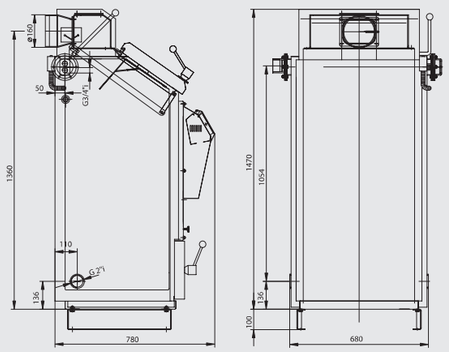
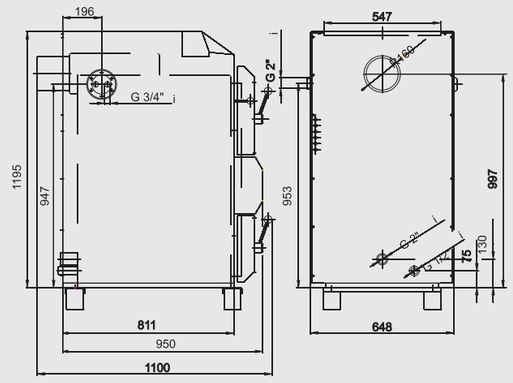
Technical specifications		GN20	GN20E	G25D /GN25D	G25D LS /GN25D LS	G45GV /GN45	G45 LS /GN45 LS
Rating	kW	20	20 (max. 22)	25	25	45	41
Efficiency	%	up to 90	up to 90	up to 90	up to 91	up to 91	up to 91
Fuel consumption at rated power	cca kg/h	5,3	5,3	7,5	7,2	13,5	11,3
Maximal constructional overpressure	kPa	300	300	300	300	300	300
Volume of water charge	l	30	30	70	70	92	92
Volume of feeding space	l	110	110	125	125	180	180
Maximal electric input	W	-	50	70	70	70	70
Average electric input	W	-	30	35	50	40	50
Voltage	V/Hz	230/50	230/50	230/50	230/50	230/50	230/50
Minimal temperature of returning water in operation	°C	60	60	60	60	60	60
Total weight	kg	390	390	445/430	450/435	630/570	630/570
Maximal noise level	dB	-	54	54	54	54	54
Rated operating chimney draught	Pa	15 - 35	15 - 35	15 - 35	15 - 35	15 - 35	15 - 35

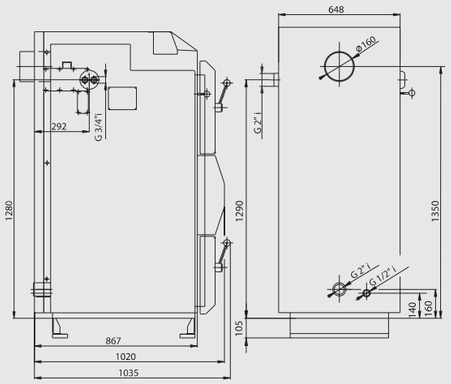
GN20E (GN20)



GN25D/G25D/GN25D LS/G25D LS



GN45/G45GV/GN45 LS/G45 LS



Prolonged guarantee for boiler bodies
Up to **5 years guarantee** for boiler body by several models.

All products made by VERNER company are certified by EN 303-5:2000, EN 50165:1999 and EN 60335-1:1997 standards.

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Commercial representation

Typographical errors, technical or constructive changes are stipulated.

VERNER®
EXPERT ON HEAT

Hot-water boilers intended for burning of wood

THE VERNER COMPANY PRODUCES AND SUPPLIES


fireplace stoves


interior boilers


automatic boilers


wood boilers


biomass boiler plants

VERNER®
EXPERT ON HEAT

ADVANTAGES OF VERNER BOILERS

Boiler regulation is ensured by microchip. Regulation enables **direct connecting of housing thermoregulator** even two circulating pumps. The effectivity of burning is up to 91%. Saving pressure ventilator. **Possibility of controlled charging accumulation storage reservoirs** and completion by pellet burner with automatic ashes removal system. Completion by a **chimney sensor**. Long operating life and low operating costs.

ANTICORROSIVE FEATURE

By several types of 20 – 45 kW boiler line the protection against corrosion is solved by thickening of weldment walls.
Inner surface of boilers is made of high-quality steel or **stainless plate**.

GN20E, GN20

Water-cooled boiler body with installed replaceable **stainless** filling chamber makes the base of GN20 and GN20E boilers. **The warm-water exchanger is accessible** after opening feeding door so its cleaning is significantly simpler. The feeding door has **double sealing** and the air in space between two sealing layers is ventilated into the chimney.
The heat rate of GN20 boiler is controlled by thermomechanic regulator HONEYWELL without the need of electrical power. The heat rate of GN20E boiler is controlled by electronic regulator, which can be connected to a housing thermoregulator and circulation pump. The boilers are especially suited for connection with accumulation storage reservoirs.
The electronic regulation of controlled burning and a **keep-in-glow function** is the big advantage. The regulation switches the ventilator off even before complete fuel burn-out so glowing layer stays in the boiler and there is no need to make fire every day.

NEW

GN25D, G25D, G45GV, GN45

This line of boilers includes classic pyroliytic boilers designed regarding suppression of rust-through danger, which goes together with this type of burning.
The boilers are made of boiler-iron or **stainless plate**.
The regulation of boilers is ensured by electronic regulator.
The regulator scans output water temperature and flue gas temperature (eventually temperature in a room). This ensures high comfort of attendance.
The construction of filling chamber is characterized by high efficiency of space by using half meter long logs.
Boilers can be equipped by hanging turbulators intended for increasing of effectivity. Their usage is suitable by burning high-quality dry fuel.

It is possible to install **pellet burner HP** additionally to this product line in order to get the possibility to combination - burning **logs** and automatic burning of **pellets**.

NEW

GN25D LS, G25D LS, G45 LS, GN45 LS

By newest types of boilers G25D LS, GN25D LS, G45 LS and GN45 LS the burning process is controlled by **lambda probe**. Their operation is regulated on the basis of output water temperature, flue gas temperature and quantity of oxygen in flue gas. This is the way how to **save the fuel for heating season expressively**. Compared with VERNER boilers without lambda probe the **yearlong saving of fuel achieves up to 25%**. High-level saving comes up namely by making fire, stand off mode, etc. The operation comfort is ensured among others by expressive **prolongation of intervals between several fire feedings**.
The GN25D LS and GN45 LS boilers have inner walls made of **stainless steel**.

The boilers are equipped with pressure ventilator for burning air supply. By request it is possible to furnish the boilers by drain ventilator for improvement comfort by making and feeding fire. This solution is ideal regarding to operational safety and electricity saving.

Air pollutions by test in TÜV:
CO = 191 mg/m^3 of flue gas (O_2 = 13%)
Dust = 15 mg/m^3 of flue gas (O_2 = 13%)

GN20

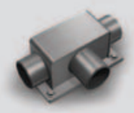
GN20E

**G25D, GN25D
G25D LS, GN25D LS**

**G45GV, GN45
G45 LS, GN45 LS**

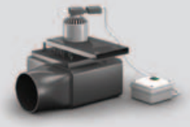
GN25D + HP

By completing the boiler with **pellet burner HP** it is possible to combine burning of logs and automatic operation by burning pellets.



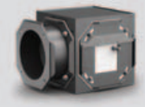
Self-acting mixing armature VERNER

is intended for the protection of boilers against low-temperature corrosion. It ensures the temperature of the returning water running into boiler at minimally 60 °C. The boiler water circuit can work by gravity system so there is no need to install the circulating pump into the circuit.



Ventilator VS5

is used for increasing of chimney draught by solid fuel heaters. It is usually placed on the smoke flue between the flue gas eduction on the boiler and the chimney inlet. It reduces fuming during fire feeding, makes ignition easier and faster, increases the rating by heaters dependent on chimney draught and reduces the dustiness during ashes removal and cleaning the boiler.



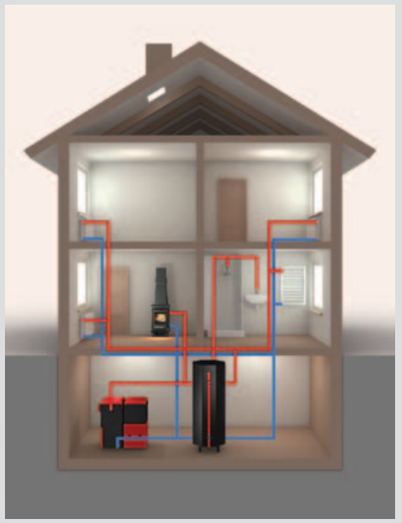
Chimney draught regulator

ensures steady draught behind the boiler and creates optimal conditions for burning on the furnace. It also ensures the ventilation of the chimney flue so it reduces danger of condensation. There is an opportunity to achieve 3 – 9% savings of fuel by installing this equipment. This product is available in case or socket alternative.

Electronic boiler regulator

Controls the burning process and boiler rating. It controls multistep rotation speed of the boiler ventilator and two circulating pumps for the primary and secondary circuit. On the regulator there is a display for displaying operation states, buttons for settings of required values and switches for manual operation. The automatic keep-in-glow function ensures, that the ventilator swithes off before complete fuel burn-out in the chamber. It is possible to install AKU-pack to this regulation. This pack controls the boiler rating during charging the accumulation storage reservoirs. The functions of regulator, together with the housing thermoregulator or eventually with a clock timer, controls operation of the boiler, scans the output water temperature and flue gas temperature.

Accumulation storage reservoir



The scheme of connecting
hot-water boiler VERNER into heating system of family house in combination with accumulation storage reservoir which includes built-in boiler for domestic hot water warming and with an interior boiler.