

K 750-1000-1300-1500-1800/M-MEC

MECHANICAL MODULATION

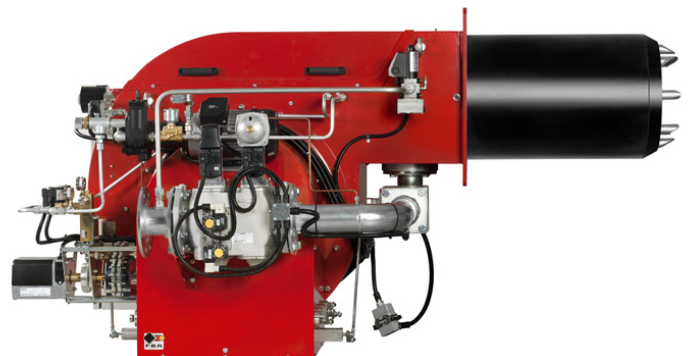
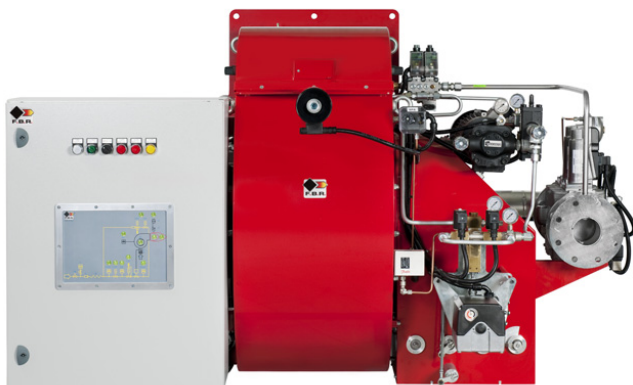
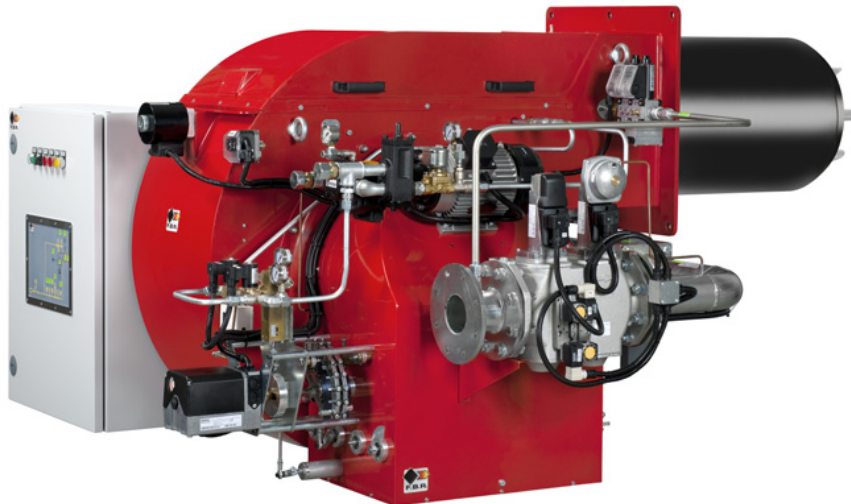
Dual fuel burners for gas and light oil at 2 stages progressive (hi-low flame) or PID fully modulating if optional modulation kit (digital type) and feeder (of temperature or pressure) are added.

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.

Available also versions with electronic camme.





TECHNICAL DATA

MODEL		K 750/M-MEC	K 1000/M-MEC	K 1300/M-MEC
Thermal power min 1°st./min 2°st.-max 2°st. *	[Mcal/h]	1200/3400-7500	1200/3400-10000	1700/3600-11500
Thermal power min 1°st./min 2°st.-max 2°st. *	[kW]	1395/3953-8721	1395/3953-11628	1977/4186-13372
Gas flow G20 (natural gas) min 1°st./min 2°st.-max 2°st. *	[Nm³/h]	140/398-877	140/398-1170	199/421-1345
Gas flow G31 (L.P.G.) min 1°st./min 2°st.-max 2°st. *	[Nm³/h]	54/153-338	54/153-450	77/162-518
Fuel		Natural gas (second family) - L.P.G. (third family)		
Fuel category		I _{2R} , I _{2H} , I _{2L} , I _{2E} , I _E , 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 ,relative humidity max. 80%		
Max temperature combustion air	[°C]	60	60	60
Minimum pressure gas train (DN80-S F80 natural gas/L.P.G.) **	[mbar]	280/107	-/-	-/-
Minimum pressure gas train (DN80-S F80 natural gas/L.P.G.) **	[mbar]	164/63	292/112	366/141
Minimum pressure gas train (DN100-S F100 natural gas/L.P.G.) **	[mbar]	110/40	184/71	248/95
Minimum pressure gas train (DN125-S F125 natural gas/L.P.G.) **	[mbar]	81/31	145/56	180/70
Maximum pressure at the entry of the valves (Pe.max)	[mbar]	500	500	500
LIGHT-OIL flow min 1°st./min 2°st.-max 2°st. *	[kg/h]	118/333-735	118/333-980	167/353-1127
Fuel		Light-oil 1.5°E at 20°C = 6.2cSt = 35sec Redwood N°1		
Nominal electric power	[kW]	25.5	34.5	41.5
Fan motor	[kW]	22	30	37
Pump motor	[kW]	3	4	4
Power supply		3~400V-1/N~230V-50Hz	3~400V-1/N~230V-50Hz	3~400V-1/N~230V-50Hz
Degree of electric protection		IP54	IP54	IP54
Noiseness***	[dB(A)]	89	91	93

* 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

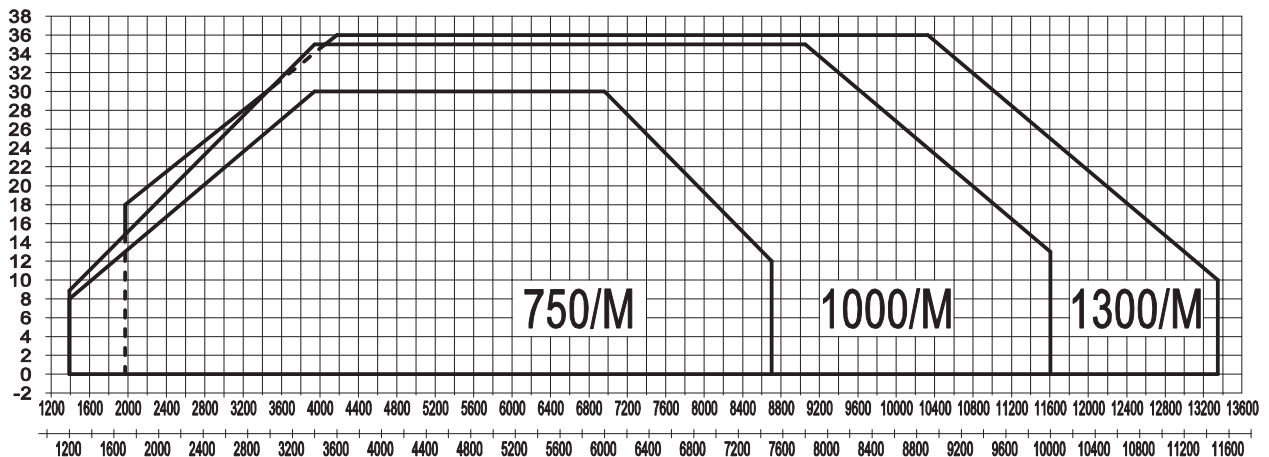


Fig. 1 X = Thermal power (kW - Mcal/h) Y = Pression in the combustion chamber (mbar)

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.



TECHNICAL DATA

MODEL		K 1500/M-MEC	K 1800/M-MEC
Thermal power min 1°st./min 2°st.-max 2°st. *	[Mcal/h]	1700/3600-13000	2000/5000-15000
Thermal power min 1°st./min 2°st.-max 2°st. *	[kW]	1977/4186-15116	2325/5815-17442
Gas flow G20 (natural gas) min 1°st./min 2°st.-max 2°st. *	[Nm³/h]	199/421-1520	234/585-1754
Gas flow G31 (L.P.G.) min 1°st./min 2°st.-max 2°st. *	[Nm³/h]	77/162-585	90/225-676
Fuel		Natural gas (second family) - L.P.G. (third family)	
Fuel category		I _{2R} , I _{2H} , I _{2L} , I _{2E} , I _{Er} , 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 ,relative humidity max. 80%	
Max temperature combustion air	[°C]	60	60
Minimum pressure gas train (DN80-S F80 natual gas/L.P.G.) **	[mbar]	-/142	-/-
Minimum pressure gas train (DN100-S F100 natual gas/L.P.G.) **	[mbar]	220/88	370/-
Minimum pressure gas train (DN125-S F125 natual gas/L.P.G.) **	[mbar]	191/70	307/-
Minimum pressure gas train (DN150-S F150 natual gas/L.P.G.) **	[mbar]	175/56	287/-
Maximum pressure at the entry of the valves (Pe.max)	[mbar]	500	500
LIGHT-OIL flow min 1°st./min 2°st.-max 2°st. *	[kg/h]	167/353-1274	196/490-1470
Fuel		Light-oil 1.5°E at 20°C = 6.2cSt = 35sec Redwood N°1	
Nominal electric power	[kW]	49.5	61
Fan motor	[kW]	45	55
Pump motor	[kW]	4	5.5
Power supply		3~400V-1/N~230V-50Hz	3~400V-1/N~230V-50Hz
Degree of electric protection		IP54	IP54
Noiseness***	[dB(A)]	97	101

* 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

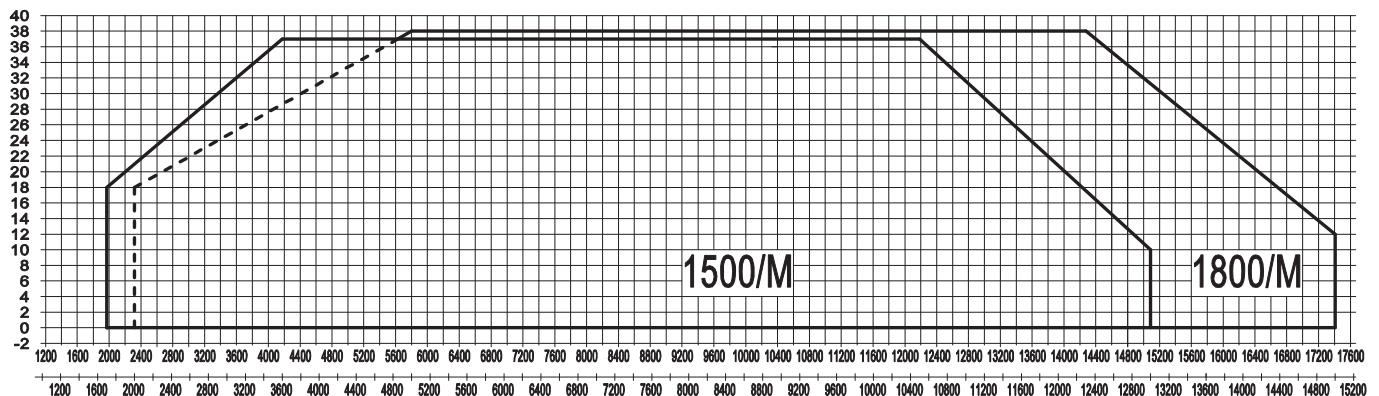
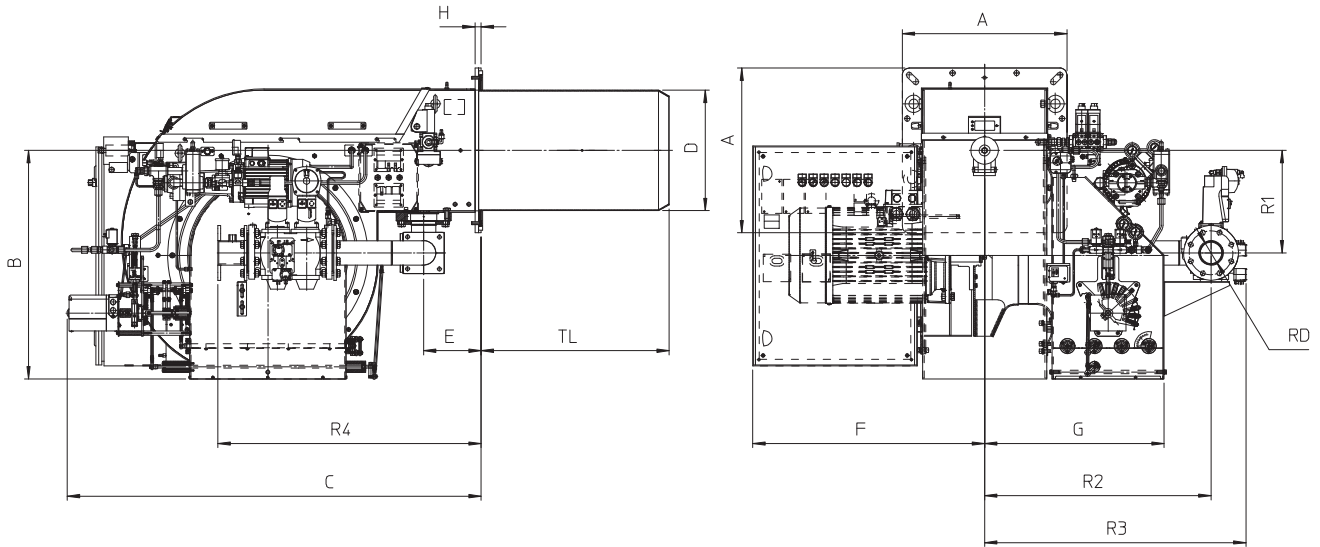


Fig. 2 X = Thermal power (kW - Mcal/h) Y = Pression in the combustion chamber (mbar)

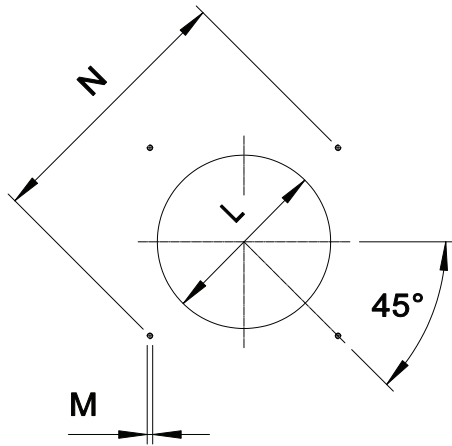
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DIMENSIONS [mm]



MODEL	A	B	C	D	E	F	G	H	R1	R2	R3	R4	RD	TL
K 750/M-MEC DN65	600	832	1508	448	210	845	654	22	373	825	950	936	DN65	685
K 750/M-MEC DN80	600	832	1508	448	210	845	654	22	373	825	958	959	DN80	685
K 750/M-MEC DN100	600	832	1508	448	210	845	654	22	373	825	968	999	DN100	685
K 750/M-MEC DN125	600	832	1508	448	210	845	654	22	373	825	982	1049	DN125	685
K 1000/M-MEC DN80	600	832	1508	468	210	845	654	22	373	825	958	959	DN80	685
K 1000/M-MEC DN100	600	832	1508	468	210	845	654	22	373	825	968	999	DN100	685
K 1000/M-MEC DN125	600	832	1508	468	210	845	654	22	373	825	982	1049	DN125	685
K 1300/M-MEC DN80	600	832	1508	499	210	845	634	22	373	825	958	959	DN80	655
K 1300/M-MEC DN100	600	832	1508	499	210	845	634	22	373	825	968	999	DN100	655
K 1300/M-MEC DN125	600	832	1508	499	210	845	634	22	373	825	982	1049	DN125	655
K 1500/M-MEC DN80	600	832	1508	499	210	845	634	22	373	825	958	959	DN80	655
K 1500/M-MEC DN100	600	832	1508	499	210	845	634	22	373	825	968	999	DN100	655
K 1500/M-MEC DN125	600	832	1508	499	210	845	634	22	373	825	982	1049	DN125	655
K 1500/M-MEC DN150	600	832	1508	499	210	845	634	22	373	825	1000	1129	DN150	655
K 1800/M-MEC DN100	700	884	1660	540	222	875	680	22	476	825	968	999	DN100	685
K 1800/M-MEC DN125	700	884	1660	540	222	875	680	22	476	825	982	1049	DN125	685
K 1800/M-MEC DN150	700	884	1660	540	222	875	680	22	476	825	1000	1129	DN150	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
K 750/M-MEC	mm	M16	707	778	778	460	540
K 1000/M-MEC	mm	M16	707	778	778	480	540
K 1300/M-MEC	mm	M16	707	778	778	510	540
K 1500/M-MEC	mm	M16	707	778	778	510	540
K 1800/M-MEC	mm	M18	806	890	890	550	630

* Suggested dimension