

Standard delay
3 working days*



Cetetherm AquaFirst Neo

+ AquaFirst "Neo" for the addition of an intermediate range of 30 models. Complete range of 70 models between 30 and 750 kW (primary at 80°C).

+ AquaFirst "Neo" for its new Micro4000 control box, with dynamic, user-friendly and intuitive display

+ AquaFirst "Neo" for the addition of charging pump(s) management for primary storage tank

+ AquaFirst "Neo" for the management of renewable energy installations

* Ex-works upon receipt of order for 2 units maximum.
For larger quantities, please contact us.

APPLICATIONS

AquaFirst Neo is an easy-to-select domestic hot water (DHW) system, designed for DHW production between 30 kW and 750 kW for:

- apartment blocks
- Hospitals
- Hotels
- Retirement homes and care centers
- Schools and universities
- Leisure centers...

Competitive, efficient and ready to be connected to any type of boiler. Cetetherm AquaFirst Neo can be connected to remote building management systems via ModBus.

KEY BENEFITS

- Extended range between 30 and 750 kW:
 - 28 instant models: no storage tank required
 - 42 semi-instantaneous models in combination with a DHW storage tank
- User-friendly control with dynamic menus
- Low consumption primary pump(s): class A
- Low scaling
- Very high level of regulation quality thanks to rapid response of control valves; 15 seconds speed actuator
- Possibility of remote control via ModBus
- Compliance of materials with drinking water standards: 316 stainless steel plates and EPDM FF "clip-on" gaskets

- Possibility of adding plates to increase power
- Easy and quick maintenance

WORKING PRINCIPLE

In the tap water system, energy is exchanged through a heat exchanger from the primary to the DHW side. On the primary side, the Cetetherm AquaFirst Neo has to be fed by a heating source that can be provided for example by a local boiler, a primary tank or a solar system. The temperature of the water entering the heat exchanger on the primary side is adapted to meet the demand detected on the domestic side. The mixing valve eliminates thermal shock in the heat exchanger and reduces the potential build-up of lime-scale on the secondary side.

On the secondary side, Cetetherm AquaFirst Neo instantaneous is connected to the main water circuit and provides domestic hot water to the distribution pipe-work when there is demand. A circulation pump - which is usually used to limit the time needed to deliver domestic hot water to the tap at the right temperature - maintains a minimum flow rate through the heat exchanger and through the distribution pipe-work.

For Cetetherm AquaFirst Neo semi-instantaneous a charging pump maintains - thanks to a constant flow rate - the supply of energy to the storage tank and the DHW network. This storage tank ensures DHW supply is met during peak demand periods.

MICRO4000

Controller for DHW units AquaFirst Neo, AquaEfficiency Neo and AquaGenius Neo

NEW



KEY BENEFITS

- + Dynamic, user-friendly and intuitive display
- + Management of charging pump(s) for primary tank
- + Features adapted to renewable energies
- + Heat Pump Ready
- + ModBus communication
- + Siemens Climatix controller with specific Cetetherm program
- + Industrial electronics
- + Easy access to components

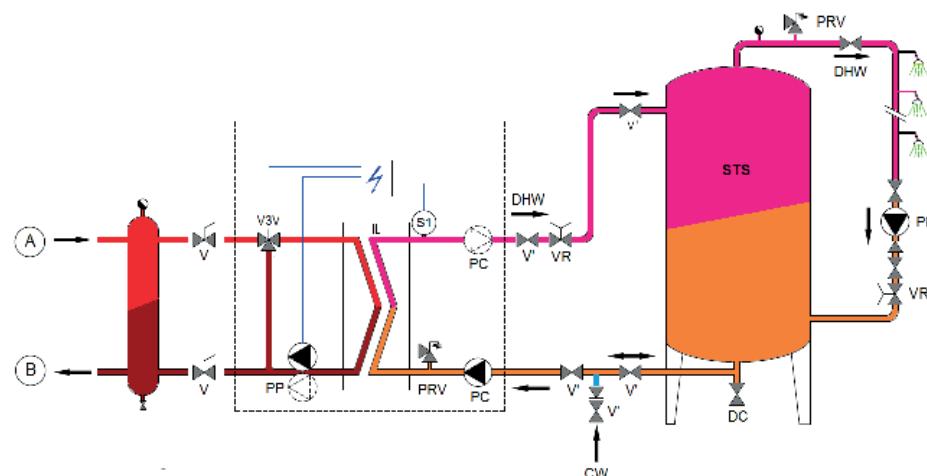
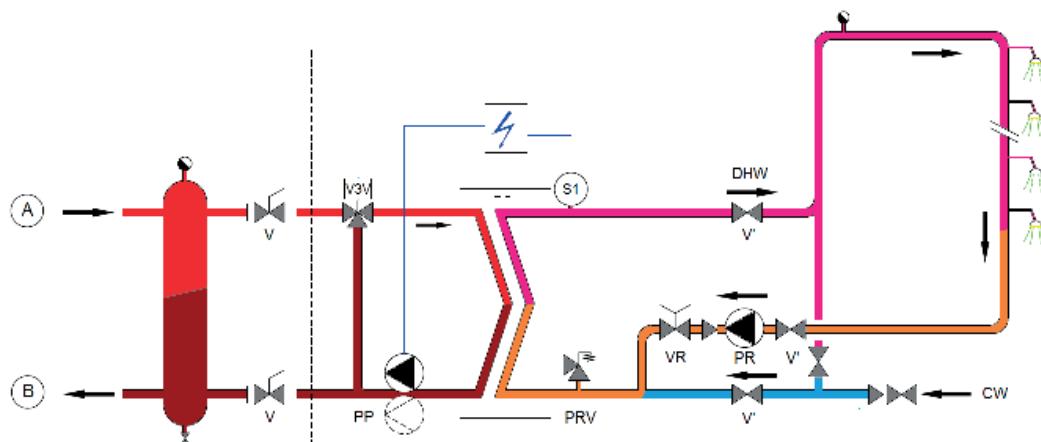


STANDARD FEATURES

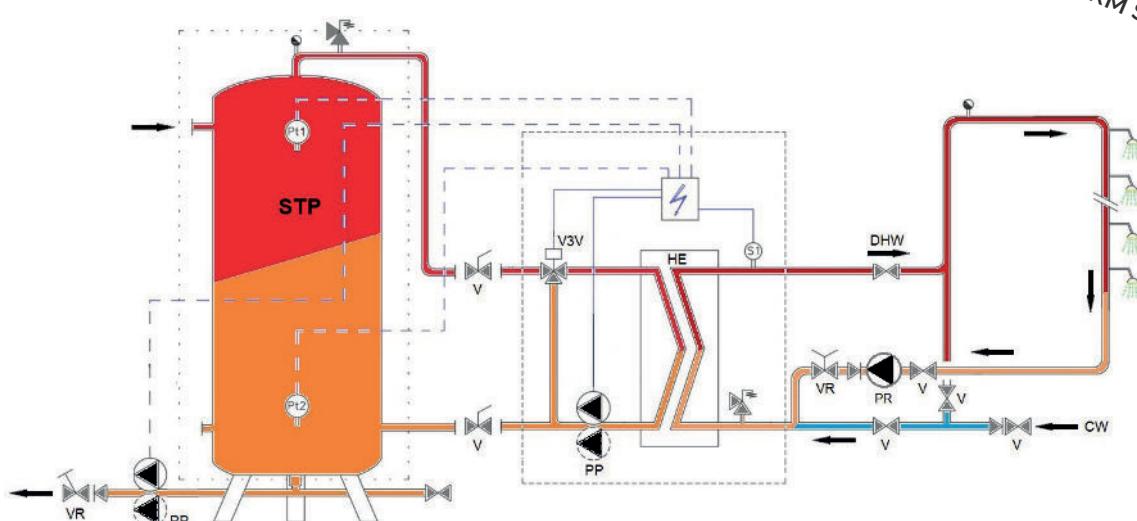
Heat exchanger	<ul style="list-style-type: none"> • Plates & Gasket heat exchanger <ul style="list-style-type: none"> - Corrosion resistant stainless steel 316 plates - EPDMFF clip-on gaskets • EPP insulation
Control system	<ul style="list-style-type: none"> • 3-port mixing electronic control valve • 24V 0-10V, 15 second speed actuator • ModBus RTU RS 485 Controller • Multi functional IP44 control box • NTC10K temperature sensors on secondary outlet with stainless steel sleeve
Pumps	<ul style="list-style-type: none"> • Primary class A flooded rotor Pumps pump: single or double head • Stainless steel charging flooded rotor pump: single or double head for Indirect solutions
Valves	<ul style="list-style-type: none"> • Drain valve (primary) • Pressure relief valve (secondary)

Operating limits	Primary	Secondary
Maximum operating pressure bar	10	10
Maximum operating temperature °C	100	85

HYDRAULIC FLOWCHART AQUAFIRST NEO INSTANTANEOUS & SEMI-INSTANTANEOUS



HYDRAULIC FLOWCHART AQUAFIRST NEO WITH PRIMARY TANK



COMBITHERM SOLUTION

A	Primary inlet
B	Primary outlet
CW	Cold water inlet
DC	Draining valve
DHW	Domestic Hot Water
HE	Heat exchanger (PHE)
PC	Charging pump (one or two)
PP	Primary pump (single or double)

PR	Recycling pump (on installation)
PRV	Pressure relief valve
S	DHW temperature sensor
STS	Storage tank (Buffer vessel) secondary
STP	Storage tank (Buffer vessel) primary
V	Manual gate valve
VR	Balancing valve
V3V	Mixing 3-port control valve with actuator

COMBITHERM SOLUTION



WHY COMBITHERM ?

Combitherm optimises the advantages of both instantaneous and semi-instantaneous, providing

- Maximum hygiene**
secondary storage is avoided, along with the risk of legionella, as the thermal capacity is transferred to the primary side.
- Greater cost-effectiveness**
a greater return of investment is generated, by allowing reduced power from the primary source.
- Full suitability**
the solution is suitable for all domestic hot water loops and high circulation flow rates, like in hospitals and other collective applications..
- Easy maintenance**
periodic maintenance is not needed at the secondary side, like storage tank and sanitary charging pumps.
- Optimal reliability and robustness**
the tank charging pump is located on the heating side, so there is no risk of scaling the recycling pump or corrosion.
- Thermal efficiency**
Combitherm significantly reduces return temperatures.

Contact Cetetherm to calculate the Combitherm solution best suited to your needs.

* Brochures for these products are available at www.cetetherm.com

QUICK SELECTION TABLE – INSTANTANEOUS

Primary	Prim. 80°C	Secondary		Prim. 70°C	Secondary		Prim. 65°C	Secondary		Partnumber	
flow rate m³/h	capacity kW	flow rate L/sec	pres. drop kPa	capacity kW	flow rate L/sec	pres. drop kPa	capacity kW	flow rate L/sec	pres. drop kPa	single pump	double pump
Secondary: 10°C - 60°C / free pressure available on primary: 5 Kpa											
1,1	30	0,2	9	18	0,1	4	12	0,1	2	FI2007IS	FI2007ID
2,9	95	0,5	13	60	0,3	5	42	0,2	3	FI2017IS	FI2017ID
5,2	175	0,8	16	115	0,6	8	80	0,4	4	FI4027IS	FI4027ID
6,3	260	1,3	14	175	0,8	7	125	0,6	4	FI4045IS	FI4045ID
5,0	290	1,4	28	207	1,0	15	155	0,7	9	FI5015IS	FI5015ID
6,2	360	1,7	21	263	1,3	12	200	1,0	7	FI5021IS	FI5021ID
7,1	415	2,0	15	310	1,5	8	240	1,1	6	FI5029IS	FI5029ID
7,9	460	2,2	12	345	1,6	7	272	1,3	4	FI5037IS	FI5037ID
8,8	510	2,4	10	385	1,8	6	305	1,5	4	FI5047IS	FI5047ID
9,1	530	2,5	9	400	1,9	6	315	1,5	4	FI5051IS	FI5051ID
8,5	295	1,4	16	185	0,9	7	120	0,6	3	FI6113IS	FI6113ID
10,6	430	2,1	14	260	1,2	5	180	0,9	3	FI6123IS	FI6123ID
14,3	600	2,9	8	400	1,9	4	280	1,3	2	FI8031IS	FI8031ID
15,4	750	3,6	5	520	2,5	3	380	1,8	2	FI8055IS	FI8055ID

NEW

QUICK SELECTION TABLE – SEMI-INSTANTANEOUS

Primary	Prim. 80°C	Secondary		Prim. 70°C	Secondary		Prim. 65°C	Secondary		Partnumber		
flow rate m³/h	capacity kW	flow rate L/sec	pres. drop kPa	capacity kW	flow rate L/sec	pres. drop kPa	capacity kW	flow rate L/sec	pres. drop kPa	single/ single pumps	double/ single pumps	double/double pumps
Secondary: 10°C - 60°C / free pressure available on primary: 5 Kpa												
1,1	30	0,2	65	18	0,1	71	12	0,1	74	FI2007SS	FI2007DS	FI2007DD
2,9	95	0,5	57	60	0,3	68	42	0,2	71	FI2017SS	FI2017DS	FI2017DD
5,2	175	0,8	47	115	0,6	60	80	0,4	67	FI4027SS	FI4027DS	FI4027DD
6,3	260	1,3	41	175	0,8	56	125	0,6	64	FI4045SS	FI4045DS	FI4045DD
5,0	290	1,4	25	207	1,0	46	155	0,7	57	FI5015SS	FI5015DS	FI5015DD
6,2	360	1,7	24	263	1,3	43	200	1,0	55	FI5021SS	FI5021DS	FI5021DD
7,1	415	2,0	23	310	1,5	42	240	1,1	52	FI5029SS	FI5029DS	FI5029DD
7,9	460	2,2	20	345	1,6	39	272	1,3	50	FI5037SS	FI5037DS	FI5037DD
8,8	510	2,4	15	385	1,8	36	305	1,5	47	FI5047SS	FI5047DS	FI5047DD
9,1	530	2,5	13	400	1,9	34	315	1,5	46	FI5051SS	FI5051DS	FI5051DD
8,5	295	1,4	36	185	0,9	56	120	0,6	65	FI6113SS	FI6113DS	FI6113DD
10,6	430	2,1	22	260	1,2	51	180	0,9	60	FI6123SS	FI6123DS	FI6123DD
14,3	600	2,9	37	400	1,9	66	280	1,3	80	FI8031SS	FI8031DS	FI8031DD
15,4	750	3,6	16	520	2,5	53	380	1,8	70	FI8055SS	FI8055DS	FI8055DD

NEW

TECHNICAL TABLE - INSTANTANEOUS

Part number	Number of plates	Dimensions	Weight	Power consumption					
				L x D x H (mm)	(kg)	Pmax (W)	I _{max} (A)		
FI2007IS	7	492 x 326 x 1025	57	85	1.2	305	2.2		
FI2017IS	17		60						
FI4027IS	27		62	165	1.8				
FI4045IS	45		64						
FI2007ID	7	485 x 407 x 1025	66	85/160*	1.2/1.8*	385	2.8		
FI2017ID	17		69						
FI4027ID	27		71	165/315*	1.8/3*				
FI4045ID	45		73						
FI5015IS	15	580 x 785 x 1280	103	315	1.83	535	2.81		
FI5021IS	21		106						
FI5029IS	29		110						
FI5037IS	37		114						
FI5047IS	47		119						
FI5051IS	51		121						
FI5015ID	15	580 x 785 x 1280	110	315/620*	1.83/3.16*	535/840*	2.81/4.14		
FI5021ID	21		113						
FI5029ID	29		117						
FI5037ID	37		121						
FI5047ID	47		126						
FI5051ID	51		128						
FI6113IS	13	843 x 326 x 1365	155	210	2.2	730/1100*	2.2/3.9*		
FI6123IS	23		163						
FI8031IS	31		178	385	2.2				
FI8055IS	55		199						
FI6113ID	13	846 x 504 x 1365	164	210/405*	2.2/3.8*	1445**	3.7/5.5*		
FI6123ID	23		173						
FI8031ID	31		196	385/755*	2.2/3.9*				
FI8055ID	55		217						

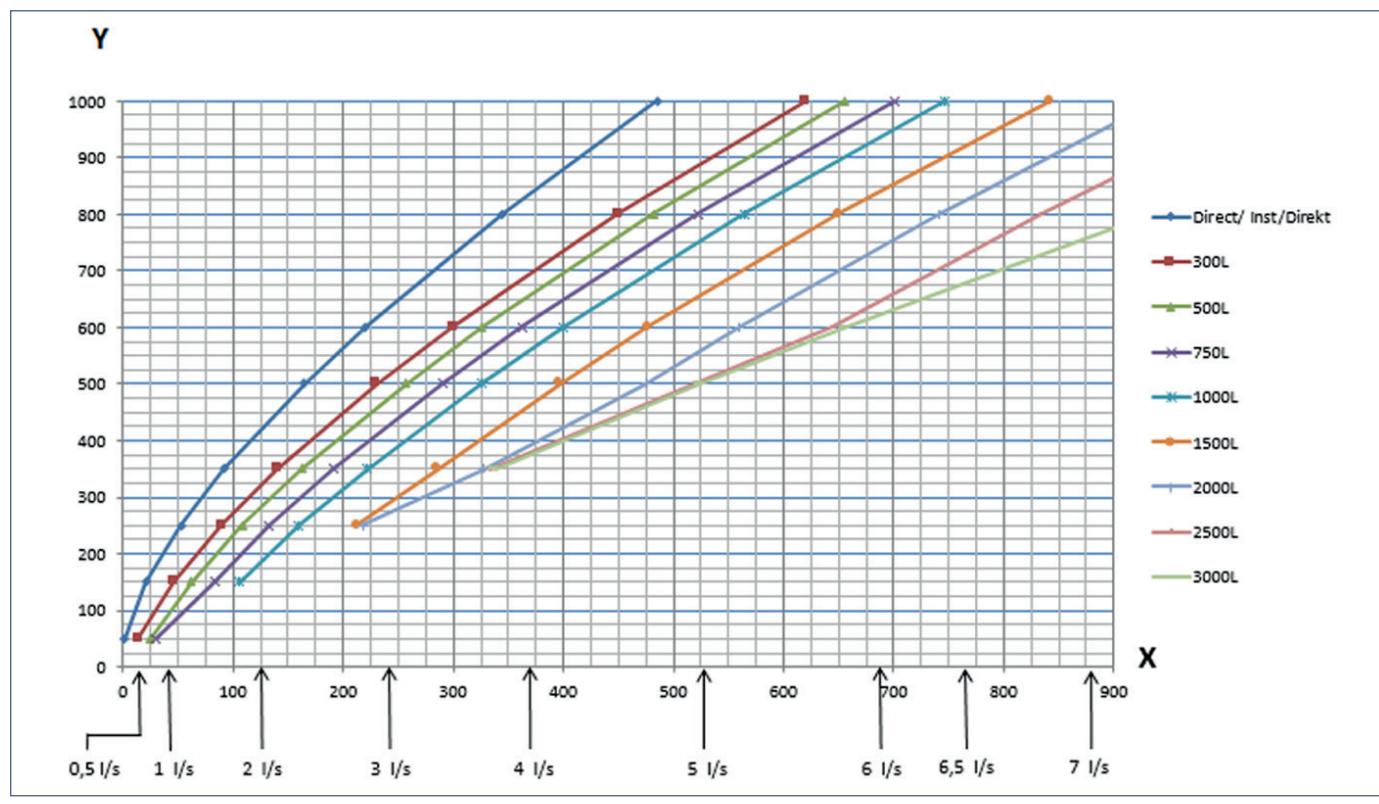
*with booster function activated

** with emergency function activated

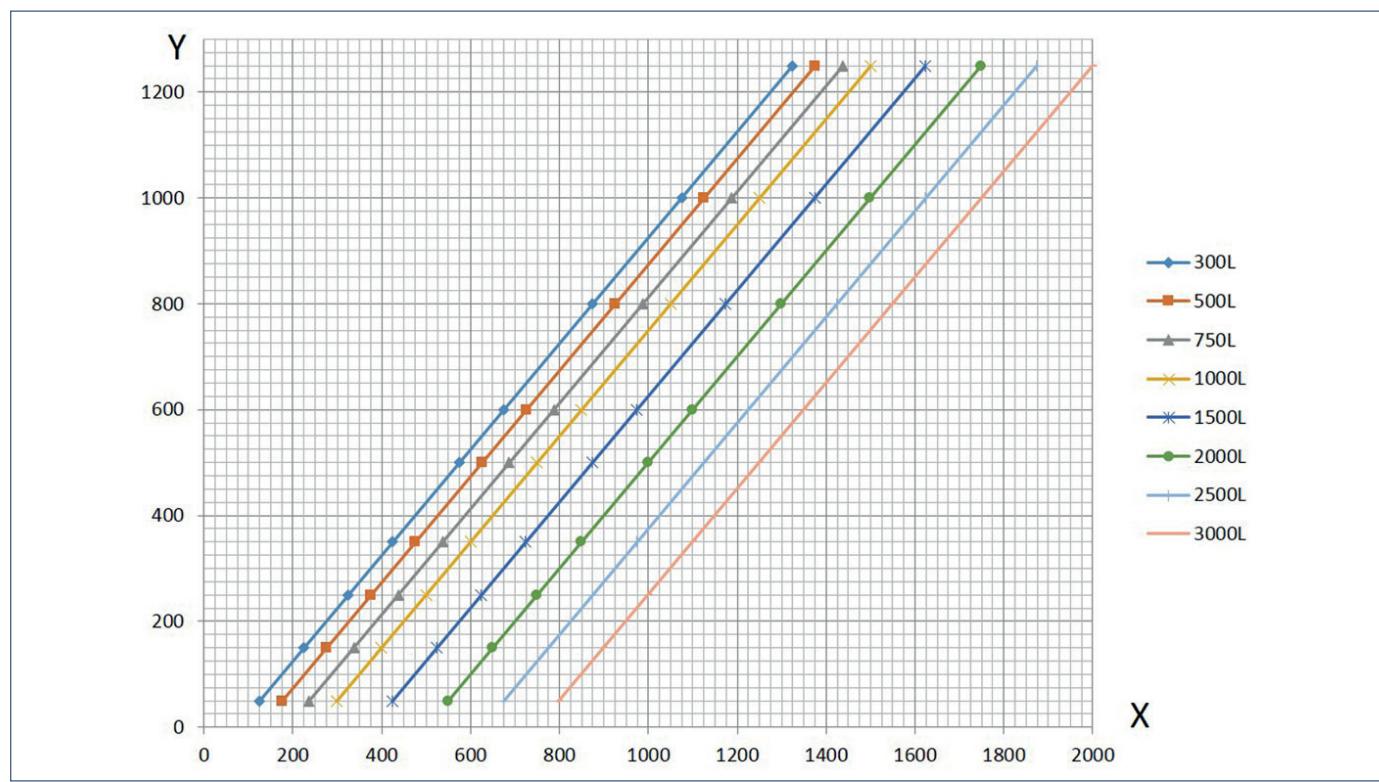
TECHNICAL TABLE - SEMI-INSTANTANEOUS

Part number	Number of plates	Dimensions	Weight	Power consumption					
				L x D x H (mm)	(kg)	Pmax (W)	I _{max} (A)		
FI2007SS	7	492 x 326 x 1025	63	305	2.2	730/1100*	2.8		
FI2017SS	17		66						
FI4027SS	27		68	385	2.8				
FI4045SS	45		70						
FI2007DS	7	485 x 533 x 1025	70	305/385*	2.2/2.8*	1445**	5.5**		
FI2017DS	17		74						
FI4027DS	27		77	385/535*	2.8/4.1*				
FI4045DS	45		79						
FI2007DD	7	485 x 533 x 1025	76	305/380*/600**	2.2/2.8*/3.8**	1445**	5.5**		
FI2017DD	17		80						
FI4027DD	27		83	385/535*/755**	2.8/4.1*/5**				
FI4045DD	45		85						
FI5015SS	15	580 x 785 x 1280	108	535	2.81	1445**	5.5**		
FI5021SS	21		111						
FI5029SS	29		115						
FI5037SS	37		119						
FI5047SS	47		124						
FI5051SS	51		126						
FI5015DS	15	580 x 785 x 1280	115	535/840*	2.81/4.14	1445**	5.5**		
FI5021DS	21		118						
FI5029DS	29		122						
FI5037DS	37		126						
FI5047DS	47		131						
FI5051DS	51		133						
FI5015DD	15	580 x 785 x 1280	132	535/840*/1060**	2.81/4.14*/5.52**	1445**	5.5**		
FI5021DD	21		135						
FI5029DD	29		139						
FI5037DD	37		143						
FI5047DD	47		148						
FI5051DD	51		150						
FI6113SS	13	843 x 350 x 1365	160	730/1100*	3.15	1445**	5.5**		
FI6123SS	23		169						
FI8031SS	31		186						
FI8055SS	55		207						
FI6113DS	13	846 x 504 x 1365	170	730/1100*	2.2/3.9*	1445**	5.5**		
FI6123DS	23		179						
FI8031DS	31		204						
FI8055DS	55		225						
FI6113DD	13	846 x 504 x 1365	176	730/1100*/1445**	3.7/5.5*/6.5**	1445**	5.5**		
FI6123DD	23		184						
FI8031DD	31		211						
FI8055DD	55		233						

SELECTION CHART AQUAFIRST NEO (DHW FLOW RATE: 10 - 60°C)



SELECTION CHART AQUAFIRST NEO WITH PRIMARY VESSEL (DHW OUTLET: 60°C)

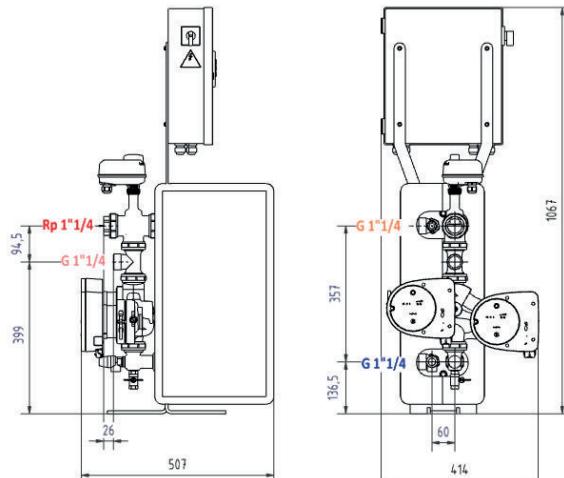


Y Required boiler power in Kw

X Required power for instantaneous domestic hot water unit in Kw

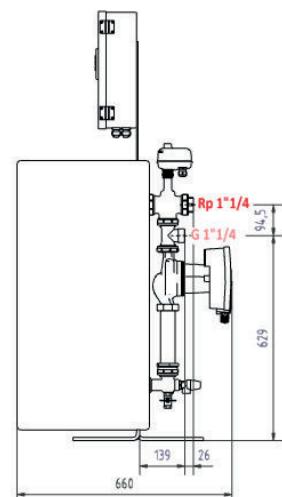
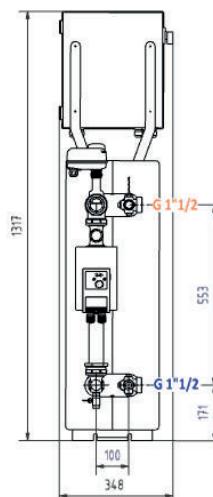
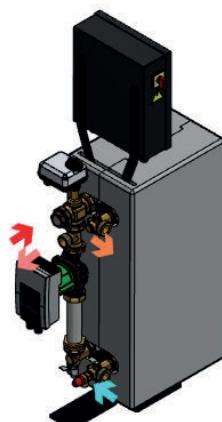
AQUAFIRST NEO INSTANTANEOUS

- MODELS 2000 & 4000
INSTANTANEOUS DOUBLE



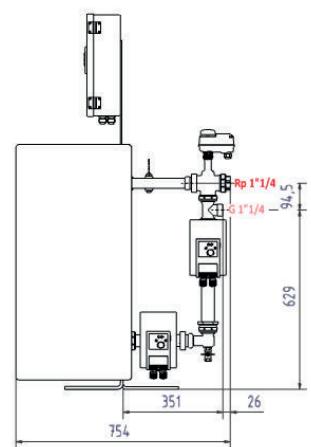
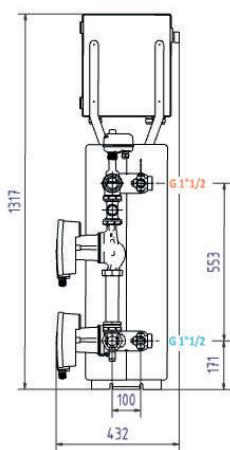
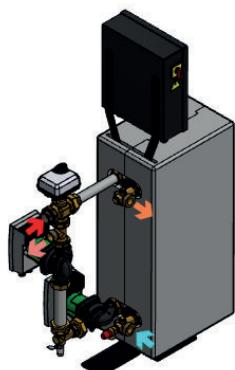
NEW

- MODEL 5000
INSTANTANEOUS SINGLE

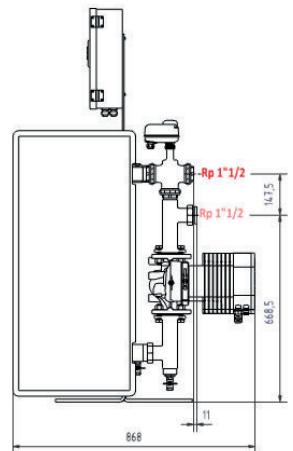
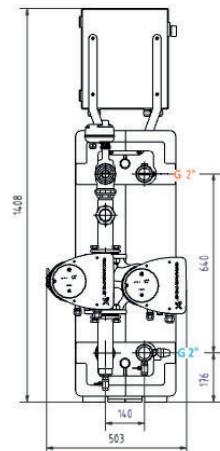
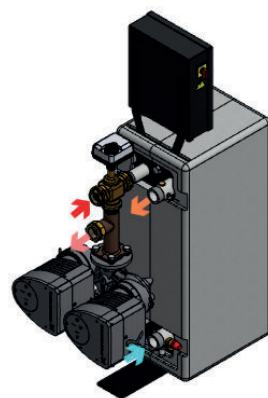


NEW

- MODEL 5000
INSTANTANEOUS DOUBLE

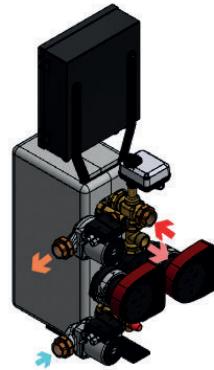
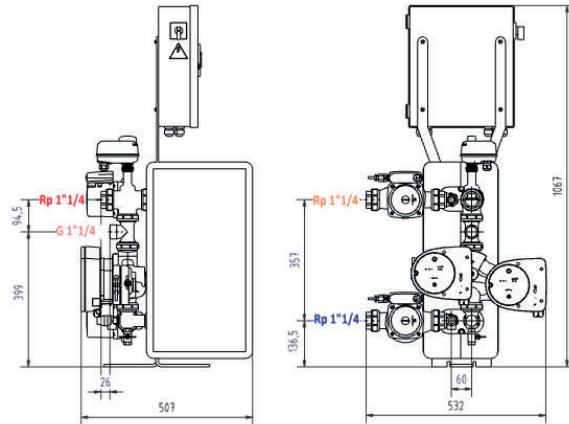


- MODELS 6000 & 8000
INSTANTANEOUS DOUBLE



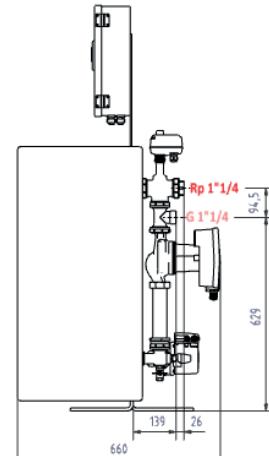
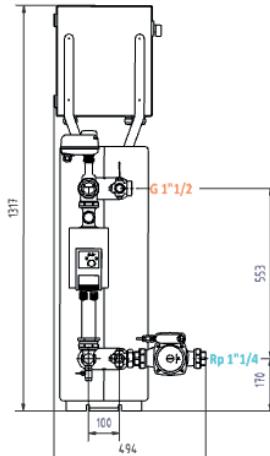
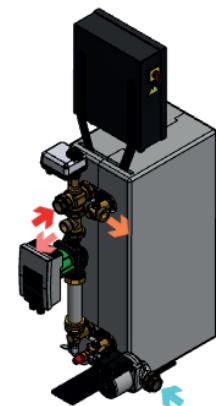
AQUAFIRST NEO SEMI-INSTANTANEOUS

- MODELS 2000 & 4000
SEMI-INSTANTANEOUS DOUBLE



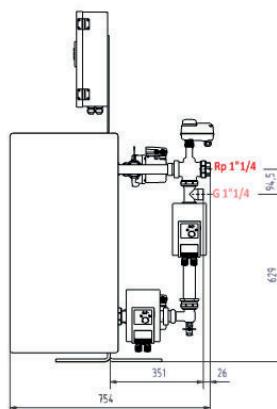
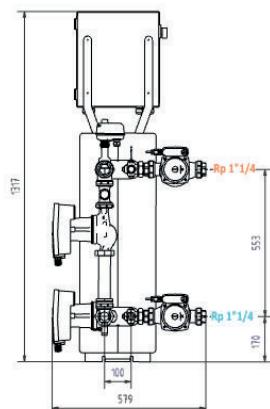
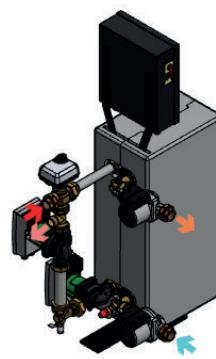
NEW

- MODEL 5000
SEMI-INSTANTANEOUS SINGLE



NEW

- MODELS 5000
SEMI-INSTANTANEOUS DOUBLE



- MODELS 6000 & 8000
SEMI-INSTANTANEOUS DOUBLE

