Thermia iTec Eco

iTec Eco

The air source heat pump that delivers maximum performance and comfort, year round.

Thermia iTec Eco is an air source heat pump with inverter technology. The inverter-controlled compressor adjusts the heat load constantly according to the current heat demand. You never use more energy than is needed, and this of course reduces your energy bills further energy is collected from the outdoor air, and is used to heating of hot water and hydronic heating systems, delivering efficient energy savings at temperatures as low as -25 °C.

With iTec Eco you can save a lot of money with reduced environmental impact. iTec Eco uses refrigerant R32 which is a more environmentally friendly alternative than traditional refrigerants for air heat pumps. iTec Eco provides up to 23%* more hot water than its predecessor with a generally higher water comfort.

The cooling function assures a pleasant indoor climate also during the hottest period of the year. And if you have a swimming pool, you can reduce the heating cost significantly as Thermia iTec is prepared for heating of pools.
With a high seasonal performance Thermia iTec allows you to reduce your energy consumption by up to 75%.

Thermia iTec Eco is available in four output sizes: 5 kW, 8 kW, 12 kW & 16 kW. It consists of two parts: the heat pump itself, which is installed outdoors, and an indoor unit. You can choose from five versions of the indoor unit, each with different features. The choice of unit depends on the set-up of your heating system, to ensure you never pay for more than you actually need.

With the help of a calendar function, you can program and control the heat pump according to your own needs. Additionally, with the Thermia Online accessory, you can remotely control and monitor your heat pump.

*applies to iTec Eco 5

A+++ A+++

A+++ energy class when the heat pump is part of an integrated system
A+++ energy class when the heat pump is the sole heat generator
Energy class according to Eco-design Directive 811/2013

RETAILER:

Technical data iTec Eco

Connection

1 Supply line heating system: R25, steel, external thread (rear side of the heat pump)
2 Return line heating system: R25, steel, external thread (rear side of the heat pump)
3 Power and communication wiring conduits

Indoor unit

W: 380 mm
D: 204 mm
H: 600 mm

STANDARD

- Intelligent Controller

W: 420 mm
D: 260 mm
H: 730 mm + 50 mm pipe

PLUS

- Intelligent Controller
- Immersion heater (3/6/9/12/15 kW 3~400V; 3/6/9 kW 1~230 V)
- Optimum controlled circulation pump Class A
- Three way valve for heating or hot water production

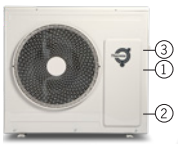
W: 596 mm
D: 690 mm
H: 1845 mm

W: 596 mm
D: 690 mm
H: 1538 mm

TOTAL
TOTAL EQ
TOTAL COMPACT

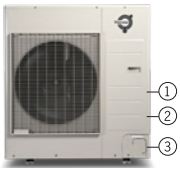
- Intelligent Controller
- Hot water tank, 180 litre
- Optimum controlled circulation pump Class A
- Three way valve for heating or hot water production
- Immersion heater (3/6/9/12/15 kW 3~400 V; 3/6/9 kW 1~230 V
- Total EQ feature extra 60 liters volume tank, 12 liters expansion vessel and an additional circulation pump.

Outdoor unit



iTec 5

1,1 – 5 kW
1~230 V



iTec 8

1,7 – 8 kW
1~230 V
3~400 V

iTec 12

3,4 – 12 kW
1~230 V
3~400 V

iTec 16

3,4 – 16 kW
1~230 V
3~400 V

iTec Eco			5	8	12	16
Refrigerant	Type		R32	R32	R32	R32
	Amount	kg	1	1.15	2.2	2.2
	GWP	tCO2e	0.68	0.78	1.49	1.49
	Test pressure	MPa	12.3	12.3	12.3	12.3
	Design pressure	MPa	4.1	4.1	4.1	4.1
Compressor	Type		BLDC Twin Rotary			
	Oil		POE			
Electrical data	Main supply	Volt	230	400/230	400/230	400/230
	Rated power, cooling A35/W18	kW	1.14	1.50	2.77	3.28
	Rated power, heating	kW	2.79	4.13	6.87	8.47
	Fuse	A	13	10/20	10/30	16/40
Performance	COP/Heating capacity/Power input-heating A7/W35	kW	4.85/5/1.03	4.52/8/1.77	4.53/12/2.65	4.42/16/3.62
	COP/Heating capacity/Power input-heating A-7/W35	kW	2.71/5.31/1.96	2.43/7.66/3.15	2.55/12.5/4.91	2.43/15.21/6.25
	COP/Heating capacity/Power input-heating A-15/W35	kW	2.32/4.3/2.32	2.29/6.31/2.75	2.22/10.6/4.78	2.17/13/6
	SEER		3.98	4.52	5.22	5.31
	Cooling capacity		5.00	7.90	12.00	14.00
	Power input – cooling A35/W18		1.14	1.50	2.77	3.28
	SCOP 14825 (Warm climate) Low temp		6,06	6,02	6,13	6,36
	SCOP 14825 (Average climate) Low temp		4.46	4.45	4.69	4.48
	SCOP 14825 (Cold climate) Low temp		3.6	3.62	3.66	3.44
	SCOP 14825 (Warm climate) High temp		3,71	3,77	3,8	3,85
	SCOP 14825 (Average climate) High temp		3.2	3.23	3.52	3.53
	SCOP 14825 (Cold climate) High temp		2.47	2.53	2.63	2.55
Energy class - system [1]	Floor heating (35°C)/Radiator (55°C)		A+++/A++	A+++/A++	A+++/A++	A+++/A++
Energy class - product [2]	Floor heating (35°C)/Radiator (55°C)		A+++/A++	A+++/A++	A+++/A++	A+++/A++
	Domestic hot water / Declared load profile		A+/L	A+/L	A/L / A+/L	A/L / A+/L
Hot water performance	Volume 40°C hot water	l	261*	248*	249**/251*	245**/252*
Operating range (outdoor)	Heating	°C	-25~+35	-25~+35	-25~+35	-25~+35
	Cooling	°C	+10~+46	+10~+46	+10~+46	+10~+46
	Domestic hot water	°C	-25~+43	-25~+43	-25~+43	-25~+43
Max temperature [3]	Heating circuit	°C	65	65	65	65
Sound power level	Normal drift - EN12102 - A7/W35	dB(A)	61	63	64	66
Sound pressure level	4m [4]	dB(A)	44	46	47	49
	8m [4]	dB(A)	38	40	41	43
Weight	Outdoor unit	kg	58.5	76	111	111
	Standard	kg	18	18	18	18
	Plus	kg	21	21	21	21
	Total	kg	106	106	106	106
	Total EQ	kg	142	142	142	142
	Total Compact	kg	100	100	100	100
Maximum distance between outdoor and indoor unit:		m	15	15	15	15
Dimensions (WxDxH)	Outdoor unit	mm	880 x 310 x 798	940 x 330 x 998	940 x 330 x 1420	940 x 330 x 1420

1) When the heat pump is part of an integrated system. According to Eco-design Directive 811/2013
2) When the heat pump is the sole heat generator and the built-in controller is not included. According to Eco-design Directive 811/2013.
3) At minimum outdoor temperature +7°C.
4) Quarter spherical sound propagation in free field, nominal operation A7W35, heat pump ground mounted against building facade
*) Super-Eco mode
**) Comfort mode

Thermia AB reserves the right to make changes without further notice.