# Thermia iTec XTR





## A powerful heat pump with a natural refrigerant

**Thermia iTec XTR** is an air source heat pump that provides exceptionally high performance across all climate zones in Europe. Even better, the Thermia iTec XTR uses a natural refrigerant, R290, which is a more environmentally friendly alternative to traditional refrigerants for air source heat pumps.

It has an extremely impressive SCOP\* (Seasonal Coefficient of Performance) of 5,1 and the natural refrigerant R290 has a remarkably low GWP\*\* (Global Warming Potential).

The Thermia iTec XTR works in 3 different ways. In addition to heating and providing hot water, you can also use the built-in cooling function to keep the house cool when the weather is hot.

The hot water delivery is very good. The Thermia iTec XTR heats and supplies hot water to very high temperatures, up to 75°C, and the unique Thermia technology means that, even at -25°C, it provides heating at 65°C.

The product is based on well-proven inverter technology that adjusts the heat load constantly according to the current heat demand. This means you never use more energy than needed, which has a major impact on your energy bills.

The iTec XTR has an attractive display with a completely intuitive menu. The user-friendly icons are easy to understand and use for both settings and operations and the iTec XTR is compatible with the Thermia Online service, which allows you to monitor and control it remotely.

It is available in four output sizes: 5 kW, 8 kW, 12 kW and 16 kW, and 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 and will help ensure you never pay for more than you actually need.

Thermia is constantly working towards a more climate-friendly and sustainable society, which is why the Thermia iTec XTR uses a natural refrigerant, a more environmentally friendly alternative to traditional refrigerants for air source heat pumps. The natural refrigerant R290 has a GWP of only 0,02, which equates to a very low CO<sub>2</sub> equivalent\*\*



### System:



# Product:





 $<sup>^{*}</sup>$  SCOP 5,1 for iTec XTR S according to measurement standard EN 14825, average climate, underfloor heating.

<sup>\*\*</sup> CO<sub>2</sub> equivalent is the most accurate measurement for a product. The measurement shows the GWP value times the filling quantity and thus also takes into account how much refrigerant a specific product contains. GWP stands for "Global Warming Potential" and is expressed in GWP/gram gas.

# Technical data iTec XTR

### Connections

- ${\bf 1} \ {\bf Power} \ {\bf and} \ {\bf communication} \ {\bf wiring} \ {\bf conduits}$
- 2 Return line heating system: R25, external thread (rear side of the heat pump)
- 3 Supply line heating system: R25, external thread (rear side of the heat pump)

All connections are located at the rear of the heat pump.

#### Indoor unit







**▶ PLUS** 

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



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



W: 596 mm H: 1538 mm

**▶** COMPACT



**Outdoor unit** 

W: 998 mm D: 500 mm H: 850 mm

▶ iTec XTR S



W: 1270 mm D: 530 mm H: 1018 mm

Intelligent	
Controller	

**▶ STANDARD** 

## Intelligent Controller

- · Immersion heater (15 kW 3~400VAC: 9 kW 1~230VAC)
- Optimum controlled circulation pump Class A
- Three way valve for heating or hot water production

### **▶ 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 (3~400 V, 3/6/9/12/15 kW)
- Total EQ feature extra 60 liters volume tank, 12 liters expansion vessel and an additional circulation pump.

1–5 kW 230~1N	2–8 kW 400~3N
	230~1N

▶ iTec XTR M

▶ iTec XTR L	iTec XTR XL		
3–12 kW 400~3N	3–16 kW 400~3N		
230~1N			

iTec XTR				M	L	XL
Heating capacity		kW	1–5	2–8	3–12	3–16
Refrigerant	Type Amount <sup>1</sup> CO <sub>2</sub> -equivalent	kg tCO <sub>2</sub>	R290 0,63 0,000013	R290 0,87 0,000017	R290 1,25 0,000025	R290 1,25 0,000025
Compressor	Туре		Rotary	Rotary	Scroll	Scroll
Electrical data, 400V~3N	Main supply Max working power, compressor Fuse <sup>2</sup>	V kW A	230~1N 3,19 16	400~3N / 230~1N 4,95 10 / 25	400~3N / 230~1N 7,54 16 / 32	400~3N 8,88 16
Performance	SCOP (average climate) floor heating <sup>3</sup> SCOP (average climate) radiator <sup>3</sup> SCOP (cold climate) floor heating <sup>4</sup> SCOP (cold climate) radiator <sup>4</sup> Power output <sup>5</sup> Power output A-10W35 COP A7W35	kW kW	5,10 3,60 4,30 3,10 5 5 5,1	4,85 3,55 4,25 3,28 8 8 4,91	4,90 3,65 4,23 3,18 12 12 4,8	4,70 3,55 4,33 3,20 16 16 4,51
	Cooling capacity Power input – cooling A35/W18	kW kW	5 1,28	8 2,05	12 3	14 3,68
Energy class - system <sup>6</sup>	Floor heating (35°C) Radiator (55°C)		A+++ A++	A+++ A++	A+++ A++	A+++ A++
Energy class - product <sup>7</sup>	Floor heating (35°C) Radiator (55°C) Domestic hot water <sup>s</sup>		A+++ A++ A	A+++ A++ A	A+++ A++ A	A+++ A++ A
Operating range - Min/max temperature	Heating	°C	-25~+35	-25~+35	-25~+35	-25~+35
	Domestic hot water Cooling	°C	-25~+40 +10~+46	-25~+40 +10~+46	-25~+40 +10~+46	-25~+40 +10~+46
Max/min temperature	Heating circuit	°C	75 <sup>9</sup>	75 <sup>9</sup>	75°	75°
Sound power level	iTec XTR	dB(A)	5210	5210	5410	5410
Max sound pressure level <sup>11</sup> Max sound pressure level - silent mode <sup>11</sup>	1/4/10 m 1/4/10 m	dB(A) dB(A)	50/45/37 40/35/27	53/48/40 40/35/27	56/51/43 40/35/27	58/53/45 40/35/27
Hot water performance	Volume 40°C hot water <sup>8</sup>	liter	250	240	247	240
Weight	Outdoor unit	kg	86	98	140	140
	Standard Plus Total Total EQ Compact	kg kg kg kg kg	11 21 106 142 100	11 21 106 142 100	11 21 106 142 100	11 21 106 142 100
Dimensions (WxDxH)	Outdoor unit	mm	998×500×850	998×500×850	1270×530×1018	1270×530×1018

<sup>1)</sup> The refrigerant circuit is hermeti cally sealed and subject to the F-gas directive. Global Warming Potential (GWP) for R290 according to 0,02.

<sup>11)</sup> Measured at maximum compressor speed and fan rpm at -5°C air temperature and +55°C outlet temperature. Sound pressure level calculated according to ISO 11203 at 1 meter, otherwise calculated as quarter spherical sound propagation in free field. Depending on ice buildup and local circumstances at the specific installation, higher sound pressure levels may occur.



<sup>2)</sup> The minimum recommended fuse size depends on the limitation of the power supply. 230V version: Complies with IEC61000-3-12 without measure. 400V versions: Complies with IEC61000-3-12 at Ssc connection >3.3 MVA without action.

SCOP according to EN14825, medium climate (Strasbourg).
 SCOP according to EN14825, cold climate (Helsinki).

<sup>5)</sup> At A7/W35, according to EN14511.

<sup>6)</sup> When the heat pump is part of an integrated system. According to Eco-design Directive 811/2013

<sup>7)</sup> When the heat pump is the sole heat generator and the built-in controller is not included. According to Eco-design Directive 811/2013.

8) Hot water performance according to EN16147, V40 according to XL cycle

9) Maximum flow rate at -10°C to +40°C.

<sup>10)</sup> Sound power level according to energy labeling, measured according to EN12102 and EN3741 (A7W55).