RG91 –RG92

Dual stage
Light oil burners

MANUAL OF INSTALLATION - USE - MAINTENANCE

CIB UNIGAS

BURNERS - BRUCIATORI - BRULERS - BRENNER - QUEMADORES - ГОРЕЛКИ

M039192CB Rel.1.0 09/2011

Burner model identification

Burners are identified by burner type and model. Burner model identification is described as follows.

Type RG91 **Model** G-. AB. S. *. A. (1) (2) (3) (4) (5)	
(1) BURNER TYPE	RG91
(2) FUEL	G – Light oil A - Biodiesel
(3) OPERATION	AB – Dual stage
(4) BLAST TUBE	S – Standard L **-** Extended
(5) DESTINATION COUNTRY	* - see ID plate
(6) VERSION	A - Standard

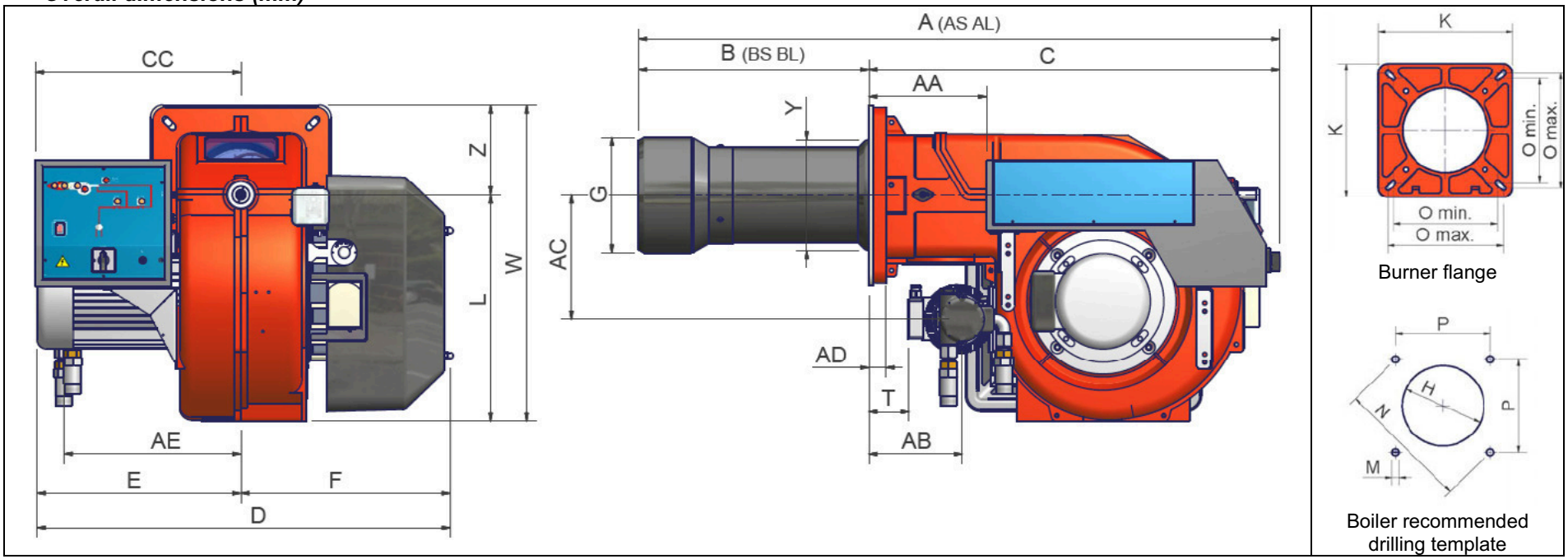
Specifications

		RG91	**RG92**
Output	min - max kW	1047 - 2093	1280 - 2558
Fuel		Light oil	
Oil rate	min. - max. kg/h	88 - 176	108 - 215
Oil viscosity	cSt @ 40°C	2 - 7.4	2 - 7.4
Oil density	kg/m3	840	840
Oil pressure at the oil train inlet	bar	1.5 max	1.5 max
Power supply		400V 3N~ 50	400V 3N~ 50
Total power consumption	kW	4.5	6.0
Fan motor	kW	4	5.5
Pump motor	kW		
Protection		IP40	IP40
Operation		Dual stage	
Operating temperature	°C	-10 ÷ +50	-10 ÷ +50
Storage temperature	°C	-20 ÷ +60	-20 ÷ +60
Working service *		Intermittent	Intermittent

WARNING: if fuel used is BIODIESEL, some components must be replaced. Please contact our Technical Department for further details.

*** NOTE ON THE WORKING SERVICE: the Siemens LMO.. control box automatically stops after 24h of continuous working. The control box immediately starts up, automatically**.

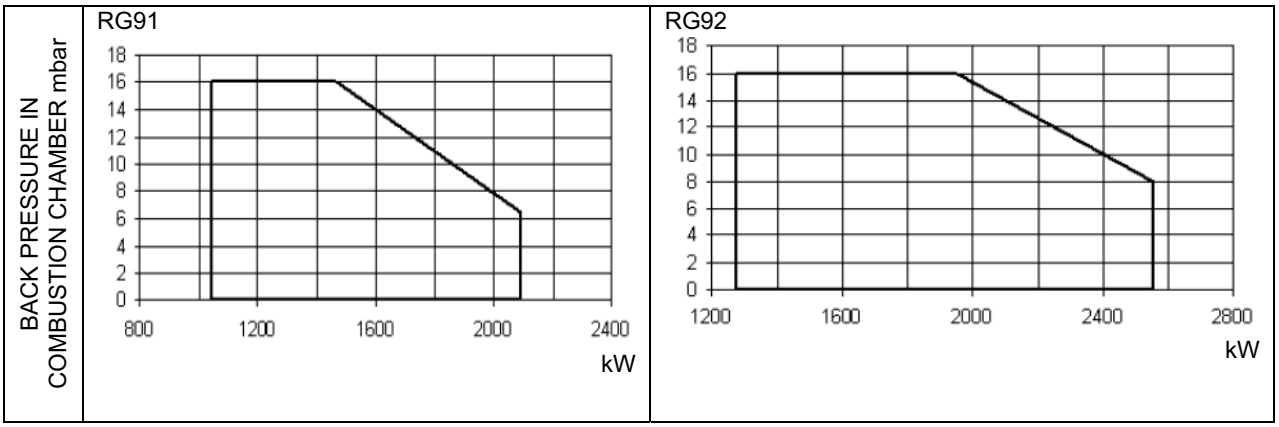
Overall dimensions (mm)



	A (AS*)	A (AL*)	AA	AB	AC	AD	AE	B (BS*)	B (BL*)	C	CC	E	F	G	H	K	L	M	N	Omin	Omax	P	T	W	Y	Z
RG91	1144	1317	242	182	256	35	367	300	473	844	422	419	434	238	268	360	464	M12	417	280	310	295	80	649	228	185
RG92	1138	1311	242	x	x	35	x	294	467	844	422	419	434	266	296	360	464	M12	417	280	310	295	x	649	228	185

*AS/BS = measure referred to standard blast tube
*AL/BL = measure referred to extended blast tube

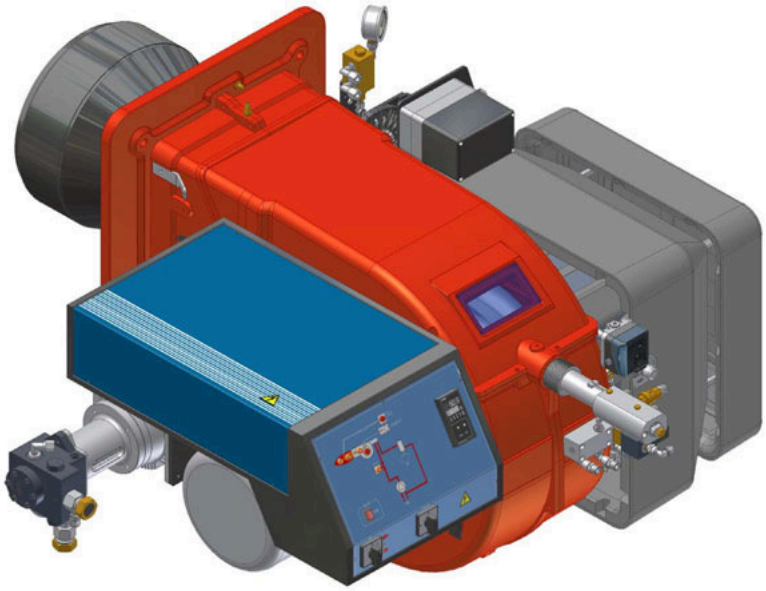
Performance curves



To get the input in kcal/h, multiply value in kW by 860.
Data are referred to the following conditions: 1013mbar atmospheric pressure, 15°C ambient temperature**.**

NOTE: The performance curve is a diagram that represents the burner performance in the type approval phase or in the laboratory tests, but does not represent the regulation range of the machine. On this diagram the maximum output point is usually reached by adjusting the combustion head to its “MAX” position (see paragraph “Adjusting the combustion head”); the minimum output point is reached setting the combustion head to its “MIN” position. During the first ignition, the combustion head is set in order to find a compromise between the burner output and the generator specifications, that is why the minimum output may be different from the Performance curve minimum.

RG91 - RG92 - RG93
RG510 - RG515
RG520 - RG525



Progressive - Fully modulating
Light oil burners

MANUAL OF INSTALLATION - USE - MAINTENANCE

CIB UNIGAS

BURNERS - BRUCIATORI - BRULERS - BRENNER - QUEMADORES - ГОРЕЛКИ

M039214CC Rel. 2.•• 11/2010

Technical specifications

BURNERS		**RG91**	**RG92**	**RG93**
Output	min. -max. kW	698 - 2093	849 - 2558	550 - 4100
Light oil rate	min. -max. kg/h	59 - 176	72 - 215	46 - 345
Fuel		Light oil		
Viscosity	cSt @ 40 °C	2 - 7.4		
Density	kg/m^3	840		
Oil train pressure inlet	bar max	4		
Power supply		400V 3N ~ 50Hz		
Fan motor	kW	4	5.5	7.5
Pump motor	kW	1.1	1.1	1.1
Total power consumption	kW	5.6	7.0	9.0
Index of protection		IP40		
Approx. weight	kg	220	220	230
Operation		Progressive - Fully modulating		
Operating temperature	°C	-10 ÷ +50		
Storage temperature	°C	-20 ÷ +60		
Working service *		Intermittent		

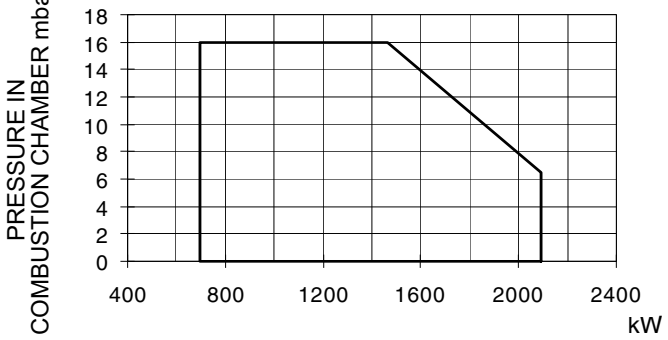
BURNERS		**RG510**	**RG515**	**RG520**	**RG525**
Output	min. -max. kW	1314 - 3953	1628 - 4884	2326 - 6977	2000 - 8000
Fuel		Light oil			
Light oil rate	min. -max. kg/h	111 - 333	137 - 411	196 - 588	169 - 674
Viscosity	cSt @ 40 °C	2 - 7.4			
Density	kg/m^3	840			
Oil train pressure inlet	bar max	4			
Power supply		400V 3N ~ 50Hz			
Electric motor	kW	7.5	11	15	18.5
Pump motor	kW	1.1	1.5	1.5	3
Total power consumption	kW	9.1	13	17	22
Operation		Progressive - Fully modulating			
Index of protection		IP40			
Operating temperature	°C	-10 ÷ +50			
Storage temperature	°C	-20 ÷ +60			
Working service *		Intermittent			

***NOTE ON THE BURNER WORKING SERVICE: for safety reasons, one controlled shutdown must be performed after 24 hours of intermittent operation.**

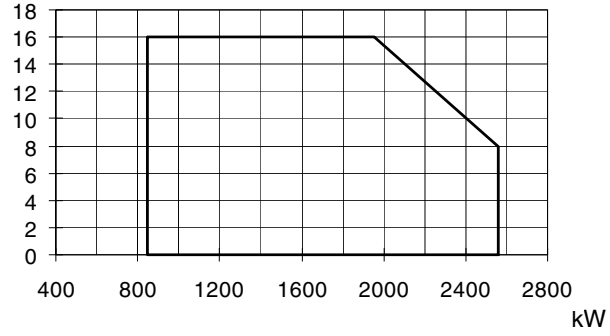
NOTE: Choosing the nozzle for light oil, consider Hi equal to 42.8MJ/kg.

Performance curves

RG91

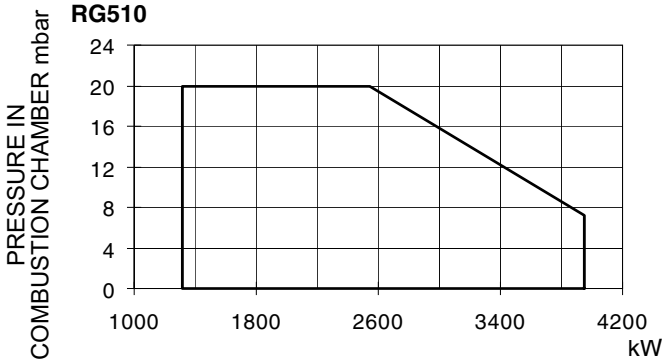


RG92

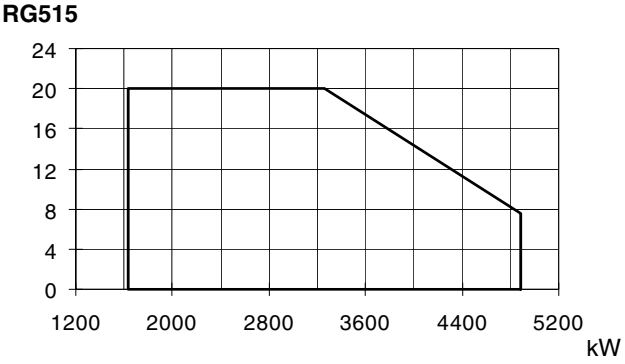


RG93

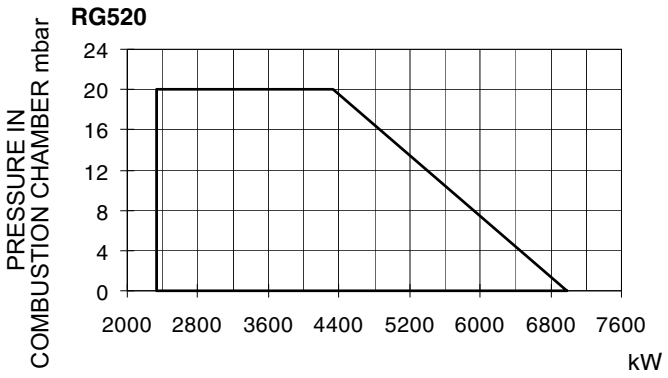
RG510



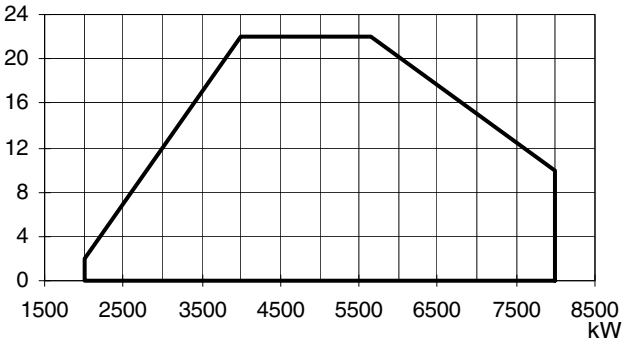
RG515



RG520



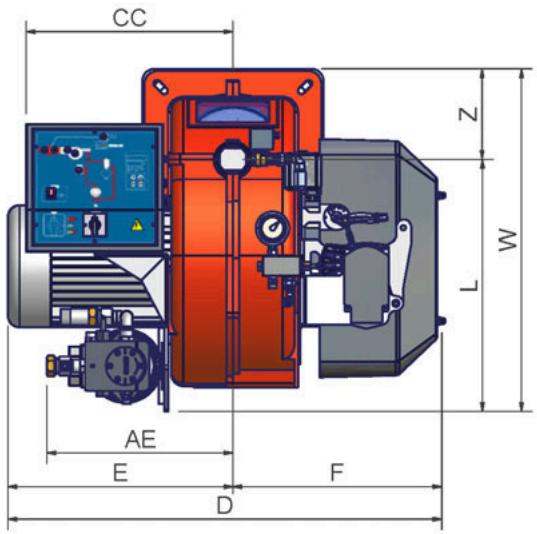
RG525

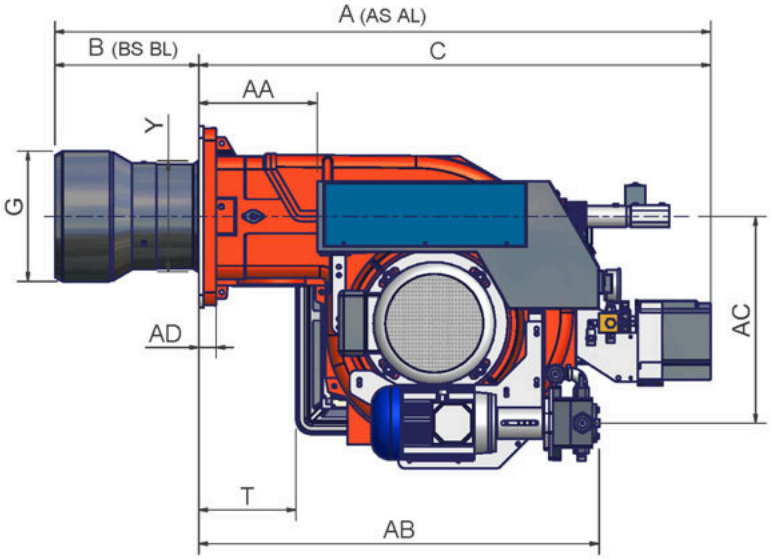


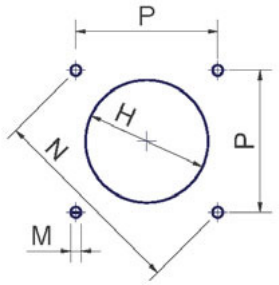
To get the input in kcal/h, multiply value in kW by 860. Data are referred to standard conditions: atmospheric pressure at 1013mbar, ambient temperature at 15°C.

NOTE: The performance curve is a diagram that represents the burner performance in the type approval phase or in the laboratory tests, but does not represent the regulation range of the machine. On this diagram the maximum output point is usually reached by adjsuting the combustion head to its “MAX” position (see paragraph “Adjusting the combustion head”); the minimum output point is reached setting the combustion head to its “MIN” position. During the first ignition, the combustion head is set in order to find a compromise between the burner output and the generator specifications, that is why the minimum output may be different from the Performance curve minimum.

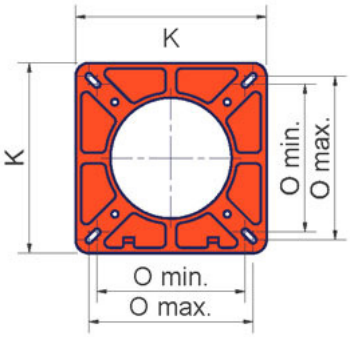
Overall dimensions (mm)







boiler recommended drilling template



burner flange

	A (AS)	A (AL)	AA	AB	AC	AD	AE	B (BS)	B (BL)	BB	C	CC	E	F	G	H	K	L	M	N	Omin	Omax	P	W	Y	Z
RG91	1345	1518	242	820	421	35	380	300	473	419	1045	422	419	434	238	268	360	513	M12	417	280	310	295	698	228	185
RG92	1339	1512	242	820	421	35	380	294	467	419	1045	422	419	434	266	296	360	513	M12	417	280	310	295	698	228	185
RG93	1339	1512	242	820	421	35	380	294	467	460	1045	422	460	434	266	296	360	513	M12	417	280	310	295	698	228	185

*AS/BS: measure referred to burner with standard blast tube provided

*AL/BL: measure referred to burner with extended blast tube provided