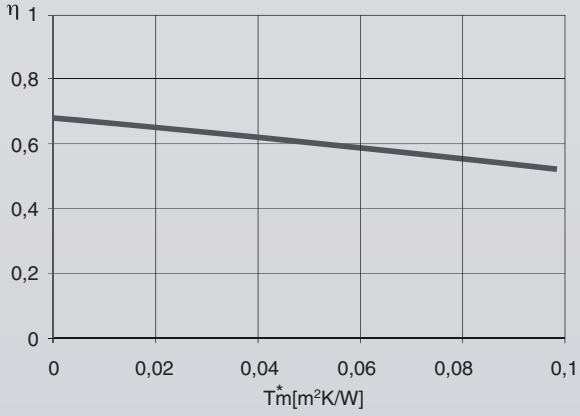
CODE	DESCRIPTION	CODE	DESCRIPTION
20026381	supporting bars kit - 1 SCV-25 collector	20013464	undertile fixing elements for pitched roof
20026383	supporting bars kit - 2 SCV-25 collectors	20008757	connection fittings kit
20026384	fixing elements kit for flat roof for SCV-25 collector	20027281	straight fittings kits ø 18 to be tightened
20008292	fixing elements kit for pitched roof	20027289	SCV-25 fittings kit for flexible stainless steel pipes

To select the brackets codes consult the proper section (pages 156-157).

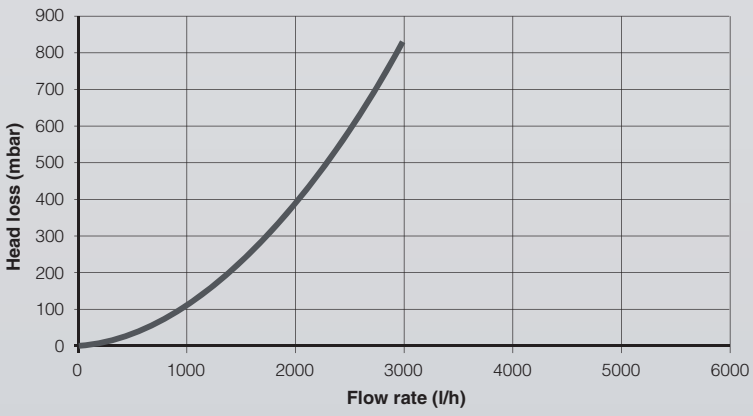


SPECIFICATIONS	EVACUATED TUBE COLLECTOR SCV-25	
Total area	2,77	m²
Exposed area	2,40	m²
Effective absorption area	2,69	m²
Connections	fittings for ø 18 pipes to be tightened	mm
Weight (empty)	52	kg
Liquid content	2,05	l
Recommended flow rate for m2 of collector	30	l/h
Absorption	⩾94	%
Emissions	<7	%
Maximum permitted pressure	10	bar
Stagnation temperature	268	°C
Maximum number of collectors to be connected in a series	6	n°

Efficiency curve referred to the exposed area



Head loss in solar collectors



Brackets for flat and pitched roof – complete kits for SCV-25 with fittings for copper pipes ø 18

CODE	DESCRIPTION	CODE	DESCRIPTION
20027335	brackets kit for flat roof 1 SCV-25 collector	20027341	brackets kit for pitched roof 1 SCV-25 collector
20027336	brackets kit for flat roof 2 SCV-25 collectors	20027342	brackets kit for pitched roof 2 SCV-25 collectors
20027337	brackets kit for flat roof 3 SCV-25 collectors	20027343	brackets kit for pitched roof 3 SCV-25 collectors
20027338	brackets kit for flat roof 4 SCV-25 collectors	20027344	brackets kit for pitched roof 4 SCV-25 collectors
20027339	brackets kit for flat roof 5 SCV-25 collectors	20027345	brackets kit for pitched roof 5 SCV-25 collectors
20027340	brackets kit for flat roof 6 SCV-25 collectors	20027346	brackets kit for pitched roof 6 SCV-25 collectors

The fittings (code 20027281) are included in the complete brackets kit. They are needed at the inlet-outlet of collectors to connect to copper pipes Ø 18 and to connect more collectors with each other in a series.
For the composition of brackets kits for flat and pitched roof refer to the tables below.

Composition table of brackets kits for flat roof

CODE	DESCRIPTION	20027335 1 COLL. SCV-25	20027336 2 COLL. SCV-25	20027337 3 COLL. SCV-25	20027338 4 COLL. SCV-25	20027339 5 COLL. SCV-25	20027340 6 COLL. SCV-25
20026381	supporting bars kit - 1 SCV-25 collector	1	-	1	-	1	-
20026383	supporting bars kit - 2 SCV-25 collectors	-	1	1	2	2	3
20026384	fixing elements for flat roof for SCV-25 collector	2	3	5	6	8	9
20008757	connection fittings kit	-	-	1	1	2	2
20027281	straight screw fittings kits ø 18	1	2	2	3	3	4

Composition table of brackets kits for pitched roof

CODE	DESCRIPTION	20027341 1 COLL. SCV-25	20027342 2 COLL. SCV-25	20027343 3 COLL. SCV-25	20027344 4 COLL. SCV-25	20027345 5 COLL. SCV-25	20027346 6 COLL. SCV-25
20026381	supporting bars kit - 1 SCV-25 collector	1	-	1	-	1	-
20026383	supporting bars kit - 2 SCV-25 collectors	-	1	1	2	2	3
20008292	fixing elements kit for pitched roof	2	3	5	6	8	9
20008757	connection fittings kit	-	-	1	1	2	2
20027281	straight screw fittings kit ø 18	1	2	2	3	3	4

Brackets for flat and pitched roof – complete kits for SCV-25 with fittings for stainless steel pipes ø 18

CODE	DESCRIPTION	CODE	DESCRIPTION
20028692	brackets kit for flat roof 1 SCV-25 collector	20028700	brackets kit for pitched roof 1 SCV-25 collector
20028693	brackets kit for flat roof 2 SCV-25 collectors	20028703	brackets kit for pitched roof 2 SCV-25 collectors
20028694	brackets kit for flat roof 3 SCV-25 collectors	20028704	brackets kit for pitched roof 3 SCV-25 collectors
20028696	brackets kit for flat roof 4 SCV-25 collectors	20028705	brackets kit for pitched roof 4 SCV-25 collectors
20028697	brackets kit for flat roof 5 SCV-25 collectors	20028706	brackets kit for pitched roof 5 SCV-25 collectors
20028699	brackets kit for flat roof 6 SCV-25 collectors	20028707	brackets kit for pitched roof 6 SCV-25 collectors

The fittings -code 20027281- are included in the complete brackets kits. They are needed to connect more collectors with each other in a series.
The fittings -code 20027289- are included in the complete brackets kits and are needed to connect SCV-25 collectors to the flexible stainless steel pipes. For the composition of the brackets kits for flat and pitched roof refer to the tables below.

Composition table of brackets kits for flat roof

CODE	DESCRIPTION	20028692 1 COLL. SCV-25	20028693 2 COLL. SCV-25	20028694 3 COLL. SCV-25	20028696 4 COLL. SCV-25	20028697 5 COLL. SCV-25	20028699 6 COLL. SCV-25
20026381	supporting bars kit - 1 SCV-25 collector	1	-	1	-	1	-
20026383	supporting bars kit - 2 SCV-25 collectors	-	1	1	2	2	3
20026384	fixing elements for flat roof for SCV-25	2	3	5	6	8	9
20008757	connection fittings kit	-	-	1	1	2	2
20027281	straight screw fittings kits ø 18	-	1	1	2	2	3
20027289	SCV-25 fittings kits for flexible stainless steel pipes	1	1	1	1	1	1

Composition table of brackets kits for pitched roof

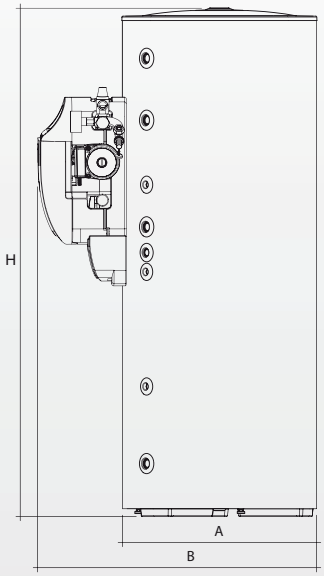
CODE	DESCRIPTION	20028700 1 COLL. SCV-25	20028703 2 COLL. SCV-25	20028704 3 COLL. SCV-25	20028705 4 COLL. SCV-25	20028706 5 COLL. SCV-25	20028707 6 COLL. SCV-25
20026381	supporting bars kit - 1 SCV-25 collector	1	-	1	-	1	-
20026383	supporting bars kit - 2 SCV-25 collectors	-	1	1	2	2	3
20008292	fixing elements kit for pitched roof	2	3	5	6	8	9
20008757	connection fittings kit	-	-	1	1	2	2
20027281	straight screw fittings kits ø 18	-	1	1	2	2	3
20027289	SCV-25 fittings kits for flexible stainless steel pipes	1	1	1	1	1	1

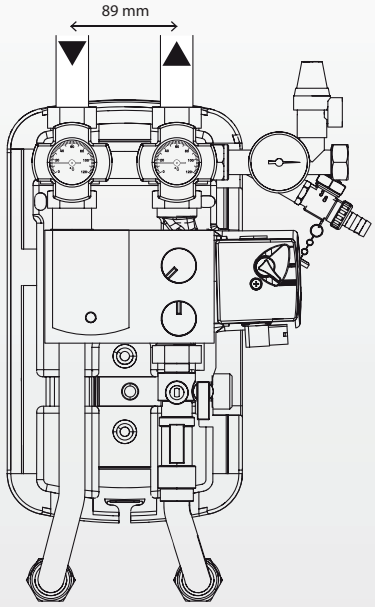
- Solar cylinders with pre-installed hydraulic group (flow and return) and SUN B solar controller
- Vertical steel enamelled (double layer) solar cylinder
- Single and double coil heat-exchanger
- High heat exchange capacity of the coils
- Sacrificial magnesium anode included with the standard equipment
- CFC-free polyurethane direct foaming insulation method

CODE	MODEL	DIMENSIONS H x Ø (mm)	CYLINDER CAPACITY (litres)
20072888	IDRA MS 150 FI	1.055x605	150 single coil
20026189	IDRA DS 200 FI	1.330x605	200 double coil
20026192	IDRA DS 300 FI	1.840x605	300 double coil
20026194	IDRA DS 430 FI	1.630x755	430 double coil
20026196	IDRA DS 550 FI	1.980x755	550 double coil

Specific accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20015431	single-phase electrical resistance 1,5 kW, 1” 1/2	20020707	three-phase electrical resistance 3,8 kW, 1” 1/2
4383271	single-phase electrical resistance 2,2 kW, 1” 1/2	20001492	thermostatic mixing valve 1” with 3/4” adapter
4383272	single-phase electrical resistance 3 kW, 1” 1/2	1220599	socket probe for boilers

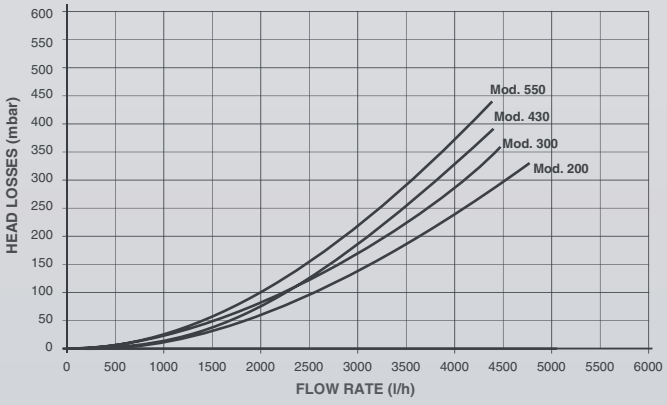




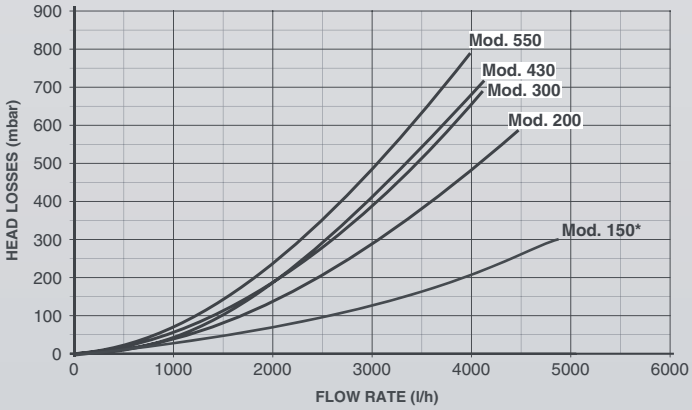
SPECIFICATIONS	IDRA MS 150 FI	IDRA DS 200 FI	IDRA DS 300 FI	IDRA DS 430 FI	IDRA DS 550 FI	
Solar cylinder type	Enamelled (double layer)					
Cylinder lay-out	Vertical					
Heat-exchangers lay-out	Vertical					
Cylinder capacity	150	203	298	433	546	l
Cylinder diameter with insulation without hydraulic group (A)	605			755		mm
Cylinder diameter with hydraulic group (B)	825			975		mm
Height with insulation (H)	1055	1330	1840	1630	1980	mm
Insulation thickness	50					mm
Magnesium anode diameter/length	33/450			33/520		mm
Flange diameter	181					mm
Probe sockets diameter/length	16/175					mm
Electrical resistor (not provided) socket	1"1/2 F					Ø
Lower coil water content	4,8	5,7	9,3	11,0	12,8	l
Upper coil water content	NP	4,1	5,5	7,1	8,0	l
Lower coil exchange surface	0,78	0,94	1,53	1,80	2,10	m^2
Upper coil exchange surface	NP	0,68	0,91	1,17	1,31	m^2
Heat loss	2,4	2,79	2,24	2,18	2,74	kWh/24h
Lower coil absorbed power (**)	23,8*	29,5	46,6	52	62	kW
Upper coil absorbed power (**)	NP	20,7	30,6	36,5	43	kW
DHW production – lower coil (**)	585	725	1145	1278	1523	l/h
DHW production – upper coil (**)	NP	508	753	897	1056	l/h
Cylinder maximum working pressure	10					bar
Coils maximum working pressure	10					bar
Maximum working temperature	99					°C
Net weight with insulation	72	105	130	162	175	kg

(*) Technical data to be confirmed
(**) With ΔT= 35°C and primary temperature = 80°C.
Performance measured with loading pump 3000 l/h and using correctly sized heat generators.

Head losses
UPPER COIL IDRA DS FI



Head losses
LOWER COIL IDRA MS/DS FI



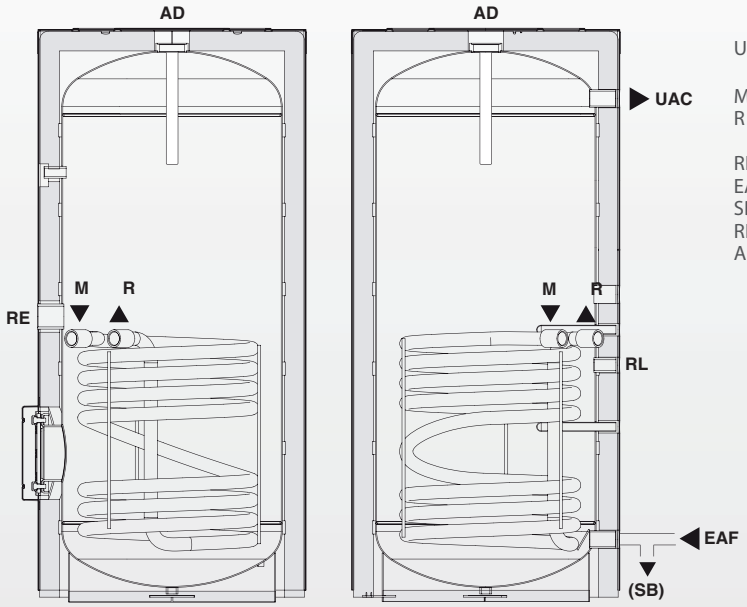
* Technical data to be confirmed

- Enamelled (double layer) steel solar cylinder (150 to 550-litres models)
- Single coil heat-exchanger
- High heat exchange capacity of the coil
- Sacrificial magnesium anode included with the standard equipment

CODE	MODEL	DIMENSIONS H x Ø (mm)	CYLINDER CAPACITY (litres)
20072887	IDRA MS 150	1.055x605	150 single coil
20015324	IDRA MS 200	1.330x605	200 single coil
20015328	IDRA MS 300	1.840x605	300 single coil
20015333	IDRA MS 430	1.630x755	430 single coil
20015340	IDRA MS 550	1.980x755	550 single coil

Specific accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20009244	control box SUN B with probes	20001492	thermostatic mixing valve 1” with 3/4” adapter
20009246	control box SUN C with probes	20026215	hydraulic group flow/return (residual head 6,5 m)
20026145	hydraulic group return (residual head 4,5 m)	20009196	hydraulic group flow/return (residual head 11 m)
1220599	socket probe for boilers		



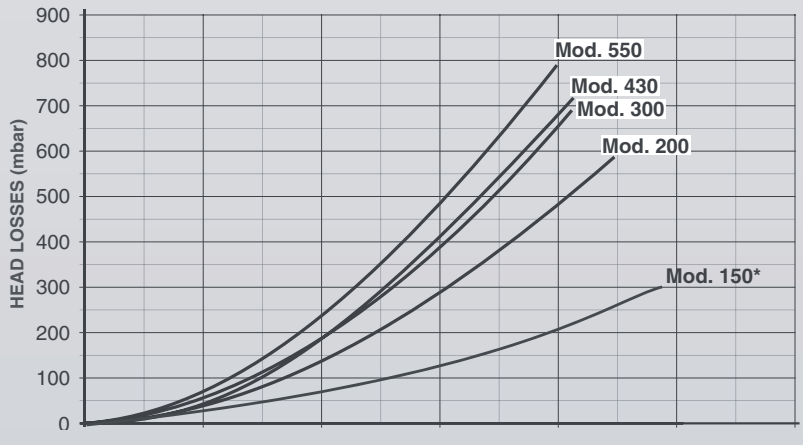
UAC - DHW outlet

M - Flow
R - Return
Solar

RL - DHW recirculation
EAF - Domestic cold water inlet
SB - Cylinder drain
RE - Electrical probe socket (not provided)
AD - Magnesium anode

SPECIFICATIONS	IDRA MS 150	IDRA MS 200	IDRA MS 300	IDRA MS 430	IDRA MS 550	
Solar cylinder type	Enamelled (double layer) steel cylinder					
Cylinder lay-out	Vertical					
Heat-exchanger lay-out	Vertical					
Cylinder capacity	150	208	305	442	556	l
Cylinder diameter with insulation	605	605		755		mm
Height with insulation	1055	1330	1840	1630	1980	mm
Insulation thickness	50					mm
Magnesium anode diameter/length	33/450			33/520		mm
Flange diameter	118					mm
Probes sockets diameter/length	16/175					mm
Electrical resistor (not provided) socket	1" 1/2F					Ø
Coil water content	4,8	5,7	9,3	11	12,8	l
Coil exchange surface	0,78	0,94	1,53	1,8	2,1	m^2
Coil absorbed power (**)	23,8*	29,5	46,6	52	62	kW
DHW production - coil (**)	585	725	1145	1278	1523	l/h
Cylinder maximum working pressure	10					bar
Coil maximum working pressure	10					bar
Maximum working temperature	99					°C
Net weight with insulation	62	72	98	130	146	kg

* Technical data to be confirmed
(**) With ΔT = 35 °C and primary temperature = 80 °C
Performance measured with loading pump 3000 l/h and using correctly sized heat generators.



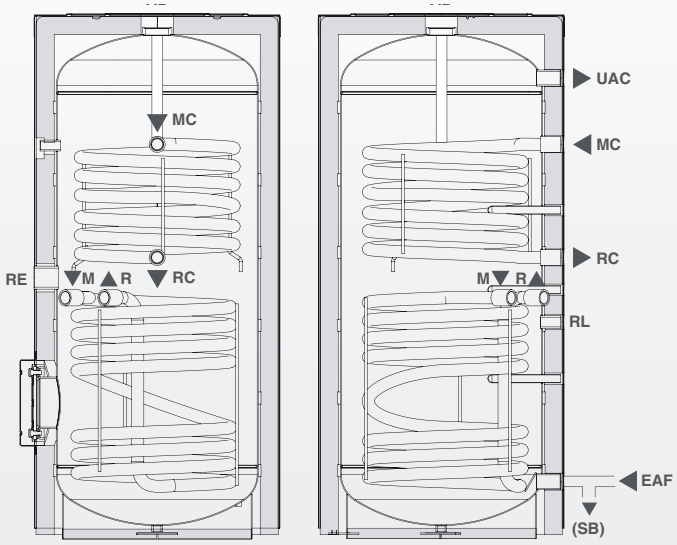
* Technical data to be confirmed

- Enamelled (double layer) steel solar cylinder
- Double coil heat-exchanger
- High heat exchange capacity of the coils
- Sacrificial magnesium anode included with the standard equipment
- CFC-free polyurethane direct foaming insulation method (200 to 550-litres models)

CODE	MODEL	DIMENSIONS H x Ø (mm)	CYLINDER CAPACITY (litres)
20001224	IDRA DS 200	1.330x605	200 double coil
20001225	IDRA DS 300	1.840x605	300 double coil
20001226	IDRA DS 430	1.630x755	430 double coil
20001227	IDRA DS 550	1.980x755	550 double coil
20009144	IDRA DS 750	1.870x1.000	750 double coil
20009145	IDRA DS 1000	2.195x1.000	1000 double coil

Specific accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20009244	control box SUN B with probes	20027382	connection bends kit for hydraulic group (residual head 6,5m) and solar cylinder
20009246	control box SUN C with probes	20015431	single-phase electrical resistance 1,5 kW, 1 1/2
20026145	hydraulic group return (residual head 4,5m)	20009438	connection bends kit for hydraulic group (residual head 11m) and solar cylinder
1220599	socket probe for boilers	4383271	single-phase electrical resistance 2,2 kW, 1” 1/2
20001492	thermostatic mixing valve 1” with 3/4” adapter	4383272	single-phase electrical resistance 3 kW, 1” 1/2
20026215	hydraulic group flow/return (residual head 6,5m)	20020707	three-phase electrical resistance 3,8 kW, 1” 1/2
20009196	hydraulic group flow/return (residual head 11m)		



UAC - DHW outlet

MC - Flow
RC - Return
Boiler

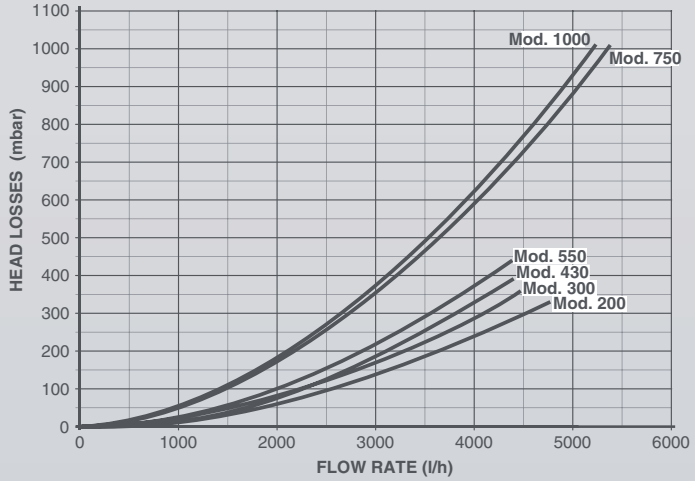
M - Flow
R - Return
Solar

RL - DHW recirculation
EAF - Domestic cold water inlet
SB - Cylinder drain
RE - Electrical probe socket (not provided)
AD - Magnesium anode

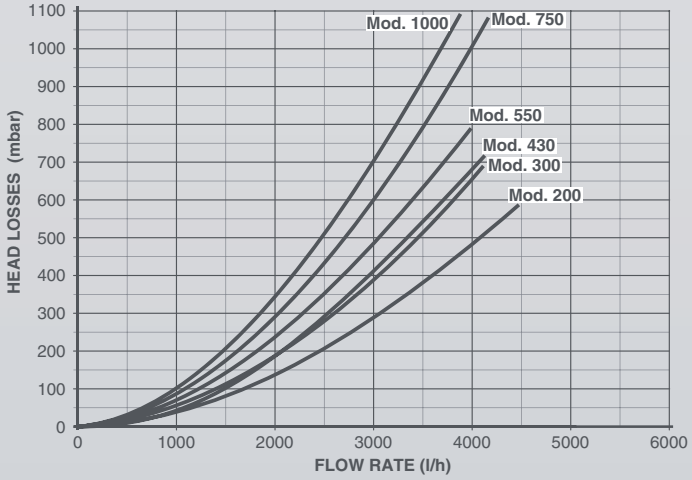
SPECIFICATIONS	IDRA DS 200	IDRA DS 300	IDRA DS 430	IDRA DS 550	IDRA DS 750	IDRA DS 1000	
Solar cylinder type	Enamelled (double layer) steel cylinder						
Cylinder lay-out	Vertical						
Heat-exchanger lay-out	Vertical						
Cylinder capacity	203	298	433	546	716	875	l
Cylinder diameter with insulation	605		755		1000		mm
Cylinder diameter without insulation	-		-		79 0		mm
Height with insulation	1330	1840	1630	1980	1870	2195	mm
Insulation thickness	50				100		mm
First magnesium anode diameter/length	33/450		33/520		33/450		mm
Second magnesium anode diameter/length	-				33/450		mm
Flange diameter	118						mm
Probes sockets diameter/length	16/175				17/210		mm
Electrical resistor (not provided) socket	1"1/2 F						Ø
Lower coil water content	5,7	9,3	11,0	12,8	16,0	19,0	l
Upper coil water content	4,1	5,5	7,1	8,0	10,2	10,2	l
Lower coil exchange surface	0,94	1,53	1,80	2,10	2,80	3,16	m^2
Upper coil exchange surface	0,68	0,91	1,17	1,31	1,70		m^2
Heat loss	2,79	2,24	2,18	2,74	2,50	2,50	kWh/24h
Upper coil absorbed power (*)	20,7	30,6	36,5	43	48	58	kW
DHW production – upper coil (*)	508	753	897	1056	1165	1326	l/h
Cylinder maximum working pressure	10				7		bar
Coil maximum working pressure	10						bar
Maximum working temperature	99						°C
Net weight with insulation	92	118	150	166	221	258	kg

(*) With ΔT= 35°C and primary temperature = 80°C.
Performance measured with loading pump 3000 l/h and using correctly sized heat generators.

Head losses
UPPER COIL IDRA DS



Head losses
LOWER COIL IDRA DS



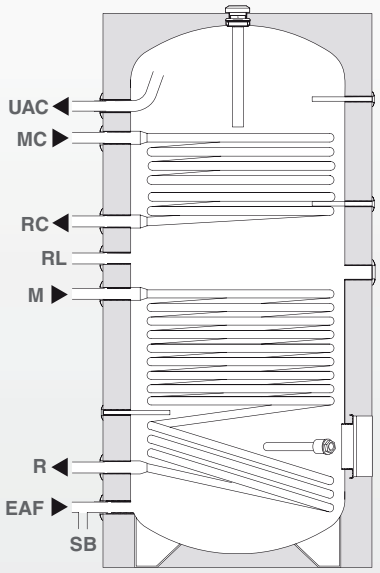
- Vertical steel solar cylinder
- Maximum working temperature 99 °C
- Double coil heat-exchanger
- High heat exchange capacity of the coils
- Double magnesium anode included with the standard equipment

CODE	MODEL	DIMENSIONS H x Ø (mm)	CYLINDER CAPACITY (litres)
20052790	IDRA N DS 1500	2.120x1.200	1449 double coil
20052791	IDRA N DS 2000	2.405x1.300	2054 double coil

Specific accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20009244	control box SUN B with probes	20026215	hydraulic group flow/return (residual head 6,5m)
20009246	control box SUN C with probes	20009196	hydraulic group flow/return (residual head 11m)
20001492	thermostatic mixing valve 1” with 3/4” adapter	20055206	electrical anode kit 1/2” (*)
20015431	single-phase electrical resistance 1,5 kW, 1” 1/2	4383272	single-phase electrical resistance 3 kW, 1” 1/2
4383271	single-phase electrical resistance 2,2 kW, 1” 1/2	20020707	three-phase electrical resistance 3,8 kW, 1” 1/2

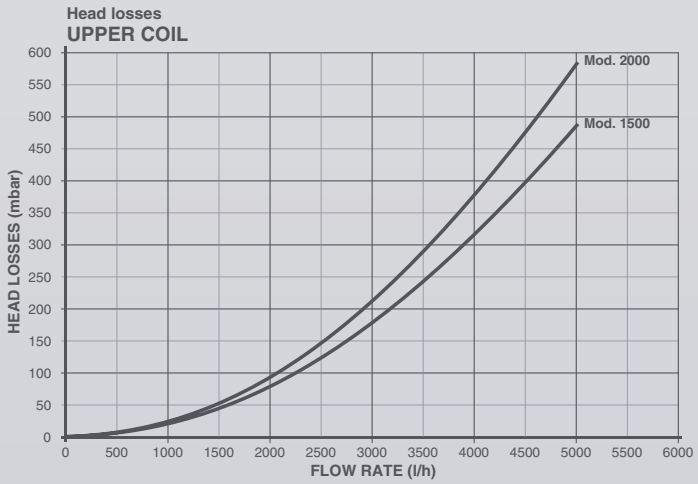
(*) To connect the electrical anode kit, provide a reduction (not supplied as standard) from 1” ¼ to ½”.

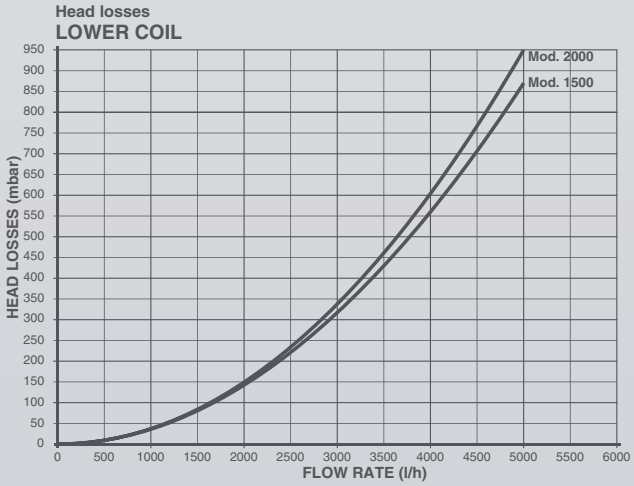


UAC - DHW outlet
MC - Flow
RC - Return
Boiler
M - Flow
R - Return
Solar
RL - DHW recirculation
EAF - Domestic cold water inlet
SB - Cylinder drain

SPECIFICATIONS	IDRA N DS 1500	IDRA N DS 2000	
Solar cylinder type	Enamelled		
Cylinder lay-out	Vertical		
Heat-exchangers lay-out	Vertical		
Cylinder capacity	1449	2054	l
Cylinder diameter with insulation	1200	1300	mm
Cylinder diameter without insulat	1000	1100	mm
Height with insulation	2185	2470	mm
Insulation thickness	100		mm
First magnesium anode (diameter/length)	32x700		mm
Second magnesium anode (diameter/length)	32x400		mm
Flange diameter	290/220		mm
Probes sockets diameter	8	8	mm
Electrical resistor (not provided) socket	1"1/2	1"1/2	Ø
Lower coil water content	19,4	28,1	l
Upper coil water content	10,4	16,9	l
Lower coil exchange surface	3,4	4,6	m^2
Upper coil exchange surface	1,8	2,8	m^2
Lower coil absorbed power (*)	88	120	kW
Upper coil absorbed power (*)	47	73	kW
DHW production – lower coil (*)	2200	2900	l/h
DHW production – upper coil (*)	1200	1800	l/h
Necessary capacity heat exchanger – lower coil (*)	3,8	5,2	m^3/h
Necessary capacity heat exchanger – upper coil (*)	2,0	3,1	m^3/h
Cylinder maximum working pressure	8	8	bar
Coil maximum working pressure	6	6	bar
Maximum working temperature	99	99	°C
Heat loss (**)	3,93	4,77	kWh/24h
Net weight with insulation	330	544	kg

(*) According to DIN 4708, to get domestic hot water with ΔT 20°C (80°/60°C) on the heat-exchanger, please observe the values showed in the datasheet concerning absorbed power and necessary capacity heat-exchanger
(**) With room temperature 20 °C and tank medium temperature 60 °C.





- Vertical steel solar cylinder
- **Maximum working temperature 99 °C**
- Coils kit with high heat exchange capacity (accessories)
- Double magnesium anode included with the standard equipment

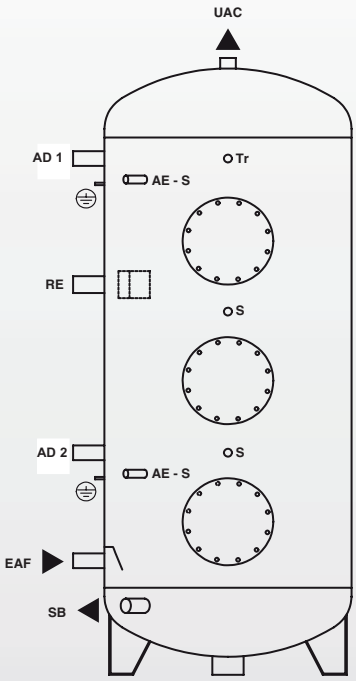
CODE	MODEL	DIMENSIONS H x Ø (mm)	CYLINDER CAPACITY (litres)
20052793	IDRA PLUS DS 1000	2.095x990	888 three flanges
20052794	IDRA PLUS DS 1500	2.155x1.200	1449 three flanges
20052795	IDRA PLUS DS 2000	2.470x1.300	2054 three flanges
20052796	IDRA PLUS DS 3000	2.730x1.450	2959 three flanges

Cylinders are supplied with flanges but without coils. To select the right coils consult the proper section “solar thermal accessories” (pages 182-183).

Specific accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20055205	tin coated copper coil kit 2,63 m^2	20009246	control box SUN C with probes
4383089	tin coated copper coil kit 4,54 m^2	20001492	thermostatic mixing valve 1” with 3/4” adapter
4383087	tin coated copper coil kit 6,34 m^2 (**)	20026215	hydraulic group flow/return (residual head 6,5m)
20055206	electrical anode kit 1/2”	20009196	hydraulic group flow/return (residual head 11m)
20009244	control box SUN B with probes		

** not suitable for IDRA PLUS DS 1000.



UAC - DHW outlet
EAF - Domestic cold water inlet
SB - Storage cylinder drain
AE - Electronical anode (optional)
RE - Electrical probe socket (not provided)
S - Probe
Tr - Thermometer
AD1 - Magnesium anode
AD2 - Magnesium anode

SPECIFICATIONS	IDRA PLUS DS 1000	IDRA PLUS DS 1500	IDRA PLUS DS 2000	IDRA PLUS DS 3000	
Solar cylinder type	Enamelled				
Cylinder lay-out	Vertical				
Heat-exchangers lay-out	Horizontal				
Cylinder capacity	888	1449	2054	2959	l
Cylinder diameter with insulation	990	1200	1300	1450	mm
Cylinder diameter without insulation	790	1000	1100	1250	mm
Height with insulation	2095	2155	2470	2730	mm
Insulation thickness	100				mm
First magnesium anode (diameter/length)	32x700				mm
Second magnesium anode (diameter/length)	32x700				mm
Flange diameter	290/220				mm
Probes sockets diameter	1/2"				Ø
Electrical resistance (not provided) socket	1"1/2				Ø
Cylinder maximum working pressure	10	8	8	8	bar
Coil maximum working pressure	6				bar
Coil maximum working temperature	99				°C
Heat loss (*)	3,01	3,89	4,77	5,88	Kwh/24 h
Net weight with insulation	175	283	443	543	kg

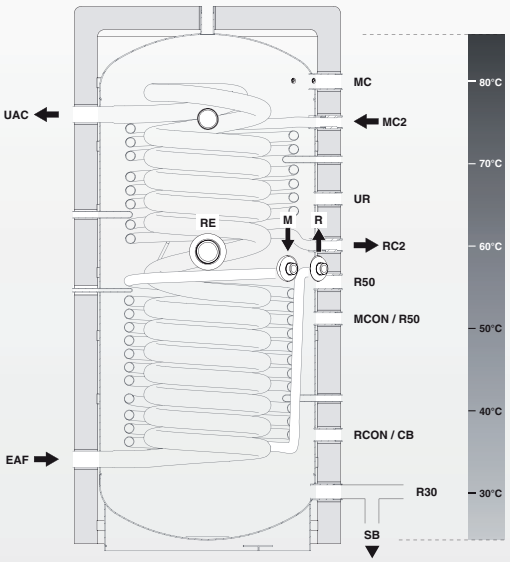
(*) With cylinder medium temperature = 60 °C and room temperature = 20 °C

- Triple coil buffer tank
- Ideal for heating and DHW production
- DHW coil in AISI 316L stainless steel
- Suitable for combination with boilers, heat pumps, solar thermal and other energy sources

CODE	MODEL	DIMENSIONS H x Ø (mm)	BUFFER TANK CAPACITY (litres)
20051862	HYBRID STOR 430	1.650x810	407
20051863	HYBRID STOR 550	2.000x810	520
20051864	HYBRID STOR 750	1.855x1.000	732
20051866	HYBRID STOR 1000	2.180x1.000	898

Specific accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20015431	single-phase electrical resistance 1,5 kW, 1” 1/2	4383272	single-phase electrical resistance 3 kW, 1” 1/2
4383271	single-phase electrical resistance 2,2 kW, 1” 1/2	20020707	three-phase electrical resistance 3,8 kW, 1” 1/2

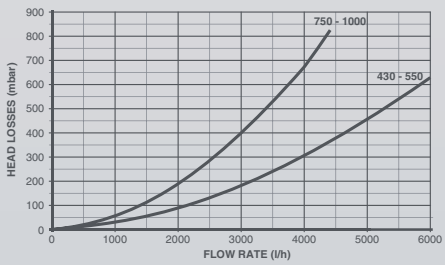


UAC - DHW outlet
EAF - Domestic cold water inlet
RE - Socket for electrical heater
M - Solar collector outlet
R - Solar collector return
MC - Boiler flow
MC2 - Boiler 2 flow
UR - CH outlet
RC2 - Boiler 2 return
R50 - 50 °C water return
MCON - Flow condensing boiler
RCON - Return condensing boiler
CB - Buffer tank filling
SB - Buffer tank drain
R30 - 30 °C water return

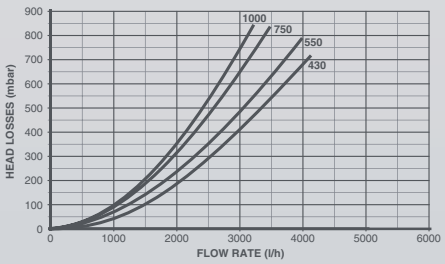
	HYBRID STOR				
SPECIFICATIONS	**430**	**550**	**750**	**1000**	
Buffer tank type	Not enamelled				
Buffer tank lay-out	Vertical				
Heat-exchangers lay-out	Vertical				
Primary coils	Smooth steel pipe				
DHW coil	Corrugated pipe in AISI 316 L stainless steel				
Buffer tank capacity	407	520	732	898	l
Diameter with insulation	810	810	1000	1000	mm
Height	1650	2000	1855	2180	mm
Insulation thickness	70		100		mm
Probes sockets diameter (boiler and solar system)	16				Ø mm
Thermal probe socket diameter	8				Ø mm
Thermometer socket diameter	1/2"M				Ø
Upper primary coil water content	7,1	8,0	10,0	10,0	l
Lower primary coil water content	11,0	12,8	17,4	19,8	l
DHW coil water content	23,6	23,6	30,4	30,4	l
Upper primary coil exchange surface	1,17	1,31	1,72	1,72	m^2
Lower primary coil exchange surface	1,80	2,10	2,90	3,34	m^2
DHW coil exchange surface	4,5	4,5	5,8	5,8	m^2
Upper primary coil absorbed power (*)	25,0	26,0	30,0	30,0	kW
Lower primary coil absorbed power (*)	52,0	62,0	76,0	92,0	kW
Upper primary coil DHW production (*)	620		750		l/h
Buffer tank maximum working pressure	3		5		bar
Buffer tank maximum working temperature	99				°C
Primary coils maximum working pressure	10				bar
DHW coil maximum working pressure	6				bar
Primary coils maximum working temperature	99				°C
DHW coil maximum working temperature	99				°C
Recommended surface area of solar panel	6	8	12	14	m^2
Net weight	168	195	239	269	kg
Gross weight (package included)	189	215,5	254	284,4	kg

(*) With ΔT= 35°C and primary temperature = 80 °C
Performance obtained with loading pump set for the maximum flow to the primary circuit and using correctly sized generators.

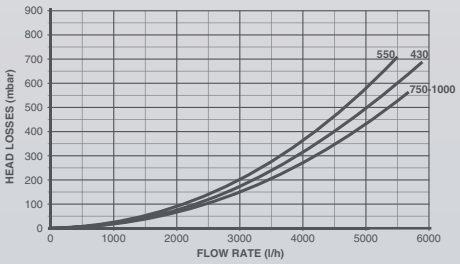
Head losses
UPPER COIL HYBRID STOR



Head losses
LOWER COIL HYBRID STOR



Head losses
DHW COIL HYBRID STOR

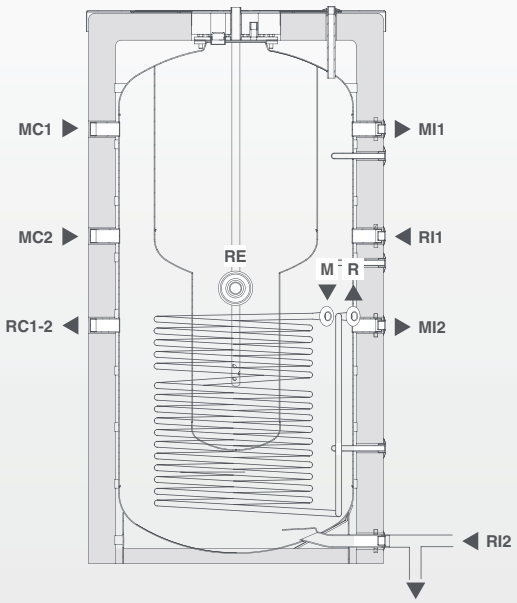


- Combined storage tank for the production/storage of DHW and for heating supplement (tank-in-tank technology)
- Heat exchange solar coil as standard equipment
- Seven fittings at different heights for the use of different types of heat generators for the best stratification
- Sacrificial magnesium anode included with the standard equipment

CODE	MODEL	DIMENSIONS H x Ø (mm)	STORAGE TANK CAPACITY	DHW CAPACITY (litres)
20014351	STOR C 800	1.870x990	560 with coil	240
20014352	STOR C 1000	2.196x990	695 with coil	285

Specific accessories

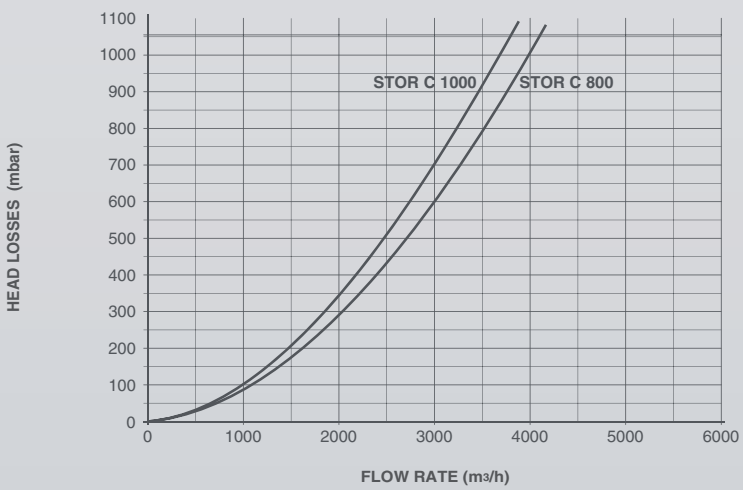
CODE	DESCRIPTION	CODE	DESCRIPTION
20009244	control box SUN B with probes	20026215	hydraulic group flow/return (residual head 6,5m)
20009246	control box SUN C with probes	20009196	hydraulic group flow/return (residual head 11m)
20001492	thermostatic mixing valve 1” with 3/4” adapter		



EAF - Domestic cold water inlet
RL - DHW recirculation
UAC - DHW outlet
MC1 - Boiler 1 flow (high temperature)
MC2 - Boiler 2 flow (low temperature)
RC1-2 - Boiler 1-2 return
RI2/SB - System 2 return low temperature) / storage tank drain
MI2 - System 2 flow (low temperature)
R - Collector return
M - Collector flow
RE - Socket for electrical heater
RI1 - System 1 return (high temperature)
MI1 - System 1 flow (high temperature)

SPECIFICATIONS		MODEL		
		STOR C 800	STOR C 1000	
Solar cylinder type		enamelled		
Storage tank type		not enamelled		
Cylinder lay-out		vertical		
Heat-exchanger lay-out		vertical		
Storage tank capacity		560	695	l
Cylinder capacity		240	285	l
Diameter with insulation		990		mm
Height		1870	2196	mm
Insulation thickness		90		mm
Magnesium anode		32x460		Øxmm
Flange diameter (external/internal)		280/205		mm
Probes sockets diameter		1/2"		Ø
Coil water content		16	19	l
Coil exchange surface		2,80	3,16	m²
Coil absorbed power (*)		76	92	kW
DHW production (*)		800	1000	l/h
DHW flow rate in 10' with average ΔT 35°C and primary storage at	80°C	515	550	l
	70°C	500	515	l
	60°C	415	450	l
Cylinder maximum working pressure		6		bar
Cylinder maximum working temperature		99		°C
Storage tank maximum working pressure		3		bar
Storage tank maximum working temperature		99		°C
Coil maximum working pressure		6		bar
Coil maximum working temperature		99		°C
Heat loss		4,68	5,21	kWh/24h
Net weight		210	265	kg
Gross weight (package included)		225	281	kg

(*) With ΔT= 35°C and primary temperature = 80-60 °C.
Performance obtained using a correctly sized generator, set for a 4m3/h flow rate for the model STOR C 800 and for a 5m3/h flow rate for the model STOR C 1000.



- Designed for forced circulation solar systems to supplement the heating system
- STOR M and STOR tanks are not suitable for DHW storage
- Production of DHW through an additional external heat exchange module “ACS” (see pages 178-181)
- Eight fittings at different heights for the use of different types of heat generators for the best stratification
- STOR M models: supplied with heat exchange solar coil and insulation as standard equipment
- STOR models: through a standard flange it is possible the insertion of an additional heat exchange solar coil, available as accessory
- Buffer tank and insulation are delivered in separate packages for STOR models
- Standard flange on STOR versions to allow the insertion of an additional heat-exchanger

N.B. This picture only represents STOR M. For STOR models see drawing at the following page

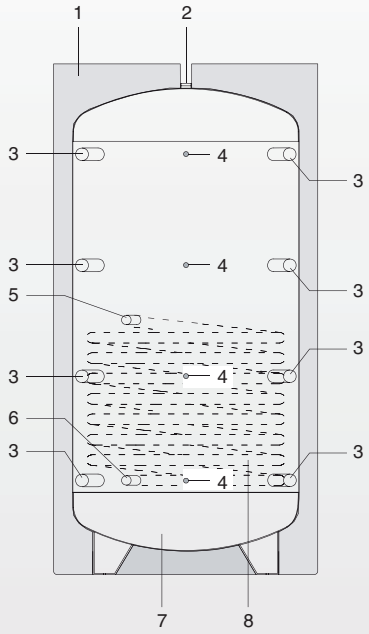
CODE	MODEL	DIMENSIONS H x Ø (mm)	BUFFER TANK CAPACITY (litres)
20055207	STOR 300 M	1.635x700	283 with coil
20055208	STOR 500 M	1.775x850	489 with coil
20001406	STOR 1000 M	2.190x990	1000 with coil
20001407	STOR 1500 M	2.165x1.200	1449 with coil
20001408	STOR 2000	2.480x1.300	2054
20001409	STOR 3000	2.720x1.450	2960
20001410	STOR 5000	2.870x1.800	5055

Specific accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20055205	tin coated copper coil kit 2,63 m^2 (*)	4383087	tin coated copper coil kit 6,34 m^2 (*)
4383089	tin coated copper coil kit 4,54 m^2 (*)		

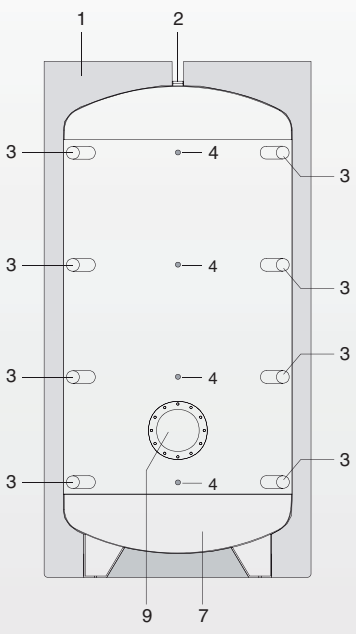
* To use only with STOR 2000, STOR 3000 and STOR 5000.

STOR M



1 - Soft insulation (100 mm thick) in CFC-free polyurethane
2 - Vent/flow connection (Ø1"1/4F)
3 - Flow/return connection (Ø 1"1/2F)
4 - Probes sockets (Ø 8 mm)
5 - Solar collector flow connection (Ø 1"F)
6 - Solar collector return connection (Ø 1"F)
7 - Tank
8 - Coil
9 - Inspection flange

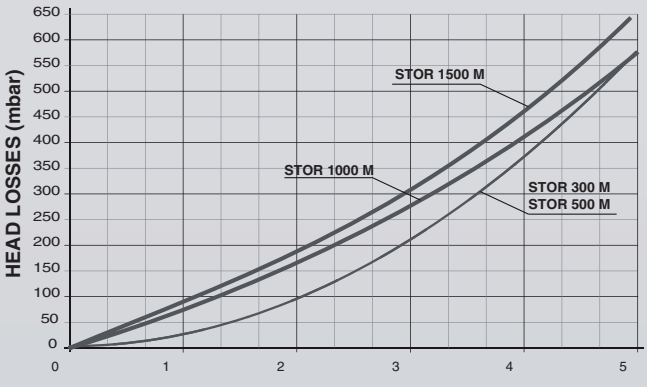
STOR



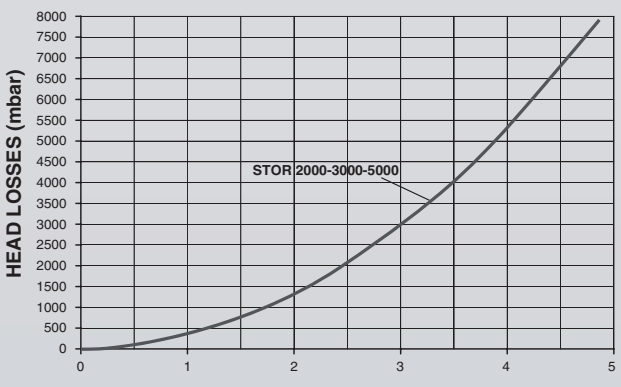
SPECIFICATIONS	STOR 300 M	STOR 500 M	STOR 1000 M	STOR 1500 M	STOR 2000	STOR 3000	STOR 5000	
Buffer tank type	Not enamelled							
Buffer tank lay-out	Vertical							
Coil lay-out	Vertical	Vertical	Vertical	Vertical	-	-	-	
Buffer tank capacity	283	489	1000	1449	2054	2960	5055	l
External diameter with insulation	700	850	990	1200	1300	1450	1800	mm
Height with insulation	1635	1775	2190	2165	2480	2720	2870	mm
Insulation thickness	100							mm
Flange diameter (external/internal)	-	-	-	-	290/220	290/220	290/220	mm
Probes sockets diameter	8							mm
Coil water content	10,4	10,4	14,6	21,6	-	-	-	l
Coil heat exchange surface	1,8	1,8	2,6	3,8	-	-	-	m^2
Coil absorbed power (*)	43	45	68	99	-	-	-	kW
Heating hot water production (*)	1100	1100	1700	2400	-	-	-	l/h
Necessary capacity heat exchanger (*)	1,9	1,9	2,9	4,2	4,4	5,6	6,0	m^3/h
Tank maximum working pressure	3							bar
Tank maximum working temperature	99							°C
Coil maximum working pressure	6	6	6	6	-	-		bar
Coil maximum working temperature	99							°C
Heat loss (**)	1,64	2,20	2,97	3,90	4,78	5,88	7,98	kWh/24h
Net weight with insulation	115	140	225	285	345	415	570	kg

(*) To get heating hot water with ΔT 20°C (80°/60°C) on the heat-exchanger, please observe the values showed in the datasheet concerning absorbed power and necessary capacity heat-exchanger
(**) With room temperature 20 °C and tank medium temperature 60 °C.

STOR M HEAD LOSSES



HEAD LOSSES OF STOR EXCHANGE COIL (ACCESSORY)



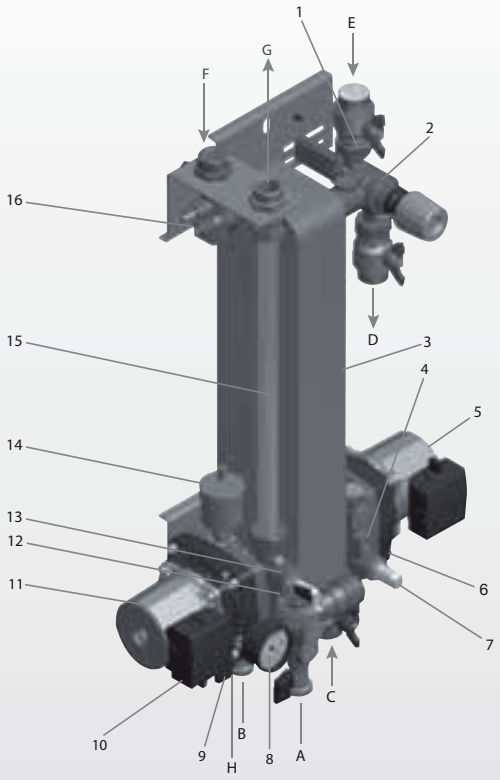
STS 50 N

- Heat-exchange group solar-side
- Effective stratification
- Suitable for medium-sized installations
- Built-in circulators as standard
- Built-in plates heat-exchanger as standard
- Built-in solar control-box as standard

Solar side heat-exchange module

CODE	MODEL	DIMENSIONS H x L x D (mm)	MANAGED COLLECTORS SURFACE (m^2)
20048701	STS 50 N	930x496x325	50

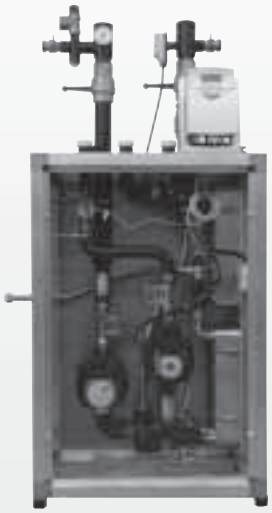
STS 50 N



1 - Flow temperature probe to buffer
2 - Motorized mixing valve
3 - Plate heat-exchanger
4 - Buffer circuit adjustment valve
5 - Buffer circuit pump
6 - Return temperature probe from buffer
7 - Buffer circuit flow meter
8 - Pressure gauge
9 - Solar circuit adjustment valve
10 - Expansion vessel connection
11 - Solar circuit pump
12 - Solar return temperature probe
13 - Solar circuit flow meter
14 - Solar circuit air vent valve
15 - Solar return pipe
16 - Solar circuit temperature probe

SPECIFICATIONS		STS 50 N
Dimensions (hxlxd)	mm	930x496x325
Insulation		EPP black RG 45 g/l
Solar piping	mm	ø22*0,8, copper
Buffer piping	mm	ø26,2*0,18, steel
Weight	kg	25
Connections		
A	Ø	Filling tap 3/8" external thread
B	Ø	Drain tap 3/8" external thread
C	Ø	Return from buffer 1" external thread
D	Ø	Flow to buffer (warm) 1" external thread
E	Ø	Flow to buffer (hot) 1" external thread
F	Ø	From solar 1" external thread
G	Ø	To solar 1" external thread
H	Ø	Expansion vessel ¾" external thread
Maximum working pressures		
Solar circuit	bar	6
Buffer circuit	bar	3
Solar pump		
Nominal voltage	V / Hz	230 / 50
Nominal power	W	86
Max pumping height	m	6
Buffer pump		
Nominal voltage	V / Hz	230 / 50
Nominal power	W	63
Max pumping height	m	4
Plate heat exchanger		
Thermal rate	kW	26
Solar side ΔT	°C	60 / 35
Buffer side ΔT	°C	29 / 54
Flow rate of	kg / h	970

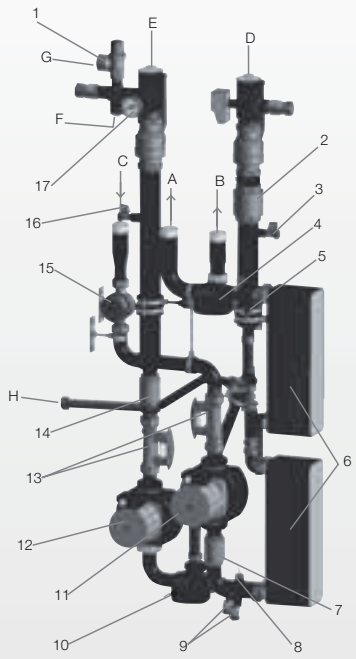
STS 120 N / STS 200 N



- Heat-exchange group solar-side
- Effective stratification
- Suitable for large-sized installations
- Built-in circulators as standard
- Built-in plates heat-exchanger as standard
- Built-in solar control-box as standard

Solar side heat-exchange modules

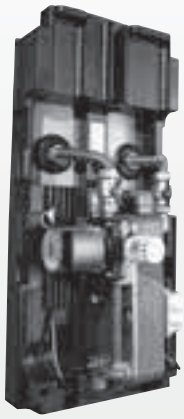
CODE	MODEL	DIMENSIONS H x L x D (mm)	MANAGED COLLECTORS SURFACE (m^2)
20048702	STS 120 N	1.710x825x415	120
20048704	STS 200 N	1.710x825x415	200



1 - Safety valve
2 - Non-return valve
3 - Filling and drain valve
4 - Stratification valve
5 - Buffer filling and heat meter probe
6 - Heat-exchanger
7 - Non-return valve
8 - Heat meter probe
9 - Filling and drain valve
10 - By-pass valve
11 - Buffer filling pump
12 - Solar pump
13 - Flow rate meter
14 - Non-return valve
15 - Flow rate meter for heat volume metering
16 - Filling and drain valve
17 - Pressure gauge

SPECIFICATIONS		STS 120 N	STS 200 N
Dimensions (hxlxd)	mm	1710x825x415	1710x825x415
Insulation		Galvanized steel, 20mm insulation	Galvanized steel, 20mm insulation
Solar piping		2", steel	2", steel
Buffer piping		1" 1/2, steel	1" 1/2, steel
Weight	kg	85	95
Connections			
C	Ø	Return from buffer 1" ½ inner thread	
B	Ø	Flow to buffer (warm) 1" ½ inner thread	
A	Ø	Flow to buffer (hot) 1" ½ inner thread	
D	Ø	From solar 2" inner thread	
E	Ø	To solar 2" inner thread	
F	Ø	Expansion vessel 1" inner thread	
G	Ø	Safety relief valve 1" ½ inner thread	
H	Ø	Safety relief valve # 2 1" flat-sealing	
Maximum working pressures			
Solar circuit	bar	6	6
Buffer circuit	bar	3	3
Solar pump			
Nominal voltage	V / Hz	230 / 50	230 / 50
Nominal power	W	400	400
Max absorbed current	A	2,02	2,02
Max pumping height	kPa	113	113
Buffer pump			
Nominal voltage	V / Hz	230 / 50	230 / 50
Nominal power	W	195	195
Max absorbed current	A	0,95	0,95
Max pumping height	kPa	68	68
Plate heat exchanger			
Thermal rate	kW	60	100
Solar side ΔT	°C	60 / 35	60 / 35
Buffer side ΔT	°C	29 / 54	29 / 54
Flow rates (prim-sec; 6K)	kg / s	0,663 / 0,575	1,106 / 0,958
Head loss (prim-sec; 6K)	kPa	26	22
Working temperatures			
Minimum working temperature	°C	2	2
Maximum working temperature	°C	95	95

ACS 30 N



- Heat-exchange group for the instantaneous production of DHW
- Low return temperature on primary circuit
- Built-in circulator as standard
- Built-in plates heat-exchanger as standard
- Built-in thermostatic mixing valve as standard
- Suitable for the production of DHW in small-sized installations
- Possibility to install ACS 30 in cascade

Heat-exchange modules for DHW production

CODE	MODEL	DIMENSIONS H x L x D (mm)	DHW PRODUCTION (lit./min.)
20048705	ACS 30 N	800x400x330	30*

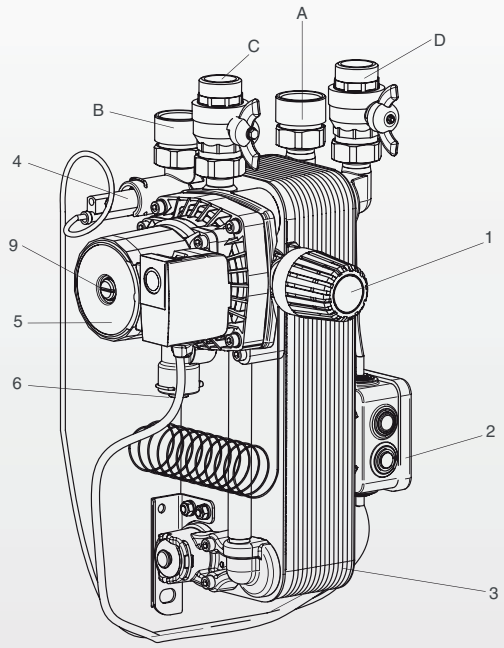
* Value referred to an outlet DHW temperature of 40° C

Specific accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20056375	recirculation kit/cascade ACS 30*		

* Suitable for 2 or 3 ACS 30 in cascade configuration.
For the cascade installation also provide pressure relief valves (25 kPa for the second module and 35 kPa for the third module).

ACS 30 N



1 - Thermostat head
2 - Electrical box
3 - Plate heat exchanger
4 - Flow-switch
5 - Filling pump
6 - Coiled probe
9 - Filling pump air vent screw
A - Fresh water
B - Hot water
C - From buffer tank (flow)
D - To buffer tank (return)

SPECIFICATIONS		ACS 30 N
Max output	l/min	30
Dimensions (hxlxd)	mm	800x400x330
Insulation		EPP
Weight	kg	20
Connections		
Fresh water	Ø	1" internal thread
Hot water	Ø	1" internal thread
From buffer	Ø	1" external thread
To buffer (warm)	Ø	1" external thread
Circulation	Ø	1/2" internal thread
Maximum working pressures		
Fresh water circuit	bar	10
Heating circuit	bar	3
Filling pump		
Nominal voltage	V / Hz	230 / 50
Nominal power	W	95
Nominal current	A	0,4
Circulation pump		
Nominal voltage	V / Hz	230 / 50
Number of revs	rpm	2200
Nominal power	W	8
Nominal current	A	0,1
Temperatures		
Room temperature (min – max)	°C	2 – 40
Buffer water (primary) (min – max)	°C	2 – 95

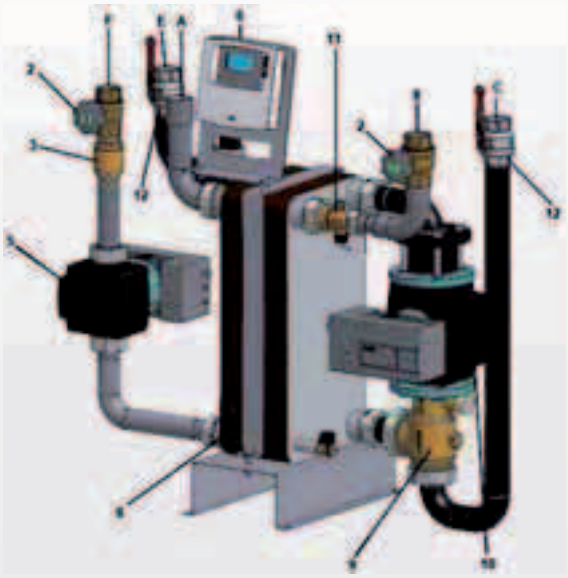
ACS 150 N / ACS 225 N

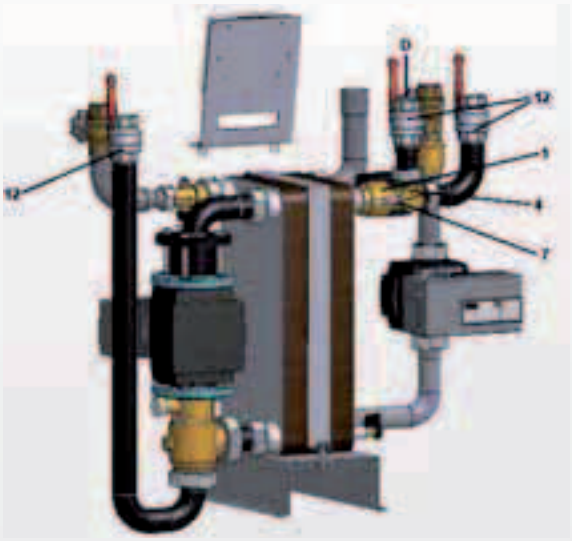
- Heat-exchange group for the instantaneous production of DHW
- Low return temperature on primary circuit
- Built-in circulators as standard
- Built-in plates heat-exchanger as standard
- Built-in solar control box as standard
- Suitable for the production of DHW in large-sized installations

Heat-exchange modules for DHW production

CODE	MODEL	DIMENSIONS H x L x D (mm)	DHW PRODUCTION (lit./min.)
20048707	ACS 150 N	750x1.170x420	150*
20048709	ACS 225 N	750x1.170x420	225*

* Value referred to an outlet DHW temperature of 40° C





1 - Non-return valve
2 - Ball valve (smoothly closing)
3 - Non-return valve
4 - Distribution valve (2-zones stratification)
5 - Circulation pump (high efficiency)
6 - Controller
7 - Temperature probe
8 - Plate heat-exchanger
9 - Thermostatic valve
10 - Primary circuit pump (high efficiency)
11 - Flow meter
12 - Off valve

SPECIFICATIONS		ACS 150 N	ACS 225 N
Dimensions (HxLxD)	mm	750x1170x420	750x1170x420
Insulation		Galvanized steel, 20mm insulation	
Water pipes	Ø	1" ½, stainless steel, insulated	
Recirculation pipes	Ø	1" ¼, stainless steel, insulated	
Buffer pipes (primary)	Ø	1" ½, painted steel, insulated	
Weight	kg	153	175
Max output (40°C)	l/min	150	225
Max output (55°C)	l/min	100	150
Heat exchanger	kW	315	475
Partial load hot water outlet	°C	58 – 60	
Full load hot water outlet	°C	55	
Allowed buffer temperature (primary)	°C	60 – 100	
Buffer return (primary)	°C	2-zones stratification	
Connections			
A	Ø	Fresh water 1" ½ internal thread	
B	Ø	Hot water 1" ½ internal thread	
C	Ø	From buffer 1" ½ internal thread	
D	Ø	To buffer, cold 1" ½ internal thread	
E	Ø	To buffer, hot 1" ½ internal thread	
F	Ø	Circulation 1" ¼ internal thread	
Maximum working pressures			
Fresh water circuit	bar	10	10
Heating circuit	bar	3	3
Filling pump			
Nominal voltage	V / Hz	230 / 50	230 / 50
Nominal power	W	290	621
Nominal current	A	1,32	2,7
Nominal speed	rpm	4800	4600
Circulation pump			
Nominal voltage	V / Hz	230 / 50	230 / 50
Nominal power	W	290	290
Nominal current	A	1,32	1,32
Nominal speed	rpm	4800	
Minimum admitted working temperature	°C	2	
Maximum admitted working temperature	°C	95	

Electronic control-boxes

CODE	DESCRIPTION	CODE	DESCRIPTION
20039694	thermostat SUN 1 with probes for boilers	20009246	control box SUN C with probes
20009244	control box SUN B with probes	20008787*	probe for control boxes SUN B – SUN C

* the solar control boxes are already equipped with probes

Diverter valves and thermostatic valves

CODE	DESCRIPTION	CODE	DESCRIPTION
1150529	thermostatic mixing valve 3/4”	20001491	motorised 3-ways diverter valve **
20001492	thermostatic mixing valve 1” with 3/4” adapter	20025113	solar diverter mixing valve

** not suitable for solar circuit

Expansion vessels

CODE	DESCRIPTION	CODE	DESCRIPTION
1150489	expansion vessel 18L	20001448	expansion vessel 50L
1150509	expansion vessel 24L	20001449	expansion vessel 100L
1150519	expansion vessel 35L	20009237	expansion vessel 300L
1150499	flex and support for expansion vessel (18-24L)		

Flow regulators and solar filling pump

CODE	DESCRIPTION	CODE	DESCRIPTION
20001453	flow regulator 12 l/min	20001454	solar filling pump
20026577	manual air vent		

Stainless steel and copper pipes

CODE	DESCRIPTION	CODE	DESCRIPTION
1150619	flexible pipe ø 16-15 m connecting collector to cylinder	20001451	flexible pipe ø 16-20 m connecting collector to cylinder
20001452	fittings kit for flexible stainless steel pipes (connection with 2,5 m² tray or Al frame collectors, and with solar cylinder)	20007290	fittings SCF-20N for flexible stainless-steel pipes
20022233	fittings kit for flexible stainless steel pipes (connection with SCI-25N and with solar cylinder)	20027289	fittings SCV-25 for flexible stainless-steel pipes
20021321	fittings for copper pipes (connection with SCI-25N and with solar cylinder)	20014661	fittings kit for copper pipes (connection with 2,5 m² tray or Al frame collectors, and with solar cylinder)
20029277	compensation joint kit		

Hydraulic groups

CODE	DESCRIPTION	CODE	DESCRIPTION
20026145	hydraulic group return (residual head 4,5m)	20042106	connection bend kit for hydraulic group return (residual head 4,5m) – cylinder
20026215	hydraulic group flow/return (residual head 6,5m)	20009196	hydraulic group flow/return (residual head 11m)
20027382	connection bends kit for hydraulic group (residual head 6,5m) - cylinder	20009438	connection bends kit for hydraulic group (residual head 11m) - cylinder
20042105	solar control fixing (connected with hydraulic group return 4,5m) – cylinder		

Glycol

CODE	DESCRIPTION	CODE	DESCRIPTION
20009190	2,5 kg glycol *	1150559	10 kg glycol *
1150549	5 kg glycol *	20030161	20 kg inorganic premix glycol specific for SCV-25 evacuated tube collector

*Not suitable for SCV-25 evacuated tube collector

Natural circulation solar system
NS-SOL

- Natural circulation system for the production of DHW, performing best in areas with high levels of sunlight and mild winters
- Ready-to-be-installed system, complete with collector(s), cylinder, fittings and glycol
- Semi-selective aluminium absorber surface
- Ease of functioning: no need of any additional components such as a circulator or an electronic controller
- Indirect natural circulation cylinder with polyurethane insulation
- Shock-proof plastic cover protects the cylinder
- Collector stagnation temperature: 196 °C
- Collectors conform to the EN 12975 standard
- Solar Systems (NS-SOL 200/1 and NS-SOL 300/2) conform to the EN 12976 standard.
- Semi-selective solar collector is certified by the prestigious Quality Label 'Solar Keymark'
- Electrical resistance and mixing valve available as accessories
- NS-SOL system can be matched with combi wall-hung boilers

Systems for flat and pitched roof

CODE	MODEL	NUMBER OF COLLECTORS	CYLINDER CAPACITY (litres)	COLLECTORS DIMENSIONS H x L (mm)	COLLECTOR TOTAL AREA (m^2)
20049186	NS-SOL 150/1*	1	150	1.856x1.086	2,02
20049198	NS-SOL 200/1*	1	200	1.856x1.086	2,02
20049199	NS-SOL 200/2*	2	200	1.856x2.172	4,04
20049201	NS-SOL 300/2*	2	300	1.856x2.172	4,04

* Brackets are not included in NS-SOL systems.

Packages

CODE	QUANTITY	CODE	QUANTITY
20059107	package of 2 pcs NS-SOL 150/1*	20059116	package of 2 pcs NS-SOL 200/1*

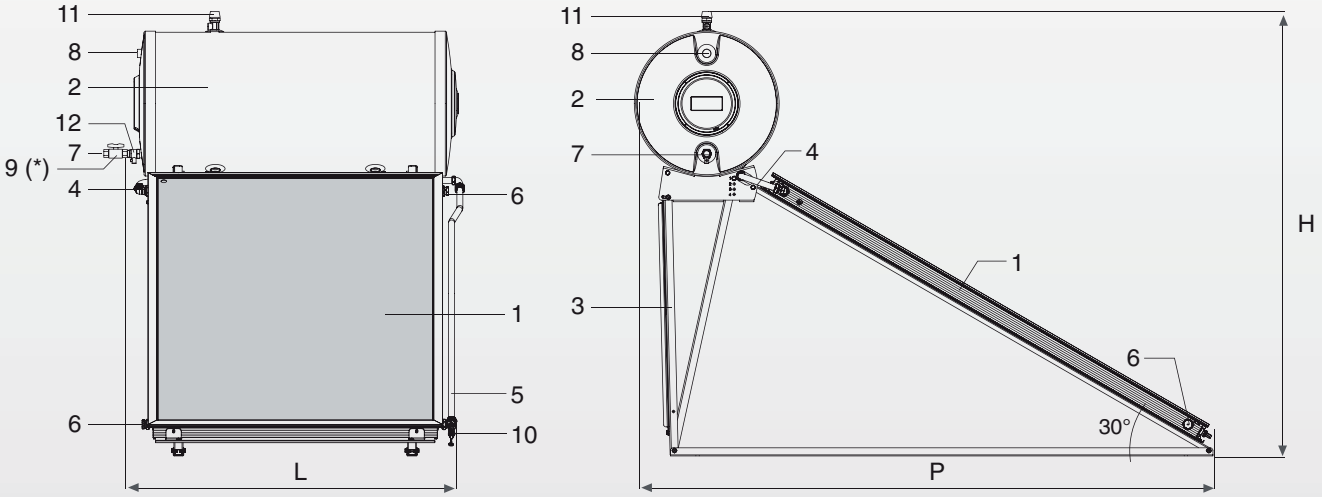
*Brackets are not included in NS-SOL systems.

Specific accessories

CODE	DESCRIPTION	CODE	DESCRIPTION
20019358	brackets kit for NS-SOL 150/1 – 200/1 pitched roof	20048532	brackets kit for NS-SOL 150/1 – 200/1 30° flat roof
20051300	brackets kit for NS-SOL 200/2 pitched roof	20048534	brackets kit for NS-SOL 200/2 30° flat roof
20021305	brackets kit for NS-SOL 300/2 pitched roof	20050062	brackets kit for NS-SOL 300/2 30° flat roof
1150529	thermostatic mixing valve 3/4"	20050173	inclination adjustment brackets kit 35°-40°-45° flat roof
20009201	electrical resistance 1,5 kW	20001492	thermostatic mixing valve 1" with 3/4" adapter

1 Solar collector
2 Cylinder
3 Supporting frame
4 Solar flow
5 Solar return
6 Plug
7 Domestic cold water inlet – 3/4”
8 DHW outlet – 3/4”
9 Inlet tap for domestic cold water*
10 Fill/drain tap
11 Safety valve primary circuit (2,5 bar)
12 Non-return valve – Safety valve secondary circuit (10 bar/99 °C)

(*) Tap not included in the system, to be provided for by the installer.



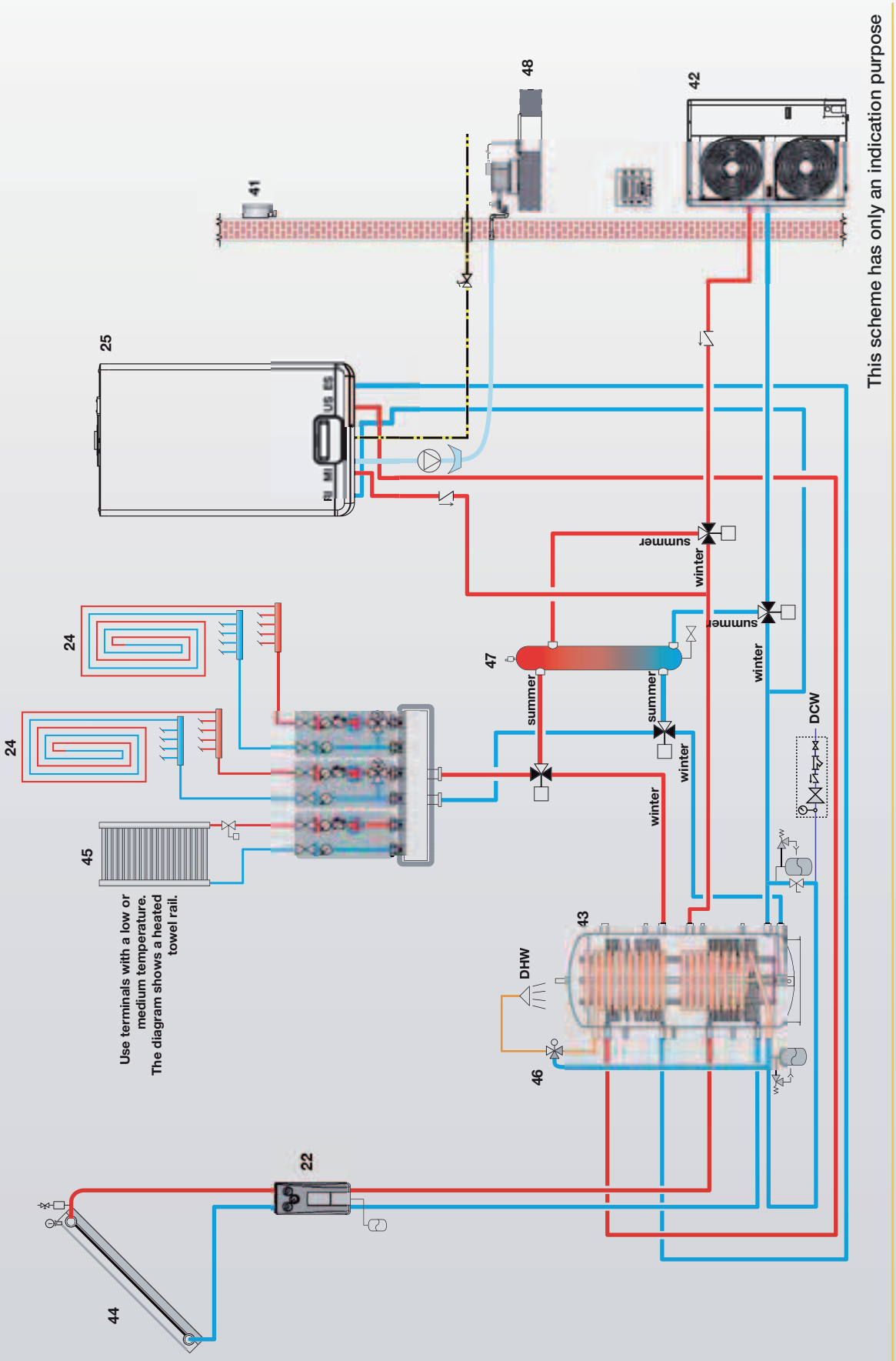
SPECIFICATIONS	NS-SOL 150/1	NS-SOL 200/1	NS-SOL 200/2	NS-SOL 300/2	
Collector					
Description	SCN-20S				
Total area	2,02 x 1	2,02 x 1	2,02 x 2	2,02 x 2	m² x n° coll.
Exposed area	1,80 x 1	1,80 x 1	1,80 x 2	1,80 x 2	m² x n° coll.
Effective absorption area	1,77 x 1	1,77 x 1	1,77 x 2	1,77 x 2	m² x n° coll.
Liquid content	1,5 x 1	1,5 x 1	1,5 x 2	1,5 x 2	l x n° coll.
Connections	Ø 22				mm
Maximum permitted pressure	10				bar
Stagnation temperature	196				°C
Dimensions	1856 x 1086 x 75				mm
Weight (empty)	28	28	56	56	Kg
Cylinder					
Type	indirect natural circulation (tank-in-tank)				
Capacity	153	202	202	278	l
Dimensions (with insulation)	1190 x Ø 534	1510 x Ø 534	1510 x Ø 534	2000 x Ø 534	mm
Weight (empty)	55	65	65	90	Kg
Maximum permitted pressure (DHW circuit)	10				bar
Maximum permitted pressure (solar circuit)	2,5				bar
Hydraulic connections (solar - domestic water)	3/4" M				Ø
Electrical resistance connection	1" 1/4 F				Ø
Magnesium anode	22 x 300	22 x 300	22 x 300	22 x 400	Ø x mm
Complete system					
Cylinder	153	202	202	278	l
Collectors	1	1	2	2	n°
Heat transfer fluid content	8,5	13,6	15,4	20,3	l

Maximum allowed load for wind and snow (possibly combined) on the collector surface: 1500 Pa.

SPECIFICATIONS	NS-SOL 150/1	NS-SOL 200/1	NS-SOL 200/2	NS-SOL 300/2	
Weight (empty)	110	120	151	176	Kg
Weight (full)	272	336	369	474	Kg
L	1220	1536	2325	2325	mm
P	2135				mm
H	1640				mm

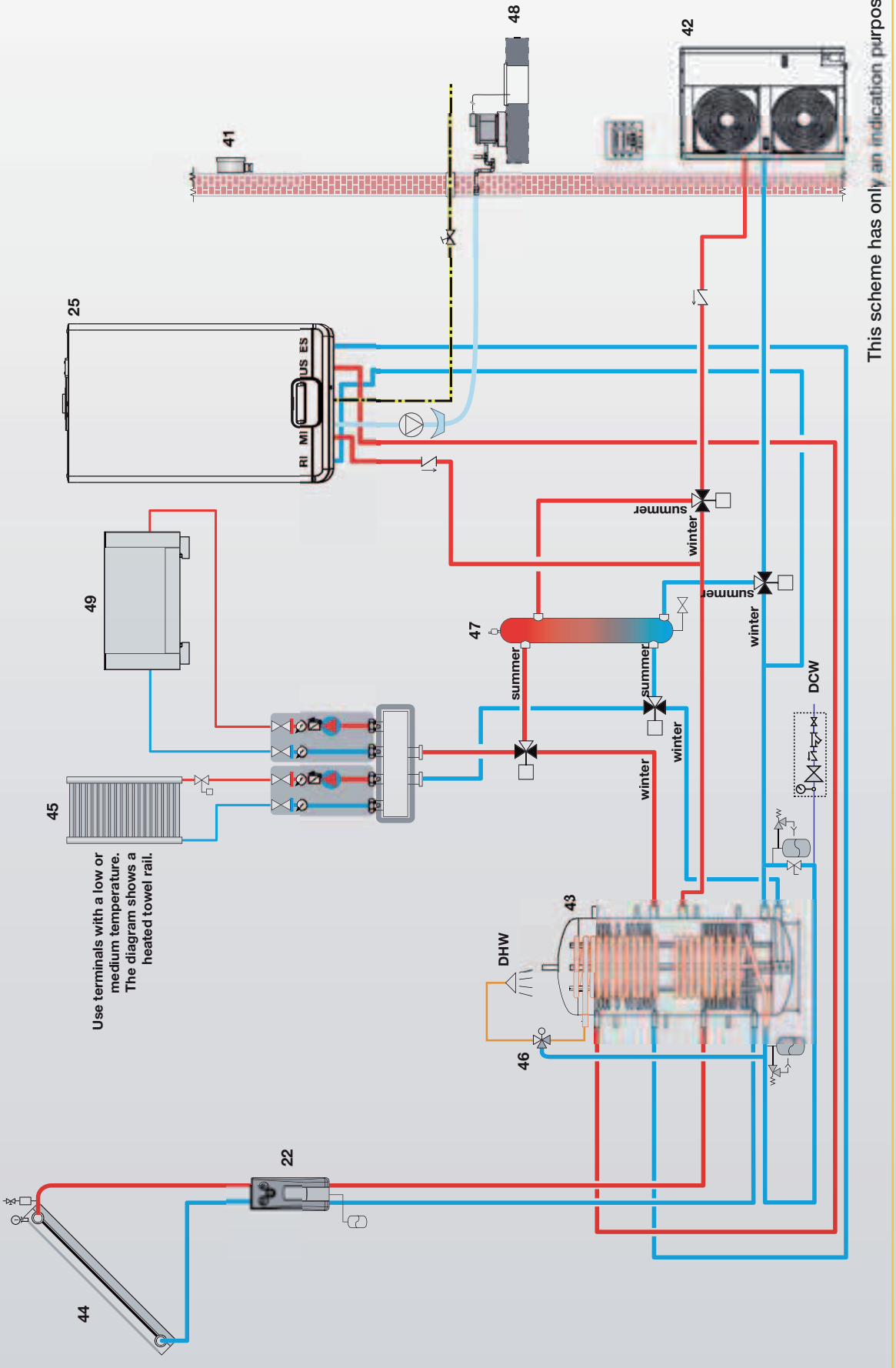
HYBRID SYSTEM FOR HEATING AND DHW PRODUCTION WITH SOLAR THERMAL SYSTEM AND TRIPLE COILS STORAGE TANK (HYBRID STOR)

Hot/cold system with heat pump, back up wall mounted 'heating only' boiler and solar thermal system, with low temperature circuits and heated towel rails



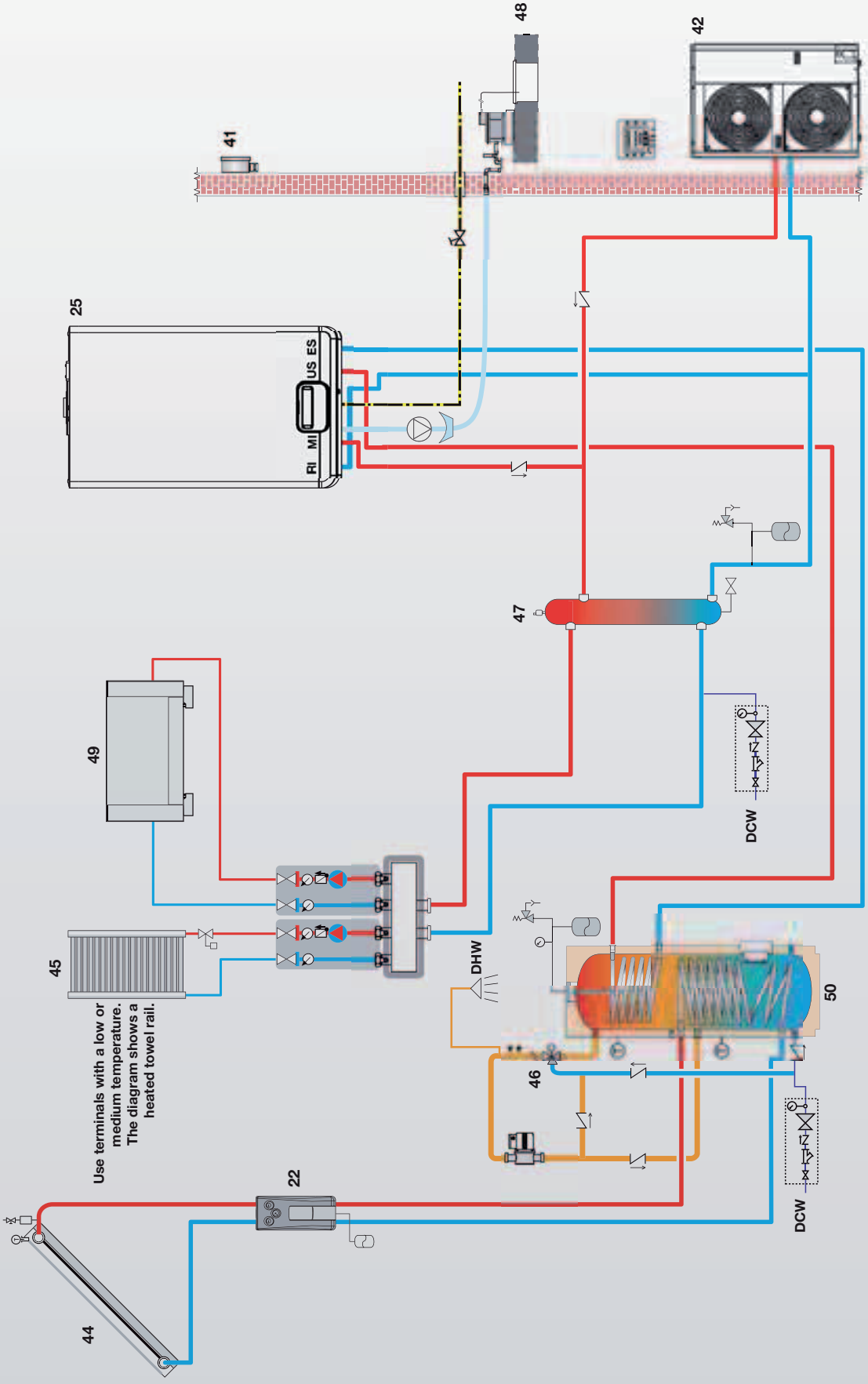
HYBRID SYSTEM FOR HEATING AND DHW PRODUCTION WITH SOLAR THERMAL SYSTEM AND TRIPLE COILS PUFFER TANK (HYBRID STOR)

Hot/cold system with heat pump, back up wall mounted 'heating only' boiler and solar thermal system, with fan coil units and heated towel rails



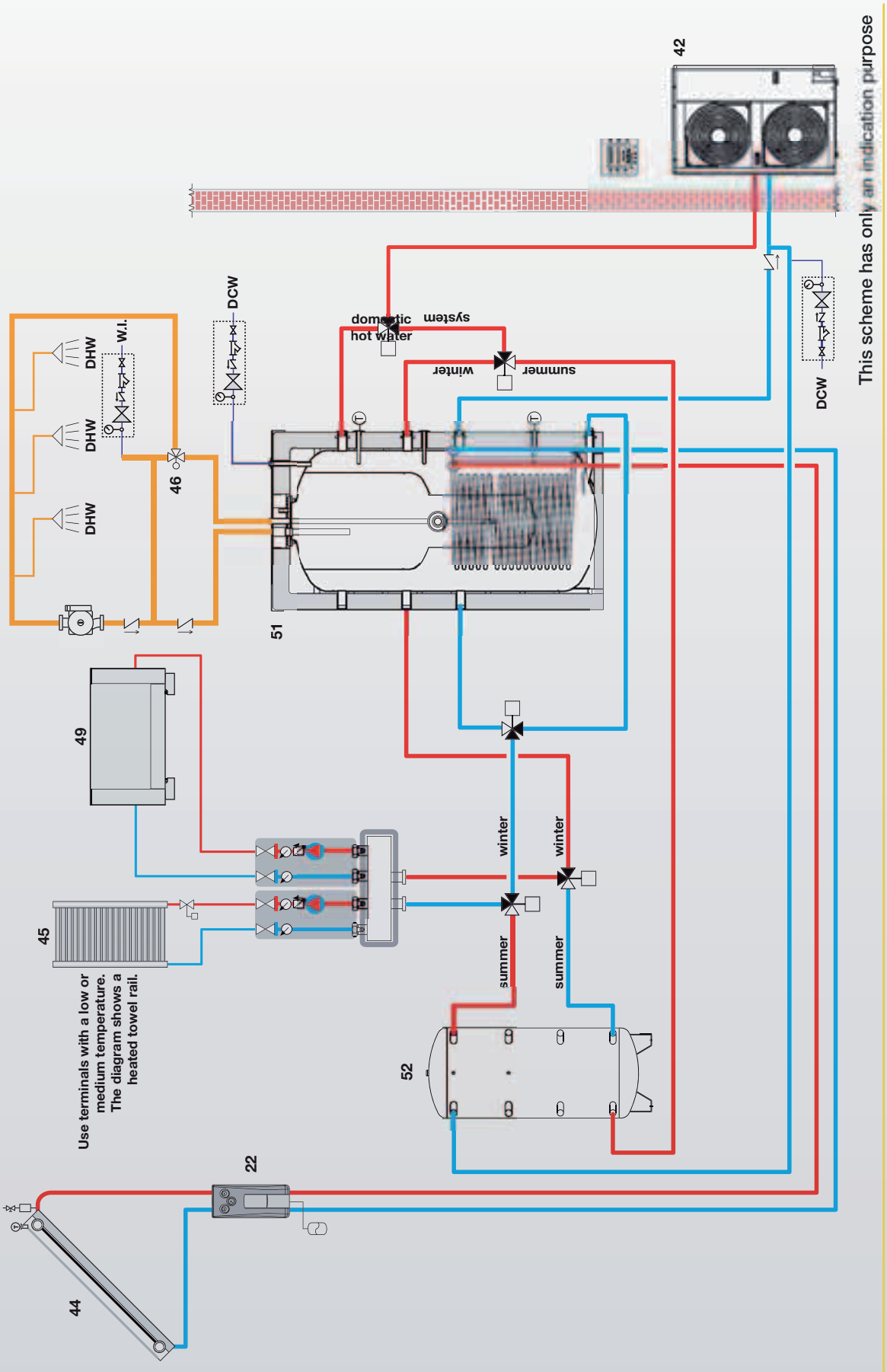
HYBRID SYSTEM FOR HEATING AND DHW PRODUCTION WITH SOLAR THERMAL SYSTEM AND TWIN COIL CYLINDER

Hot/cold system with heat pump, back up wall mounted ‘heating only’ boiler and solar thermal system, with fan coil units and heated towel rails

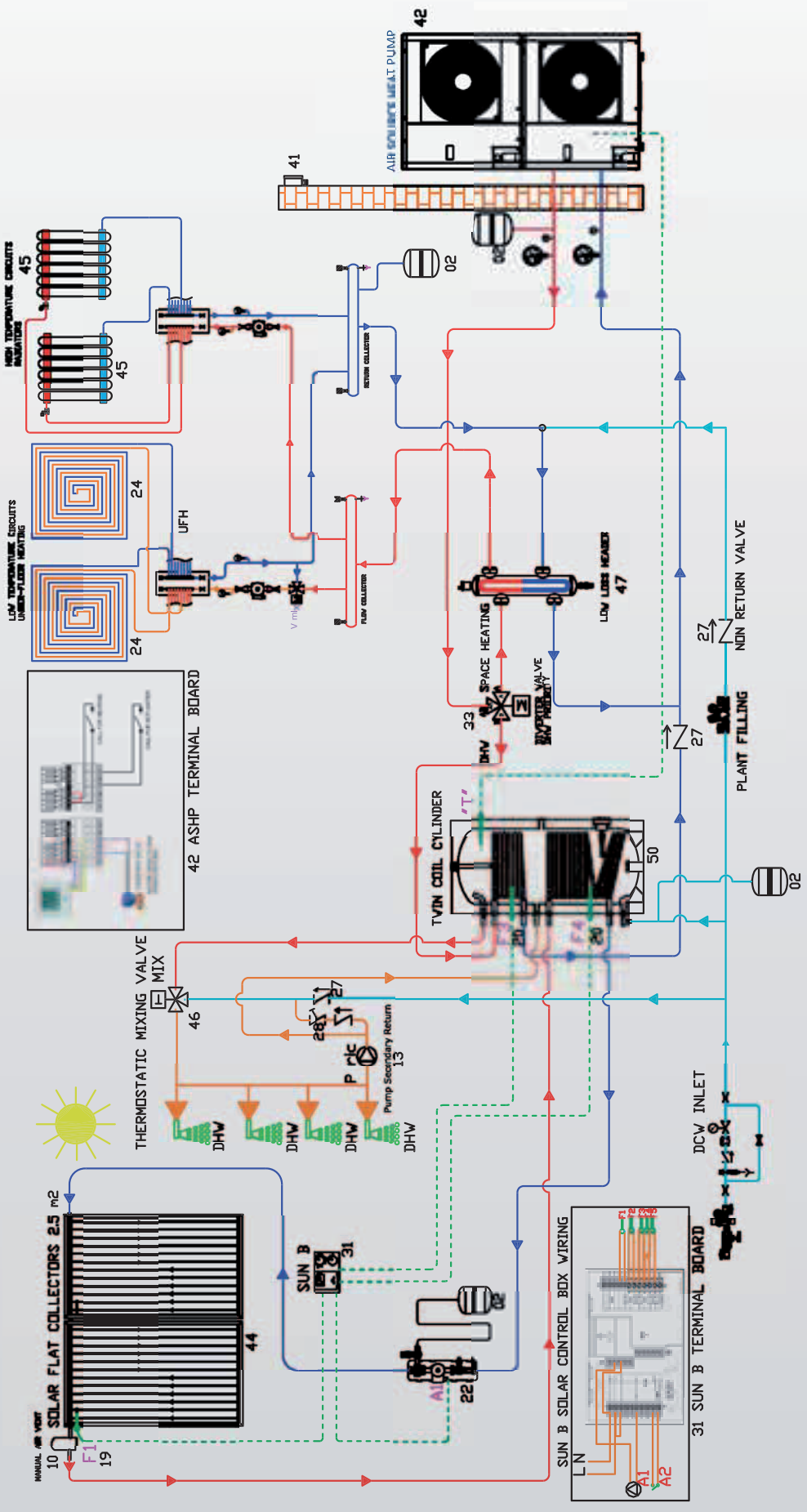


HYBRID SYSTEM FOR HEATING AND DHW PRODUCTION WITH SOLAR THERMAL SYSTEM AND COMBINED STORAGE TANK (TANK-IN-TANK)

Hot/cold system with heat pump and solar thermal system, with fan coil units and heated towel rails



SOLAR THERMAL SYSTEM FOR DHW PRODUCTION IN COMBINATION WITH AIR SOURCE HEAT PUMP FOR DHW AND CH SYSTEM

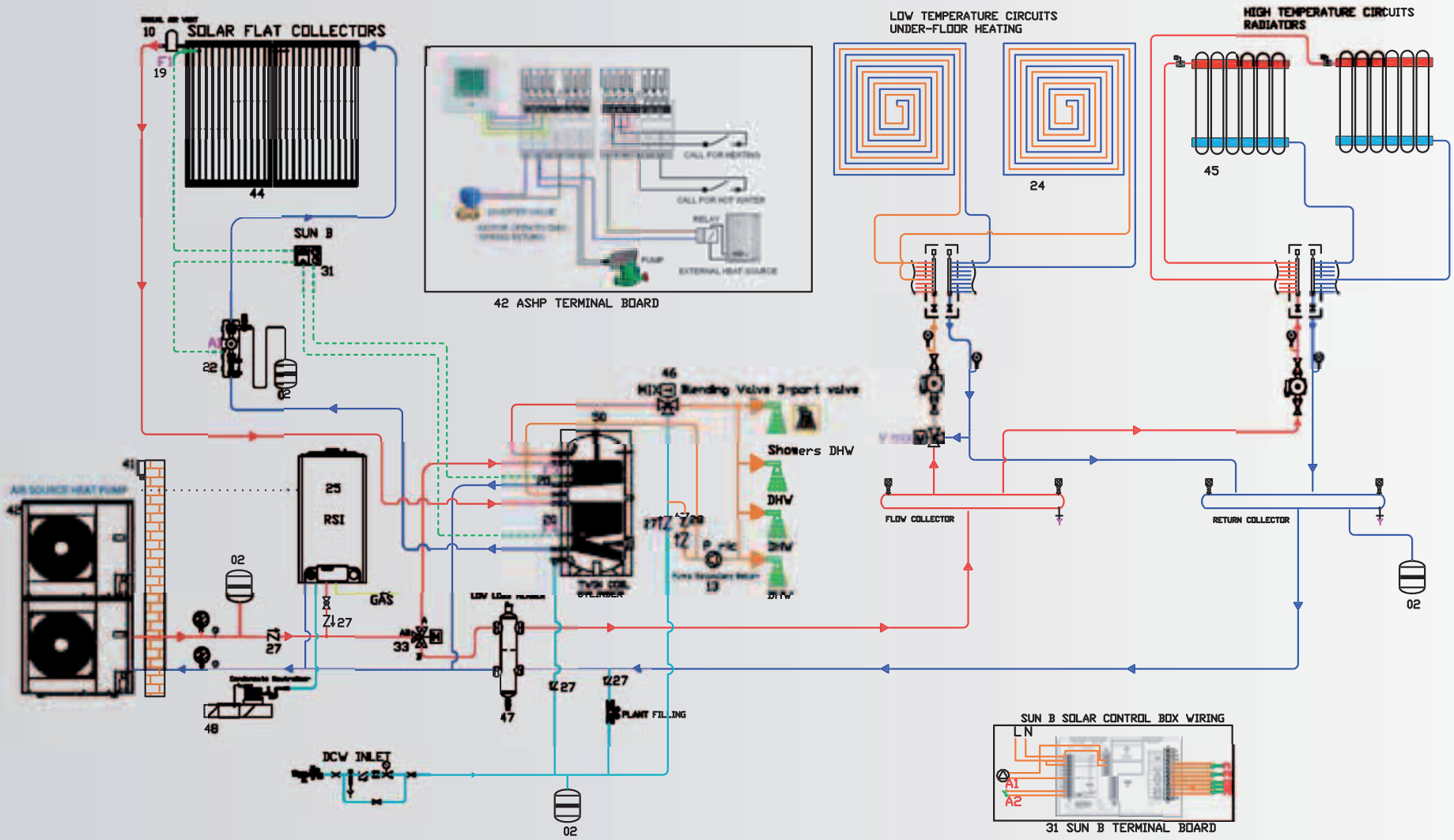


This scheme has only an indication purpose

KEY

02 - Expansion vessels
10 - Manual air vent
13 - DHW recirculation pump
19 - Solar collector temperature probes
20 - Cylinder temperature probes
22 - Solar pump station (return group 4.5 m)
24 - Underfloor heating circuits (low temperature circuits)
27 - Non-return valve
28 - Flow regulator
31 - Solar control box (SUN B)
33 - Motorised 3-ways diverter valve (DHW priority)
41 - External temperature probe (wheather compensation)
42 - Air source heat pump
44 - Solar flat collectors 2.0 or 2.5 m^2
45 - Radiators or heated towel rails (high temperature circuit)
46 - Thermostatic manual mixing valve
47 - Hydraulic separator (LLH = Low Loss Header)
50 - Twin coil cylinder (DHW)

'BIVALENT' TYPE SYSTEM WITH SOLAR THERMAL SYSTEM FOR DHW PRODUCTION, AIR SOURCE HEAT PUMP AND CONDENSING GAS BOILER

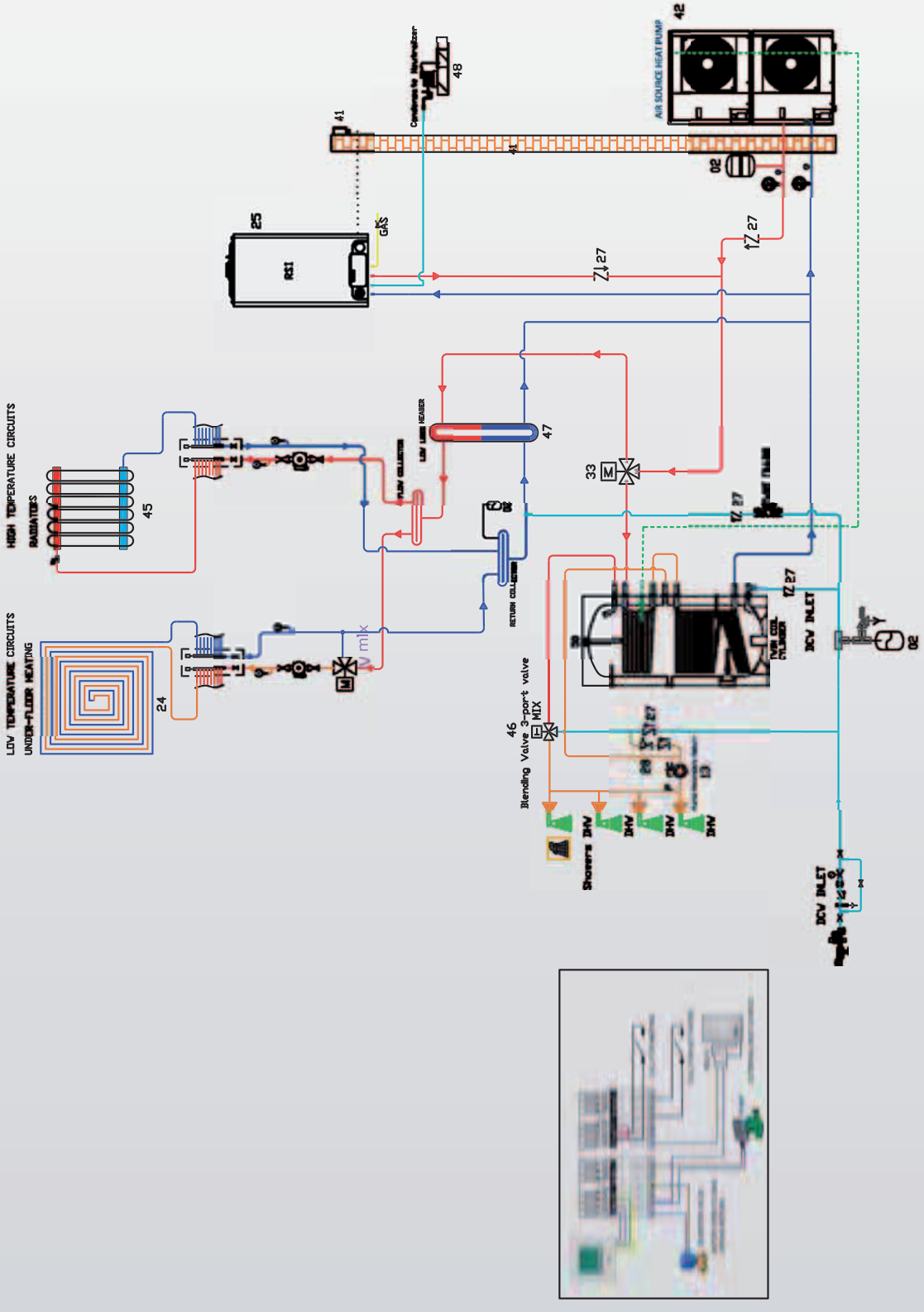


This scheme has only an indication purpose

KEY

02 - Expansion vessels
10 - Manual air vent
13 - DHW recirculation pump
19 - Solar collector temperature probes
20 - Cylinder temperature probes
22 - Solar pump station (return group 4,5 m)
24 - Underfloor heating circuits (low temperature circuits)
25 - Condensing gas boiler
27 - Non-return valve
28 - Flow regulator
31 - Solar control box (SUN B)
33 - Motorised 3-ways diverter valve (DHW priority)
41 - External temperature probe (wheather compensation)
42 - Air source heat pump
44 - Solar flat collectors 2.0 or 2.5 m²
45 - Radiators or heated towel rails (high temperature circuit)
46 - Thermostatic manual mixing valve
47 - Hydraulic separator (LLH = Low Loss Header)
50 - Twin coil cylinder (DHW)

‘BIVALENT’ TYPE SYSTEM WITH AIR SOURCE HEAT PUMP AND BACK UP WITH WALL-HUNG ‘HEATING ONLY’ BOILER

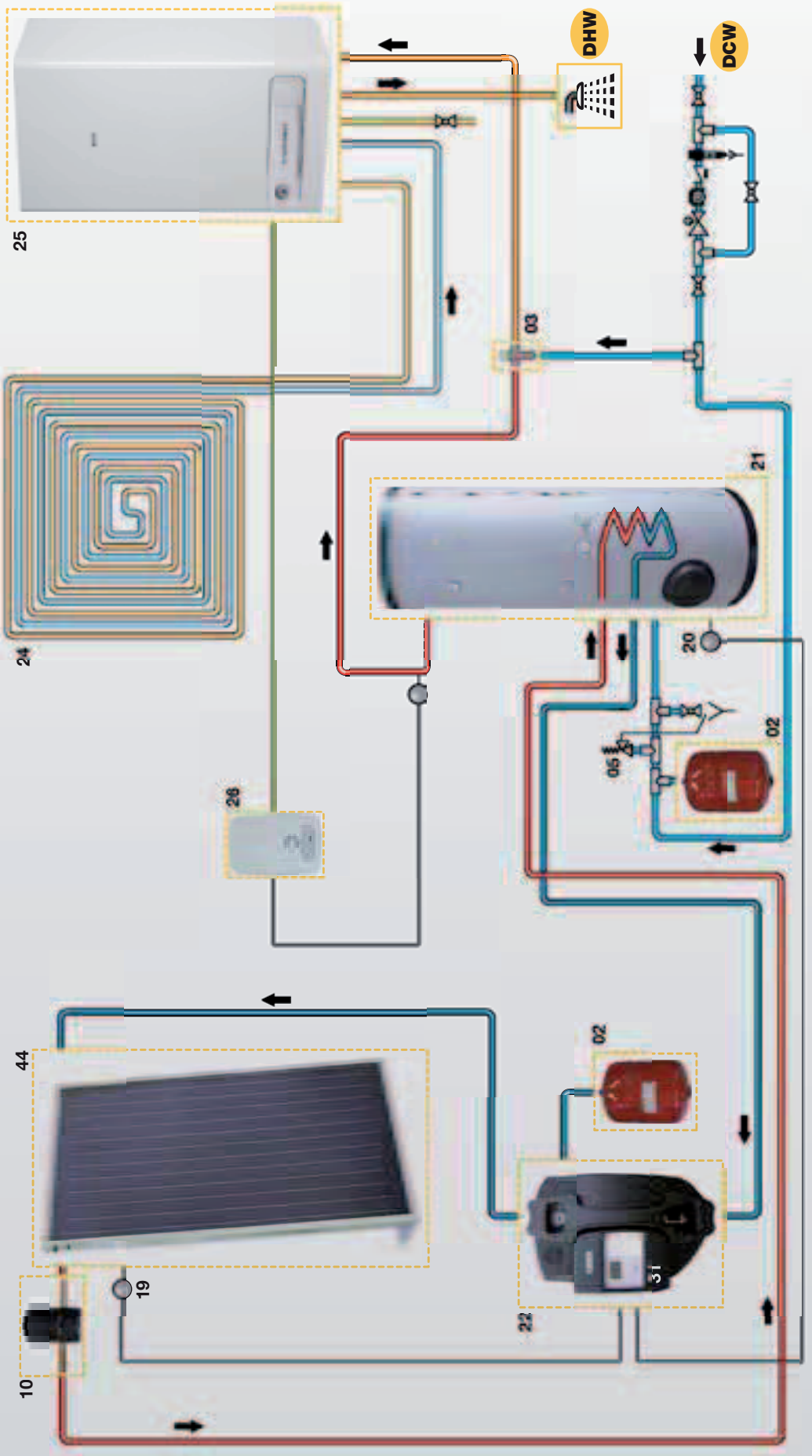


This scheme has only an indication purpose

KEY

02 - Expansion vessels
13 - DHW recirculation pump
24 - Underfloor heating circuits (low temperature circuits)
25 - Gas boiler
27 - Non-return valve
28 - Flow regulator
33 - Motorised 3-ways diverter valve (DHW priority)
41 - External temperature probe (wheather compensation)
42 - Air source heat pump
45 - Radiators or heated towel rails (high temperature circuit)
46 - Thermostatic manual mixing valve
47 - Hydraulic separator (LLH = Low Loss Header)
48 - Condensate neutralizer
50 - Twin coil cylinder (DHW)

SOLAR THERMAL SYSTEM FOR DHW PRE-HEATING WITH MYNUTE GREEN CSI

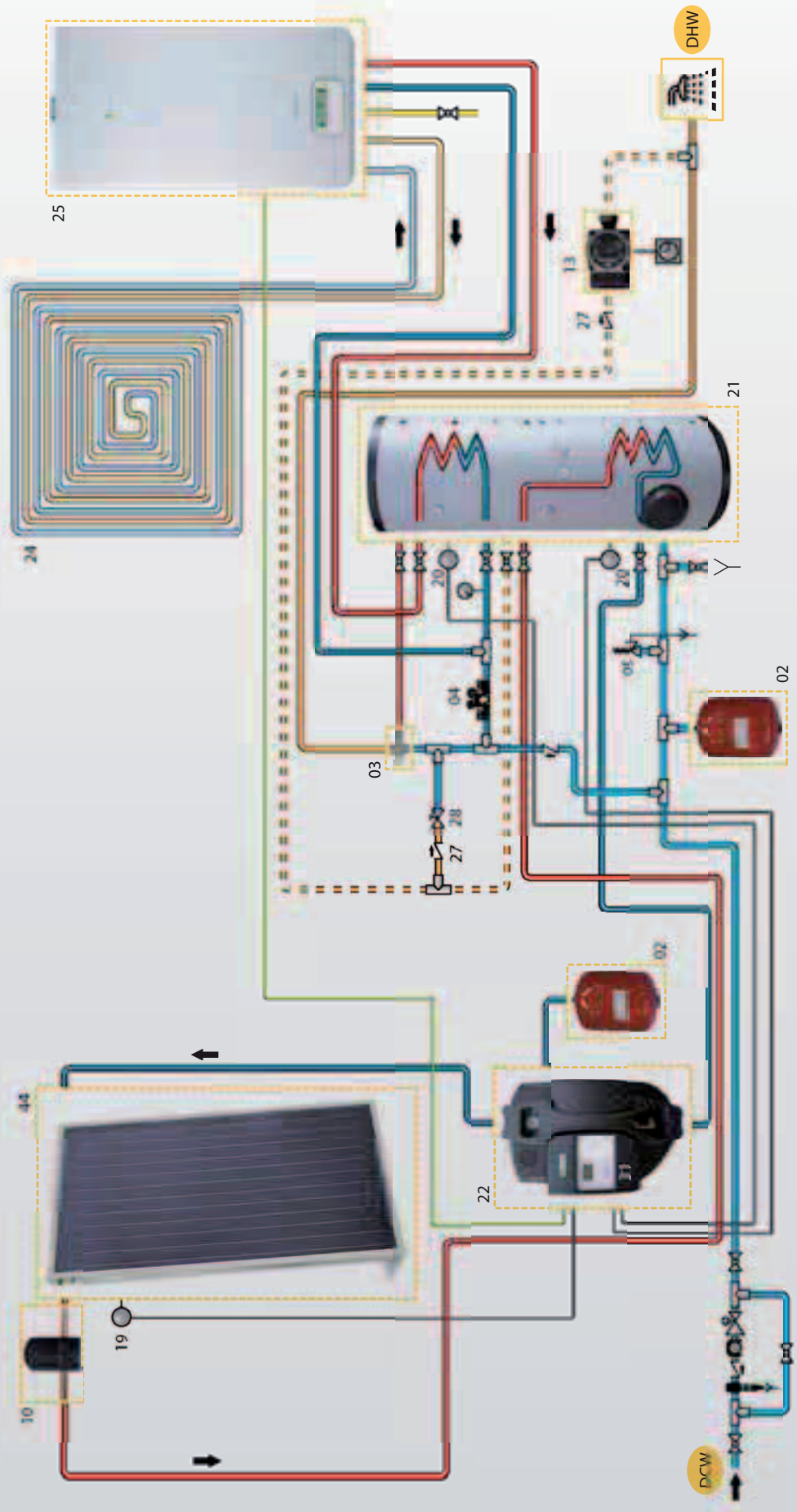


This scheme has only an indication purpose

KEY

02 - Expansion vessel
03 - Thermostatic mixing valve
05 - Safety valve
10 - Manual air vent
19 - Collector probe
20 - Cylinder probe
21 - Idra cylinder
22 - Hydraulic group flow/return
24 - Low temperature circuit
25 - Boiler
26 - Thermostat SUN 1
31 - Control box
44 - Solar collector
DHW - Domestic hot water
DCW - Domestic cold water

SOLAR THERMAL SYSTEM FOR THE PRODUCTION OF DHW WITH INTEGRATION OF 'HEATING ONLY' BOILER

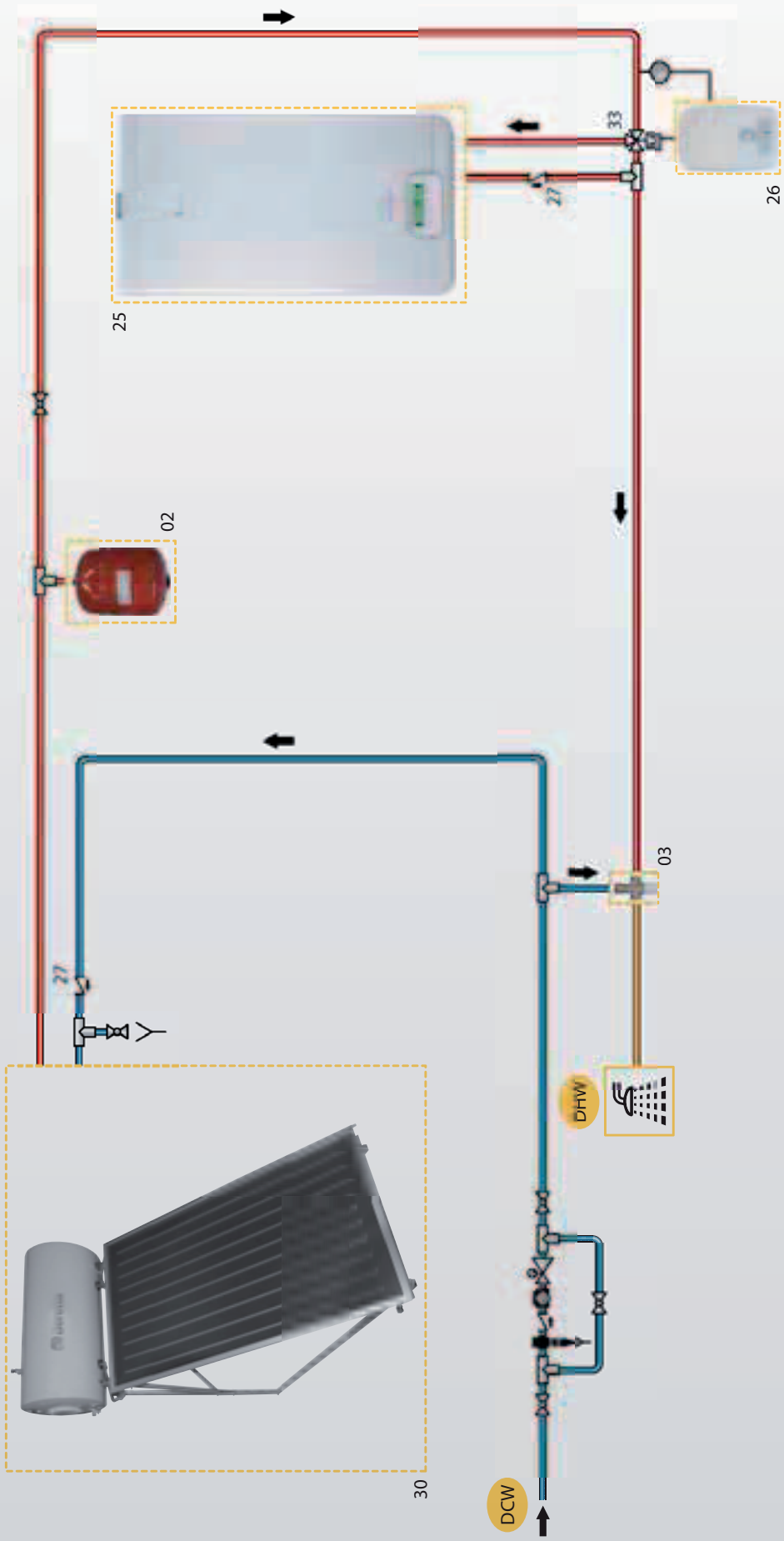


This scheme has only an indication purpose

KEY

02 - Expansion vessel
03 - Thermostatic mixing valve
04 - Plant filling valve (with disconnector)
05 - Safety valve
10 - Manual air vent
13 - DHW recirculation pump
19 - Collector probe
20 - Cylinder probe
21 - Idra cylinder
22 - Hydraulic group flow/return
24 - Low temperature circuit
25 - Boiler
27 - Non-return valve
28 - Flow regulator
31 - Control box
44 - Solar collector
DHW - Domestic hot water
DCW - Domestic cold water

NATURAL CIRCULATION SOLAR SYSTEM FOR THE PRODUCTION OF DHW WITH INTEGRATION OF A COMBI BOILER

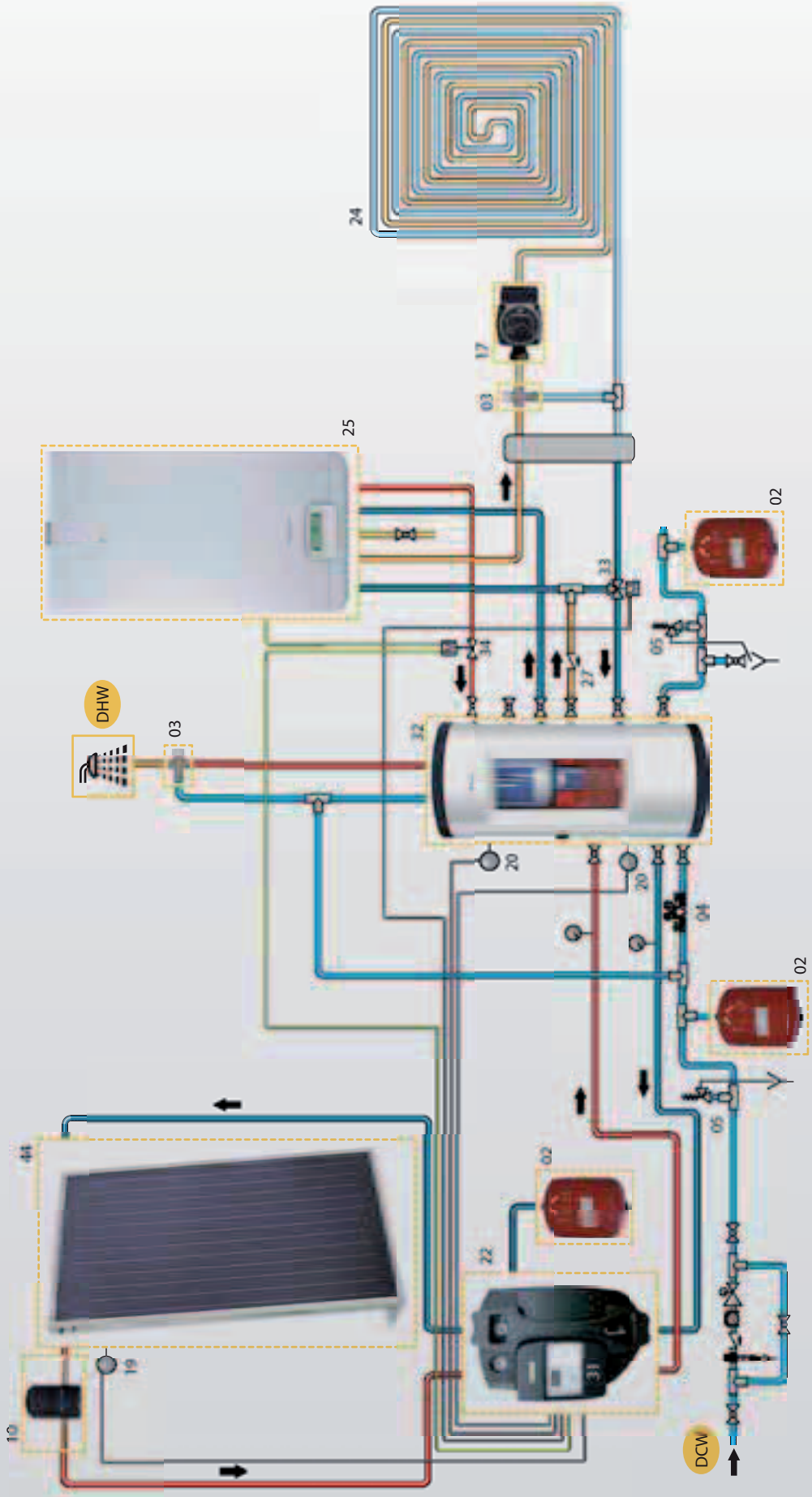


This scheme has only an indication purpose

KEY

02 - Expansion vessel
03 - Thermostatic mixing valve
25 - Boiler
26 - Thermostat SUN 1
27 - Non-return valve
30 - Natural circulation system
33 - Motorised 3-ways diverter valve
DHW - Domestic hot water
DCW - Domestic cold water

SOLAR THERMAL SYSTEM FOR THE PRODUCTION OF DHW AND HEATING SUPPLEMENT WITH STOR C COMBINED STORAGE TANK AND BOILER

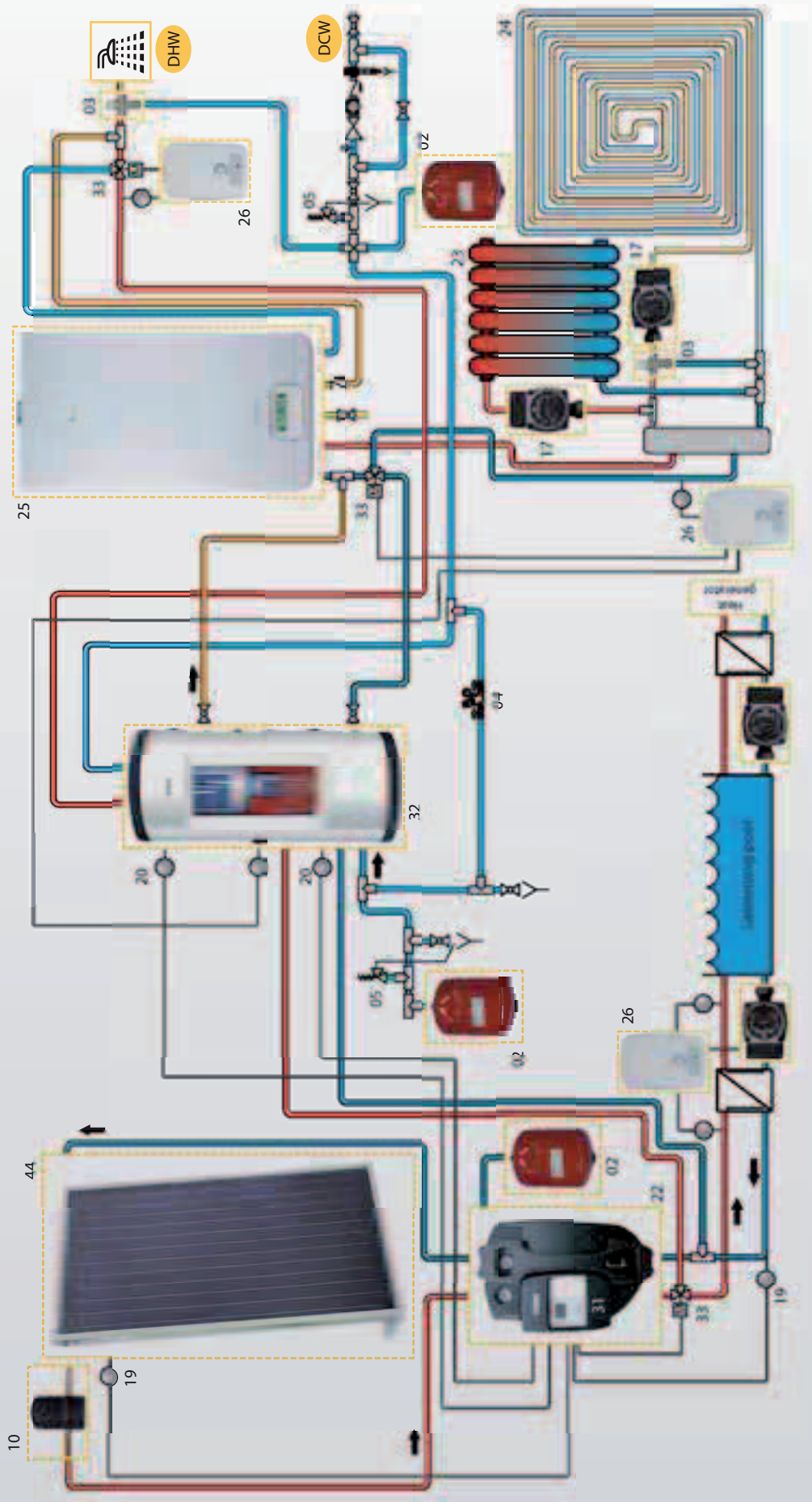


This scheme has only an indication purpose

KEY

02 - Expansion vessel
03 - Thermostatic mixing valve
04 - Plant filling valve (with disconnector)
05 - Safety valve
10 - Manual air vent
17 - Central heating pump
19 - Collector probe
20 - Combined storage tank probe
22 - Hydraulic group flow/return
24 - Low temperature circuit
25 - Boiler
27 - Non-return valve
31 - Control box
32 - Combined storage tank STOR C (tank-in-tank)
33 - Motorised 3-ways diverter valve
34 - Motorised two-ways valve with off-end path micro-switch
44 - Solar collector
DHW - Domestic hot water
DCW - Domestic cold water

SOLAR THERMAL SYSTEM FOR THE PRODUCTION OF DHW, HEATING SUPPLEMENT AND SWIMMING POOL WITH COMBINED STORAGE TANK STOR C AND COMBI BOILER

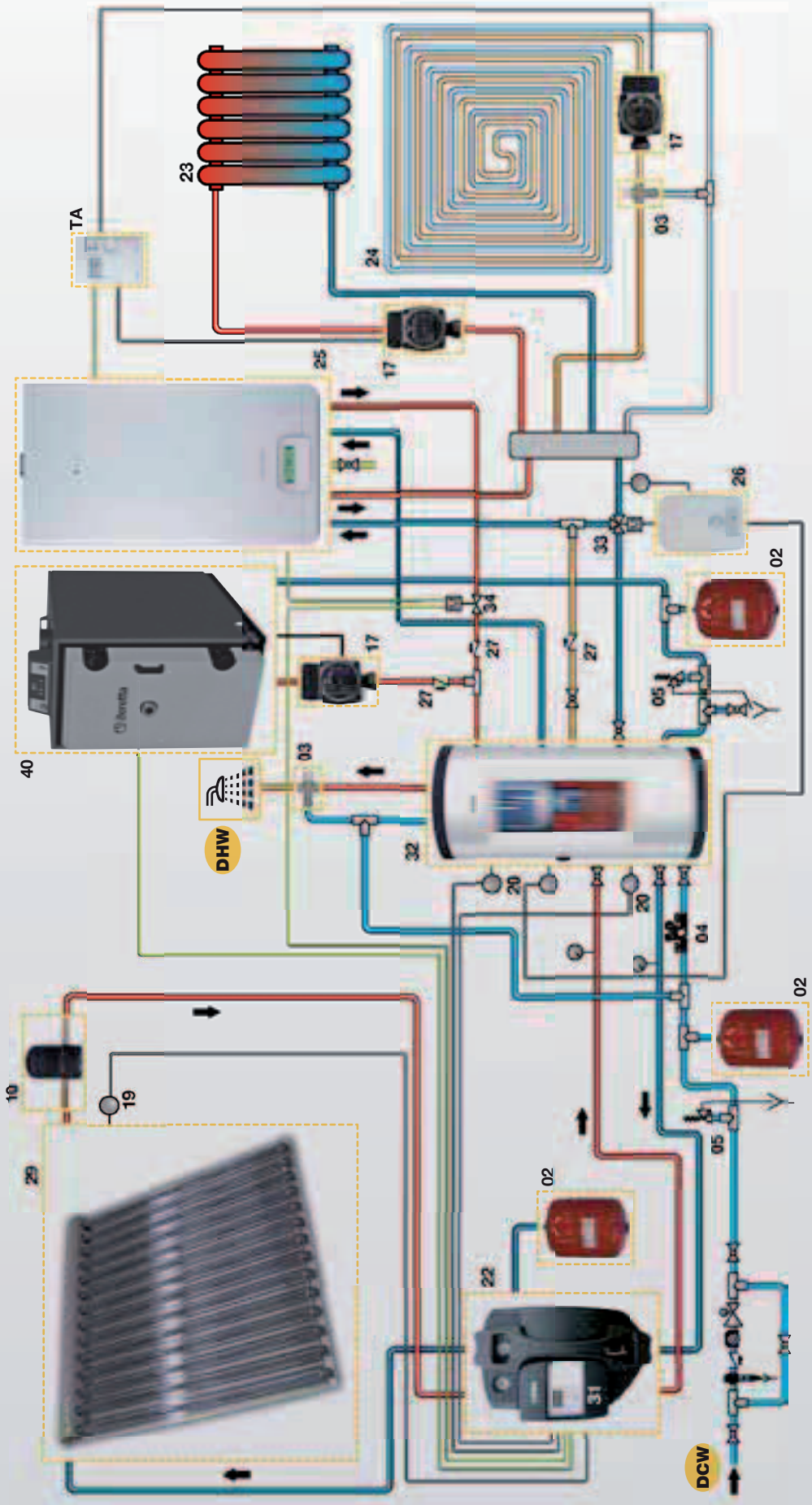


This scheme has only an indication purpose

KEY

02 - Expansion vessel
03 - Thermostatic mixing valve
04 - Plant filling valve (with disconnector)
05 - Safety valve
10 - Manual air vent
17 - Central heating pump
19 - Collector probe
20 - Storage tank probe
22 - Hydraulic group flow/return
23 - High temperature circuit
24 - Low temperature circuit
25 - Boiler
26 - Thermostat SUN 1
31 - Control box
32 - Combi storage tank STOR C (tank-in-tank)
33 - Motorised 3-ways diverter valve
44 - Solar collector
DHW - Domestic hot water
DCW - Domestic cold water

SOLAR THERMAL SYSTEM FOR THE PRODUCTION OF DHW AND HEATING SUPPLEMENT WITH BOILER, BIOMASS HEAT GENERATOR AND COMBINED STORAGE TANK STOR C

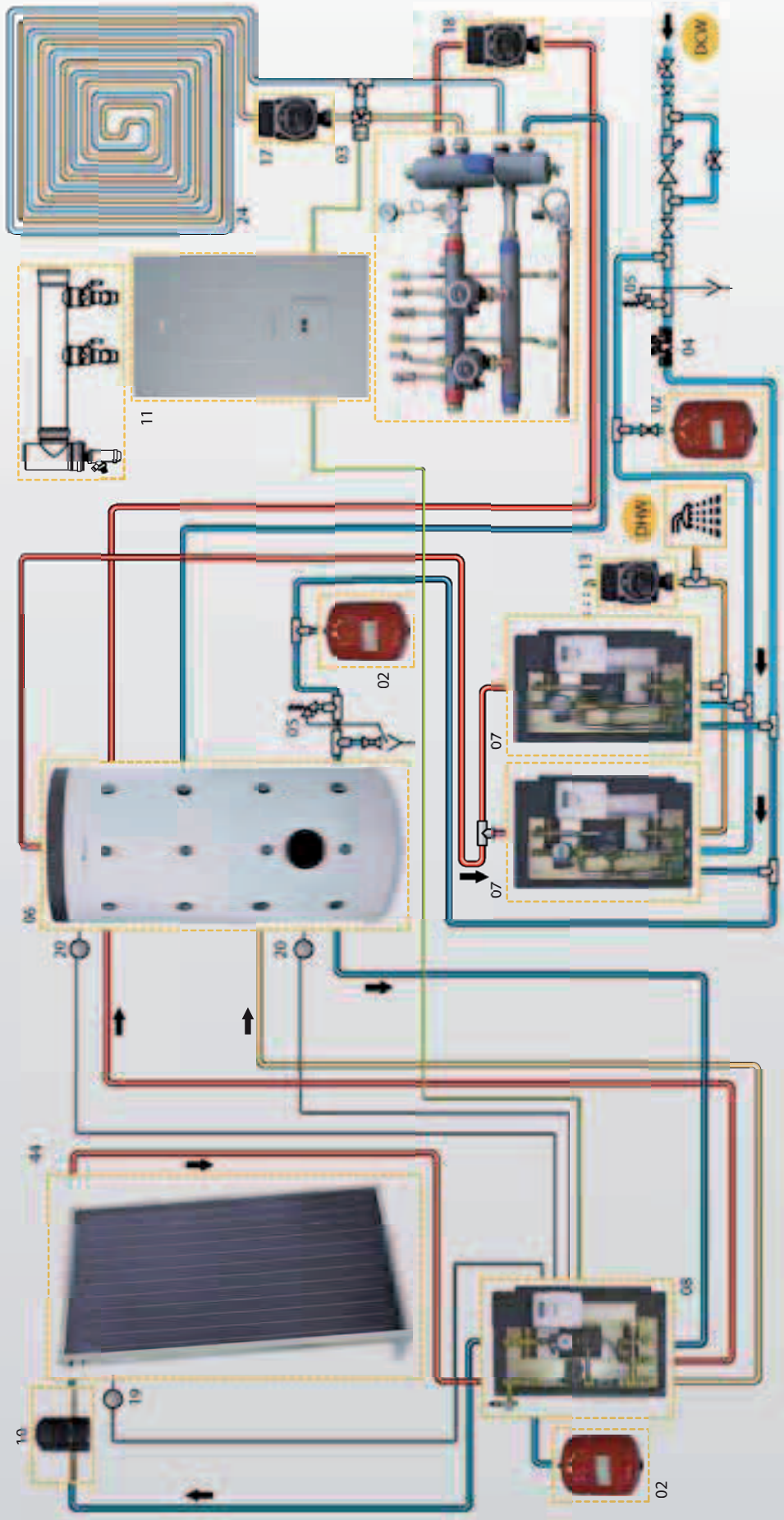


This scheme has only an indication purpose

KEY

02 - Expansion vessel
03 - Thermostatic mixing valve
04 - Plant filling valve (with disconnector)
05 - Safety valve
10 - Manual air vent
17 - Central heating pump
19 - Collector probe
20 - Storage tank probe
22 - Hydraulic group flow/return
23 - High temperature circuit
24 - Low temperature circuit
25 - Boiler
26 - Thermostat SUN 1
27 - Non-return valve
29 - Evacuated tube collector SC-V
31 - Control box
32 - Combined storage tank STOR C (tank-in-tank)
33 - Motorised 3-ways diverter valve
34 - Motorised two-ways valve with off-end path micro-switch
40 - Biomass heat generator
TA - Room thermostat
DHW - Domestic hot water
DCW - Domestic cold water

SOLAR THERMAL SYSTEM FOR THE PRODUCTION OF CENTRALIZED DHW WITH BUFFER TANK AND BOILER INTEGRATION

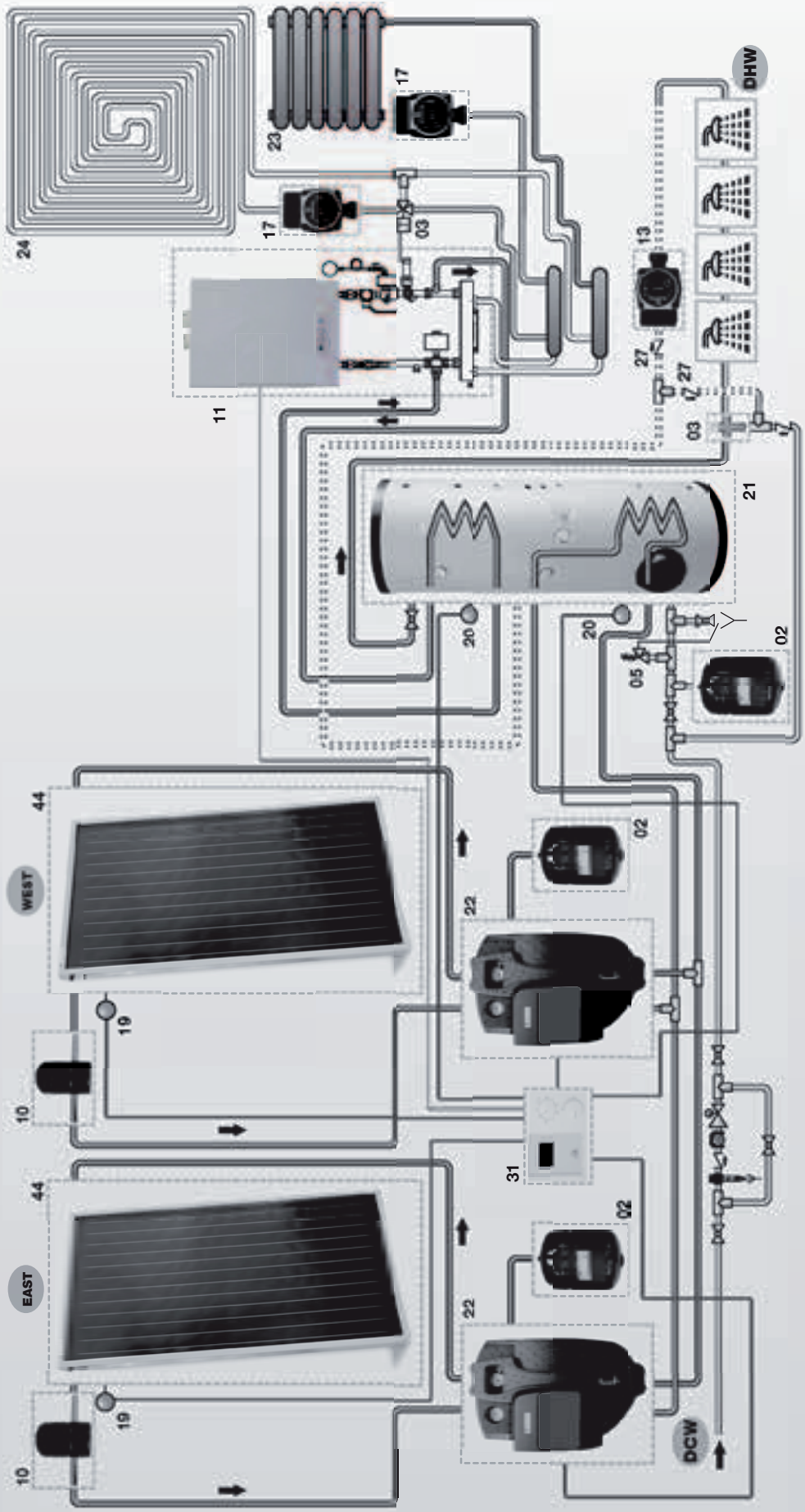


This scheme has only an indication purpose

KEY

02 - Expansion vessel
03 - 3-ways thermostatic mixing valve
04 - Plant filling valve (with disconnector)
05 - Safety valve
06 - Buffer tank STOR
07 - ACS 35 module (DHW heat-exchanger)
08 - STS 50 module (solar-side heat exchanger)
10 - Manual air vent
11 - Power Plus modular boiler
13 - DHW recirculation pump
17 - Central heating pump
18 - Buffer tank loading pump
19 - Collector probe
20 - Buffer tank probe
24 - Low temperature circuit
44 - Solar collector
DHW - Domestic hot water
DCW - Domestic cold water

SOLAR THERMAL SYSTEM ON DOUBLE SLOPE FOR THE PRODUCTION OF DHW WITH IDRA CYLINDER AND INTEGRATION OF CENTRALIZED HEATING

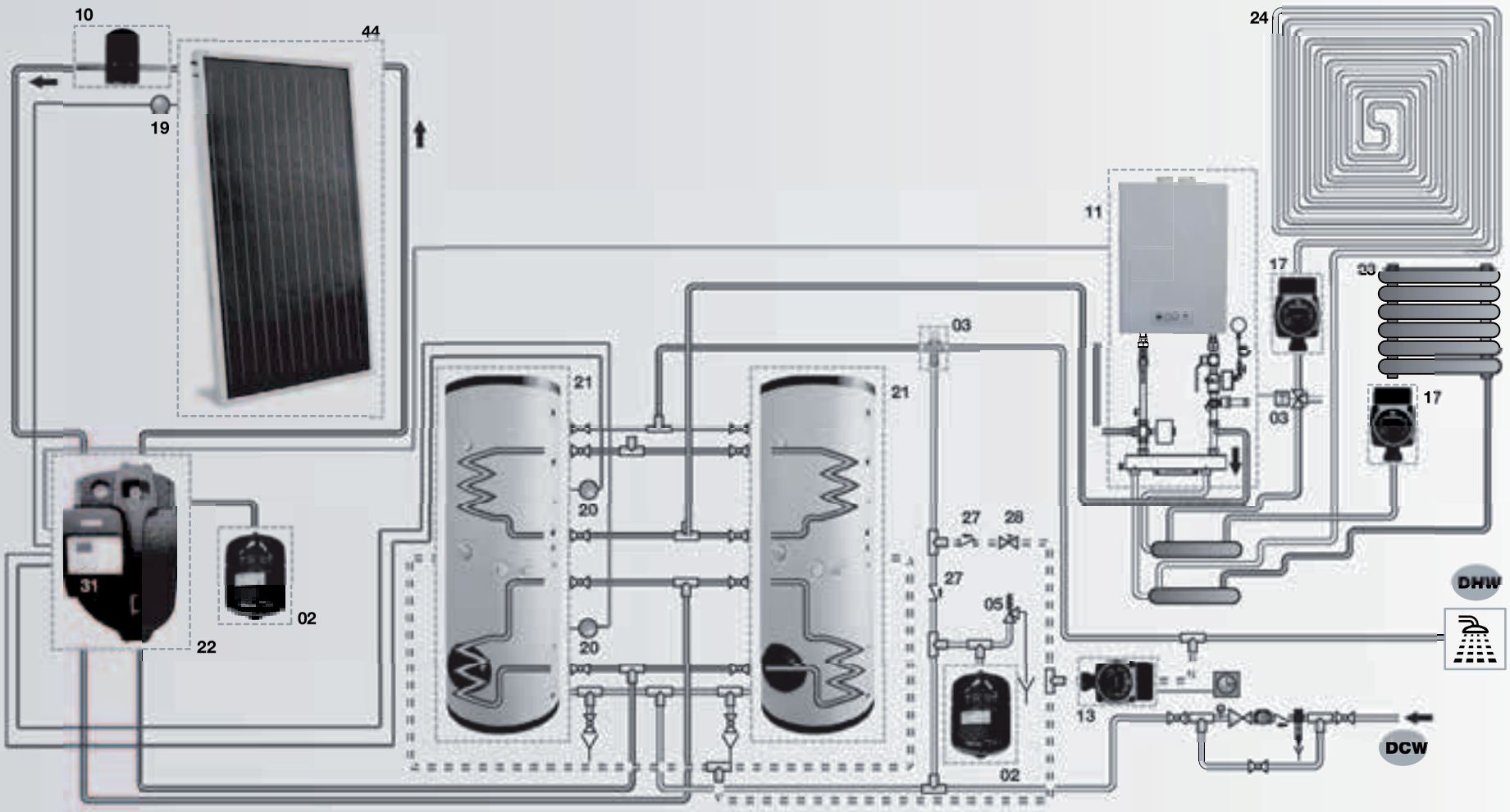


This scheme has only an indication purpose

KEY

02 - Expansion vessel
03 - Thermostatic mixing valve
05 - Safety valve
10 - Manual air vent
11 - MYNUTE GREEN 50 RSI modular boiler
13 - DHW recirculation pump
17 - Central heating pump
19 - Collector probe
20 - Cylinder probe
21 - Twin coil IDRA cylinder
22 - Hydraulic group flow/return
23 - High temperature circuit
24 - Low temperature circuit
27 - Non-return valve
31 - Control box
44 - Solar collector
DHW - Domestic hot water
DCW - Domestic cold water

SOLAR THERMAL SYSTEM FOR THE PRODUCTION OF DHW AND HEATING SUPPLEMENT WITH TWO IDRA CYLINDERS



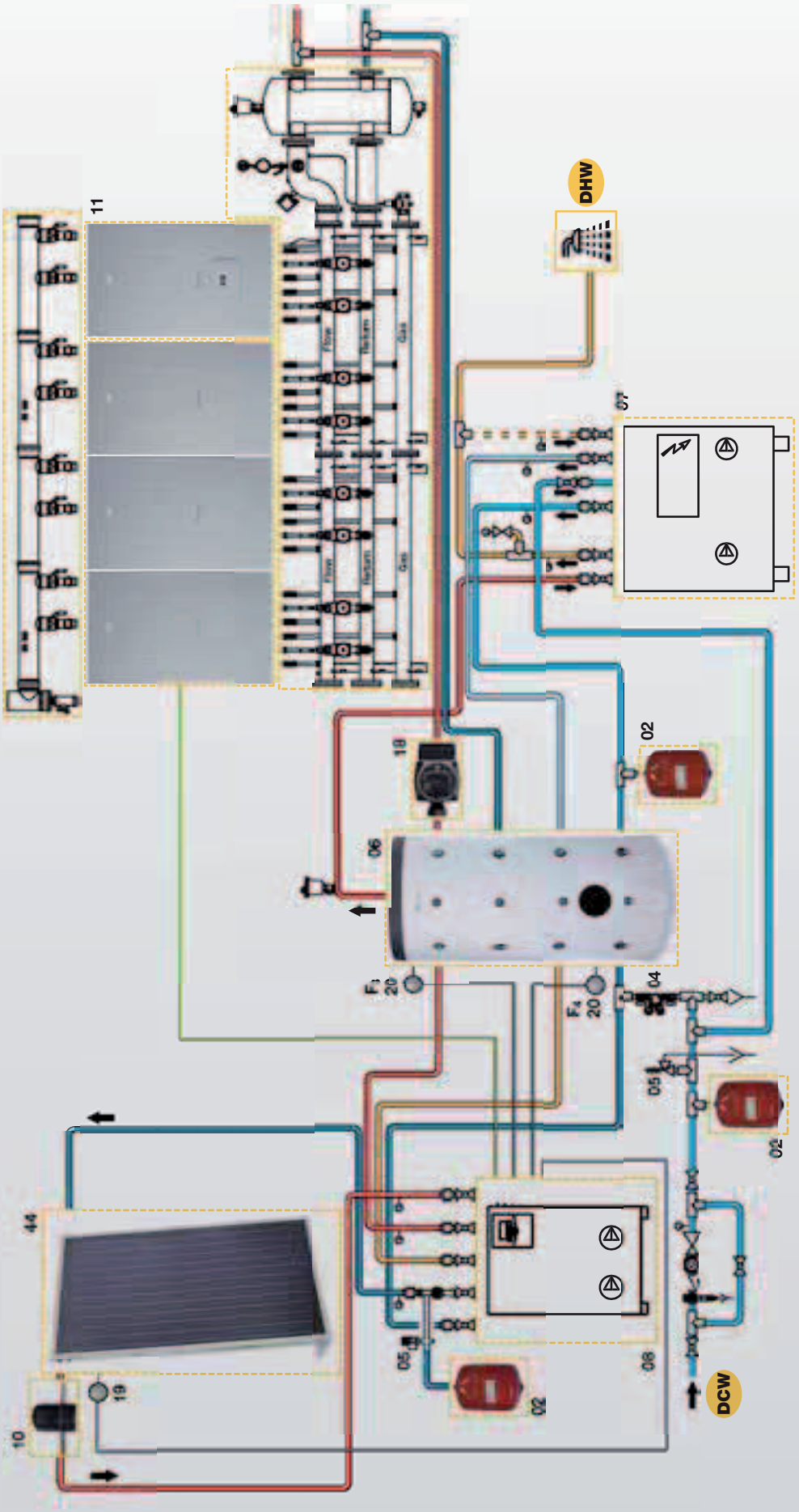
This scheme has only an indication purpose

KEY

02 - Expansion vessel
03 - Thermostatic mixing valve
05 - Safety valve
10 - Manual air vent
11 - MYNUTE GREEN 50 RSI modular boiler
13 - DHW recirculation pump
17 - Central heating pump
19 - Collector probe
20 - Cylinder probe
21 - IDRA cylinder
22 - Hydraulic group flow/return
23 - High temperature circuit
24 - Low temperature circuit
27 - Non-return valve
28 - Flow regulator
31 - Control box
44 - Solar collector

DHW - Domestic hot water
DCW - Domestic cold water

SOLAR THERMAL SYSTEM FOR THE PRODUCTION OF CENTRALIZED DHW WITH BUFFER TANK AND INTEGRATION OF POWER PLUS BOILERS IN CASCADE



This scheme has only an indication purpose

KEY

02 - Expansion vessel
04 - Plant filling valve (with disconnector)
05 - Safety valve
06 - Buffer tank STOR
07 - ACS 150/225 module (DHW heat-exchanger)
08 - STS 200 module (solar-side heat exchanger)
10 - Manual air vent
11 - Power Plus cascade application (400 kW)
18 - Cylinder loading pump
19 - Collector probe F_1
20 - Buffer tank probe (F_3 - F_4)
44 - Solar collector
DHW - Domestic hot water
DCW - Domestic cold water

03/2014 EN-INT PCat PSF

Trading Address:
Via Risorgimento, 23/A
23900 LECCO
Italy
Tel. +39 0341 277111
Fax +39 0341 277263
info@berettaboilers.com
www.berettaboilers.com

Beretta