



New arrival – MEGA S-E

THERMIA MEGA

The ultimate light commercial heat pump

- Geothermal heat pump for advanced applications with a capacity of up to 1400 kW
- Reduce energy consumption by up to 80%
- Inverter technology adjusts to real-time demand
- Cascade function up to 16 units
- Hotgas technology for efficient hot water production
- One solution for heating, domestic hot water and cooling
- Online – control your heat pump from anywhere
- Ready for building management systems (BMS) via Modbus



Thermia Mega

Inverter technology – speed controlled compressor & built-in low-energy pumps

- Continuously adapts operations to provide the lowest possible energy consumption
- Provides the highest possible energy coverage
- Optimizes the operating condition of the compressor
- The compressor speeds down when to high temperature from the heat source
- Adapts to the current conditions by regulating the compressor speed to prevents unnecessary compressor stops



Thermia Mega

Hotgas changer as standard – super efficient hot water production

- Provides a higher efficiency for hot water production
- Hot water produced when the heat pump produces heat, for no extra cost
- The hotgas heat exchanger can cover the HWC-losses in the property



Thermia Mega

Installation

- Developed together with installers
- All connections facing upwards provide an easier installation
- Built-in circulation pumps provide a faster and cheaper installation



THERMIA MEGA

Applications

For all building types:

- Apartments
- Hotels with extended SPA facilities
- Offices
- Shopping centers
- Public buildings: schools, nurseries, pool facilities
- Industry properties (factories, warehouses, workshops)

Use different type of energy sources:

- Ground source - Borehole
- Ground source - Horizontal loop
- Exhaust air
- Ground source - Ground water



THERMIA MEGA

The Mega Range

Four power sizes to find the ideal dimensioning in terms of cost efficiency:

NEW

Mega S / S-E **10-33 kW**

Mega M **11-44 kW**

Mega L **14-59 kW**

Mega XL **21-88 kW**

If needed, up to 16 heat pumps can be connected in primary/secondary.

The plant is then controlled according to the highest possible instantaneous efficiency.



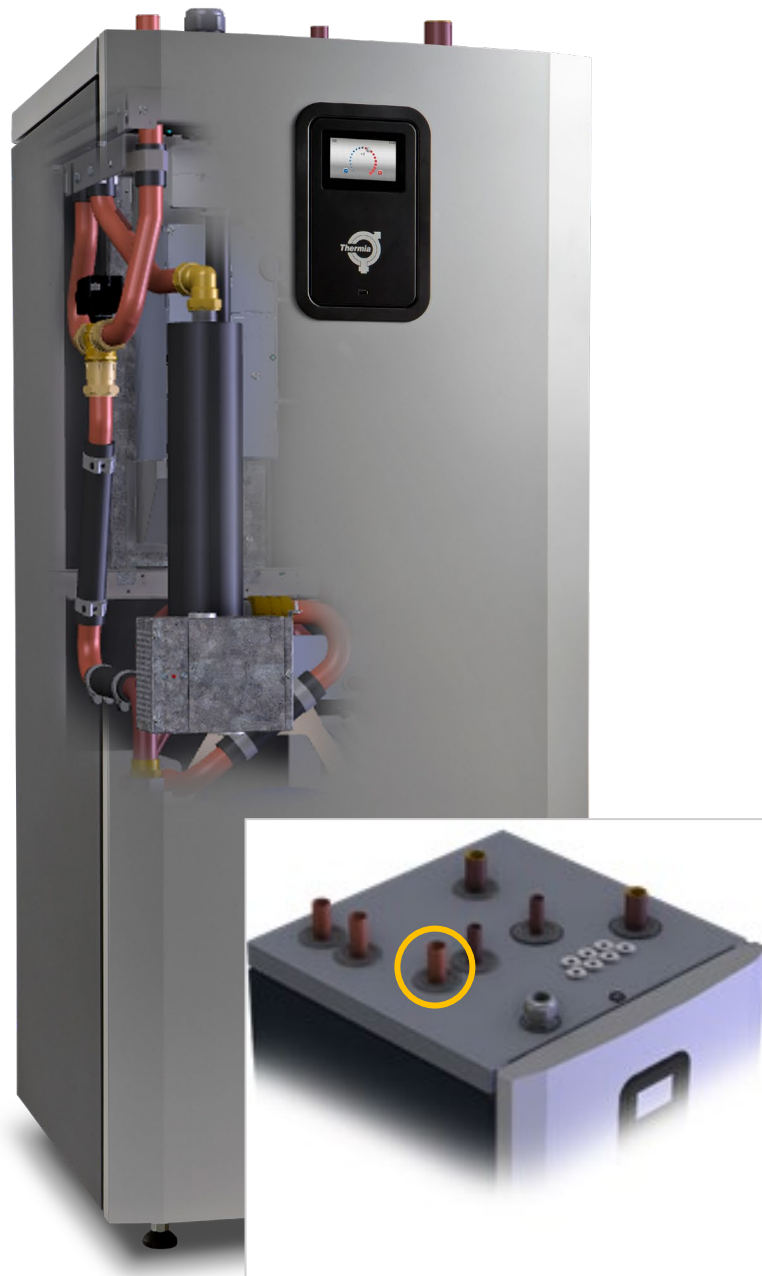
An addition to the Thermia Mega family



INTRODUCTION MEGA S-E

A new addition to the Mega family.

- More flexibility to fit a wider range of installations.
- Less time spent on installation with built-in change-over-valve and auxiliary heater.
- Installation and service friendly, just like Mega S.
- Great performance, same as Mega S.
- Increased market competitiveness.



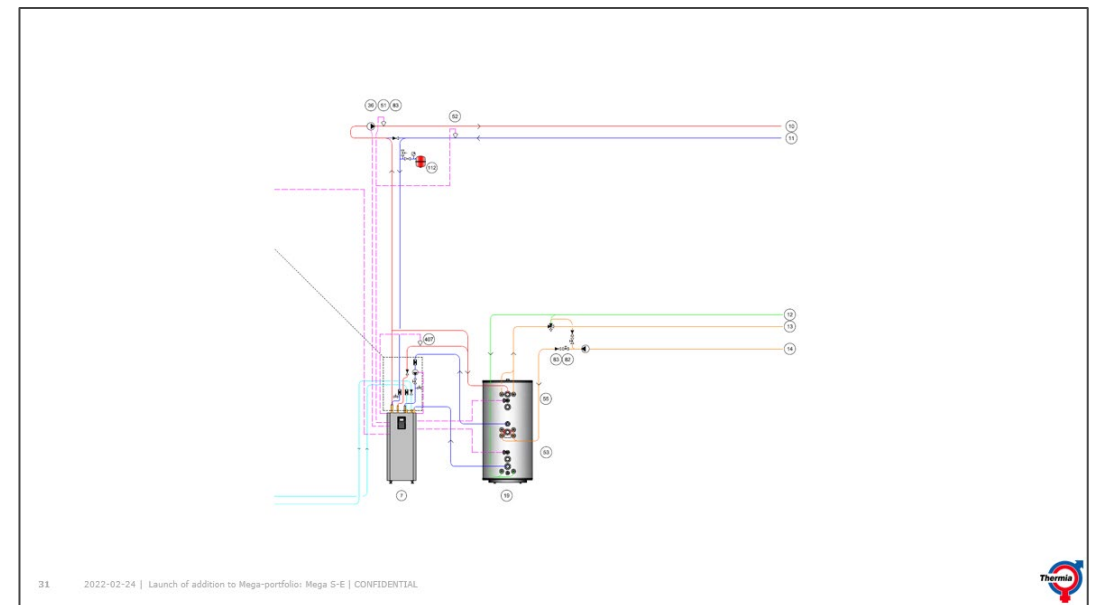
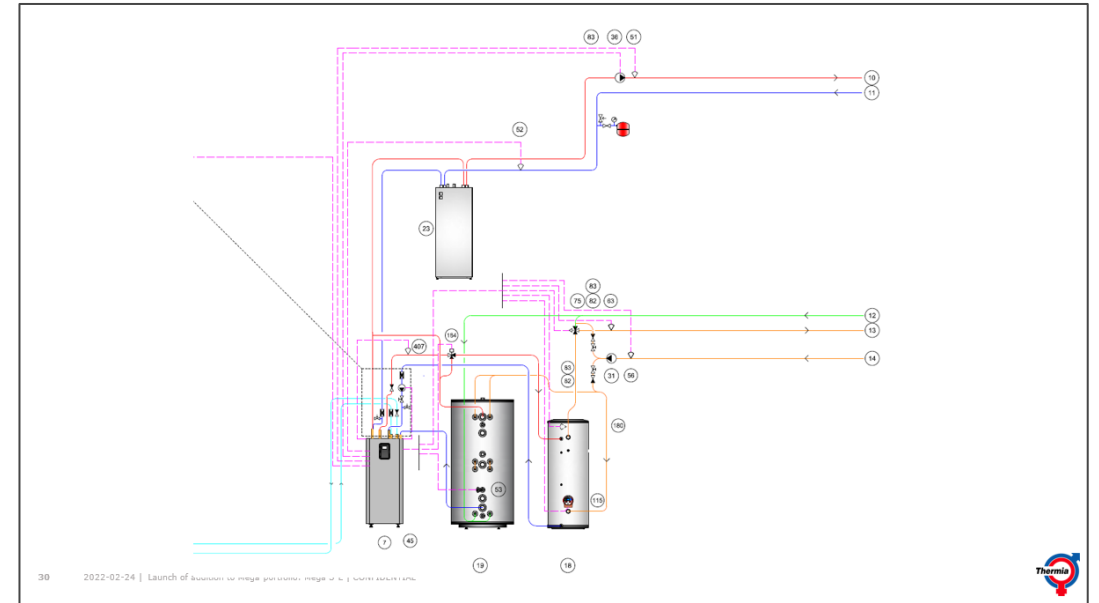
INTRODUCTION MEGA S-E

The news are hidden inside

- Auxiliary heater 15 kW in steps 5 kW, 10 kW and 15 kW
- Change-over-valve for hot water production (The valve is connected to the heat pumps return line)
- Separate electric cabinet for the overheat protection and contactors for electric heater
- Enables easier and cleaner installation due to the built-in change over valve and immersion heater.
- Requested in smaller applications, where the power demand is higher than what a domestic heat pump can offer

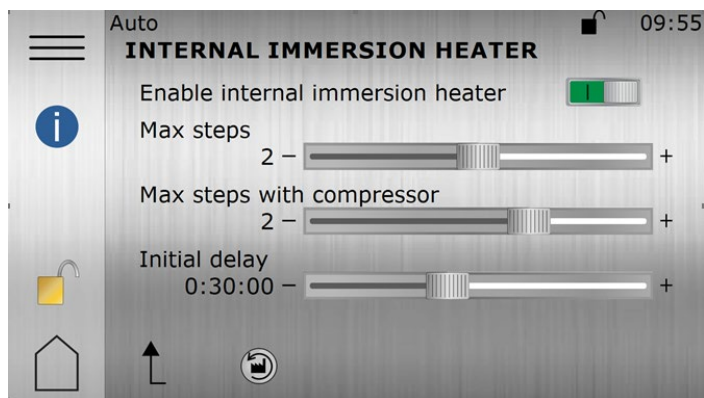
System solutions

- Supports the same system solutions as current Mega S
- Even simpler systems since the Mega S-E is equipped with changeover valve and electric heater
- Required to use system circulation pump in cascade and recommended for single installations



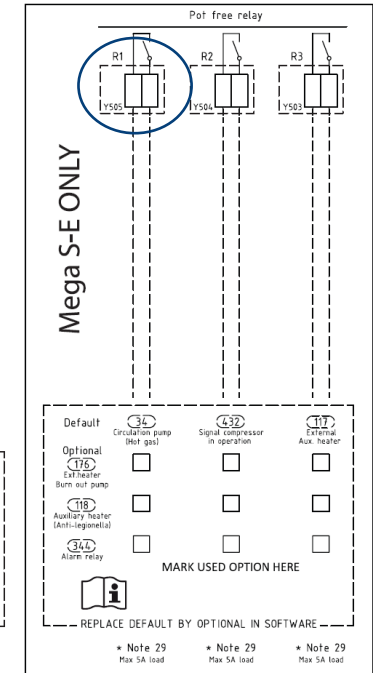
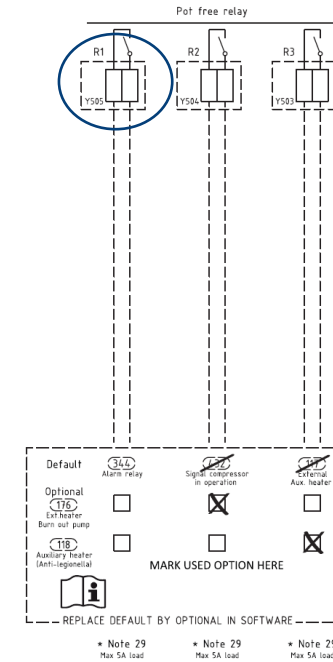
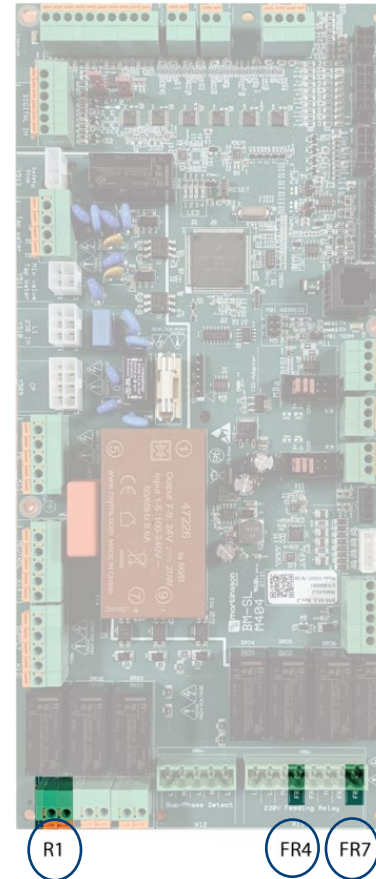
New pages in the display

- New display page with settings for the internal auxiliary heater



Allocation and outputs

- Output FR4 (external brinepump) and FR7 (hotgas pump on/off) is now dedicated to the relay for the electric heater
- Hotgas pump (on/off) for Mega S-E is controlled via R1
- If need of external brinepump, use EM3



Performance Mega S-E vs Mega S

	Mega S-E	Mega S
REFRIGERANT Amount (kg)	R410A 3,9	R410A 3,9
COMPRESSOR Oil	Scroll POE	Scroll POE
ELECTRICAL DATA 3-N Fuse Only compressor (A) Auxiliary, 3 step (kW) Fuse (Compressor + auxiliary) (A)	400V 32 5/10/15 32/40/50	400V 32 N/A N/A
ENERGY LABEL Floor heating (35°C) Radiator (55°C)	With/Without Control A+++/A+++ A+++/A+++	With/Without Control A+++/A+++ A+++/A+++
MAX SYSTEM PRESSURE Cooling (bar) Heating (bar)	6 6	6 6
MAX/MIN TEMPERATURE Cooling (°C) Heating (°C)	20/-10 65/20	20/-10 65/20
SOUND Min/Max (dbA) Effect (dbA)	41-56 47	41-56 47
DIMENSIONS W x D x H (mm) Weight (kg)	692x796x1652 ± 10 309	692x796x1652 ± 10 300

Competitor overview

Thermia Mega S-E

Thermia Mega S-E 10-33:

- Refrigerant: R410
- Variable speed compressor 10-33 kW
- 40/59 dB(A)
- 692 x 796 x 1720
- 309 kg
- Max supply line temp: 65°C
- Electrical heater: 15 kW
- Change over valve
- Prepared for BMS (Modbus)



IVT GEO 222-280

IVT GEO 228

- Refrigerant: R410A
- On/off compressor x 2
- 48/52 dB(A)
- 700 x 750 x 1620 mm
- 360 kg
- Max supply line temp: 68C
- Electrical heater 6/9/15 kW



NIBE S-1155 6-25

NIBE S-1155 25

- Refrigerant: R410A
- Variable speed compressor 6-25 kW
- 36-47 dB(A) (LWA EN12102)
- 600 x 620 x 1500 mm
- 205 kg
- Max supply line temp: 65C
- Electrical heater 1-9 kW



Most Important End User Values

- 5.3 SCOP - One of the most efficient ground source heat pumps on the market
- 100% of the building energy requirements with or without an auxiliary heater
- Up to 65°C supply temperature - High supply line temperature and efficient production of hot water thanks to a hot gas exchanger
- Simultaneously heating and cooling
- >30% energy savings can be achieved with Inverter Scroll Technology
- Low sound level

