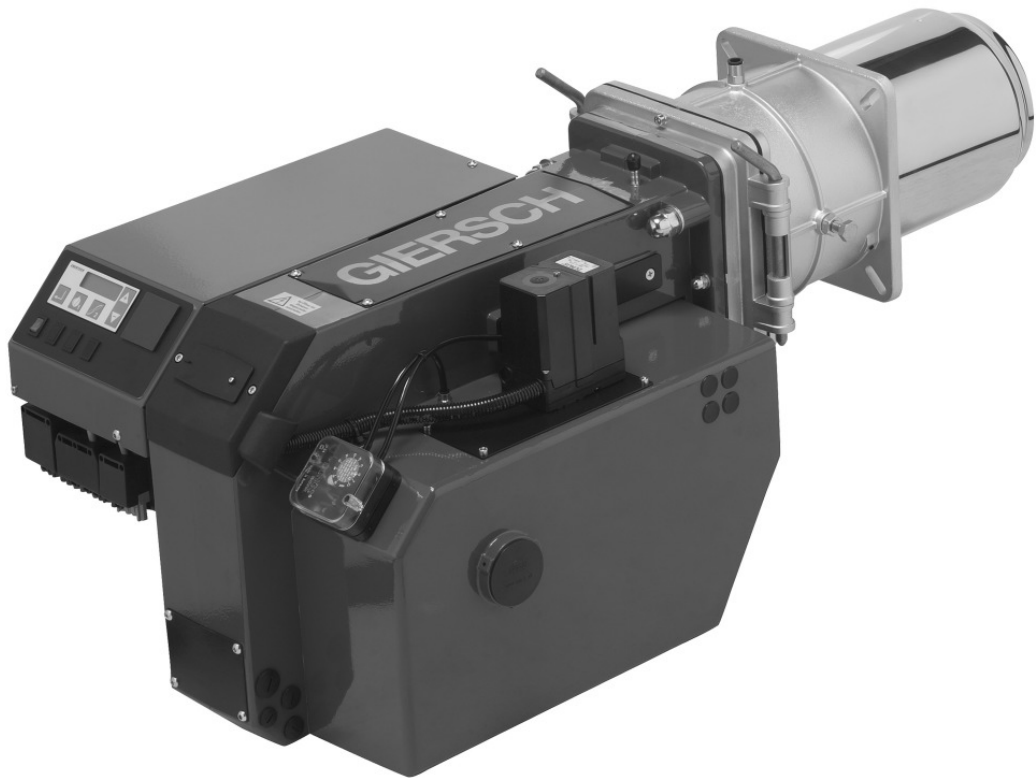


Technical Information

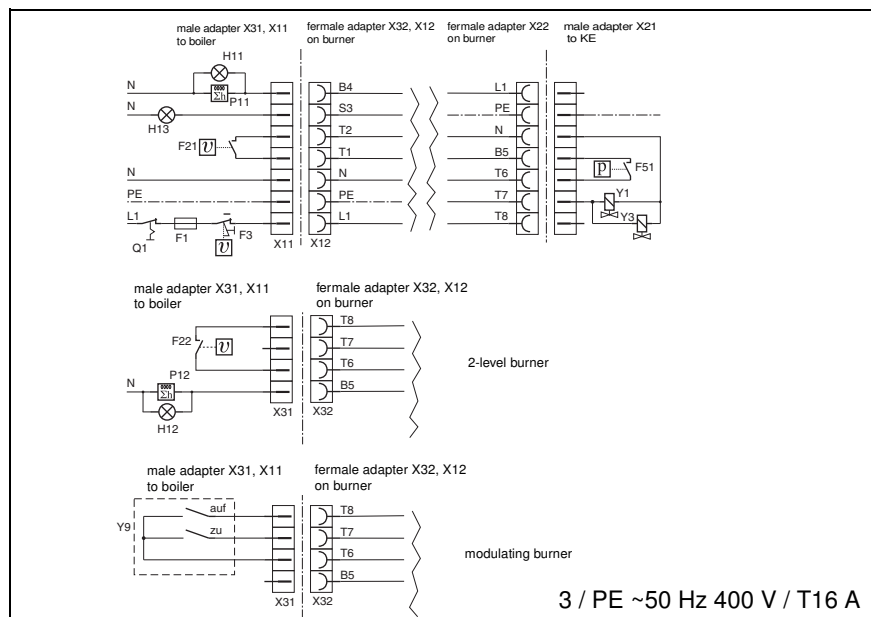
MG20-ZM-LN

Issued in September 2005
Right reserved to effect techn. modifications
in the interest of product improvement.

Gas



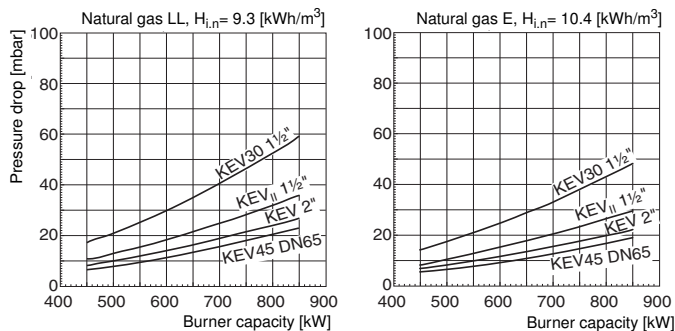
Electrical connection



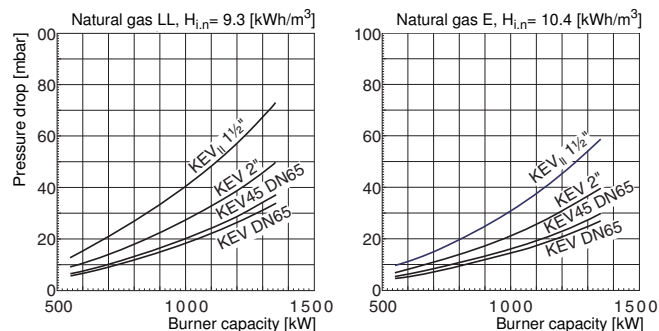
- F1 Ext. fuse boiler control
- F21, F22 Ext. temp. controller 1st stage / 2nd stage
- F3 Ext. safety temperature limiter
- F51 Gas-pressure monitor
- Q1 Main heating switch
- H11, H12 Ext. pilot lamp
- H13 Ext. fault message lamp
- L1 Phase
- P11, P12 Time meter 1st stage / 2nd stage
- Y1, Y2 Solenoid valve
- Y3 Safety solenoid valve
- Y9 Ext. regulator

Selection diagrams

MG20/1-LN



MG20/2-LN



Technical specifications

Technical data	Burner type	
	MG20/1-LN	MG20/2-LN
Min. burner output in kW	225	225
Max. burner output in kW	860	1350
Gas type	Natural gas LL + E	
Method of operation	2-stage sliding, modulating	
Voltage	3 / PE ~50 Hz 400 V / T16 A	
max. current consumption start/operation	6.5 A max. / 3.6 A eff.	
Electric motor power (at 2800min ⁻¹) in kW	1.1	2.2
Flame failure controller	Ionisation /IRD	
Control box	MPA 22	
Air pressure monitor	LGW 50	
Weight in kg	56	58
Noise emission in dB (A)	≤ 78	≤ 78

Adjustment tables

MG20/1-ZM-LN						Natural gas LL: $H_{i,n} = 9,3 \text{ [kWh/m}^3\text{]}$			
Burner output [kW]		Boiler output $\eta = 92\%$ [kW]	Position air flap [°]		Position Burner head [mm]	Gas nozzle pressure [mbar]		Gas throughput [m ³ /h]	
Stage 2	Stage 1	Stage 2	Stage 2 P 9	Stage 1 P 1		Stage 2	Stage 1	Stage 2	Stage 1
450	224	414	26.0	9	.22	7.3	2.1	49.9	24.8
520	260	478	33.0	12	22	9.6	2.7	57.6	28.8
560	280	515	30.5	13	10	7.9	2.7	62.1	31.0
640	320	589	36.0	17	10	10.3	3.5	70.9	35.5
780	390	718	44.0	17	0	14.3	4.3	86.5	43.2
860	430	791	90.0	20	0	17.4	5.0	95.3	47.7

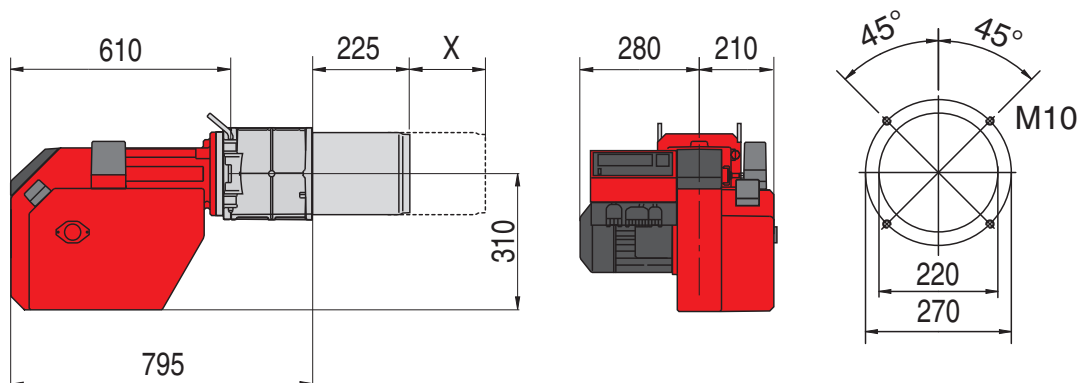
MG20/1-ZM-LN						Natural gas E: $H_{i,n} = 10.4 \text{ [kWh/m}^3\text{]}$			
Burner output [kW]		Boiler output $\eta = 92\%$ [kW]	Position air flap [°]		Position Burner head [mm]	Gas nozzle pressure [mbar]		Gas throughput [m ³ /h]	
Stage 2	Stage 1	Stage 2	Stage 2 P 9	Stage 1 P 1		Stage 2	Stage 1	Stage 2	Stage 1
450	224	414	26.0	9	22	5.7	1.6	44.6	22.2
520	260	478	33.0	12	22	7.5	2.1	51.5	25.8
560	280	515	30.5	13	10	6.2	2.1	55.5	27.8
640	320	589	36.0	17	10	8.1	2.7	63.4	31.7
780	390	718	44.0	17	0	11.2	3.4	77.3	38.7
860	430	791	90.0	20	0	13.6	3.9	85.2	42.6

MG20/2-ZM-LN						Natural gas LL: $H_{i,n} = 9.3 \text{ [kWh/m}^3\text{]}$			
Burner output [kW]		Boiler output $\eta = 92\%$ [kW]	Position air flap [°]		Position Burner head [mm]	Gas nozzle pressure [mbar]		Gas throughput [m ³ /h]	
Stage 2	Stage 1	Stage 2	Stage 2 P 9	Stage 1 P 1		Stage 2	Stage 1	Stage 2	Stage 1
440	222	405	22	9	22	4.9	1.3	48.8	24.6
600	300	552	30	13	22	6.9	2.5	66.5	33.3
500	248	460	25	9	10	5.0	1.2	55.4	27.5
660	330	607	32	17	10	7.0	3.0	73.2	36.6
1100	550	1012	43	19	0	16.0	4.9	121.9	61.0
1350	680	1242	90	24	0	24.6	6.3	149.7	75.4

MG20/2-ZM-LN						Natural gas E: $H_{i,n} = 10.4 \text{ [kWh/m}^3\text{]}$			
Burner output [kW]		Boiler output $\eta = 92\%$ [kW]	Position air flap [°]		Position Burner head [mm]	Gas nozzle pressure [mbar]		Gas throughput [m ³ /h]	
Stage 2	Stage 1	Stage 2	Stage 2 P9	Stage 1 P 1		Stage 2	Stage 1	Stage 2	Stage 1
440	222	405	22	9	22	3.8	1.0	43.6	22.0
600	300	552	30	13	22	5.4	2.0	59.5	29.7
500	248	460	25	9	10	3.9	0.9	49.6	24.6
660	330	607	32	17	10	5.5	2.3	65.4	32.7
1100	550	1012	43	19	0	12.5	3.8	109.0	54.5
1350	680	1242	90	24	0	19.2	4.9	133.8	67.4

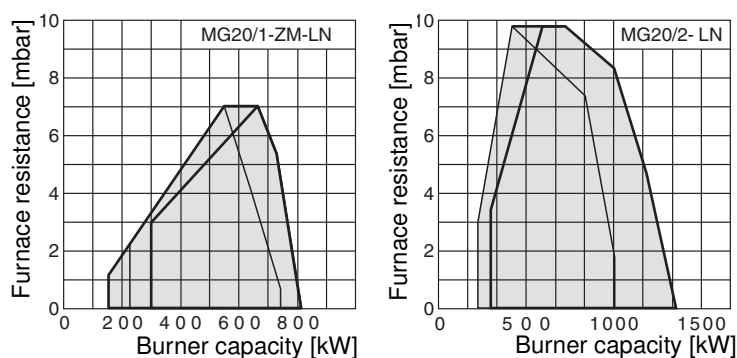
Overall dimensions / Boiler connection measures

All dimensions in mm



X = Burner pipe extension 100 mm und 200 mm

Working range



DVGW tested working range according to DIN EN 676.

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Subject to alterations.

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