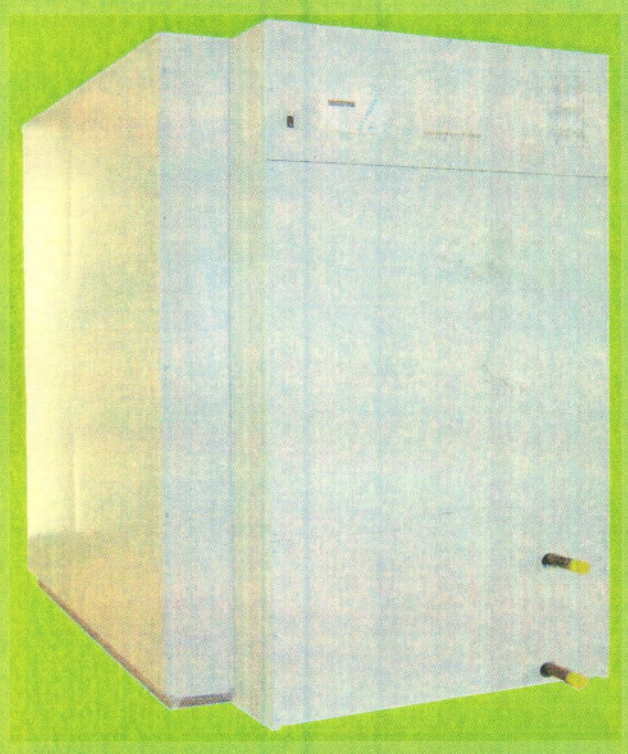
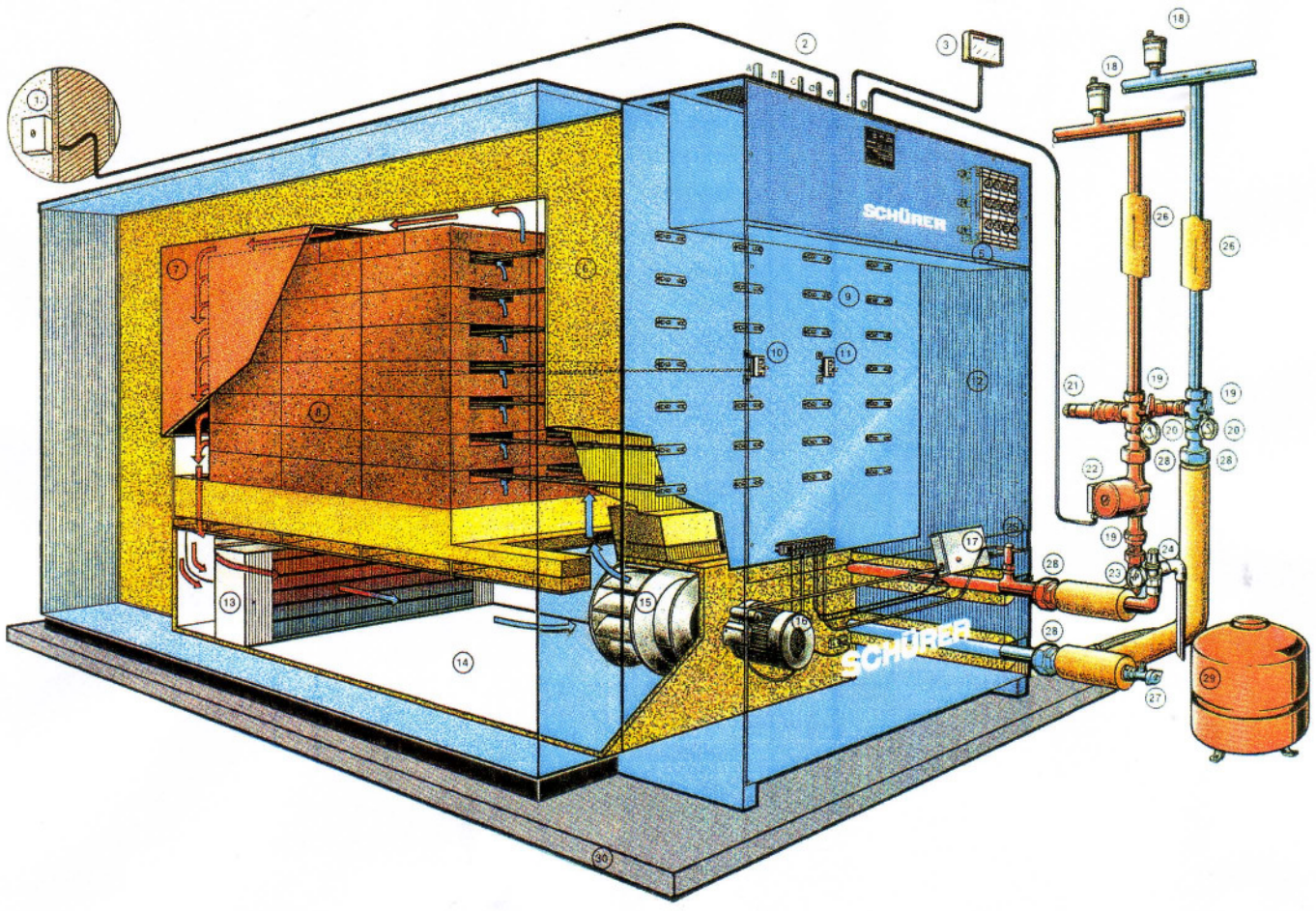
SCHÜRER-BENZ
HEIZSYSTEME GmbH
SYSTEMHAUS FÜR ELEKTROWÄRME

Electric Storage Central Heating system



User-friendly Microprocessor Control

The clean, protecting the enviroment electric heating sytem for all central heating systems



1 Outside temperature sensor
2 Cable entry for electrical lines
3 remote control unit (optional)
5 load circuit fuses
6 high-tempertaure thermal insulation
7 housing for heat storage
8 magnesite brick heat storage
9 electric heating elements
10 safety high-limit thermostat for heat storage
11 temperature sensor for heat storage
12 housing
13 air/water heat exchanger
14 air duct system
15 fan
16 fan motor
17 temperature control thermostat and safety high temperature controller
18 permanent vent*
19 gate valve*
20 thermometer*
21 differential pressure relay valve*
22 pump of heating system*
23 manometer*
24 relief valve*
26 thermal insulation for pipes*
27 filling and drain valve*
28 connection fittings*
29 expansion tank*
30 concrete base*

* These positions are not included in our delivery

High advanced technology

The most vital parts of the heating unit are the heat storage, the air circulation system, the water circuit and the microprocessor controler, which coordinates all the other components for benefit and econimical perfromance.

Depending on the outside temperatures the electrical heating elements heat the heat storage to a maximum of 650°C (full charge).

a speed regulated fan circulates air through the air duct system and extrades heat from the magnesite bricks.

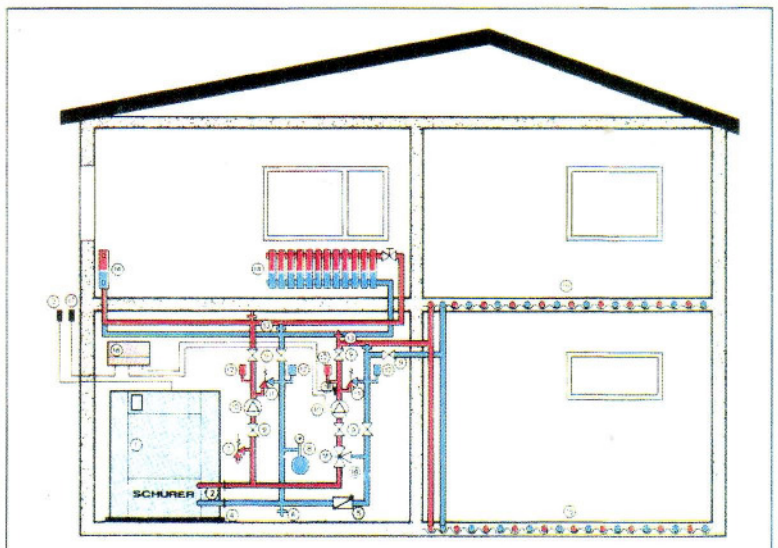
The heated air flows through the air/ water exchanger and transfers the heat to the water of the heating system.

Quality till the last detail

The parts of the housing are galvanised and outside coated metal sheet.
The high tempertaure thermal insulation is layed in 5 labyrinth junction layers and also intense side elements with a toatl thickness of 250 mm keep the thermal losses on a minimum.
Intense magnesite bricks mean a maximum stroage capacity on the smallest space with high thermal conductivity build the heat storage.
An almost airtight galvanised housing encloses heat reflecting of the storage.
Electric heating elements out of chrome-nickel steel deliver quick and also uniform heat.
Fan motor and fan are wear-resistant directly connected.
The slowly running special fan motor with silumin rotor guaranties quietness of running and smallest power loss.
The copper heat exchanger, calculated with a large surface is powerful and resisting of corrosion.

For all heating systems

Floor heating, convector or radiator heating system, even an air condition system can be supplied from the central storage system without any problems.
Of course a low temperature heating is controlled as well as a convention heating system.
Compared with water storage systems is the advantage to deliver, if necessary, a temperature of 90°C.



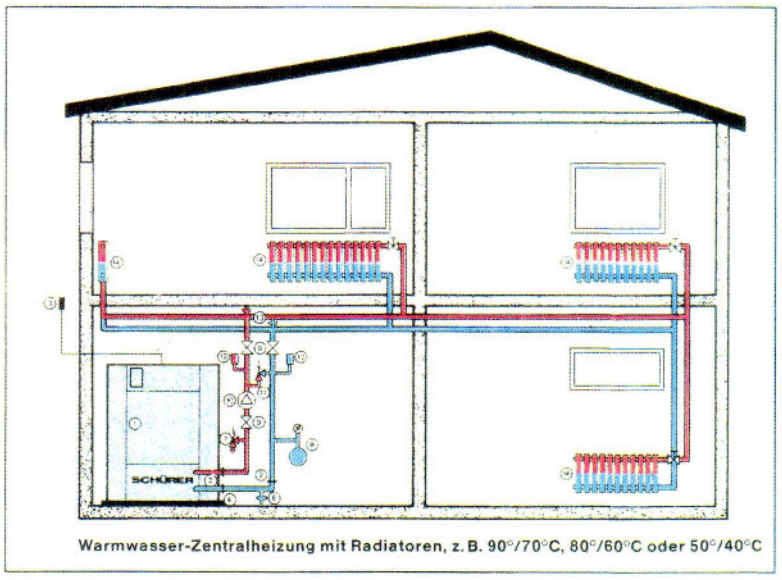
Warmwasser-Zentralheizung mit 2 verschiedenen Vorlauftemperaturen

Gaining space

The low required floor space and also the independence of the heating system make this unit very interessting for industrial use and also for substitute of old oil, coal or gas units.

Where today your old heating unit is standing there could be your new electric heating system, you only have to cut the pipes of the old system and connect them with the new system.

Some bars oir hobby rooms can be built on the free space.



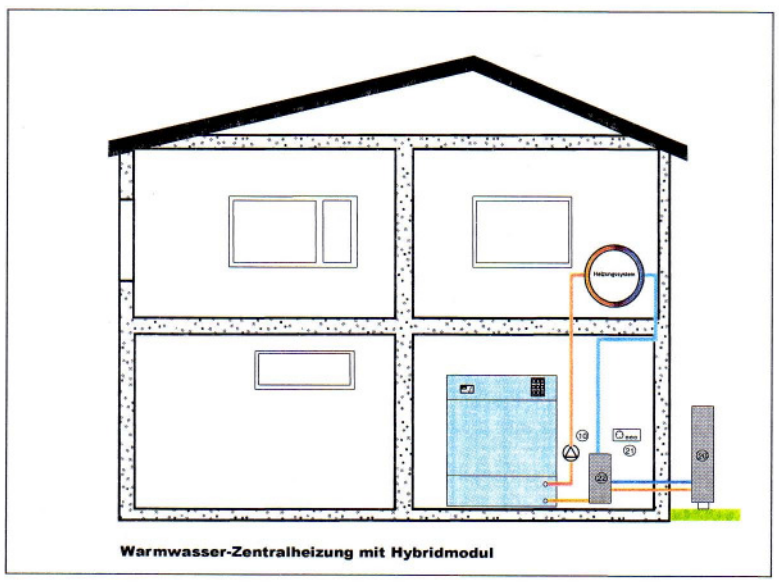
Warmwasser-Zentralheizung mit Radiatoren, z. B. 90°/70°C, 80°/60°C oder 50°/40°C

Extension with a heat pumpe

Through the installation of our hybrdi module the heat demand of the building is in the transition period almost completely covered by the module. The storage system assists supports the module at low out side temperatures so that you have the always the flow temperature calculated from the processor.

Advantages of the electric heating

* Independent of fossil fuels
* no storage space for supplies
* no chemney
* no maintenance
* working with renewable energy sources possible


Warmwasser-Zentralheizung mit Hybridmodul

Information for the Specialist

SCHÜRER-BENZ Central Storage System

Typ	WB 12.15	WB 14.18	WB 18.20	WB 20.26	WB 24.30	WB 30.40	WB 40.40	WB 50.60	WB 65.75
Connecting power (calculated according to the requirements)	18/21/24 27/30	9/12/15 18/21	18/21/24 27/30	24/27/30 33/36	27/30/33 36/39/42 45	30/33/36 39/42/45 48/51/54	42/45/48 51/54/57 60/63/66 69/72	48/51/54 57/60/63 66/69/72 75/78/81 84/87/90	60/63/66 69/72/75 78/81/84 87/90 93/96/99 102/105 108/111 114/117 120
Connecting voltage V	400-3/N								
Maximum storage capacity *1 kWh	154	176	233	277	308	384	484	617	819
Usable storage capacity Operat temp. max. 50°C app. .kWh Operat.temp. max. 90°C app . kWh	136 123	157 140	207 185	246 220	274 245	341 305	428 387	548 409	728 650
Maximum heating power app. kW	20			26	40			60	75
Permanent heating power	depending of connting power, charging time and time of heating								
Max. operating temperature °C	90								
Min. water flow *2 l/h	900			1100	1600			2500	3250
Prssure head of external heating pump *3 mWs	3,8			4,2	4,8			5,5	6,0
Connection of heat exchanger	R 1"							R 1 1/2"	
Pressure drop *4 approx. mWs	0,7					0,9			1,2
Dimensions width approx. mm depth approx. mm hight approx. mm	900 1500 1800	1050 1750 1900	1250 1750 1800	1450 1750 1700	1450 1750 1800	1450 1750 2000	1450 2000 2000	1900 1750 2100	1900 2000 2100
Toatl weight	1150	1400	1750	1950	2100	2500	3000	4000	5000

*1 This figure **may not** be usable at the required storage capacity used a reference.
*2 The duration of heating depends on connecting power, charging time and heating time.
*3 In order to ensure, when using electonically controlled circulation pumps, the minimum water flow rate we recommand to install at an appropriate point of the system over flow valve.
*4 Recommandation out of experience according building installation (minimum values).

Technical changes reserved.

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