Thermia Calibra RXT

A natural step into the future

The Calibra RXT is a ground source heat pump that takes a big step forward by using the natural refrigerant R290*. Natural refrigerants are the future of heating and cooling and we at Thermia are at the forefront of technological solutions that use natural refrigerants to meet environmental targets. The Calibra RXT is also uncompromising when it comes to safety, offering a built-in solution that does not require any extra space.

Exceptional performance and versality

The Calibra RXT has a supply temperature of up to 70°C, delivering both hot water and heating extremely efficiently and very economically in high and low temperature systems. With two power sizes (1-7 kW and 3-12 kW) and the option of a cascade connection, the Calibra RXT can be used in many different ways and is a great choice for both new installations and retrofits.

Natural refrigerant

The natural refrigerant R290 has a very low GWP value of 0.02**. The result is a perfect ground source heat pump for those who are thinking about the future, as well as quality and comfort.

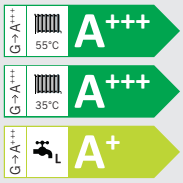
Plenty of hot water at low cost

The Calibra RXT has a SCOP of 5.58*** and provides hot water extremely well, as a result of the high supply temperature, as well as TWS technology and variable hot water charging. This means the Calibra RXT can deliver large amounts of hot water at low cost.

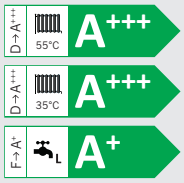
Smart and simple to control

The Calibra RXT is totally intuitive to control via a touchscreen with a number of innovative features. With Thermia Online, you can monitor and control your heat pump via an app on your smartphone. Spot price control is also possible through the free additional service Smart Price.

System:



Product:



Read more about the energy class in footnotes 5–6 on the next page.

* R290 is a hydrocarbon that occurs in nature and is not fluorinated.
** The refrigeration circuit is hermetically sealed and contains refrigerants that are subject to the F-gas regulation. The GWP of R290 according to EC 573/2024 is 0.02 (Annex VI, AR6 method). GWP stands for "Global Warming Potential" and is expressed in GWP/gram gas.
*** SCOP 5,58 refers to the Calibra RXT 12's seasonal coefficient of performance according to the measurement standard EN 14825, based on underfloor heating in a cold climate. The SCOP figure according to the standard EN 14825, for underfloor heating in an average climate is 5,4

RETAILER:

Technical data Calibra RXT

Connections Calibra RXT

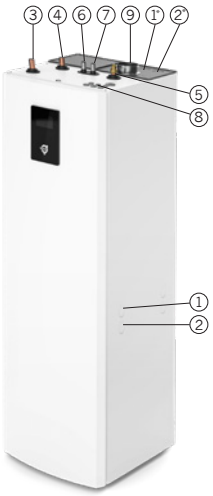
The brine lines can be connected on either the left or right-hand sides of the heat pump.

1 Brine return line (Brine in), Ø28 mm
2 Brine supply line (Brine out), Ø28 mm
3 Heating system supply line, Ø28 mm
4 Heating system return line, Ø28 mm
5 Manual air purging valve, Ø22mm
6 Hot water, Ø22 mm
7 Cold water, Ø22 mm
8 Lead-in for incoming power supply, sensors and communication cable
9 Fan duct, 100mm

Connections Calibra RXT Duo

The brine lines can be connected on either the left or right-hand sides of the heat pump.

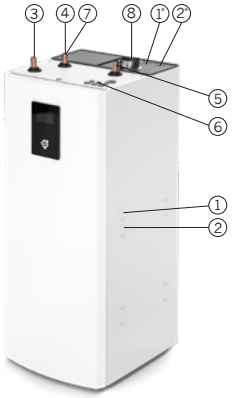
1 Brine return line (Brine in), Ø28 mm
2 Brine supply line (Brine out), Ø28 mm
3 Heating system supply line, Ø28 mm
4 Heating system return line, Ø28 mm
5 Hot water supply line, Ø28 mm
6 Lead-in for incoming power supply, sensors and communication cable
7 Return line hot water tank, Ø28 mm
8 Fan duct, 100mm



W: 598mm
D: 703mm
H: 1863mm

CALIBRA RXT

*Additional pipes needed for this type of connection



W: 598mm
D: 703mm
H: 1450mm

CALIBRA RXT DUO

*Additional pipes needed for this type of connection

Calibra RXT			Calibra RXT 7	Calibra RXT 12
Heating capacity		kW	1–7	3–12
Refrigerant	Typ		R290	R290
	Amount[1]	kg	0,33	0,52
	CO_2-equivalent	tCO_2	0,000007	0,000010
	Design pressure	Bar(g)	31	31
Compressor	Typ		Inverter-controlled, Twin rotary	Inverter-controlled, Twin rotary
	Oil		POE	POE
Electrical data, 400V 3-N, ~50Hz	Main power supply	V	400	400
	Max working power, compressor	kW	2,8	4,7
	Rated power, circulation pumps	kW	0,1	0,2
	Auxiliary heater, 3 steps	kW	(0)2/4/6	(0)3/6/9
	Fuse[2A, 2B]	A	(13)/13/13/13[2A]	(10)/16/20/25[2B]
Electrical data, 230V 1-N, ~50Hz	Main power supply	V	230	230
	Max working power, compressor	kW	2,8	3,6
	Rated power, circulation pumps	kW	0,1	0,2
	Auxiliary heater, 3 steps	kW	(0)2/4/6	(0)2/4/6
	Fuse[2C]	A	(13)25/32/40[2C]	(20)25/40/50[2C]
Performance	SCOP, Floor heating (35°C)[3]		5,46	5,58
	SCOP, Radiator (55°C)[3]		4,13	4,28
	COP[4]		4,62	4,87
Energy class - system[5]	Floor heating (35°C)		A+++	A+++
	Radiator (55°C)		A+++	A+++
Energy class - product[6]	Radiator (55°C)		A+++	A+++
	Hot water (Economy)[7]		A+	A+
	Hot water (Normal/Comfort)[8]		A	A
Max/min temperature	Cooling circuit	°C	20/–10	20/–10
	Heating circuit	°C	70/20	70/20
Anti-freeze[9]			Ethanol + water solution –17±2°C	
Max/min refrigerant circuit	Low pressure	Bar(g)	1	1
	High pressure	Bar(g)	31	31
Sound power level	Calibra RXT	dB(A)	37–44[10] (37)[11]	37–46[10] (40)[11]
	Calibra RXT Duo	dB(A)	37–45[10] (38)[11]	37–47[10] (40)[11]
Hot water performance	Volume 40ºC hot water[12]	l	280	293
	COP, Hot water[7]		3,2	3,06
Water volume	Calibra RXT	l	184	184
	Calibra RXT Duo	l	optional	optional
Weight	Calibra RXT, Empty	kg	158	175
	Calibra RXT, Filled	kg	338	355
	Calibra RXT Duo	kg	115	132
Dimensions (W×D×H)	Calibra RXT	mm	598×703×1863 ±10	598×703×1863 ±10
	Calibra RXT Duo	mm	598×703×1450 ±10	598×703×1450 ±10

1) The refrigerant circuit is hermetically sealed and subject to the F-gas directive. Global Warming Potential (GWP) for R290 according to EC 517/2014 is 0,02.

2a) The minimum recommended fuse group size depends on auxiliary heater setting. The maximal steps of auxilliary heater may be configured differently with/without compressor in the controller. Controller and circulation pumps are connected by L3, electrical immersion heater is connected by L1 and L2 and the frequency converter for the compressor is connected by L3. Meets IEC 61000-3-12 without action.

2b) The minimum recommended fuse group size depends on the auxiliary heater setting in combination with the compressor. The maximal steps of auxiliary heater may be configured differently with/without a compressor in the controller. Controller and circulation pumps are connected by L3. Electrical auxiliary heater and the frequency converter for the compressor is connected by by L1, L2 and L3. Meets IEC61000-3-12 at Ssc connection point min. 0,7 MVA for Calibra RXT 12.

2c) Connection of the 230V version can be made to a 1-phase 230V mains supply, either with a standard supply or with physically separate supplies to the heat pump (compressor) and to the auxiliary heater in order to reduce the fuse rating required. Complies with IEC 61000-3-12 without conditional connection

3) SCOP according to EN14825, Cold climate (Helsinki)

4) At B0/W35, according to EN14511

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

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

7) Hot water performance according to EN16147, COP according to XL cycle with the control computer set for Economy mode and built-in tank.

8) Hot water performance according to EN16147, COP according to XL cycle with the control computer set for Normal / Comfort mode and built-in tank.

9) Always check local rules and regulations before using antifreeze.

10) According to EN12102:2017 and EN 3741:2010 (max B0W35, min B0W35).

11) Sound power level according to Energy label, EN 12102:2017 and EN 3741:2010 (B0W55)

12) Hot water performance according to EN 16147: 2017, V40 according to XL cycle, COP with the control computer set for Comfort mode and built-in tank.