

Cetetherm AquaFirst Neo



**Standard lead time
3 working days***

- ⊕ AquaFirst “Neo” a range expansion up to 65 models between 30 and 900 kW (primary 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

NEW 2025

8000 and 6000 series are equipped with more efficient plates.

Benefits:

- ⊕ Higher delta temperature with a primary flow reduction.
- ⊕ Primary outlet temperature reduction as well.

* 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 900 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 900 kW:
 - 26 instant models: no storage tank required
 - 39 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.

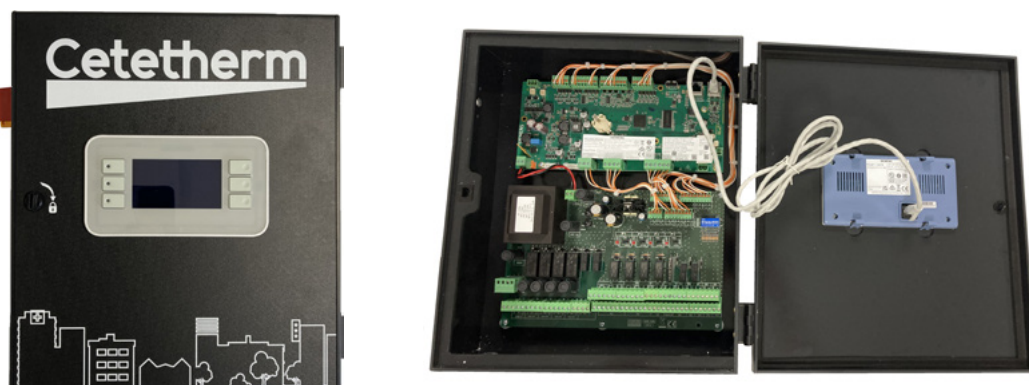
On the secondary side, Cetetherm AquaFirst Neo instantaneous is connected to the main water circuit and provides domestic hot water to the distribution pipe-work when there is demand. A circulation pump - which is usually used to limit the time needed to deliver domestic hot water to the tap at the right 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 AquaGenius Neo, AquaFirst Neo and AquaEfficiency Neo

NEW



KEY BENEFITS

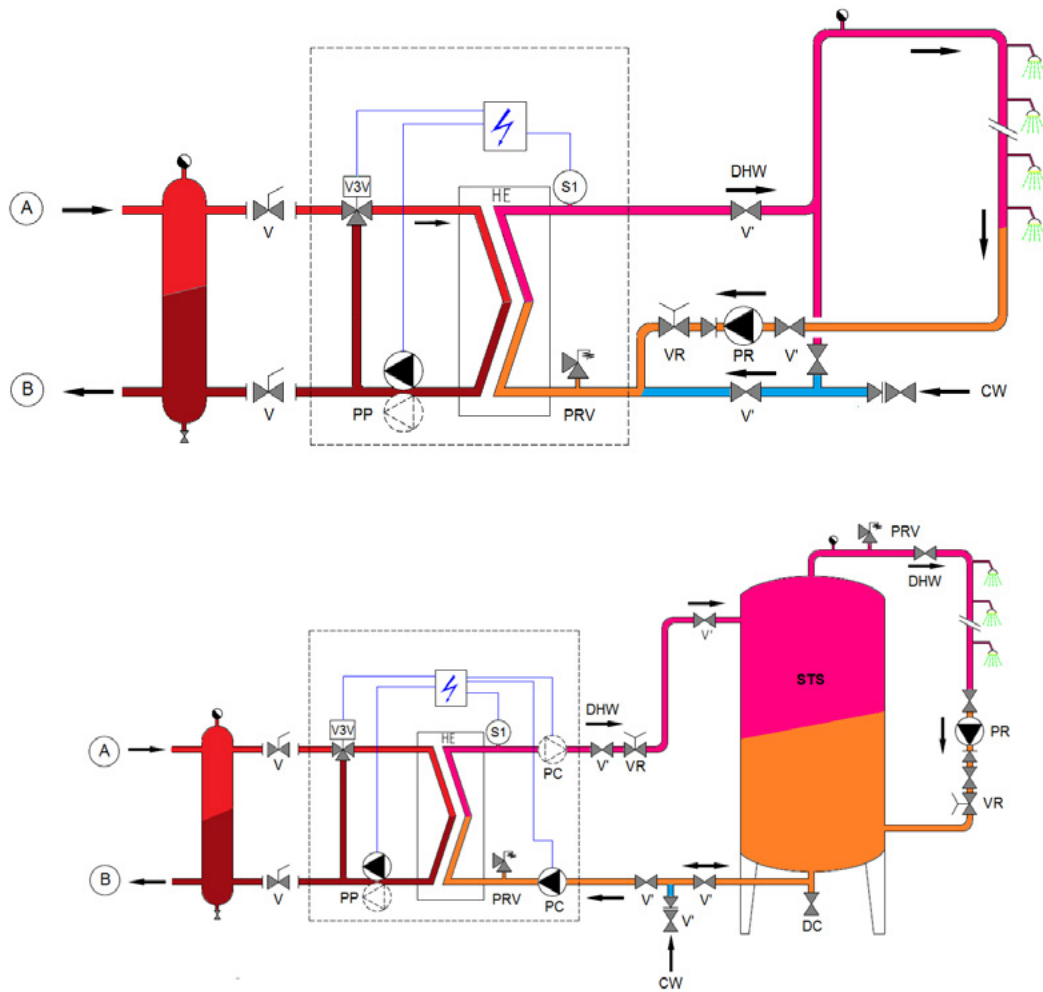
- ⊕ Dynamic, user-friendly and intuitive display
- ⊕ Management of charging pump(s) for primary tank
- ⊕ Features adapted to renewable energies
- ⊕ Heat Pump Ready
- ⊕ ModBus communication
- ⊕ Siemens Climatix controller with specific Cetetherm program
- ⊕ Industrial electronics
- ⊕ Easy access to components

STANDARD FEATURES

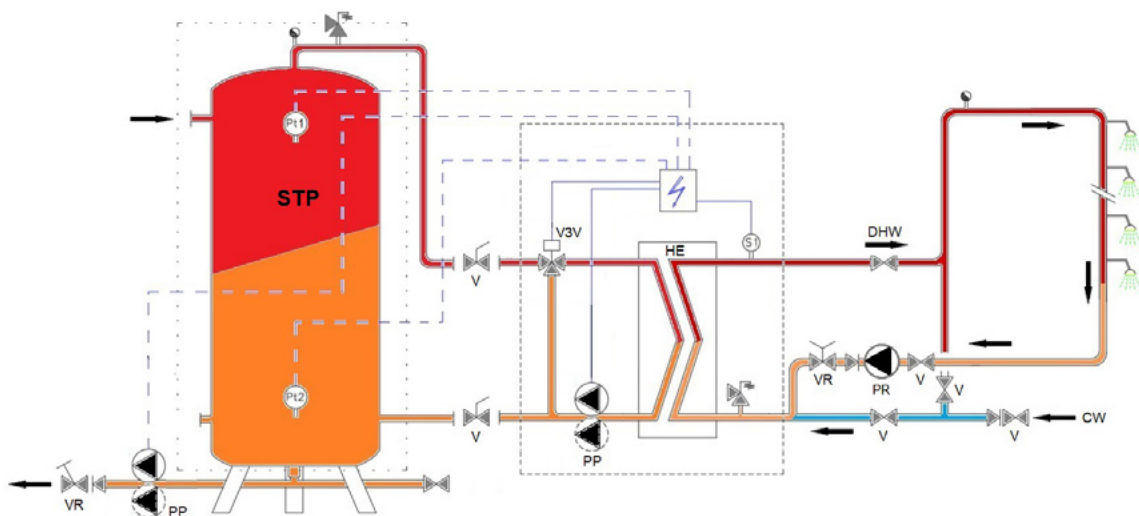
Heat exchanger	- Plates & Gasket heat exchanger - Corrosion resistant stainless steel 316 plates - EPDM-FF or EPDMW clip-on gaskets - EPP insulation
Control system	3-port mixing electronic control valve 24V 0-10V, 15 second speed actuator - ModBus RTU RS 485 Controller - Multi functional IP44 control box - NTC10K temperature sensors on secondary outlet with stainless steel sleeve
Pumps	- Primary class A flooded rotor Pumps pump: single or double head - Stainless steel charging flooded rotor pump: single or double head for semi-instantaneous solutions
Valves	- 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)
Pt1 - Pt2 primary tank sensors

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

1.



AquaEfficiency Neo



Sensor(s)



Primary tank



Recycling pump

2.



AquaFirst Neo*



Sensor(s)



Primary tank



Recycling pump

3.



AquaGenius Neo*



Sensor(s)



Primary tank



Recycling pump

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 m ³ /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
6	280	1,3	32	195	0,9	16	143	0,7	8	FI5015IS	FI5015ID
6,8	345	1,6	24	248	1,2	13	184	0,9	8	FI5021IS	FI5021ID
7,4	400	1,9	17	290	1,4	10	218	1,0	6	FI5029IS	FI5029ID
7,6	440	2,1	13	320	1,5	7	244	1,2	5	FI5037IS	FI5037ID
7,2	410	2,0	36	300	1,4	20	230	1,1	12	FI6119IS	FI6119ID
8,7	510	2,4	32	370	1,8	18	287	1,4	11	FI6125IS	FI6125ID
9,9	605	2,9	23	450	2,1	13	355	1,7	9	FI6135IS	FI6135ID
12,5	730	3,5	37	540	2,6	21	420	2,0	13	FI8033IS	FI8033ID
14,3	900	4,3	20	680	3,2	12	535	2,6	8	FI8057IS	FI8057ID

NEW

QUICK SELECTION TABLE - SEMI-INSTANTANEOUS

Primary	Prim. 80°C	Secondary		Prim. 70°C	Secondary		Prim. 65°C	Secondary		Partnumber		
flow rate m ³ /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
6	280	1,3	22	195	0,9	46	143	0,7	59	FI5015SS	FI5015DS	FI5015DD
6,8	345	1,6	22	248	1,2	44	184	0,9	55	FI5021SS	FI5021DS	FI5021DD
7,4	400	1,9	22	290	1,4	43	218	1,0	54	FI5029SS	FI5029DS	FI5029DD
7,6	440	2,1	22	320	1,5	42	244	1,2	52	FI5037SS	FI5037DS	FI5037DD
7,2	400	1,9	6	300	1,4	31	230	1,1	47	FI6119SS	FI6119DS	FI6119DD
8,6	460	2,2	6	370	1,8	25	287	1,4	42	FI6125SS	FI6125DS	FI6125DD
9,9	525	2,5	5	450	2,1	20	355	1,7	36	FI6135SS	FI6135DS	FI6135DD
12,5	660	3,2	6	540	2,6	32	420	2,0	55	FI8033SS	FI8033DS	FI8033DD
14,2	760	3,6	5	680	3,2	21	535	2,6	46	FI8057SS	FI8057DS	FI8057DD

NEW

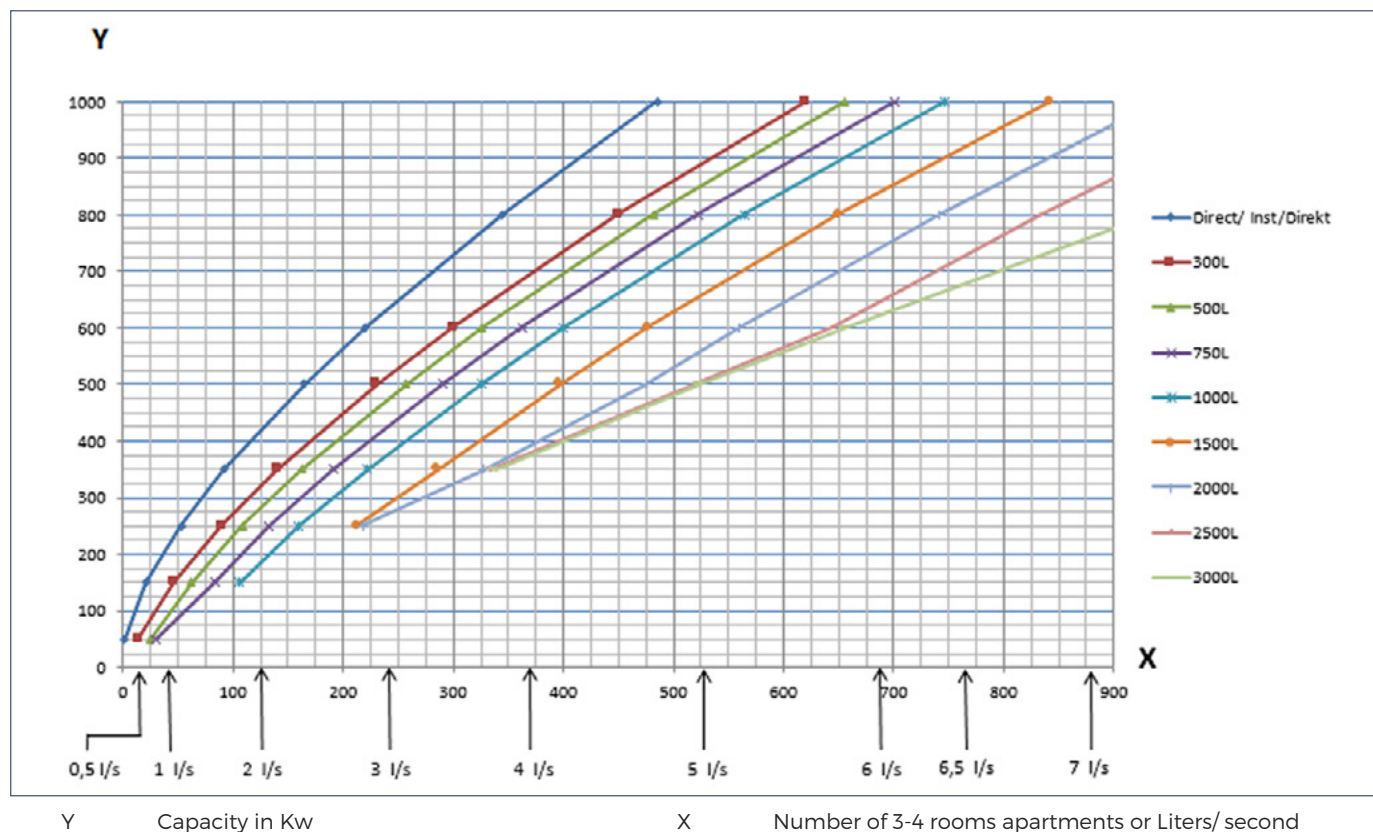
TECHNICAL TABLE - INSTANTANEOUS

Electrical supply 1x230V 50hz				
Part number	Number of plates	Weight	Power consumption	
		(kg)	Pmax (W)	I _{max} (A)
FI2007IS	7	57	225	2
FI2017IS	17	60		
FI4027IS	27	62		
FI4045IS	45	64		
FI2007ID	7	66	176	1.7
FI2017ID	17	69		
FI4027ID	27	71	332	3
FI4045ID	45	73		
FI5015IS	15	103	335	1.9
FI5021IS	21	106		
FI5029IS	29	110		
FI5037IS	37	114		
FI5015ID	15	110	640	3.2
FI5021ID	21	113		
FI5029ID	29	117		
FI5037ID	37	121		
FI6119IS	19	130	225	2.1
FI6125IS	25	138		
FI6135IS	35	144		
FI8033IS	33	164	400	2.2
FI8057IS	57	176		
FI6119ID	19	140	420	3.7
FI6125ID	25	148		
FI6135ID	35	154		
FI8033ID	33	170	770	3.8
FI8057ID	57	194		

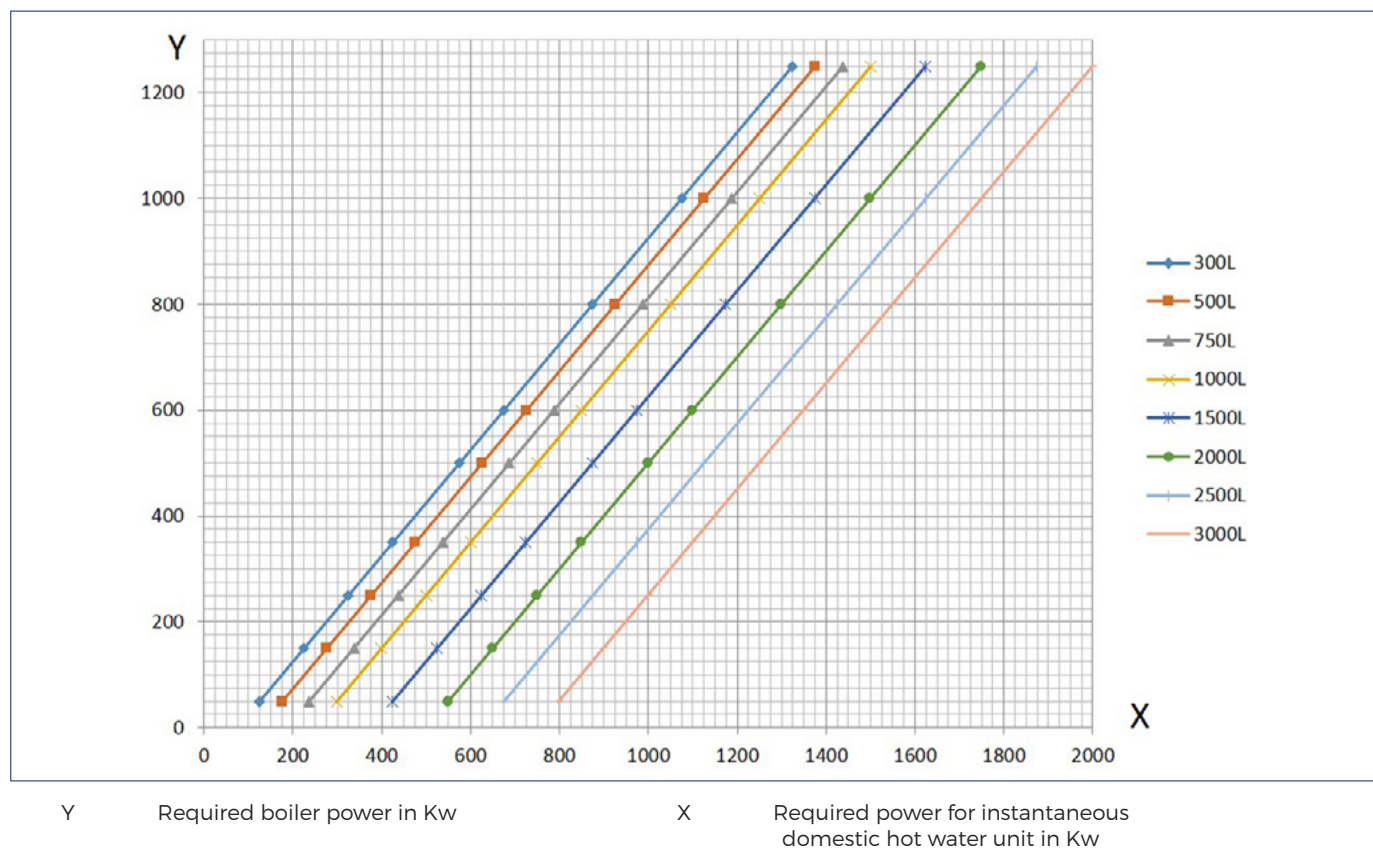
TECHNICAL TABLE - SEMI-INSTANTANEOUS

Electrical supply 1x230V 50hz				
Part number	Number of plates	Weight	Power consumption	
		(kg)	Pmax (W)	Imax (A)
FI2007SS	7	63	445	3
FI2017SS	17	66		
FI4027SS	27	68		
FI4045SS	45	70		
FI2007DS	7	70	396	2.7
FI2017DS	17	74		
FI4027DS	27	77	552	3.9
FI4045DS	45	79		
FI2007DD	7	76	616	3.7
FI2017DD	17	80		
FI4027DD	27	83	772	4.9
FI4045DD	45	85		
FI5015SS	15	108	555	2.81
FI5021SS	21	111		
FI5029SS	29	115		
FI5037SS	37	119		
FI5015DS	15	115	860	4.2
FI5021DS	21	118		
FI5029DS	29	122		
FI5037DS	37	126		
FI5015DD	15	132	1080	5.2
FI5021DD	21	135		
FI5029DD	29	139		
FI5037DD	37	143		
FI6119SS	19	136	445	3.1
FI6125SS	25	144		
FI6135SS	35	150		
FI8033SS	33	170	745	3.7
FI8057SS	57	181		
FI6119DS	19	146	640	4.6
FI6125DS	25	154		
FI6135DS	35	160		
FI8033DS	33	182	1115	5.4
FI8057DS	57	201		
FI6119DD	19	152	860	5.6
FI6125DD	25	160		
FI6135DD	35	166		
FI8033DD	33	188	1460	6.9
FI8057DD	57	209		

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

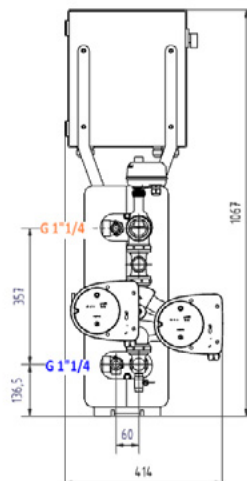
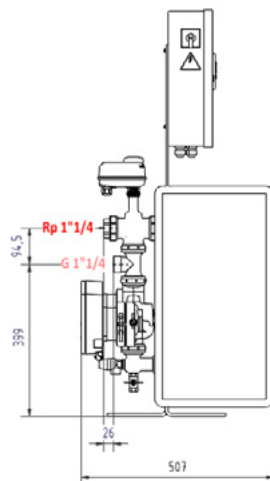


SELECTION CHART AQUAFIRST NEO WITH PRIMARY VESSEL (DHW OUTLET: 60°C)



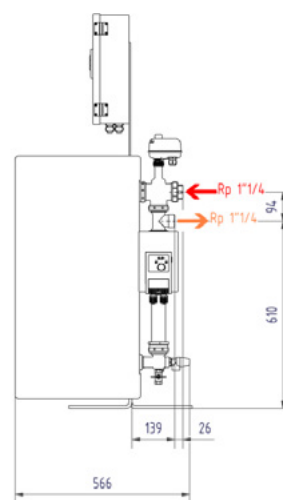
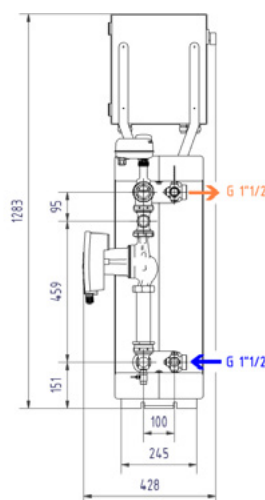
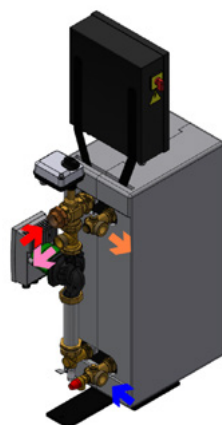
AQUAFIRST NEO INSTANTANEOUS

- MODELS 2000 & 4000
INSTANTANEOUS DOUBLE



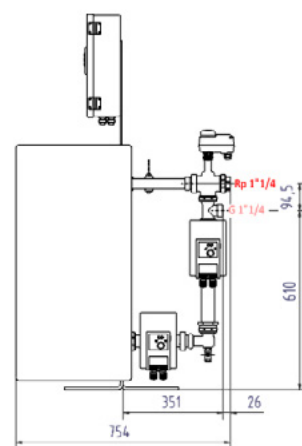
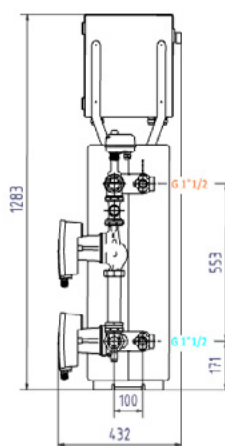
NEW

- MODEL 5000
INSTANTANEOUS SINGLE

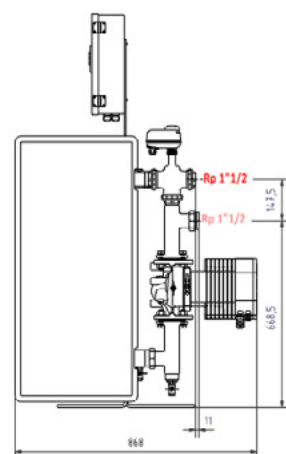
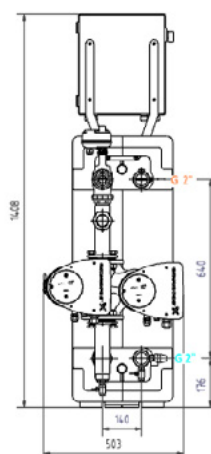
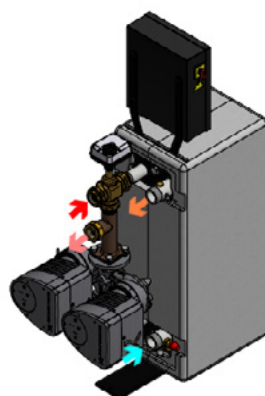


NEW

- MODEL 5000
INSTANTANEOUS DOUBLE

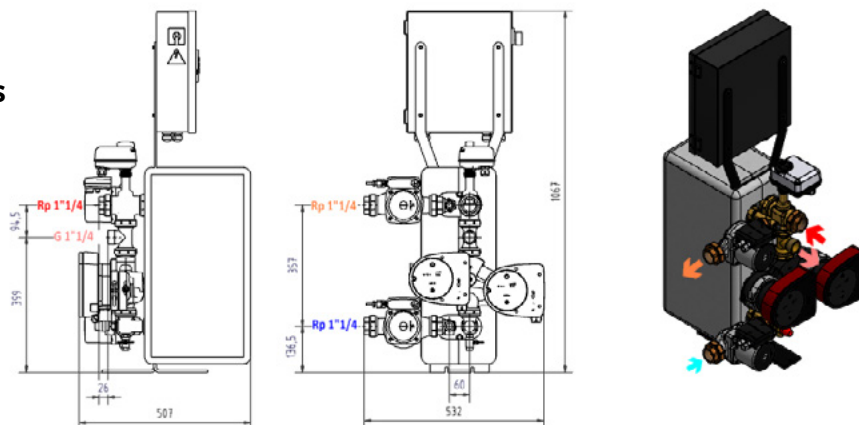


- MODELS 6000 & 8000
INSTANTANEOUS DOUBLE



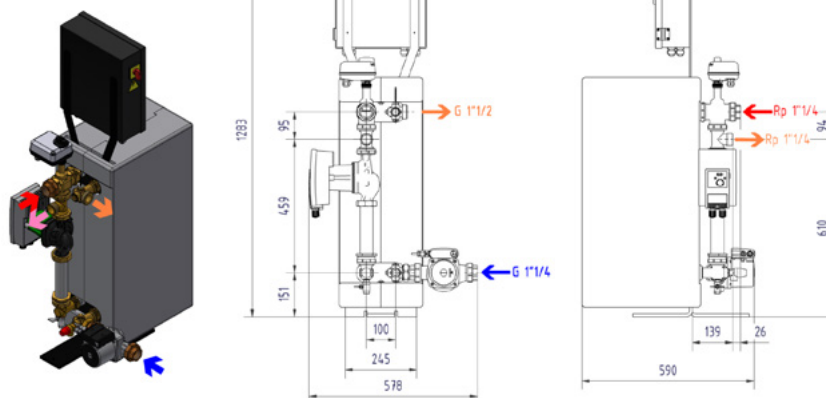
AQUAFIRST NEO SEMI-INSTANTANEOUS

- MODELS 2000 & 4000
SEMI-INSTANTANEOUS DOUBLE



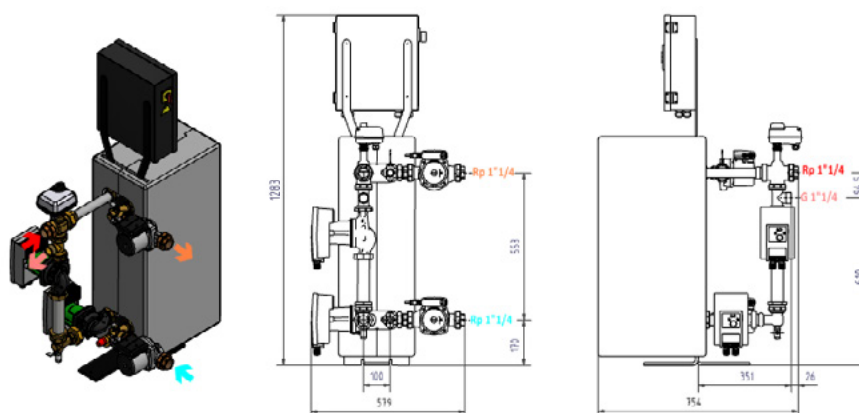
NEW

- MODEL 5000
SEMI-INSTANTANEOUS SINGLE



NEW

- MODELS 5000
SEMI-INSTANTANEOUS DOUBLE



- MODELS 6000 & 8000
SEMI-INSTANTANEOUS DOUBLE

