

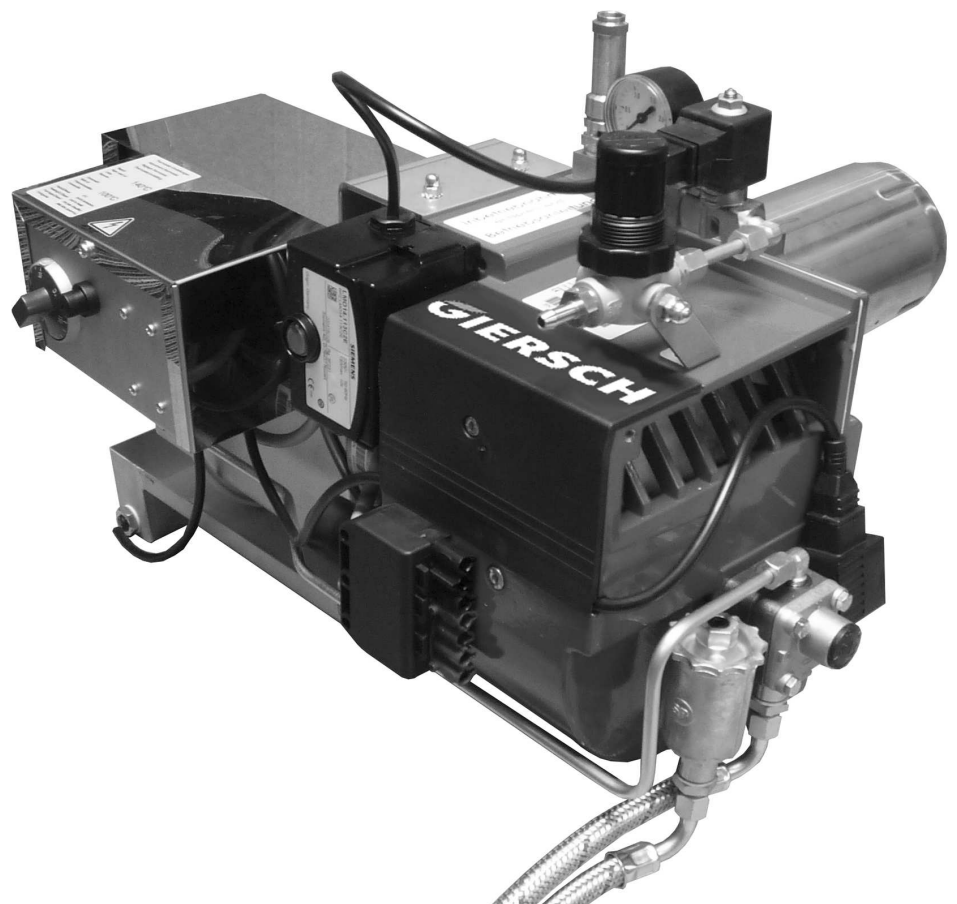
Technical Information • Data Sheet

Universal Oil Burner GU20

Oil

Issued April 2024

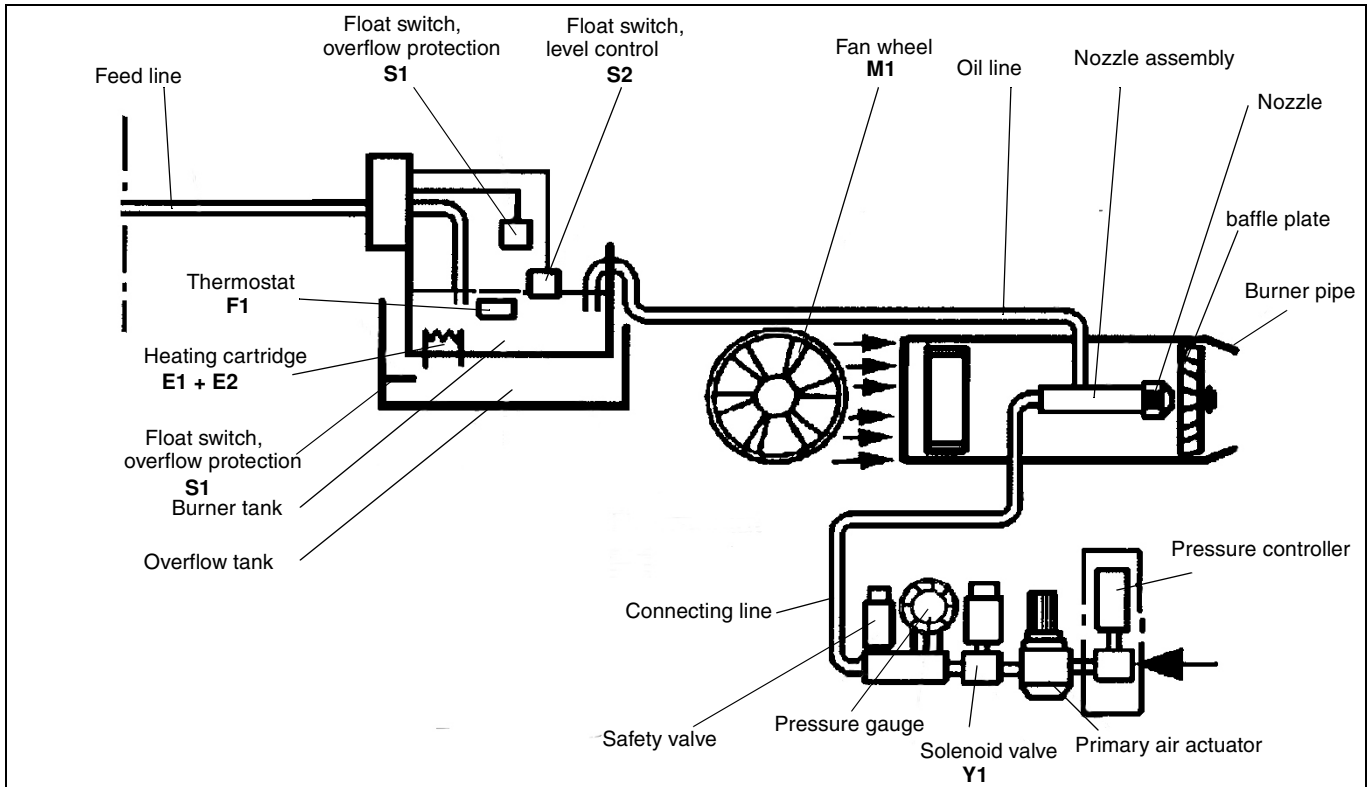
In the interests of continuous product improvement, technical specifications are subject to change without prior notice.



Functional description

The fuel is pumped out of the supply tank and into the burner tank. A float switch controls the level inside the burner tank. Another float switch (overflow protection) serves as a limiter, which switches to fault if the tank is overfilled. A thermostat regulates the oil temperature in the burner tank and starts the burner when the set temperature is reached. Thereafter, the automatic oil burner control system controls and monitors the operation of the burner. Fuel is aspirated and finely atomised by a special nozzle using the compressed air flowing through the burner, which is used as primary air for the combustion process. The burner blower supplies the secondary air which is added to the atomised spray at the baffle plate. This ensures full combustion and operational reliability. At the oil temperature in excess of 150° C, the safety switch automatically de-energises the burner.

Air/oil flow schematic



Technical specification

	Burner type	
Technical specifications		GU20
Output, fuel oil	kW	33 - 52
Oil throughput, fuel oil	kg/h	2.8 - 4.4
Output, rapeseed oil	kW	27 - 40
Oil throughput, rapeseed oil	kg/h	2.7 - 4.0
Compressor output	m ³ /h	4
Primary air connection	bar	0.4-0.8
Motor output	W	90
Heating element	W	1100
Voltage		1/N/PE ~50 Hz 220 - 240 V
Weight	kg	20
Emission class fuel oil		2
Emission class rapeseed oil		1
NO _x limit fuel oil		< 185 mg/kWh
NO _x limit rapeseed oil		< 250 mg/kWh

Adjustment table



The values given in the table are only setting values for start-up. The system settings required in each case must be redefined if values such as boiler output, calorific value and altitude deviate. **Adjustment is required in any case (due to the system design).**

- For initial start-up, fill the burner tank up to the oil mark by hand.



Caution !

If the oil level is too high, the float switch will switch off the burner.
If the oil level is too low, the heating cartridge will become encrusted or damaged.

Adjustment table for rapeseed oil

Burner type	GU20				
Output in kW	30	35	37	40	42
Oil throughput in kg/h	2.8	3.3	3.5	3.8	3.9
Primary air in bar	0.3	0.4	0.5	0.6	0.7
Secondary air (scale on air damper)	7.0	11.0	12.5	14.0	14.5
Thermostat setting in °C	140				

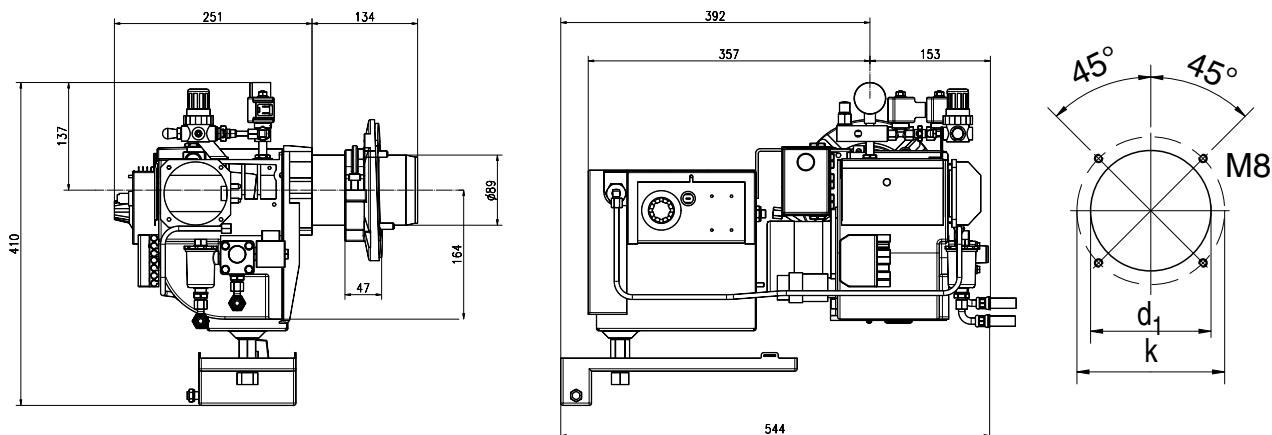
Adjustment table for fuel oil

Burner type	GU20				
Output in kW	33	38	43	47	50
Oil throughput in kg/h	2.8	3.2	3.6	3.9	4.2
Primary air in bar	0.2	0.3	0.4	0.5	0.65
Secondary air (scale on air damper)	8.0	12.0	16.0	19.0	23.0
Thermostat setting in °C	0° do not heat				

The thermostat on the burner tank must be set to between "min." for heating oil EL and 140°C for rapeseed oil, depending on the viscosity of the oil.

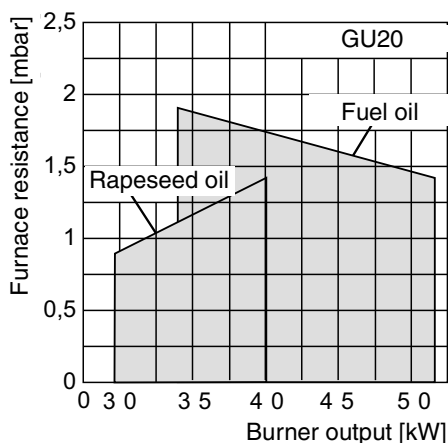
Burner dimensions / boiler connection dimensions

ZBZ_2-432



Burner type	d_1	k
GU20	90	125 - 160

Working range



All information in this technical documentation as well as the drawings, photos and technical descriptions placed at your disposal remain our property and may not be duplicated without our written permission given in advance.
Subject to change.

GIERSCH

Giersch GmbH • Brenner und Heizsysteme
D-58675 Hemer • Adjutantenkamp 18 • Telephone 02372/965-0 • Telefax 02372/61240
Email: info@giersch.de • Internet: <http://www.giersch.de>

