

General technical data

Heating

SIZES			2.1	3.1	4.1	5.1	6.1 / 6.1T	7.1 / 7.1T	8.1 / 8.1T	9.1	10.1	12.1	14.1
Air 7 °C - Water 35 °C													
Nominal heating capacity	1	kW	4.20	6.35	8.40	10.0	12.1	14.5	15.9	18.0	22.0	26.0	30.1
Total power input	1	kW	0.82	1.28	1.63	2.02	2.44	3.15	3.53	3.83	5.00	6.37	7.70
COP	1	-	5.10	4.95	5.15	4.95	4.95	4.60	4.50	4.70	4.40	4.08	3.91
Water flow-rate	1	l/s	0.20	0.30	0.40	0.48	0.58	0.69	0.76	0.86	1.05	1.25	1.44
Nominal available pressure	1	kPa	85	85	86	86	88	87	87	112	111	111	110
Air 2 °C - Water 35 °C													
Nominal heating capacity	2	kW	4.40	5.50	7.10	8.20	9.20	11.0	13.0	18.0	22.0	24.0	26.0
Total power input	2	kW	1.10	1.41	1.73	2.05	2.36	3.06	3.77	5.33	7.10	8.33	9.29
COP	2	-	4.00	3.90	4.10	4.00	3.90	3.60	3.45	3.38	3.10	2.88	2.80
Water flow-rate	2	l/s	0.21	0.26	0.34	0.39	0.44	0.53	0.62	0.86	1.05	1.15	1.25
Nominal available pressure	2	kPa	85	85	85	85	88	88	87	112	111	111	111
Air -7 °C - Water 35 °C													
Nominal heating capacity	3	kW	4.70	6.00	7.00	8.00	10.0	12.0	13.1	18.0	21.0	22.0	23.0
Total power input	3	kW	1.52	2.00	2.19	2.62	3.33	4.21	4.85	6.67	8.08	8.80	9.39
COP	3	-	3.10	3.00	3.20	3.05	3.00	2.85	2.70	2.70	2.60	2.50	2.45
Water flow-rate	3	l/s	0.23	0.29	0.34	0.38	0.48	0.57	0.63	0.86	1.01	1.05	1.10
Nominal available pressure	3	kPa	85	85	85	85	88	88	87	112	111	111	111
Air 7 °C - Water 45 °C													
Nominal heating capacity	4	kW	4.30	6.30	8.10	10.0	12.3	14.1	16.0	18.0	22.0	26.0	30.0
Total power input	4	kW	1.13	1.70	2.10	2.67	3.32	3.92	4.57	5.14	6.47	8.39	10.3
COP	4	-	3.80	3.70	3.85	3.75	3.70	3.60	3.50	3.50	3.40	3.10	2.90
Water flow-rate	4	l/s	0.21	0.30	0.39	0.48	0.59	0.68	0.77	0.86	1.05	1.25	1.44
Nominal available pressure	4	kPa	85	85	85	86	88	87	87	112	111	111	110
Air 7 °C - Water 55 °C													
Nominal heating capacity	5	kW	4.40	6.00	7.50	9.50	11.9	13.8	16.0	18.0	22.0	26.0	30.0
Total power input	5	kW	1.49	2.03	2.36	3.06	3.90	4.68	5.61	6.55	8.30	10.6	13.0
COP	5	-	2.95	2.95	3.18	3.10	3.05	2.95	2.85	2.75	2.65	2.45	2.30
Water flow-rate	5	l/s	0.21	0.29	0.36	0.45	0.57	0.66	0.77	0.86	1.05	1.25	1.44
Nominal available pressure	5	kPa	85	85	85	86	88	87	87	112	111	111	110

Data according to EN 14511:2018.

1. inlet/outlet water temperature 30/35 °C, outdoor air temperature 7 °C dry bulb / 6 °C wet bulb
2. inlet/outlet water temperature 30/35 °C, outdoor air temperature 2 °C dry bulb / 1 °C wet bulb
3. inlet/outlet water temperature 30/35 °C, outdoor air temperature 7 °C dry bulb / 8 °C wet bulb
4. inlet/outlet water temperature 40/45 °C, outdoor air temperature 7 °C dry bulb / 6 °C wet bulb
5. inlet/outlet water temperature 47/55 °C, outdoor air temperature 7 °C dry bulb / 6 °C wet bulb

Cooling

SIZES			2.1	3.1	4.1	5.1	6.1 / 6.1T	7.1 / 7.1T	8.1 / 8.1T	9.1	10.1	12.1	14.1
Air 35 °C - Water 18 °C													
Nominal cooling capacity	6	kW	4.50	6.50	8.30	9.90	12.0	13.5	14.2	18.5	23.0	27.0	31.0
Total power input	6	kW	0.82	1.35	1.64	2.18	3.04	3.74	3.94	3.90	5.00	6.28	7.75
EER	6	-	5.50	4.80	5.05	4.55	3.95	3.61	3.61	4.75	4.60	4.30	4.00
Water flow-rate	6	l/s	0.22	0.31	0.40	0.47	0.57	0.65	0.68	0.89	1.10	1.29	1.48
Nominal available pressure	6	kPa	85	85	85	86	88	87	87	112	111	111	110
Air 35 °C - Water 7 °C													
Nominal cooling capacity	7	kW	4.70	7.00	7.45	8.20	11.5	12.4	14.0	17.0	21.0	26.0	29.5
Total power input	7	kW	1.36	2.33	2.22	2.52	4.18	4.96	5.60	5.57	7.12	9.63	11.6
EER	7	-	3.45	3.00	3.35	3.25	2.75	2.50	2.50	3.05	2.95	2.70	2.55
Water flow-rate	7	l/s	0.23	0.34	0.36	0.39	0.55	0.59	0.67	0.81	1.01	1.25	1.41
Nominal available pressure	7	kPa	85	85	85	85	88	88	87	112	112	111	111

Data according to EN 14511:2018.

6. inlet/outlet water temperature 23/18 °C, outdoor air temperature 35 °C dry bulb / 27 °C wet bulb
7. inlet/outlet water temperature 12/7 °C, outdoor air temperature 35 °C dry bulb / 27 °C wet bulb

ErP

SIZES			2.1	3.1	4.1	5.1	6.1	7.1	8.1	6.1T	7.1T	8.1T	9.1	10.1	12.1	14.1
Average climatic conditions - Heat pump for Average temperature application																
Nominal power	7	kW	4,4	5,7	6,6	7,7	11,6	11,6	13,0	12,1	12,1	13,0	17,7	22,4	26,2	29,7
SCOP	7	-	3,31	3,52	3,37	3,47	3,45	3,47	3,41	3,45	3,47	3,41	3,20	3,23	3,15	3,15
Generator energy class	7	-	A++	A++	A++	A++	A++	A++	A++	A++	A++	A++	A+	A++	A+	A+
ηs	7	%	129	138	131	137	135	135	133	135	135	133	125	126	123	123
Energy class of gas hybrid system	7	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A
ηs of gas hybrid system	7	%	96	96	96	96	97	96	97	97	96	97	96	96	96	97
Energy class of solar hybrid system	7	-	A++	A++	A++	A++	A++	A++	A++	A++	A++	A++	A++	A++	A++	A++
ηs of solar hybrid system	7	%	158	160	149	152	148	146	143	147	146	143	134	134	130	130
Average climatic conditions - Heat pump for Low temperature application																
Nominal power	8	kW	5,5	6,8	8,1	9,2	12,0	13,7	15,2	12,0	13,7	15,2	18,0	22,3	25,0	29,2
SCOP	8	-	4,85	4,95	5,22	5,20	4,81	4,72	4,62	4,81	4,72	4,62	4,60	4,53	4,5	4,2
Generator energy class	8	-	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A++
ηs	8	%	191	195	205	205	189	186	182	189	186	182	181	179	177	165
Energy class of gas hybrid system	8	-	D	D	D	D	D	D	D	D	D	D	D	D	D	D
ηs of gas hybrid system	8	%	96	96	96	96	96	96	98	96	96	98	96	96	96	97
Energy class of solar hybrid system	8	-	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A++
ηs of solar hybrid system	8	%	221	216	222	219	201	197	192	201	197	192	190	187	184	172
Average climatic conditions - Heat pump for application with Fan coil																
Nominal power	9	kW	4,7	6,4	7,4	8,7	11,3	12,2	14,3	11,3	12,2	14,3	16,6	20,6	25,5	29,5
SEER	9	-	4,99	5,34	5,83	5,98	4,89	4,86	4,69	4,86	4,83	4,67	4,70	4,69	4,66	4,48
ηs	9	%	197	211	230	236	192	191	184	191	190	184	185	185	183	176

The product is conforming with the European ErP Directives, which includes Commission Delegated Regulation (EU) no. 811/2018 and Commission Delegated Regulation no. 813/2018 of the Commission.

Data according to EN 14825

7. Average climate, Medium temperature 47/55 °C

8. Average climate, Low temperature 30/35 °C

9. Average climate, Low temperature 12/7 °C

Technical specifications

SIZES			2.1	3.1	4.1	5.1	6.1 / 6.1T	7.1 / 7.1T	8.1 / 8.1T	9.1	10.1	12.1	14.1
Refrigeration circuit													
Compressor	no./type	-	-	1	1	1	1	1	1	1	1	1	1
Oil	type	-	-	Twin Rotary	Twin Rotary	Twin Rotary	Twin Rotary	Twin Rotary	Twin Rotary	Twin Rotary	Twin Rotary	Twin Rotary	Twin Rotary
	charge	-	ml	460	460	460	460	1100	1100	1100	1500	1500	1500
Refrigerant	type/GWP	1	-	R-32 / 675									
	charge	-	kg	1.40	1.40	1.40	1.40	1.75	1.75	1.75	5.00	5.00	5.00
	CO ₂ equiv.	-	t _{CO2}	945	945	945	945	1181	1181	1181	3375	3375	3375
Number of fans	-	-	-	1	1	1	1	1	1	2	2	2	2
Water circuit													
Minimum system water content	-	l	-	30	30	70	70	70	70	100	100	100	100
Admissible water flow rate	minimum	2	l/s	0.11	0.11	0.11	0.11	0.20	0.20	0.20	0.50	0.50	0.50
	maximum	-	l/s	0.25	0.35	0.46	0.58	0.69	0.76	0.83	1.03	1.26	1.49
Maximum system pressure	-	bar	-	3	3	3	3	3	3	3	3	3	3
System expansion vessel	volume	3	l	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
	pre-charge	-	bar	1	1	1	1	1	1	1	1	1	1
Hydraulic connections	-	inch-es	-	1" M	1" M	1 1/4" M	1 1/4" M	1 1/4" M	1 1/4" M	1 1/4" M	1 1/4" M	1 1/4" M	1 1/4" M
Sound data													
Sound pressure at 1 metre	4	dB(A)	-	41	44	45	46	50	50	53	50	50	53
Sound power	4	dB(A)	-	55	58	59	60	65	65	68	65	65	68
Dimensions and weights													
Dimensions (Length x Height x Depth)	unit	-	mm	1295x717x426				1385x864x523				1120x1557x528	
	packaging	-	mm	1375x885x475				1465x1035x560				1220x1735x565	
Weight	unit	-	kg	86	86	105	105	129 / 144	129 / 144	129 / 144	177	177	177
	packaging	-	kg	107	107	132	132	155 / 172	155 / 172	155 / 172	206	206	206

1. it contains fluorinated greenhouse gases
2. consider the water content of the area with less volume
3. sufficient volume up to a maximum of 60 litres of water content in the system.
4. Sound power levels are determined using the intensimetric method (UNI EN ISO 9614-2). Data referring to the following conditions at full load.
Heating: inlet/outlet water temperature 47/55 °C, outdoor air temperature 7 °C.
Cooling: water inlet/outlet temperature 12/7 °C, outdoor air temperature 35 °C.

General technical data

Boilers for stand-alone installations

MODEL				UC 24.4	UC 33.4	FE 24.4	FE 33.4
Heating Performance							
Nominal heat capacity (Qn)	-	Maximum	[kW]	24.0	34.0	24.5	34.8
		Minimum	[kW]	5.0	5.0	4.8	5.0
Heating capacity (Pn)	60/80 °C	Maximum	[kW]	23.4	33.2	24.0	34.0
		Minimum	[kW]	4.8	4.8	4.7	4.9
	30/50 °C	Maximum	[kW]	25.2	35.8	26.0	37.0
		Minimum	[kW]	5.3	5.4	5.2	5.4
Efficiency	60/80 °C	Maximum	%	97.7	97.7	97.8	97.7
		Minimum	%	96.5	96.4	97.6	97.2
	30/50 °C	Maximum	%	105.1	105.2	106.1	106.2
		Minimum	%	106.9	107.0	107.3	107.1
	30% of Pn	-	%	108.7	108.6	109.7	109.7
		-	-	-	-	-	-
Boiler water content	-	-	[l]	2.5	2.8	3.4	4.3
Operating pressure	PMS	Maximum	[bar]	3	3	3	3
	-	Minimum	[bar]	0.5	0.5	0.8	0.8
Expansion tank	Volume	-	[l]	10	10	8	10
	Pre-charge	-	[bar]	1	1	0.8	0.8
DHW performance							
Nominal heat capacity (Qnw)	-	Maximum	[kW]	28.0	34.0	28.5	34.8
		Minimum	[kW]	5.0	5.0	4.7	5.0
Heating capacity	-	Maximum	[kW]	27.3	33.2	28.0	34.0
		Minimum	[kW]	4.8	4.8	4.7	4.8
DHW flow rate	ΔT=25 °C	-	[l/min]	16.2	19.2	16.1	19.5
	ΔT=30 °C	-	[l/min]	13.5	16.0	13.4	16.2
	ΔT=45 K	-	[l/min]	9.0	10.6	8.9	10.8
DHW production in continuous operation	ΔT=40 K	-	[l/min]	10.1	11.9	10.0	12.1
	ΔT=35 K	-	[l/min]	11.6	13.6	11.5	13.9
	ΔT=30 K	-	[l/min]	13.5	15.8	13.4	16.2
	ΔT=25 K	-	[l/min]	16.2	19.0	16.1	19.5
	-	-	-	-	-	-	-
Water temperature		Maximum	[°C]	60	60	65	65
		Minimum	[°C]	38	38	40	40
Operating pressure	PMW	Maximum	[bar]	6	6	9	9
	-	Minimum	[bar]	0.5	0.5	0.3	0.3
ErP data							
Seasonal eff. Average climate	Heating	ηs	%	93	93	94	94
		Energy class	-	A	A	A	A
	DHW	ηwh	%	87	90	85	85
		Energy class	-	A	A	A	A
		Withdrawal profile	-	XL	XL	XL	XXL
Sound power level		Lwa	[dB(A)]	53	56	49	52
Thermal losses and discharge of flue gas							
Flue loss	burner ON 80/60 °C	Pmax	%	2.33	2.27	2.00	2.10
		Pmin	%	2.24	2.32	2.00	2.90
	burner ON 50/30 °C	Pmax	%	1.70	1.15	1.40	1.40
		Pmin	%	1.37	1.44	1.00	1.00
Flue gas temperature	80/60 °C	Pmax	[°C]	66.5	64.9	66	67
		Pmin	[°C]	64.3	65.9	64	62
	50/30 °C	Pmax	[°C]	53.6	52.7	52	53
		Pmin	[°C]	47.2	48.4	44	45
Flue gas flow rate	-	Pmax	[g/s]	13.8	15.6	11.2	16
	-	Pmin	[g/s]	2.3	2.3	2.3	2.4
Nitrogen oxide (NOX) emissions		Class	-	6	6	6	6
		-	[mq/kWh]	45	49	35	33

Boilers for centralised systems

MODEL				UC 70.2	UC 115.2	UC 200.2
Heating Performance						
Modulation ratio	-	-	-	1: 7	1: 5.75	1: 10
Nominal heat capacity (Qn)	-	Maximum	[kW]	67.5	115.0	199.0
		Minimum	[kW]	9.6	20.0	20.0
Heating capacity (Pn)	60/80 °C	Maximum	[kW]	65.7	111.5	194.8
		Minimum	[kW]	9.1	19.2	19.1
	30/50 °C	Maximum	[kW]	68.7	120.0	205.2
		Minimum	[kW]	10.3	21.8	21.1
Efficiency	60/80 °C	Maximum	%	97.3	97.1	97.9
		Minimum	%	94.9	95.9	95.6
	30/50 °C	Maximum	%	101.7	104.6	103.1
		Minimum	%	107.6	108.8	105.4
	30% of Pn		-	107.3	107.3	108.9
Combustion efficiency	Reduced load		%	98.3	98.3	98.2
	Nominal load		%	97.4	97.7	98.0
Water content			[l]	3.9	9.0	22.0
Operating pressure	PMS	Maximum	[bar]	6	6	6
	-	Minimum	[bar]	0.5	0.5	0.5
ErP data						
Seasonal eff.	Heating	ηs	%	93	92	93
Average climate		Energy class	-	A	A	A
Sound power level		Lwa	[dB(A)]	63	-	-
Thermal losses and discharge of flue gas						
Casing losses	burner ON	Qn	%	0.09	0.7	0.14
		Qmin	%	3.44	2.69	2.60
Flue loss	burner ON	Pmax	%	2.62	2.29	2.00
		Pmin	%	1.66	1.87	1.80
Flue gas temperature (T _f -T _a)		Pmax	[°C]	51.3	46.6	40
		Pmin	[°C]	34	36	34
Flue gas flow rate	-	Pmax	[g/s]	111.4	184.6	319.57
		Pmin	[g/s]	15.9	34.3	34.3
Nitrogen oxide (NOX) emissions	-	Class	-	6	6	6
			[mg/kWh]	59	47	68

“Factory made” hybrid combinations

Heat pumps				Compatible boiler				
Combination	Power			24.4	33.4	70.2	115.2	200F.2
1 unit	2.1	kW	4.20	✓	✓	✓	✓	✓
	3.1	kW	6.35	✓	✓	✓	✓	✓
	4.1	kW	8.40	✓	✓	✓	✓	✓
	5.1	kW	10.0	✓	✓	✓	✓	✓
	6.1	kW	12.1	-	✓	✓	✓	✓
	7.1	kW	14.5	-	✓	✓	✓	✓
	8.1	kW	15.9	-	✓	✓	✓	✓
	9.1	kW	18.0	-	-	✓	✓	✓
	10.1	kW	22.0	-	-	✓	✓	✓
	12.1	kW	26.0	-	-	✓	✓	✓
2 units (cascade)	14.1	kW	30.1	-	-	✓	✓	✓
	2.1+2.1	kW	8.4	✓	✓	✓	✓	✓
	3.1+3.1	kW	12.7	-	✓	✓	✓	✓
	4.1+4.1	kW	16.8	-	-	✓	✓	✓
	5.1+5.1	kW	20.0	-	-	✓	✓	✓
	6.1+6.1	kW	24.2	-	-	✓	✓	✓
	7.1+7.1	kW	29.0	-	-	✓	✓	✓
	8.1+8.1	kW	31.8	-	-	✓	✓	✓
	9.1+9.1	kW	36.0	-	-	-	✓	✓
	10.1+10.1	kW	44.0	-	-	-	✓	✓
3 units (cascade)	12.1+12.1	kW	52.0	-	-	-	✓	✓
	14.1+14.1	kW	60.2	-	-	-	-	✓
	2.1+2.1+2.1	kW	12.6	-	✓	✓	✓	✓
	3.1+3.1+3.1	kW	19.1	-	-	✓	✓	✓
	4.1+4.1+4.1	kW	25.2	-	-	✓	✓	✓
	5.1+5.1+5.1	kW	30.0	-	-	✓	✓	✓
	6.1+6.1+6.1	kW	36.3	-	-	-	✓	✓
	7.1+7.1+7.1	kW	43.5	-	-	-	✓	✓
	8.1+8.1+8.1	kW	47.7	-	-	-	✓	✓
	9.1+9.1+9.1	kW	54.0	-	-	-	✓	✓
6 units (cascade)	10.1+10.1+10.1	kW	66.0	-	-	-	-	✓
	12.1+12.1+12.1	kW	78.0	-	-	-	-	✓
	14.1+14.1+14.1	kW	90.3	-	-	-	-	✓
	2.1+2.1+2.1+2.1+2.1+2.1	kW	16.8	-	-	✓	✓	✓
	3.1+3.1+3.1+3.1+3.1+3.1	kW	25.4	-	-	✓	✓	✓
	4.1+4.1+4.1+4.1+4.1+4.1	kW	33.6	-	-	-	✓	✓
	5.1+5.1+5.1+5.1+5.1+5.1	kW	40.0	-	-	-	✓	✓
	6.1+6.1+6.1+6.1+6.1+6.1	kW	48.4	-	-	-	✓	✓
	7.1+7.1+7.1+7.1+7.1+7.1	kW	58.0	-	-	-	-	✓
	8.1+8.1+8.1+8.1+8.1+8.1	kW	63.6	-	-	-	-	✓
5 units (cascade)	9.1+9.1+9.1+9.1+9.1+9.1	kW	72.0	-	-	-	-	✓
	10.1+10.1+10.1+10.1+10.1+10.1	kW	88.0	-	-	-	-	✓
	12.1+12.1+12.1+12.1+12.1+12.1	kW	104.0	-	-	-	-	-
	14.1+14.1+14.1+14.1+14.1+14.1	kW	120.4	-	-	-	-	-
	2.1+2.1+2.1+2.1+2.1+2.1	kW	21.0	-	-	✓	✓	✓
	3.1+3.1+3.1+3.1+3.1+3.1	kW	31.8	-	-	✓	✓	✓
	4.1+4.1+4.1+4.1+4.1+4.1	kW	42.0	-	-	-	✓	✓
	5.1+5.1+5.1+5.1+5.1+5.1	kW	50.0	-	-	-	✓	✓
	6.1+6.1+6.1+6.1+6.1+6.1	kW	60.5	-	-	-	-	✓
	7.1+7.1+7.1+7.1+7.1+7.1	kW	72.5	-	-	-	-	✓
6 units (cascade)	8.1+8.1+8.1+8.1+8.1+8.1	kW	79.5	-	-	-	-	✓
	9.1+9.1+9.1+9.1+9.1+9.1	kW	90.0	-	-	-	-	✓
	10.1+10.1+10.1+10.1+10.1+10.1	kW	110.0	-	-	-	-	-
	12.1+12.1+12.1+12.1+12.1+12.1	kW	130.0	-	-	-	-	-
	14.1+14.1+14.1+14.1+14.1+14.1	kW	150.5	-	-	-	-	-
	2.1+2.1+2.1+2.1+2.1+2.1	kW	25.2	-	-	✓	✓	✓
	3.1+3.1+3.1+3.1+3.1+3.1	kW	38.1	-	-	-	✓	✓
	4.1+4.1+4.1+4.1+4.1+4.1	kW	50.4	-	-	-	✓	✓
	5.1+5.1+5.1+5.1+5.1+5.1	kW	60.0	-	-	-	-	✓
	6.1+6.1+6.1+6.1+6.1+6.1	kW	72.6	-	-	-	-	✓
6 units (cascade)	7.1+7.1+7.1+7.1+7.1+7.1	kW	87.0	-	-	-	-	✓
	8.1+8.1+8.1+8.1+8.1+8.1	kW	95.4	-	-	-	-	✓
	9.1+9.1+9.1+9.1+9.1+9.1	kW	108.0	-	-	-	-	-
	10.1+10.1+10.1+10.1+10.1+10.1	kW	132.0	-	-	-	-	-
	12.1+12.1+12.1+12.1+12.1+12.1	kW	156.0	-	-	-	-	-
	14.1+14.1+14.1+14.1+14.1+14.1	kW	180.6	-	-	-	-	-

Electric data

Sizes			2.1	3.1	4.1	5.1	6.1	7.1	8.1	6.1T	7.1T	8.1T	9.1	10.1	12.1	14.1
Power supply	1	V/Hz/p	230/50/1						400/50/3+N							
Standard Unit																
F.L.I. - Power input at max admissible conditions	-	kW	2.3	2.7	3.4	3.7	5.5	5.8	6.2	5.5	5.8	6.2	10.6	12.5	13.8	14.5
F.L.A. - Absorbed current at maximum admissible conditions	-	A	12.0	14.0	16.0	17.0	25.0	26.0	27.0	10.0	11.0	12.0	21.0	24.5	27.0	28.5
IBH configuration: built-in additional electric heater																
F.L.I. - Power input at max admissible conditions	2	kW	5.6	6.0	6.7	7.0	8.8	9.1	9.5	15.4	15.7	16.1	-	-	-	-
F.L.A. - Absorbed current at maximum admissible conditions	2	A	24.3	26.1	29.1	30.4	38.3	39.6	41.3	67.0	68.3	70.0	-	-	-	-

Boilers for hybrid versions

Model			FE 24.4	FE 33.4	UC 24.4	UC 33.4	UC 70.2	UC 115.2	UC 200F.2
Power supply	-	[V-Hz]	230/50	230/50	230/50	230/50	230/50	230/50	230/50
F.L.A. - Absorbed current at maximum admissible conditions	2	[A]	0.41	0.53	0.36	0.43	1.16	1.37	2.52
F.L.I. - Power input at max admissible conditions	2	[kW]	0.095	0.122	0.082	0.099	0.267	0.314	0.58
Protection rating	IP	-	X5D	X5D	X4D	X4D	X4D	X5D	X5D

Accessories

ACS200X / ACS300X / ACS500X TBH and QERAX heater	F.L.I.	4	kW	2.10
	F.L.A.	4	A	9.13
ACS1000X / ACS10SX - TBH and QERATX heater	F.L.I.	4	kW	4.73
	F.L.A.	4	A	6.82
IBHX	F.L.I.	3-4	kW	6.6
	F.L.A.	3-4	A	28.7
IBHTX	F.L.I.	3-4	kW	9.9
	F.L.A.	3-4	A	14.3
DTX - antifreeze heater	F.L.I.	2	W	110
	F.L.A.	2	mA	480
KIRE2HX / KIRE2HLX - two identical circulators	F.L.I.	4	W	90
	F.L.A.	4	mA	880
KCSX - circulator	F.L.I.	4	W	60
	F.L.A.	4	mA	580
PRSX - circulator	F.L.I.	4	W	76
	F.L.A.	4	mA	330
PCSX - circulator	F.L.I.	4	W	52
	F.L.A.	4	mA	520
PCS2X - circulator	F.L.I.	4	W	140
	F.L.A.	4	mA	1100

The units comply with the requirements of European standard IEC EN 60335.

1. permissible power supply: 220-240V±10% and 380-415V±6%.
2. data to be added to standard unit values
3. data on the maximum installable power (3 stages). It is possible to power 1 or 2 stages and the electrical sizing values are proportional to the number of stages
4. the application requires independent power supply: data required for sizing the relevant power lines

The tanks are supplied with immersed electric heater

⚠ When defining the size, make sure all absorption values are compliant with current power supply contracts in the country of installation.

Current data for *Power limitation* function

This function is used to limit the current consumed by the unit according to predefined profiles, which can be set at 0-8.

Maximum current limitation [A] according to the selected profile:

SIZES	#							
	1	2	3	4	5	6	7	8
2.1 TO 3.1	18	16	15	14	13	12		
4.1 TO 5.1	19	18	16	14	12			
6.1M-7.1M	30	28	26	24	22	20	18	16
8.1M	30	29	27	25	23	21	19	17
6.1T-8.1T	14	13	12	11	10	9		
9.1	18	17	16	15	14	13	12.5	12
10.1	21	20	19	18	17	16	15	14
12.1	24	23	22	21	20	19	18	17
14.1	28	27	26	25	24	23	22	21

⚠ By enabling the function, the performance of the unit will be less than the nominal one.

Sound levels

SIZES				2.1	3.1	4.1	5.1	6.1	7.1	8.1	6.1T	7.1T	8.1T	9.1	10.1	12.1	14.1
Sound power	standard	-	dB(A)	55	58	59	60	65	65	68	65	65	68	70	72	74	77
	silent	1	dB(A)	54	56	56	57	61	61	63	61	61	63	66	64	71	75
	supersilent	2	dB(A)	53	55	54	55	59	59	59	59	59	59	63	62	70	73
Sound pressure @1m	standard	-	dB(A)	41	44	45	46	50	50	53	50	50	53	55	56	58	61
	silent	1	dB(A)	40	42	42	42	46	46	48	46	46	48	51	48	55	59
	supersilent	2	dB(A)	39	41	40	40	44	44	44	44	44	44	48	46	54	57

Sound power level

SIZE	Octave bands (Hz)							
	63	125	250	500	1000	2000	4000	8000
2.1	64	58	54	53	51	45	38	34
3.1	64	58	54	53	52	45	38	34
4.1	68	69	58	56	52	49	48	39
5.1	69	65	61	57	53	52	49	42
6.1	73	66	63	63	60	56	48	42
7.1	73	68	62	63	59	57	50	44
8.1	78	78	64	65	62	59	51	47
6.1T	70	69	63	62	60	57	54	53
7.1T	71	72	64	60	58	57	57	54
8.1T	76	73	64	64	62	61	58	53
9.1	71	79	70	67	64	61	53	50
10.1	75	76	71	69	66	64	57	54
12.1	76	79	73	71	68	66	59	56
14.1	75	81	77	73	71	69	61	57

The sound levels refer to a unit at full load, under nominal test conditions.

Reference conditions: inlet/outlet water temperature 47/55 °C, outdoor air temperature 7 °C dry bulb / 6 °C wet bulb

The noise level is determined using the tensiometric method (UNI EN ISO 9614-2)

The sound pressure level refers to 1 m. from the unit outer surface operating in open field.

1. use a correction factor of 0.8 to calculate the maximum capacity delivered in Silent mode
2. use a correction factor of 0.6 to calculate the maximum capacity delivered in Super-Silent mode

Note: Silent and Supersilent functions are designed for temporary unit operations