



Dual fuel burners for gas and heavy 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, pilot flame for gas ignition.

Available versions for natural gas or LPG (to be specified in your 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.

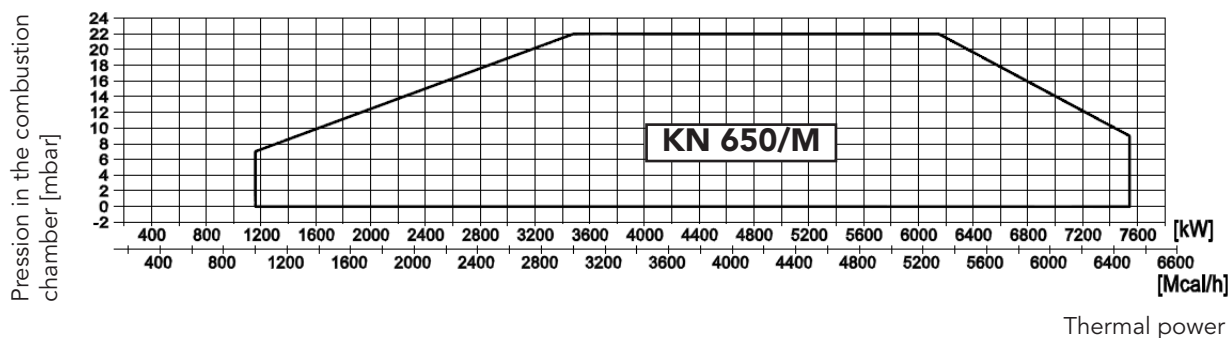
Burners are supplied with nozzle, fuel switch, gasket for installation on boiler, flexible hoses, pre-heated line filter and thermostat, pre-heating tank with low density flanged resistances.

### TECHNICAL DATA

MODEL	KN 650/M	
Thermal power min-max*	Mcal/h	1000/3000-6500
	kW	1162/3488-7558
Flow-rate G20 (NATURAL GAS) min-max*	Nm <sup>3</sup> /h	117/351-760
Flow-rate G31 (LPG) min-max*	Nm <sup>3</sup> /h	45/136-294
Fuel	NATURAL GAS (second family) - LPG (third family)	
Combustible category	2R' 2H' 2L' 2E' 2E+ ' 2Er' 2ELL' 2E(R)B 38/P' 3+ ' 3P' 38' 3R	
Intermittent operation (min. 1 stop every 24 hours) at 2 stages progressive or modulating		
Allowed environment conditions on running/stock	-15...+40°C/-20...+70°C, rel. humidity max 80%	
Max temperature combustion air	°C	60
Min. pressure gas train DN65-FS65 NATURAL GAS/LPG*	mbar	390/182
Min. pressure gas train DN80-FS80 NATURAL GAS/LPG**	mbar	230/108
Min. pressure gas train DN100-FS100 NATURAL GAS/LPG**	mbar	120/53
Max pressure at the entry of the valves (Pe.max)	mbar	500
HEAVY-OIL flow-rate min-max*	kg/h	100/300-650
Fuel	HEAVY OIL 5°-20° E to 50° C	
Nominal electric power	kW	24
Motor fan	kW	22
Motor pump	kW	2.2
Nominal absorption power	A	44
Nominal absorption auxiliary	A	0.5
Power supply	3~400V,1/N~230V-50Hz	
Degree of electric protection	IP44	

\* Reference conditions: Room temperature 20°C - Atmospheric pressure 1013 mbars - Altitude 0m (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 combustion laboratory, with functional burner on beta boiler in a distance of 1 m.

### FIRING RATES: Thermal power - Pressure in combustion chamber



Le illustrazioni e i dati riportati sono indicativi. F.B.R. Bruciatori S.r.l. si riserva il diritto di apportare, senza obbligo di preavviso, tutte le modifiche opportune, per l'evoluzione dei propri prodotti.  
 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.