

MOBILE HEAT EXCHANGER TSR V-HEAT 400KW MK III

Mobile heat exchanger TSR V-Heat 400kW is a district heating substation delivered to site fully assembled in a steel frame. The MK III generation comes with RMS 5G remote control and a 7-inch touch screen as standard.

- Output 400 kW, SWEP B220Lx100 plate heat exchanger
- Primary side 100 °C / DN50 flange, max 16 bar
- Secondary side 40...60 °C / 2" Camlock, max 6 bar
- Flow rates 6.09 m³/h (primary) and 17.43 m³/h (secondary)
- Grundfos Magna3 50-150F circulation pump
- RMS 5G remote control and cloud portal as standard
- Steel frame, wheels, forklift pockets and lifting loops
- Dimensions 1200 x 770 x 1836 mm, weight 320 kg



SKU: 801030009

TECHNICAL ATTRIBUTES

Power	400 kW	Max. työlämpötila (ensiö/toisio)	120 °C / 95 °C
Voimanlähde	400V / 16A	Dimensions (W x D x H)	1200 x 770 x 1836 mm
Putken halkaisija (ensiö/toisio)	DN50 / DN65	Weight	320 kg
Säätöventtiili (ensiö)	DN25 / kvs 10,0	Lämmönvaihdin	SWEP B220Lx100
Ensiön lämpötila (tulo/paluu)	100 °C / 41,18 °C	Regulaattori	Siemens SAX 61.03

Toision lämpötila (tulo/meno)	40 °C / 60 °C	Pump	Magna3 50-150F
Virtaama (ensiö/toisio)	6,09 / 17,43 m³/h	KytKentä (ensiö/toisio)	Flange DN50 / Camlock 'D' 2xDN50, 2xDN65
Painehäviö (ensiö/toisio)	2,78 / 21,0 kPa	Sertifikaatit	PED Art. 14 2014/68/UE
Max. paine-ero	800 kPa	Approvals	CE
Max. työpaine (ensiö/toisio)	16 bar / 6 bar	Tuotenumero	801030009

ADDITIONAL PRODUCT DESCRIPTION

Mobile heat exchanger TSR V-Heat 400kW is a district heating substation that transfers heat from the district heating network into the site's own hydronic heating circuit. Output is 400 kilowatts and the heat is transferred by a SWEP B220Lx100 plate heat exchanger. The unit arrives fully assembled in a steel frame with wheels, forklift pockets and lifting loops. The SKU is 801030009.

Who is the mobile heat exchanger TSR V-Heat 400kW for?

The unit is meant for temporary use: heating and drying construction sites, and situations where a fixed district heating substation is under service or being replaced.

It suits sites that already have a district heating connection and where heat is needed before the final plant room is finished. Background on district heating is published by [Finnish Energy](#).

For smaller loads the series also includes a [200 kilowatt model](#) with the same mobile construction.

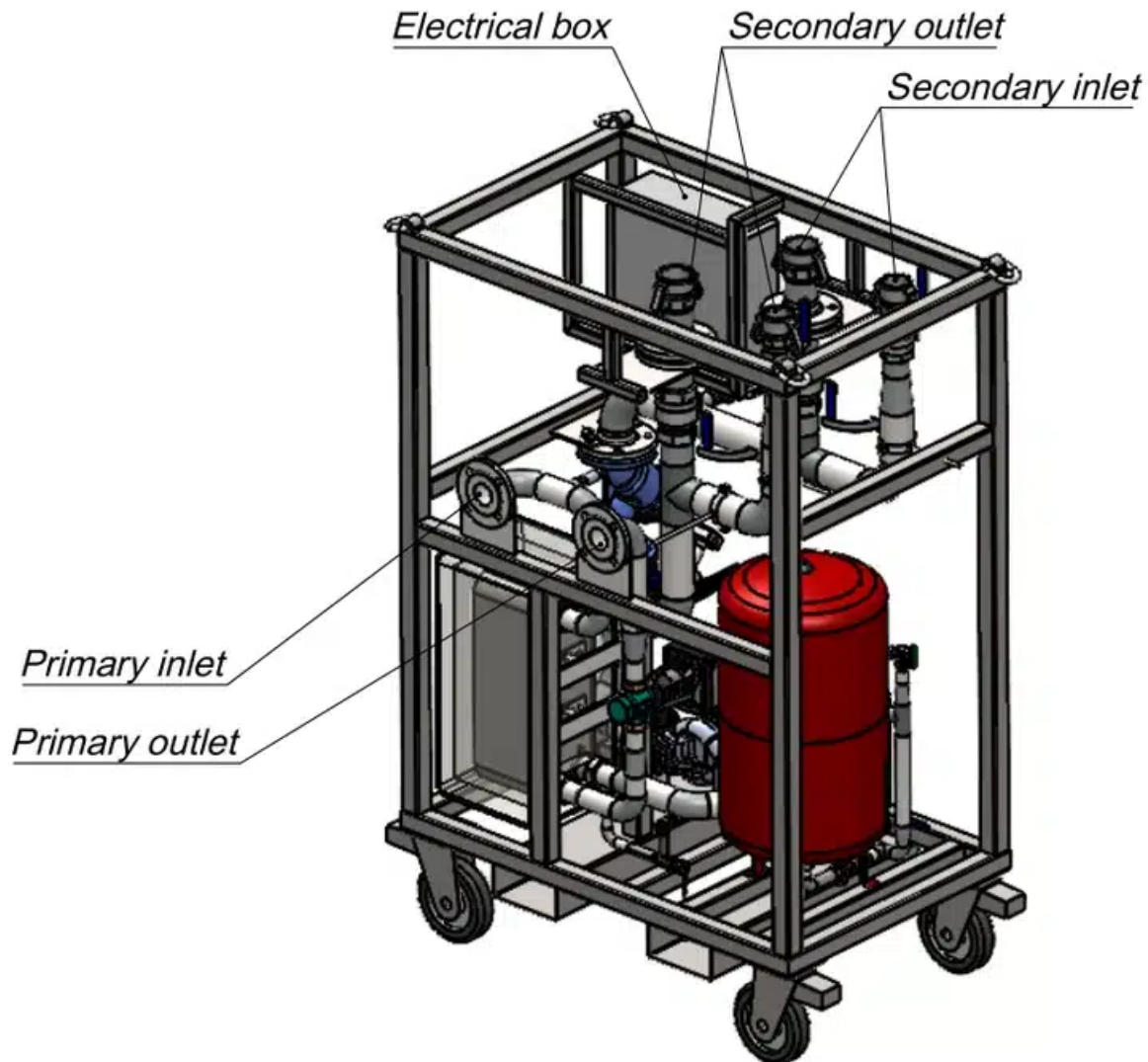


How the substation is connected on site

The primary side, the district heating connection, is a DN50 flange. Only an installer authorised by the district heating company may make this connection.

The secondary side has 2-inch Camlock quick couplings (2 × DN50 and 2 × DN65), so the site heating circuit connects without welding. Flow directions are marked on the pipes.

The unit is prepared for an external degasser and filter. Unused connections are plugged.

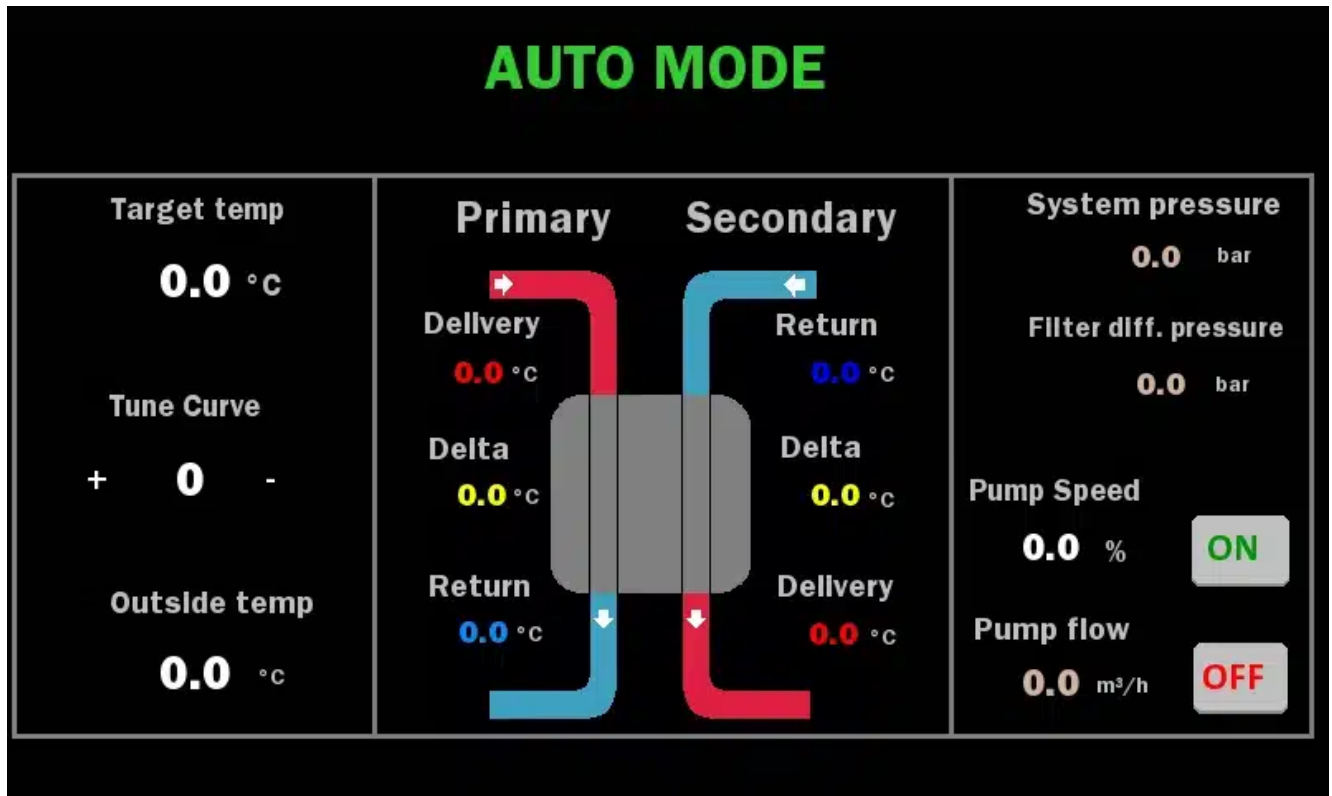


Mobile heat exchanger TSR V-Heat 400kW and RMS 5G remote control

The MK III generation includes the TSR RMS 5G remote management system as standard. It connects your entire fleet of exchangers into one view and lets you manage them remotely.

Control runs either from the unit's own 7-inch touch screen or from the cloud portal. The screen shows flow and return temperatures, system pressure, filter differential pressure and pump status.

A built-in battery backup keeps monitoring running through a power failure.

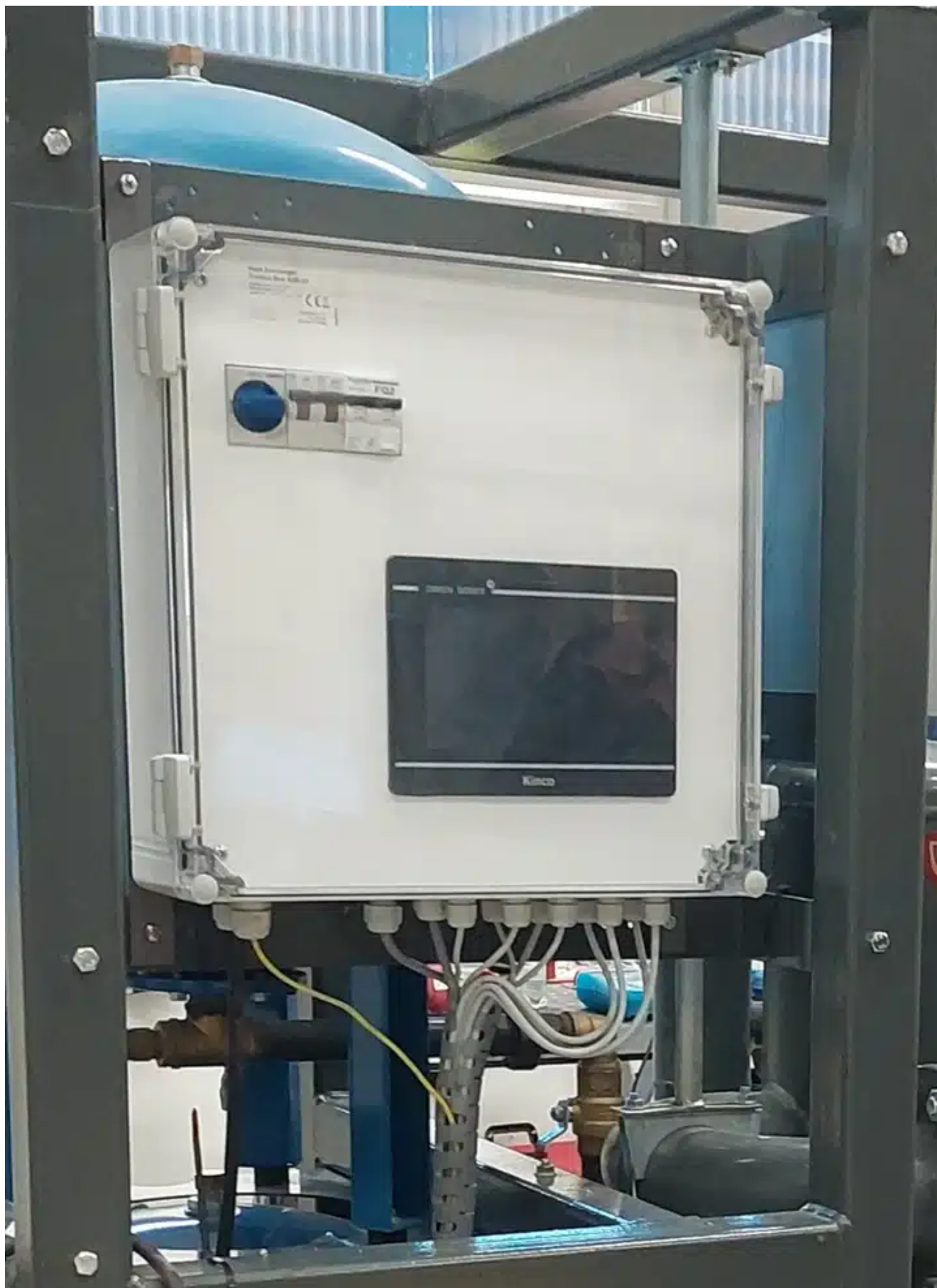


What the RMS 5G system does

The mobile heat exchanger TSR V-Heat 400kW is delivered with the RMS system already fitted. The controller box is in an IP65 enclosure and holds the controller, the 7-inch touch screen and a battery-backed power supply. Local values are pushed to the cloud immediately, and the other way around.

The system runs in three modes: Forced, Auto and Manual. In Auto mode it retrieves weather data from the meteorological institute, so no external outdoor sensor is needed.

From the cloud portal you see every unit on a map, read reports for any period and export the data through an open API. Alarms can be forwarded by SMS, for example.



Mobile heat exchanger TSR V-Heat 400kW - technical data

Device type	Mobile district heating substation
SKU	801030009
Output	400 kW
Plate heat exchanger	SWEP B220Lx100
Control valve	DN25 / kvs 10.0
Actuator	Siemens SAX 61.03
Circulation pump	Grundfos Magna3 50-150F
Max. differential pressure	800 kPa
Primary connection	Flange DN50
Secondary connection	Camlock D, 2 x DN50 and 2 x DN65
Pipe material	Black steel
Dimensions (W x D x H)	1200 x 770 x 1836 mm
Weight	320 kg
Control	RMS 5G, 7-inch touch screen
Certification	PED 2014/68/EU Art. 14

Primary and secondary design values

Primary inlet temperature	100 °C
Primary outlet temperature	41.18 °C
Primary flow	6.09 m ³ /h
Primary pressure drop	2.78 kPa
Primary pipe size	DN50
Primary max. working pressure	16 bar
Primary max. temperature	120 °C
Secondary inlet temperature	40 °C
Secondary outlet temperature	60 °C

Secondary flow	17.43 m ³ /h
Secondary pressure drop	21.0 kPa
Secondary pipe size	DN65
Secondary max. working pressure	6 bar
Secondary max. temperature	95 °C

Add the product to your quote request cart and ask for a quotation – we size the right configuration and the accessories your site needs.

Mobile heat exchanger TSR V-Heat 400kW: frame and moving

The frame is heavy steel and its footprint matches a EUR pallet. It has large wheels, forklift pockets and lifting loops, so the unit moves around site without special equipment.

Dimensions are 1200 x 770 x 1836 millimetres and the weight is 320 kilograms. The frame protects the components during transport and moves.

Place the unit on level ground so the screen and valves are freely accessible and unauthorised people cannot reach it unsupervised.

Mobile heat exchanger TSR V-Heat 400kW: commissioning and service

Compare the pressure and temperature values on the rating plate with the values stated by the district heating company before connecting. The unit must not be installed if the network values exceed the plate maximums.

Fill and vent the secondary circuit carefully at commissioning. Always switch off the power at the main switch before service work – the primary side water is hot and under high pressure.

For transport below +5 °C, fill the exchanger with a 50/50 water-ethylene glycol mixture so it cannot freeze.

Frequently asked questions

What is the mobile heat exchanger TSR V-Heat 400kW used for?

It is meant for temporary district heating distribution on site, or while a fixed substation is under service. The output is 400 kilowatts and the heat is transferred by a SWEP B220Lx100 plate heat exchanger.

What connections does the unit have?

The primary side is a DN50 flange and the secondary side has 2-inch Camlock quick couplings: two of DN50 and two of DN65.

What are the maximum working pressures and temperatures?

16 bar and 120 °C on the primary side, 6 bar and 95 °C on the secondary side. The maximum differential pressure is 800 kPa.

Can the unit be controlled remotely?

Yes. The RMS 5G system is standard: control runs from the 7-inch touch screen or the cloud portal, and alarms can be forwarded by SMS.

Is a separate outdoor temperature sensor needed?

No. In Auto mode the system retrieves weather data from the meteorological institute.

How much does the unit weigh and what are the dimensions?

The weight is 320 kilograms and the dimensions 1200 x 770 x 1836 millimetres. The frame footprint matches a EUR pallet.

Who may connect the unit to district heating?

Only an installer authorised by the district heating company. Secondary side work is done by trained installers.

What is the product code?

The SKU is **801030009** and the model designation TSR V-Heat 400kW MK III. Use it in quotation requests and spare part enquiries.

Request a quote for the substation

Add the product to your quote request cart and send the request – we answer quickly. You can collect several units in one cart. The full range is in the [hydronic heating category](#) and the other solutions on the [worksite heating page](#). If you want to ask something first, open the chat in the bottom right corner.

OTHER PRODUCT IMAGES

