

Thermia Calibra Calibra Duo



Calibra

Ground source heat pump with Thermia Inverter Technology, specially designed for the heating & cooling of modern and existing homes

Thermia Calibra covers the power range 1.5 to 12 kW and includes features that have been optimized to provide maximum energy savings when heating or cooling homes. Based on inverter technology, Calibra is an excellent choice for energy-efficient new-build houses and provides the opportunity to meet additional energy needs, such as a swimming pool or future extensions to the house. It is also ideal for retrofitting projects, where Calibra can precisely adjusted to head demand and available energy source.

Thermia Calibra is geothermal heat pump and draws on rock, surface ground, ground water or lake water as its heat sources.

The variable-speed compressor has a power range of 1.5-7 kW and 3-12 kW (2 models) and constantly adjusts the supply of energy according to your needs. This enables you to enjoy an extremely high annual efficiency factor*. Because you never use more energy than you actually need, you can reduce your electricity (bill) even further.

Together with a number of other technical innovations, Thermia TWS technology** provides excellent hot water comfort for its size class. Calibra produces water faster and at higher temperatures than can be achieved using traditional techniques. Thermia Calibra is also available in a Duo variant with dedicated MBH Calibra hot water tank. The MBH Calibra hot water tank is available in two sizes: 200 and 300.

Using the integrated Thermia Online tool, you can remotely monitor your heat pump via a computer, tablet or smartphone.

* Annual efficiency is a measure that describes how efficiently your heat pump works over a whole year, including both warm and cold periods as well as hot water production.

** TWS = Tap Water Stratification = a heating technique for water heaters, developed by Thermia.



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

Technical data Thermia Calibra

Thermia Calibra Duo

Connections Thermia Calibra

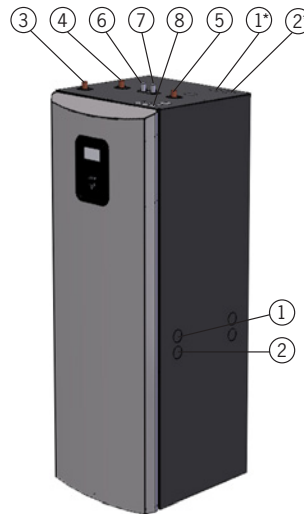
The brine lines can be connected on either the left or right-hand sides of the heat pump.

- 1 Brine return line (Brine in), \varnothing 28 mm
- 2 Brine supply line (Brine out), \varnothing 28 mm
- 3 Heating system supply line, \varnothing 28 mm
- 4 Heating system return line, \varnothing 28 mm
- 5 Connection for bleed valve, \varnothing 28 mm
- 6 Hot water, \varnothing 22 mm
- 7 Cold water, \varnothing 22 mm
- 8 Lead-in for incoming power supply, sensors and communication cable

Connections Thermia Calibra Duo

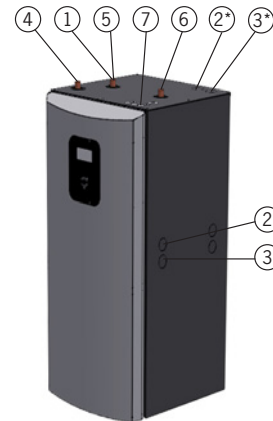
The brine lines can be connected on either the left or right-hand sides of the heat pump.

- 1 Return line hot water tank, \varnothing 28 mm
- 2 Brine return line (Brine in), \varnothing 28 mm
- 3 Brine supply line (Brine out), \varnothing 28 mm
- 4 Heating system supply line, \varnothing 28 mm
- 5 Heating system return line, \varnothing 28 mm
- 6 Supply line hot water tank, \varnothing 28 mm
- 7 Lead-in for incoming power supply, sensors and communication cable



Calibra

*Additional pipes needed for this type of connection



Calibra Duo

*Additional pipes needed for this type of connection

Thermia Calibra / Thermia Calibra Duo		Calibra 7 (1,5–7 kW)	Calibra 12 (3–12 kW)
Refrigerant	Type	R410A	R410A
	Amount ²	0,95 kg	1,40 kg
	Test pressure	45 bar(g)	45 bar(g)
	Design pressure	45 bar(g)	45 bar(g)
Compressor	Type	Scroll	Scroll
	Oil	POE	POE
Electrical data 3-N, -50Hz	Main power supply	V	400
	Max working power, compressor	kW	2,63
	Rated power, circulation pumps	kW	0,12
	Auxiliary heater, 3 steps	kW	(0)/2/4/6
	Fuse (heat pump + auxiliary heater) ³	A	(13)/13/13/16 ^{3A}
Electrical data 1-N, -50Hz	Main power supply	V	230
	Max working power, compressor	kW	2,63
	Rated power, circulation pumps	kW	0,12
	Auxiliary heater, 3 steps	kW	(0)/2/4/6
	Fuse (heat pump + auxiliary heater) ³	A	(13)/25/32/40
	Fuse (heat pump, separated supply) ⁴	A	13
	Fuse (auxiliary heater, separated supply) ^{3,4}	A	10/20/32
Performance	SCOP, Floor heating (35°C) ⁵	5,77	5,80
	SCOP, Radiator (55°C) ⁵	4,12	4,29
	COP ¹	4,65	4,75
Energy class - system ⁸	Floor heating (35°C)	A+++	A+++
	Radiator (55°C)	A+++	A+++
Energy class - product ⁹	Floor heating (35°C)	A+++	A+++
	Radiator (55°C)	A+++	A+++
	Domestic hot water	A	A
Max/min temperature	Cooling circuit	°C	20/-10
	Heating circuit	°C	65/20
Anti-freeze ⁶		Ethanol + water solution -17+/- 2 °C	
Max/min refrigerant circuit	Low pressure	bar(g)	2,3
	Operating pressure	bar(g)	41,5
	High pressure	bar(g)	45
Sound power level	Calibra	dB(A)	28-42 ^{7A} (32) ^{7B}
	Calibra Duo	dB(A)	29-43 ^{7A} (33) ^{7B}
Hot water performance ¹⁰	Volume 40°C hot water	l	260
	COP, Hot water		2,7
Water volume	Calibra	l	184
	Calibra Duo	l	optional
Weight	Calibra, Empty	kg	150
	Calibra, Filled	kg	340
	Calibra Duo	kg	115
Dimensions (WxDxH)	Calibra	mm	598x703x1863 +/-10
	Calibra Duo	mm	598x703x1450 +/-10

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

1) At 80/W35, according to EN14511 ; 2) The refrigerant circuit is hermetically sealed and subject to the F-gas directive. Global Warming Potential (GWP) for R410A according to EC 517/2014 is 2088, giving a CO2 equivalent corresponding to: CALIBRA 7: 1,984 ton and CALIBRA 12: 2,923 ton. ; 3) The minimum recommended fuse group size depends on auxiliary heater setting. The maximal steps of auxiliary heater may be configured differently with/without compressor in the controller. ; 3A) Controller and circulation pumps are connected by L1, auxiliary heater is connected to L1 and L2 and the frequency converter for the compressor is connected by L3. ; 3B) The recommended fuse group size depends on auxiliary heater setting (0/3/6/9 kW). Auxiliary heater and frequency converter for the compressor are connected by L1, L2 and L3. Controller and circulation pumps are connected by L1. Meets IEC 61000-3-12 at Ssc connection <1.3 MVA without action. ; 4) Connection of the 230V version can be done to single phase or 3 phase 230V grids, either with one common supply, or with physically separated supplies to heat pump (compressor) and to auxiliary heater to lower the fuse needed. ; 5) SCOP according to EN14825, Cold climate (Helsinki), P-design CALIBRA 7: 6,39 kW (BOW55), 7,11 kW (BOW35). P-design CALIBRA 12: 10,60 kW (BOW55), 11,69 kW (BOW35). ; 6) Always check local rules and regulations before using antifreeze. ; 7A) According to EN12102:2017 and EN 3741:2010 (max BOW55, min BOW35). ; 7B) Sound power level according to Energy label, EN 12102:2017 and EN 3741:2010 (BOW55). ; 8) When the heat pump is part of an integrated system. According to Eco-design Directive 811/2013. ; 9) When the heat pump is the sole heat generator and the built-in controller is not included. According to Eco-design Directive 811/2013. ; 10) Hot water performance according to EN 16147: 2017, V40 according to XL cycle, COP with the control computer set for economy mode and built-in tank.