



# 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  $-25^{\circ}\text{C}$ .

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 (230V), 8 kW (230V/400V), 12 kW (400V) & 16 kW (400V). 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+++ 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

# 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

### TOTAL TOTAL EQ

- 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



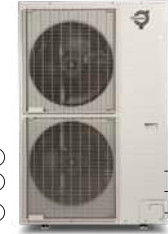
### iTec 5

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  
3~400 V



### iTec 16

3,4 – 16 kW  
3~400 V

iTec Eco		1~230 V, 50 Hz		3~400 V, 50 Hz		
		5	8	8	12	16
<b>Refrigerant</b>	Type	R32				
	Amount	1	1.15	1.15	2.2	2.2
	GWP	0.68	0.78	0.78	1.49	1.49
	Test pressure	12.3	12.3	12.3	12.3	12.3
	Design pressure	4.1	4.1	4.1	4.1	4.1
<b>Compressor</b>	Type	BLDC Twin Rotary				
	Oil	POE				
<b>Electrical data</b>	Main supply	230	230	400	400	400
	Rated power, cooling A35/W18	1.14	1.50	1.50	2.77	3.28
	Rated power, heating	2.79	4.13	4.13	6.87	8.47
	Fuse	13	20	10	10	16
<b>Performance</b>	COP/Heating capacity/Power input-heating A7/W35	4.85/5/1.03	4.52/8/1.77	4.52/8/1.77	4.53/12/2.65	4.42/16/3.62
	COP/Heating capacity/Power input-heating A-7/W35	2.71/5.31/1.96	2.43/7.66/3.15	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	2.32/4.3/2.32	2.29/6.31/2.75	2.29/6.31/2.75	2.22/10.6/4.78	2.17/13/6
	SEER	3.98	4.52	4.52	5.22	5.31
	Cooling capacity	5.00	7.90	7.90	12.00	14.00
	Power input – cooling A35/W18	1.14	1.50	1.50	2.77	3.28
	SCOP 14825 (Warm climate) Low temp	6,06	6,02	6,02	6,13	6,36
	SCOP 14825 (Average climate) Low temp	4.46	4.45	4.45	4.69	4.48
	SCOP 14825 (Cold climate) Low temp	3.6	3.62	3.62	3.66	3.44
	SCOP 14825 (Warm climate) High temp	3,71	3,77	3,77	3,8	3,85
SCOP 14825 (Average climate) High temp	3.2	3.23	3.23	3.52	3.53	
SCOP 14825 (Cold climate) High temp	2.47	2.53	2.53	2.63	2.55	
<b>Energy class - system</b> <sup>1</sup>	Floor heating (35°C)/Radiator (55°C)	A+++/A++	A+++/A++	A+++/A++	A+++/A++	A+++/A++
<b>Energy class - product</b> <sup>2</sup>	Floor heating (35°C)/Radiator (55°C)	A+++/A++	A+++/A++	A+++/A++	A+++/A++	A+++/A++
	Domestic hot water / Declared load profile	A+/L	A+/L	A+/L	A/L	A/L
<b>Hot water performance</b>	Volume 40°C hot water	261*	248*	248*	249**	245**
<b>Operating range (outdoor)</b>	Heating	-25~+35	-25~+35	-25~+35	-25~+35	-25~+35
	Cooling	+10~+46	+10~+46	+10~+46	+10~+46	+10~+46
	Domestic hot water	-25~+43	-25~+43	-25~+43	-25~+43	-25~+43
<b>Max temperature</b> <sup>3</sup>	Heating circuit	65	65	65	65	65
<b>Sound power level</b>	Normal drift - EN12102 - A7/W35	61	63	63	64	66
<b>Sound pressure level</b>	4m <sup>4</sup>	44	46	46	47	49
	8m <sup>4</sup>	38	40	40	41	43
<b>Weight</b>	Outdoor unit	58.5	76	76	111	111
	Standard	18	18	18	18	18
	Plus	21	21	21	21	21
	Total	106	106	106	106	106
	Total EQ	142	142	142	142	142
	Total Compact	100	100	100	100	100
<b>Maximum distance between outdoor and indoor unit:</b>		15	15	15	15	15
<b>Dimensions (WxDxH)</b>	Outdoor unit	880 x 310 x 798	940 x 330 x 998	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