



# Thermia iTec E



## Reliable performance in cold climates

The Thermia iTec E is an air source heat pump with inverter technology. The inverter-controlled compressor adjusts the heat load constantly according to the current heat demand, meaning you never use more energy than is needed.

The Thermia iTec E heat pump is very high-performing and works at temperatures as low as -25 °C, collecting energy from the outdoor air and using it to heat hot water and hydronic heating systems.

And if you have a swimming pool, you can reduce the heating cost significantly, as the Thermia iTec E is perfect for the heating of pools. With a high seasonal performance, the Thermia iTec E will help you manage your energy consumption.

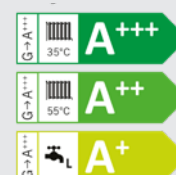
In addition to heating your home and providing lots of hot water, the cooling function ensures a pleasant indoor climate during the hottest periods of the year.

The Thermia iTec E 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.

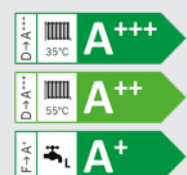
With the help of a calendar function, you can programme and control the iTec E hour by hour, day by day. Furthermore, with the Thermia Online accessory, you can monitor and control your heat pump remotely. Spot price control is also possible through the free Smart Price Light add-on service.



System:



Product:



Read more about the energy class in footnotes 1–2 on the next page.

# Technical data iTec E

## 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 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



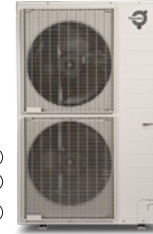
### iTec 5

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  
1~230 V  
3~400 V



### iTec 16

3,4 – 16 kW  
1~230 V  
3~400 V

iTec E		5	8	12	16	
<b>Refrigerant</b>	Type	R32	R32	R32	R32	
	Amount	1	1.15	2.2	2.2	
	GWP	0.68	0.78	1.49	1.49	
	Design pressure	4.7	4.7	4.7	4.7	
<b>Compressor</b>	Type	BLDC Twin Rotary				
	Oil	POE				
<b>Electrical data</b>	Main supply	230	400/230	400/230	400/230	
	Rated power, cooling A35/W18	1.14	1.50	2.77	3.28	
	Rated power, heating	2.79	4.13	6.87	8.47	
	Fuse	13	10/20	10/30	16/40	
<b>Performance</b>	COP/Heating capacity/Power input-heating A7/W35	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	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	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	6.36	6.13	
	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	3.85	3.8	
	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		
<b>Energy class - system</b> <sup>1</sup>	Floor heating (35°C)/Radiator (55°C)	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+++	
	Domestic hot water / Declared load profile	A+ / L	A+ / L	A / L / A+ / L	A / L / A+ / L	
<b>Hot water performance</b>	Volume 40°C hot water	261*	248*	249**/251*	245**/252*	
<b>Operating range (outdoor)</b>	Heating	-25~+35	-25~+35	-25~+35	-25~+35	
	Cooling	+10~+46	+10~+46	+10~+46	+10~+46	
	Domestic hot water	-25~+35	-25~+35	-25~+35	-25~+35	
<b>Max temperature</b> <sup>3</sup>	Heating circuit	65	65	65	65	
<b>Sound power level</b>	Normal drift - EN12102 - A7/W35	61	63	64	66	
<b>Sound pressure level</b>	4m <sup>4</sup>	44	46	47	49	
	8m <sup>5</sup>	38	40	41	43	
<b>Maximum sound pressure level - free field</b> <sup>6</sup>	1/4/10 m	56/50/42	60/55/47	61/56/48	62/57/49	
<b>Weight</b>	Outdoor unit	kg	58.5	76	111	111
	Standard	kg	11	11	11	11
	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
<b>Maximum distance between outdoor and indoor unit:</b>		m	15	15	15	15
<b>Dimensions (WxDxH)</b>	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) According to EN11203, nominal operation A7W55, heat pump ground mounted against building facade

5) Quarter spherical sound propagation in free field, nominal operation A7W55, heat pump ground mounted against building facade

6) Measured at maximum compressor and fan speed at -5°C air temperature and +55°C supply temperature. Sound pressure level calculated according to ISO 11203 at 1 metre, otherwise calculated based on installation on the ground against a wall in free field (quarter spherical distribution). Depending on the design of the installation, local conditions and possible ice formation, higher sound pressure levels may occur.

\* Super Economy mode \*\* Comfort mode