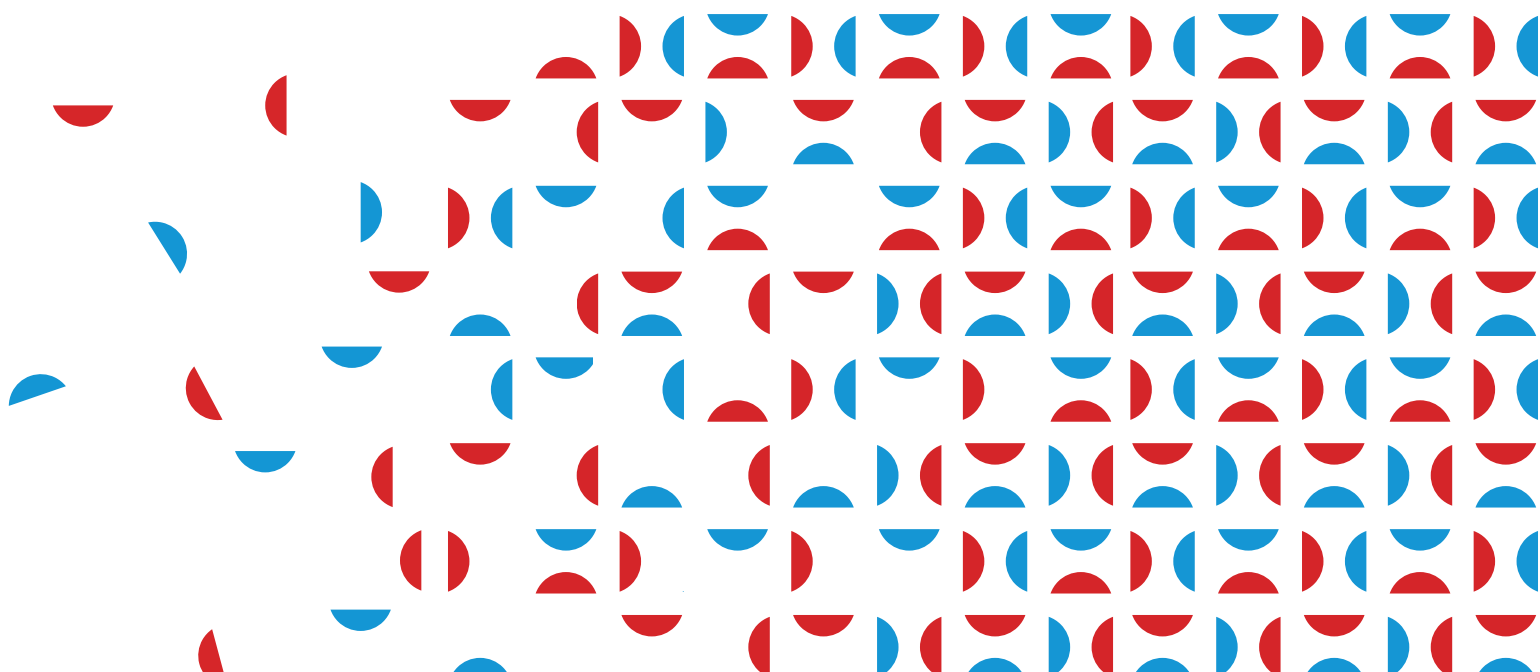


DHW SYSTEMS

DHW SEMI-INSTANTANEOUS SYSTEMS

TPI



DHW Semi-Instantaneous Systems

WATEREADY

WATEREADY consists of a compact, high-efficiency heat exchanger unit for the rapid production of domestic hot water that can be combined with any HEIZERSILE thermal storage tank of the ATV and ATX series or with any storage tank of the BSX and BXX or BSFV, MAXI, VERTINOX series. The possibility of combining WATEREADY with different types of tanks and volumes allows a wide range of solutions for rapid domestic hot water production. The rapid heater is ideal for small and large communities (homes, restaurants, hotels, sports centres,...).

The WATEREADY system consists of:

- ✓ Plate heat exchanger
- ✓ Electronic controller
- ✓ Robust container made of painted and insulated sheet metal
- ✓ High-efficiency DHW circulator
- ✓ Fittings and valves

model	max. primary pressure	max. secondary pressure
WATEREADY 12/35 - 25/100	6 bar	10 bar
WATEREADY 30/120 - 80/350	10 bar	10 bar



PRICES

ACCESSORIES
PRICES

WATEREADY 12/35

TESTED

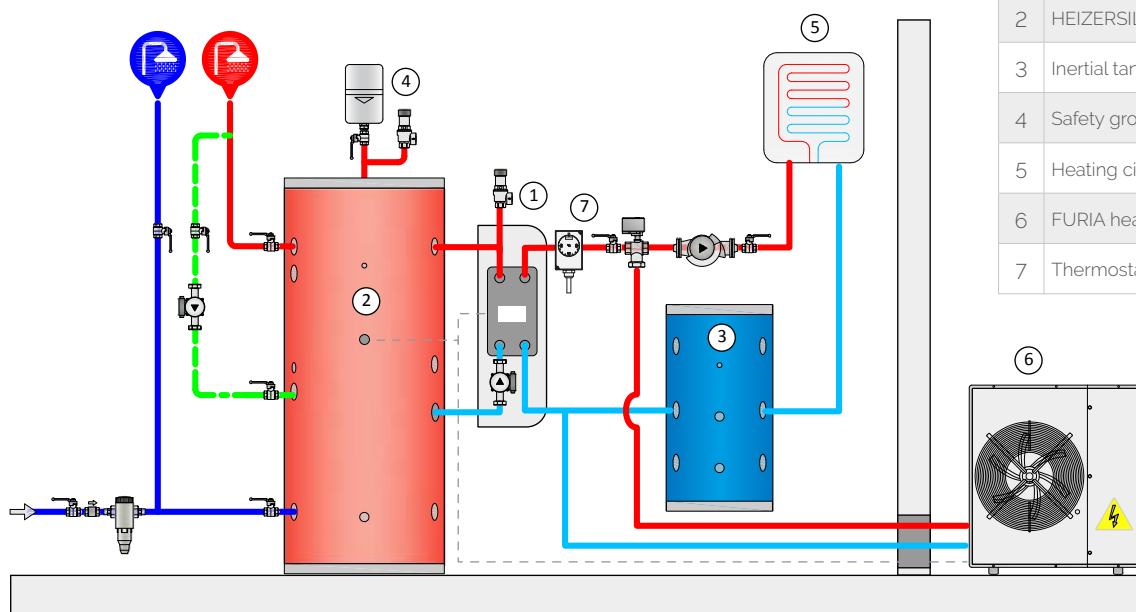
WATEREADY 50/200

Codes

Model	Code	Price	With packaging	
			Dimensions cm	Weight kg
WATEREADY 12/35	341060070X	1.444,00 €	100X40X35	18
WATEREADY 18/70	341060071X	1.522,00 €	100X40X35	19
WATEREADY 25/100	341060072X	1.605,00 €	100X40X35	21
WATEREADY 30/120	341060073X	2.715,00 €	110x50x45	47
WATEREADY 40/150	341060074X	2.786,00 €	110x50x45	48
WATEREADY 50/200	341060075X	2.913,00 €	110x50x45	51
WATEREADY 60/250	341060076X	3.037,00 €	110x50x45	53
WATEREADY 70/300	341060077X	3.228,00 €	110x50x45	56
WATEREADY 80/350	341060078X	3.409,00 €	110x50x45	57

Accessories

Description	Code	Price
THERMOSTAT ACCESSORY DIVERSION	322010004	57,00 €



Legend

1	WATEREADY rapid trainer
2	HEIZERSILE ATV / ATX
3	Inertial tank ACR CH
4	Safety group
5	Heating circuit
6	FURIA heat pump
7	Thermostat

DHW Semi-Instantaneous Systems

WATEREADY

Model	Water temperature from Heat Pump 55-50°C			Water temperature from boiler 80-60°C			Connections inches	Pump power max W	Voltage V/Ph/Hz	Current max A
	Power kW	Primary flow rate L/h	dP primary kPa	Power kW	Primary flow rate L/h	dP primary kPa				
WATEREADY 12/35	12	2064	38	35	1505	20	1 1/4	120	230/1/50	0,52
WATEREADY 18/70	18	3096	39	70	3010	37	1 1/4	120	230/1/50	0,52
WATEREADY 25/100	25	4300	36	100	4300	36	1 1/4	120	230/1/50	0,52
WATEREADY 30/120	30	5160	32	120	5160	32	1 1/4	140	230/1/50	1,1
WATEREADY 40/150	40	6880	40	150	6450	35	1 1/4	140	230/1/50	1,1
WATEREADY 50/200	50	8600	38	200	8600	38	1 1/4	140	230/1/50	1,1
WATEREADY 60/250	60	10320	38	250	10750	40	1 1/4	140	230/1/50	1,1
WATEREADY 70/300	70	12040	39	300	12900	43	1 1/4	140	230/1/50	1,1
WATEREADY 80/350	80	13760	44	350	15050	52	1 1/4	140	230/1/50	1,1

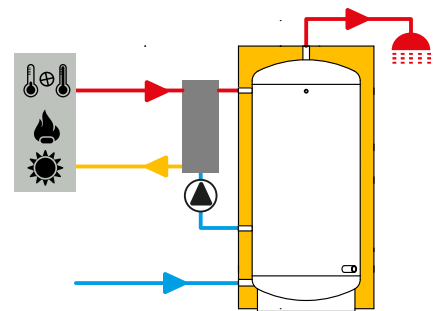
The second set point is adjustable via the digital input and can be used to carry out the anti-legionella cycle.

DESCRIPTION

The WATEREADY models for small and medium users (WATEREADY 12/35, 18/70 and 25/100) use a braze-welded plate exchanger, consisting of corrugated AISI 316 stainless steel plates, joined by a pure copper brazing.



The larger size models (WATEREADY from 30/120 up to 80/350) use inspectable plate heat exchangers, consisting of corrugated AISI 316 stainless steel plates enclosed in an epoxy painted carbon steel frame.



Compared to traditional solutions, the WATEREADY system has important advantages:

- ✓ Significant reduction in domestic water set-up time;
- ✓ Optimisation of the match between generator output (heat pump or boiler) and heat exchanger performance;
- ✓ Optimum power can be selected from a wide range of standard solutions;
- ✓ Possibility of using a smaller storage volume.
- ✓ Possibility of starting WATEREADY at the request of the primary (remote ON/OFF)
- ✓ All parameters and values are accessible for reading and writing - where possible - via Modbus.

HOW TO COMPOSE THE WATEREADY SYSTEM

To compose the desired system, it is necessary to identify:

1. the WATEREADY code of the power required (see next page)
2. the code of the tank or cylinder to be combined (see sections ATV and ATX, BSX and BXX and BSFV, MAXI, VERTINOX)

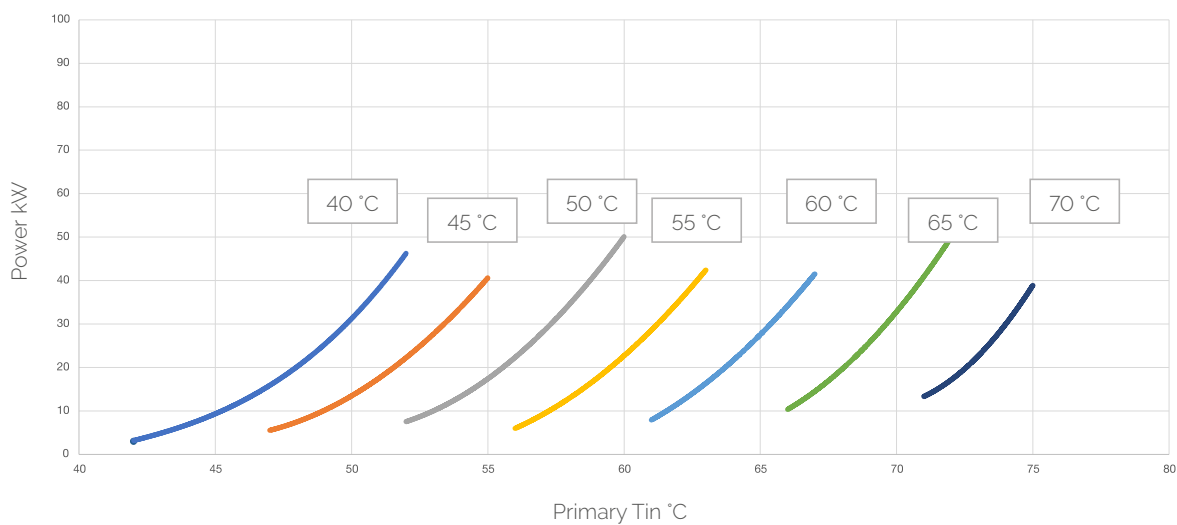
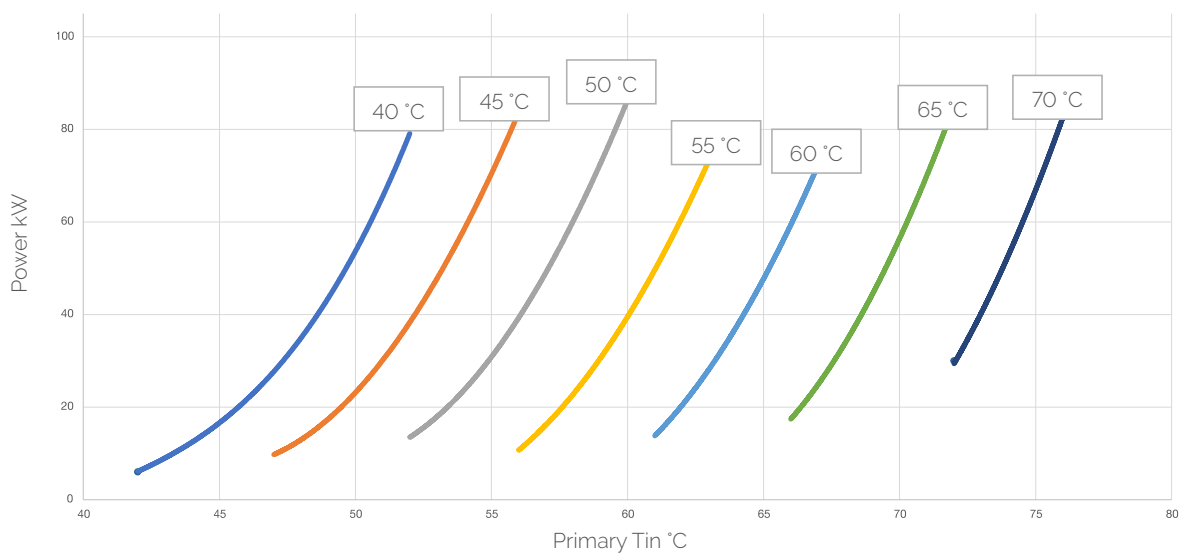
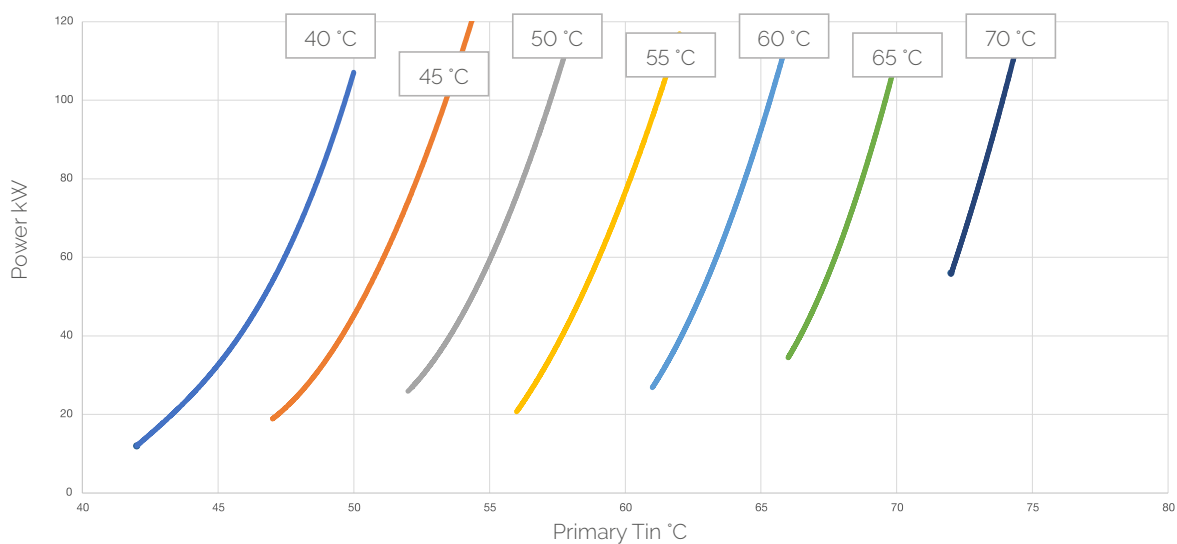
WATEREADY performance and tank compatibility



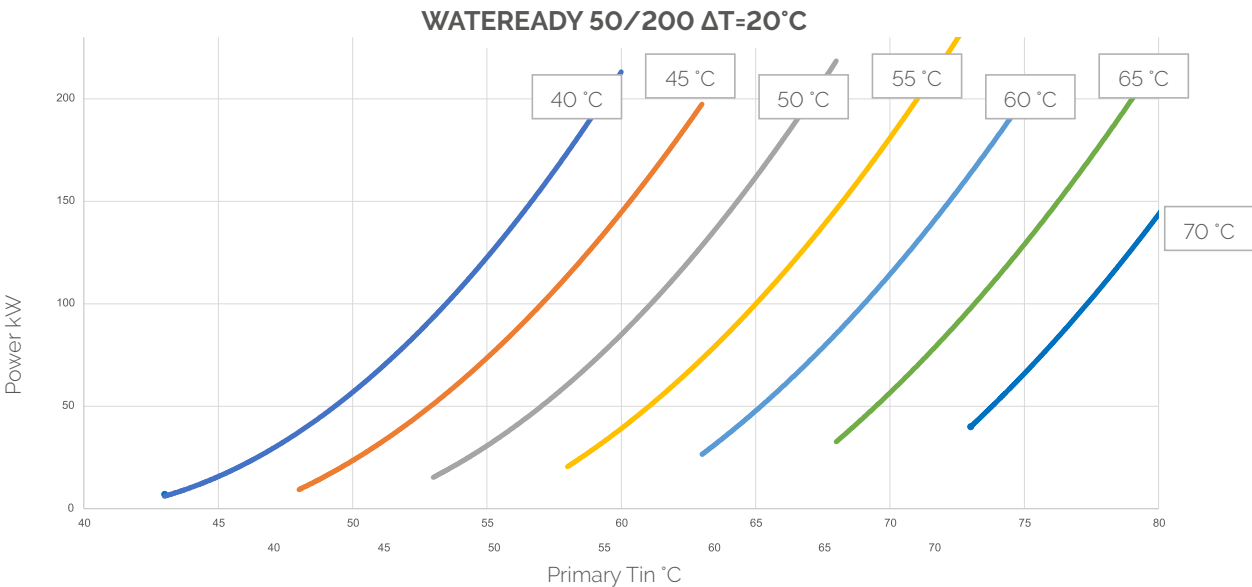
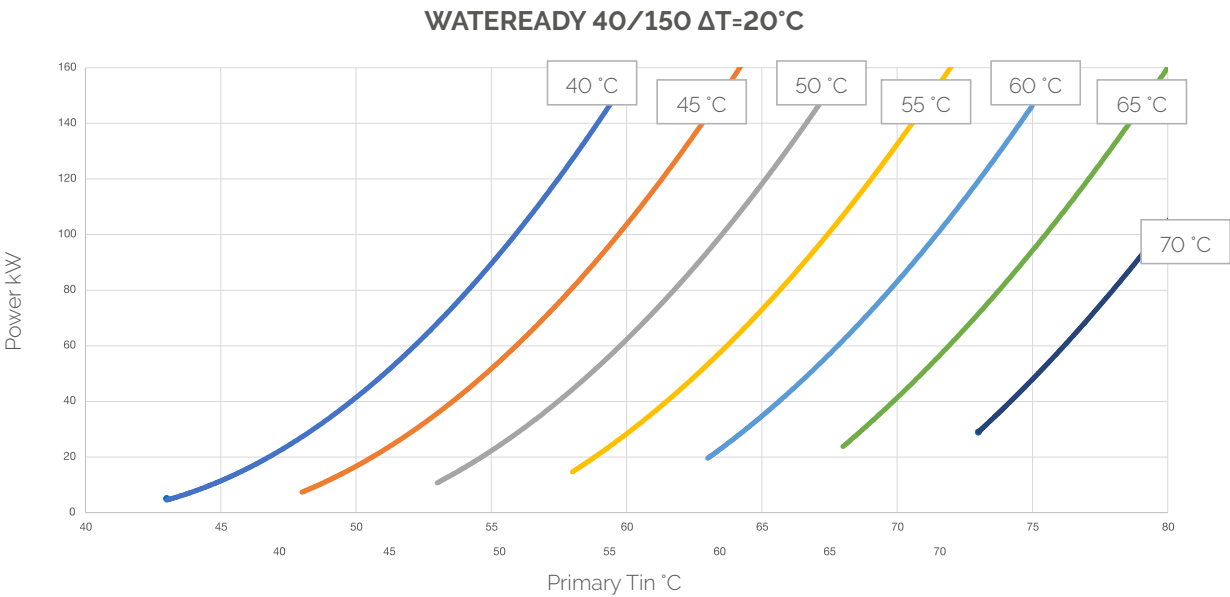
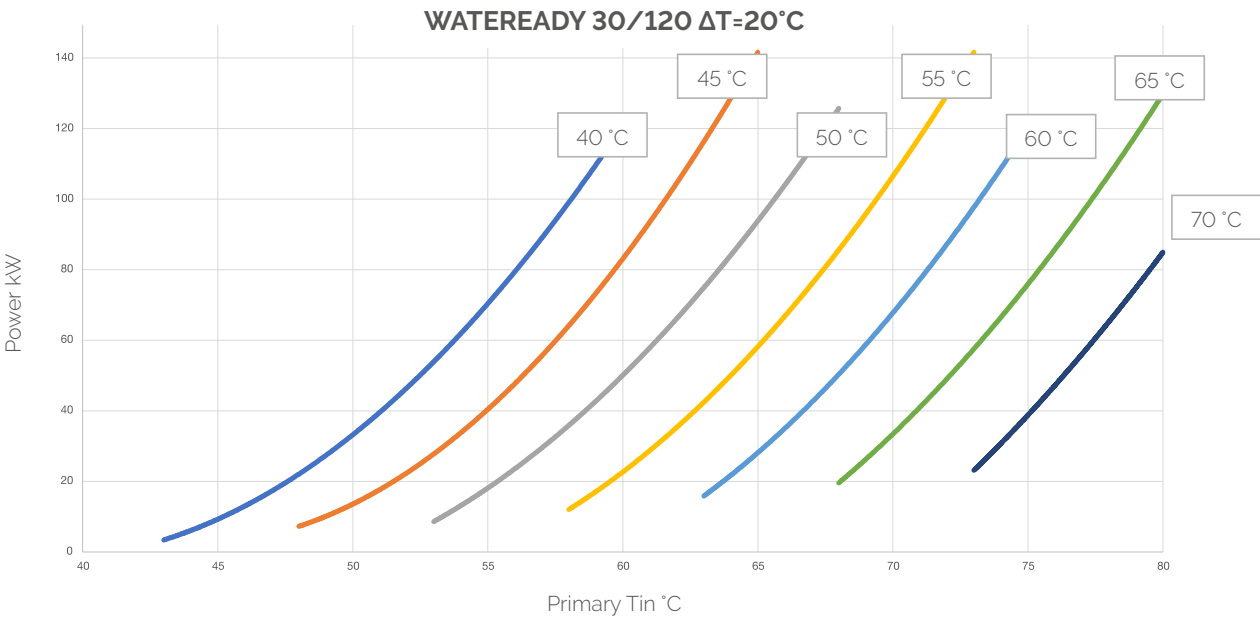
WATEREADY can be combined with storage tanks of different capacities: this table is a guideline, but the combination is free according to requirements.

	POWER with primary 55-50°C	Storage Capacity	TA 50°C; Tout DHW 45°C; Tin DHW 10°C			POWER with primary 80-60°C	Storage Capacity	TA 50°C; Tout DHW 45°C; Tin DHW 10°C		
Model	kW	L	L/10 min.	L/60 min.	DHW reset time	kW	L	L/10 min.	L/60 min.	DHW reset time
WATEREADY 12/35	12	200	278	523	46	35	200	429	1150	20
		300	392	640	70		300	572	1290	30
		500	621	870	116		500	858	1575	50
WATEREADY 18/70	18	500	645	1015	77	70	500	1001	2433	25
		750	931	1300	116		750	1358	2790	37
		1000	1217	1585	155		1000	1715	3150	50
WATEREADY 25/100	25	750	960	1470	84	100	750	1481	3530	26
		1000	1245	1760	112		1000	1838	3900	35
		1500	1817	2330	167		1500	2552	4600	52
WATEREADY 30/120	30	1000	1266	1880	93	120	1000	1920	4377	29
		1500	1837	2451	139		1500	2634	5091	44
		2000	2409	3023	186		2000	3349	5805	58
WATEREADY 40/150	40	1500	1878	2697	105	150	1500	2757	5829	35
		2000	2450	3269	139		2000	3471	6543	46
		2500	3021	3840	174		2500	4186	7257	58
WATEREADY 50/200	50	2000	2490	3514	112	200	2000	3676	7771	35
		2500	3062	4086	139		2500	4390	8486	44
		3000	3633	4657	167		3000	5105	9200	52
WATEREADY 60/250	60	2000	2531	3760	93	250	2000	3881	9000	28
		3000	3674	4903	139		3000	5310	10429	42
		4000	4817	6046	186		4000	6738	11857	56
WATEREADY 70/300	70	3000	3715	5149	120	300	3000	5514	11657	35
		4000	4858	6291	159		4000	6943	13086	46
		5000	6001	7434	199		5000	8371	14514	58
WATEREADY 80/350	80	3000	3756	5394	105	350	3000	5719	12886	30
		4000	4899	6537	139		4000	7148	14314	40
		5000	6042	7680	174		5000	8576	15743	50

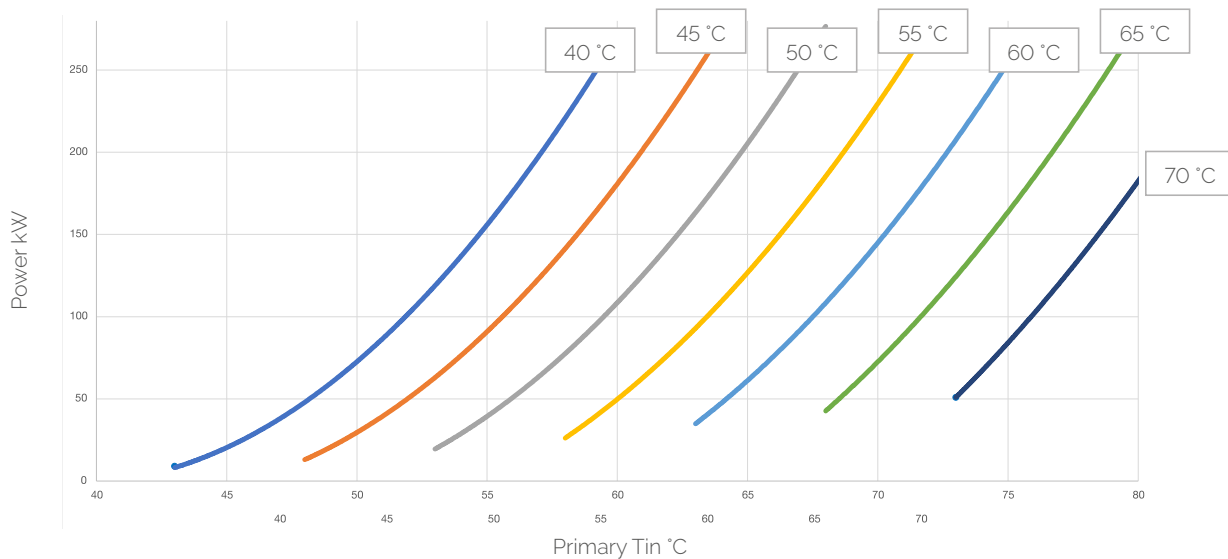
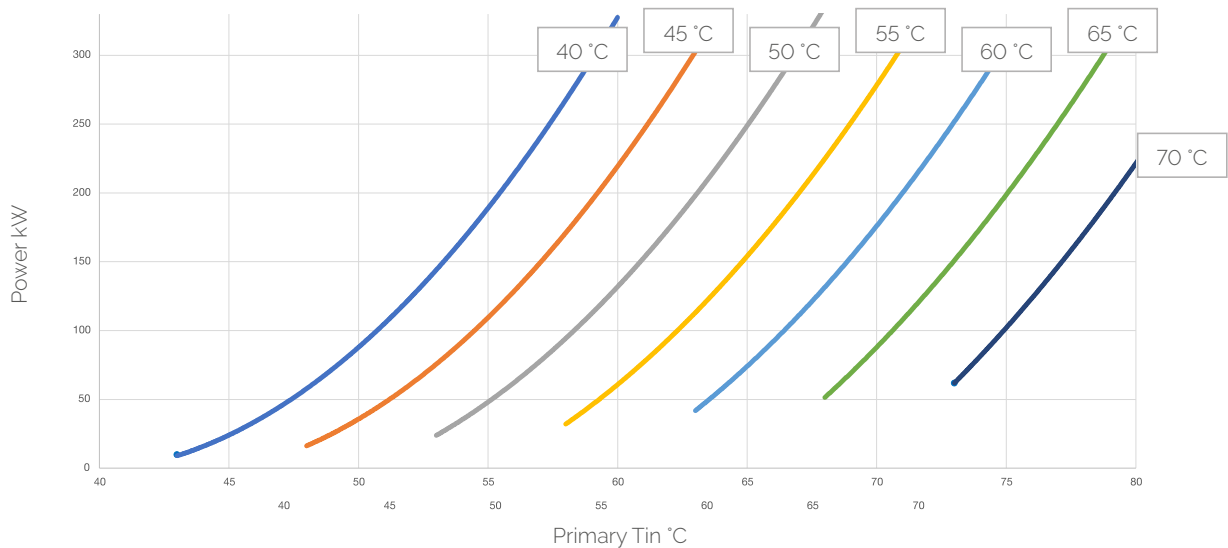
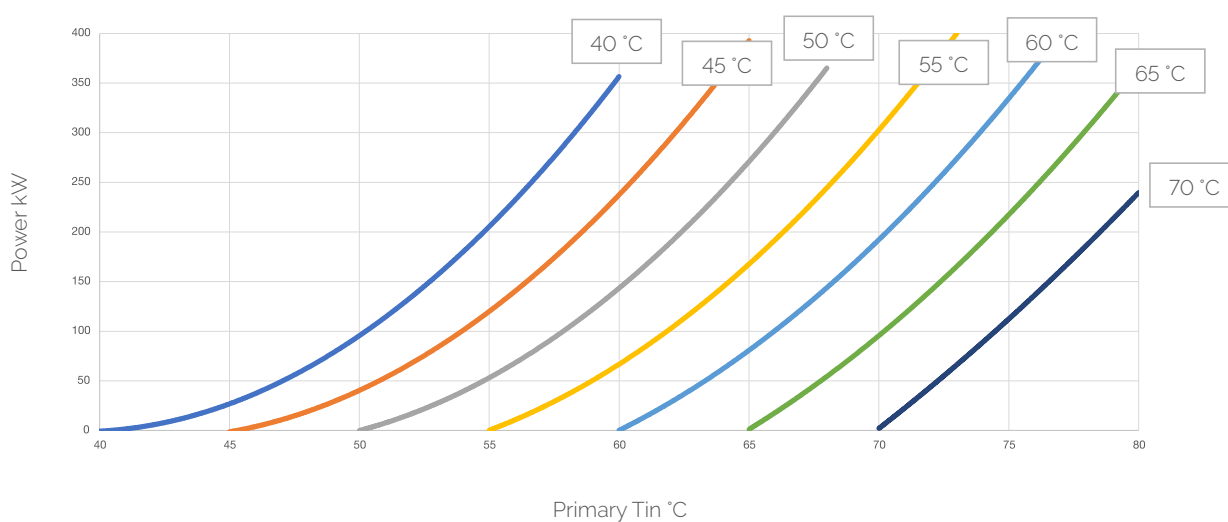
WATEREADY performance

WATEREADY 12/35 $\Delta T=20^{\circ}\text{C}$ **WATEREADY 18/70 $\Delta T=20^{\circ}\text{C}$** **WATEREADY 25/100 $\Delta T=20^{\circ}\text{C}$** 

WATEREADY performance



WATEREADY performance

WATEREADY 60/250 $\Delta T=20^{\circ}\text{C}$ **WATEREADY 70/300 $\Delta T=20^{\circ}\text{C}$** **WATEREADY 80/350 $\Delta T=20^{\circ}\text{C}$** 

WATEREADY operation

Start-up

The product is Plug & Play! To start using WATEREADY all you need to do is:

1. Mount the fittings, sump and valves of WATEREADY on the tank
2. Connect WATEREADY to valves via quick-release couplings (adjust centre distance if necessary)
3. For WATEREADY models 30/120 to 80/350, the pump cable must be connected and the cover fitted
4. Make electrical connections:
 - 4.a Insert temperature probe into thermowell
 - 4.b Connect power supply
 - 4.c Connect primary start consent



Start-up : first start-up recommended.

Operation

WATEREADY is a rapid heater consisting of fittings and a plate heat exchanger and equipped with a control unit from which the desired set point can be adjusted.

The Set Point indicates the storage tank temperature below which a water temperature reset is requested.

The set point temperature of WATEREADY is preset to 55°C by default, with $\Delta t=5^{\circ}\text{C}$ (hysteresis). It is possible to vary this set point temperature by setting the desired temperature from the controller.

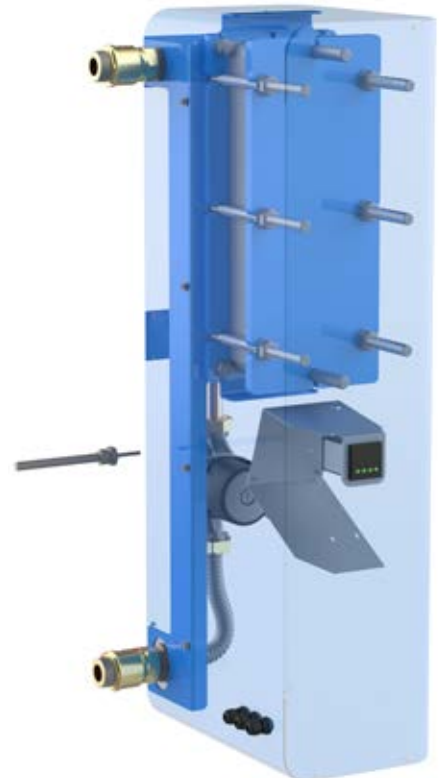
Optional: a primary temperature thermostat can be connected, so that the WATEREADY circulator is only activated when the primary temperature is appropriate for the storage tank load.

Why choose WATEREADY over a fixed coil boiler?

Compared to traditional domestic hot water production systems, such as fixed coil boilers,

WATEREADY allows you to:

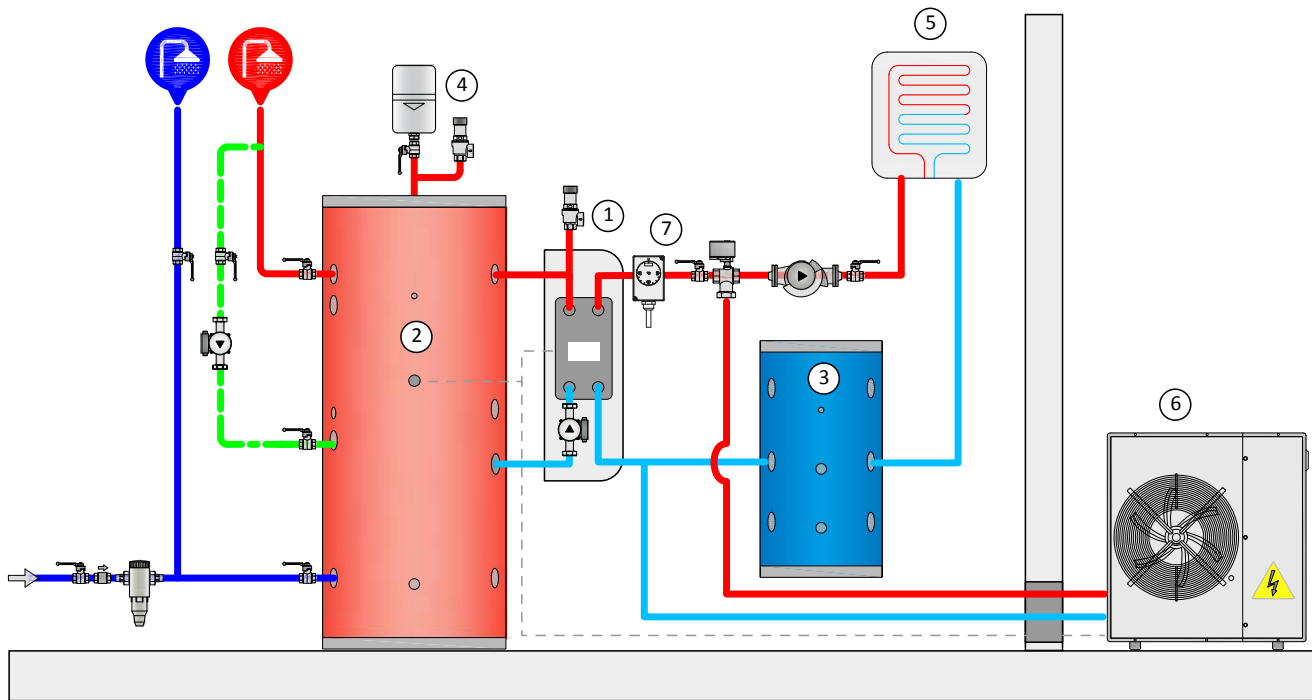
- ✓ Saving: it is not necessary to equip the system with tanks with large coils, which coincides with a reduction in the final price
- ✓ It can also be used in large systems: depending on the model selected, it is possible to meet the domestic hot water demand of a residential system as well as that of a heating plant (such as for an apartment block or a sports facility);
- ✓ Eliminate the stringent volume/surface constraint: the tank volume is linked to the power of the rapid heater, but the exchange takes place externally;
- ✓ Faster and less invasive maintenance or replacement: with WATEREADY, simply replace the heater unit to meet higher power demands, or carry out repairs.
- ✓ Easy installation due to Plug & Play system and lighter tank weight (no coil)
- ✓ Reduce environmental impact: the exchange system is more efficient, can be activated when the set point temperature is reached, and can be integrated with modern heating and cooling systems combined with the heat pump.
- ✓ Minimise water temperature make-up time in the storage tank



Patterns and combinations of WATEREADY plant

Legend

1	WATEREADY rapid trainer
2	HEIZERSILE ATV-ATX tank
3	ACR-CH inertial tank
4	Safety group
5	Heating circuit
6	FURIA heat pump



Plant pairings

Scenario	number of toilets/ showers	number of persons	Power Heat Pump kW	Model selected quick trainer	Storage capacity ATV-ATX l	Capacity ACR CH l
Residential						
Flat	1	3	4	WATEREADY 12/35	100	100
Condominium of 3 Apartments/house	3	12	8	WATEREADY 12/35	300	100
4-apartment flat block / semi-detached house	12	16	12	WATEREADY 12/35	300	200
Condominium of 7 flats	7	28	18	WATEREADY 18/70	1000	200
Condominium of 15 flats	15	60	25	WATEREADY 25/100	1000	300
Condominium of 19 flats	19	76	30	WATEREADY 30/120	1500	300
Condominium of 25 flats	25	104	40	WATEREADY 40/150	2000	400
Condominium of 33 flats	33	132	50	WATEREADY 50/200	2500	500
Condominium of 40 flats	40	160	60	WATEREADY 60/250	3000	750
Condominium of 45 flats	45	180	70	WATEREADY 70/300	3000	750
Condominium with 55 flats	55	220	80	WATEREADY 80/350	4000	750
Sports Centre						
Sports centre with 6 showers	6	12	12	WATEREADY 12/35	1000	100
Sports centre with 9 showers	9	18	18	WATEREADY 18/70	1500	100
Sports centre with 15 showers	15	30	30	WATEREADY 30/120	2500	300
Sports centre with 19 showers	19	38	40	WATEREADY 40/150	3000	300
Hotels						
19-room hotel	19	60	50	WATEREADY 50/200	3000	500
25-room hotel	25	75	60	WATEREADY 60/250	4000	750
35-room hotel	35	105	70	WATEREADY 70/300	5000	750
38-room hotel	38	111	80	WATEREADY 80/350	5000	750

WATEREADY pairings with tanks

The WATEREADY rapid heater can be combined with any tank.

This page shows the HEIZERSILE models of DHW storage tanks and the connections dedicated to WATEREADY, i.e. the pair of connections with the correct spacing.



ATV and BSX		
Capacity (l)	Connections	
200	K1	K3
300	K1	K3
500	K1	K2
750	K1	K2
1000	K1	K2
1500	K1	K3
2000	K1	K3
2500	K1	K3
3000	K1	K3
4000	K1	K3
5000	K1	K3
6000	n.a.	n.a.
8000	n.a.	n.a.
10000	n.a.	n.a.

ATV 2F and BSX 2		
Capacity (l)	Connections	
200	n.a.	n.a.
300	n.a.	n.a.
500	K1	K3
750	K1	K3
1000	K1	K3
1500	K1	K3
2000	K1	K3
2500	K1	K3
3000	K1	K3
4000	K1	K3
5000	K1	K3

ATX and BXX 1		
Capacity (l)	Connections	
200	n.a.	n.a.
300	n.a.	n.a.
500	K1	K3
800	K1	K3
1000	K1	K3
1500	K1	K3
2000	K1	K3
2500	K1	K3
3000	K1	K3
4000	K1	K3
5000	K1	K3

ATX 2F and BXX 2		
Capacity (l)	Connections	
200	n.a.	n.a.
300	n.a.	n.a.
500	K1	K3
750	K1	K3
1000	K1	K3
1500	K1	K3
2000	K1	K3
2500	K1	K3
3000	n.a.	n.a.
4000	K1	K3
5000	K1	K3

ATV CONTAINER		
Capacity (l)	Connections	
1500	K1	K3
2050	K1	K3
2500	K1	K3
3000	K1	K3
4000	K1	K3
5000	K1	K3

BSFV 1		
Capacity (l)	Connections	
200	K1	K2
300	K1	K2
500	K1	K2
750	K1	K2
1000	K1	K2
1500	K1	K2
2000	K1	K2
3000	K1	K2

BSFV 2		
Capacity (l)	Connections	
200	K1	K2
300	K1	K2
500	K1	K2
750	K1	K2
1000	K1	K2
1500	K1	K2
2000	K1	K2
3000	K1	K2

VERTINOX 1-2		
Capacity (l)	Connections	
200	K1	K2
300	K1	K2
500	K1	K2
750	K1	K2
1000	K1	K2
1500	K1	K2
2000	K1	K2
2500	K1	K2
3000	K1	K2

MAXI 1		
Capacity (l)	Connections	
300	K2	K3
500	K2	K3
750	K2	K3
1000	K2	K3

MAXI 2		
Capacity (l)	Connections	
300	K2	K3
500	K2	K3
750	K2	K3
1000	K2	K3

Wenkel S.r.l

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