

- raadman -

Product List
July 2023

raadman

Mono Block Burners

Staging Burners

Mechanical Staging Burners

Mechanical Modular Burners

Electrical Modular Burners

Premixed Burners

PE Series

(Post Mixed Burner) PM Series

Dual Block Burners

Electrical Modular Burners

Furnace Burners

Water Tube Burners



raadman Burners



PACKMAN Company was established in February 1975. The company started its activity in construction of High-Pressure Vessels such as Hot-Water Boilers, Steam Boilers, Pool Coil Tanks, Softeners, and Heat Exchangers in 1984.

After 40 years of experience in the field of heating industry, especially boilers and burners, the company started its activity in the field of burners under the brand name raadman in January 2011. Currently, the burners of this company cover a firing range of 100 to 60000 kW. Single-stage, double-stage, modular, and Low NOx burners (generally lower than 80 mg/kWh and individually lower than 40 mg/kWh) are available for various domestic and industrial applications.

-Monoblock burners:

Staging burners in 28 models

Mechanical staging in 22 models

Mechanical modular in 22 models

Electronic modular burners in 48 models

-Dual block burners:

Electronic modular burners in 22 models

-Pre-mixed burner:

PE-Series in 9 models

PM-Series in 9 models

Designed in accordance with Iran national standards ISIRI-7595 and ISIRI-7594 (equivalent to European standards BS-EN 676, BS-EN 267)

- Lightweight and optimized geometry.
- High-quality heat-resistant steel material for all parts of burner head as well as flame covering accessories.
- accessibility to internal components.
- Ease of Installation, adjustment, and maintenance.
- Suitable for firetube, firebox, water tube boilers, etc.



R LHGP B - M/M - 385 / LN - DB - FGR

Option: FGR*

DB: Dual Block Burner

Blank: NOx class: II acc to BS-EN 676

LN: Low NOx with Class III acc to BS-EN 676

Ultra-Low NOx

PE: Pre-Mixed Gas Burner

PM: Post-Mixed Gas Burner

Reference of approximate Capacity x 10 kW

Operation:

Blank: Two Stage or One Stage

M: Natural Gas, LPG: Electrical Modular
Light Oil, Heavy Oil: Two/Three Stage Progressive

MC: Natural Gas, LPG: Mechanical Modular
Light Oil, Heavy Oil: Two/Three Stage Progressive

MS: Natural Gas, LPG: Mechanical Staging
Light Oil, Heavy Oil: Two/Three Stage Progressive

M/M: Natural Gas, LPG: Electrical Modular
Light Oil, Heavy Oil: Electrical Modular

B: Burner

Type of Fuel

G: G=Natural gas

GP: G=Natural gas, P=Propane

LG: L=Light oil, G=Natural gas

LGP: L=Light oil, G=Natural gas, P=Propane

LHG: L=Light oil, H=Heavy oil, G=Natural gas

LHGP: L=Light oil, H=Heavy oil, G=Natural gas, P=Propane

P: Pre-Mixed or Post-Mixed Gas Burner

Product Family Name: raadman

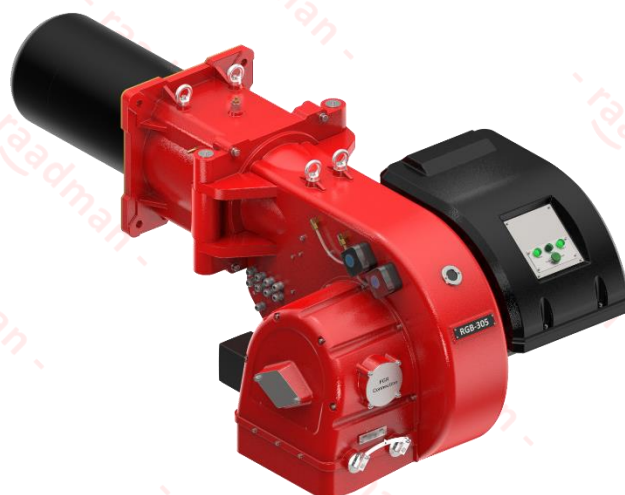
*FGR: Flue Gas Recirculation

• raadman Staging Gas Burners

raadman staging gas burners cover a firing range of 160 kW to 6200 kW in two/three stages of natural gas.

This category of burners includes all mechanical components, burner head, ignition devices, burner controllers such as Shokouh /Honeywell TMG or Siemens LFL, burner actuators, accessories of power system, ventilation motor, fan wheel, safety devices, and air pressure switches.

Gas train includes filter, regulator, main and safety valves, pressure gauges, minimum pressure switch, leak test pressure switch, and valve proving system for burners with a capacity of over 1.2 MW (All according to BS-EN 676).



raadman Staging Gas Burners (RGB-Series)

N.O	Burner	Capacity (kW)	Turn Down	CO (ppm)	NOx (mg/kWh)	Class of NOx
1	RGB-20	85-215	1 : 2	< 40	< 130	I
2	RGB-38	154-500	1 : 3	< 11	< 120	II
3	RGB-55	160-580	1 : 3	< 30	< 120	II
4	RGB-80	297-810	1 : 3	< 30	< 120	II
5	RGB-85/LN	250-900	1 : 3	< 20	< 80	III
6	RGB-110	350-1150	1 : 3	< 30	< 120	II
7	RGB-130/LN	350-1280	1 : 3	< 20	< 80	III
8	RGB-145	400-1480	1 : 4	< 30	< 120	II
9	RGB-185	470-1870	1 : 4	< 30	< 120	II
10	RGB-205	490-2250	1 : 4	< 30	< 120	II
11	RGB-255/LN	580-2400	1 : 4	< 20	< 80	III
12	RGB-305	600-3000	1 : 5	< 30	< 120	II
13	RGB-385	650-3800	1 : 5	< 30	< 120	II
14	RGB-405/LN	680-4100	1 : 6	< 20	< 80	III
15	RGB-505/LN	700-5100	1 : 7	< 20	< 80	III
16	RGB-605	850-6200	1 : 7	< 30	< 120	II

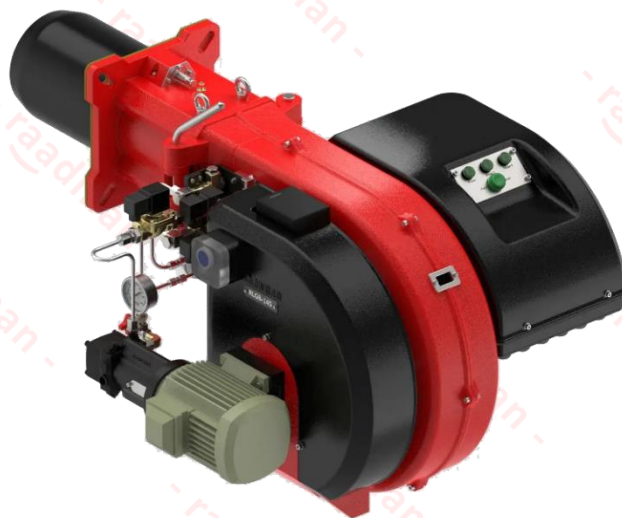
• raadman Staging Dual Fuel Burner

raadman staging dual-fuel burners cover a firing range of 160 kW to 6100 kW in two/ three stages of natural gas and light fuel oil.

This category of burners includes all mechanical components, burner head, flame tube, safety accessories, ignition devices, flame scanners, burner controllers such as Shokouh /Honeywell TMG or Siemens LFL, burner actuators, accessories of power system, ventilation motor, fan wheel, safety devices, and air pressure switches.

Gas train includes filter, regulator, main and safety valves, pressure gauges, minimum pressure switch, leak test pressure switch, and valve proving system for burners with a capacity of over 1.2 MW (All according to BS-EN 676).

Light oil system includes separate motor for oil pump, pump with pressure regulating valve, two/three main solenoid valve and one safety solenoid valve in feeding line, pressure gauge in feeding line, two/three nozzles for two/three stages operation (All according to BS-EN 267).



raadman Staging Dual Fuel Burners (RLGB-Series)

N.O	Burner	Capacity (kW)	Turn Down	CO (ppm)		NOx (mg/kWh)		Class of NOx	
17	RLGB-55	160-580	1 : 3	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
18	RLGB-85	297-810	1 : 3	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
19	RLGB-110	350-1100	1 : 3	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
20	RLGB-145	400-1380	1 : 4	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
21	RLGB-175/LN	320-1800	1 : 5	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
22	RLGB-205/LN	450-2200	1 : 5	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
23	RLGB-255	580-2400	1 : 4	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
24	RLGB-305/LN	600-3000	1 : 5	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
25	RLGB-385/LN	650-3500	1 : 5	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
26	RLGB-405/LN	680-4100	1 : 6	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
27	RLGB-505/LN	700-5100	1 : 7	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
28	RLGB-605/LN	1000-6100	1 : 6	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II

• raadman Mechanical Staging Gas Burners

raadman mechanical staging gas burners cover a firing range of 1000 to 6200 kW, and are manufactured with high quality electro-mechanical accessories with easy installation and commissioning.

Thanks to the cam mechanism and butterfly valve, we have “Staging” operation in gas side. In this type of burner, one actuator opens the damper and butterfly valve to reach the desired stages.

This category of burners includes all mechanical components, burner head, cam mechanism, ignition devices, burner controllers such as Shokouh /Honeywell TMG or Siemens LFL, burner actuator, accessories of power system, ventilation motor, fan wheel, safety devices, and air pressure switches.

Gas train includes filter, regulator, main and safety valves, pressure gauges, minimum pressure switch, leak test pressure switch, and valve proving system for burners with a capacity of over 1.2 MW (All according to BS-EN 676).



raadman Mechanical Staging Gas Burners (RGB-MS-Series)

N.O	Burner	Capacity (kW)	Turn Down	CO (ppm)	NOx (mg/kWh)	Class of NOx
29	RGB-MS-85/LN	250-900	1 : 3	< 20	< 80	III
30	RGB-MS-110	350-1150	1 : 3	< 30	< 120	II
31	RGB-MS-130/LN	350-1280	1 : 3	< 20	< 80	III
32	RGB-MS-145	400-1480	1 : 4	< 30	< 120	II
33	RGB-MS-185	470-1870	1 : 4	< 30	< 120	II
34	RGB-MS-205	490-2250	1 : 4	< 30	< 120	II
35	RGB-MS-255/LN	580-2400	1 : 4	< 20	< 80	III
36	RGB-MS-305	600-3000	1 : 5	< 30	< 120	II
37	RGB-MS-385	650-3800	1 : 5	< 30	< 120	II
38	RGB-MS-405/LN	680-4100	1 : 6	< 20	< 80	III
39	RGB-MS-505/LN	700-5100	1 : 7	< 20	< 80	III
40	RGB-MS-605	850-6200	1 : 7	< 30	< 120	II

• raadman Mechanical Staging Dual Fuel Burners

raadman mechanical staging dual-fuel burners cover a firing range of 1000 to 6100 kW, and are manufactured with high quality electro-mechanical accessories with easy installation and commissioning.

Thanks to the cam mechanism and butterfly valve we have "Staging" operation in gas side. In this type of burner, one actuator opens the damper and butterfly valve to reach the desired stages.

This category of burners includes all mechanical components, burner head, flame tube, and cam mechanism, safety accessories, ignition devices, flame scanners, burner controllers such as Shokouh /Honeywell TMG or Siemens LFL, burner actuators, accessories of power system, ventilation motor, fan wheel, safety devices, air pressure switches.

Gas train includes filter, regulator, main and safety valves, pressure gauges, minimum pressure switch, leak test pressure switch, and valve proving system for burners with a capacity of over than 1.2 MW (All according to BS-EN 676).

Light oil system includes separate motor for oil pump, pump with pressure regulating valve, double main solenoid valve and one safety solenoid valve in feeding line, pressure gauge in feeding line, two nozzles for two stage operation (All according to BS-EN 267).



raadman Mechanical Staging Dual Fuel Burners (RLGB-MS-Series)

N.O	Burner	Capacity (kW)	Turn Down	CO (ppm)		NOx (mg/kWh)		Class of NOx	
41	RLGB-MS-110	350-1100	1 : 3	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
42	RLGB-MS-145	400-1380	1 : 4	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
43	RLGB-MS-175/LN	320-1800	1 : 5	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
44	RLGB-MS-205/LN	450-2200	1 : 5	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
45	RLGB-MS-255	580-2400	1 : 4	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
46	RLGB-MS-305/LN	600-3000	1 : 5	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
47	RLGB-MS-385/LN	650-3500	1 : 5	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
48	RLGB-MS-405/LN	680-4100	1 : 6	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
49	RLGB-MS-505/LN	700-5100	1 : 7	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
50	RLGB-MS-605/LN	1000-6100	1 : 6	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II

• raadman Mechanical Modular Gas Burners

raadman mechanical modular gas burners cover a firing range of 1000 to 6200 kW, and are manufactured with high-quality electro-mechanical accessories with easy installation and commissioning.

Their operation is “modulating” at the gas side by installing a PID logic regulator and respective probes.

This category of burners includes all mechanical components, burner head, cam mechanism, ignition devices, burner controllers such as Siemens LFL, burner actuator, accessories of power system, ventilation motor, fan wheel, safety devices, and air pressure switches.

Gas train includes filter, regulator, main and safety valves, pressure gauges, minimum pressure switch, leak test pressure switch, and valve proving system for burners with a capacity of over than 1.2 MW (All according to BS-EN 676).



raadman Mechanical Modular Gas Burners (RGB-MC-Series)

N.O	Burner	Capacity (kW)	Turn Down	CO (ppm)	NOx (mg/kWh)	Class of NOx
51	RGB-MC-85/LN	250-900	1 : 3	< 20	< 80	III
52	RGB-MC-110	350-1150	1 : 3	< 30	< 120	II
23	RGB-MC-130/LN	350-1280	1 : 3	< 20	< 80	III
54	RGB-MC-145	400-1480	1 : 4	< 30	< 120	II
55	RGB-MC-185	470-1870	1 : 4	< 30	< 120	II
56	RGB-MC-205	490-2250	1 : 4	< 30	< 120	II
57	RGB-MC-255/LN	580-2400	1 : 4	< 20	< 80	III
58	RGB-MC-305	600-3000	1 : 5	< 30	< 120	II
59	RGB-MS-385	650-3800	1 : 5	< 30	< 120	II
60	RGB-MC-405/LN	680-4100	1 : 6	< 20	< 80	III
61	RGB-MC-505/LN	700-5100	1 : 7	< 20	< 80	III
62	RGB-MC-605	850-6200	1 : 7	< 30	< 120	II

• raadman Mechanical Modular Dual Fuel Burners

raadman mechanical modular dual-fuel burners cover a firing range of 1000 to 6100 kW, and are manufactured with high-quality electro-mechanical accessories with easy installation and commissioning.

Their operation is “Two-stage” for oil fuel and “modulating” for gas fuel by installing PID logic regulator and respective probes.

This category of burners includes all mechanical components, burner head, cam mechanism, ignition devices, burner controllers such as Siemens LFL, burner actuator, accessories of power system, ventilation motor, fan wheel, safety devices, and air pressure switches.

Gas train includes filter, regulator, main and safety valves, pressure gauges, minimum pressure switch, leak test pressure switch, and valve proving system for burners with a capacity of over than 1.2 MW (All according to BS-EN 676).

Light oil system includes separate motor for oil pump, pump with pressure regulating valve, double main solenoid valve and one safety solenoid valve in feeding line, pressure gauge in feeding line, two nozzles for two stage operation (All according to BS-EN 267).



raadman Mechanical Modular Dual Fuel Burners (RLGB-MC-Series)

N.O	Burner	Capacity (kW)	Turn Down	CO (ppm)		NOx (mg/kWh)		Class of NOx	
63	RLGB-MC-110	350-1100	1 : 3	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
64	RLGB-MC-145	400-1380	1 : 4	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
65	RLGB-MC-175/LN	320-1800	1 : 5	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
66	RLGB-MC-205/LN	450-2200	1 : 5	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
67	RLGB-MC-255	580-2400	1 : 4	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
68	RLGB-MC-305/LN	600-3000	1 : 5	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
69	RLGB-MC-385/LN	650-3500	1 : 5	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
70	RLGB-MC-405/LN	680-4100	1 : 6	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
71	RLGB-MC-505/LN	700-5100	1 : 7	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
72	RLGB-MC-605/LN	1000-6100	1 : 6	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II

• raadman Electrical Modular Gas Burners

raadman electrical modular gas burners cover a firing range of 160 to 25000 kW, and are designed for a wide range of domestic and industrial applications.

Burner's superior design accompanied by high quality electronic devices has also resulted in a further improvement in the boiler's performance in order to decrease fuel consumption and emissions.

This category of burners includes all mechanical components, burner head, ignition devices, burner controllers, burner actuator, power system accessories, ventilation motor, fan wheel, safety devices, and air pressure switches.

Electronic modular burner controller:

Autoflame (burners with capacity less than 6.5 MW in boiler/burner packages), Lamtec or Siemens depends on the manufacturer's policy, market availability or the customer's order.

Gas train includes filter, regulator, main and safety valves, pressure gauges, minimum and leak test pressure switches, system for burners with a capacity of over than 1.2 MW (All according to BS-EN 676).



raadman Electrical Modular Gas Burners (RGB-M-Series)

N.O	Burner	Capacity (kW)	Turn Down	CO (ppm)	NOx (mg/kWh)	Class of NOx
73	RGB-M-55	160-580	1 : 3	< 30	< 120	II
74	RGB-M-80	297-810	1 : 3	< 30	< 120	II
75	RGB-M-85/LN	250-900	1 : 3	< 20	< 80	III
76	RGB-M-110	350-1150	1 : 3	< 30	< 120	II
77	RGB-M-130/LN	350-1280	1 : 3	< 20	< 80	III
78	RGB-M-145	400-1480	1 : 4	< 30	< 120	II
79	RGB-M-185	470-1870	1 : 4	< 30	< 120	II
80	RGB-M-205	490-2250	1 : 4	< 30	< 120	II
81	RGB-M-255/LN	580-2400	1 : 4	< 20	< 80	III
82	RGB-M-305	600-3000	1 : 5	< 30	< 120	II
83	RGB-M-385	650-3800	1 : 5	< 30	< 120	II
84	RGB-M-405/LN	680-4100	1 : 6	< 20	< 80	III
85	RGB-M-505/LN	700-5100	1 : 7	< 20	< 80	III
86	RGB-M-605	850-6200	1 : 7	< 30	< 120	II
87	RGB-M-705	1000-7000	1 : 7	< 30	< 120	II
88	RGB-M-805	1000-8000	1 : 8	< 30	< 120	II
89	RGB-M-950	1000-9000	1 : 9	< 30	< 120	II
90	RGB-M-1050	1000-10500	1 : 10	< 30	< 120	II
91	RGB-M-1250	1200-12000	1 : 10	< 30	< 120	II
92	RGB-M-1350	1700-13500	1 : 8	< 30	< 120	II
93	RGB-M-1550	1900-15000	1 : 8	< 20	< 80	II
94	RGB-M-1750	2200-17000	1 : 8	< 20	< 80	II
95	RGB-M-2250	2750-22000	1 : 8	< 30	< 120	II
96	RGB-M-2550	3150-25000	1 : 8	< 30	< 120	II

• raadman Electrical Modular Dual Fuel Burners

raadman modulating dual fuel burners cover a firing range of 160 to 6100 kW, and are designed for a wide range of domestic and industrial applications.

These burners are equipped with PID controller with capability of full air/gas ratio control throughout entire burner operating range as well as devices from well-known European companies such as Dungs, Kromschroder and Suntec.

This category of burners includes all mechanical components, burner head, ignition devices, flame scanner, burner actuator, accessories of power system, ventilation motor, fan wheel, safety devices, air pressure switches.

Electronic modular burner controller:

AutoFlame (burners with capacity less than 6 MW in boiler/burner packages), Lamtec or Siemens depends on the manufacturer's policy, market availability or the customer's order.

Gas train includes filter, regulator, main and safety valves, pressure gauges, minimum and leak test pressure switches, for over 1.2 MW capacity burners (All according to BS-EN 676).

Light oil system includes separate motor for oil pump, pump with pressure regulating valve, two/three main solenoid valve and one safety solenoid valve in feeding line, pressure gauge in feeding line, two/three nozzles for two/three stage operation (All according to BS-EN 267).



raadman Electrical Modular Dual Fuel Burners (RLGB-M-Series)

N.O	Burner	Capacity (kW)	Turn Down	CO (ppm)		NOx (mg/kWh)		Class of NOx	
97	RLGB-M-55	160-580	1 : 3	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
98	RLGB-M-85	297-810	1 : 3	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
99	RLGB-M-110	350-1100	1 : 3	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
100	RLGB-M-145	400-1380	1 : 4	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
101	RLGB-M-175/LN	320-1800	1 : 5	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
102	RLGB-M-205/LN	450-2200	1 : 5	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
103	RLGB-M-255	580-2400	1 : 4	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
104	RLGB-M-305/LN	600-3000	1 : 5	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
105	RLGB-M-385/LN	650-3500	1 : 5	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
106	RLGB-M-405/LN	680-4100	1 : 6	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
107	RLGB-M-505/LN	700-5100	1 : 7	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
108	RLGB-M-605/LN	1000-6100	1 : 6	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II

• raadman Electrical Modular Dual Fuel Burners

RLGB-M/M Series or raadman modulating dual fuel burners cover a firing range of 650 to 25000 kW, and they are designed for a wide range of domestic and industrial applications. They have modulating operation for both gas and light oil fuel.

This category of burners includes all mechanical components, burner head, ignition devices, flame scanner, burner actuator, accessories of power system, ventilation motor, fan wheel, safety devices, and air pressure switches.

Electronic modular burner controller:

AutoFlame (burners with capacity less than 6.5 MW in boiler/burner packages), Lamtec or Siemens depends on the manufacturer's policy, market availability or the customer's order.

Gas train includes filter, regulator, main and safety valves, pressure gauges, minimum and leak test pressure switches (All according to BS-EN 676).

Light oil system includes separate motor for oil pump, pump with pressure regulating valve, solenoid valves in feeding line, pressure gauge in feeding and return line, atomizers, burner gun, strainer, and all necessary safety devices (All according to BS-EN 267).



raadman Electrical Modular Dual Fuel Burners (RLGB-M/M-Series)

N.O	Burner	Capacity (kW)	Turn Down	CO (ppm)		NOx (mg/kWh)		Class of NOx	
109	RLGB-M/M-385/LN	650-3500	1 : 5	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
110	RLGB-M/M-405/LN	680-4100	1 : 6	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
111	RLGB-M/M-505/LN	700-5100	1 : 7	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
112	RLGB-M/M-605/LN	1000-6100	1 : 6	Gas	< 20	Gas	< 80	Gas	III
				Oil	< 30	Oil	< 170	Oil	II
113	RLGB-M/M-705	1000-7000	1 : 7	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
114	RLGB-M/M-805	1000-8000	1 : 8	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
115	RLGB-M/M-950	1000-9000	1 : 9	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
116	RLGB-M/M-1050	1000-10500	1 : 10	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
117	RLGB-M/M-1250	1200-12000	1 : 10	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
118	RLGB-M/M-1350	1700-13500	1 : 8	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
119	RLGB-M/M-1550	1900-15000	1 : 8	Gas	< 20	Gas	< 80	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
120	RLGB-M/M-1750	2200-17000	1 : 8	Gas	< 20	Gas	< 80	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
121	RLGB-M/M-2250	2750-22000	1 : 8	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
122	RLGB-M/M-2550	3150-25000	1 : 8	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II

• raadman Post-Mixed Burners

raadman post-mixed burners cover a firing range of 500 to 4000 kW.

In post-mixed burner (PM series), air and gas are thoroughly mixed before the burner head. Then, the mixture goes through high-temperature stainless steel, ceramics, and metal fiber heating heads.

In this type of burner, the mixing head has been innovatively designed for the complete mixing of fuel and air using a staging mechanism and a set of flow-rotating blades. The fuel and air are injected from independent paths and are mixed through two rows of rotating blades, due to the creation of vortices and turbulence in the flow.

Electronic modular burner controller:

AutoFlame (in boiler/burner packages), Lamtec or Siemens depends on the manufacturer's policy, market availability or the customer's order.

Gas train includes filter, regulator, main and safety valves, pressure gauges, minimum and leak test pressure switches (All according to BS-EN 676).



raadman Post-Mixed Burners (RPB-M-.../PM-Series)

N.O	Burner	Capacity (kW)	Turn Down	CO (ppm)	NOx (mg/kWh)	Class of NOx
123	RPB-M-50/PM	125-500	1 : 4	< 2	< 40	Ultra low Nox
124	RPB-M-80/PM	200-800	1 : 4	< 2	< 40	Ultra low Nox
125	RPB-M-125/PM	300-1200	1 : 4	< 2	< 40	Ultra low Nox
126	RPB-M-150/PM	380-1500	1 : 4	< 2	< 40	Ultra low Nox
127	RPB-M-175/PM	430-1700	1 : 4	< 2	< 40	Ultra low Nox
128	RPB-M-200/PM	500-2000	1 : 4	< 2	< 40	Ultra low Nox
129	RPB-M-250/PM	630-2500	1 : 4	< 2	< 40	Ultra low Nox
130	RPB-M-300/PM	750-3000	1 : 4	< 2	< 40	Ultra low Nox
131	RPB-M-400/PM	1000-4000	1 : 4	< 2	< 40	Ultra low Nox



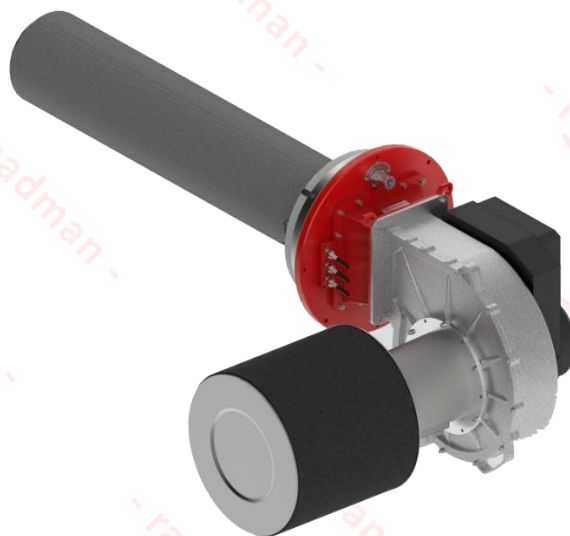
• raadman Pre-Mixed Burners

raadman pre-mixed burners cover a firing range of 500 to 4000 kW.

In pre-mixed burner (PE series), air and gas are thoroughly mixed before the burner head. Then, the mixture goes through high-temperature stainless steel, ceramics, and metal fiber heating heads.

PE-Series of raadman burners are equipped with a centrifugal fan and a brushless electromotor that guarantee high performance, low sound emission, and optimized speed variation. The motor speed variation controls the regulation of gas delivery. Pre-mixed burner gas train consist of a pneumatic proportioning multiblock gas valve that regulates gas input by fan pressure feedback.

Thanks to standard mixing venturis, gas and combustion air are completely mixed before the fan wheel. Using the PWM pulse and, as a consequence, controlling the rotation of blower, the mixture is transferred to combustion area. Finally, a well spark, leads to a pre-mixed flame with minimum pollution.



raadman Pre-Mixed Burners (RPB-M-.../PE-Series)

N.O	Burner	Capacity (kW)	Turn Down	CO (ppm)	NOx (mg/kWh)	Class of NOx
132	RPB-M-50/PE	125-500	1 : 4	< 2	< 40	Ultra low Nox
133	RPB-M-80/PE	200-800	1 : 4	< 2	< 40	Ultra low Nox
134	RPB-M-125/PE	300-1200	1 : 4	< 2	< 40	Ultra low Nox
135	RPB-M-150/PE	380-1500	1 : 4	< 2	< 40	Ultra low Nox
136	RPB-M-175/PE	430-1700	1 : 4	< 2	< 40	Ultra low Nox
137	RPB-M-200/PE	500-2000	1 : 4	< 2	< 40	Ultra low Nox
138	RPB-M-250/PE	630-2500	1 : 4	< 2	< 40	Ultra low Nox
139	RPB-M-300/PE	750-3000	1 : 4	< 2	< 40	Ultra low Nox
140	RPB-M-400/PE	1000-4000	1 : 4	< 2	< 40	Ultra low Nox

• raadman Electrical Modular Gas Burners

raadman dual block gas burners cover a firing range of 7000 to 32000 kW, and they are designed for a wide range of domestic and industrial applications. DB-Series burners are equipped with an electronic microprocessor management panel that controls the air damper servomotor and fuel servomotors as well as the head regulating sleeves. Using electronic modulation, hysteresis is prevented by the precise control of the separated and independent servomotors and the software linked by can-bus. The AutoFlame, Lamtec, ETAMATIC / CMS combustion managers or Siemens LMV51/52, as the most popular brands, are frequently used in DB-Series of raadman modular burners. This control system can control fuel/air ratio by an electronic controller system.



Up to five motorized actuators can be assigned to modulate air and fuel drives with the option of an additional module to add variable speed drive control for the combustion air fan.

Gas train includes filter, regulator, main and safety valves, pressure gauges, minimum and leak test pressure switches (All according to BS-EN 676).

raadman Electrical Modular Gas Burners (RGB-M-...-DB-Series)

N.O	Burner	Capacity (kW)	Turn Down	CO (ppm)	NOx (mg/kWh)	Class of NOx
141	RGB-M-705-DB	800-7000	1 : 8	< 30	< 120	II
142	RGB-M-805-DB	1000-8000	1 : 8	< 30	< 120	II
143	RGB-M-950-DB	1000-9000	1 : 9	< 30	< 120	II
144	RGB-M-1050-DB	1000-10500	1 : 10	< 30	< 120	II
145	RGB-M-1250-DB	1200-12000	1 : 10	< 30	< 120	II
146	RGB-M-1350-DB	1700-13500	1 : 8	< 30	< 120	II
147	RGB-M-1550-DB	1900-15000	1 : 8	< 20	< 80	II
148	RGB-M-1750-DB	2200-17000	1 : 8	< 20	< 80	II
149	RGB-M-2250-DB	2750-22000	1 : 8	< 30	< 120	II
150	RGB-M-2550-DB	3150-25000	1 : 8	< 30	< 120	II
151	RGB-M-3250-DB	4000-32000	1 : 8	< 30	< 120	II

• raadman Electrical Modular Dual Fuel Burners

Full electronic modulating burners are designed to operate safely throughout their firing range of high fire to low fire. 1:8 up to 1:10 are the most common turndown ratings in DB-Series burner. High turndown is used to reduce the burner cycling and maintain a consistent temperature or pressure in the boiler. This is crucial if the boiler is used in an industrial process that requires a consistent temperature or pressure.

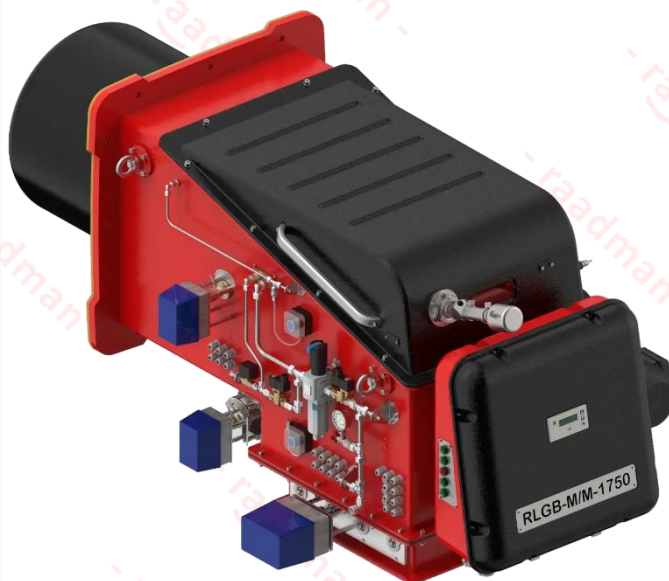
This category of burners includes all mechanical components, burner head, ignition devices, flame scanner, burner actuator, accessories of power system, safety devices, and air pressure switches.

Electronic modular burner controller:

AutoFlame, Lamtec or Siemens, depend on the manufacturer's policy, market availability, and suitability as well as negotiating with customers.

Gas train includes filter, regulator, main and safety valves, pressure gauges, minimum and leak test pressure switches (All according to BS-EN 676).

Light oil system includes separate motor for oil pump, pump with pressure regulating valve, solenoid valves in feeding line, pressure gauges in feeding and return line, atomizers, burner gun, strainer, and all necessary safety devices (All according to BS-EN 267).



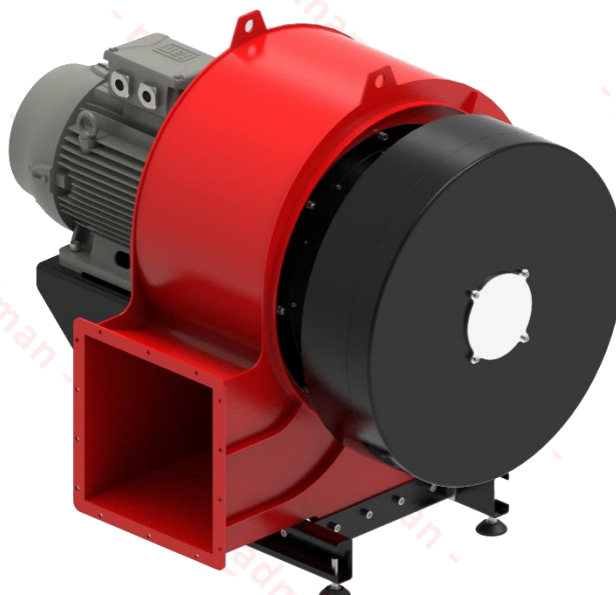
raadman Electrical Modular Dual Fuel Burners (RLGB-M/M-...-DB-Series)

N.O	Burner	Capacity (kW)	Turn Down	CO (ppm)		NOx (mg/kWh)		Class of NOx	
152	RLGB-M/M-705-DB	800-7000	1 : 8	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
153	RLGB-M/M-805-DB	1000-8000	1 : 8	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
154	RLGB-M/M-950-DB	1000-9000	1 : 9	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
155	RLGB-M/M-1050-DB	1000-10500	1 : 10	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
156	RLGB-M/M-1250-DB	1200-12000	1 : 10	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
157	RLGB-M/M-1350-DB	1700-13500	1 : 8	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
158	RLGB-M/M-1550-DB	1900-15000	1 : 8	Gas	< 20	Gas	< 80	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
159	RLGB-M/M-1750-DB	2200-17000	1 : 8	Gas	< 20	Gas	< 80	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
160	RLGB-M/M-2250-DB	2750-22000	1 : 8	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
161	RLGB-M/M-2550-DB	3150-25000	1 : 8	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II
162	RLGB-M/M-3250-DB	4000-32000	1 : 8	Gas	< 30	Gas	< 120	Gas	II
				Oil	< 30	Oil	< 170	Oil	II



• raadman Burner Ventilation System

In order to obtain a complete industrial combustion system, raadman burner is able to offer various components to be matched with the combustion heads of DB-Series, such as the centrifugal air fans. The fans supply the airflow to the combustion head through the adduction channel, with the appropriate technical features required from the application. The delivered air processed from the fan is in a correct proportion to the fuel in order to guarantee the required burner output with a safe operation.



raadman Burner Ventilation System (BVS-Series)

N.O	Model	Burner firing rate (kW)	Air flow rate (m ³ /h)	Air pressure drop (mbar)	Real poer consumption (Kw)	Avaliable motor in marker (Kw)
163	BVS-1200/60/30	10500	12000	60	28	30
164	BVS-1380/60/37	12000	138000	60	33	37
165	BVS-1720/60/45	15000	172000	60	41	45
166	BVS-1700/65/55	17000	20000	65	51	55
167	BVS-2580/65/75	22000	25800	65	70	75
168	BVS-2900/65/75	25000	29000	65	74.3	75
169	BVS-3700/90/132	32000	37000	90	130.3	132

• -raadman- Burners Ventilation Motor Starter

In order to obtain a complete industrial combustion system, raadman burner is able to offer various components to be matched with the combustion heads of DB-Series, such as the centrifugal air fans.

The fans supply the airflow to the combustion head through the adduction channel, with the appropriate technical features required from the application. The delivered air processed from the fan is in a correct proportion to the fuel in order to guarantee the required burner output with a safe operation.



-raadman- Burners Ventilation Motor Starter (RMS-Series)

N.O	Power Model	Motor Power (kW)	Method for Starter	Panel Size
170	RMS-22-SD-I	22	Star-Delta	I
171	RMS-30-SD-I	30	Star-Delta	I
172	RMS-37-SD-I	37	Star-Delta	I
173	RMS-45-SD-I	45	Star-Delta	I
174	RMS-55-SD-I*	55	Star-Delta	I
175	RMS-75-SD-I*	75	Star-Delta	I
176	RMS-22-VSD-II	22	Variable Speed Drive	I
177	RMS-30-VSD-II	30	Variable Speed Drive	I
178	RMS-37-VSD-II	37	Variable Speed Drive	I
179	RMS-45-VSD-II	45	Variable Speed Drive	II
180	RMS-55-VSD-II	55	Variable Speed Drive	II
181	RMS-75-VSD-III	75	Variable Speed Drive	II
182	RMS-90-VSD-III	90	Variable Speed Drive	II
183	RMS-110-VSD-III	110	Variable Speed Drive	III
184	RMS-132-VSD-III	132	Variable Speed Drive	III



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