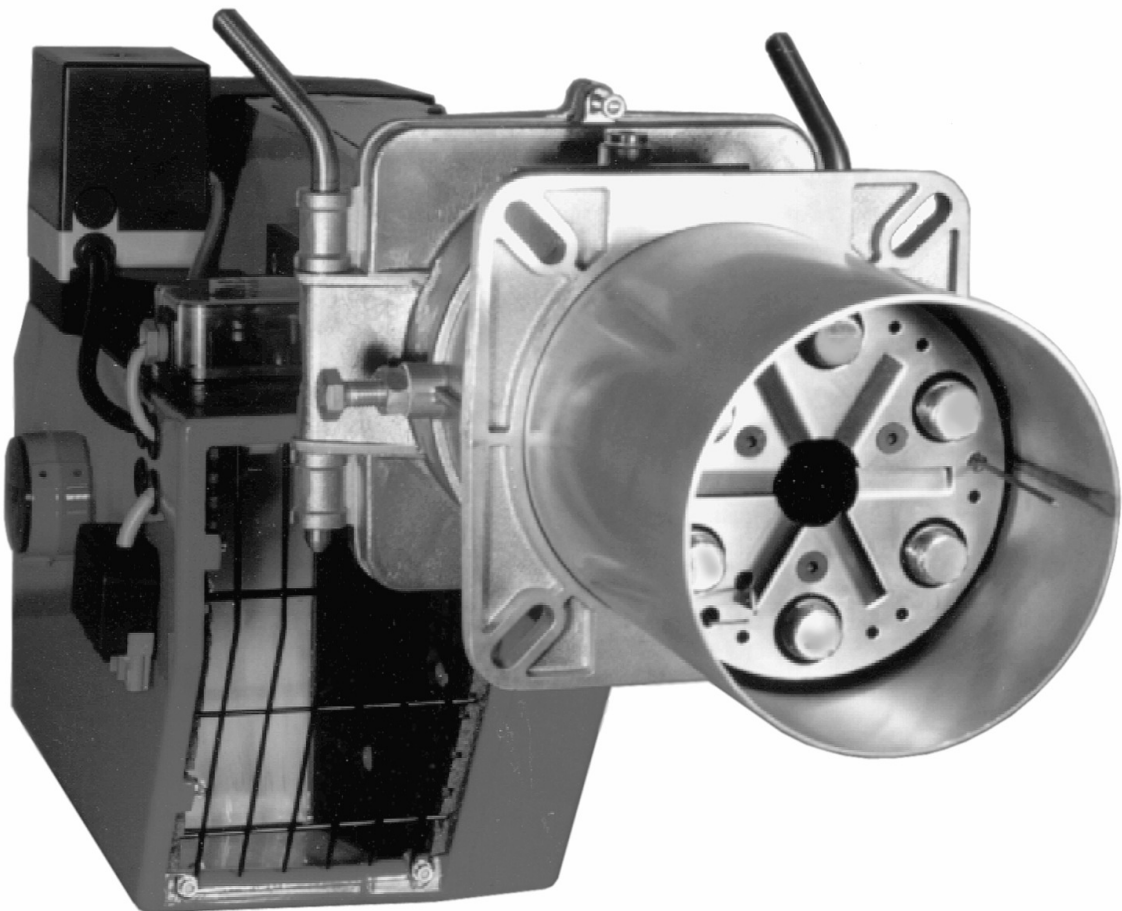


Technical Information

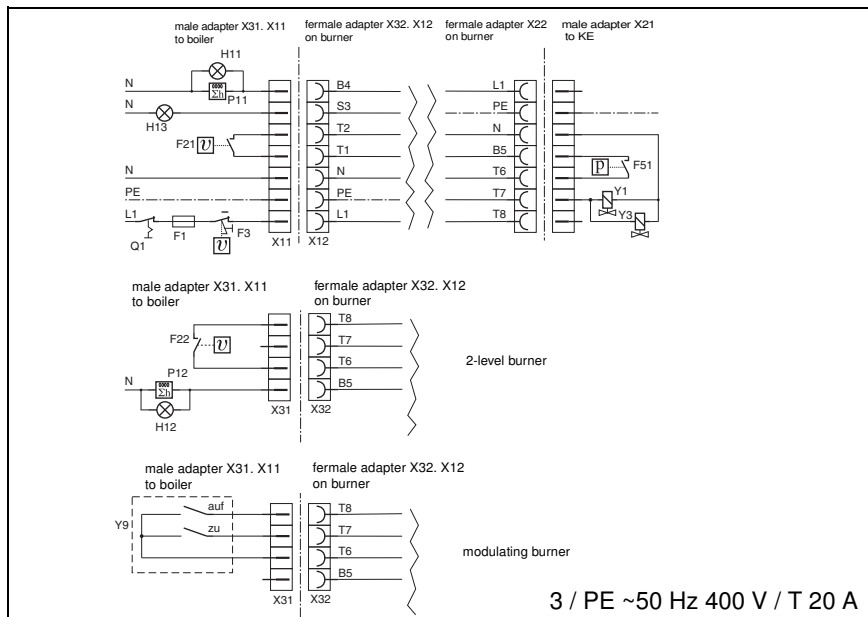
MG3-ZM-L-N

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

Gas



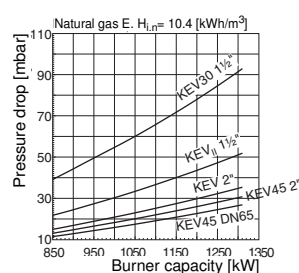
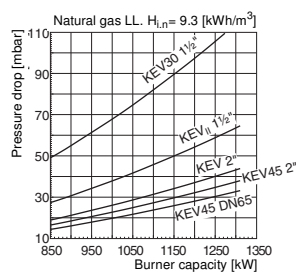
Electrical connection



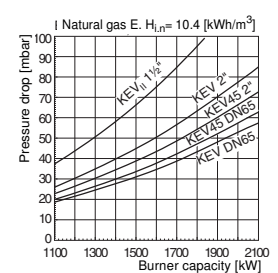
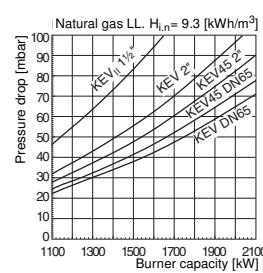
- F1 Ext. fuse boiler control
- F21,F22 Ext. temp. controller 1st stage/
2nd stage
- F3 Ext. safety temperature limiter
- F51 Gas-pressure monitor
- Q1 Main heating switch
- H11,H12 Ext. pilot lamp
- H13 Ext. fault message lamp
- L1 Phase
- P11,P12 Time meter 1st stage / 2nd stage
- Y1,Y2 Solenoid valve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

Selection diagrams

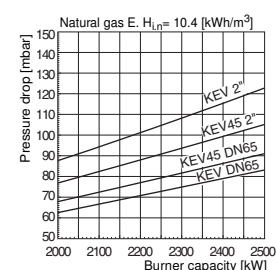
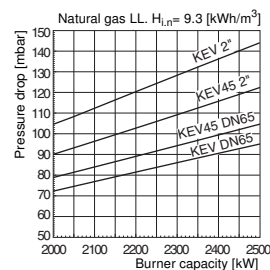
MG3.1-ZM-L-N



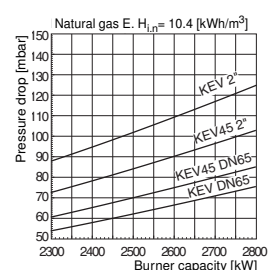
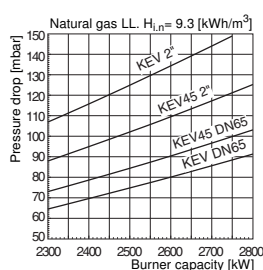
MG3.2-ZM-L-N



MG3.3-ZM-L-N



MG3.4-ZM-L-N



Technical specifications

Technical data	Burner type			
	MG3.1-ZM-L-N	MG3.2-ZM-L-N	MG3.3-ZM-L-N	MG3.4-ZM-L-N
Min. burner output in kW	458	533	639	793
Max. burner output in kW	1340	2148	2539	2800
Gas type	for natural gas LL + E = "-N"			
Method of operating	2-stage sliding / modulating			
Voltage	3 / PE ~50 Hz 400 V / T 20 A			
max. current consumption start/operation	12 A max./ 7.1 A eff.	14.5 A max. / 10.2 A eff.	16.5 A max./ 11.4 A eff.	22.5 A max./ 15.5 A eff.
Electric motor power (at 2800min ⁻¹) in kW	3.0	4.0	4.5	5.5
Flame failure controller	IRD			
Control box	MPA 22			
Air pressure monitor	LGW50			
Weight in kg	110	115	120	125

Adjustment tables

MG3.1-ZM-L-N							Natural gas LL: $H_{i,n} = 9.3$ [kWh/m ³]		Natural gas E: $H_{i,n} = 10.4$ [kWh/m ³]			
Burner output [kW]		Boiler output $\eta_k = 92\%$ [kW]	Position air flap [°]		Gas nozzle pressure [mbar]		Gas throughput [m ³ /h]		Gas nozzle pressure [mbar]		Gas throughput [m ³ /h]	
Stage 2	Stage 1	Stage 2	St 2 P9	St 1 P1	St 2	St 1	St 2	St 1	St 2	St 1	St 2	St 1
913	458	840	22.0	3.5	12.8	3.0	104.4	52.3	10.4	2.4	93.4	46.8
1043	522	960	25.6	8.3	16.1	3.3	119.4	59.7	13.0	2.6	106.7	53.4
1174	652	1080	48.5	14.0	19.3	4.9	134.3	74.6	15.6	3.9	120.1	66.7
1340	652	1233	90.0	14.0	24.9	4.9	153.3	74.6	20.0	3.9	137.1	66.7

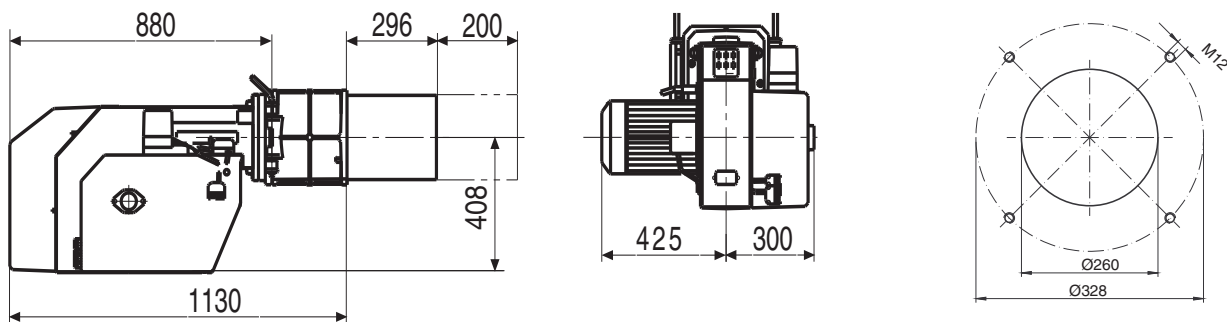
MG3.2-ZM-L-N							Natural gas LL: $H_{i,n} = 9.3$ [kWh/m ³]		Natural gas E: $H_{i,n} = 10.4$ [kWh/m ³]			
Burner output [kW]		Boiler output $\eta_k = 92\%$ [kW]	Position air flap [°]		Gas nozzle pressure [mbar]		Gas throughput [m ³ /h]		Gas nozzle pressure [mbar]		Gas throughput [m ³ /h]	
Stage 2	Stage 1	Stag 2	St 2 P9	St 1 P1	St 2	St 1	St 2	St 1	St 2	St 1	St 2	St 1
913	533	840	28.0	6.2	13.0	6.6	104.4	60.9	10.6	5.1	93.4	54.5
1141	620	1050	31.2	10.4	20.4	9.6	130.5	70.9	16.4	7.5	116.7	63.4
1370	685	1260	34.6	14.0	36.6	11.1	156.7	78.3	29.1	8.7	140.1	70.0
1598	793	1470	41.5	21.0	46.1	13.6	182.8	90.8	36.6	10.6	163.4	81.2
1924	1022	1770	48.5	28.0	53.9	15.9	220.1	116.9	42.8	12.9	196.9	104.5
2054	1022	1890	59.0	28.0	68.0	15.9	235.0	116.9	53.8	12.9	210.1	104.5
2148	1022	1976	90.0	28.0	73.5	15.9	245.7	116.9	58.1	12.9	219.7	104.5

MG3.3-ZM-L-N							Natural gas LL: $H_{i,n} = 9.3$ [kWh/m ³]		Natural gas E: $H_{i,n} = 10.4$ [kWh/m ³]			
Burner output [kW]		Boiler output $\eta_k = 92\%$ [kW]	Position air flap [°]		Gas nozzle pressure [mbar]		Gas throughput [m ³ /h]		Gas nozzle pressure [mbar]		Gas throughput [m ³ /h]	
Stage 2	Stage 1	Stage 2	St 2 P9	St 1 P1	St 2	St 1	St 2	St 1	St 2	St 1	St 2	St 1
1359	639	1250	28.0	9.0	21.2	5.6	155.4	73.1	17.1	4.4	139.0	65.4
1630	761	1500	36.0	10.4	44.2	13.3	186.5	87.0	35.1	10.4	166.8	77.8
1848	880	1700	41.5	14.0	58.9	16.4	211.4	100.7	46.6	12.8	189.0	90.1
2174	1000	2000	52.0	17.3	63.9	19.9	248.7	114.4	50.6	15.5	222.4	102.3
2539	1000	2336	90.0	17.3	69.4	19.9	290.4	114.4	54.9	15.5	259.7	102.3

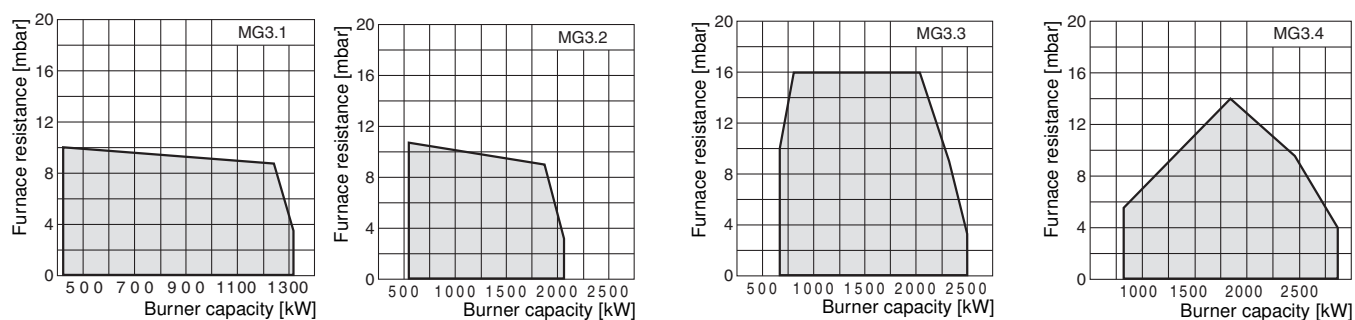
MG3.4-ZM-L-N							Natural gas LL: $H_{i,n} = 9.3$ [kWh/m ³]		Natural gas E: $H_{i,n} = 10.4$ [kWh/m ³]			
Burner output [kW]		Boiler output $\eta_k = 92\%$ [kW]	Position air flap [°]		Gas nozzle pressure [mbar]		Gas nozzle pressure [mbar]		Gas nozzle pressure [mbar]		Gas nozzle pressure [mbar]	
Stage 2	Stage 1	Stage 2	St 2 P9	St 1 P1	St 2	St 1	St 2	St 1	St 2	St 1	St 2	St 1
1533	793	1410	31.2	14.0	20.2	6.8	175.3	908.0	16.3	5.3	156.8	81.2
1913	950	1760	48.5	17.3	33.5	14.9	218.8	108.7	26.8	11.6	195.7	97.2
2359	1100	2170	62.5	21.0	46.7	18.2	269.8	125.8	37.1	14.2	241.3	112.5
2620	1100	2410	76.0	21.0	54.6	18.2	299.6	125.8	43.3	14.2	267.9	112.5
2800	1110	2580	90.0	21.0	59.7	18.2	320.8	125.8	47.3	14.2	286.8	112.5

Overall dimensions / Boiler connection measures

All dimensions in mm



Working range



DVGW tested working range according to DIN EN 676.

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