

KN 750/M-MEC

Dual fuel burners for gas and heavy oil at 2 stages progressive (hi-low flame) or PID fully modulating.

Fan at high pressurization, high efficiency combustion head with adjustment and high flame stability.

Available versions for natural gas or LPG (to be specified at the order).

Gas train includes working valve, safety valve, minimum gas pressure switch, gas pressure filter-stabilizer and is supplied already assembled, connected and tested.

The adoption of strong metal components makes the burner durable also in heavy duty conditions.

Burners are supplied with nozzle, fuel switch, gasket for installation on boiler, flexible hoses, line filter.



Fig. 1 KN 750/M-MEC

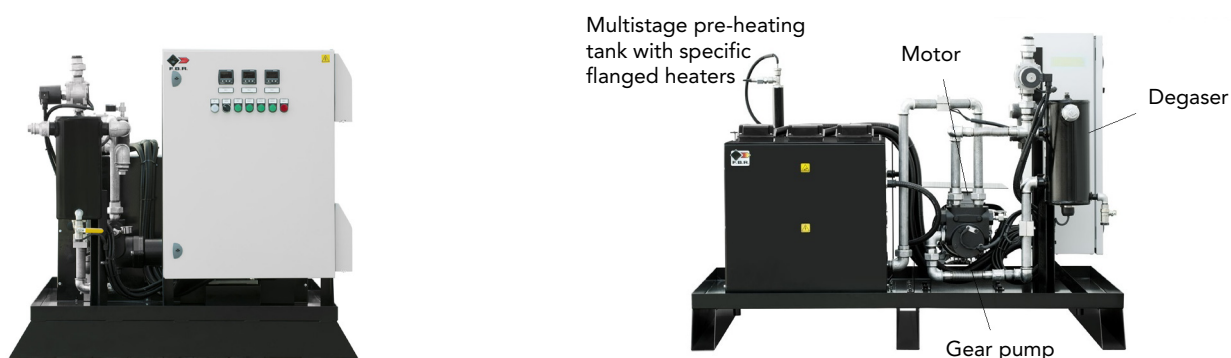


Fig. 2 Pump skid



TECHNICAL DATA

MODEL		KN 750/M-MEC
Thermal power min 1°st./min 2°st.-max 2°st. *	[Mcal/h]	1117/3400-7500
Thermal power min 1°st./min 2°st.-max 2°st. *	[kW]	1299/3953-8721
Gas flow G20 (natural gas) min 1°st./min 2°st.-max 2°st. *	[Nm ³ /h]	130/398-877
Gas flow G31 (L.P.G.) min 1°st./min 2°st.-max 2°st. *	[Nm ³ /h]	50/153-338
Fuel		Natural gas (second family) - LPG (third family)
Fuel category		I _{2R} , I _{2H} , I _{2L} , I _{2E} , I _{2ELL} - I _{3BP} , I ₃₊ , I _{3P} , I _{3B} , I _{3R}
Intermittent working operation (min, 1 stop every 24 hours) two stages progressive or modulating		
Enviromental conditions operation/storage		-15...+40°C / -20...+70°C , rel. humidity max. 80%
Max temperature combustion air	[°C]	60
Minimum pressure gas train (DN65-S F65 natural gas/L.P.G.) **	[mbar]	280/107
Minimum pressure gas train (DN80-S F80 natural gas/L.P.G.) **	[mbar]	164/63
Minimum pressure gas train (DN100-S F100 natural gas/L.P.G.) **	[mbar]	110/40
Minimum pressure gas train (DN125-S F125 natural gas/L.P.G.) **	[mbar]	81/31
Maximum pressure at the entry of the valves (Pe.max)	[mbar]	500
HEAVY-OIL flow min 1°st./min 2°st.-max 2°st. *	[kg/h]	114/347-765
Fuel		Heavy-oil 5°-20°E at 50°C
Nominal electric power burner	[kW]	22
Nominal electric power pump skid	[kW]	51
Fan motor	[kW]	22
Pump motor	[kW]	3
Resistances	[kW]	48
Power supply		3~400V-1/N~230V-50Hz
Degree of electric protection		IP44
Noiseness***	[dB(A)]	88

* Reference conditions: Environment temperature 20°C - Barometric pressure 1013 mbars - Altitude 0 metre (sea level).

** Minimal feeding-gas pressure to the gas train to get the maximum power of the burner, considering counter-pressure in combustion chamber of value 0 (zero).

*** Measured sonorous pressure in the laboratory combustion, with functional burner on beta boiler to 1 metre of distance (UNI EN ISO 3746 law).

FIRING RATES

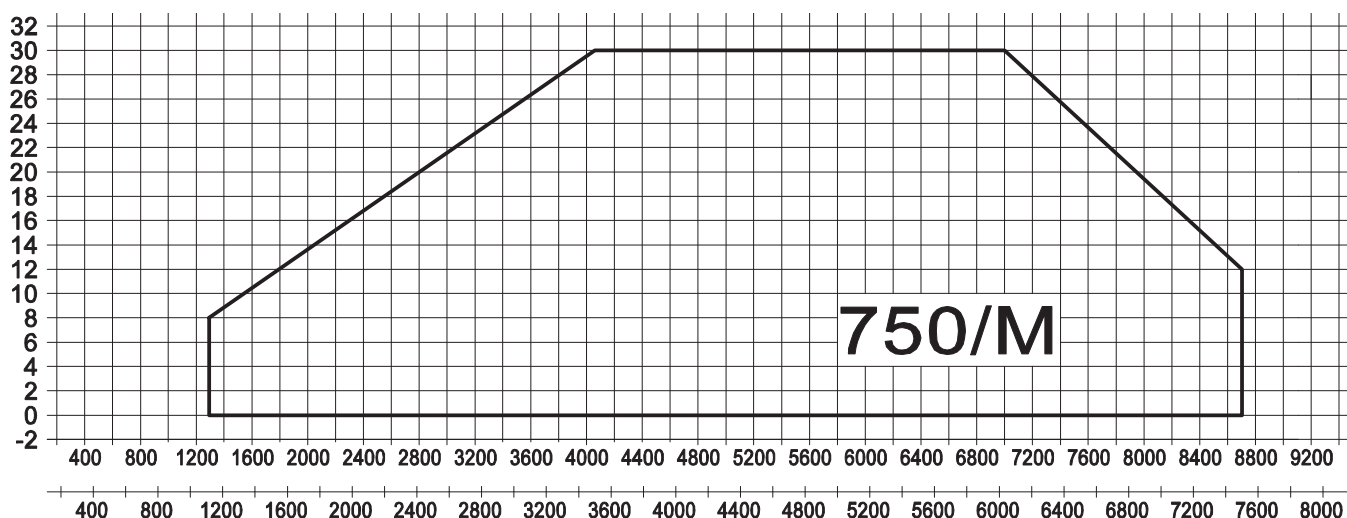
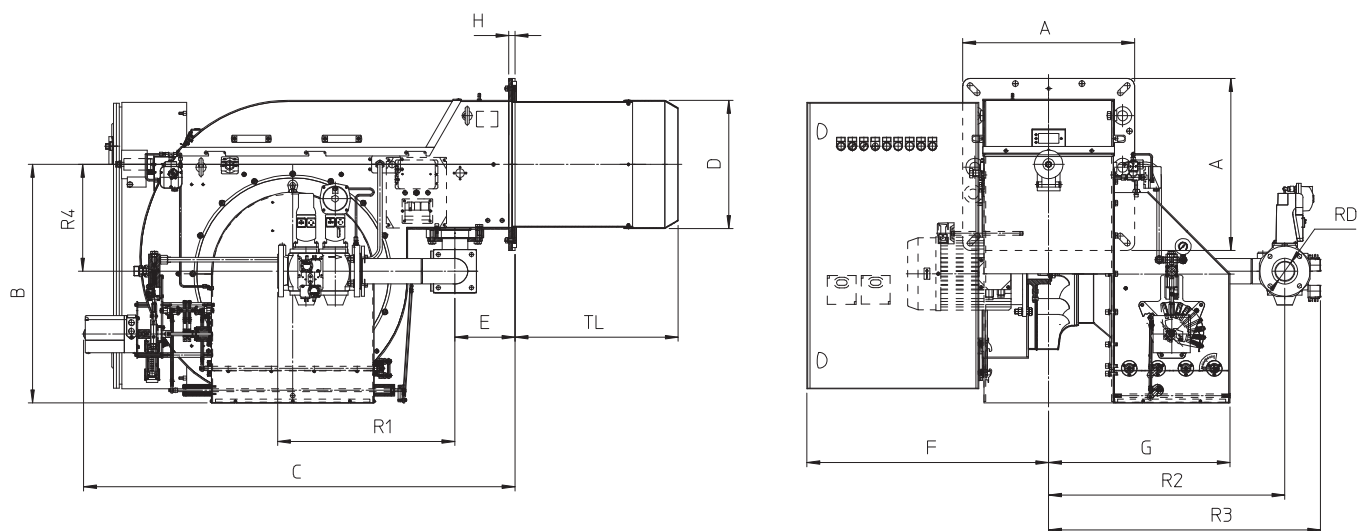


Fig. 3 X = Thermal power (kW -Mcal/h) Y = Pression in the combustion chamber (mbar)

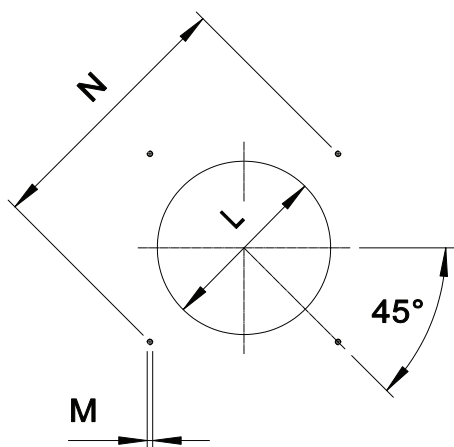
The firing rates has been obtained based on test boilers in accordance with EN267 standards and are indicative of matching the burner to the boiler. For the correct operation of the burner, combustion chamber dimensions must be in accordance with current regulation. In case of non-compliance, contact the manufacturer.

DIMENSIONS [mm]



MODEL	A	B	C	D	E	F	G	H	R1	R2	R3	R4	RD	TL
KN 750/M-MEC-DN65	600	832	1510	448	210	845	654	22	830	825	950	373	DN65	685
KN 750/M-MEC-DN80	600	832	1510	448	210	845	654	22	853	825	950	373	DN80	685
KN 750/M-MEC-DN100	600	832	1510	448	210	845	654	22	890	825	968	373	DN100	685
KN 750/M-MEC-DN125	600	832	1510	448	210	845	654	22	940	825	968	373	DN125	685

BOILER PLATE

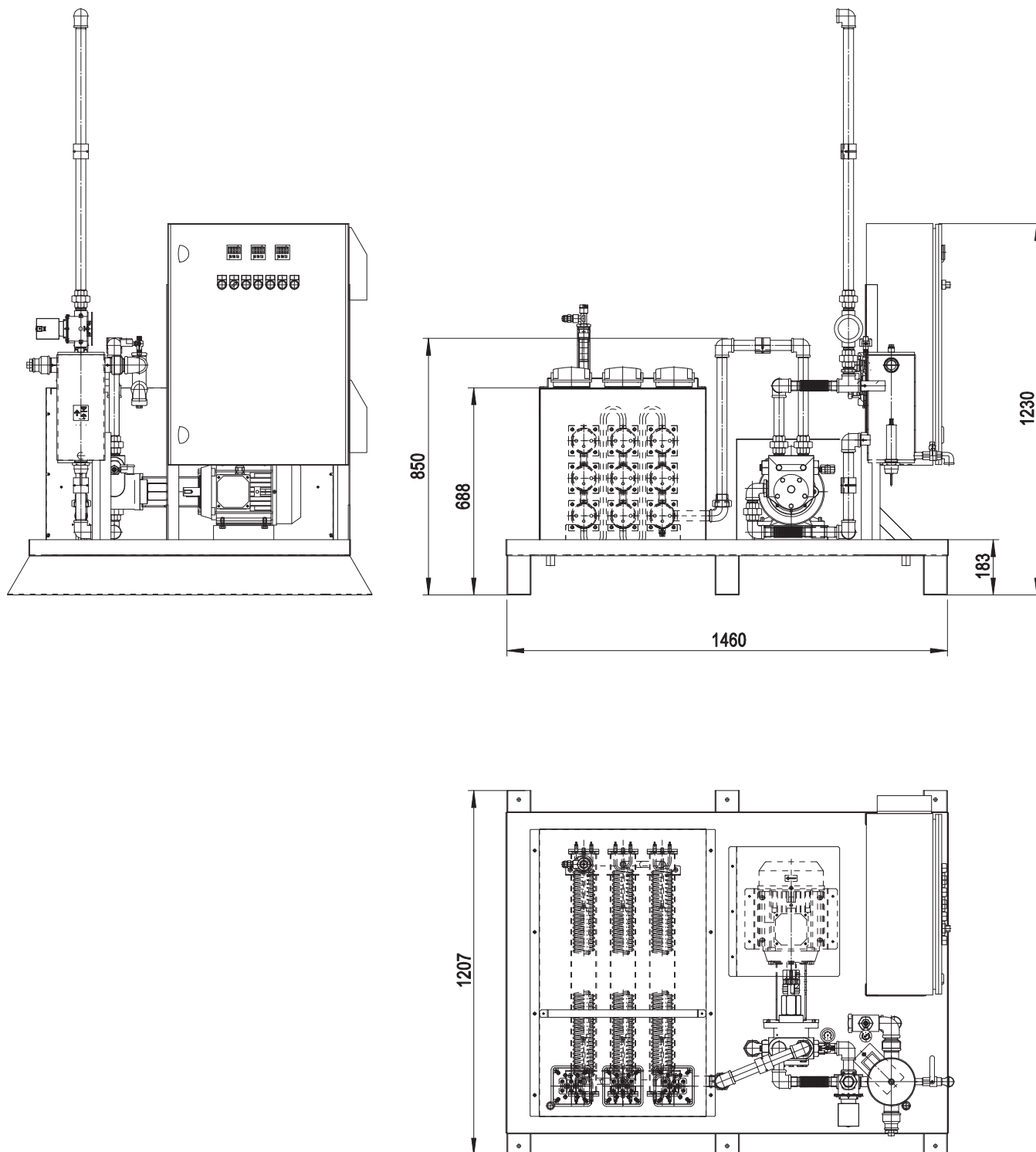


The dimensions of the boiler plate must be as indicated in the drawing.

MODEL		M	N min	N*	N Max	Lmin	Lmax
KN 750/M-MEC	mm	M16	707	778	778	460	540

* Suggested dimension

PUMP SKID: DIMENSIONS (mm)



The illustrations and data here shown are indicative. F.B.R. Bruciatori S.r.l. reserves the right to bring, without any obligation of warning, any changes that would be appropriate to the continuing development of their products.