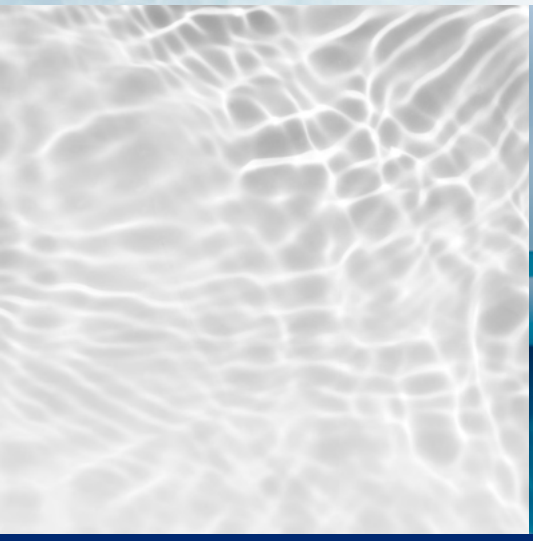

Carletti

Carletti COMPACT

Carletti PRO
20/30/40/60

Carletti BESPOKE
80/100/150

ENERGYLAB
Heat Pumps — Specify • Supply • Support

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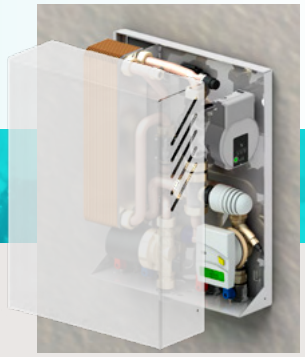
July 2025

DATASHEET

Carletti COMPACT



WALL-HUNG VERSION
450x340x120 mm

BUILT-IN VERSION
500x400x110 mm

DESCRIPTION

Compact dimensions, maximum result.

Carletti COMPACT is a DHW production module that uses stainless steel plate heat exchanger. The temperature of the water is managed by a thermostatic mixing valve on the primary circuit.

The pump, placed on the primary circuit is activated to the signal of the flowswitch that is placed on the secondary circuit. For optimized comfort a secondary return kit is available. Carletti COMPACT is designed for the installation of the heat meter 1.5 m3/h 110 x ¾

ADVANTAGES

- Compact module 330x450x120 mm white cover ral 9010.
- Preassembled and tested module.
- Wall-hung or built-in version.
- Shut-off valves both on primary and secondary circuit.
- Reduced maintenance.
- Easy temperature setting.
- Large production of DHW.
- No need to balance the flow rate of the primary circuit.
- Modulating flow rate by the thermostatic mixing valve on the primary circuit.
- Available the secondary return kit.
- Secondary return kit with return temperature setting.
- Design for the installation of the heat meter (primary circuit).

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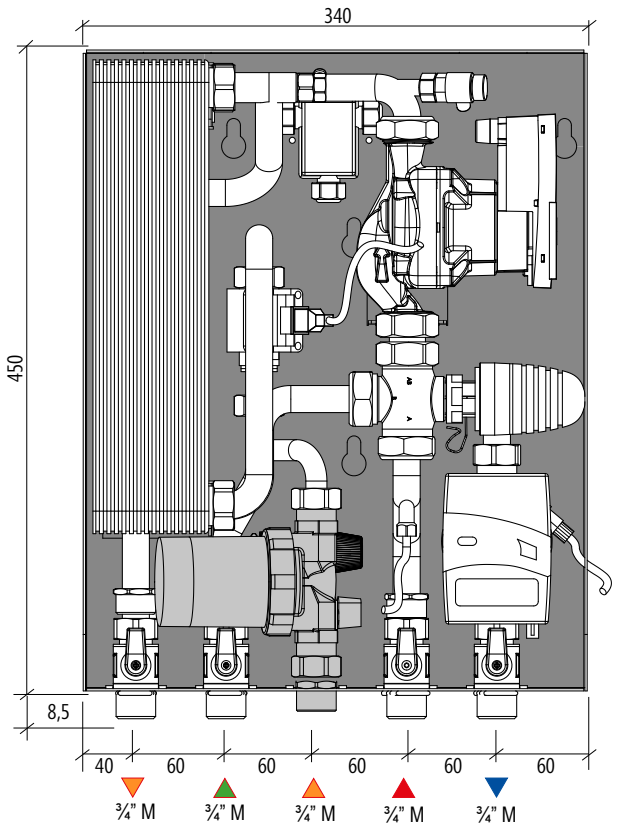
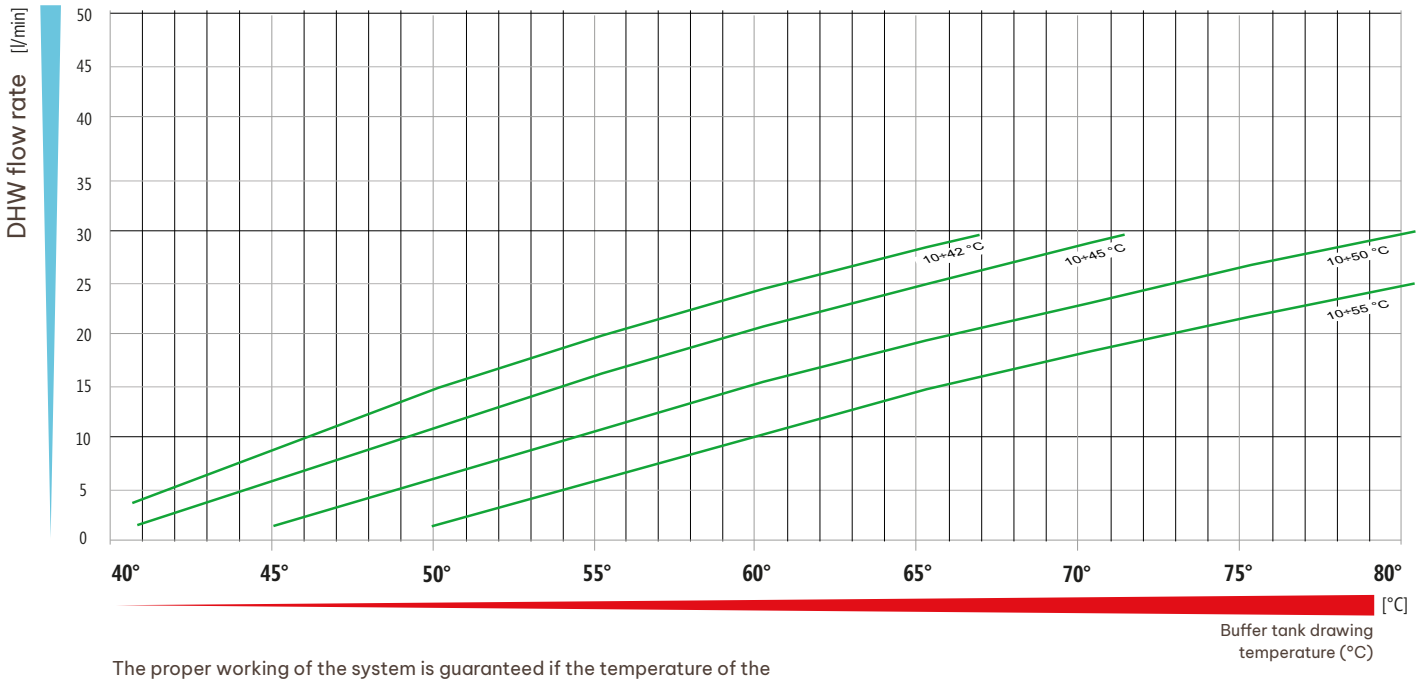
DIMENSIONS AND CONNECTIONS



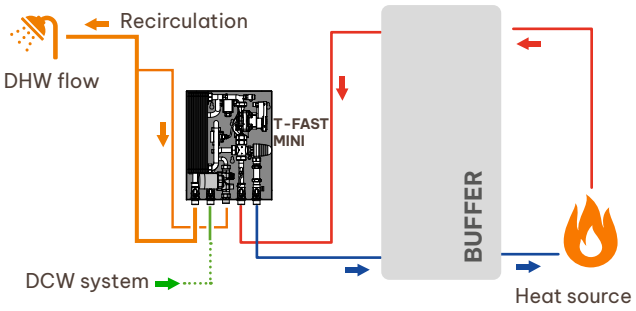
Max. flow rate of secondary outlet (DHW)	28 l/min
Min. flow rate DHW production	2.5 ± 0.3 l/m
Pressure loss DHW circuit (28 l/min)	0.48 bar
DHW temperature set	40-55°C
Max. working pressure	10 bar
Exchange surface of plates exchanger	0.708 m2
Max. flow rate of primary flow	1450 l/h
Max. temperature	90°C
Pump	Wilo PARA SC 15/1-6
Max Power supply	45W
Connections	3/4"M
Box dimension	550x450x130
Pump of DHW recirculation	Lowara/Xylem EB 15-1/94 R
ULTRA CFMUS ULTRASONIC M-BUS Qn 1.5 m3/h - 110 x 3/4"	1/5 m3/h - CL 2 - 110 mm x ¾"
ULTRA CFMUS ULTRASONIC M-BUS Qn 1.5 m3/h - 110 x 3/4"	1/5 m3/h - CL 2 - 110 mm x ¾"

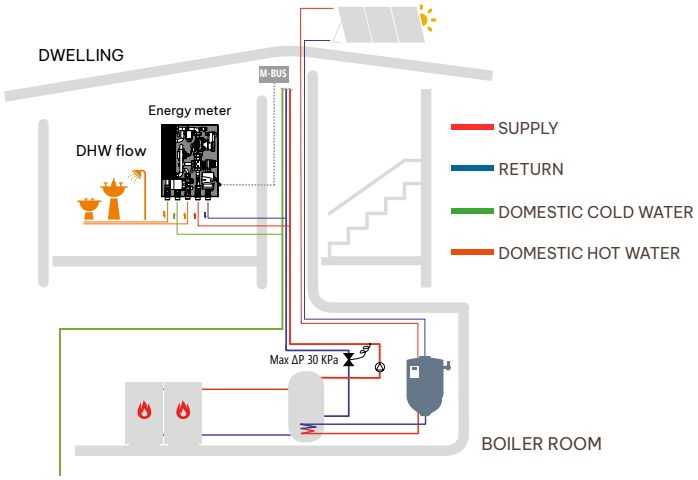
DHW PRODUCTION



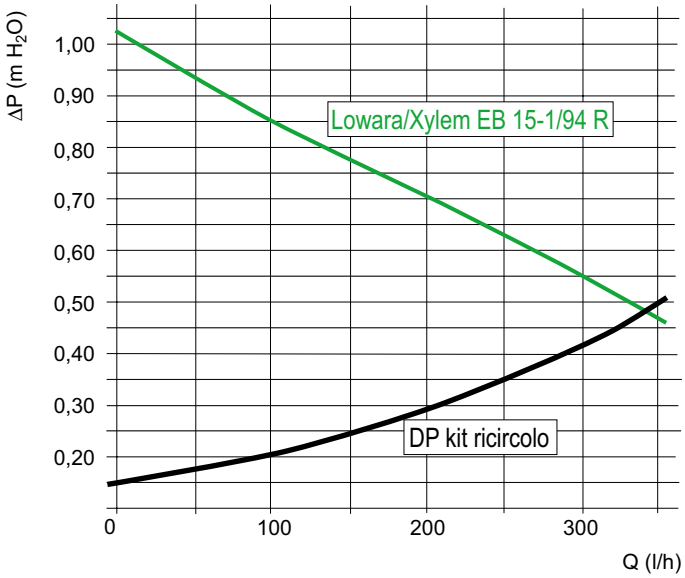
The proper working of the system is guaranteed if the temperature of the primary flow exceeds at least 5°C the temperature of the stated DHW set.

EXAMPLES OF USE





CHARACTERISTIC CURVES DHW RETURN PUMP

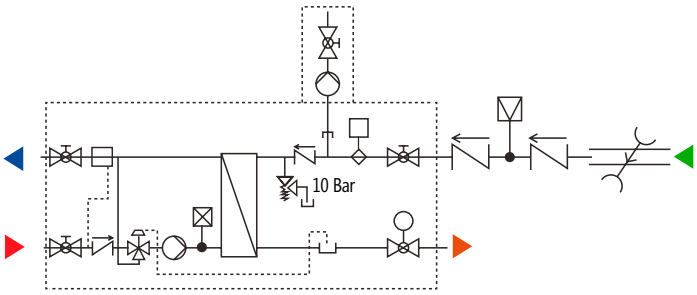


Thermostat integrated into the circulation pump. Setting 20-50 °C.

M-Bus

ULTRA CFMUS ULTRASONIC
M-BUS - Qn 1.5 m3/h - 110 X 3/4"

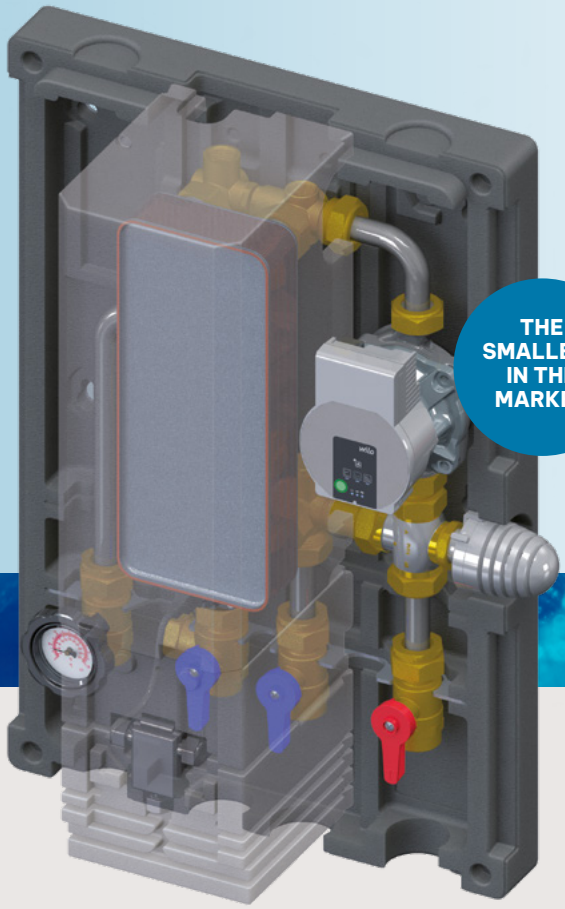
HYDRAULIC CIRCUIT



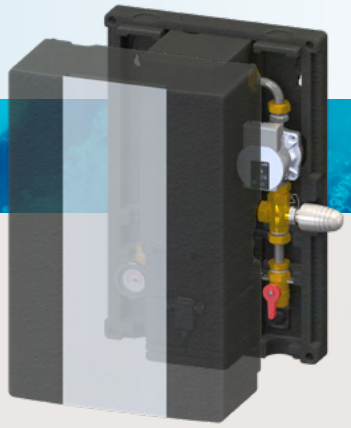
DHW PRODUCTION MODULE	COD.
CARLETTI COMPACT	
Wall-hung version	49060390
Built-in version	49060391
COMPONENTS	
Hot water sescondary return	49060389
ULTRA CFMUS ULTRASONIC M-BUS - Qn 1.5 m3/h - 110 x ¾"	20319084

DATASHEET

Carletti PRO 20/30



THE SMALLEST IN THE MARKET



HIGH REDUCTION OF WATER STAGNATION AND LEGIONELLA RISK

DESCRIPTION

Carletti PRO is a module for instantaneous domestic hot water production, which uses a stainless steel brazed plate heat exchanger and is used in combination with inertial storage tanks (buffers).

DHW production temperature is controlled by adjusting the thermostatic actuator located on the primary circuit with capillary temperature probe positioned at the DHW outlet. The primary circuit circulator is activated by a flow switch. A DHW recirculation pump kit is also available.

ADVANTAGES

- Compact module 390x590x220 mm.
- Nominal DHW delivery 20-30 l/min.
- AISI 316 stainless steel pipes.
- High yields due to the oversized steel plate heat exchanger.
- Maximum reduction of water stagnation, reducing the risk of Legionella.
- Possibility of installing a sanitary recirculation.
- Quick installation and easy maintenance.
- Compatible with any heat generator.
- Complete with 40 g/l black EPP thermal insulation.

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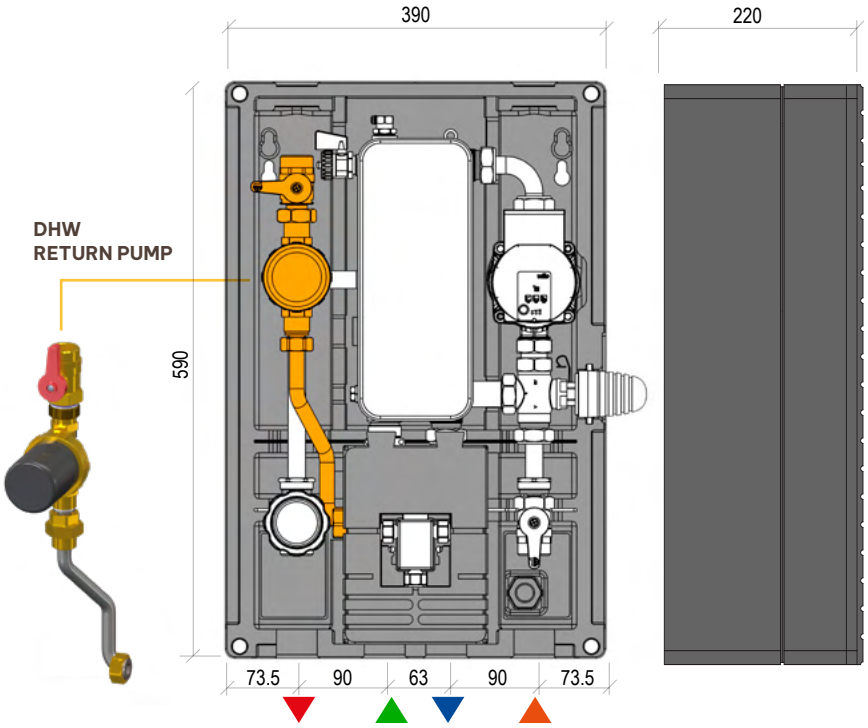
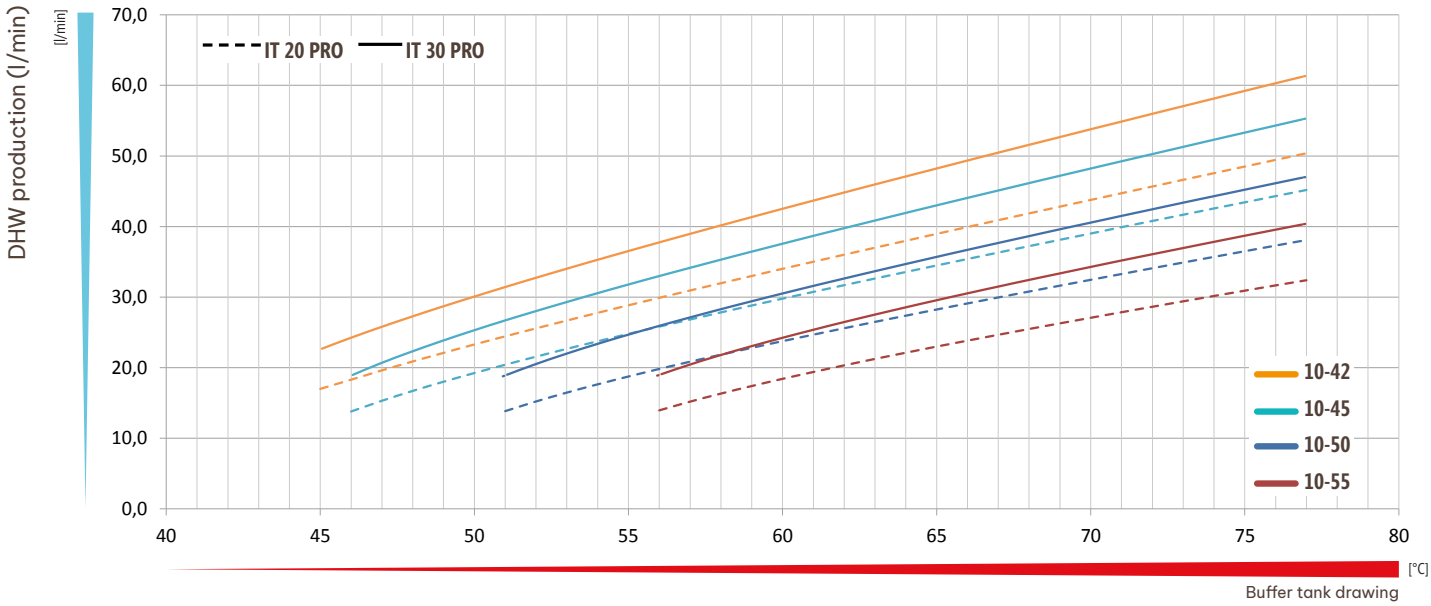
DIMENSIONS AND CONNECTIONS



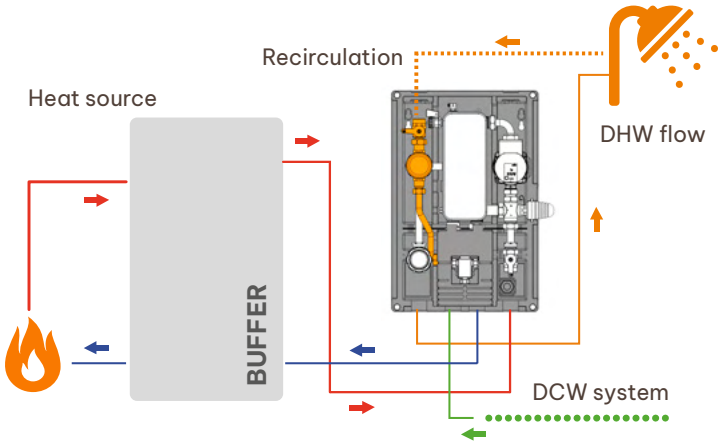
	iT20	iT30
Max. flow rate of secondary outlet (DHW)	20 l/min	30 l/min
Min. flow rate DHW production	2.5 ± 0.3 l/m	
Pressure loss DHW circuit 20-30-40 l/min	0.3 bar	0.65 bar
DHW temperature set	40-55°C	
Max. working pressure	10 bar	
Exchange surface of plates exchanger	0.78 m²	1.62 m²
Max. flow rate of primary flow	1560 l/h	1800 l/h
Max. temperature	90°C	
Pump	Wilo PARA SC 15/1-6	
Max Power supply	45W	
Connections	3/4"F-1"M	
Box dimension	590 x 390 x 220	
Pump of DHW recirculation	Lowara/Xylem EB 15-1/94 R	

DHW PRODUCTION



The proper working of the system is guaranteed if the temperature of the primary flow exceeds at least 5°C the temperature of the stated DHW set.

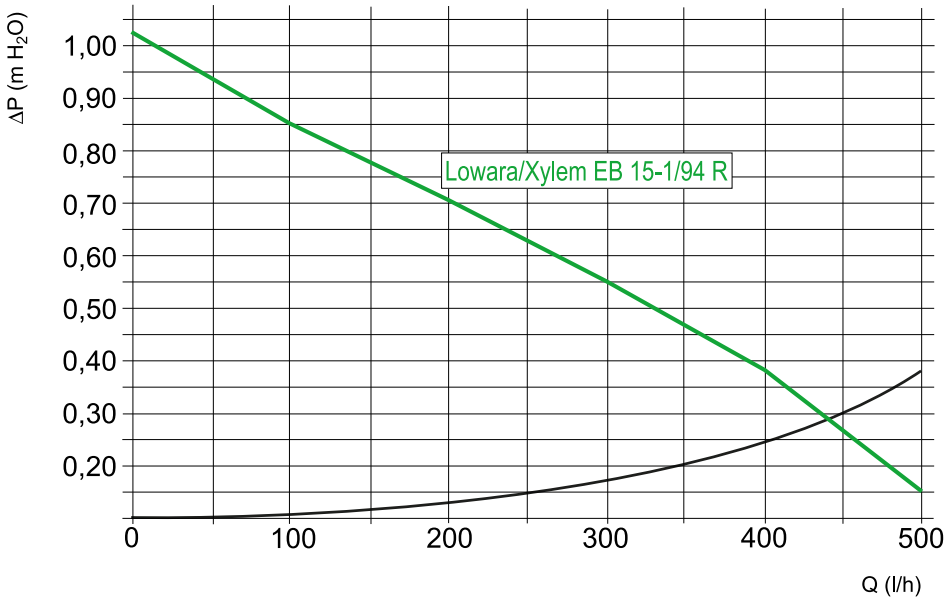
EXAMPLES OF USE



OVER HEATING PROTECTION

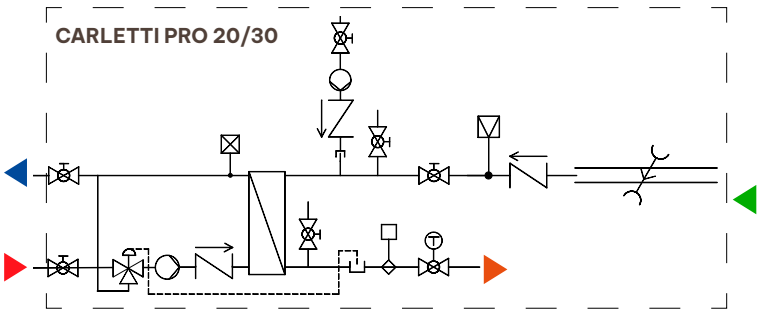
The NEW heating protection system keeps your electronics always cool.

CHARACTERISTIC CURVES DHW RETURN PUMP



Thermostat integrated into the circulation pump. Setting 20-50 °C.

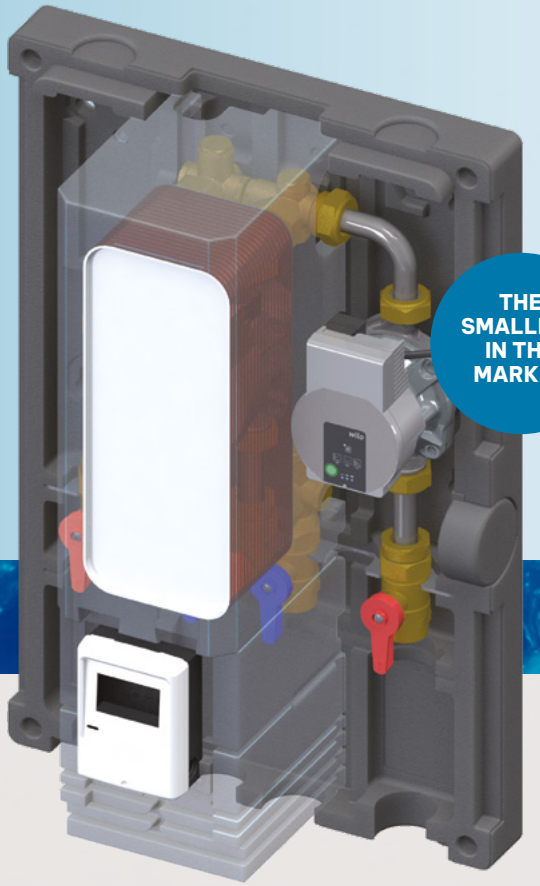
HYDRAULIC CIRCUIT



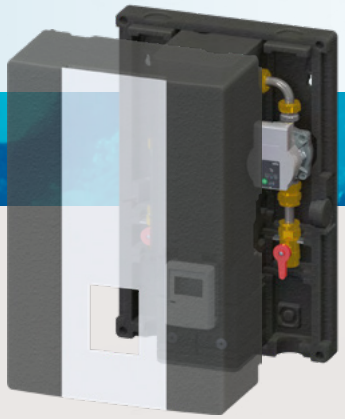
DHW PRODUCTION MODULE	COD.
CARLETTI PRO 20	49060770
CARLETTI PRO 30	49060780
ACCESSORIES	
DHW return Carletti PRO 20/30	49060800

DATASHEET

Carletti PRO/PRO+ 40



THE SMALLEST IN THE MARKET



HIGH REDUCTION OF WATER STAGNATION AND LEGIONELLA RISK

DESCRIPTION

Carletti PRO is a module for instantaneous domestic hot water production, which uses a stainless steel brazed plate heat exchanger and is used in combination with inertial storage tanks (buffers).

Domestic hot water temperature control (secondary) is achieved by modulating the flow rate of the primary carrier fluid using a high-efficiency variable-flow circulator controlled by the electronic regulator with PWM control. A domestic hot water recirculation kit is available.

ADVANTAGES

- Compact module 390x590x220 mm.
- Nominal DHW delivery 20-30-40 l/min.
- AISI 316 stainless steel pipes.
- High yields due to the oversized steel plate heat exchanger.
- Maximum reduction of water stagnation, reducing the risk of Legionella.
- Possibility of installing a sanitary recirculation.
- Quick installation and easy maintenance.
- Compatible with any heat generator.
- Complete with 40 g/l black EPP thermal insulation.

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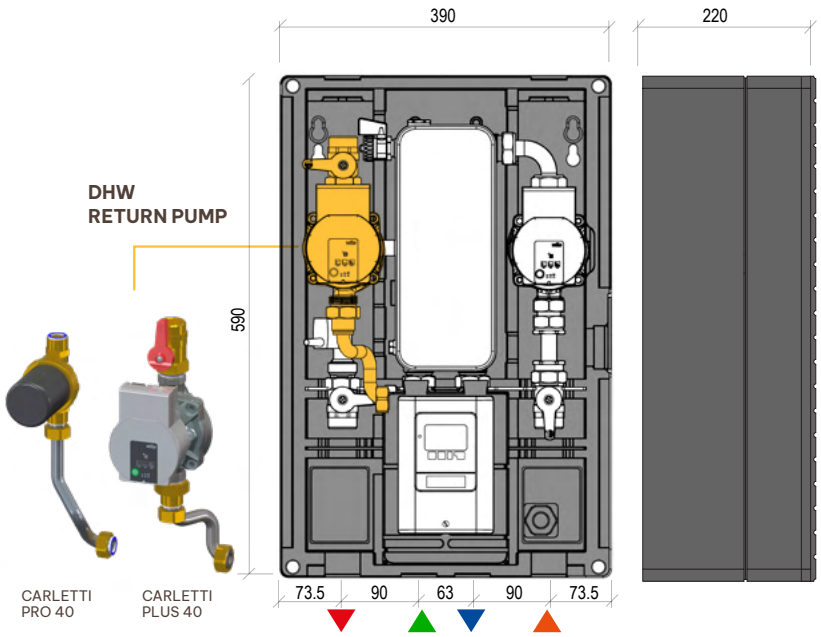
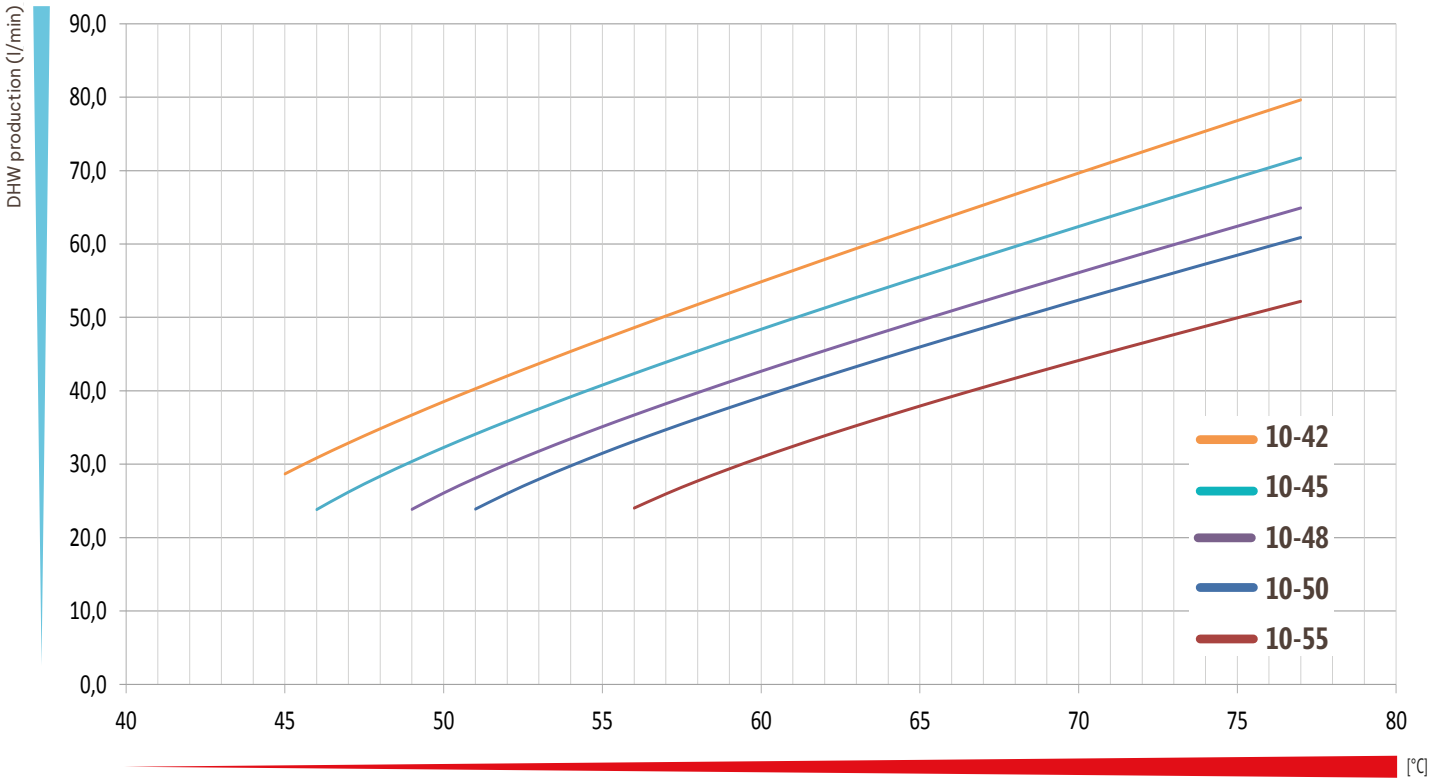
DIMENSIONS AND CONNECTIONS



	CARLETTI PRO/PRO+
Max. flow rate of secondary outlet (DHW)	44 l/min
Min. flow rate DHW production	2.5 ± 0.3 l/m
Pressure loss DHW circuit 44 l/min	0.9 bar
DHW temperature set	30-80°C
Max. working pressure	10 bar
Exchange surface of plates exchanger	1.9 m²
Max. flow rate of primary flow	2360 l/h
Max. temperature	90°C
Pump	Wilo PARA SC 15/1-6
Max Power supply	45W
Connections	3/4"F-1"M
Box dimension	590 x 390 x 220
CARLETTI PRO 40	
Pump of DHW recirculation	Lowara/Xylem EB 15-1/94 R
CARLETTI PRO+ 40	
Pump of DHW recirculation	Wilo PARA Z 15-7 PWM 2

DHW PRODUCTION



The proper working of the system is guaranteed if the temperature of the primary flow exceeds at least 5°C the temperature of the stated DHW set.

Buffer tank drawing temperature (°C)

	Recirculation ON-OFF 20-50 °C Integrate	Recirculation PLUS (PWM)	Waterfall
CARLETTI PRO 40	•		
CARLETTI PRO+ 40		•	•

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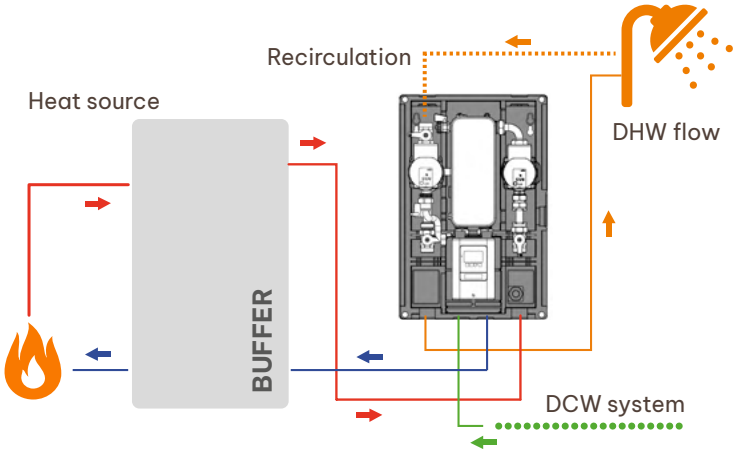
EXAMPLES OF USE



OVER HEATING
PROTECTION

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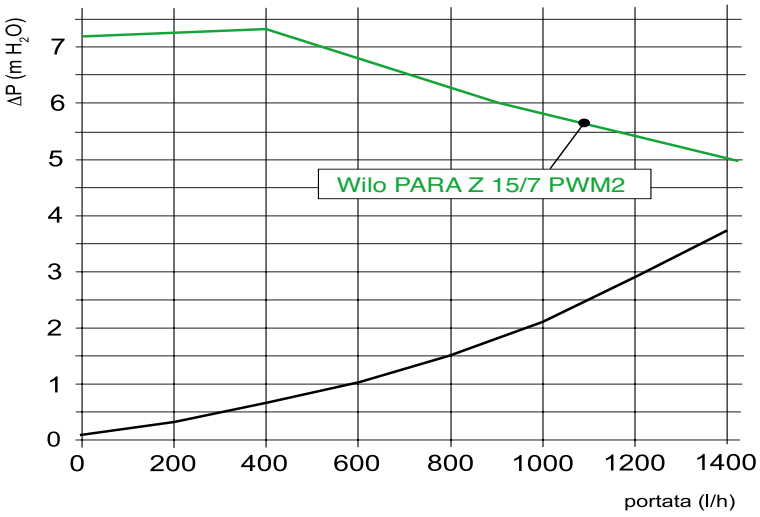
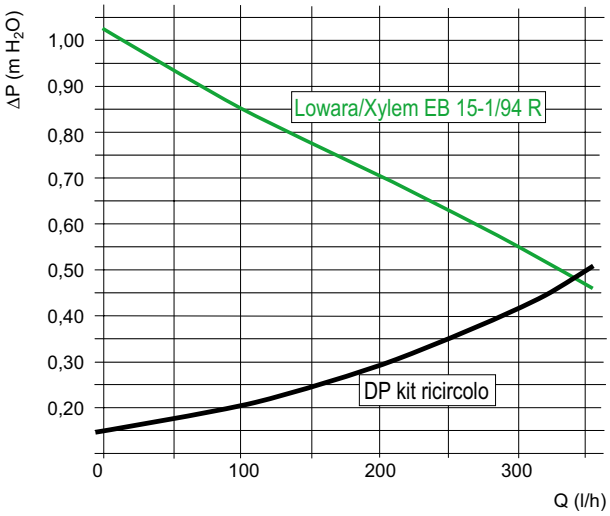
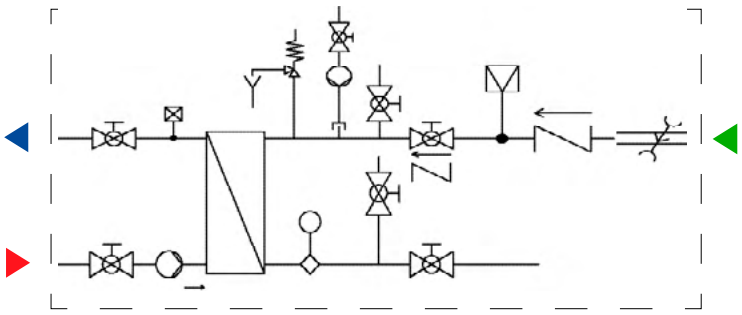
CHARACTERISTIC CURVES DHW RETURN PUMP





HYDRAULIC CIRCUIT

CARLETTI 40 PRO/PLUS



DHW PRODUCTION MODULE	COD.
CARLETTI PRO 40	49060790
CARLETTI PRO+ 40	49060793
ACCESSORIES	
DHW return Carletti PRO 40	49060805
DHW return Carletti PRO+ 40	49060810

DATASHEET

Carletti PRO+/PRO 60

THE SMALLEST IN THE MARKET

HIGH REDUCTION OF WATER STAGNATION AND LEGIONELLA RISK

DESCRIPTION

Carletti PRO 60 is an instantaneous domestic hot water production module that uses a stainless steel plates exchanger, that finds a wide use if coupled with buffer tanks.

The setting of the domestic hot water outlet temperature (secondary side) happens with the modulation of the primary circuit flow rate through a variable flow pump controlled by MFWC controller (PWM control).

The system, which works with a low primary temperature, finds a wide use in thermal solar systems and in underfloor heating.

3-way mixing valve: estabilishes the inlet water temperature (ideal function for the summer, in which the system exploites solar thermal panels) Is available a DHW recirculation pump kit.

ADVANTAGES

- Domestic hot water is produced on requests, so that big accumulations are not necessary.
- DHW nominal supply 60 l/min.
- AISI 316 stainless steel pipes.
- High performances due to the oversized plate exchanger made of steel.
- High reduction of water stagnation and legionella risk.
- Possibility to install domestic recirculation.
- Standard or high efficiency circulating pump.
- Quick installation and easy maintenance.
- It may be combined with every heat generator.
- Complete with thermal insulation.

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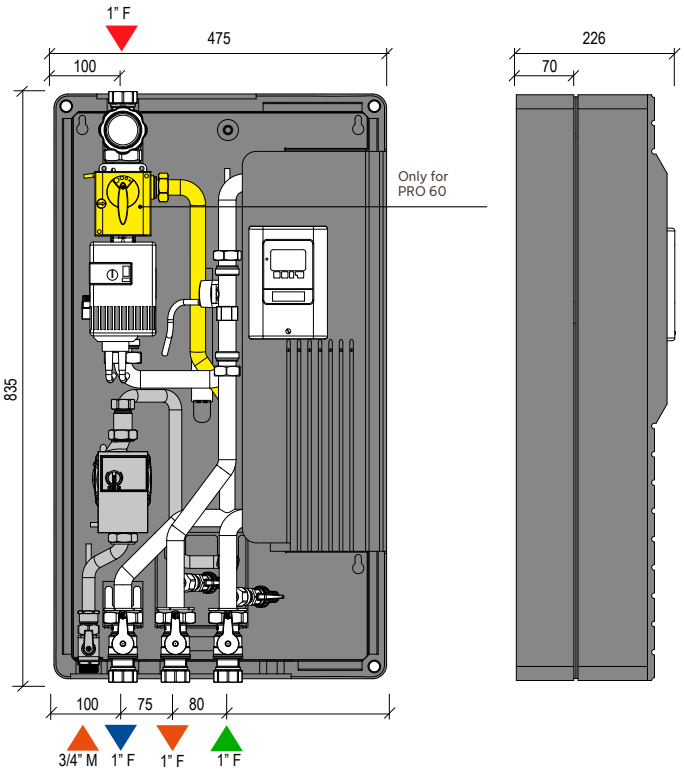
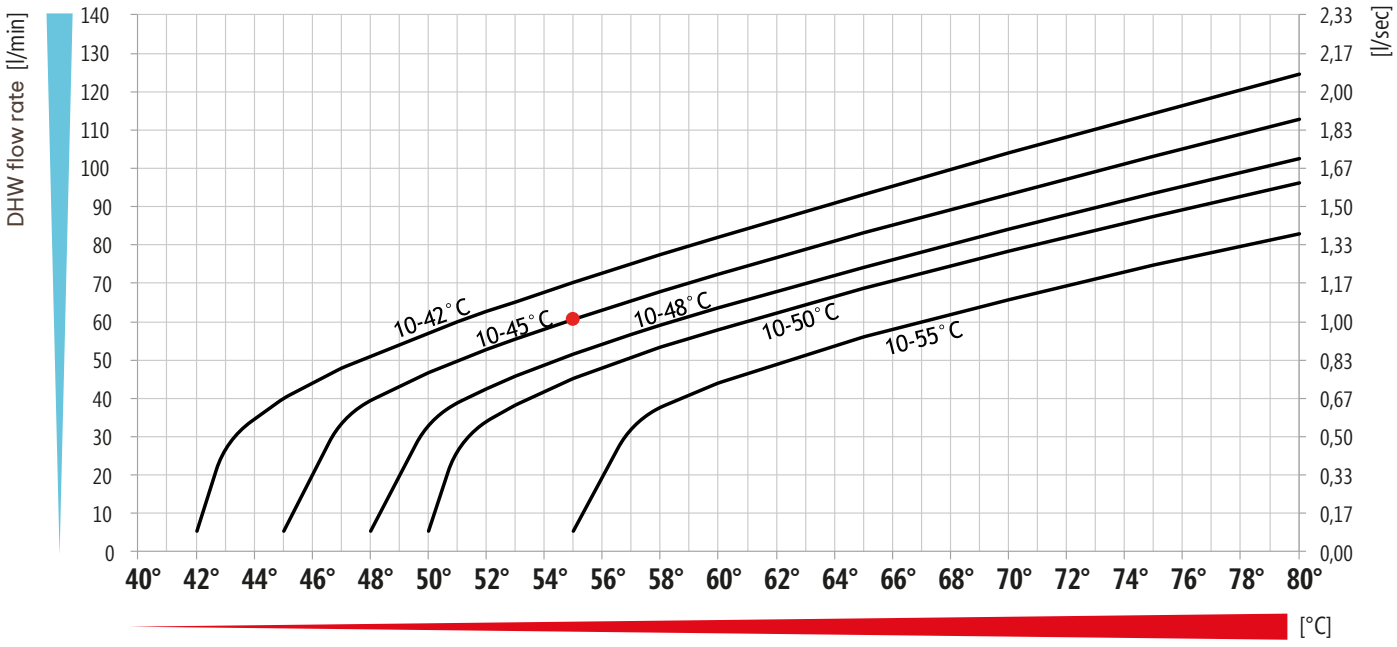
DIMENSIONS AND CONNECTIONS



Max. flow rate of secondary outlet (DHW)	110 l/min
Min. flow rate DHW production	5 ± 0.3 l/m
Pressure loss DHW circuit -110 l/min	0.8 bar
DHW temperature set	30-80°C
Max. working pressure	10 bar
Exchange surface of plates exchanger	3.00 m^2
Max. flow rate of primary flow	3600 l/h
Max. temperature	90°C
Pump	Wilo Maxo PARA 25/11
Max Power supply	140 W
Connections	1"F
Pipe material	INOX ASI 316
Exchanger material	INOX ASI 316 Braised welding
Box dimension	890x530x220
Pump of DHW recirculation	Wilo PARA Z 15/7 iPWM
ULTRA CFMUS ULTRASONIC M-BUS Qn 1.5 m3/h - 110 x 3/4"	1.5 m3/h - CL 2 - 110 mm x ¾"
ULTRA CFMUS ULTRASONIC M-BUS Qn 1.5 m^3/h - 110 x 3/4"	1.5 m^3/h - CL 2 - 110 mm x ¾"

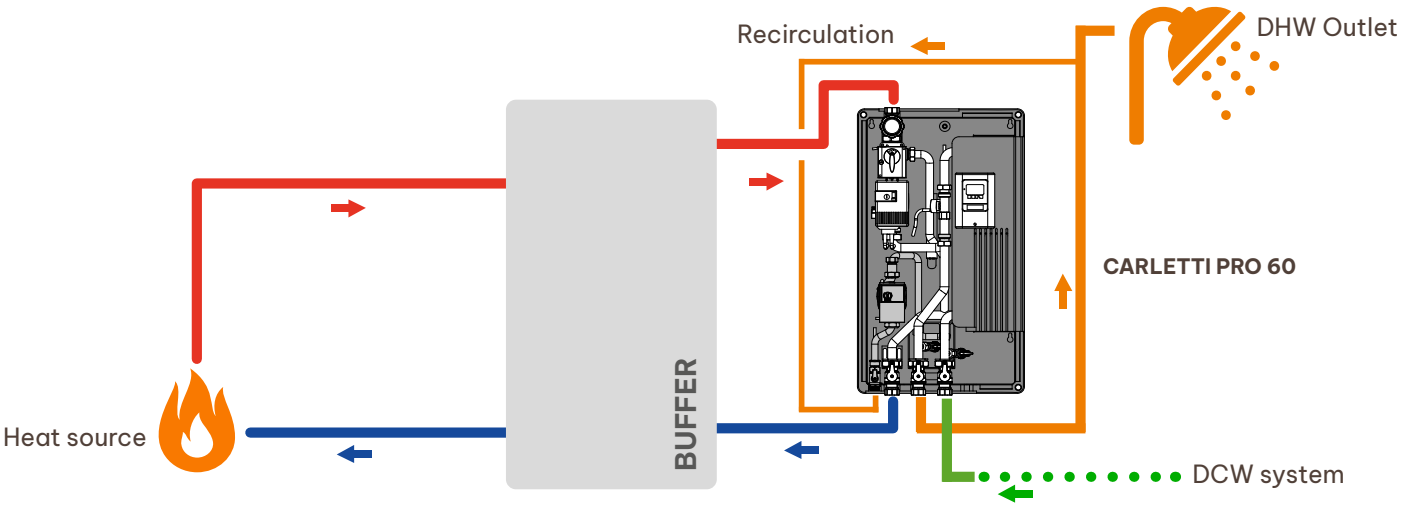
DHW PRODUCTION



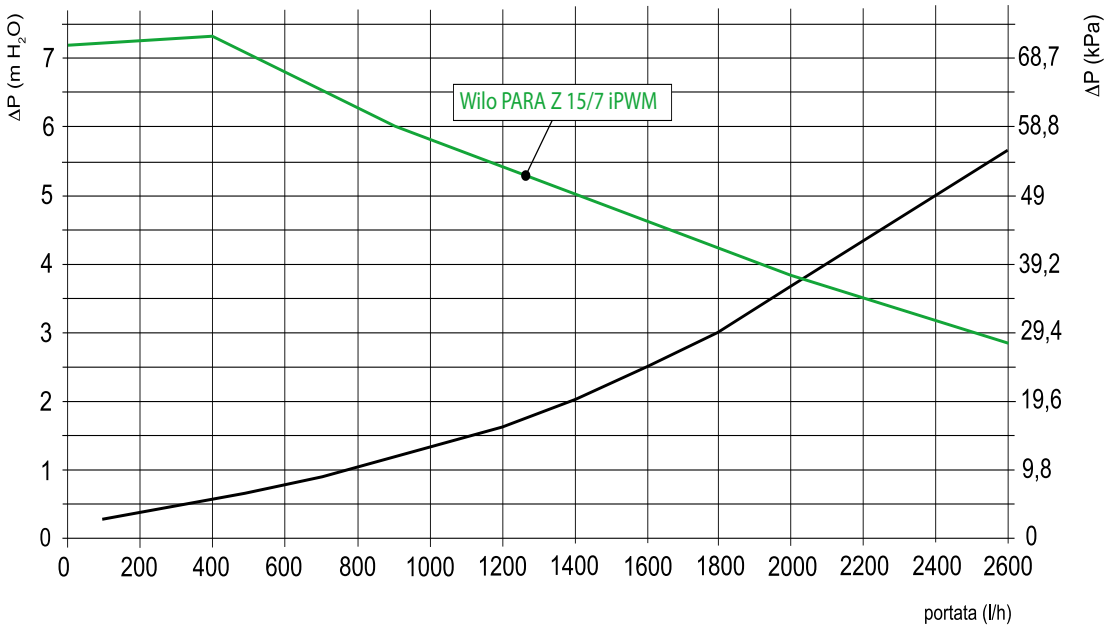
The proper working of the system is guaranteed if the temperature of the primary flow exceeds at least 5°C the temperature of the stated DHW set.

	Mix Valve	Primary temp.	AUX o LEGIONELLA
CARLETTI PRO+ 60	•	>58 °C	•
CARLETTI PRO 60	-	<58 °C	•

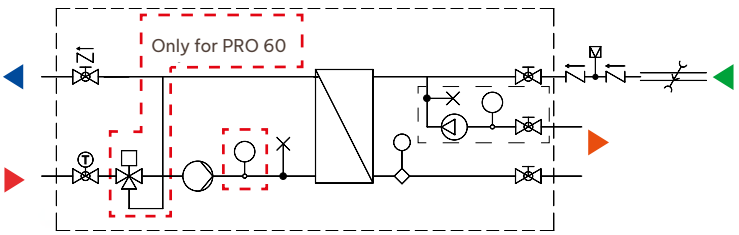
EXAMPLES OF USE



CHARACTERISTIC CURVES DHW RETURN PUMP



HYDRAULIC CIRCUIT



DHW PRODUCTION MODULE	COD.
CARLETTI PRO+ 60	49060560
CARLETTI PRO 60	49060562
KIT Hot water secondary return pump kit	49060565
Cascade kit 2x	49060525
Cascade kit 3x	49060526

DATASHEET

Carletti BESPOKE 80/100/150

HIGH REDUCTION OF WATER STAGNATION AND LEGIONELLA RISK

ADVANTAGES

- Reduced risk of Legionella formation.
- 8 configurations, 3 sizes of hot water output.
- PLUG AND PLAY, ready-to-use, no on-site operations (assembly and factory testing).
- Constant DHW supply due to the double pump system.
- Can be integrated with existing sanitary installations.
- Cascade applications up to 8 modules in parallel.
- 4-side inspection.
- Control of the gas boiler (dry contact).
- Comfort function to ensure minimum DHW flow rates (even below 5 l/min).
- Remote supervision.
- Easy selection of the model due to the ON-LINE CARLETTI CONFIGURATOR.

DESCRIPTION

Carletti BESPOKE is a floor-standing module for the instantaneous production of large amount of domestic hot water.

The function of the module is to heat the domestic hot water through the plate heat exchanger using the energy coming from a buffer tank.

The advantage of this module is the production of domestic hot water in large volume, with a low primary flow temperature of 48°C (DHW set at 45°C). This allows the use of several energy sources, such as solar installations, heat pumps, biomass, etc.

The module is designed with the most advanced hydraulic technologies and electronic control ensuring the production of DHW up to 220 l/min.

DOUBLE PUMPS. The adjustment of the flow rate on the primary side through two modulating pumps in parallel ensures a constant DHW supply even in case of a pump fault (up to 60% of the total DHW supply) and guarantees the absolute precision of DHW outlet temperature control even at minimum withdrawal of flow rates. The energy transferred to the cold water flow is only the energy necessary to produce the DHW at the required temperature.

ENERGY EFFICIENCY. The module is energy efficient, reduces energy waste and preserves the energy stored inside the buffer tank. This system is superior than all other traditional forms of DHW production (tank with coil or instantaneous gas/electricity producers).

LARGE WITHDRAWAL APPLICATIONS. The floor-standing module is suitable for large withdrawal applications such as block of flats, sports facilities (changing rooms, gyms, swimming pools or football fields), residences, camping and holiday resorts, clinics, offices, cowsheds (drinking troughs, processes for controlled average temperatures) and any other applications that requires large production of DHW.

REDUCES THE RISK OF LEGIONELLA. The design significantly reduces water stagnation volumes and due to the anti-legionella function which activates an external system to raise the temperature, the risk of bacterium proliferation is reduced to a minimum.

AVAILABLE CONFIGURATIONS. The module is offered in 8 configurations with 3 sizes of hot water output to cover the different system requirements and conditions of use. In addition to the basic version (DHW instantaneous production), the module can be set up with other accessories completely assembled and tested directly inside the factory:

CASCADE KIT to connect several DHW production units in parallel (up to 1200 l/min) with primary temperature of 55°C;

REMOTE DATA SUPERVISION SYSTEM.

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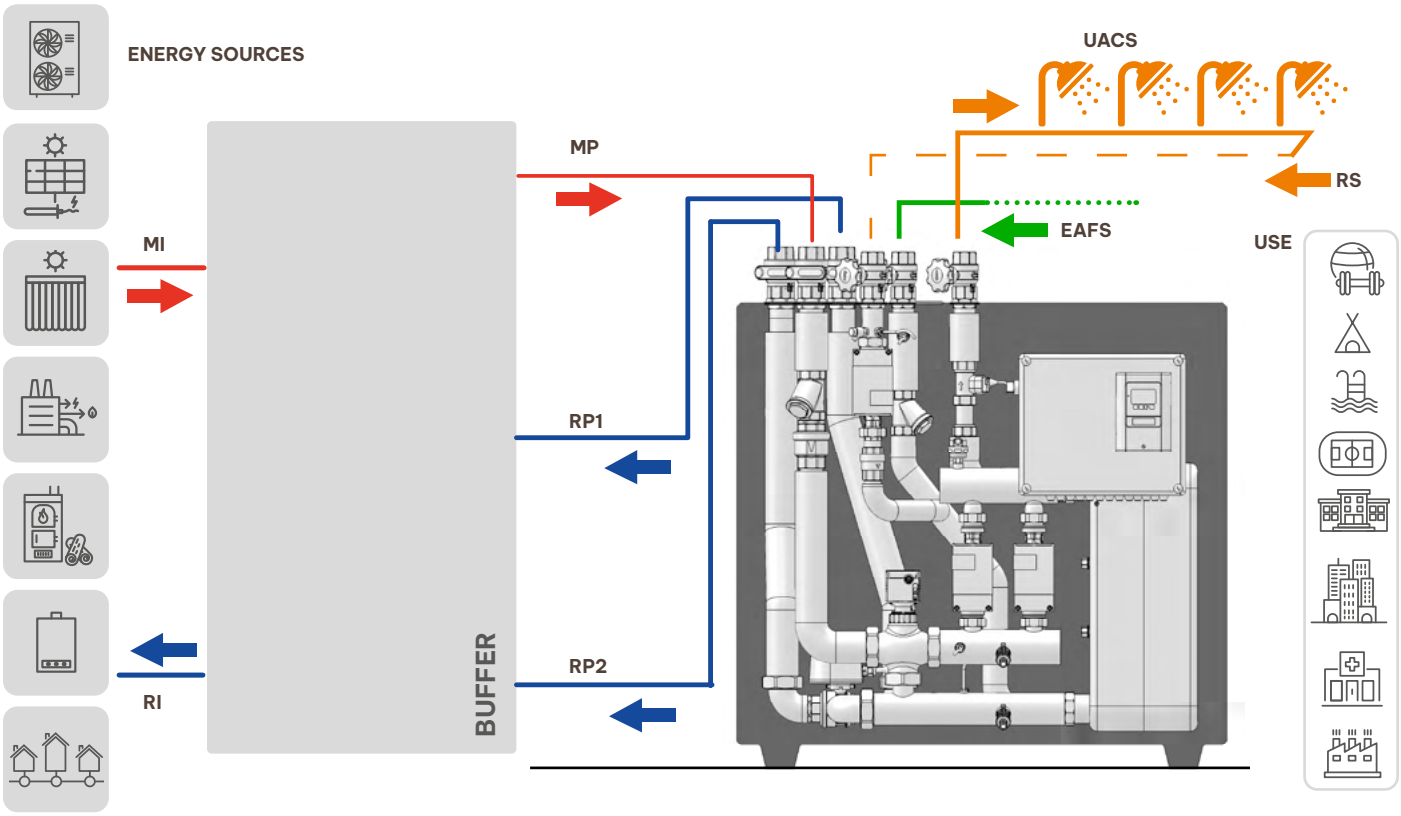
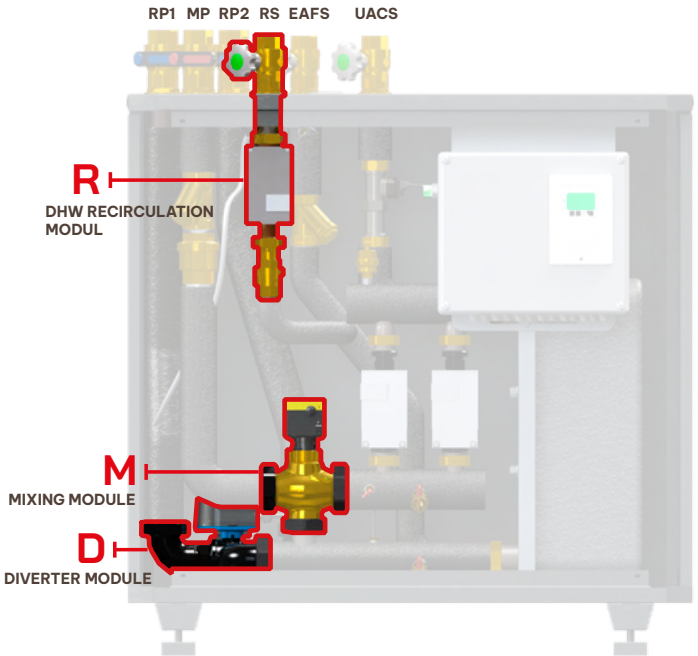
APPLICATION FUNCTIONAL DIAGRAM



MPR	PRIMARY FLOW	**MP**	BUFFER TANK FLOW	**EAFS**	COLD WATER INLET
RPR	PRIMARY RETURN	**RP1**	BUFFER TANK RETURN 1	**UACS**	DOMESTIC HOT WATER OUTLET
		RP2	BUFFER TANK RETURN 2	**RS**	DHW RECIRCULATION (SECONDARY RETURN)

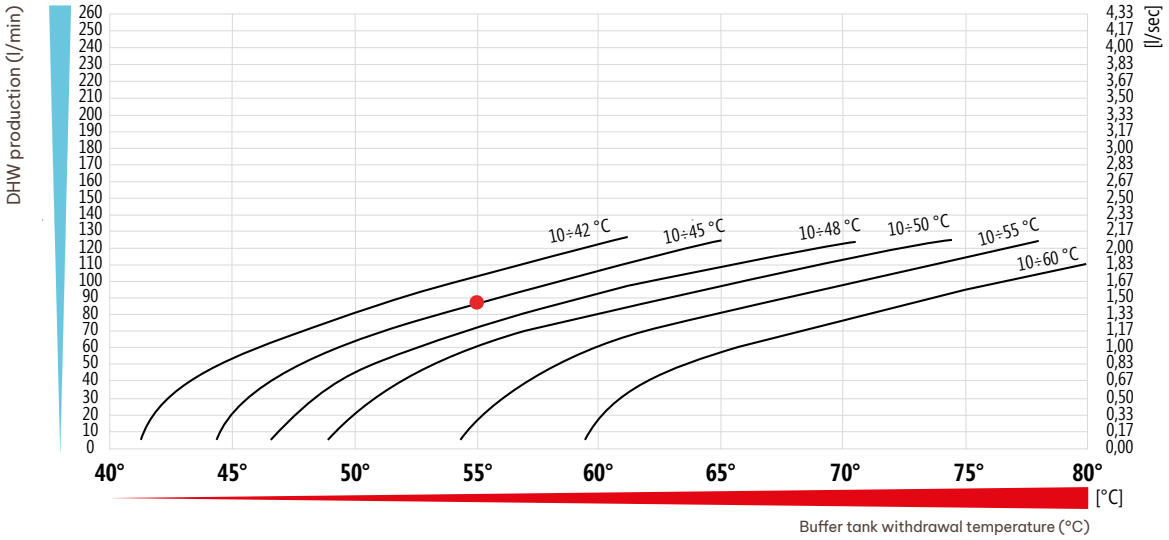


AVAILABLE MODULES

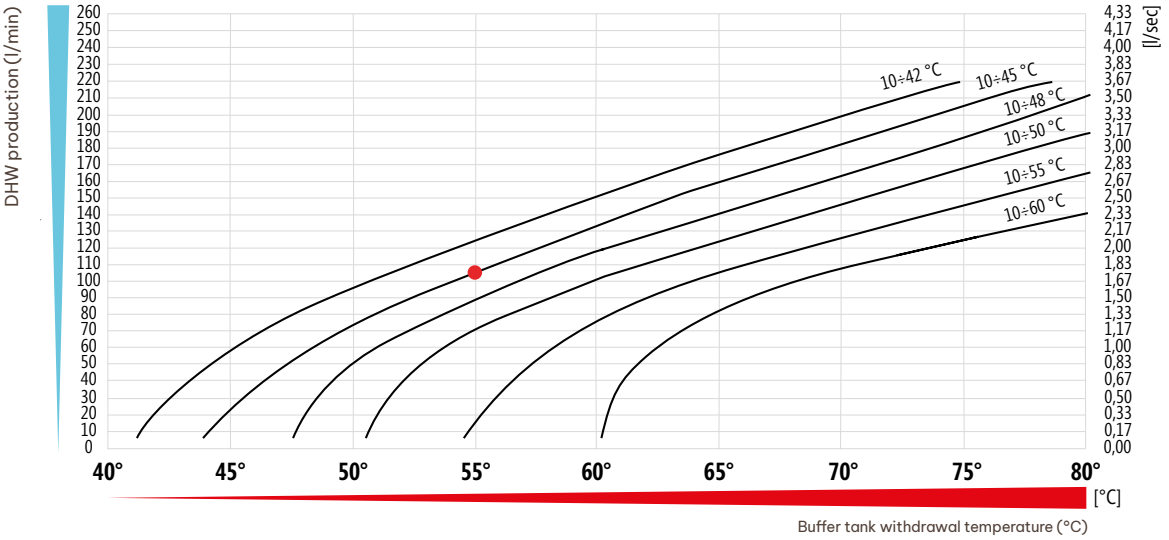
The Carletti BESPOKE module is available in 8 versions, starting from a B version (basic) it can be implemented with different sets (assembled and tested directly in the factory) depending on the requirements:

- **R DHW recirculation module:** intelligent management of DHW recirculation when it is needed to keep the DHW line warm (time band control and based on the recirculation return temperature).
- **M Mixing module:** adjusts and stabilizes the inlet temperature of the plate heat exchanger when the temperature of the water stored inside the buffer tank exceeds 58°C. This facilitates stratification, limits the formation of limescale in the plate heat exchanger, preserves the system's functionality over the time and optimises the control of the sanitary outlet temperature.
- **D Diverter module:** allows the stratification of both two buffers in series and high stratification buffer tanks.

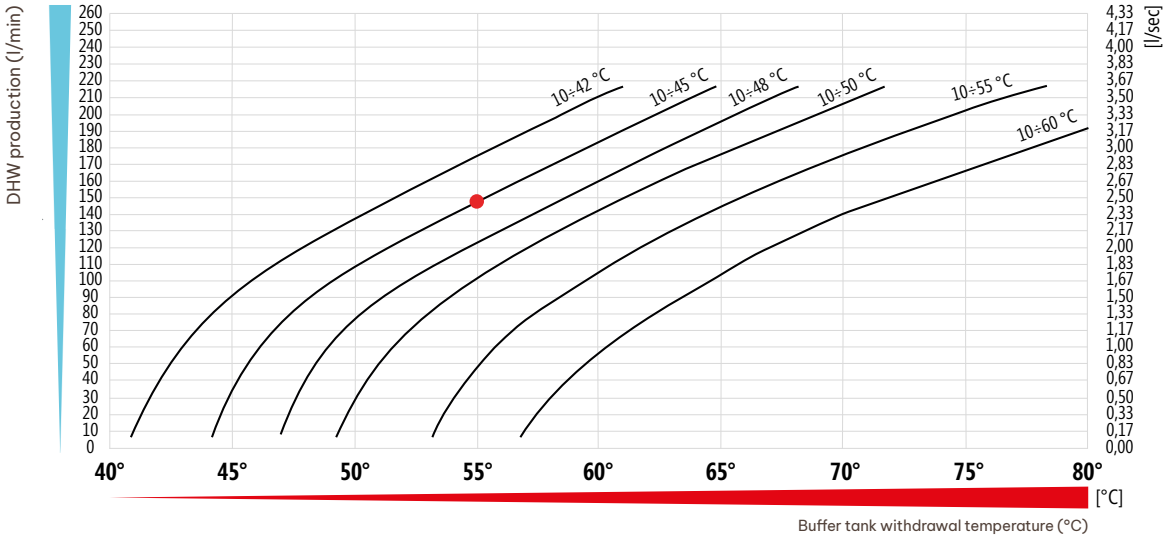
Carletti BESPOKE 80



Carletti BESPOKE 100



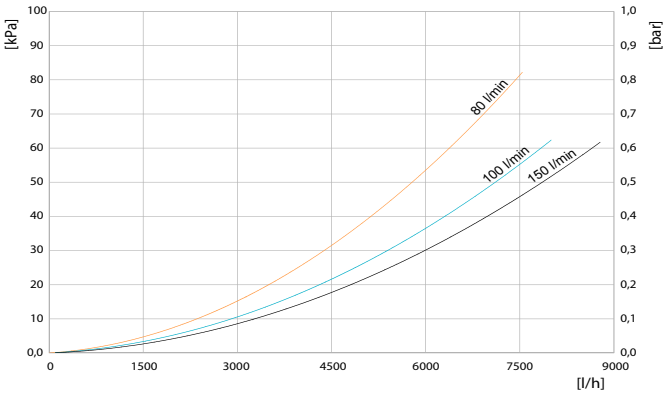
Carletti BESPOKE 150

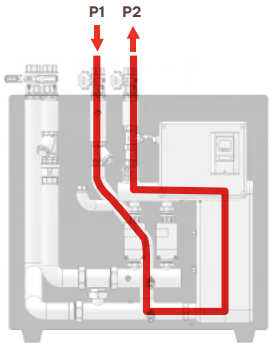


NB: The correct working of the module is granted if the primary flow temperature exceeds the DHW set temperature at least 3°C

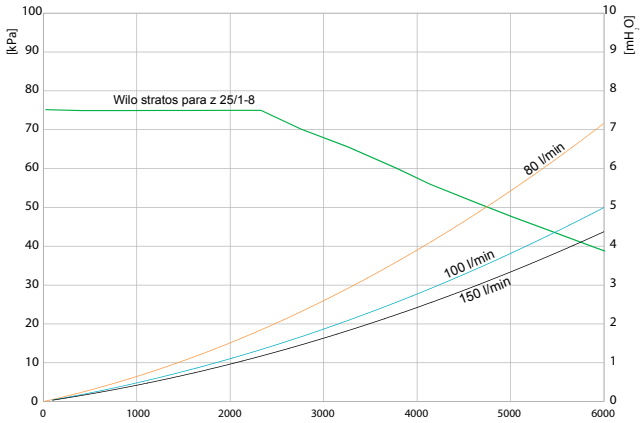
DHW PRODUCTION

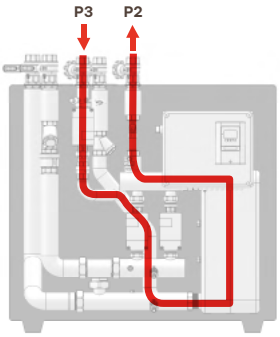
DHW CIRCUIT P1-P2

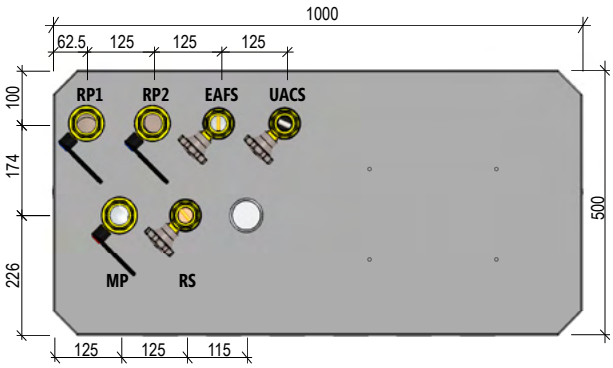


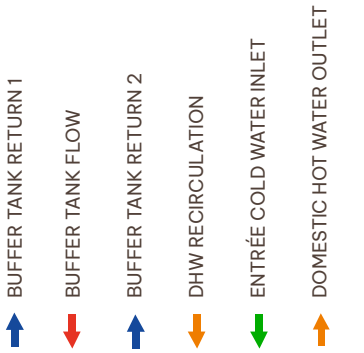


DHW RECIRCULATION CIRCUIT P3-P2







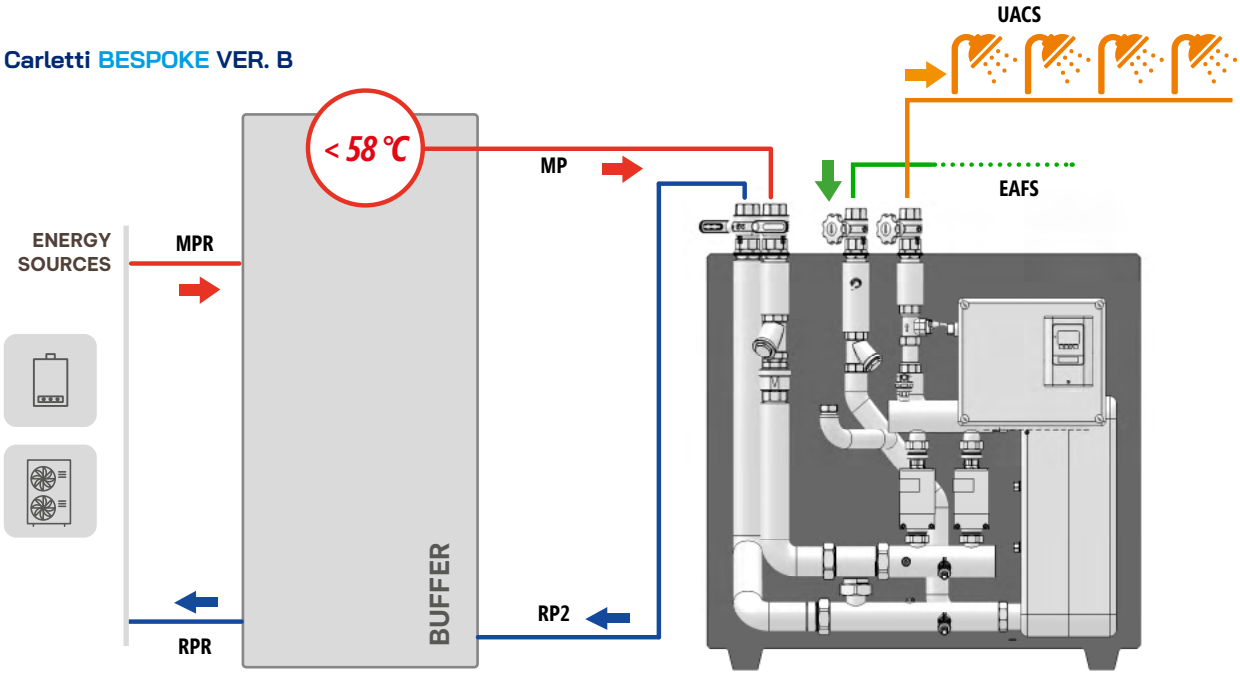


CONNECTIONS	RP1	MP	RP2	RS*	EAFS	UACS
Carletti BESPOKE 80/100/150	1"½	1"½	1"½	1"¼	1"¼	1"¼

	CARLETTI BESPOKE 80	CARLETTI BESPOKE 100	CARLETTI BESPOKE 150
Max. withdrawal from buffer tank	6.300 l/h	8.000 l/h	10.500 l/h
Min-max DHW flow rate	5-100 l/min	10-200 l/min	10-200 l/min
DHW production - (T prim. 55°C - ΔT sec. 10-45°C)	80 l/min	100 l/min	150 l/min
DHW production - (T prim. 60°C - ΔT sec. 10-45°C)	105 l/min	135 l/min	187 l/min
DHW production - (T prim. 65°C - ΔT sec. 10-45°C)	105 l/min	165 l/min	220 l/min
Maximum power consumption	360 W / 1.5 A	410 W / 3.9 A	770 W / 4.35 A
Power supply	230 V		
Max. operating temperature	90 °C		
Max. pressure primary circuit	10 bar		
Max. pressure secondary circuit	10 bar		
Index of protection	IP 40		
Dimensions (bxhxp)	1000 x 1110 x 496		
Dimensions + packaging (bxhxp)	1050 x 1225 x 580		

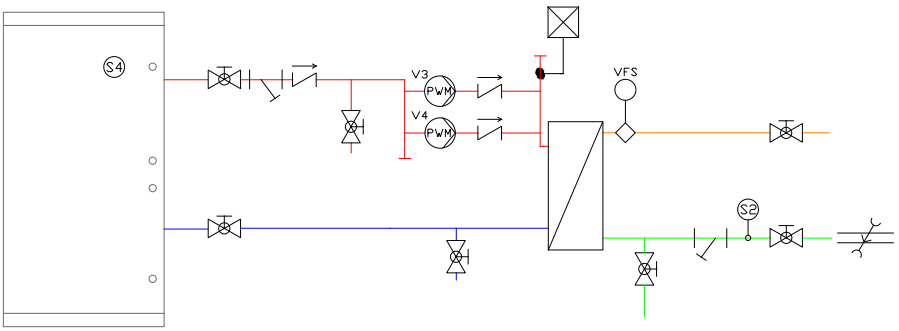
VERSION

Carletti BESPOKE VER. B



The B version is suitable to produce DHW when the temperature of the water stored inside the buffer is lower than 58°C, for example when the energy source is a heat pump or a condensing boiler.

HYDRAULIC SCHEME

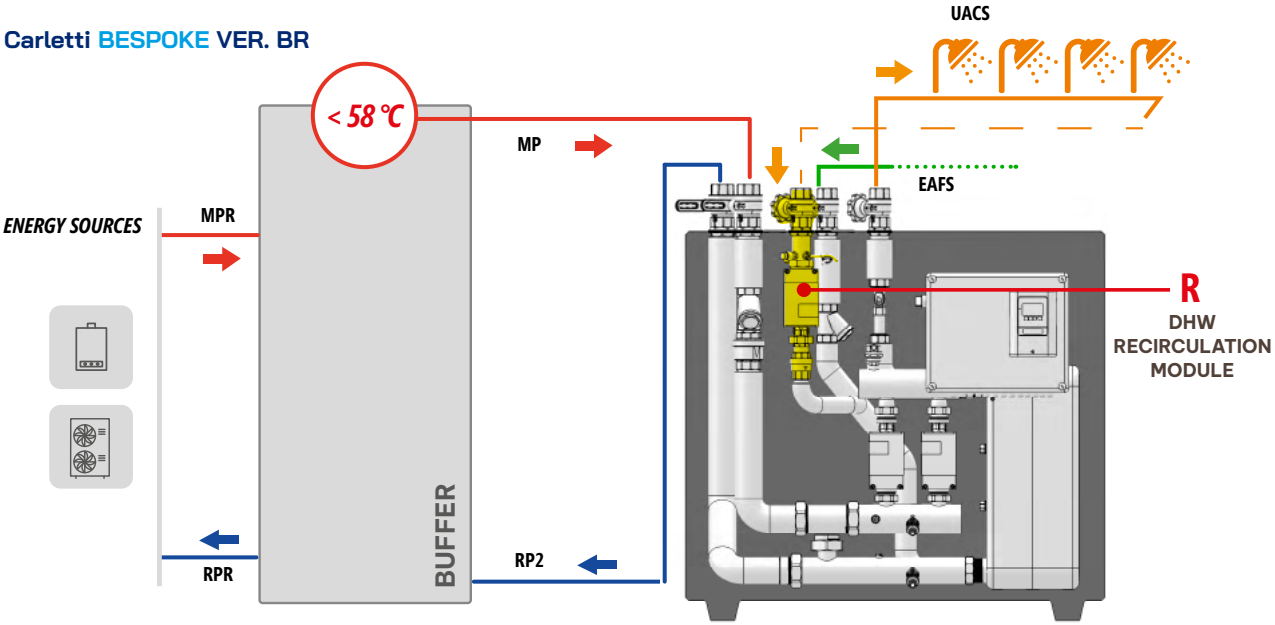


	Non-return valve
	Ball valve
	Automatic air vent
PWM	PWM pump
VFS	Flow sensor
	"Y" Strainer
S2	DCW sensor
S4	Buffer tank 1 sensor

CARLETTI BESPOKE 3 B / VERSION BASE	COD.
DHW PRODUCTION MODULE	
CARLETTI BESPOKE 80 l/min	49060710
CARLETTI BESPOKE 100 l/min	49060720
CARLETTI BESPOKE 150 l/min	49060730
CASCADE KIT CARLETTI BESPOKE	
2X	49060738
3X	49060739
SUPERVISION CONTROL	20318540

VERSION

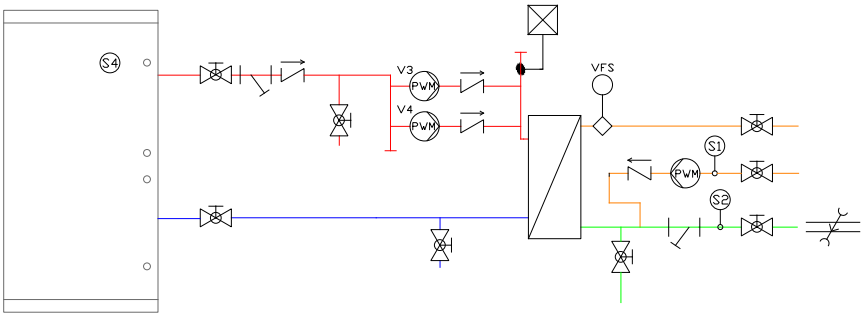
Carletti BESPOKE VER. BR



The BR version is suitable to produce DHW when the temperature of the water stored inside the buffer is lower than 58°C, for example when the energy source is a heat pump or a condensing boiler.

R DHW recirculation module: intelligent management of DHW recirculation when is need to keep the DHW line warm (time band control and based on the recirculation return temperature).

HYDRAULIC SCHEME

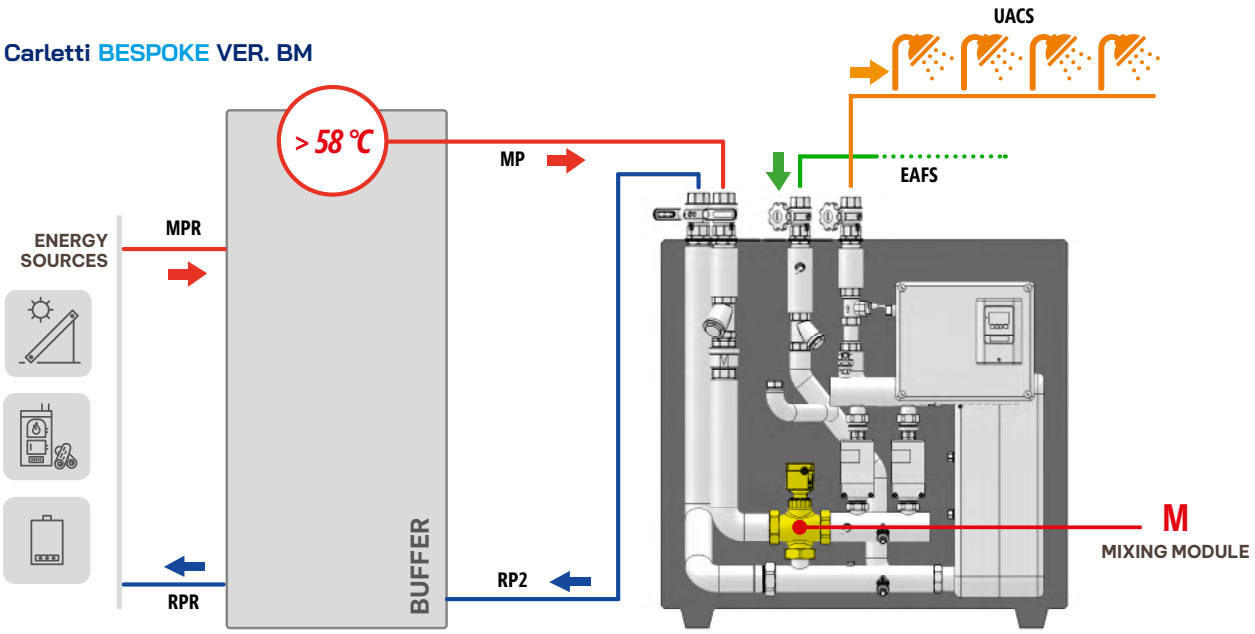


	Non-return valve
	Ball valve
	Automatic air vent
PWM	PWM pump
VFS	Flow sensor
	"Y" Strainer
S1	Recirculation sensor
S2	DCW sensor
S4	Buffer tank 1 sensor

CARLETTI BESPOKE BR - DHW RECIRCULATION MODULE	COD.
DHW PRODUCTION MODULE	
Carletti BESPOKE 80 BR 80 l/min	49060713
Carletti BESPOKE 100 BR 100 l/min	49060723
Carletti BESPOKE 150 BR 150 l/min	49060733
CASCADE KIT CARLETTI BESPOKE	
2X	49060738
3X	49060739
SUPERVISION CONTROL	20318540

VERSION

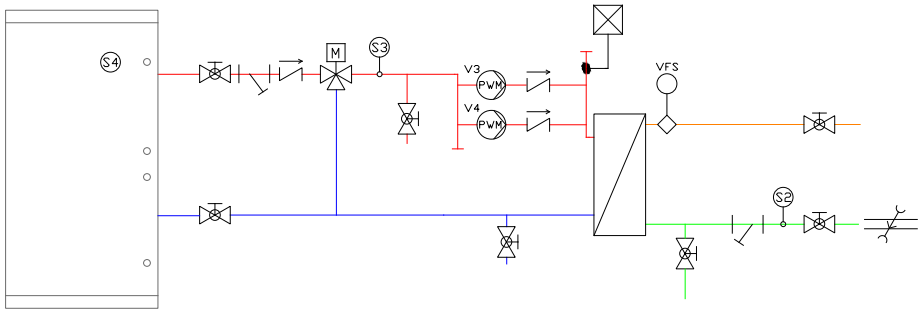
Carletti BESPOKE VER. BM



The BM version is suitable to produce DHW when the temperature of the water stored inside the buffer tank exceed 58°C, for example when the energy source is biomass boilers, traditional gas boilers, electric heaters, cogeneration systems district heating etc.

+ M Mixing module: adjusts and stabilizes the inlet temperature of the plate heat exchanger when the temperature of the water stored inside the buffer tank exceeds 58°C. This facilitates stratification, limits the formation of limescale in the plate heat exchanger, preserves the system's functionality over the time and optimises the control of the sanitary outlet temperature

HYDRAULIC SCHEME

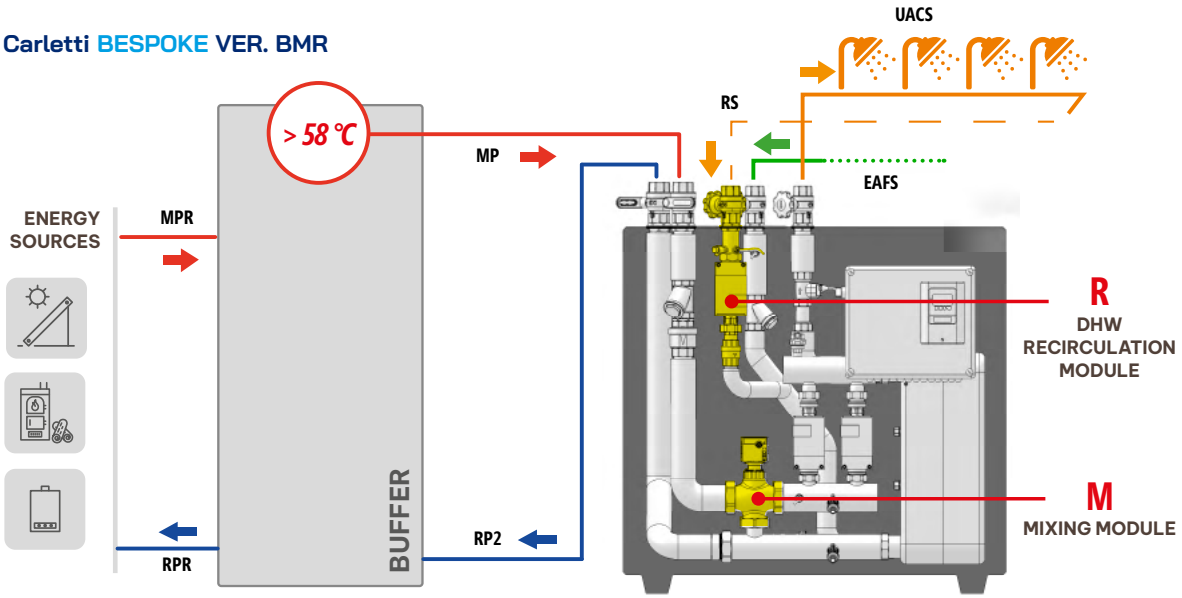


	Non-return valve
	Ball valve
	Automatic air vent
PWM	PWM pump
VFS	Flow sensor
	"Y" Strainer
S2	DCW sensor
S3	Mixing valve sensor
S4	Buffer tank 1 sensor

CARLETTI BESPOKE BM - MIXING MODULE	COD.
DHW PRODUCTION MODULE	
Carletti BESPOKE 80 BM 80 l/min	49060711
Carletti BESPOKE 100 BM 100 l/min	49060721
Carletti BESPOKE 150 BM 150 l/min	49060731
CASCADE KIT CARLETTI BESPOKE	
2X	49060738
3X	49060739
SUPERVISION CONTROL	20318540

VERSION

Carletti BESPOKE VER. BMR

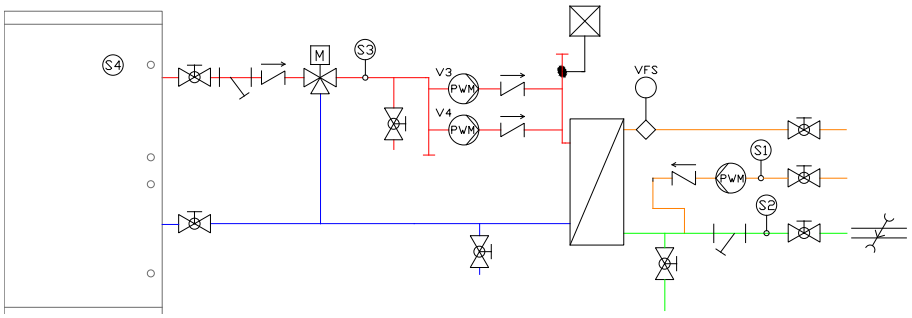


The BMR version is suitable to produce DHW when the temperature of the water stored inside the buffer tank exceed 58°C, for example when the energy source is biomass boilers, traditional gas boilers, electric heaters, cogeneration systems district heating etc..

+ R DHW recirculation module: intelligent management of DHW recirculation when is need to keep the DHW line warm (time band control and based on the recirculation return temperature).

+ M Mixing module: adjusts and stabilizes the inlet temperature of the plate heat exchanger when the temperature of the water stored inside the buffer tank exceeds 58°C. This facilitates stratification, limits the formation of limescale in the plate heat exchanger, preserves the system's functionality over the time and optimises the control of the sanitary outlet temperature.

HYDRAULIC SCHEME

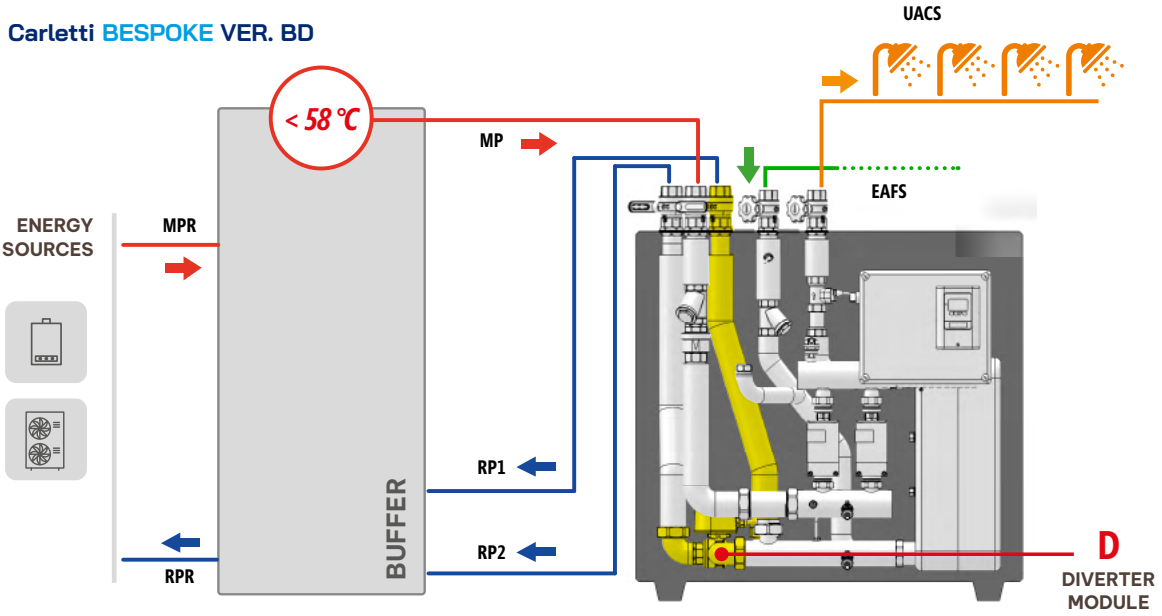


	Non-return valve
	Ball valve
	Automatic air vent
PWM	PWM pump
VFS	
	"Y" Strainer
S1	Recirculation sensor
S2	DCW sensor
S3	Mixing valve sensor
S4	Buffer tank 1 sensor

CARLETTI BESPOKE BMR - MIXING MODULE + DHW RECIRCULATION MODULE	COD.
DHW PRODUCTION MODULE	
Carletti BESPOKE 80 BMR 80 l/min	49060715
Carletti BESPOKE 100 BMR 100 l/min	49060725
Carletti BESPOKE 150 BMR 150 l/min	49060735
CASCADE KIT CARLETTI BESPOKE	
2X	49060738
3X	49060739
SUPERVISION CONTROL	20318540

VERSION

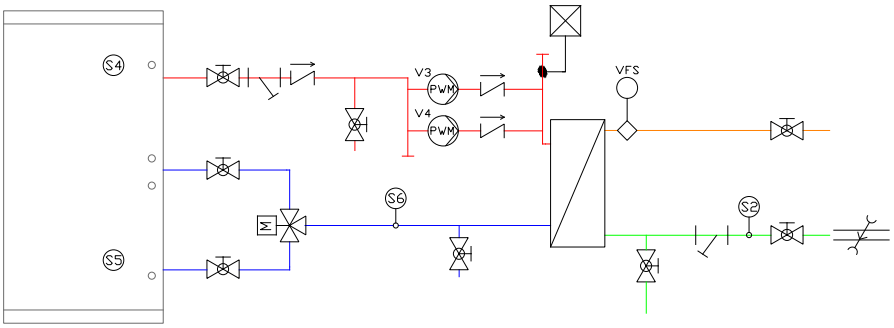
Carletti BESPOKE VER. BD



The BD version is suitable to produce DHW when the temperature of the water stored inside the buffer is lower than 58°C, for example when the energy source is a heat pump or a condensing boiler.

+ D Diverter module: allows the stratification of both two buffers in series and high stratification buffer tanks.

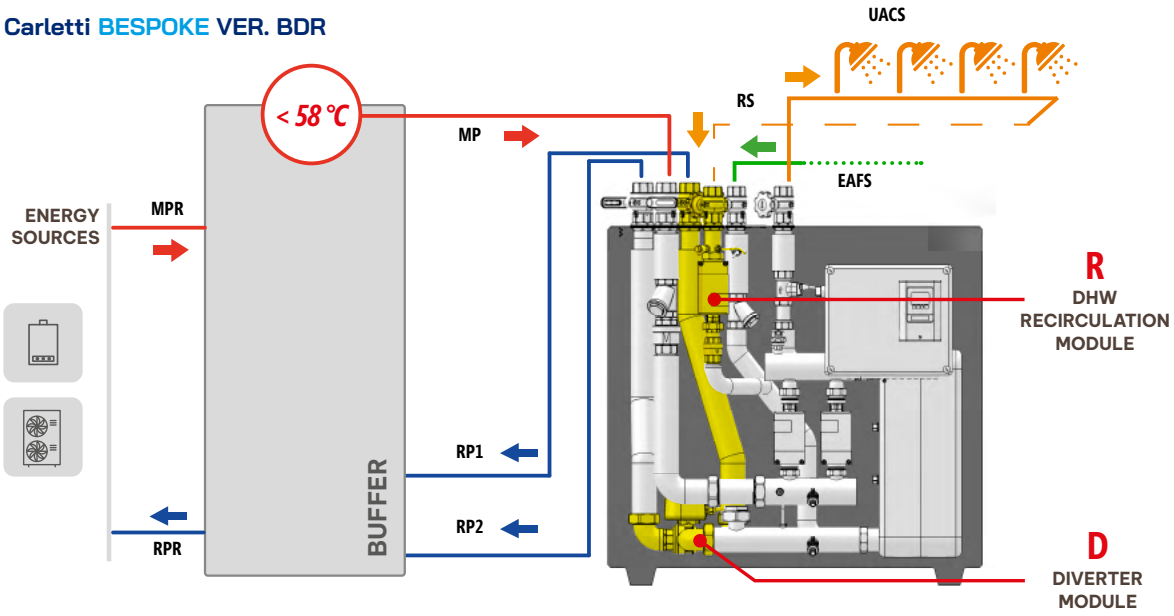
HYDRAULIC SCHEME



	Non-return valve
	Ball valve
	Automatic air vent
PWM	PWM pump
VFS	Flow sensor
	"Y" Strainer
S2	DCW sensor
S4	Buffer tank 1 sensor
S5	Buffer tank 2 sensor
S6	Diverting valve sensor

CARLETTI BESPOKE BD - DIVERTER MODULE	COD.
DHW PRODUCTION MODULE	
Carletti BESPOKE 80 BD 80 l/min	49060712
Carletti BESPOKE 100 BD 100 l/min	49060722
Carletti BESPOKE 150 BD 150 l/min	49060732
CASCADE KIT CARLETTI BESOKE	
2X	49060738
3X	49060739
SUPERVISION CONTROL	20318540

Carletti BESPOKE VER. BDR

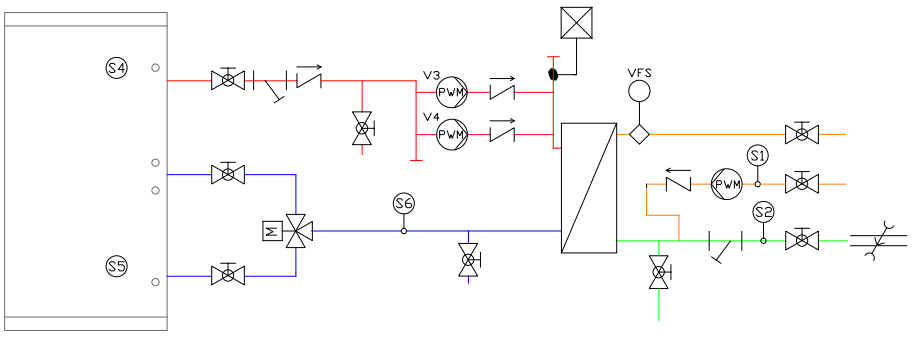


The BDR version is suitable to produce DHW when the temperature of the water stored inside the buffer is lower than 58°C, for example when the energy source is a heat pump or a condensing boiler.

+ R DHW recirculation module: intelligent management of DHW recirculation when is need to keep the DHW line warm (time band control and based on the recirculation return temperature).

+ D Diverter module: allows the stratification of both two buffers in series and high stratification buffer tanks.

HYDRAULIC SCHEME

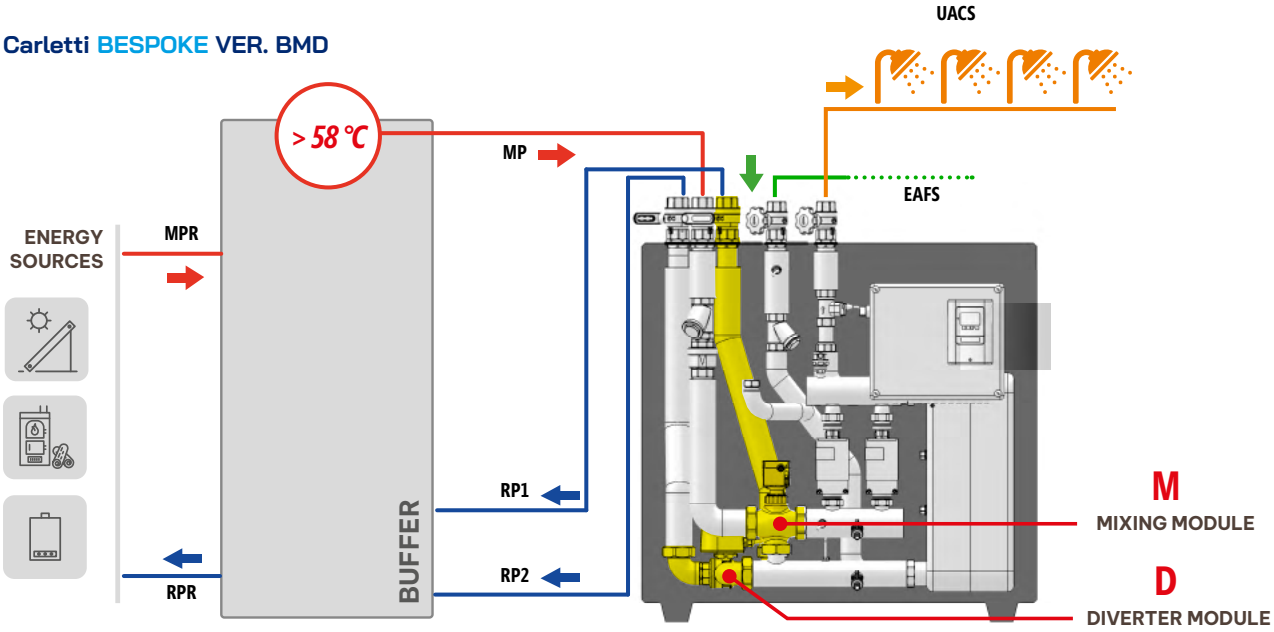


	Non-return valve
	Ball valve
	Automatic air vent
PWM	PWM pump
VFS	Flow sensor
	"Y" Strainer
S1	Recirculation sensor
S2	DCW sensor
S4	Buffer tank 1 sensor
S5	Buffer tank 2 sensor
S6	Diverting valve sensor

CARLETTI BESPOKE BDR - DIVERTER MODULE + DHW RECIRCULATION MODULE	COD.
DHW PRODUCTION MODULE	
Carletti BESPOKE 80 BDR 80 l/min	49060716
Carletti BESPOKE 100 BDR 100 l/min	49060726
Carletti BESPOKE 150 BDR 150 l/min	49060736
CASCADE KIT CARLETTI BESPOKE	
2X	49060738
3X	49060739
SUPERVISION CONTROL	20318540

VERSION

Carletti BESPOKE VER. BMD

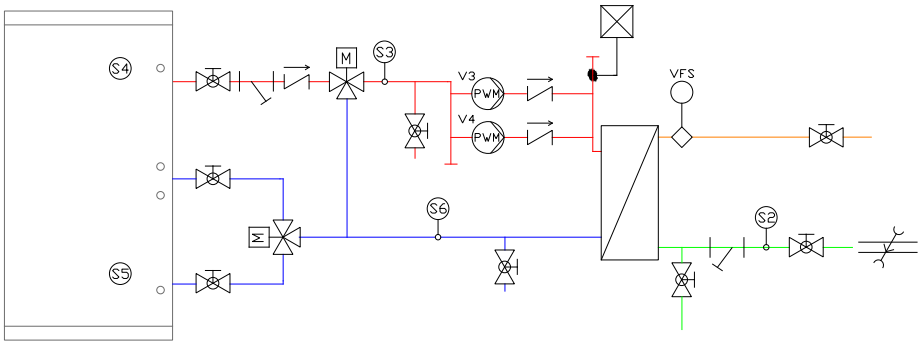


The BMD version is suitable to produce DHW when the temperature of the water stored inside the buffer tank exceed 58°C, for example when the energy source is biomass boilers, traditional gas boilers, electric heaters, cogeneration systems district heating etc.

+ **M Mixing module:** adjusts and stabilizes the inlet temperature of the plate heat exchanger when the temperature of the water stored inside the buffer tank exceeds 58°C. This facilitates stratification, limits the formation of limescale in the plate heat exchanger, preserves the system's functionality over the time and optimises the control of the sanitary outlet temperature.

+ **D Diverter module:** allows the stratification of both two buffers in series and high stratification buffer tanks.

HYDRAULIC SCHEME

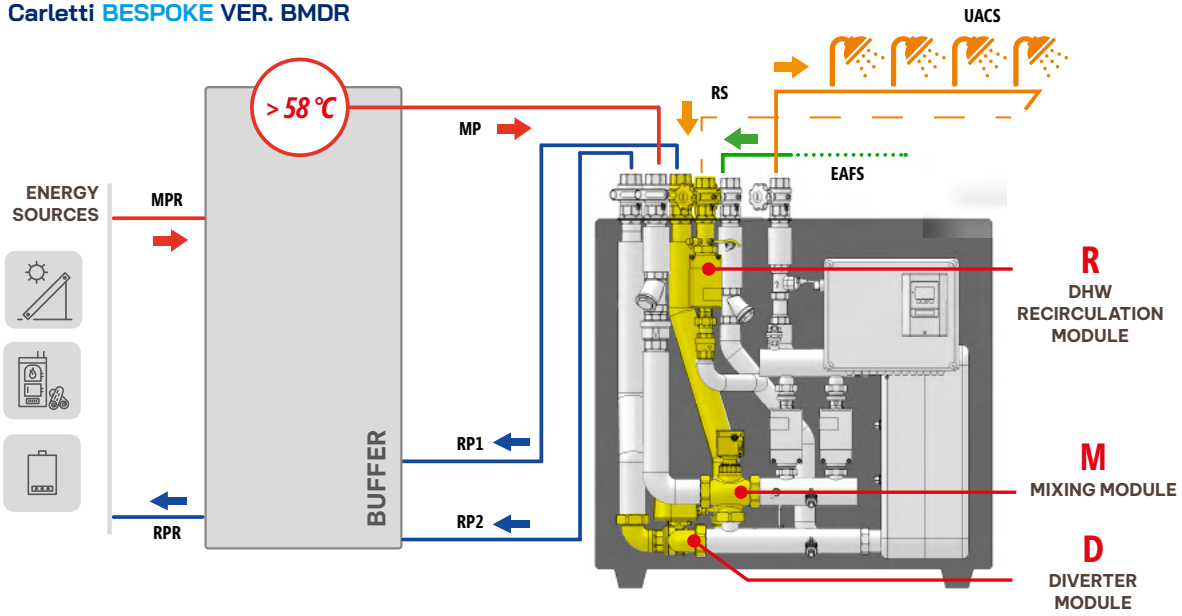


	Non-return valve
	Ball valve
	Automatic air vent
PWM	PWM pump
VFS	Flow sensor
	"Y" Strainer
S2	DCW sensor
S3	Mixing valve sensor
S4	Buffer tank 1 sensor
S5	Buffer tank 2 sensor
S6	Diverting valve sensor

CARLETTI BESPOKE BMD - MIXING MODULE + DIVERTER MODULE	COD.
DHW PRODUCTION MODULE	
Carletti BESPOKE 80 BMD 80 l/min	49060714
Carletti BESPOKE 100 BMD 100 l/min	49060724
Carletti BESPOKE 150 BMD 150 l/min	49060734
CASCADE KIT CARLETTI BESPOKE	
2X	49060738
3X	49060739
SUPERVISION CONTROL	20318540

VERSION

Carletti BESPOKE VER. BMDR



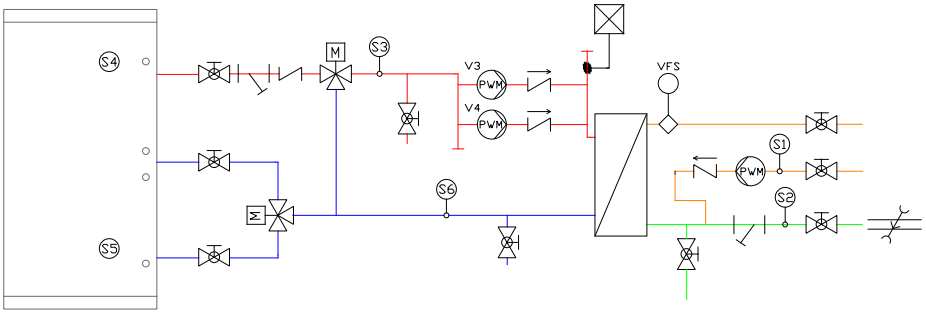
The BMDR version is suitable to produce DHW when the temperature of the water stored inside the buffer tank exceed 58°C, for example when the energy source is biomass boilers, traditional gas boilers, electric heaters, cogeneration systems district heating etc.

+ R DHW recirculation module: intelligent management of DHW recirculation when is need to keep the DHW line warm (time band control and based on the recirculation return temperature).

+ M Mixing module: adjusts and stabilizes the inlet temperature of the plate heat exchanger when the temperature of the water stored inside the buffer tank exceeds 58°C. This facilitates stratification, limits the formation of limescale in the plate heat exchanger, preserves the system's functionality over the time and opti mises the control of the sanitary outlet temperature.

+ D Diverter module: allows the stratification of both two buffers in series and high stratification buffer tanks.

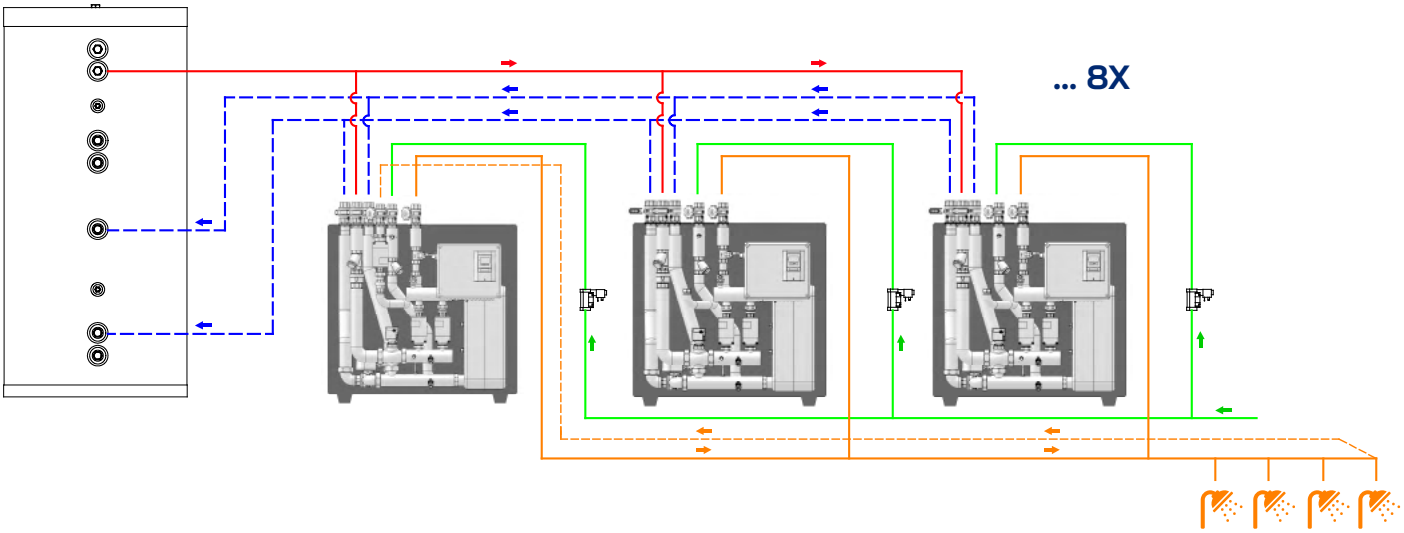
HYDRAULIC SCHEME



	Non-return valve
	Ball valve
	Automatic air vent
PWM	PWM pump
VFS	Flow sensor
	"Y" Strainer
S1	Recirculation sensor
S2	DCW sensor
S3	Mixing valve sensor
S4	Buffer tank 1 sensor
S5	Buffer tank 2 sensor
S6	Diverting valve sensor

CARLETTI BESPOKE BMDR MIXING MODULE + DIVERTER MODULE + DHW RECIRCULATION MODULE	COD.
DHW PRODUCTION MODULE	
CARLETTI BESPOKE 80 BMDR 80 l/min	49060717
CARLETTI BESPOKE 100 BMDR 100 l/min	49060727
CARLETTI BESPOKE 150 BMDR 150 l/min	49060737
CASCADE KIT CARLETTI BESPOKE	
2X	49060738
3X	49060739
SUPERVISION CONTROL	20318540

Carletti BESPOKE Cascade Kits



DESCRIPTION

Cascade kits allow the connection of up to 8 units in parallel for the production of high volume of DHW production.
The system is optimized to ensure energy-efficient large withdrawal variations. Each module, due to the double pump, ensures a high level of security for the constant production of DHW even in the case of a system's failure. The cascade configuration further increases this safety. Up to 1200 l/min of DHW can be produced at nominal conditions (55°C primary flow temperature, 10-45°C DHW output). Even larger amount of DHW can be produced with a buffer tank flow temperature higher than 55°C.

ADVANTAGES

- Connect up to 8 units.
- Ensures the production of high volumes of DHW with energy optimization.
- It makes the system reliable, guaranteeing a high and constant DHW production.
- The modules work the same number of hours to ensure the longevity of all components (symmetry of operation).
- Allows temporary shutdown of the modules for maintenance without interruption of DHW production.
- It can be easily installed on site.

		DHW PRODUCTION VOLUME WITH CASCADE KITS (10 °C - 45 °C) DHW PRODUCTION FLOW [L/MIN]			
Primary Flow temperature	Sizes	KIT 2X	KIT 3X	KIT 5X (1 KIT 2X + 1 KIT 3X)	KIT 8X (1 KIT 2X + 2 KIT 3X)
55 °C	80	170	255	425	680
	100	210	315	525	840
	150	300	450	750	1200
60 °C	80	210	315	525	840
	100	270	405	675	1080
	150	370	555	925	1480
70°C	80	220	330	550	880
	100	360	540	900	1440
	150	440	660	1100	1760

WHAT IT INCLUDES The Carletti cascade kits are offered in two configurations: cascade for two and three modules. Combining the two kits proposed you can connect up to 8 modules in parallel.

DESCRIPTION	COD.
CASCADE KIT 2X CARLETTI BESPOKE (2 motorized valves 2 CAN-bus cable with license)	49060738
CASCADE KIT 3X CARLETTI BESPOKE (3 motorized valves 2 CAN-bus cable with license)	49060739
CAN-BUS CABLE for KIT* COMBINATION	20462100

* **CAN-BUS CABLE** = nr. cascade kit -1 (e.g. to have 5 modules in parallel you choose 1 pcs-2X KIT and 1 pcs-3X KIT with 1 CAN-bus cable, to have 8 modules you use 2 pcs-3X KIT and 1 pcs-2X KIT with the addition of 2 pcs of CAN-bus cables)