

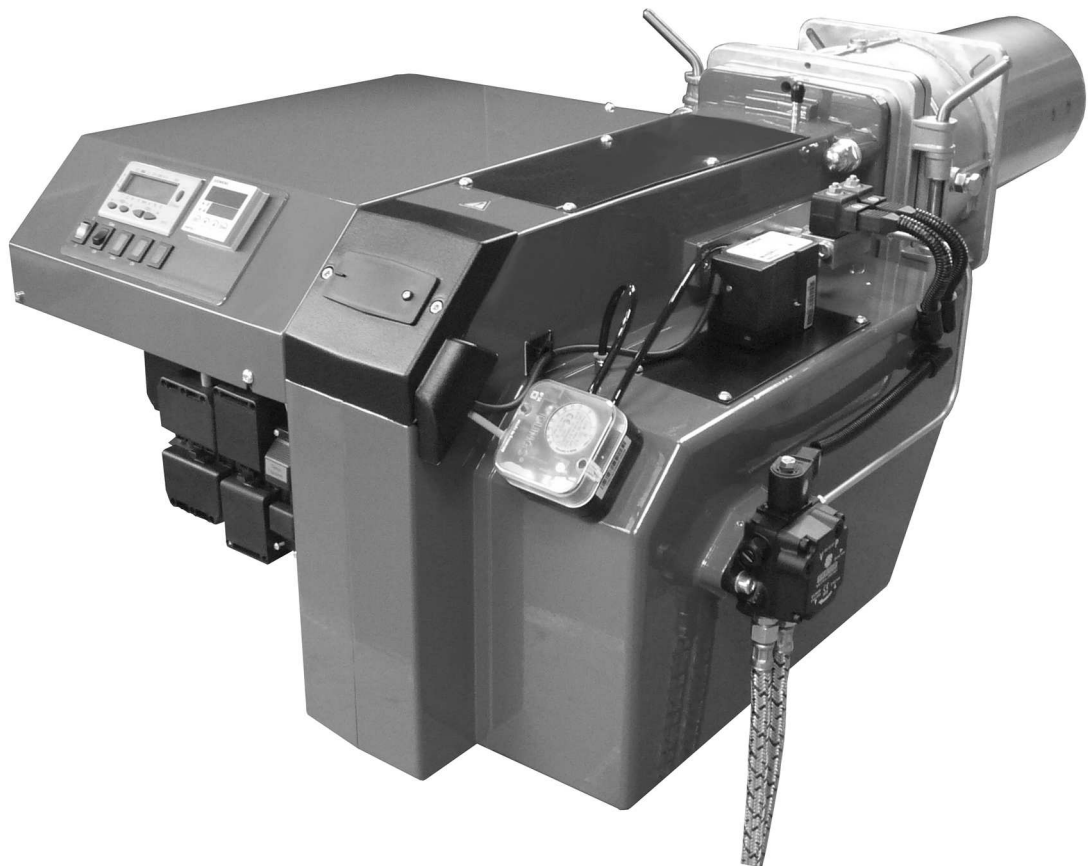
## Technical Information • Data Sheet

# MK2

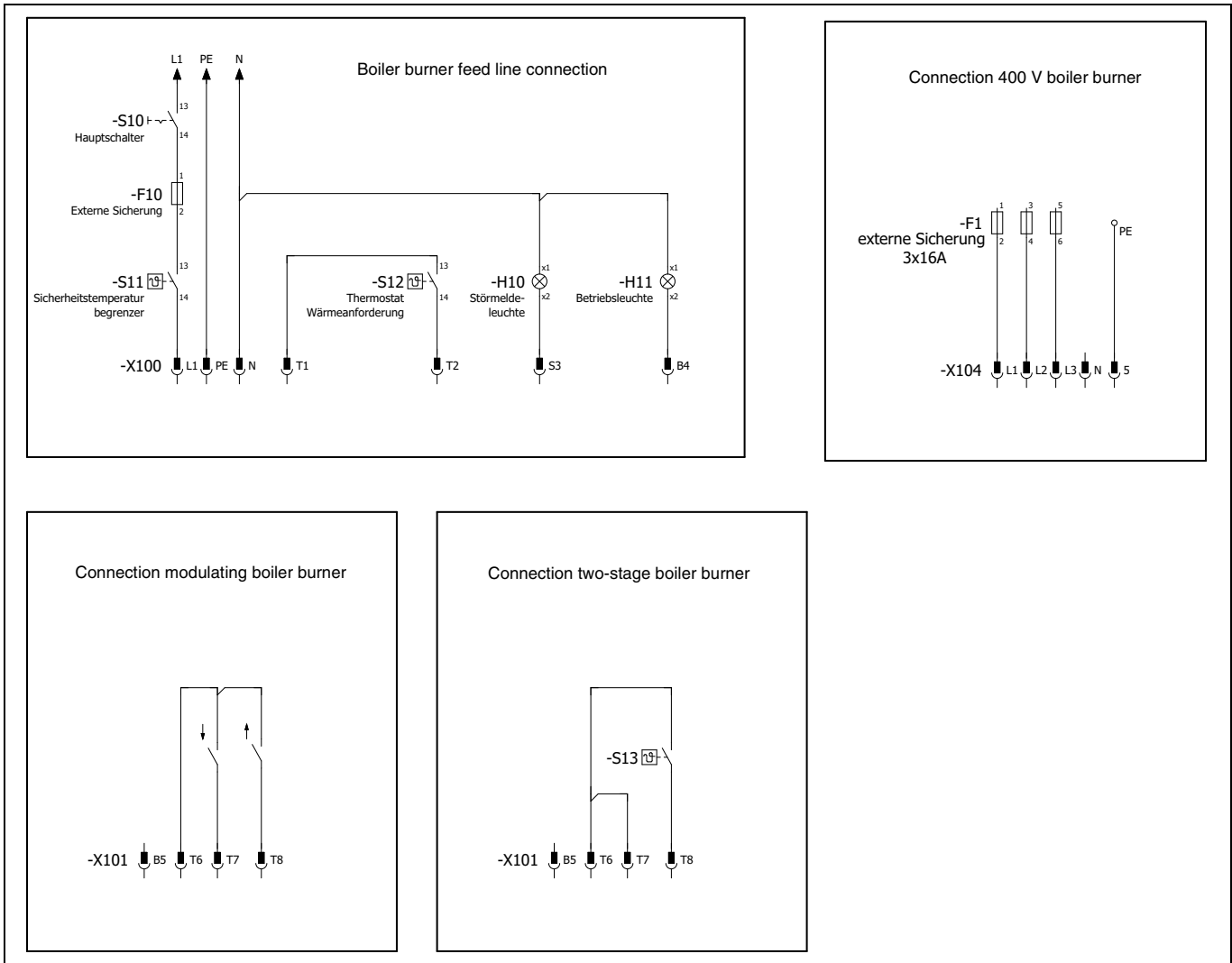
Issued April 2024

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

Oil / gas

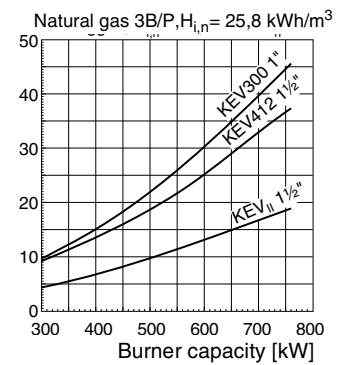
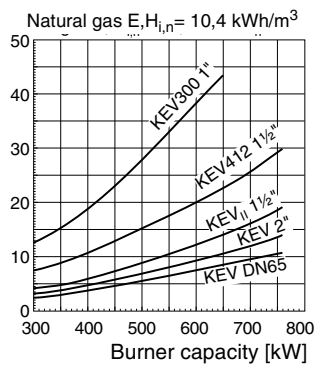
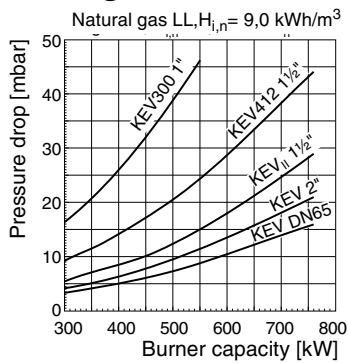


# Electrical connection

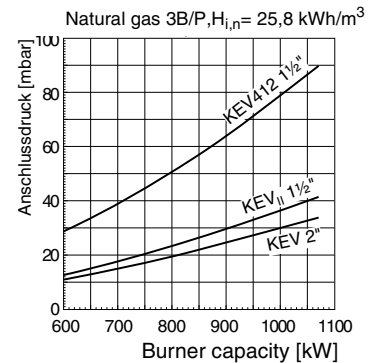
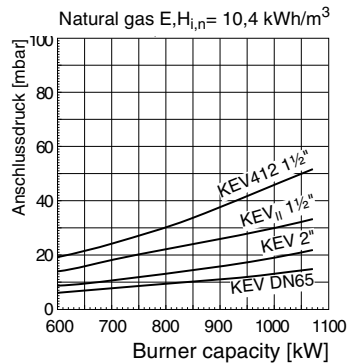
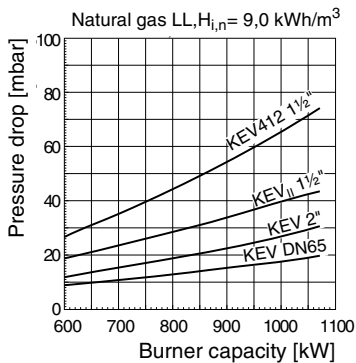


## Selection diagrams

MK2.1



MK2.2



## Technical specifications

Technical specifications	Burner type	
	MK2.1	MK2.2
Burner output in kW (in gas-fired operation)	279- 760	415 - 1071
Burner output (in oil-fired operation) in kg/h (in kW)	23.6 - 64.1 (280 - 760)	39.5 - 90.2 (469 - 1070)
Fuel	Heating oil in accordance with DIN 51603, natural gas LL + E, liquid gas	
Mode of operation	Optionally oil/gas two-stage or gas modulating, oil two-stage	
Voltage	3 / N / PE ~ 50 Hz / 400 V	
Power consumption at start / during operation *	6.5 A max./ 3.6 A eff.	
Electric motor power (at 2800rpm) in kW	1.1	2.2
Flame detector	KLC1000	
Control box	LMV26	
Gasburner class	2	-
NOx limit	≤ 120 mg/kWh	-
Directive MPC 2015/2193/EU	-	≤ 50 MW
NOx limit for gas	-	≤ 100 mg/Nm³
NOx limit for oil	-	≤ 200 mg/Nm³

\* The power consumption of the version with external oil pump is 2.7 A higher.

MK2.1-ZM-L					MK2.1-ZM-L-N								MK2.1-ZM-L-F				
					Natural gas L $H_{i,n} = 9.3 \text{ [kWh/m}^3\text{]}$				Natural gas H $H_{i,n} = 10.4 \text{ [kWh/m}^3\text{]}$				Liquid gas $H_{i,n} = 25.89 \text{ [kWh/m}^3\text{]}$				
Burner output [kW]		Boiler output $\eta = 92\%$ [kW]		Air flap position [°]		Gas nozzle pressure $p_G$ [mbar]		Gas flow rate [m <sup>3</sup> /h]		Gas nozzle pressure $p_G$ [mbar]		Gas flow rate [m <sup>3</sup> /h]		Gas nozzle pressure $p_G$ [mbar]		Gas flow rate [m <sup>3</sup> /h]	
2nd st.	1st st.	2nd st.	2nd st. P 9	1st st. P 1	2nd st.	1st st.	2nd st.	1st st.	2nd st.	1st st.	2nd st.	1st st.	2nd st.	1st st.	2nd st.	1st st.	
560	280	521	37	17.5	8	2.7	62.1	31.0	6.3	2.1	55.5	27.8	8.3	2.9	22.3	11.1	
600	300	558	44	18	10	3.5	66.5	33.3	7.8	2.7	59.5	29.7	10.1	3.4	23.9	11.9	
700	350	651	72	21	12.9	4	77.6	38.8	10.1	3.1	69.4	34.7	13.5	4.5	27.9	13.9	
770	385	716	90	24	13.2	5	85.4	42.7	10.3	3.9	76.3	38.2	15.2	5.2	30.7	15.3	

4

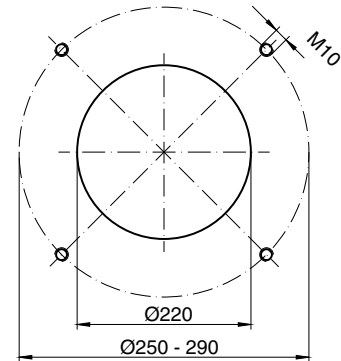
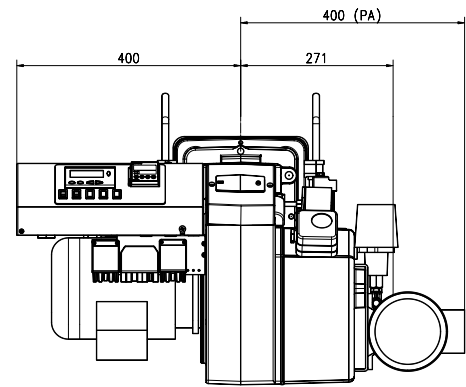
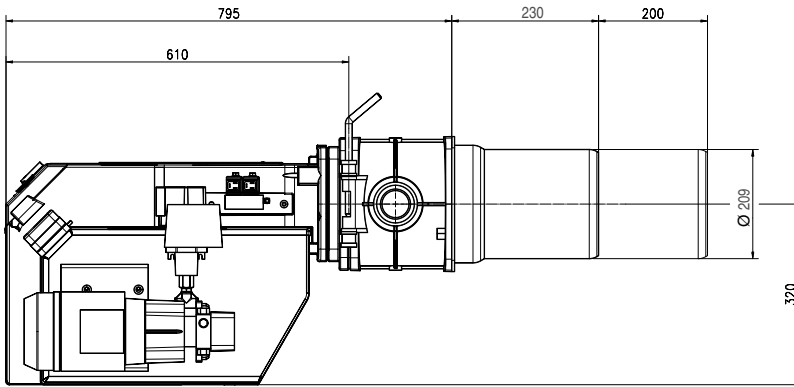
MK2.1-ZM-L								Heating oil EL $H_i = 11.86 \text{ [kWh/kg]}$					
Burner output [kW]		Boiler output $\eta = 92\%$ [kW]		Air flap position [°]				Pump pressure [bar]		Oil nozzle Steinen		Oil flow rate [kg/h]	
2nd st.	1st st.	2nd st.	P0	P1	P2 on	P2 d	P2		2. St. SS/60°	1st st. SS/60°	2nd st.	1st st.	
560	280	521	17.5	18.5	21	26	37	22	4/60°S	4/60°S	47.2	23.6	
600	300	558	18	19	22	27	44	18	5/60°S	5/60°S	50.6	25.3	
700	350	651	21	22	25	30	72	22	5/60°S	5/60°S	59.0	29.5	
770	385	716	24	25	28	33	89.9	20	6/60°S	6/60°S	64.9	32.5	

MK2.2-ZM-L					MK2.2-ZM-L-N								MK2.2-ZM-L-F				
					Natural gas L $H_{i,n} = 9.3$ [kWh/m <sup>3</sup> ]				Natural gas H $H_{i,n} = 10.4$ [kWh/m <sup>3</sup> ]				Liquid gas $H_{i,n} = 25.89$ [kWh/m <sup>3</sup> ]				
Burner output [kW]		Boiler output $\eta = 92\%$ [kW]		Air flap position [ ° ]		Gas nozzle pressure $p_G$ [mbar]		Gas flow rate [m <sup>3</sup> /h]		Gas nozzle pressure $p_G$ [mbar]		Gas flow rate [m <sup>3</sup> /h]		Gas nozzle pressure $p_G$ [mbar]		Gas flow rate [m <sup>3</sup> /h]	
2nd st.	1st st.	2nd st.	2nd st.	St. 2 P 9	St. 1 P 1	2nd st.	1st st.	2nd st.	1st st.	2nd st.	1st st.	2nd st.	1st st.	2nd st.	1st st.	2nd st.	1st st.
830	450	772	772	43	14	13	4	92.0	49.9	10.2	3.1	82.3	44.6	17.5	5.6	33.1	17.9
900	450	837	837	52	14	14	4.8	99.8	49.9	10.9	3.8	89.2	44.6	21.2	5.6	35.8	17.9
960	480	893	893	57	17	14.5	5	106.4	53.2	11.3	3.9	95.2	47.6	25.9	6.5	38.2	19.1
1070	540	995	995	85	26	16.5	7.6	118.6	59.6	12.9	5.9	106.1	53.5	29.9	7.8	42.6	21.5

5

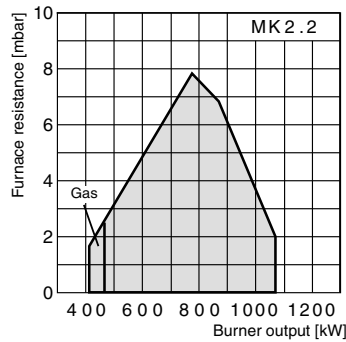
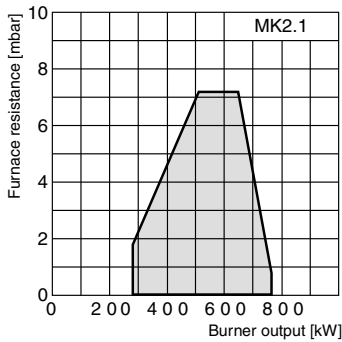
MK2.2-ZM-L								Heating oil EL $H_i = 11.86$ [kWh/kg]					
Burner output [kW]		Boiler output $\eta = 92\%$ [kW]		Air flap position [ ° ]				Pump pressure [bar]		Oil nozzle (Steinen)		Oil flow rate [kg/h]	
2nd st.	1st st.	2nd st.	2nd st.	P0	P1	P2 on	P2 d	P2	2nd st. SS/60°	1st st. SS/60°	2nd st.	1st st.	
830	450	772	772	14	15	18	23	43	20	6/60°S	7/60°S	70.0	37.9
900	450	837	837	14	15	18	23	52	20	7/60°S	7/60°S	75.9	37.9
960	480	893	893	17	18	21	26	57	18	8/60°S	8/60°S	80.9	40.5
1070	540	995	995	26	27	30	35	85	22	8/60°S	8/60°S	90.2	45.5

## Dimensions/Boiler connecting dimensions (All dimensions are given in mm)



ZBZ\_2-564

## Working ranges



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 alterations.

# GIERSCH

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

