

Technical description

iTec XT and iTec XTR



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1 Technical data, indoor units

1.1 Indoor unit

Indoor unit	Unit	iTec XT Total	iTec XT Total
		206679	206675
Mains power supply	V	400V 3~N 50Hz	230V 1~N 50Hz
Marking power, circulation pumps	kW	0,1	0,1
Immersion heater, steps	kW	3/6/9/12/15	3/6/9
Fuse separate supply, indoor unit	A	6/10/16/20/25	16/30/40
Hot water tank, size	l	180	180
Weight	kg	106	106
Dimensions	mm	596x690x1845	596x690x1845

Indoor unit	Unit	iTec XT Compact	iTec XT Compact
		206677	206676
Mains power supply	V	400V 3~N 50Hz	230V 1~N 50Hz
Marking power, circulation pumps	kW	0,1	0,1
Immersion heater, steps	kW	3/6/9/12/15	3/6/9
Fuse separate supply, indoor unit	A	6/10/16/20/25	16/30/40
Hot water tank, size	l	180	180
Weight	kg	100	100
Dimensions	mm	596x690x1538	596x690x1538

Indoor unit	Unit	iTec XT Total EQ	iTec XT Total EQ	iTec XT Total EQ
		206682	206681	206680
Mains power supply	V	400V 3~N 50Hz	230V 3~N 50Hz	230V 1~N 50Hz
Marking power, circulation pumps	kW	0,1	0,1	0,1
Immersion heater, steps	kW	3/6/9/12/15	1,8/3,6/5,4/7,2/9,0	3/6/9
Fuse separate supply, indoor unit	A	6/10/16/20/25	16/30/40	16/30/40
Hot water tank, size	l	180	180	180
Weight	kg	142	142	142
Dimensions	mm	596x690x1845	596x690x1845	596x690x1845

Indoor unit	Unit	iTec XT Standard
		206673
Mains power supply	V	230V 1~N 50Hz
Marking power, circulation pumps	kW	N/A
Immersion heater, steps	kW	N/A
Fuse separate supply, indoor unit	A	10
Hot water tank, size	l	N/A
Weight	kg	180
Dimensions	mm	380x204x600

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Indoor unit	Unit	iTec XT Plus	iTec XT Plus
		206679	206674
Mains power supply	V	400V 3~N 50Hz	230V 1~N 50Hz
Marking power, circulation pumps	kW	0,1	0,1
Immersion heater, steps	kW	3/6/9/12/15	3/6/9
Fuse separate supply, indoor unit	A	6/10/16/20/25	16/30/40
Hot water tank, size	l	N/A	N/A
Weight	kg	21	21
Dimensions	mm	417x258x727	417x258x727

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2 Technical data iTec XT 230V, outdoor units

2.1 Technical data iTec XT 230V, outdoor units

iTec XT 230V, outdoor units		Units	iTec XT 10 206667	iTec XT 14 206669	iTec XT 16 206671
Heating capacity		kW	3-10	3-14	3-16
Refrigerant	Type		R32		
	Amount ¹	kg	2,70	3,30	3,30
	CO ₂ equivalent	tons	1,820	2,230	2,230
	Design pressure	bar(g)	43		
Compressor	Type		Scroll		
	Oil		POE		
Electrical data, 230V 1~N, 50Hz	Mains power supply	V	230V~1N		
	Max working power, compressor	kW	5,28	6,67	7,09
	Marking power, fan	kW	0,122		
	Fuse separate supply, outdoor unit	A	25	32	32
Performance	SCOP, floor heating (35°C) ³		4,33	4,33	4,45
	SCOP, radiator heating (55°C) ³		3,50	3,45	3,40
	SCOP, floor heating (35°C) ⁴		4,64	4,90	4,83
	SCOP, radiator heating (55°C) ⁴		3,38	3,78	3,75
	Heating capacity	kW	8,00	12,00	14,00
	Electrical power input	kW	1,60	2,35	2,77
	COP ⁵		5,00	5,11	5,05
Energy class - system ⁶	Floor heating (35°C)		A+++		
	Radiator heating (55°C)		A++	A+++	A++
Energy class-product ⁷	Floor heating (35°C)		A+++		
	Radiator heating (55°C)		A++		
	Hot water ⁸		A		
Min/Max temperature	Outdoor air	°C	+43/-30		
	Heating	°C	+70/+20		
Pressure limits refrigerant circuit	High pressure	bar(g)	43		
Sound power level, outdoor		dB(A)	56 ⁹ /67 ¹⁰	59 ⁹ /69 ¹⁰	60 ⁹ /70 ¹⁰
Hot water performance ⁸	Volume 40°C, hot water	l	218	212	217
	COP, hot water		2,66	2,50	2,55
	Volume 40°C, comfort mode	l	270	265	254
Hot water tank, size		l	184		
Water mains		bar(g)	9		
Weight		kg	126	137	137
Dimensions (WxDxH)		mm	1270 x 530 x 1018		

1) The refrigerant circuit is hermetically sealed and contains refrigerants covered by the F-gas regulation. GWP for R32 according to EC 517/2014 is 675.

2) The minimum recommended fuse size depends on the limitation of the electrical immersion heater. Meets IEC61000-3-12 at Ssc.

3) SCOP according to EN14825, cold climate (Helsinki).

4) SCOP according to EN14825, average climate (Strasbourg).

5) At A7/W35, according to EN14511.

6) When the heat pump is installed in a heating system that is controlled via the heat pump's control computer. According to EU regulation 811/2013.

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7) When the heat pump is not connected to a heating system, and the function of the built-in control computer is not taken into account. According to EU regulation 811/2013.

8) Hot water performance according to EN16147 Average Climate, XL cycle and built-in hot water tank.

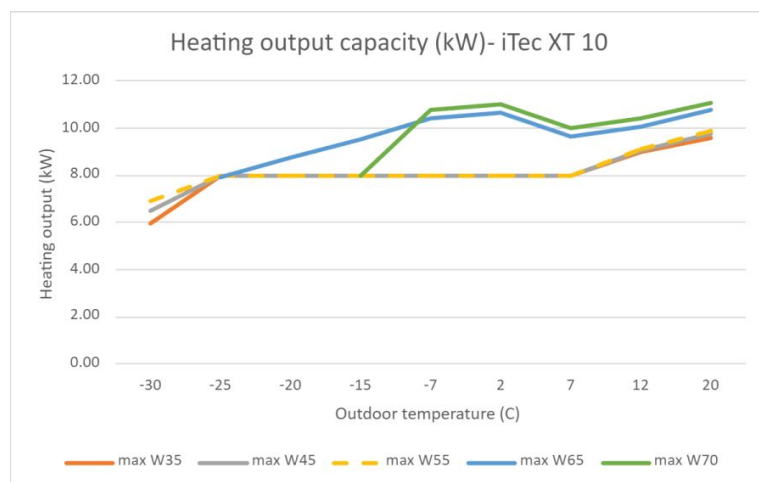
9) Sound power level according to energy labeling, measured according to EN12102 and EN3741 (A7W55).

10) Max sound power level measured according to EN 3741.

2.2 Performance iTec XT 230V, outdoor units

iTec XT 10 kW

Water outlet temperature (°C)	35	45	55	65	70
Outdoor temperature (°C)	Output (kW)	Output (kW)	Output (kW)	Output (kW)	Output (kW)
-30	5,96	6,48	6,92	-	-
-25	8,00	8,00	8,00	7,95	-
-20	8,00	8,00	8,00	8,75	
-15	8,00	8,00	8,00	9,54	8,00
-7	8,00	8,00	8,00	10,43	10,79
2	8,00	8,00	8,00	10,63	11,01
7	8,00	8,00	8,00	9,66	10,03
12	8,98	9,05	9,11	10,08	10,43
20	9,57	9,74	9,91	10,76	11,08

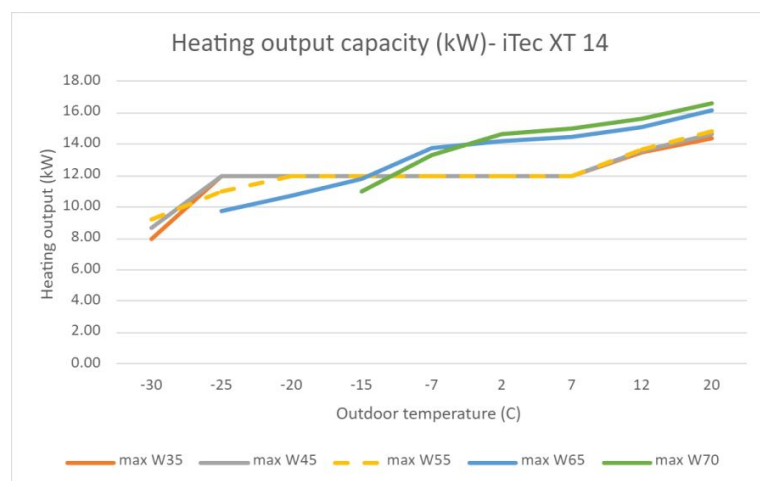


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iTec XT 14 kW

Water outlet temperature (°C)	35	45	55	65	70
Outdoor temperature (°C)	Output (kW)	Output (kW)	Output (kW)	Output (kW)	Output (kW)
-30	7,95	8,64	9,23	-	-
-25	12,00	12,00	11,00	9,77	-
-20	12,00	12,00	12,00	10,76	-
-15	12,00	12,00	12,00	11,81	11,00
-7	12,00	12,00	12,00	13,77	13,29
2	12,00	12,00	12,00	14,18	14,68
7	12,00	12,00	12,00	14,49	15,05
12	13,47	13,57	13,67	15,12	15,65
20	14,35	14,61	14,87	16,14	16,62

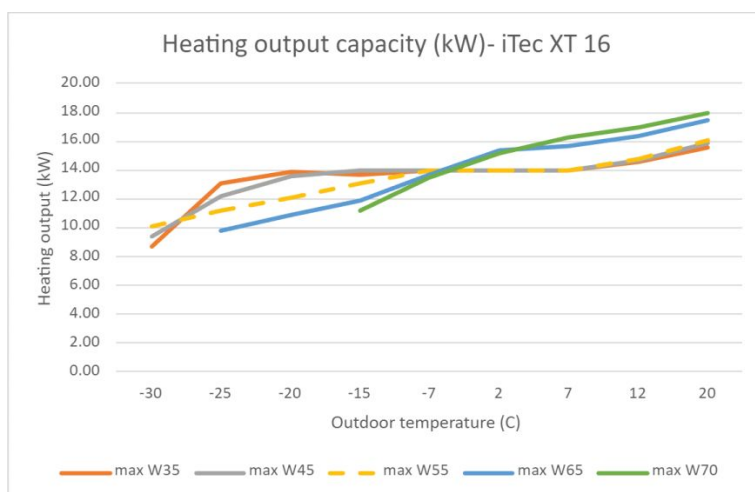


Technical description

iTec XT and iTec XTR

iTec XT 16 kW

Water outlet temperature (°C)	35	45	55	65	70
Outdoor temperature (°C)	Output (kW)	Output (kW)	Output (kW)	Output (kW)	Output (kW)
-30	8,67	9,42	10,07	-	-
-25	13,11	12,18	11,20	9,78	-
-20	13,87	13,60	12,12	10,88	-
-15	13,70	14,00	13,03	11,87	11,20
-7	14,00	14,00	14,00	13,72	13,51
2	14,00	14,00	14,00	15,36	15,21
7	14,00	14,00	14,00	15,70	16,30
12	14,59	14,70	14,81	16,38	16,95
20	15,55	15,83	16,11	17,48	18,00



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3 Technical data iTec XT 400V, outdoor units

3.1 Technical data iTec XT 400V, outdoor units

iTec XT 400V, outdoor units		Units	iTec XT 10 206668	iTec XT 14 206670	iTec XT 16 206672
Heating capacity		kW	3-10	3-14	3-16
Refrigerant	Type		R32		
	Amount ¹	kg	2,70	3,30	3,30
	CO ₂ equivalent	tons	1,820	2,230	2,230
	Design pressure	bar(g)	43		
Compressor	Type		Scroll		
	Oil		POE		
Electrical data, 400V~3N, 50Hz	Mains power supply	V	400V~3N		
	Max working power, compressor	kW	5,85	8,19	9,20
	Marking power, fan	kW	0,122		
	Fuse separate supply, outdoor unit	A	10	16	16
Performance	SCOP, floor heating (35°C) ³		4,33	4,33	4,45
	SCOP, radiator heating (55°C) ³		3,50	3,45	3,40
	SCOP, floor heating (35°C) ⁴		4,64	4,90	4,83
	SCOP, radiator heating (55°C) ⁴		3,38	3,78	3,75
	Heating capacity	kW	8,00	12,00	14,00
	Electrical power input	kW	1,60	2,35	2,77
	COP ⁵		5,00	5,11	5,05
Energy class - system ⁶	Floor heating (35°C)		A+++		
	Radiator heating (55°C)		A++	A+++	A++
Energy class-product ⁷	Floor heating (35°C)		A+++		
	Radiator heating (55°C)		A++		
	Hot water ⁸		A		
Min/Max temperature	Outdoor air	°C	+43/-30		
	Heating	°C	+70/+20		
Pressure limits refrigerant circuit	High pressure	bar(g)	43		
Sound power level, outdoor		dB(A)	56 ⁹ /67 ¹⁰	59 ⁹ /69 ¹⁰	60 ⁹ /70 ¹⁰
Hot water performance ⁸	Volume 40°C, hot water	l	218	212	217
	COP, hot water		2,66	2,50	2,55
	Volume 40°C, comfort mode	l	270	265	254
Hot water tank, size		l	184		
Water mains		bar(g)	9		
Weight		kg	126	137	137
Dimensions (WxDxH)		mm	1270 x 530 x 1018		

1) The refrigerant circuit is hermetically sealed and contains refrigerants covered by the F-gas regulation. GWP for R32 according to EC 517/2014 is 675.

2) The minimum recommended fuse size depends on the limitation of the electrical immersion heater. Meets IEC61000-3-12 at Ssc.

3) SCOP according to EN14825, cold climate (Helsinki).

4) SCOP according to EN14825, average climate (Strasbourg).

5) At A7/W35, according to EN14511.

6) When the heat pump is installed in a heating system that is controlled via the heat pump's control computer. According to EU regulation 811/2013.

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7) When the heat pump is not connected to a heating system, and the function of the built-in control computer is not taken into account. According to EU regulation 811/2013.

8) Hot water performance according to EN16147 Average Climate, XL cycle and built-in hot water tank.

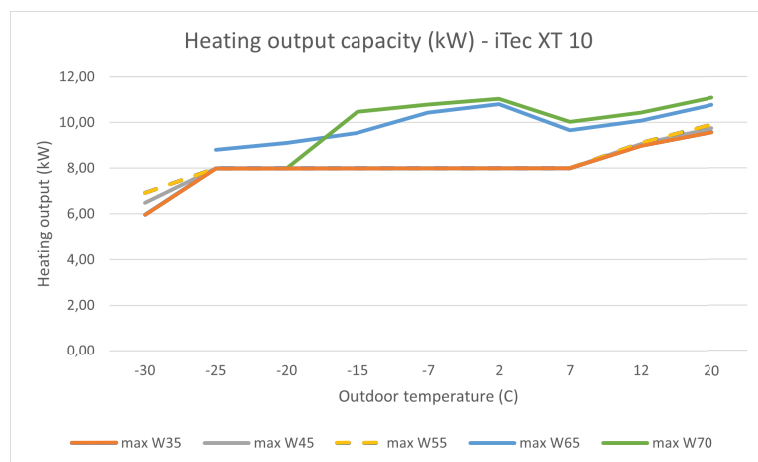
9) Sound power level according to energy labeling, measured according to EN12102 and EN3741 (A7W55).

10) Max sound power level measured according to EN 3741.

3.2 Performance iTec XT 400V, outdoor units

iTec XT 10 kW

Water outlet temperature (°C)	35	45	55	65	70
Outdoor temperature (°C)	Output (kW)	Output (kW)	Output (kW)	Output (kW)	Output (kW)
-30	5,96	6,48	6,92	-	-
-25	8,00	8,00	8,00	8,80	-
-20	8,00	8,00	8,00	9,12	
-15	8,00	8,00	8,00	9,54	8,00
-7	8,00	8,00	8,00	10,43	10,79
2	8,00	8,00	8,00	10,63	11,01
7	8,00	8,00	8,00	9,66	10,03
12	8,98	9,05	9,11	10,08	10,43
20	9,57	9,74	9,91	10,76	11,08

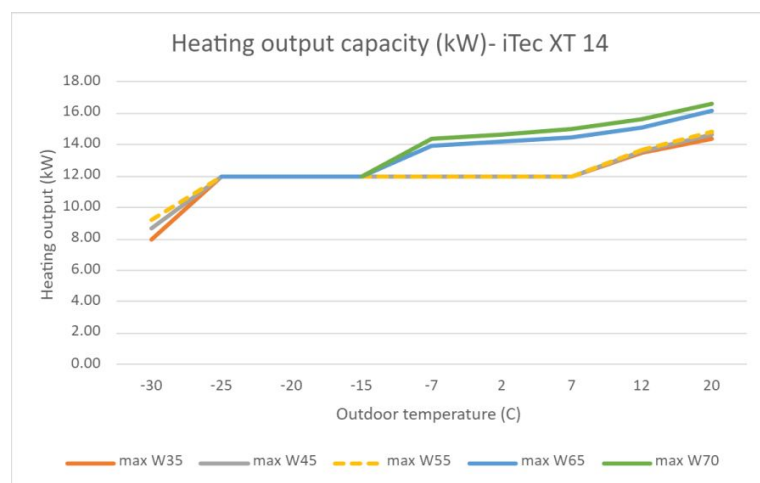


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iTec XT and iTec XTR

iTec XT 14 kW

Water outlet temperature (°C)	35	45	55	65	70
Outdoor temperature (°C)	Output (kW)	Output (kW)	Output (kW)	Output (kW)	Output (kW)
-30	7,95	8,64	9,23	-	-
-25	12,00	12,00	12,00	12,00	-
-20	12,00	12,00	12,00	12,00	-
-15	12,00	12,00	12,00	12,00	12,00
-7	12,00	12,00	12,00	13,90	14,38
2	12,00	12,00	12,00	14,18	14,68
7	12,00	12,00	12,00	14,49	15,05
12	13,47	13,57	13,67	15,12	15,65
20	14,35	14,61	14,87	16,14	16,62

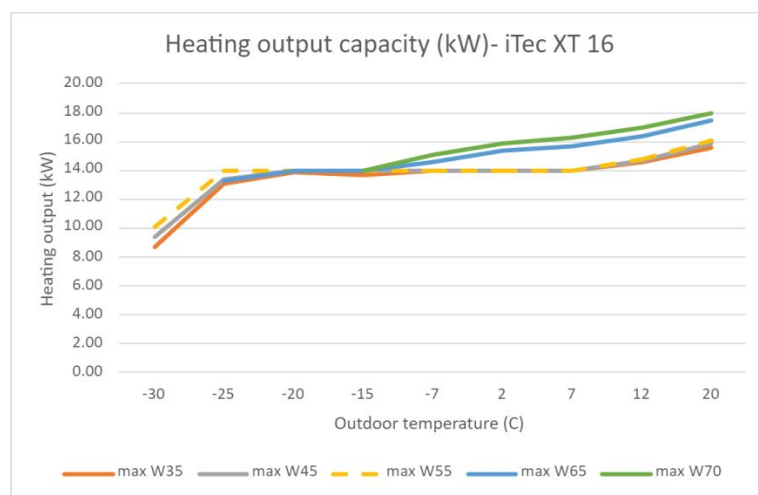


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iTec XT and iTec XTR

iTec XT 16 kW

Water outlet temperature (°C)	35	45	55	65	70
Outdoor temperature (°C)	Output (kW)	Output (kW)	Output (kW)	Output (kW)	Output (kW)
-30	8,67	9,42	10,07	-	-
-25	13,11	13,41	14,00	13,29	-
-20	13,87	14,00	14,00	14,00	-
-15	13,70	14,00	14,00	14,00	14,00
-7	14,00	14,00	14,00	14,60	15,10
2	14,00	14,00	14,00	15,36	15,90
7	14,00	14,00	14,00	15,70	16,30
12	14,59	14,70	14,81	16,38	16,95
20	15,55	15,83	16,11	17,48	18,00



Technical description iTec XT and iTec XTR

4 Technical data iTec XTR 230V, outdoor units

4.1 Technical data iTec XTR 230V, outdoor unit

iTec XTR 230V, outdoor units		Units	iTec XTR S	iTec XTR M	iTec XTR L
			207847	207849	207851
Heating capacity		kW	5	8	12
Refrigerant	Type		R290		
	Amount ¹	kg	0,63	0,87	1,25
	CO ² equivalent	tons	0,000013	0,000017	0,000025
	Design pressure	bar(g)	43		
Compressor	Type		Rotary	Scroll	Scroll
	Oil		POE		
Electrical data, 230V 1~N, 50Hz	Mains power supply	V	230V~1N		
	Max working power, compressor	kW	3,19	4,95	6,94
	Marking power, fan	kW	0,122	0,125	0,122
	Fuse separate supply, outdoor unit	A	16	25	32
Performance	SCOP, floor heating (35°C) ³		4,30	4,25	4,25
	SCOP, radiator heating (55°C) ³		3,10	3,28	3,18
	SCOP, floor heating (35°C) ⁴		5,10	4,85	4,90
	SCOP, radiator heating (55°C) ⁴		3,60	3,55	3,65
	Heating capacity	kW	5.00	8.00	12.00
	Electrical power input	kW	0,98	1,63	2,50
	COP ⁵		5,10	4,91	4,8
Energy class - system ⁶	Floor heating (35°C)		A+++		
	Radiator heating (55°C)		A++	A+++	A++
Energy class-product ⁷	Floor heating (35°C)		A+++		
	Radiator heating (55°C)		A++		
	Hot water ⁸		A		
Min/Max temperature	Outdoor air	°C	-25+35		
	Heating	°C	+75/+20		
Pressure limits refrigerant circuit	High pressure	bar(g)	43		
Sound power level, outdoor		dB(A)	62 ¹⁰ /52 ¹¹	65 ¹⁰ /52 ¹¹	68 ¹⁰ /54 ¹¹
Hot water performance ⁸	Volume 40°C, hot water	l	218	212	217
	COP, hot water		2,66	2,50	2,55
	Volume 40°C, comfort mode	l	270	265	254
Hot water tank, size		l	184		
Water mains		bar(g)	3		

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iTec XTR 230V, outdoor units	Units	iTec XTR S	iTec XTR M	iTec XTR L
		207847	207849	207851
Weight	kg	86	98	140
Dimensions (WxDxH)	mm	998x500x850		1270 x 530 x 1018

- 1) The refrigerant circuit is hermetically sealed and contains refrigerants not covered by the F-gas regulation. GWP for R290 according to EU 573/2024 is 0,02.
- 2) The minimum recommended fuse size depends on the limitation of the electrical immersion heater. Meets IEC61000-3-12 at Ssc.
- 3) SCOP according to EN14825, cold climate (Helsinki).
- 4) SCOP according to EN14825, average climate (Strasbourg).
- 5) At A7/W35, according to EN14511.
- 6) When the heat pump is installed in a heating system that is controlled via the heat pump's control computer. According to EU regulation 811/2013.
- 7) When the heat pump is not connected to a heating system, and the function of the built-in control computer is not taken into account. According to EU regulation 811/2013.
- 8) Hot water performance according to EN16147, COP according to XL cycle.
- 9) Local regulations and regulations must always be checked before antifreeze agents are used.
- 10) Max sound power level measured according to EN 3741.
- 11) Sound power level according to energy labelling, measured according to EN12102 and ISO 3741 (A7W55).

Technical description iTec XT and iTec XTR

5 Technical data iTec XTR 400V, outdoor units

5.1 Technical data iTec XTR 400V, outdoor units

iTec XTR 400V, outdoor units		Units	iTec XTR M	iTec XTR L	iTec XTR XL
			207848	207850	207852
Heating capacity		kW	2-8	3-12	4-16
Refrigerant	Type		R290		
	Amount ¹	kg	0,87	1,25	1,25
	CO ² equivalent	tons	0,000017	0,000025	0,000025
	Design pressure	bar(g)	43		
Compressor	Type		Rotary	Scroll	Scroll
	Oil		POE		
Electrical data, 400V~3N, 50Hz	Mains power supply	V	400V~3N		
	Max working power, compressor	kW	4,95	7,54	8,88
	Marking power, fan	kW		0,122	0,122
	Fuse separate supply, outdoor unit	A	10	16	16
Performance	SCOP, floor heating (35°C) ³		4,25	4,23	4,33
	SCOP, radiator heating (55°C) ³		3,28	3,18	3,20
	SCOP, floor heating (35°C) ⁴		4,85	4,90	4,70
	SCOP, radiator heating (55°C) ⁴		3,55	3,65	3,55
	Heating capacity	kW	8	12	16
	Electrical power input	kW	1,63	2,50	3,55
	COP ⁵		4,91	4,80	4,51
Energy class - system ⁶	Floor heating (35°C)		A+++		
	Radiator heating (55°C)		A++	A+++	A++
Energy class-product ⁷	Floor heating (35°C)		A+++		
	Radiator heating (55°C)		A++		
	Hot water ⁸		A		
Min/Max temperature	Outdoor air	°C	-25/+35		
	Heating	°C	+75/+20		
Pressure limits refrigerant circuit	High pressure	bar(g)	43		
Sound power level, outdoor		dB(A)	62 ¹⁰ /52 ¹¹	68 ¹⁰ /54 ¹¹	70 ¹⁰ /54 ¹¹
Hot water performance ⁸	Volume 40°C, hot water	l	218	212	217
	COP, hot water		2,66	2,50	2,55
	Volume 40°C, comfort mode	l	270	265	254
Hot water tank, size		l	N/A		
Water mains		bar(g)	3		
Weight		kg	98	140	140
Dimensions (WxDxH)		mm	998x500x850	998x500x850	1270 x 530 x 1018

1) The refrigerant circuit is hermetically sealed and contains refrigerants not covered by the F-gas regulation. GWP for R290 according to EU 573/2024 is 0,02.

2) The minimum recommended fuse size depends on the limitation of the electrical immersion heater. Meets IEC61000-3-12 at Ssc.

3) SCOP according to EN14825, cold climate (Helsinki).

4) SCOP according to EN14825, average climate (Strasbourg).

5) At A7/W35, according to EN14511.

6) When the heat pump is installed in a heating system that is controlled via the heat pump's control computer. According to EU regulation 811/2013.

- 7) When the heat pump is not connected to a heating system, and the function of the built-in control computer is not taken into account. According to EU regulation 811/2013.
- 8) Hot water performance according to EN16147, COP according to XL cycle.
- 9) Local regulations and regulations must always be checked before antifreeze agents are used.
- 10) Max sound power level measured according to EN 3741.
- 11) Sound power level according to energy labelling, measured according to EN12102 and ISO 3741 (A7W55).

Technical description iTec XT and iTec XTR

6 Heating and Cooling performance iTec XTR

6.1 Heating performance iTec XTR S, M, L and XL

iTec XTR S

Supply line temperature (°C)	25			35			45			55			65		
Outdoor temperature (°C)	Heat-ing capacity (kW)	Input power (kW)	COP	Heat-ing capacity (kW)	Input power (kW)	COP	Heat-ing capacity (kW)	Input power (kW)	COP	Heat-ing capacity (kW)	Input power (kW)	COP	Heat-ing capacity (kW)	Input power (kW)	COP
-25	3,85	1,98	1,94	3,54	1,95	1,82	3,39	2,02	1,68	3,31	2,22	1,49	3,19	2,38	1,34
-20	4,41	1,93	2,28	4,18	2,1	1,99	4,02	2,16	1,86	3,78	2,29	1,65	3,64	2,48	1,47
-15	4,9	1,85	2,65	4,73	2,18	2,17	4,52	2,21	2,05	4,3	2,39	1,80	4,14	2,59	1,60
-10	5,47	1,68	3,26	5	1,85	2,70	5	2,21	2,26	5	2,5	2,00	4,85	2,8	1,73
-7	5,71	1,58	3,61	5	1,67	2,99	5	2,02	2,48	5	2,38	2,10	5	2,68	1,87
-2	5,84	1,34	4,36	5	1,28	3,91	5	1,7	2,94	5	2,07	2,42	5	2,36	2,12
2	5,9	1,17	5,04	5	1,16	4,31	5	1,52	3,29	5	1,81	2,76	5	2,2	2,27
7	6,09	0,98	6,21	5	980	0,01	5	1,32	3,79	5	1,61	3,11	5	1,89	2,65
12	6,4	0,92	6,96	6,14	1,11	5,53	6,01	1,34	4,49	5,95	1,73	3,44	5,88	2,07	2,84
15	6,89	0,9	7,66	6,46	1,08	5,98	6,33	1,36	4,65	6,18	1,71	3,61	6,08	2,01	3,02
20	7,49	0,85	8,81	6,96	1,08	6,44	6,79	1,4	4,85	6,61	1,67	3,96	6,48	2,02	3,21
25	8,02	0,81	9,90	7,58	1,07	7,08	7,39	1,41	5,24	7,16	1,69	4,24	6,92	2,07	3,34
30	8,51	0,77	11,05	8,1	1,03	7,86	7,88	1,4	5,63	7,75	1,7	4,56	7,62	2,12	3,59
35	9,08	0,73	12,44	8,6	1,01	8,51	8,22	1,36	6,04	8,08	1,66	4,87	7,95	2,05	3,88

Technical description

iTec XT and iTec XTR

iTec XTR M

Supply line temperature (°C)	25			35			45			55			65		
Outdoor temperature (°C)	Heat-ing capacity (kW)	Input power (kW)	COP	Heat-ing capacity (kW)	Input power (kW)	COP	Heat-ing capacity (kW)	Input power (kW)	COP	Heat-ing capacity (kW)	Input power (kW)	COP	Heat-ing capacity (kW)	Input power (kW)	COP
-25	5,7	3,02	1,89	5,25	2,98	1,76	5,02	3,08	1,63	4,9	3,38	1,45	4,72	3,63	1,30
-20	6,6	2,97	2,22	6,25	3,23	1,93	6,01	3,32	1,81	5,65	3,53	1,60	5,45	3,82	1,43
-15	7,4	2,88	2,57	7,14	3,38	2,11	6,82	3,43	1,99	6,49	3,71	1,75	6,25	4,03	1,55
-10	8,25	2,61	3,16	8	3,08	2,60	7,88	3,58	2,20	7,58	3,91	1,94	7,32	4,36	1,68
-7	8,62	2,46	3,50	8	2,67	3,00	8	3,33	2,40	8	3,92	2,04	8	4,42	1,81
-2	8,81	2,08	4,24	8	2,11	3,79	8	2,81	2,85	8	3,4	2,35	8	3,88	2,06
2	8,91	1,82	4,90	8	1,9	4,21	8	2,5	3,20	8	2,99	2,68	8	3,62	2,21
7	9,19	1,52	6,05	8	1,63	4,91	8	2,16	3,70	8	2,67	3,00	8	3,11	2,57
12	9,85	1,47	6,70	9,45	1,77	5,34	9,25	2,13	4,34	9,15	2,73	3,35	9,05	3,28	2,76
15	10,4	1,39	7,48	9,75	1,68	5,80	9,55	2,11	4,53	9,33	2,67	3,49	9,18	3,12	2,94
20	11,3	1,32	8,56	10,51	1,68	6,26	10,25	2,18	4,70	9,98	2,6	3,84	9,78	3,14	3,11
25	12,11	1,27	9,54	11,44	1,66	6,89	11,16	2,19	5,10	10,8	2,62	4,12	10,45	3,21	3,26
30	12,85	1,2	10,71	12,22	1,61	7,59	11,9	2,18	5,46	11,7	2,64	4,43	11,5	3,29	3,50
35	13,7	1,14	12,02	12,98	1,57	8,27	12,4	2,11	5,88	12,2	2,58	4,73	12	3,19	3,76

iTec XTR L

Supply line temperature (°C)	25			35			45			55			65		
Outdoor temperature (°C)	Heat-ing capacity (kW)	Input power (kW)	COP	Heat-ing capacity (kW)	Input power (kW)	COP	Heat-ing capacity (kW)	Input power (kW)	COP	Heat-ing capacity (kW)	Input power (kW)	COP	Heat-ing capacity (kW)	Input power (kW)	COP
-25	9,8	4,83	2,03	9,5	5,16	1,84	9,4	5,84	1,61	9,35	6,44	1,45	9,25	7,4	1,25
-20	11	4,76	2,31	10,8	5,32	2,03	10,65	5,94	1,79	10,35	6,47	1,60	10,15	7,36	1,38
-15	11,7	4,46	2,62	11,15	5,18	2,15	11,075	5,62	1,97	11	6,22	1,77	10,87	7,2	1,51
-10	12,89	3,71	3,47	12	4,62	2,60	12	5,5	2,18	12	6,14	1,95	12	7,5	1,60
-7	12,93	3,36	3,85	12	4	3,00	12	5,01	2,40	12	5,86	2,05	12	6,77	1,77
-2	13,22	3,1	4,26	12	3,14	3,82	12	4,19	2,86	12	5,07	2,37	12	5,94	2,02
2	13,37	2,66	5,03	12	2,79	4,30	12	3,64	3,30	12	4,49	2,67	12	5,54	2,17
7	13,79	2,18	6,33	12	2,5	4,80	12	3,24	3,70	12	4	3,00	12	4,71	2,55
12	14,78	2,19	6,75	14,18	2,66	5,33	13,88	3,26	4,26	13,73	4,09	3,36	13,58	4,88	2,78
15	15,6	2,1	7,43	14,63	2,51	5,83	14,33	3,25	4,41	14	3,99	3,51	13,77	4,65	2,96
20	16,95	1,99	8,52	15,77	2,51	6,28	15,38	3,3	4,66	14,97	3,87	3,87	14,67	4,72	3,11
25	18,17	1,9	9,56	17,16	2,48	6,92	16,74	3,21	5,21	16,2	3,92	4,13	15,68	4,87	3,22
30	19,28	1,79	10,77	18,33	2,4	7,64	17,85	3,23	5,53	17,55	4	4,39	17,25	4,92	3,51
35	20,55	1,72	11,95	19,47	2,35	8,29	18,6	3,13	5,94	18,3	3,89	4,70	17,95	4,81	3,73

Technical description

iTec XT and iTec XTR

iTec XTR XL

Supply line temperature (°C)	25			35			45			55			65		
Outdoor temperature (°C)	Heat-ing capacity (kW)	Input power (kW)	COP	Heat-ing capacity (kW)	Input power (kW)	COP	Heat-ing capacity (kW)	Input power (kW)	COP	Heat-ing capacity (kW)	Input power (kW)	COP	Heat-ing capacity (kW)	Input power (kW)	COP
-25	9,8	4,83	2,03	11,5	6,57	1,75	11,3	7,48	1,51	11	8,27	1,33	10,6	8,88	1,19
-20	13,3	6,24	2,13	12,97	6,94	1,87	12,4	7,46	1,66	12,1	7,9	1,53	11,5	8,85	1,30
-15	14,98	6,35	2,36	13,76	6,95	1,98	13,1	7,02	1,87	12,56	7,55	1,66	11,86	8,14	1,46
-10	16,2	5,18	3,13	16	6,96	2,30	14,39	6,95	2,07	13,32	6,95	1,92	12,25	7,66	1,60
-7	16,25	4,69	3,46	16	5,71	2,80	15,2	6,74	2,26	13,81	6,95	1,99	13,21	8,01	1,65
-2	16,3	4,25	3,84	16	4,59	3,49	15,6	5,86	2,66	15,4	6,85	2,25	13,45	6,94	1,94
2	16,4	3,48	4,71	16	4,1	3,90	16	5,33	3,00	16	6,3	2,54	14,42	6,94	2,08
7	17,5	3,11	5,63	16	3,55	4,51	16	4,57	3,50	16	5,52	2,90	16	6,54	2,45
12	18,52	3,05	6,07	17,77	3,58	4,96	17,4	4,39	3,96	17,21	5,34	3,22	17,02	6,37	2,67
15	19,97	2,99	6,68	18,6	3,43	5,42	18,4	4,42	4,16	17,92	5,32	3,37	17,6	6,42	2,74
20	20,4	2,66	7,67	19,14	3,28	5,84	18,81	4,34	4,33	18,4	4,96	3,71	18,05	6,22	2,90
25	20,83	2,42	8,61	19,68	3,06	6,43	19,22	3,88	4,95	19,05	4,8	3,97	18,6	5,81	3,20
30	22,11	2,28	9,70	21,02	2,96	7,10	20,47	3,99	5,13	20,01	4,75	4,21	19,52	5,66	3,45
35	23,56	2,19	10,76	22,33	2,9	7,70	21,33	3,86	5,53	20,75	4,62	4,49	20,26	5,35	3,79

6.2 Cooling performance iTec XTR S, M, L and XL

Model	Supply line temperature (°C)	7		18	
	Outdoor temperature (°C)	Cooling capacity (kW)	Input power (kW)	Cooling capacity (kW)	Input power (kW)
iTec XTR S	35	3,90	1,28	5,00	1,28
iTec XTR M	35	5,70	1,90	8,00	2,05
iTec XTR L	35	9,00	3,10	12,00	3,00
iTec XTR XL	35	10,40	3,59	14,00	3,68

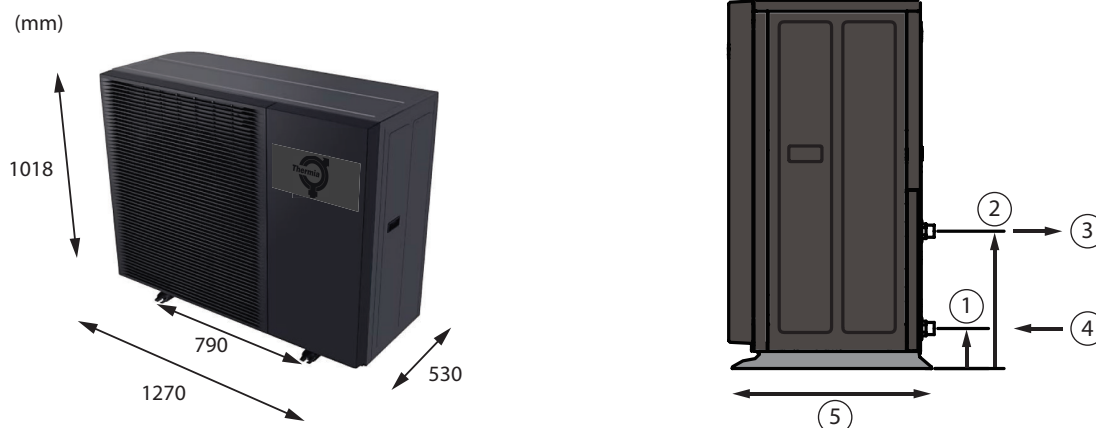
Technical description

iTec XT and iTec XTR

7 Heat pump data, dimensions and connections

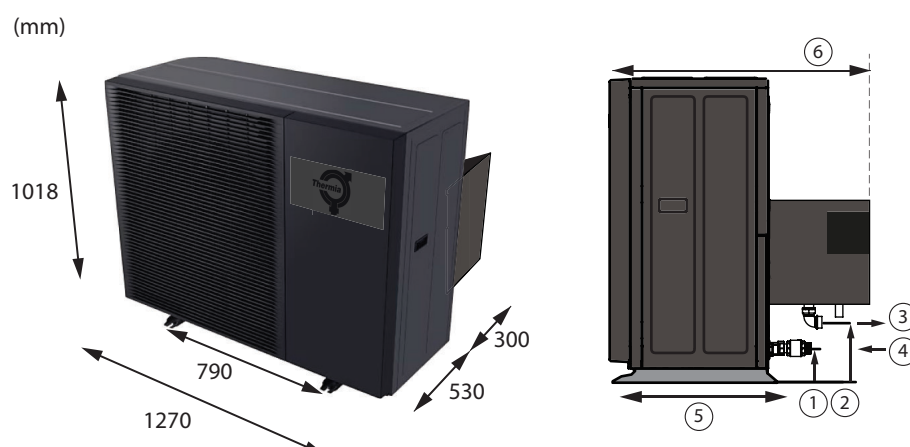
7.1 Description outdoor unit

iTec XT 10, 14 & 16



Position	Description outdoor unit	Measures
1	Height water in	111 mm
2	Height water out	380 mm
3	Water out	R25
4	Water in	R25
5	Feet width	790 mm

iTec XTR L & XL



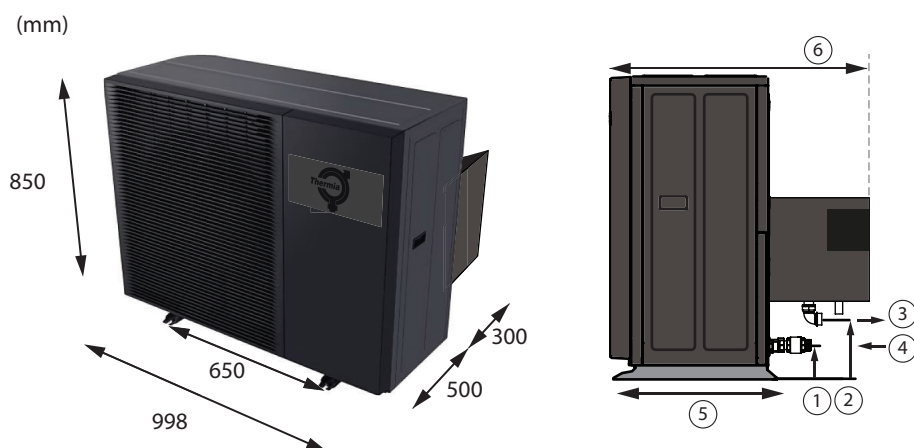
Position	Description outdoor unit	Measures
1	Height water in	93 mm
2	Height water out	170 mm
3	Water out	R25
4	Water in	R25

Technical description

iTec XT and iTec XTR

Position	Description outdoor unit	Measures
5	Feet width	790 mm
6	Depth	830 mm

iTec XTR S and M



Position	Description outdoor unit	Measures
1	Height water in	93 mm
2	Height water out	170 mm
3	Water out	R25
4	Water in	R25
5	Feet width	510 mm
6	Depth	800 mm

7.2 Description indoor unit

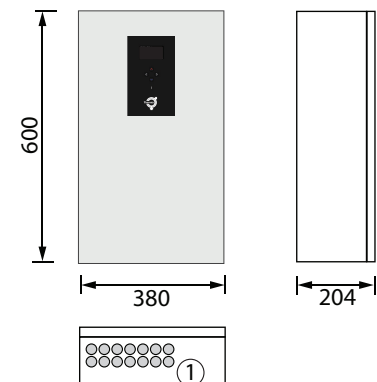
Do not install the indoor unit if it has any drainage problem.

Caution



The indoor units with integrated hydraulics must be placed indoors, in an area with a floor drain.

Indoor unit iTec XT Standard

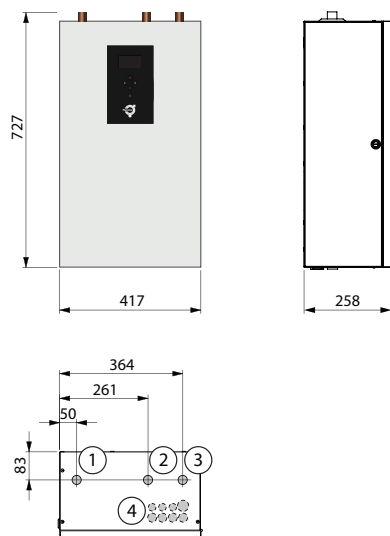


1. Lead-in for supply, sensor and communication cables

Technical description

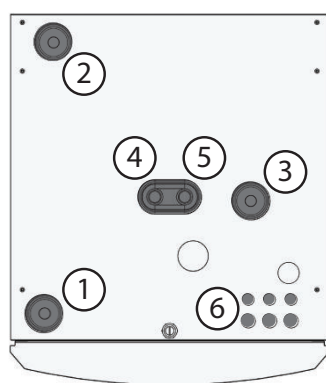
iTec XT and iTec XTR

Indoor unit iTec XT Plus



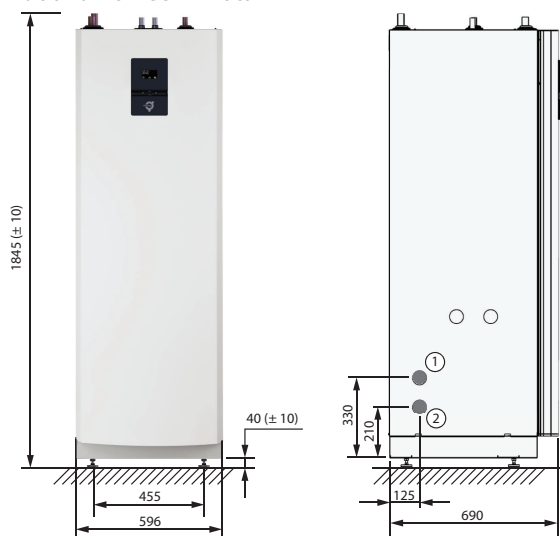
1. Supply line for heating system, 28 mm Cu
2. Supply line to water heater, 28 mm Cu
3. Supply line from heat pump, 28 mm Cu
4. Lead-in for supply, sensor and communication cables

Top plate for indoor units with inbuilt water tank



1. Supply line heating system, 28 mm Cu
2. Return line heating system, 28 mm Cu
3. Connection for bleed valve, 22 mm Cu
4. Hot water line, 22 mm Cu
5. Cold water line, 22 mm Cu
6. Lead-in for supply, sensor and communication cables

Indoor unit iTec XT Total



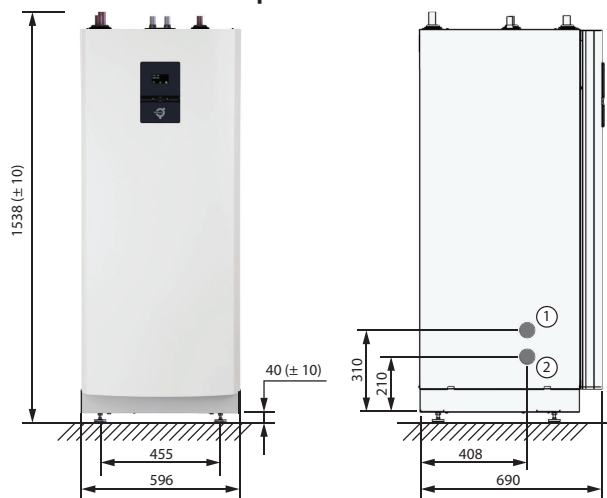
1. Supply or return line heat pump
2. Supply or return line heat pump

Position 1 and 2 can be connected to either the left or right-hand side or at the bottom of the indoor unit.

Technical description

iTec XT and iTec XTR

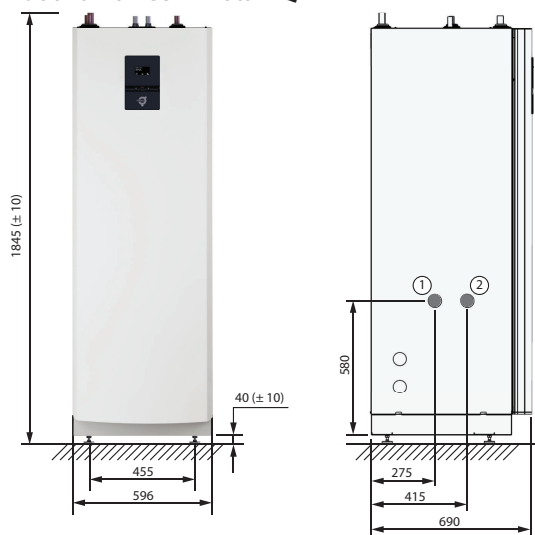
Indoor unit iTec XT Compact



1. Supply or return line heat pump
2. Supply or return line heat pump

Position 1 and 2 can be connected to either the left or right-hand side or at the bottom of the indoor unit.

Indoor unit iTec XT Total EQ



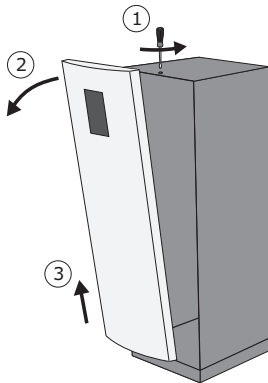
1. Supply or return line heat pump
2. Supply or return line heat pump

7.2.1 Removing front cover

Caution



Be careful not to damage the electrical wiring for the display when the front cover is removed!



1. Press against the front cover and turn the catch 90° degrees anti-clockwise to release the front cover.
2. Tilt the front cover outwards.
3. Lift the front cover upwards to remove it from the heat pump.

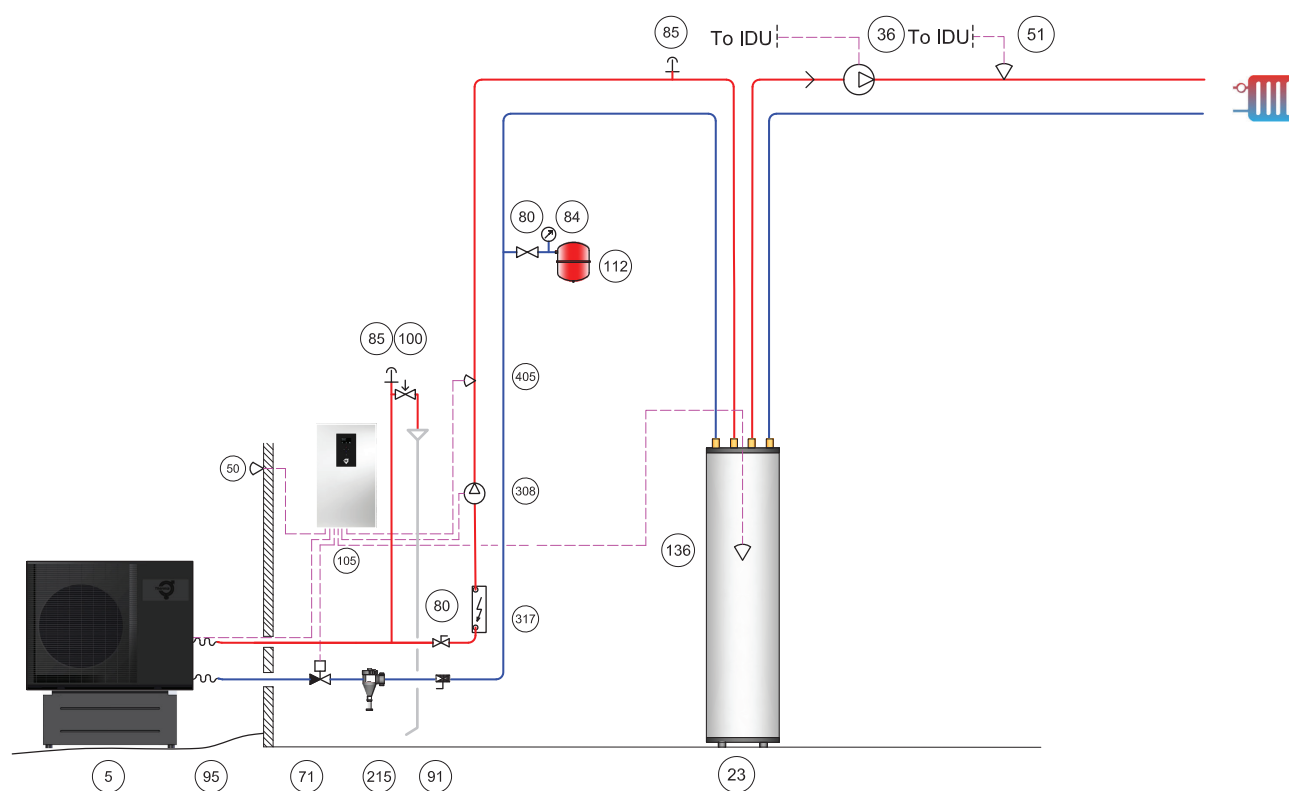
8 iTec XT system proposals

8.1 System proposal iTec XT Standard with iTec XT outdoor unit

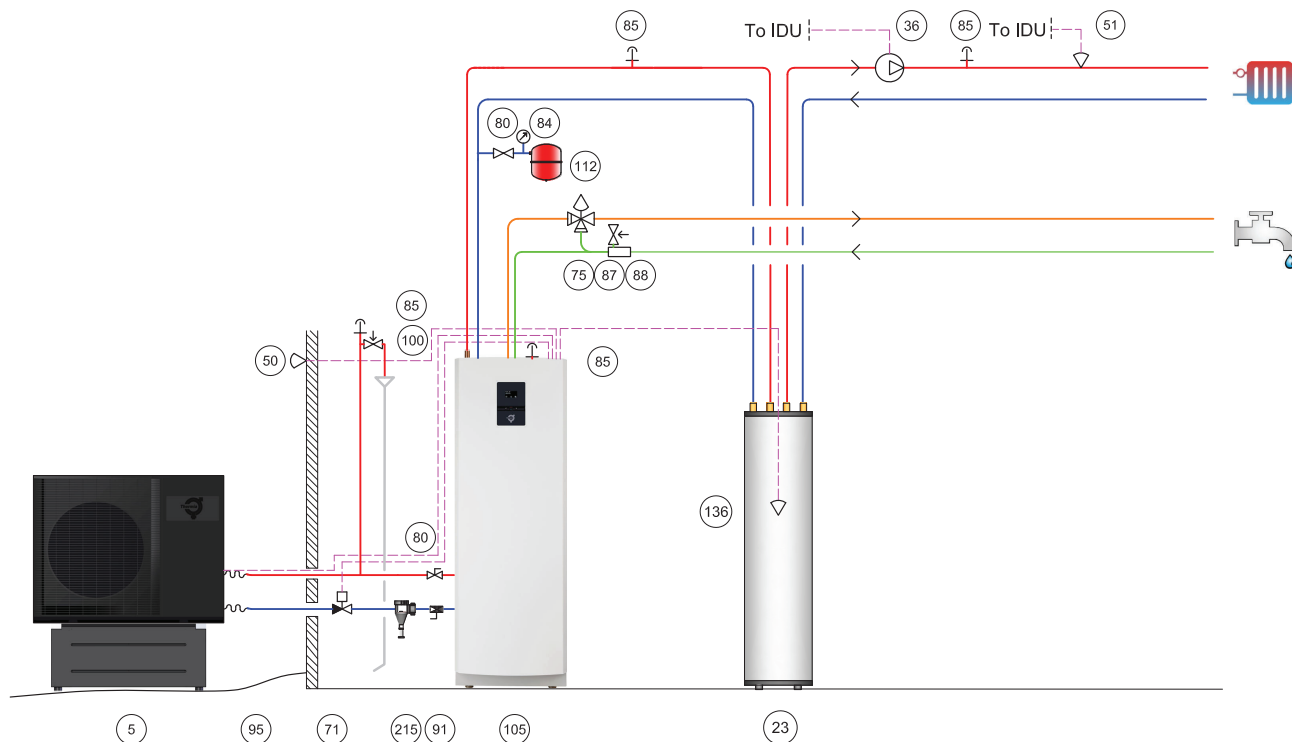
iTec XT Standard system proposal with buffer tank.

This installation produces only heating or cooling. This installation produces only heating or cooling. The control module comes with an outdoor sensor (150 Ω), three (22 K Ω) sensors, condenser pump, system circulation pump, electric auxiliary heater, and a 180 litre water tank. . The system supply line temperature and buffer tank sensor are controlled with reference to the outside temperature following a set heat curve. The additional heater starts automatically on demand if auto mode is selected.

iTec XT Standard with system supply sensor and buffer tank sensor:



27

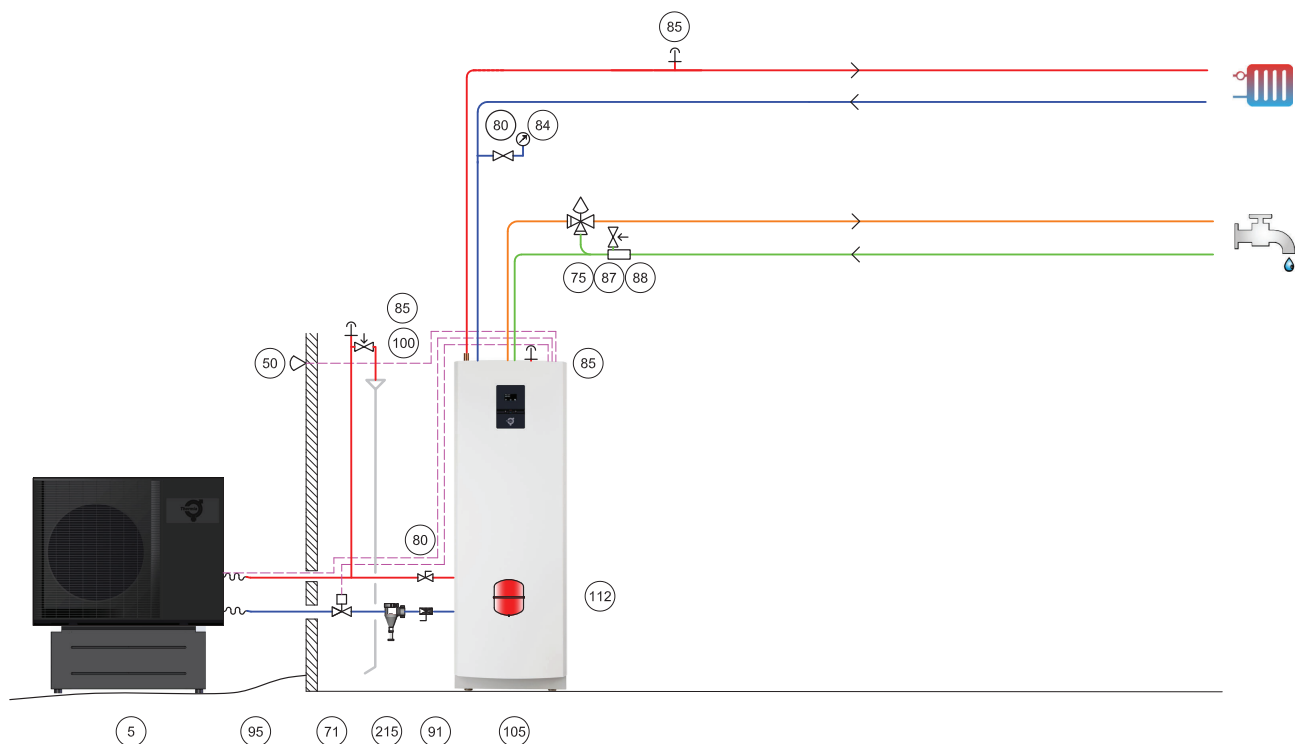


8.4 System proposal iTec XT Total EQ with iTec XT outdoor unit

iTec XT Total EQ system proposal.

This installation produces hot water, heat and/or cooling. The control module comes with an outdoor sensor (150 Ω), radiator out, radiator in sensors (22 K Ω), tank sensor (22 K Ω), two hot water tank sensors (22 K Ω), condenser pump (between indoor- and outdoor unit) and circulation pump (for space heating/cooling), 3-way valve, electric auxiliary heater, a 180 litre water tank, an additional 60 litre volume tank and an expansion vessel.

The volume tank sensor and supply line temperature are controlled with reference to the outside temperature following a set heat curve. The additional heater starts automatically on demand if auto mode is selected. The auxiliary heater carries out peak heating charging (anti-legionella function) in those operating modes that permit auxiliary heat.



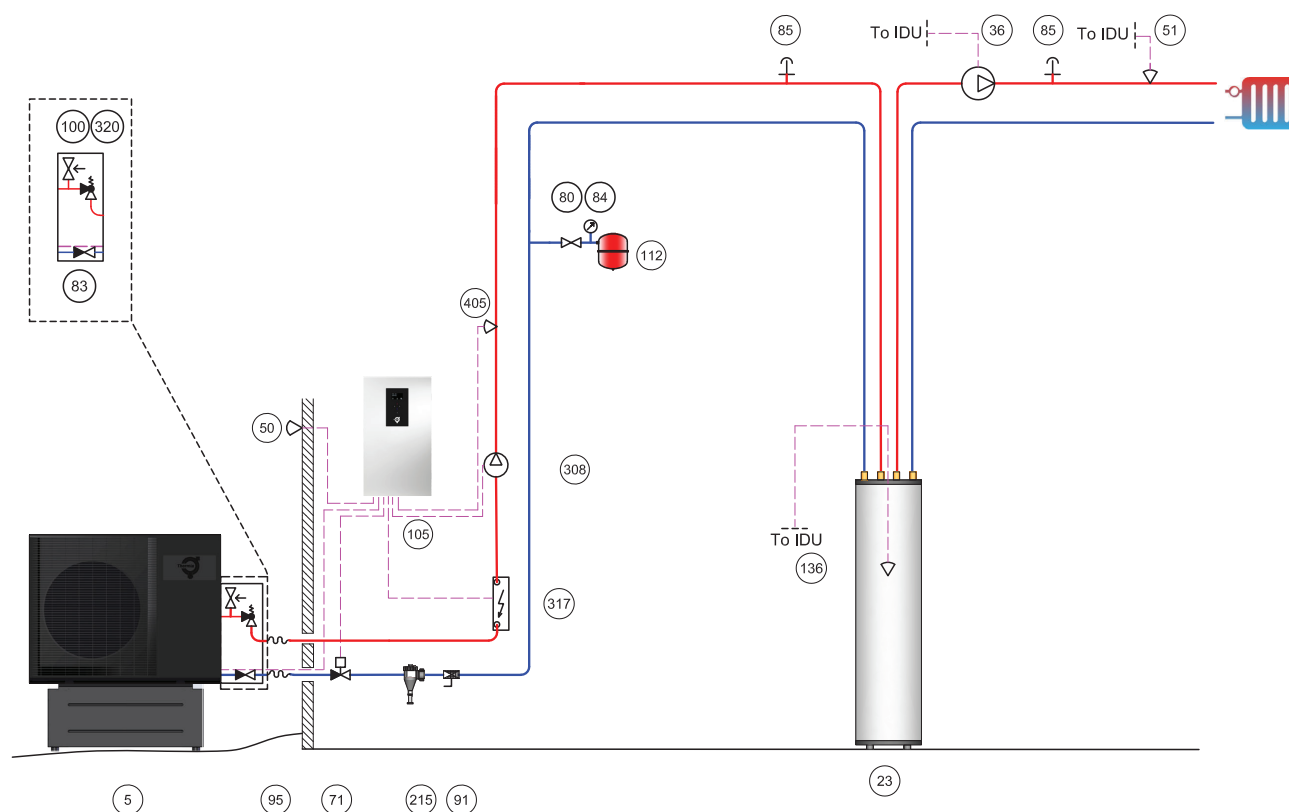
9 iTec XTR System proposal

9.1 System proposal iTec XT Standard with iTec XTR outdoor unit

iTec XT Standard system proposal with buffer tank.

This installation produces only heating or cooling. The control module comes with an outdoor sensor (150 Ω), three (22 K Ω) sensors, condenser pump, system circulation pump, electric auxiliary heater, and a 180 litre water tank. The system supply line temperature and buffer tank sensor are controlled with reference to the outside temperature following a set heat curve. The additional heater starts automatically on demand if auto mode is selected. **It is not permitted to have more safety valves in the system, in addition to the safety valve fitted outside.**

iTec XT Standard with system supply sensor and buffer tank sensor:



Technical description

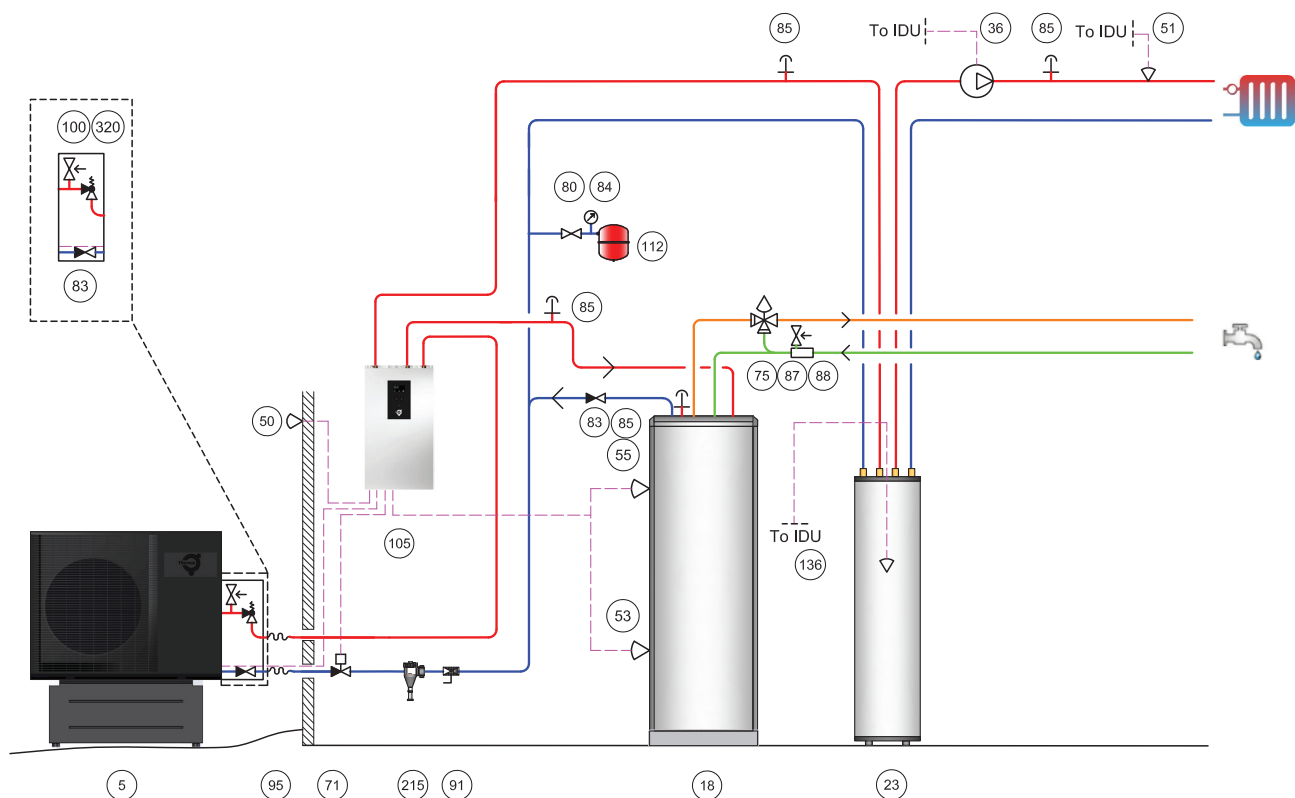
iTec XT and iTec XTR

9.2 System proposal iTec XT Plus with iTec XTR outdoor unit

iTec XT Plus system proposal with buffer tank.

This installation produces hot water, heat and/or cooling. The control module comes with an outdoor sensor (150 Ω), radiator out sensor (22 K Ω), condenser pump, 3-way valve, electric auxiliary heater. The system supply line temperature and buffer tank sensor are controlled with reference to the outside temperature following a set heat curve. The additional heater starts automatically on demand if auto mode is selected. **It is not permitted to have more safety valves in the system, in addition to the safety valve fitted outside**

iTec XT Plus with system supply sensor and buffer tank sensor:

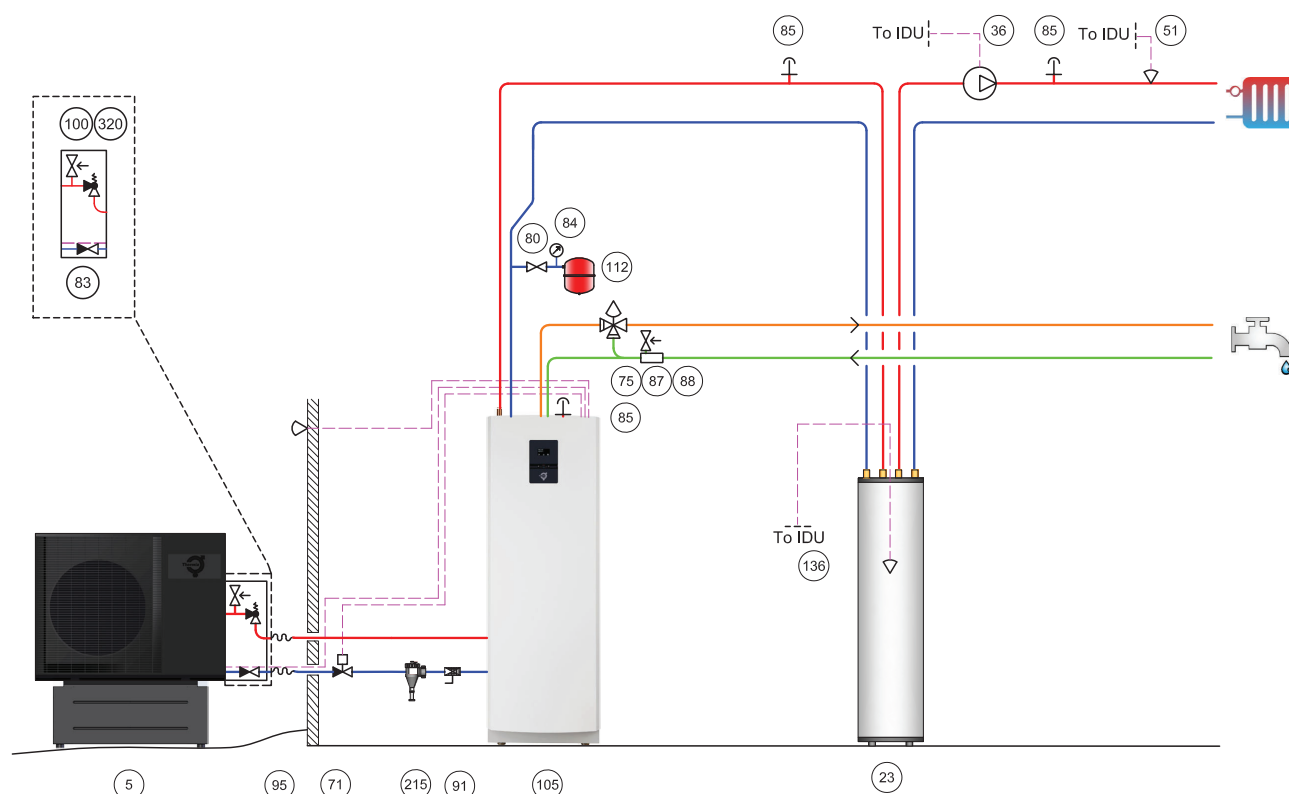


9.3 System proposal iTec XT Total and iTec XT Compact with iTec XTR outdoor unit

iTec XT Total and iTec XT Compact system proposal with buffer tank.

This installation produces hot water, heating and/or cooling. The control module comes with an outdoor sensor (150 Ω), radiator out sensor (22 K Ω), two hot water tank sensors (22 K Ω), condenser pump, 3-way valve, electric auxiliary heater, and a 180 litre water tank. The supply line temperature and buffer tank sensor are controlled with reference to the outside temperature following a set heat curve. The additional heater starts automatically on demand if auto mode is selected. The auxiliary heater carries out peak heating charging (anti-legionella function) in those operating modes that permit auxiliary heat. **It is not permitted to have more safety valves in the system, in addition to the safety valve fitted outside**

iTec XT Total and iTec XT Compact with system supply sensor and buffer tank sensor:

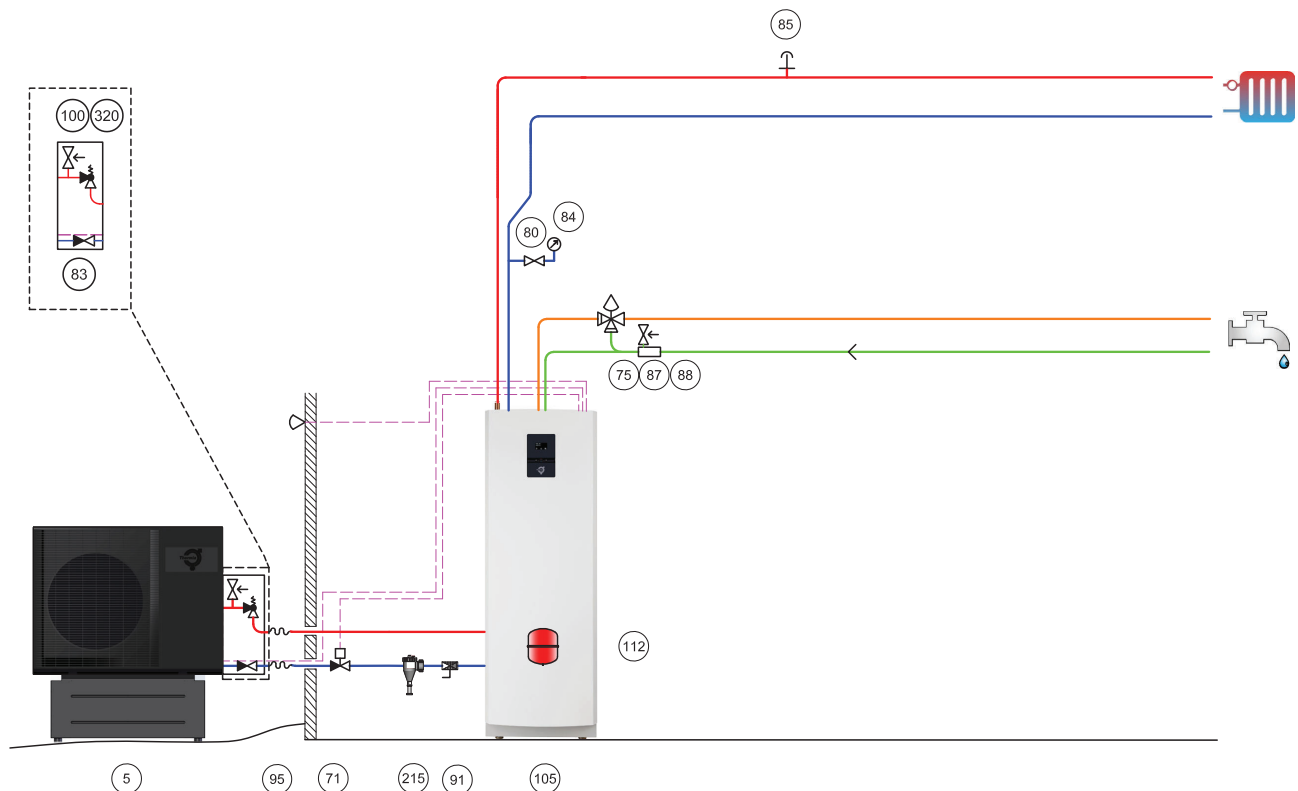


9.4 System proposal iTec XT Total EQ with iTec XTR outdoor unit

iTec XT Total EQ system proposal.

This installation produces hot water, heat and/or cooling. The control module comes with an outdoor sensor (150 Ω), radiator out, radiator in sensors (22 K Ω), tank sensor (22 K Ω), two hot water tank sensors (22 K Ω), condenser pump (between indoor- and outdoor unit) and circulation pump (for space heating/cooling), 3-way valve, electric auxiliary heater, a 180 litre water tank, an additional 60 litre volume tank and an expansion vessel.

The volume tank sensor and supply line temperature are controlled with reference to the outside temperature following a set heat curve. The additional heater starts automatically on demand if auto mode is selected. The auxiliary heater carries out peak heating charging (anti-legionella function) in those operating modes that permit auxiliary heat. **It is not permitted to have more safety valves in the system, in addition to the safety valve fitted outside**



Technical description

iTec XT and iTec XTR

10 Sound levels

10.1 Sound level, iTec XT

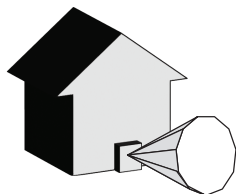


Table 1, A weighted Sound Power Level, dB(A) ref. 1 pW

Silent mode ¹			Nominal ²			Maximum ³		
10 kW	14 kW	16 kW	10 kW	14 kW	16 kW	10 kW	14 kW	16 kW
52	52	52	56	59	60	67	69	70

Table 1: Sound power levels according to ISO EN 3741.

Table 2, A weighted Sound Pressure Level, dB(A) ref. 20 uPa

Distance (m) ⁴	Silent mode ¹			Nominal ²			Maximum ³		
	10 kW	14 kW	16 kW	10 kW	14 kW	16 kW	10 kW	14 kW	16 kW
1	40	40	40	44	47	48	55	57	58
4	35	35	35	39	42	43	50	52	53
6	31	31	31	35	38	39	46	48	49
8	29	29	29	33	36	37	44	46	47
10	27	27	27	31	34	35	42	44	45
16	23	23	23	27	30	31	38	40	41

Table 2: Averaged sound pressure level at given distances calculated from sound power.

1) Silent mode activated during nominal conditions at A7W55

2) Nominal compressor speed and fan rpm at A7W55, according to EN12102

3) Maximum compressor speed and fan rpm at A-5W55

4) According to ISO 11203 at 1 meter, otherwise calculated as quarter spherical sound propagation in free field.

10.2 Sound level iTec XTR

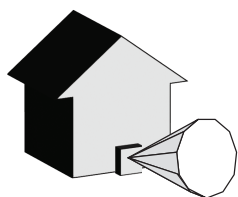


Table 1, A weighted Sound Power Level, dB(A) ref. 1 pW

Silent mode ¹				Nominal ²				Maximum ³			
S	M	L	XL	S	M	L	XL	S	M	L	XL
52	52	52	52	52	52	54	54	62	65	68	70

Table 1: Sound power levels according to ISO EN 3741.

Table 2, A weighted Sound Pressure Level, dB(A) ref. 20 uPa

Distance (m) ⁴	Silent mode ¹				Nominal ²				Maximum ³			
	S	M	L	XL	S	M	L	XL	S	M	L	XL
1	40	40	40	40	40	40	42	42	50	53	56	58
4	35	35	35	35	35	35	37	37	45	48	51	53
6	31	31	31	31	31	31	33	33	41	44	47	49
8	29	29	29	29	29	29	31	31	39	42	45	47
10	27	27	27	27	27	27	29	29	37	40	43	45
16	23	23	23	23	23	23	25	25	33	36	39	41

Table 2: Averaged sound pressure level at given distances calculated from sound power.

1) Silent mode activated during nominal conditions at A7W55

2) Nominal compressor speed and fan rpm at A7W55, according to EN12102

3) Maximum compressor speed and fan rpm at A-5W55

4) According to ISO 11203 at 1 meter, otherwise calculated as quarter spherical sound propagation in free field.

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