

KN 650/M

Dual fuel burners for gas and heavy oil at 2 stages progressive (hi-low flame) or PID fully modulating if equipped with modulation kit and probe.

Fan at high pressurization, high efficiency combustion head with adjustment and high flame stability, pump skid, preheating tank and degaser. Rational disposal of components with easy accessibility for calibration and maintenance operations.

Available versions for natural gas or L.P.G. (to be specified at the order) on request specific versions town gas or biogas.

Gas train supplied already assembled, connected and tested includes: working valve class A, safety valve class A, leakage control device, gas pressure switch - filter stabilizer.

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 special version with VSD and ELECTRONIC CAM.



Fig. 1 KN 650/M



Fig. 2 Skid group

TECHNICAL DATA

MODEL		KN 650/M
Thermal power min 1°st./min 2°st.-max 2°st. *	[Mcal/h]	1000/3000-6500
Thermal power min 1°st./min 2°st.-max 2°st. *	[kW]	1163/3489-7560
Gas flow G20 (NATURAL GAS) min 1°st./min 2°st.-max 2°st. *	[Nm³/h]	116.3/348.9-756
Gas flow G31 (L.P.G.) min 1°st./min 2°st.-max 2°st. *	[Nm³/h]	45/136-294
Fuel:		NATURAL GAS (second family) - L.P.G. (third family)
Fuel category:		I2R,I2H,I2L,I2E,I2E+,I2Er,I2ELL,I2E(R) - I3B/P,I3+,I3P,I3B,I3R
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-FS65 NATURAL GAS/L.P.G. **	[mbar]	390-182
Minimum pressure gas train DN80-FS80 NATURAL GAS/L.P.G. **	[mbar]	230/108
Minimum pressure gas train DN100 F100 S100 NATURAL GAS/L.P.G. **	[mbar]	120/53
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]	101/305-660
Fuel:		Heavy oil 5°-20°E at 50°C
Nominal electric power burner	[kW]	17
Nominal electric power skid group	[kW]	45
Fan motor	[kW]	15
Pump motor	[kW]	2.2
Resistances	[kW]	42
Power supply:		3~400V-1/N~230V-50Hz
Degree of electric protection:		IP40
Noiseness*** max	[dB(A)]	85
Burner weight	[kg]	526
Skid group weight	[kg]	360

* 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).

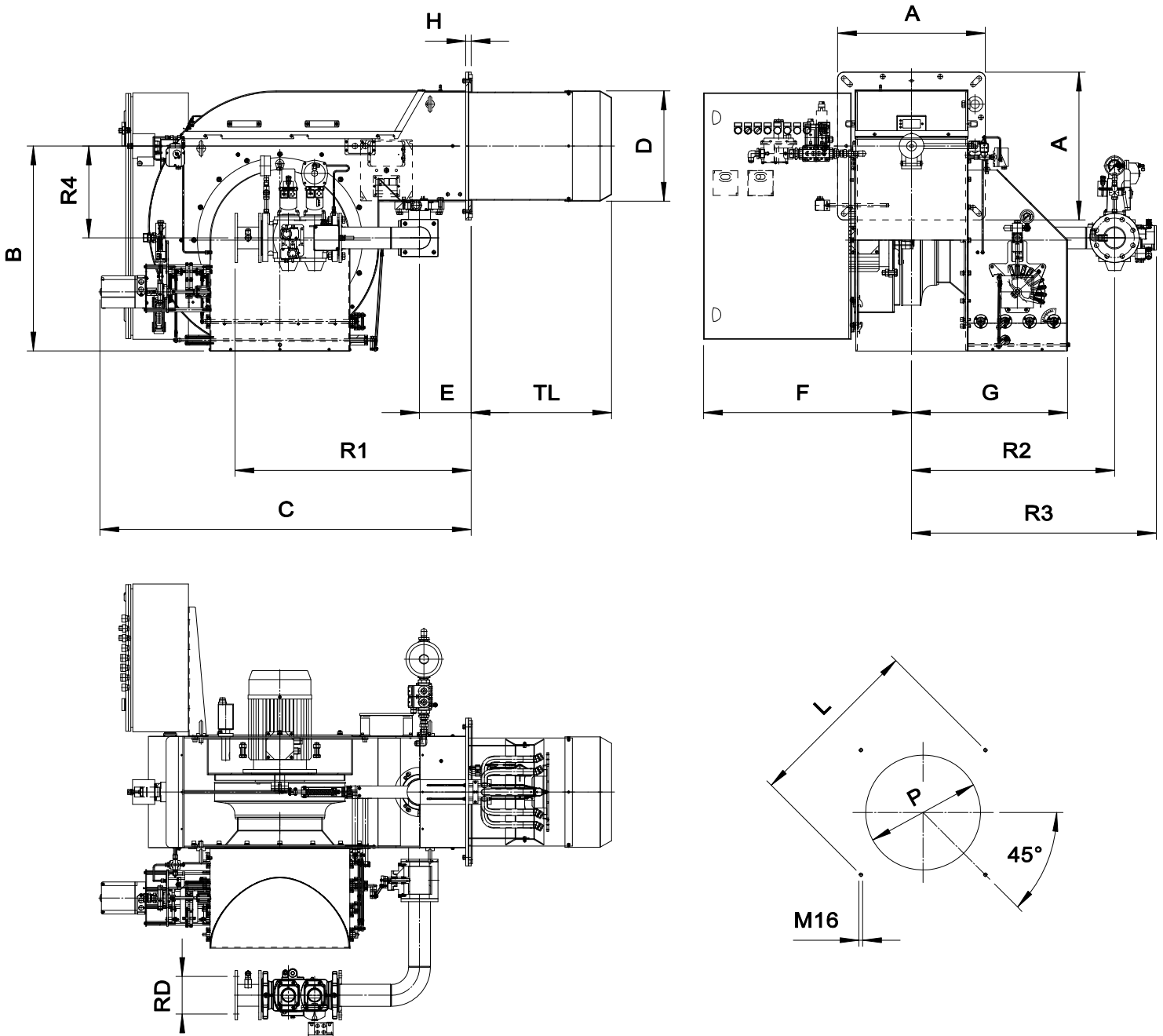
OPERATING RANGE DIAGRAM



Fig. 3 X = Thermal power Y = Pression in the combustion chamber

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]



*: Suggested dimension between burner and generator.

MODEL	A	B	C	D	E	F	G	H	TL	L		P		R1	R2	R3	R4	RD	Gas Train weight	
										min	* max	min	max							
KN 650/M-DN65	600	832	1510	448	210	845	634	22	720	707	778	778	460	540	960	825	960	373	DN80	22 kg
KN 650/M-DN80	600	832	1510	448	210	845	634	22	720	707	778	778	460	540	960	825	960	373	DN80	24 kg
KN 650/M-DN100	600	832	1510	448	210	845	634	22	720	707	778	778	460	540	1000	825	670	373	DN100	27 kg

PUMP SKID DIMENSIONS [mm]

