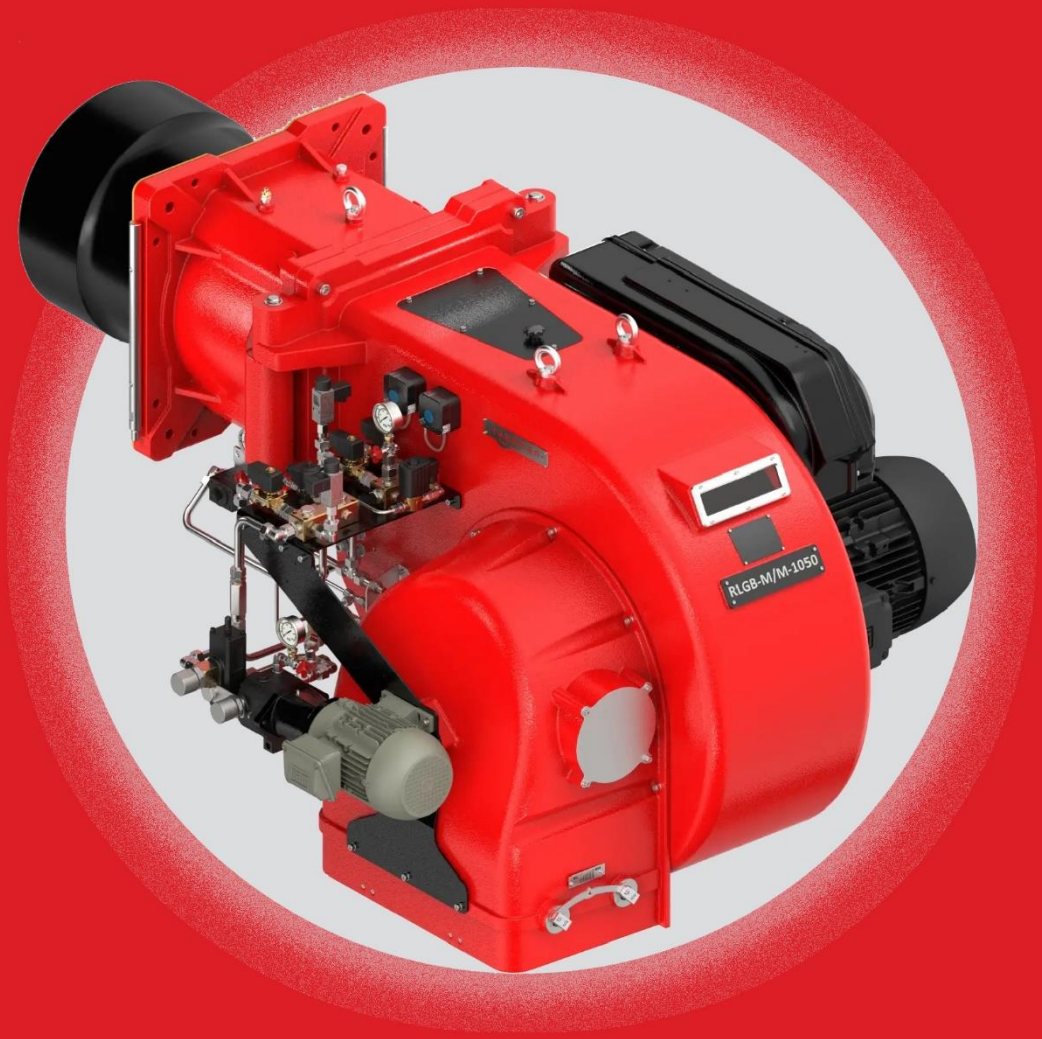
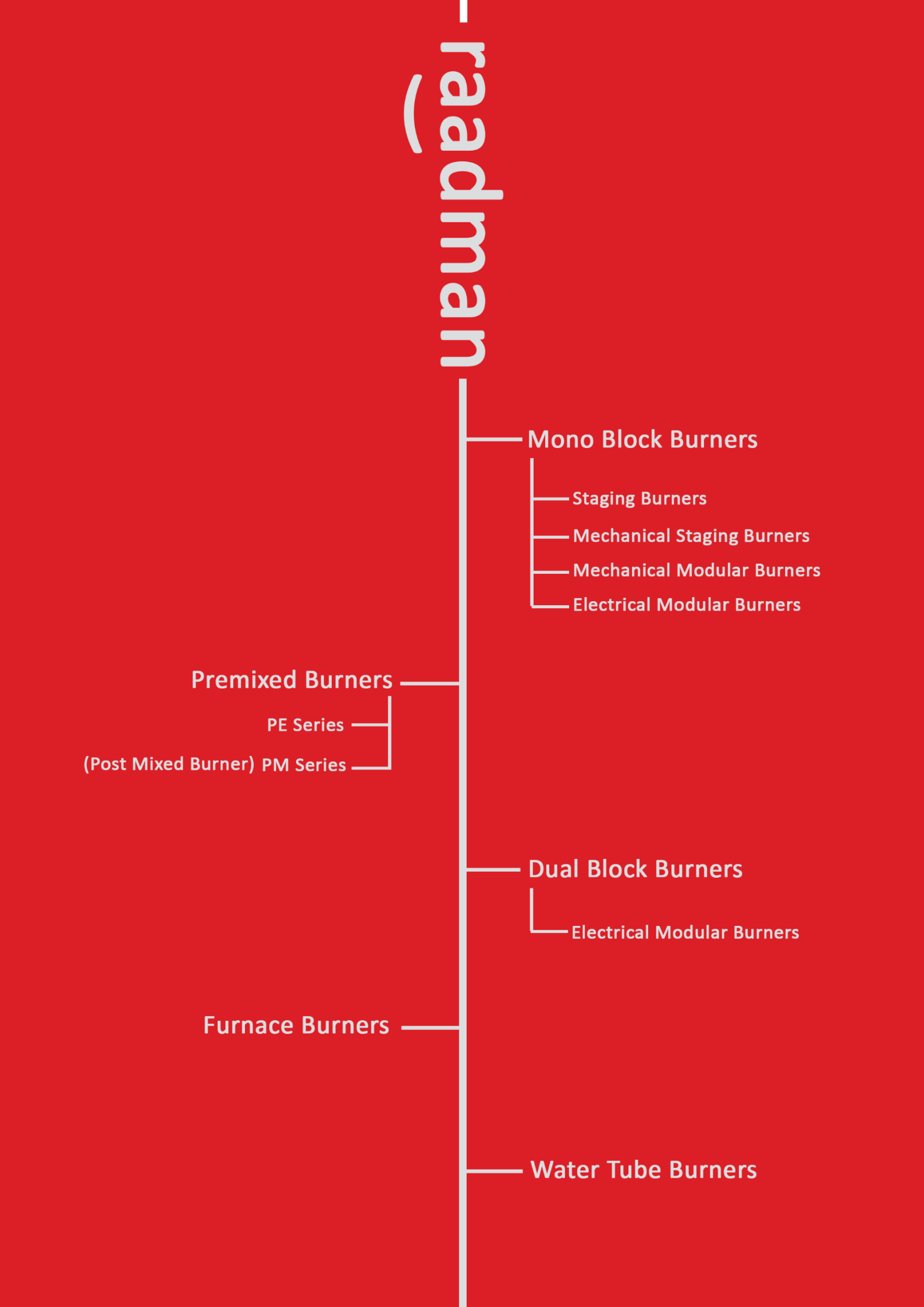


raadman

Product List

August 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 29 models
Mechanical staging in 23 models
Mechanical modular in 23 models
Electronic modular burners in 51 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.

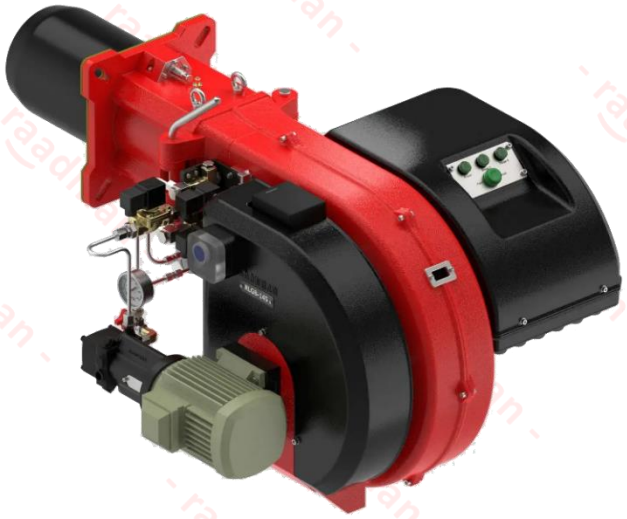
This category of burners includes all mechanical components, burner head, ignition devices, burner controllers such as Shokouh /Honeywell TMG or Siemens LFL, burner actuators, accessories of power system, ventilation motor, fan wheel, safety devices, and air pressure switches.

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).

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-175/LN	320-1800	1 : 5	< 20	< 80	III
10	RGB-185	470-1870	1 : 4	< 30	< 120	II
11	RGB-205	490-2250	1 : 4	< 30	< 120	II
12	RGB-255/LN	580-2400	1 : 4	< 20	< 80	III
13	RGB-305	600-3000	1 : 5	< 30	< 120	II
14	RGB-385	650-3800	1 : 5	< 30	< 120	II
15	RGB-405/LN	680-4100	1 : 6	< 20	< 80	III
16	RGB-505/LN	700-5100	1 : 7	< 20	< 80	III
17	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).

Staging Dual Fuel Burners (RLGB-Series)

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

Mechanical Staging Gas Burners (RGB-MS-Series)

N.O	Burner	Capacity (kW)	Turn Down	CO (ppm)	NOx (mg/kWh)	Class of NOx
30	RGB-MS-85/LN	250-900	1 : 3	< 20	< 80	III
31	RGB-MS-110	350-1150	1 : 3	< 30	< 120	II
32	RGB-MS-130/LN	350-1280	1 : 3	< 20	< 80	III
33	RGB-MS-145	400-1480	1 : 4	< 30	< 120	II
34	RGB-MS-175/LN	320-1800	1 : 5	< 20	< 80	III
35	RGB-MS-185	470-1870	1 : 4	< 30	< 120	II
36	RGB-MS-205	490-2250	1 : 4	< 30	< 120	II
37	RGB-MS-255/LN	580-2400	1 : 4	< 20	< 80	III
38	RGB-MS-305	600-3000	1 : 5	< 30	< 120	II
39	RGB-MS-385	650-3800	1 : 5	< 30	< 120	II
40	RGB-MS-405/LN	680-4100	1 : 6	< 20	< 80	III
41	RGB-MS-505/LN	700-5100	1 : 7	< 20	< 80	III
42	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).

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

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

Mechanical Modular Gas Burners (RGB-MC-Series)

N.O	Burner	Capacity (kW)	Turn Down	CO (ppm)	NOx (mg/kWh)	Class of NOx
53	RGB-MC-85/LN	250-900	1 : 3	< 20	< 80	III
54	RGB-MC-110	350-1150	1 : 3	< 30	< 120	II
55	RGB-MC-130/LN	350-1280	1 : 3	< 20	< 80	III
56	RGB-MC-145	400-1480	1 : 4	< 30	< 120	II
57	RGB-MC-175/LN	320-1800	1 : 5	< 20	< 80	III
58	RGB-MC-185	470-1870	1 : 4	< 30	< 120	II
59	RGB-MC-205	490-2250	1 : 4	< 30	< 120	II
60	RGB-MC-255/LN	580-2400	1 : 4	< 20	< 80	III
61	RGB-MC-305	600-3000	1 : 5	< 30	< 120	II
62	RGB-MS-385	650-3800	1 : 5	< 30	< 120	II
63	RGB-MC-405/LN	680-4100	1 : 6	< 20	< 80	III
64	RGB-MC-505/LN	700-5100	1 : 7	< 20	< 80	III
65	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).

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

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

Electrical Modular Gas Burners (RGB-M-Series)

N.O	Burner	Capacity (kW)	Turn Down	CO (ppm)	NOx (mg/kWh)	Class of NOx
76	RGB-M-55	160-580	1 : 3	< 30	< 120	II
77	RGB-M-80	297-810	1 : 3	< 30	< 120	II
78	RGB-M-85/LN	250-900	1 : 3	< 20	< 80	III
79	RGB-M-110	350-1150	1 : 3	< 30	< 120	II
80	RGB-M-130/LN	350-1280	1 : 3	< 20	< 80	III
81	RGB-M-145	400-1480	1 : 4	< 30	< 120	II
82	RGB-M-175/LN	320-1800	1 : 5	< 20	< 80	III
83	RGB-M-185	470-1870	1 : 4	< 30	< 120	II
84	RGB-M-205	490-2250	1 : 4	< 30	< 120	II
85	RGB-M-255/LN	580-2400	1 : 4	< 20	< 80	III
86	RGB-M-305	600-3000	1 : 5	< 30	< 120	II
87	RGB-M-385	650-3800	1 : 5	< 30	< 120	II
88	RGB-M-405/LN	680-4100	1 : 6	< 20	< 80	III
89	RGB-M-505/LN	700-5100	1 : 7	< 20	< 80	III
90	RGB-M-605	850-6200	1 : 7	< 30	< 120	II
91	RGB-M-705	1000-7000	1 : 7	< 30	< 120	II
92	RGB-M-805	1000-8000	1 : 8	< 30	< 120	II
93	RGB-M-950	1000-9000	1 : 9	< 30	< 120	II
94	RGB-M-1050	1000-10500	1 : 10	< 30	< 120	II
95	RGB-M-1250	1200-12000	1 : 10	< 30	< 120	II
96	RGB-M-1350	1350-13500	1 : 10	< 30	< 120	II
97	RGB-M-1550	1900-15000	1 : 8	< 20	< 80	II
98	RGB-M-1750	2200-17000	1 : 8	< 20	< 80	II
99	RGB-M-2250	2750-22000	1 : 8	< 30	< 120	II
100	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).

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

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

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

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

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

N.O	Burner	Capacity (kW)	Turn Down	CO (ppm)	NOx (mg/kWh)	Class of NOx
127	RPB-M-50/PM	125-500	1 : 4	< 2	< 40	Ultra low Nox
128	RPB-M-80/PM	200-800	1 : 4	< 2	< 40	Ultra low Nox
129	RPB-M-125/PM	300-1200	1 : 4	< 2	< 40	Ultra low Nox
130	RPB-M-150/PM	380-1500	1 : 4	< 2	< 40	Ultra low Nox
131	RPB-M-175/PM	430-1700	1 : 4	< 2	< 40	Ultra low Nox
132	RPB-M-200/PM	500-2000	1 : 4	< 2	< 40	Ultra low Nox
133	RPB-M-250/PM	630-2500	1 : 4	< 2	< 40	Ultra low Nox
134	RPB-M-300/PM	750-3000	1 : 4	< 2	< 40	Ultra low Nox
135	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.

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

N.O	Burner	Capacity (kW)	Turn Down	CO (ppm)	NOx (mg/kWh)	Class of NOx
136	RPB-M-50/PE	125-500	1 : 4	< 2	< 40	Ultra low Nox
137	RPB-M-80/PE	200-800	1 : 4	< 2	< 40	Ultra low Nox
138	RPB-M-125/PE	300-1200	1 : 4	< 2	< 40	Ultra low Nox
139	RPB-M-150/PE	380-1500	1 : 4	< 2	< 40	Ultra low Nox
140	RPB-M-175/PE	430-1700	1 : 4	< 2	< 40	Ultra low Nox
141	RPB-M-200/PE	500-2000	1 : 4	< 2	< 40	Ultra low Nox
142	RPB-M-250/PE	630-2500	1 : 4	< 2	< 40	Ultra low Nox
143	RPB-M-300/PE	750-3000	1 : 4	< 2	< 40	Ultra low Nox
144	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).

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

N.O	Burner	Capacity (kW)	Turn Down	CO (ppm)	NOx (mg/kWh)	Class of NOx
145	RGB-M-705-DB	800-7000	1 : 8	< 30	< 120	II
146	RGB-M-805-DB	1000-8000	1 : 8	< 30	< 120	II
147	RGB-M-950-DB	1000-9000	1 : 9	< 30	< 120	II
148	RGB-M-1050-DB	1000-10500	1 : 10	< 30	< 120	II
149	RGB-M-1250-DB	1200-12000	1 : 10	< 30	< 120	II
150	RGB-M-1350-DB	1350-13500	1 : 10	< 30	< 120	II
151	RGB-M-1550-DB	1900-15000	1 : 8	< 20	< 80	II
152	RGB-M-1750-DB	2200-17000	1 : 8	< 20	< 80	II
153	RGB-M-2250-DB	2750-22000	1 : 8	< 30	< 120	II
154	RGB-M-2550-DB	3150-25000	1 : 8	< 30	< 120	II
155	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).

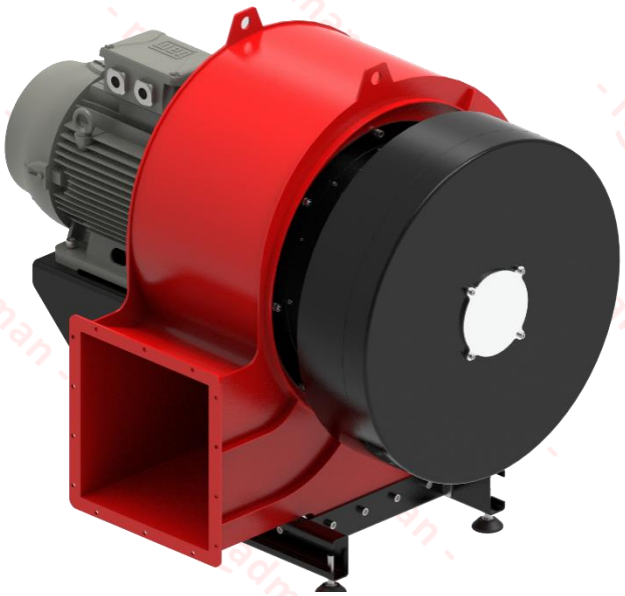
Light oil system includes separate motor for oil pump, pump with pressure regulating valve, solenoid valves in feeding line, pressure gauges in feeding and return line, atomizers, burner gun, strainer, and all necessary safety devices (All according to BS-EN 267).

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	
156	RLGB-M/M-705-DB	800-7000	1 : 8	Gas Oil	< 30 < 30	Gas Oil	< 120 < 170	Gas Oil	II II
157	RLGB-M/M-805-DB	1000-8000	1 : 8	Gas Oil	< 30 < 30	Gas Oil	< 120 < 170	Gas Oil	II II
158	RLGB-M/M-950-DB	1000-9000	1 : 9	Gas Oil	< 30 < 30	Gas Oil	< 120 < 170	Gas Oil	II II
159	RLGB-M/M-1050-DB	1000-10500	1 : 10	Gas Oil	< 30 < 30	Gas Oil	< 120 < 170	Gas Oil	II II
160	RLGB-M/M-1250-DB	1200-12000	1 : 10	Gas Oil	< 30 < 30	Gas Oil	< 120 < 170	Gas Oil	II II
161	RLGB-M/M-1350-DB	1350-13500	1 : 10	Gas Oil	< 30 < 30	Gas Oil	< 120 < 170	Gas Oil	II II
162	RLGB-M/M-1550-DB	1900-15000	1 : 8	Gas Oil	< 20 < 30	Gas Oil	< 80 < 170	Gas Oil	II II
163	RLGB-M/M-1750-DB	2200-17000	1 : 8	Gas Oil	< 20 < 30	Gas Oil	< 80 < 170	Gas Oil	II II
164	RLGB-M/M-2250-DB	2750-22000	1 : 8	Gas Oil	< 30 < 30	Gas Oil	< 120 < 170	Gas Oil	II II
165	RLGB-M/M-2550-DB	3150-25000	1 : 8	Gas Oil	< 30 < 30	Gas Oil	< 120 < 170	Gas Oil	II II
166	RLGB-M/M-3250-DB	4000-32000	1 : 8	Gas Oil	< 30 < 30	Gas Oil	< 120 < 170	Gas Oil	II 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.



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)
167	BVS-1200/60/30	10500	12000	60	28	30
168	BVS-1380/60/37	12000	13800	60	33	37
169	BVS-1720/60/45	15000	17200	60	41	45
170	BVS-1940/65/55	19400	19400	65	51	55
171	BVS-2580/65/75	22000	25800	65	70	75
172	BVS-2900/65/75	25000	29000	65	74.3	75
173	BVS-3700/90/132	32000	37000	90	130.3	132

• - raadman - Burner Ventilation Motor Starter

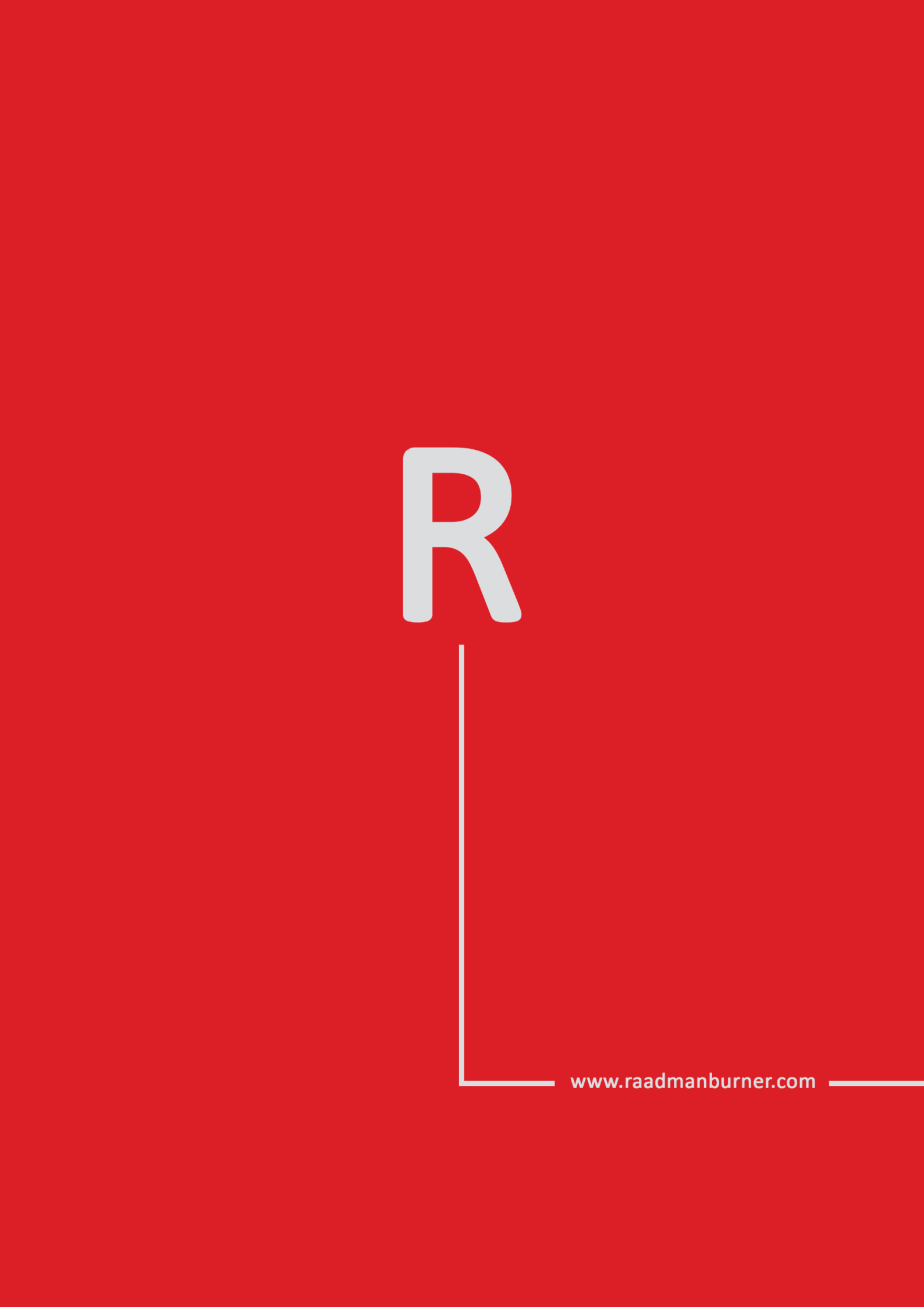
In burners with ventilation motor capacity of 22kW and above, the power circuit and control circuit need to be installed separately due to destructive effects of electrical noise that power circuit or high voltage has on the control devices. With Regard to this reason, raadman motor starter (RMS) in which the power circuit is embedded, is introduced. The Most common ventilation motor starters are star-Delta and frequency converter which is also called VSD (Variable Speed Drive).

Burner Ventilation Motor Starter (RMS-Series)

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

Note

Note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