

PELLETSHEIZUNGEN



HAPERO HYDRAULIC SCHEMES

Series Touch

15 kW Pellet boiler Living room

15 kW Pellet boiler

25 kW Pellet boiler

35 kW Pellet boiler

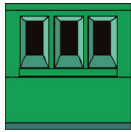
REWEAT

07.02 Plug lay-out / legend



PE N L

Pin 1 L



Phoenix RM 5,08 (230 Volt)

230 Volt electric supply

Pump connection for heating circuit / domestic hot water system / buffer / pellets feeding system

Pin 1 external conductor/ Phase

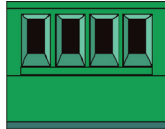
Pin 2 neutral conductor

Pin 3 protective conductor



PE N L L

Pin 1 L



Phoenix RM 5,08 (230 Volt)

3 way mixer

Pin 1 external conductor / Phase mixer OPEN

Pin 2 external conductor / Phase mixer SHUT

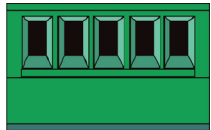
Pin 3 neutral conductor

Pin 4 protective conductor



L1 L2 PE N L3

Pin 1 L3



Phoenix RM 5,08 (230 Volt)

suction unit

Pin 1 external conductor / Phase

Pin 2 external conductor / Phase grid drive (Belimo)

Pin 3 protective conductor

Pin 4 neutral conductor

Pin 5 external conductor / Phase suction turbine



Pin 1 AI
AGND

Phoenix RM 3,5 (temperature sensor)

Pin 1 KTY 81 / 110

Pin 2 earth



Pin 1 +24V
DI

Phoenix RM 3,5 (digital input 2 poles)

Pin 1 +24 Volt

Pin 2 digital input



Pin 1 +24V
DI
AGND

Phoenix RM 3,5 (digital input 3 poles)

Pin 1 +24 Volt

Pin 2 digital input

Pin 2 earth



+24V
CAN A
CAN B
AGND



Phoenix RM 3,5 (CAN Bus connection)

Pin 1 +24 V

Pin 2 CAN A

Pin 3 CAN B

Pin 3 earth

230 V (electricity supply / pumps / pellets feeding system)
3 poles (min. 3 x 1,5 mm²)

230 V (mixer connection)
4 poles (min. 4 x 0,75 mm²)

230 V (suction unit)
5 poles (min. 5 x 1,5 mm²)

Temperature sensor
(sensor connections need to be isolated to 230 V connections)
2 poles (min. 2 x 0,22 mm²)

Cable tethered room regulator
(sensor connections need to be isolated to 230 V connections)
3 poles (min. 3 x 0,75 mm²)

CAN BUS cable
4 poles (Twisted-pair-cable with a surge resistance of 95-140 Ohm)
(CAT4 / CAT5 cable)

Screw terminal in cable room regulator



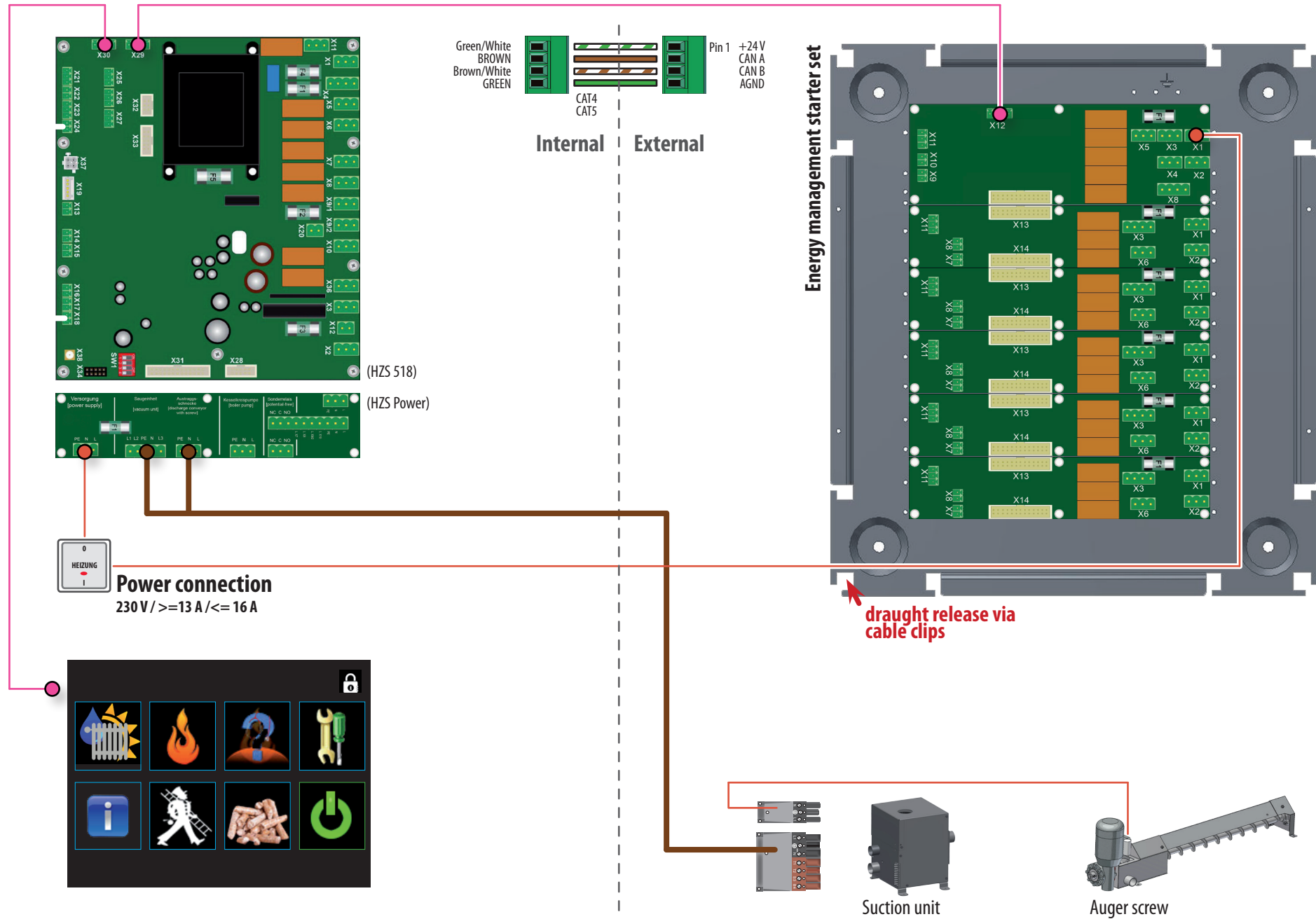
Phoenix RM 3,5 (cable room regulator)

Pin 1 room temperature

Pin 2 switch / room temperature adjuster

Pin 3 earth

Cabeling: BUS connection Touch Display - main board - Energy management starter set



Description for Hydraulic scheme: H.UK.WP.01

01.00 Place of use

Assembly in house, with buffer.

01.01 Note:

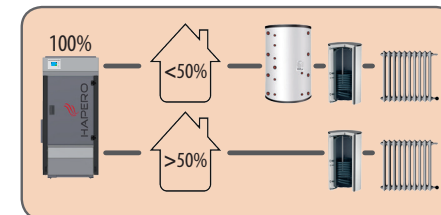
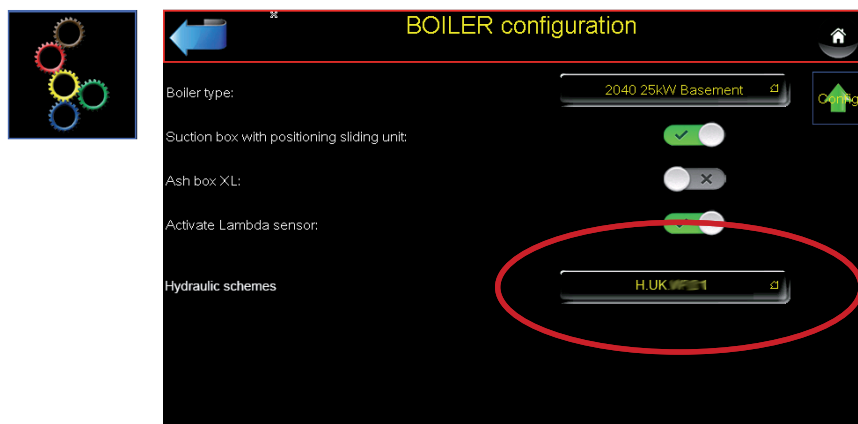
During the hot water domestic cylinder loading the heating circuits are not being loaded. A switching valve with spring return has to be fitted. When the switching valve is without power the heating circuits are being loaded.

01.02 Commissioning

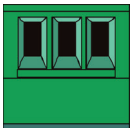
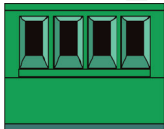
01. All national and local guidelines need to be followed.
02. Connect the hydraulics according to the hydraulic schemes and ventilate the boiler. **Further details please refer to our assembly instructions (1/3) Page 20**
03. Carry out the cabling according to the hydraulic schemes and the assembly instructions.
04. Connect to mains power. **Further details please refer to our assembly instructions (1/3) Page 22**
05. Carry out commissioning of the pellet boiler. **Further details please refer to our assembly instructions (1/3) Page 51**
06. Carry out commissioning of the energy management.

Further details see below!

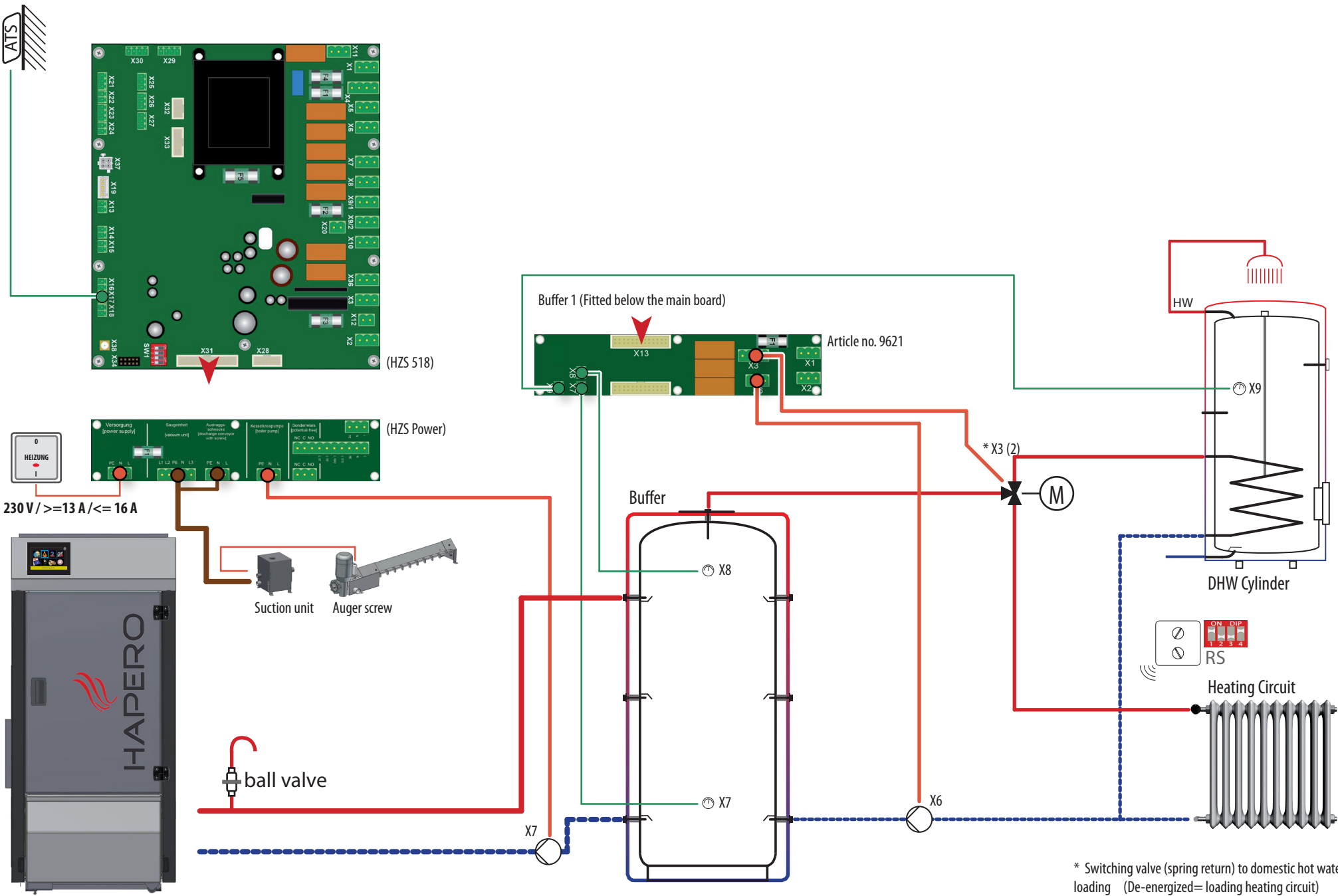
Input of the hydraulic scheme for an automatic boiler parametrisation.



07.02 Plug lay-out / legend

- | | | |
|---|--|---|
|  | <p>PE N L</p> <p>Pin 1</p>  | <p>Phoenix RM 5,08 (230 Volt)</p> <p>230 Volt</p> <p>Pin 1 Phase (Pump X6 / X7)</p> <p>Pin 2 neutral conductor</p> <p>Pin 3 protective conductor</p> |
|  | <p>PE N L L</p> <p>Pin 1</p>  | <p>Phoenix RM 5,08 (230 Volt)</p> <p>230 Volt</p> <p>Pin 1 not used</p> <p>Pin 2 Phase (Switching valve X3)</p> <p>Pin 3 neutral conductor</p> <p>Pin 4 protective conductor</p> |
|  | <p>Pin 1 AI</p> <p>AGND</p>  | <p>Phoenix RM 3,5 (temperature sensor)</p> <p>Pin 1 KTY 81 / 110</p> <p>Pin 2 earth</p> |

Hydraulic scheme: H.UK.WP.01



* Switching valve (spring return) to domestic hot water loading (De-energized= loading heating circuit)

Description for Hydraulic scheme: H.UK.WP.02

01.00 Place of use

Assembly outside the house, with buffer.

01.01 Note:

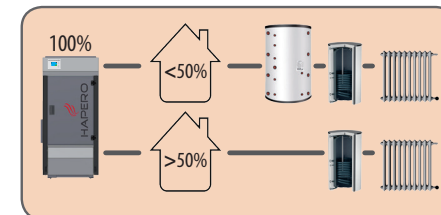
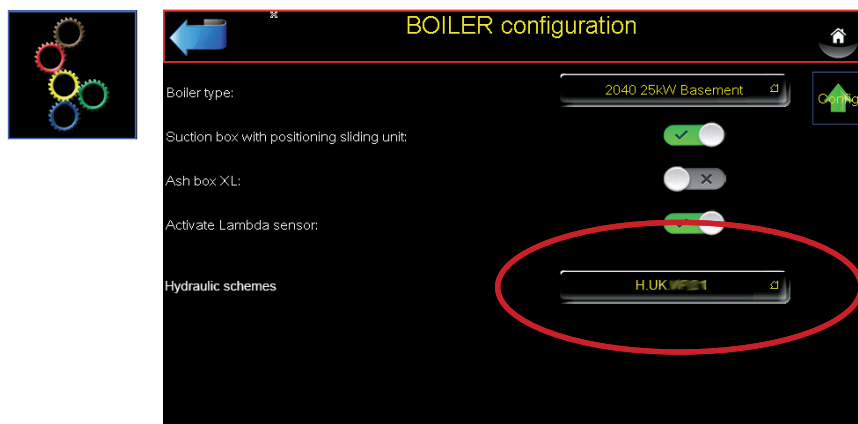
During the hot water domestic cylinder loading the heating circuits are not being loaded. A switching valve with spring return has to be fitted. When the switching valve is without power the heating circuits are being loaded. **The Biobox hydraulics has to be filled with anti-freeze!**

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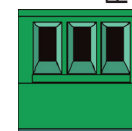
Input of the hydraulic scheme for an automatic boiler parametrisation.



07.02 Plug lay-out / legend



PE N L
Pin 1



Phoenix RM 5,08 (230 Volt)

230 Volt

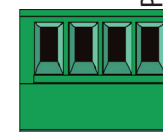
Pin 1 Phase (Pump X4 / X5)

Pin 2 neutral conductor

Pin 3 protective conductor



PE N L L
Pin 1



Phoenix RM 5,08 (230 Volt)

230 Volt

Pin 1 not used

Pin 2 Phase (Switching valve X8)

Pin 3 neutral conductor

Pin 4 protective conductor



Pin 1 AI
AGND

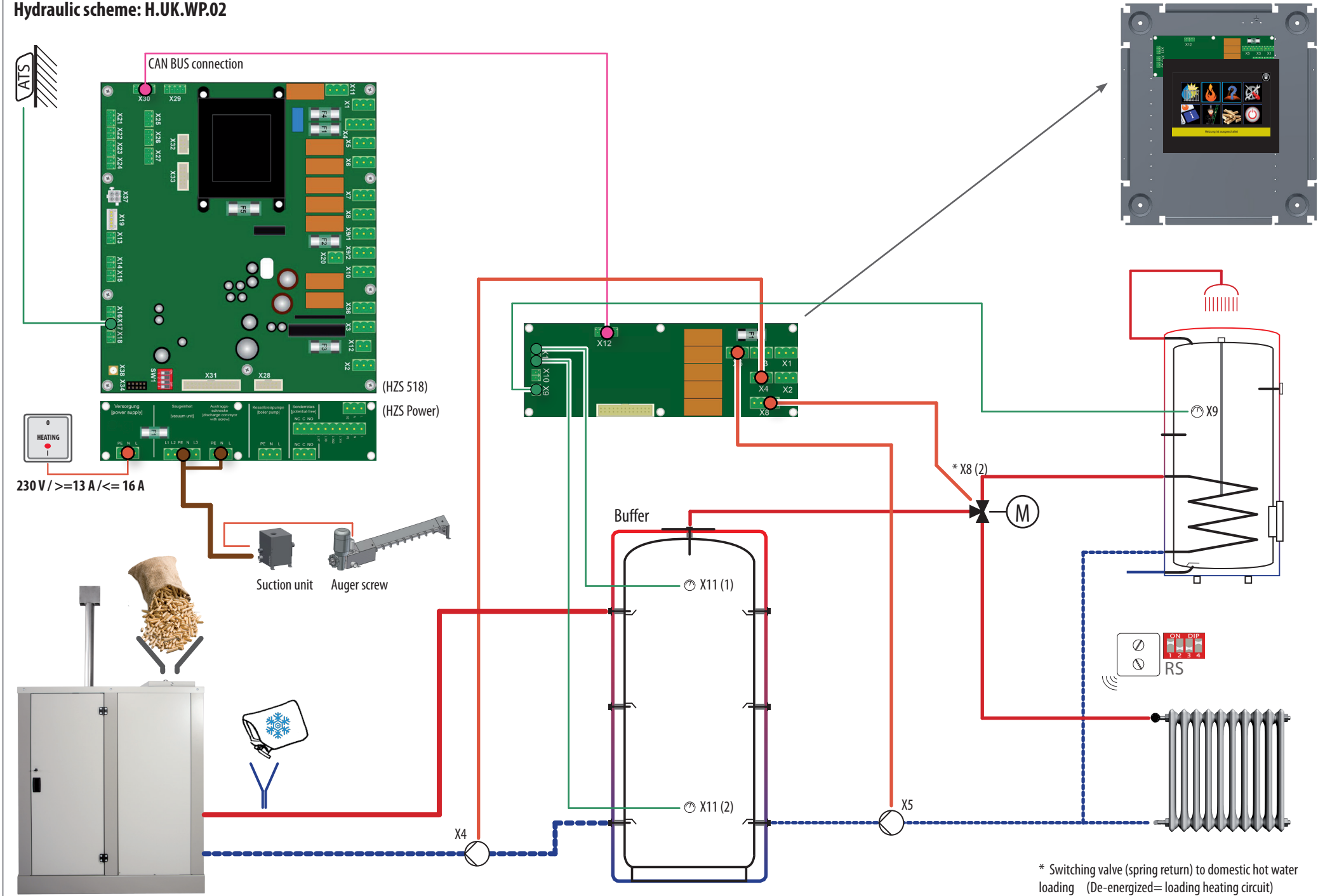


Phoenix RM 3,5 (temperature sensor)

Pin 1 KTY 81 / 110

Pin 2 earth

Hydraulic scheme: H.UK.WP.02



Description for Hydraulic scheme: H.UK.SP.01

01.00 Place of use

Assembly in house, with buffer.

01.01 Note:

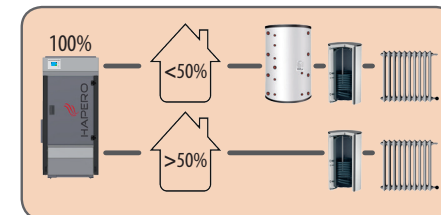
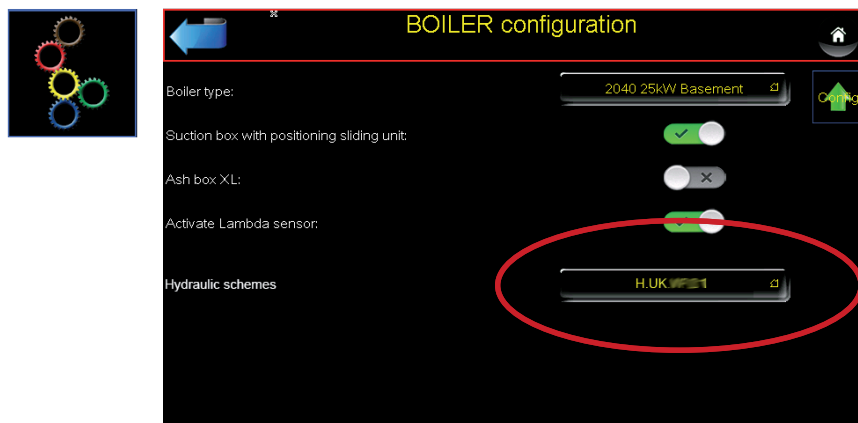
Hot water domestic cylinder and heating circuit can be operated at the same time.

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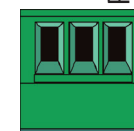
Input of the hydraulic scheme for an automatic boiler parametrisation.



07.02 Plug lay-out / legend



PE N L
Pin 1



Phoenix RM 5,08 (230 Volt)

230 Volt

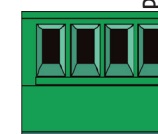
Pin 1 Phase (Pump X6 / X7)

Pin 2 neutral conductor

Pin 3 protective conductor



PE N L L
Pin 1



Phoenix RM 5,08 (230 Volt)

230 Volt

Pin 1 Phase (HC X3)

Pin 2 Phase (DHW X3)

Pin 3 neutral conductor

Pin 4 protective conductor



Pin 1 AI
AGND

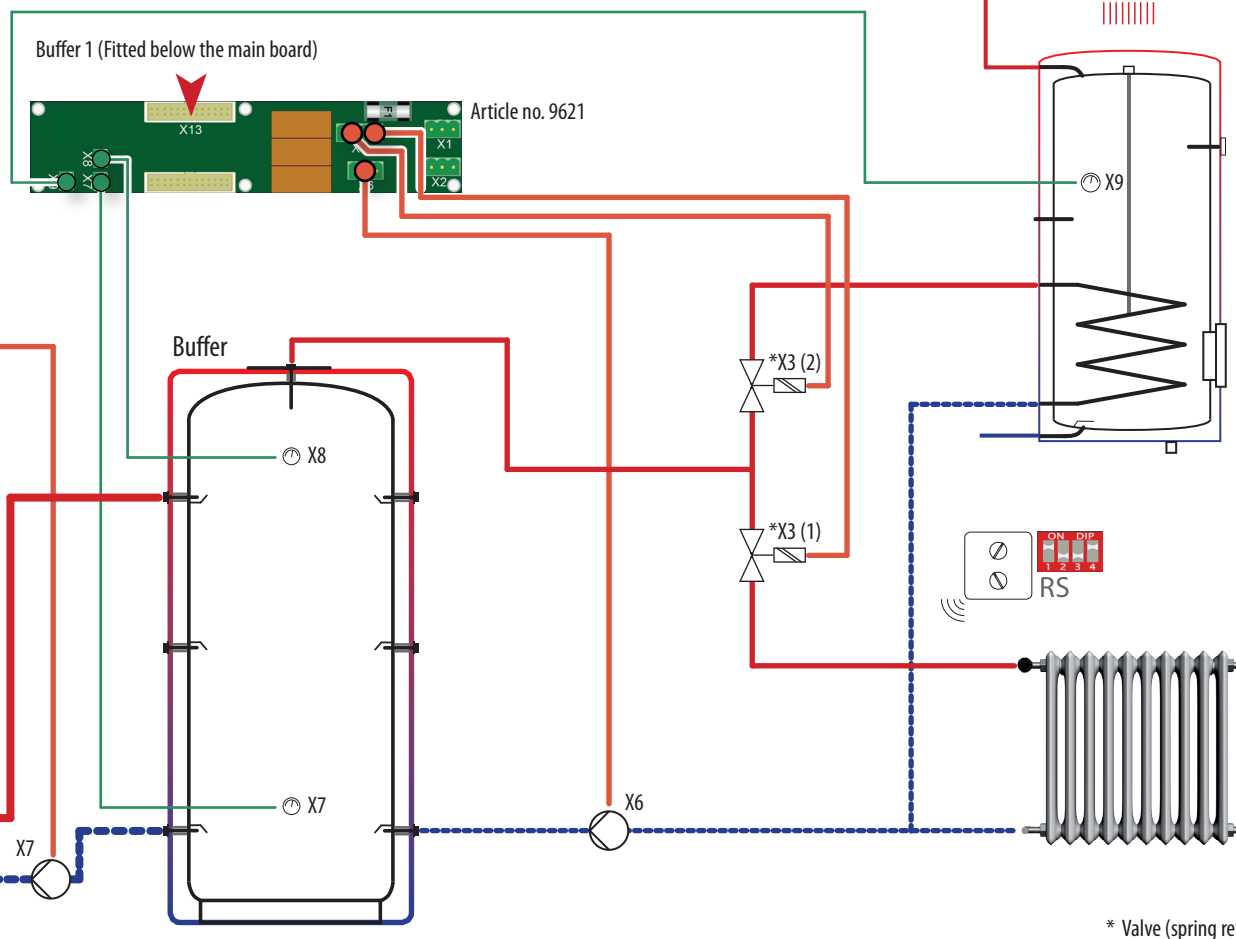
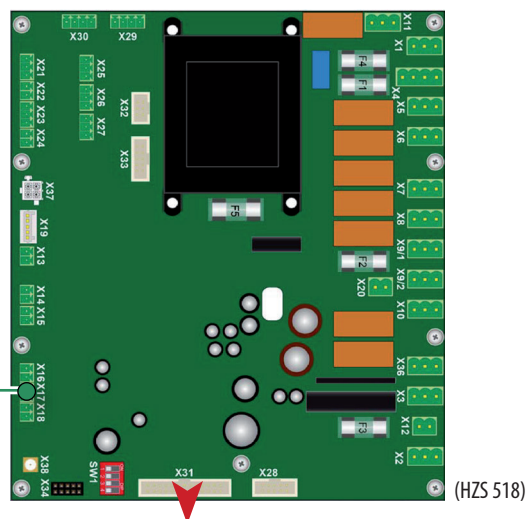


Phoenix RM 3,5 (temperature sensor)

Pin 1 KTY 81 / 110

Pin 2 earth

A diagram of a fixed support, represented by a vertical line with diagonal hatching to its right. A vertical arrow labeled R_1 points upwards from the support.



* Valve (spring return)

Description for Hydraulic scheme: H.UK.SP.02

01.00 Place of use

Assembly outside the house, with buffer.

01.01 Note:

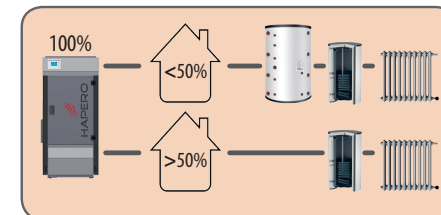
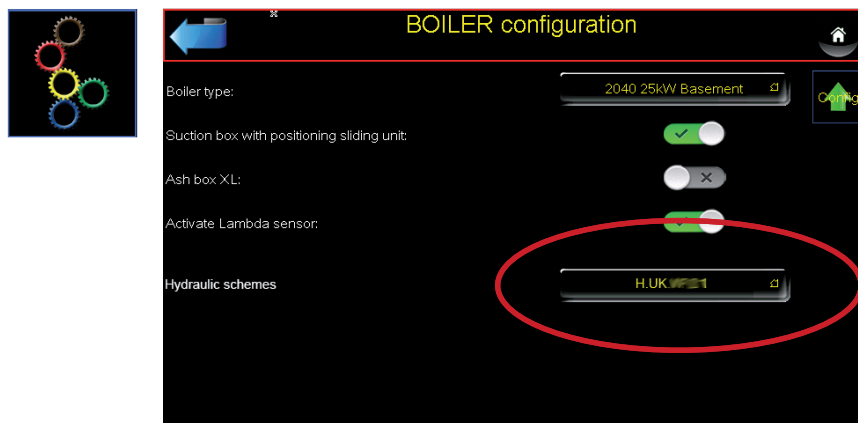
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Further details see below!

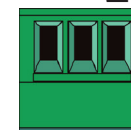
Input of the hydraulic scheme for an automatic boiler parametrisation.



07.02 Plug lay-out / legend



PE N L
Pin 1



Phoenix RM 5,08 (230 Volt)

230 Volt

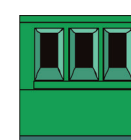
Pin 1 Phase (Pump X4 / X5)

Pin 2 neutral conductor

Pin 3 protective conductor



PE N L L
Pin 1



Phoenix RM 5,08 (230 Volt)

230 Volt

Pin 1 Phase (HC X8)

Pin 2 Phase (DHW X8)

Pin 3 neutral conductor

Pin 4 protective conductor



Pin 1 AI
AGND

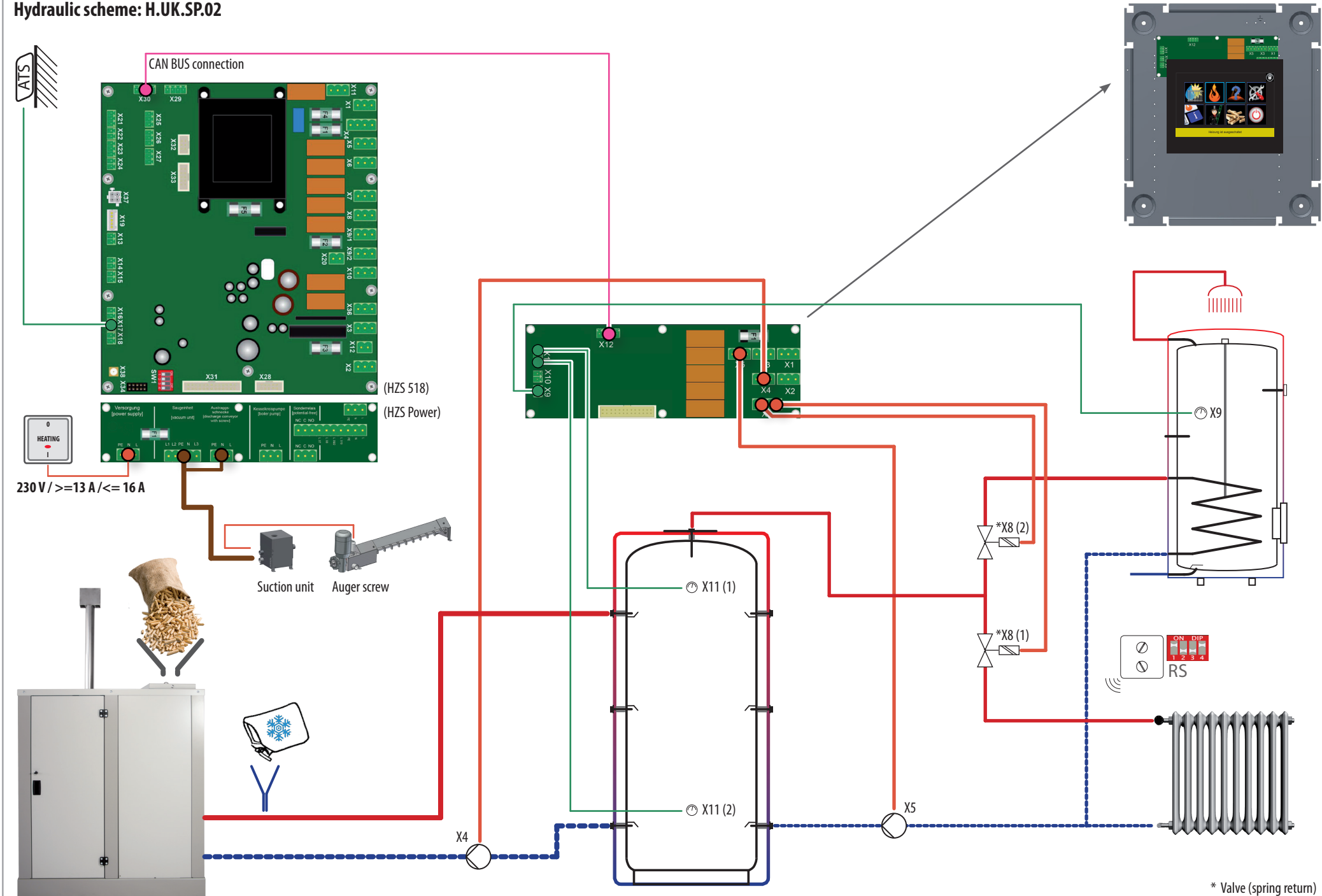


Phoenix RM 3,5 (temperature sensor)

Pin 1 KTY 81 / 110

Pin 2 earth

Hydraulic scheme: H.UK.SP.02



Description for Hydraulic scheme: H.UK.TS.01

01.00 Place of use

Assembly in house, with thermal store.

01.01 Note:

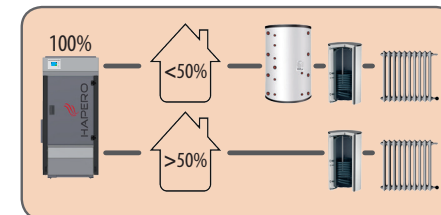
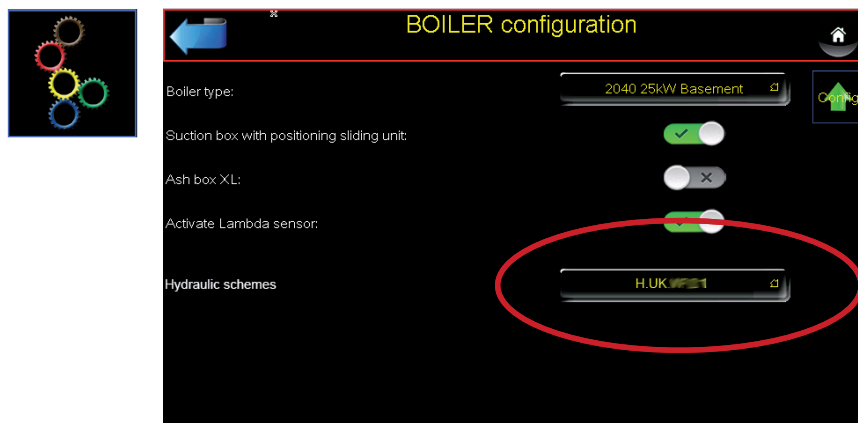
The heating circuit regulation is not the responsibility of HAPER0.

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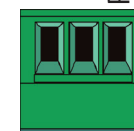
Input of the hydraulic scheme for an automatic boiler parametrisation.



07.02 Plug lay-out / legend



PE N L
Pin 1



Phoenix RM 5,08 (230 Volt)

230 Volt

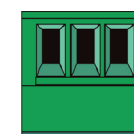
Pin 1 Phase (Pump X6)

Pin 2 neutral conductor

Pin 3 protective conductor



PE N L L
Pin 1



Phoenix RM 5,08 (230 Volt)

230 Volt

Pin 1 not used

Pin 2 Phase (SC X5)

Pin 3 neutral conductor

Pin 4 protective conductor



Pin 1 AI
AGND

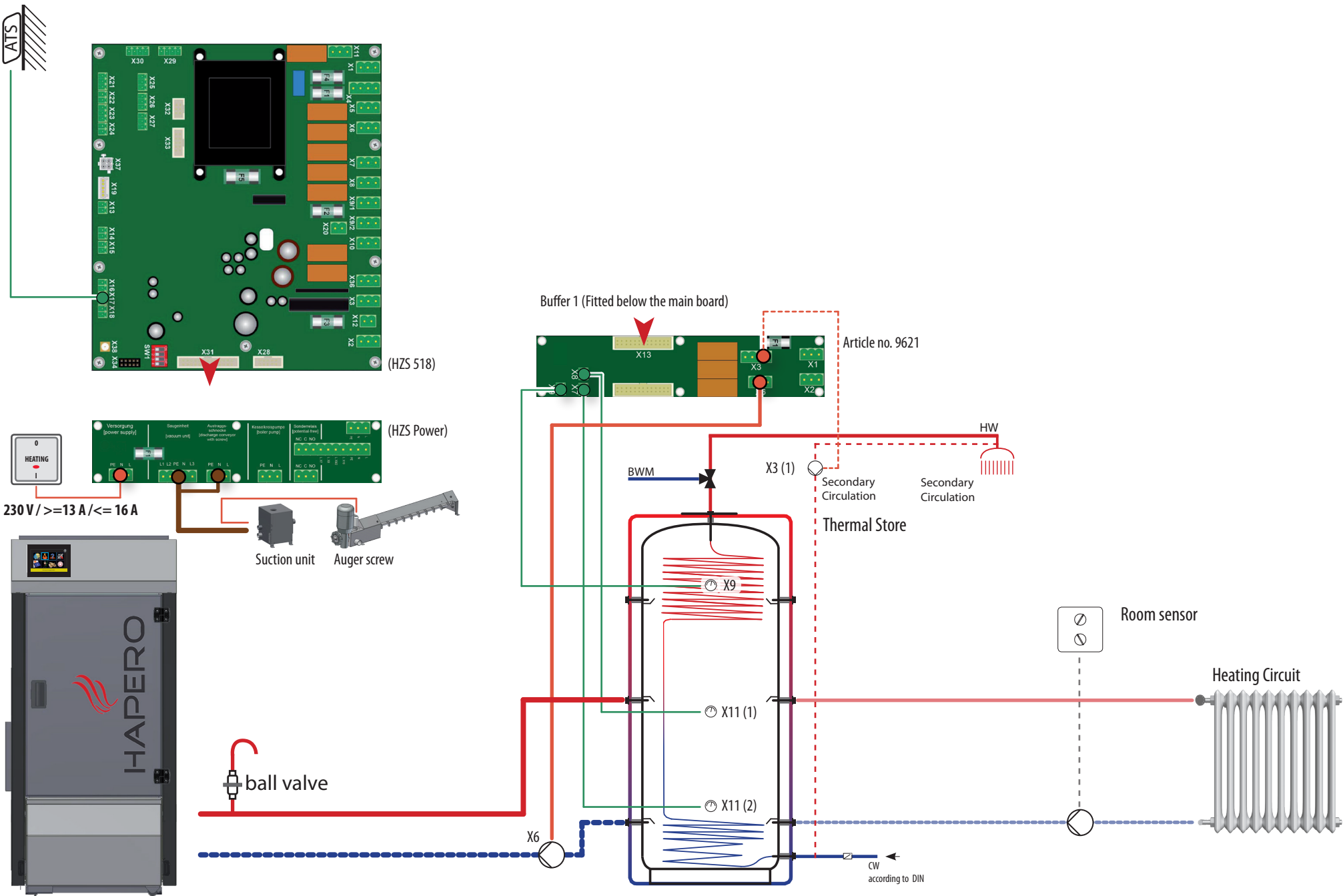


Phoenix RM 3,5 (temperature sensor)

Pin 1 KTY 81 / 110

Pin 2 earth

Hydraulic scheme: H.UK.TS.01



Description for Hydraulic scheme: H.UK.TS.02

01.00 Place of use

Assembly outside the house, with thermal store.

01.01 Note:

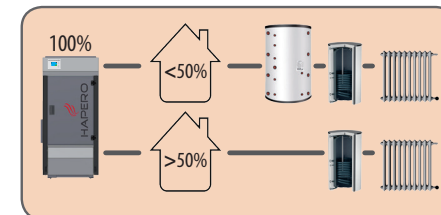
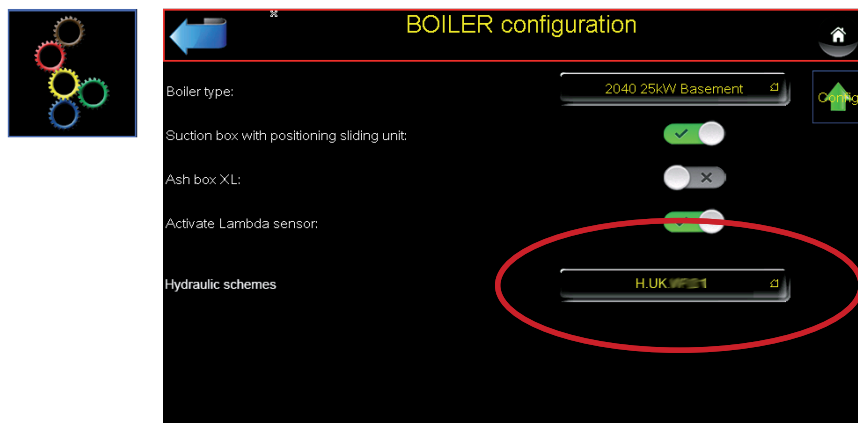
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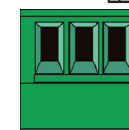
Input of the hydraulic scheme for an automatic boiler parametrisation.



07.02 Plug lay-out / legend



PE N L
Pin 1



Phoenix RM 5,08 (230 Volt)

230 Volt

- Pin 1 Phase (Pump X4)
- Pin 2 neutral conductor
- Pin 3 protective conductor



PE N L L
Pin 1



Phoenix RM 5,08 (230 Volt)

230 Volt

- Pin 1 not used
- Pin 2 Phase (SC X8)
- Pin 3 neutral conductor
- Pin 4 protective conductor



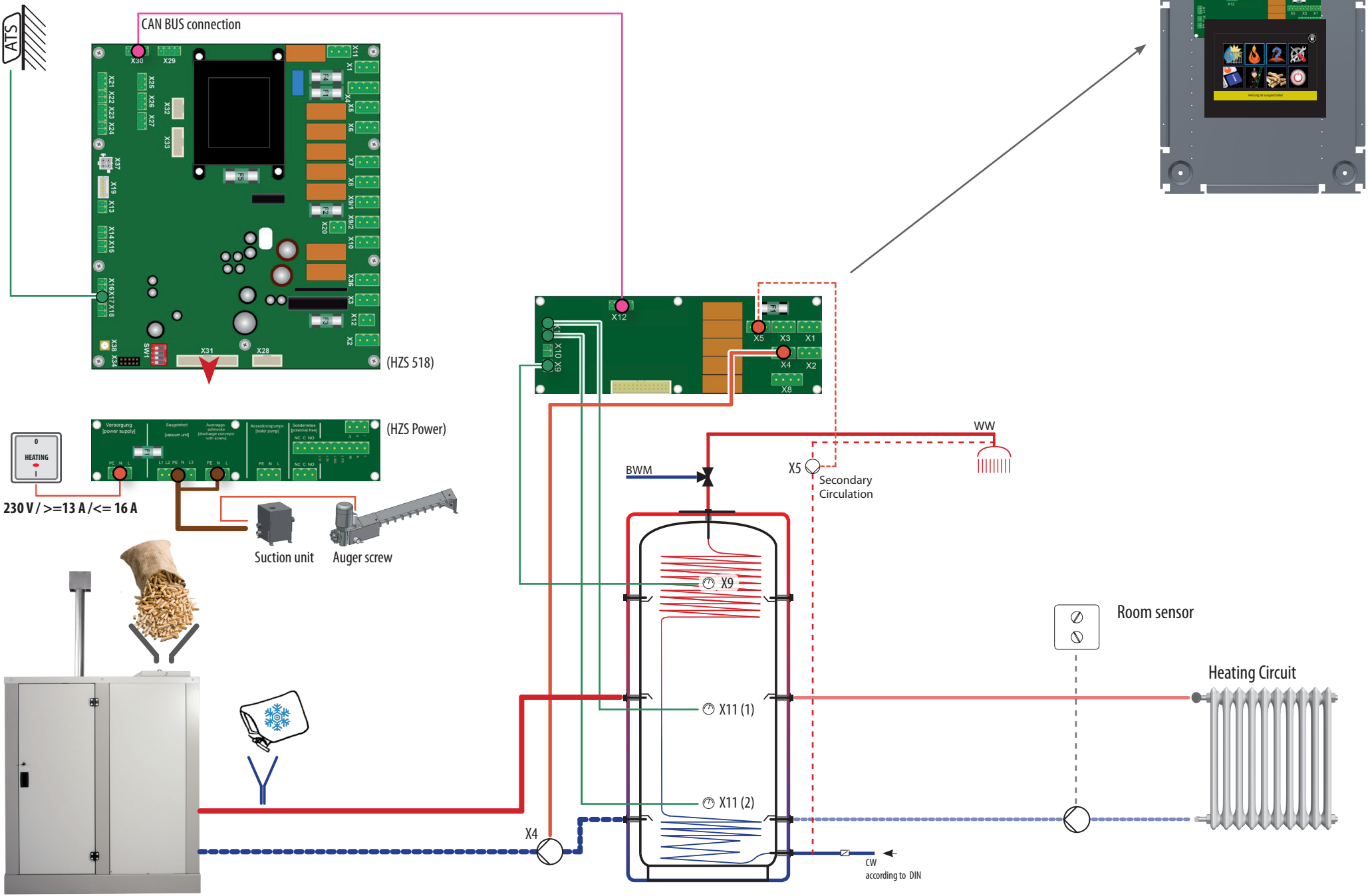
Pin 1 AI
AGND



Phoenix RM 3,5 (temperature sensor)

- Pin 1 KTY 81 / 110
- Pin 2 earth

Hydraulic scheme: H.UK.TS.02



Description for Hydraulic scheme: H.UK.WP.01

01.00 Place of use

Assembly in house, with buffer.

01.01 Note:

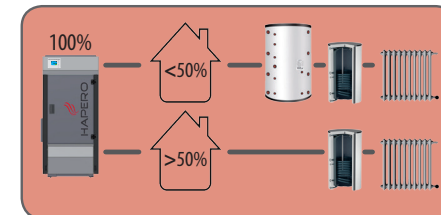
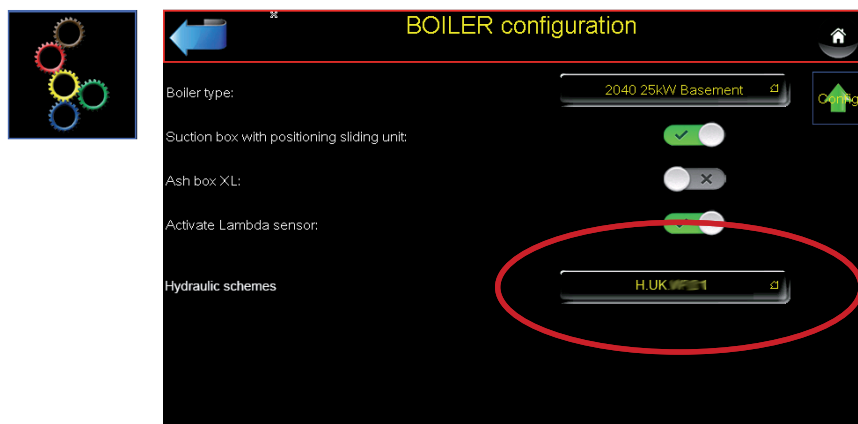
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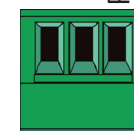
Input of the hydraulic scheme for an automatic boiler parametrisation.



07.02 Plug lay-out / legend



PE N L
Pin 1



Phoenix RM 5,08 (230 Volt)

230 Volt

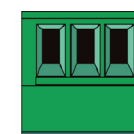
Pin 1 Phase (Pump X6 / X7)

Pin 2 neutral conductor

Pin 3 protective conductor



PE N L L
Pin 1



Phoenix RM 5,08 (230 Volt)

230 Volt

Pin 1 not used

Pin 2 Phase (Switching valve X3)

Pin 3 neutral conductor

Pin 4 protective conductor



Pin 1 AI
AGND

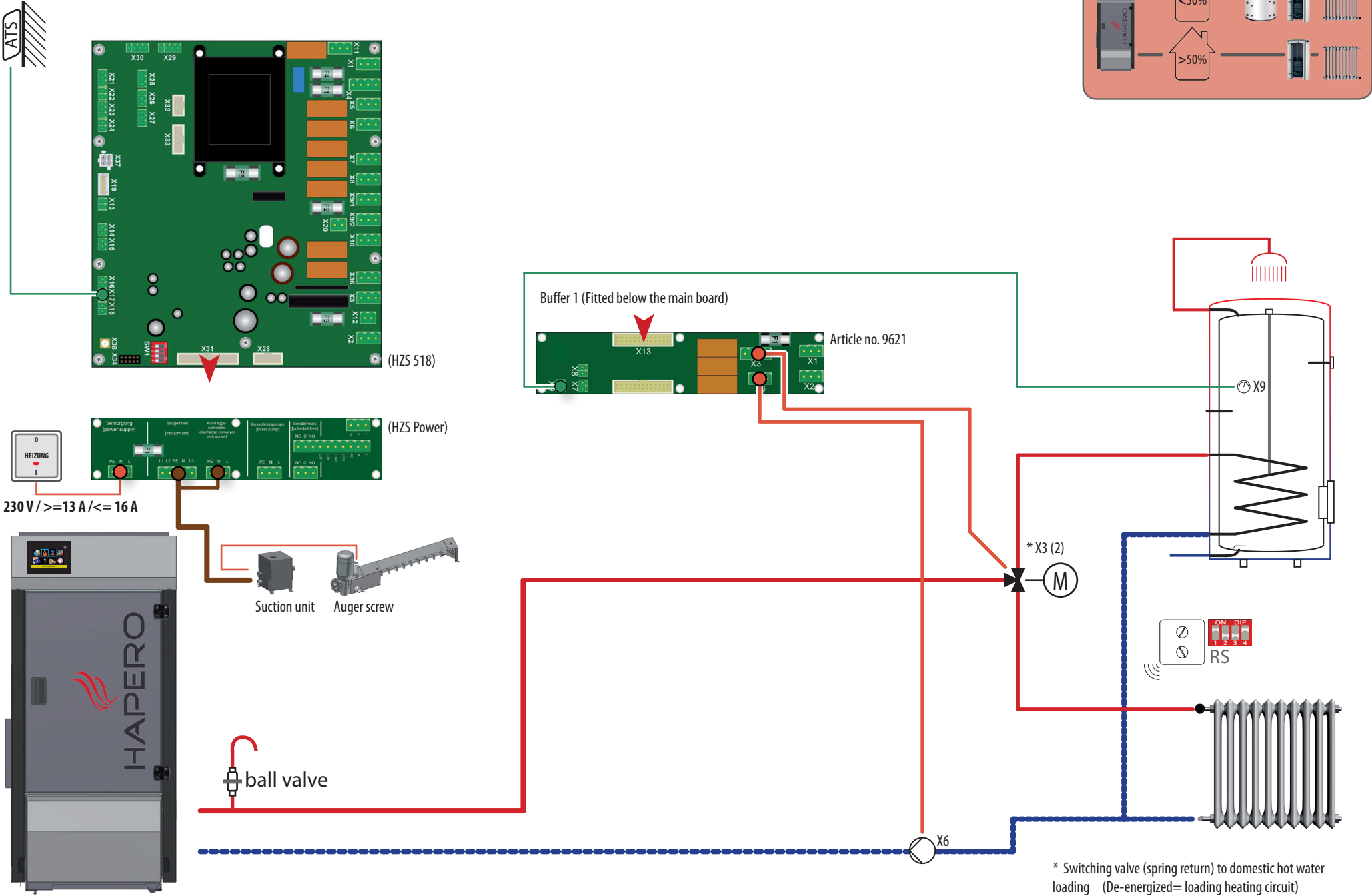


Phoenix RM 3,5 (temperature sensor)

Pin 1 KTY 81 / 110

Pin 2 earth

Hydraulic scheme: H.UK.WP.11



Description for Hydraulic scheme: H.UK.WP.02

01.00 Place of use

Assembly outside the house, with buffer.

01.01 Note:

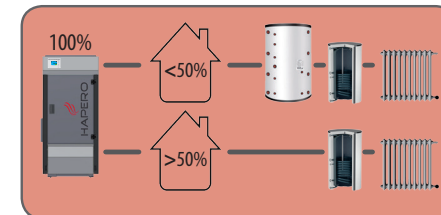
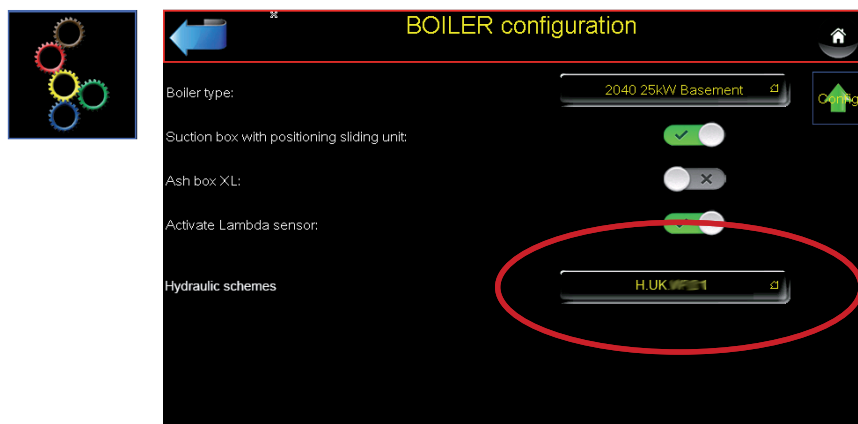
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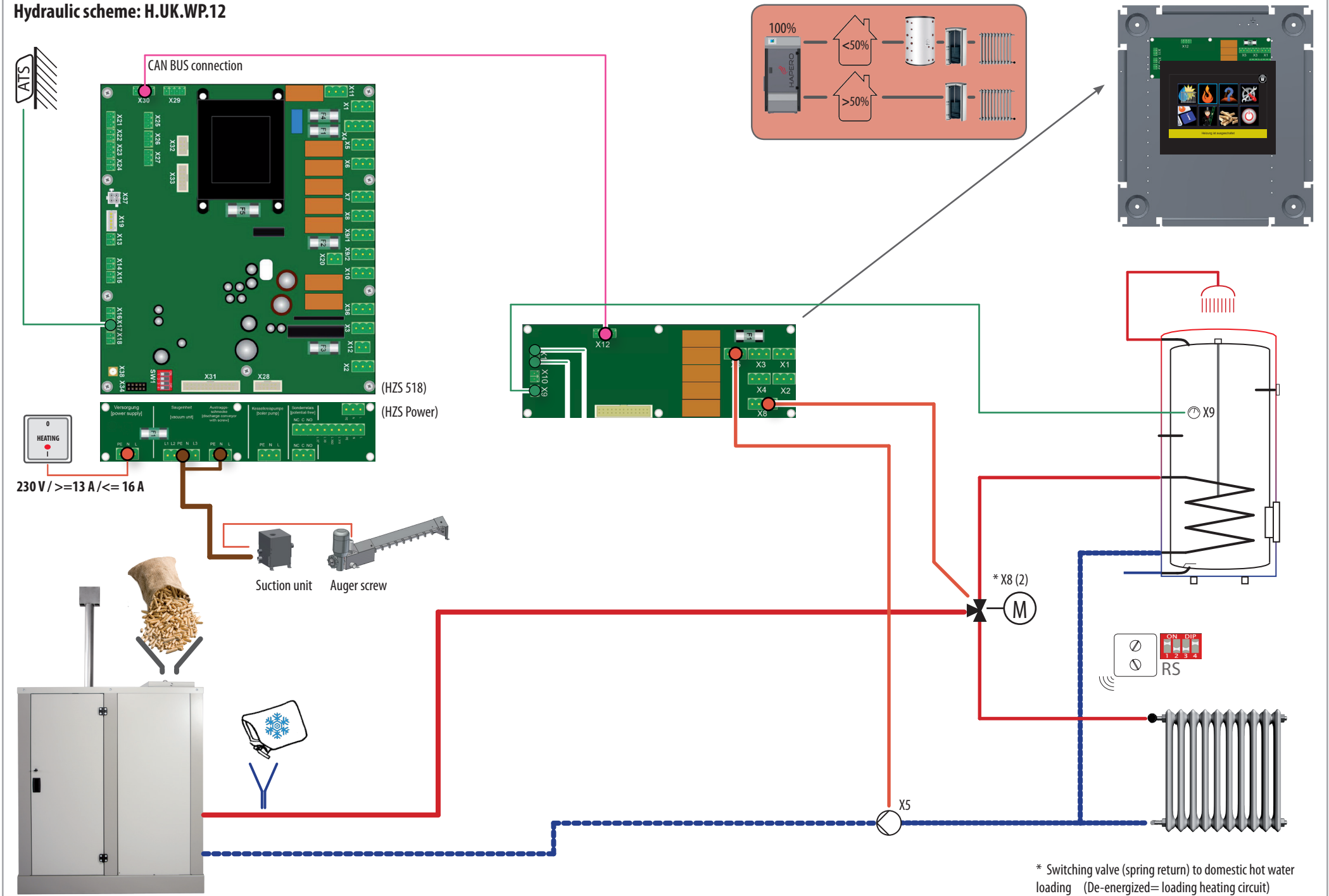
Input of the hydraulic scheme for an automatic boiler parametrisation.



07.02 Plug lay-out / legend

- | | |
|---|--|
|  | Phoenix RM 5,08 (230 Volt)
230 Volt
Pin 1 Phase (Pump X4 / X5)
Pin 2 neutral conductor
Pin 3 protective conductor |
|  | Phoenix RM 5,08 (230 Volt)
230 Volt
Pin 1 not used
Pin 2 Phase (Switching valve X8)
Pin 3 neutral conductor
Pin 4 protective conductor |
|  | Phoenix RM 3,5 (temperature sensor)
Pin 1 KTY 81 / 110
Pin 2 earth |

Hydraulic scheme: H.UK.WP.12



Description for Hydraulic scheme: H.UK.SP.01

01.00 Place of use

Assembly in house, with buffer.

01.01 Note:

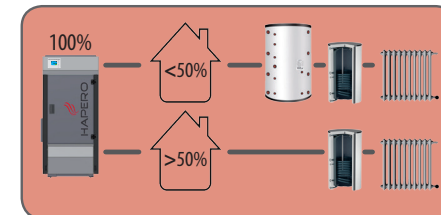
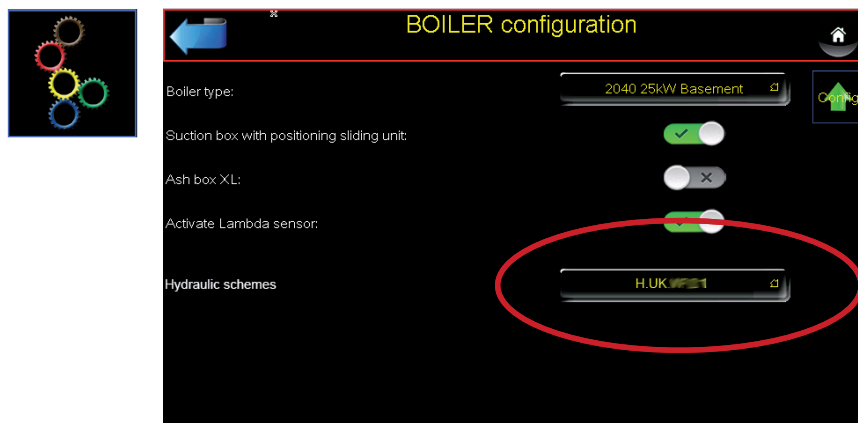
Hot water domestic cylinder and heating circuit can be operated at the same time.

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06. Carry out commissioning of the energy management.

Further details see below!

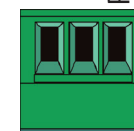
Input of the hydraulic scheme for an automatic boiler parametrisation.



07.02 Plug lay-out / legend



PE N L
Pin 1



Phoenix RM 5,08 (230 Volt)

230 Volt

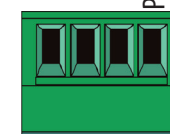
Pin 1 Phase (Pump X6 / X7)

Pin 2 neutral conductor

Pin 3 protective conductor



PE N L L
Pin 1



Phoenix RM 5,08 (230 Volt)

230 Volt

Pin 1 Phase (HC X3)

Pin 2 Phase (DHW X3)

Pin 3 neutral conductor

Pin 4 protective conductor



Pin 1 AI
AGND

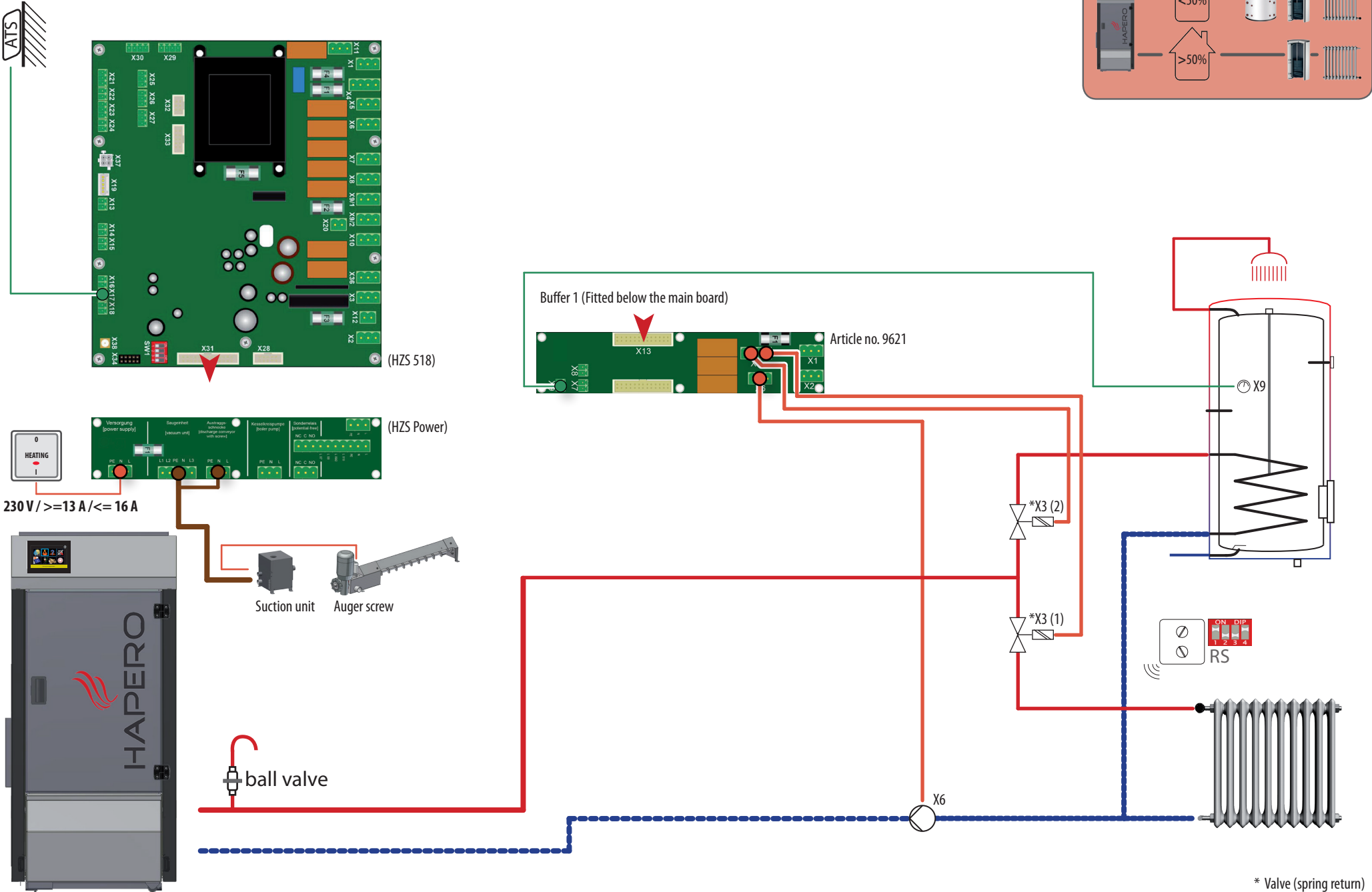


Phoenix RM 3,5 (temperature sensor)

Pin 1 KTY 81 / 110

Pin 2 earth

Hydraulic scheme: H.UK.SP.11



Description for Hydraulic scheme: H.UK.SP.02

01.00 Place of use

Assembly outside the house, with buffer.

01.01 Note:

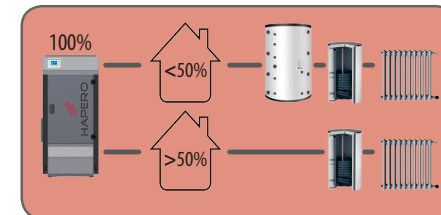
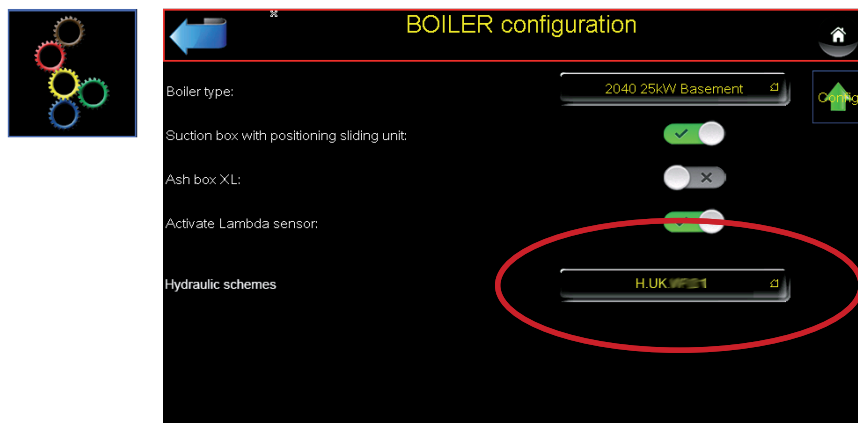
Hot water domestic cylinder and heating circuit can be operated at the same time. **The Biobox hydraulics has to be filled with anti-freeze!**

01.02 Commissioning

01. All national and local guidelines need to be followed.
02. Connect the hydraulics according to the hydraulic schemes and ventilate the boiler. **Further details please refer to our assembly instructions (1/3) Page 20**
03. Carry out the cabling according to the hydraulic schemes and the assembly instructions.
04. Connect to mains power. **Further details please refer to our assembly instructions (1/3) Page 22**
05. Carry out commissioning of the pellet boiler. **Further details please refer to our assembly instructions (1/3) Page 51**
06. Carry out commissioning of the energy management.

Further details see below!

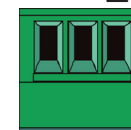
Input of the hydraulic scheme for an automatic boiler parametrisation.



07.02 Plug lay-out / legend



PE N L
Pin 1



Phoenix RM 5,08 (230 Volt)

230 Volt

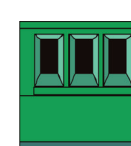
Pin 1 Phase (Pump X4 / X5)

Pin 2 neutral conductor

Pin 3 protective conductor



PE N L L
Pin 1



Phoenix RM 5,08 (230 Volt)

230 Volt

Pin 1 Phase (HC X8)

Pin 2 Phase (DHW X8)

Pin 3 neutral conductor

Pin 4 protective conductor



Pin 1 AI
AGND

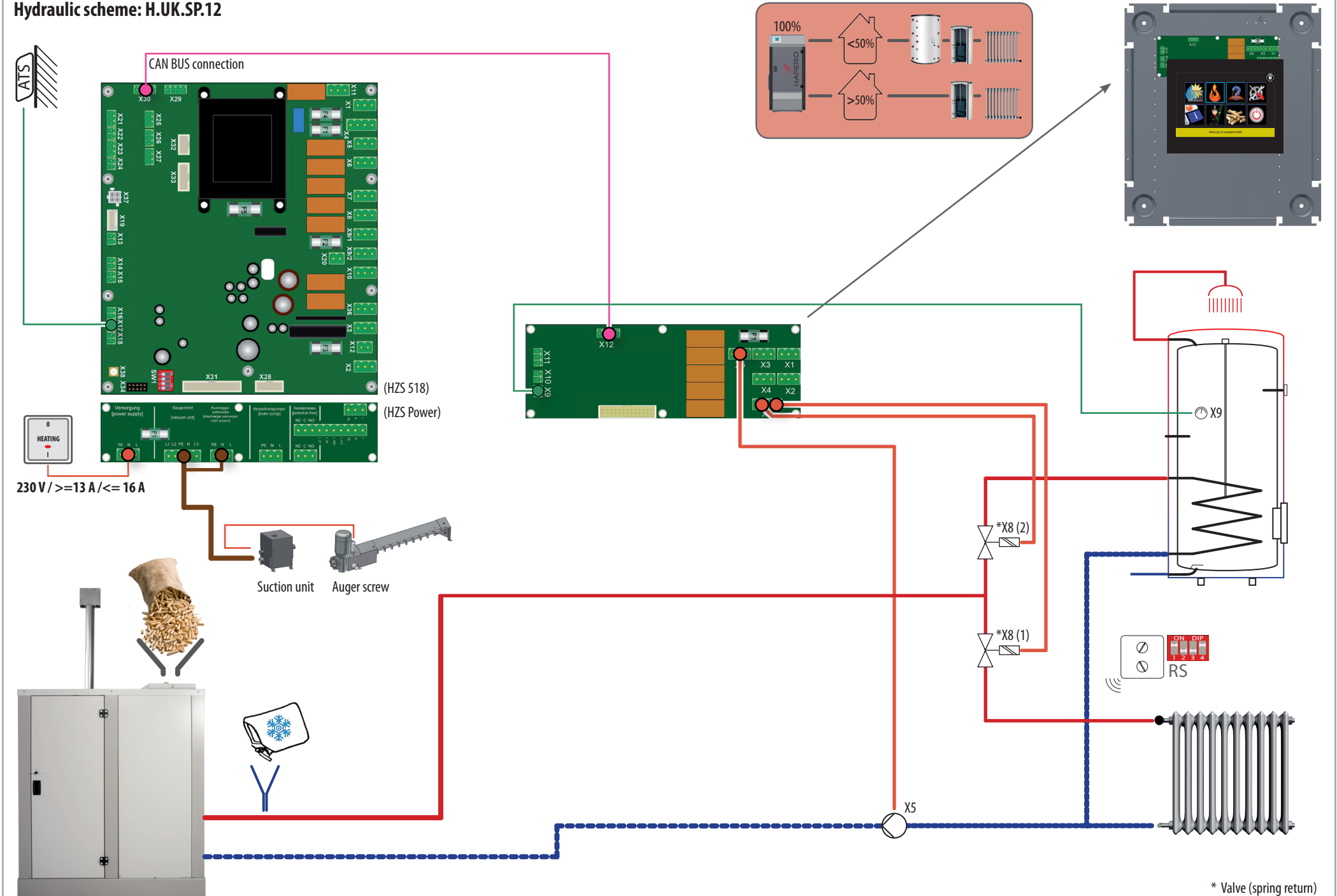


Phoenix RM 3,5 (temperature sensor)

Pin 1 KTY 81 / 110

Pin 2 earth

Hydraulic scheme: H.UK.SP.12



PELLETSHEIZUNGEN



HAPER0 Pellets-Wohnraumofen 7kW
Art. Nr. 1010.00



HAPER0 Pellets-Wohnraumkessel 15kW
Art. Nr. 2030.02



HAPER0 Pellets-Wohnraumkessel 15kW
Betonoptik, Art. Nr. 2030.01



HAPER0 Pelletskessel 15kW
Art. Nr. 2020.01



HAPER0 Pelletskessel 15kW XL
Art. Nr. 2020.02



HAPER0 outdoor Biobox 15kW
Art. Nr. 2035.00



HAPER0 Pelletskessel 25kW & 35kW
Art. Nr. 2040.01 & 2045.01



HAPER0 Kaskade 70kW
Art. Nr. 2049.01



HAPER0 Kaskade 105kW
Art. Nr. 2050.01

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