

FNDP 130/2 EVO - FNDP 160/2

Burners for heavy-oil two stages with: die-cast aluminum body, fan at high pressurisation, combustion head with adjustment at high efficiency and high flame stability and hydraulic system of regulation combustive air on the two stages of flame.

Disposition rationalized of the components with accessibility facilitated for operations of setting and maintenance. Complete of flange and gasket for installation on generator, nozzles, flexible pipes, line filter electrically heated and equipped with thermostat.

Available in versions with 2-pole or 4-pole pump motor.

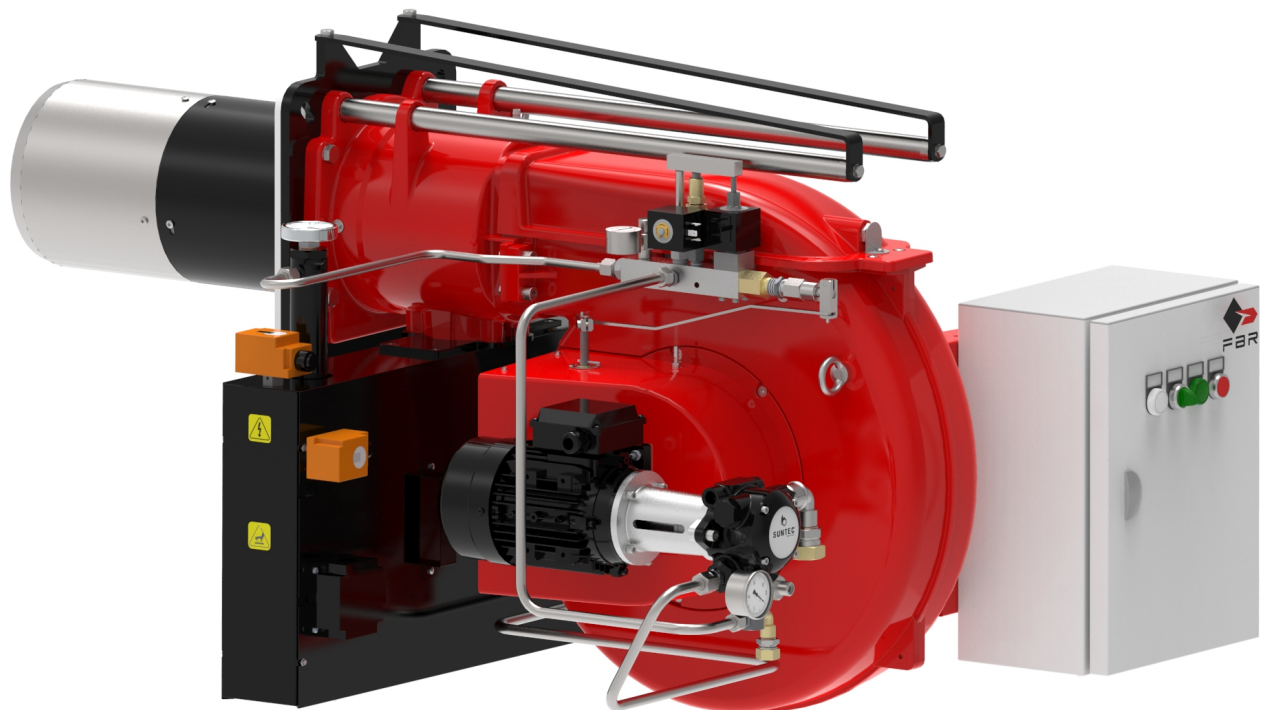


Fig. FNDP 160/2

TECHNICAL DATA FNDP 130/2 EVO - FNDP 160/2

MODEL		FNDP 130/2 EVO	FNDP 160/2
Flow min. 1°st. / min. 2°st. - max. 2°st. *	[kg/h]	34/64-137	42/80-165
Thermal power min. 1°st. / min. 2°st. - max. 2°st. *	[Mcal/h]	330/621-1329	407/776-1600
Thermal power min. 1°st. / min. 2°st. - max. 2°st. *	[kW]	380/730-1542	474/900-1900
Fuel: HEAVY-OIL MAX 20°E at 50°C			
Intermitted working operation (min. 1 stop every 24 hours) two stages			
Environmental conditions operation / storage:	-15...+40°C / -20...+70°C, rel. humidity max. 80%		
Max. temperature combustion air	[°C]	60	
Nominal electric power	[kW]	14	17
Fan motor	[kW]	2.2	4
Pump motor (2-pole version)	[kW]	0.55	0.55
Pump motor (4-pole version)	[kW]	0.75	0.75
Nominal current absorption	[A]	4.35	7.45
Nominal fan motor current absorption	[A]	4.35	7.45
Nominal pump motor current absorption	[A]	1.32	1.32
Nominal auxiliary absorption	[A]	0.8	0.8
Resistances	[kW]	11	12
Power supply:	3~400V, 1N~230V - 50Hz		
Electric protection degree:	IP 40		
Noisiness ** min-max	[dBA]	82-83	84.4-85.4

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

** Measured sonorous pressure in the combustion lab, with functional burner on beta boiler in a distance of 1 m (UNI EN ISO 3746).

OPERATING RANGE DIAGRAM

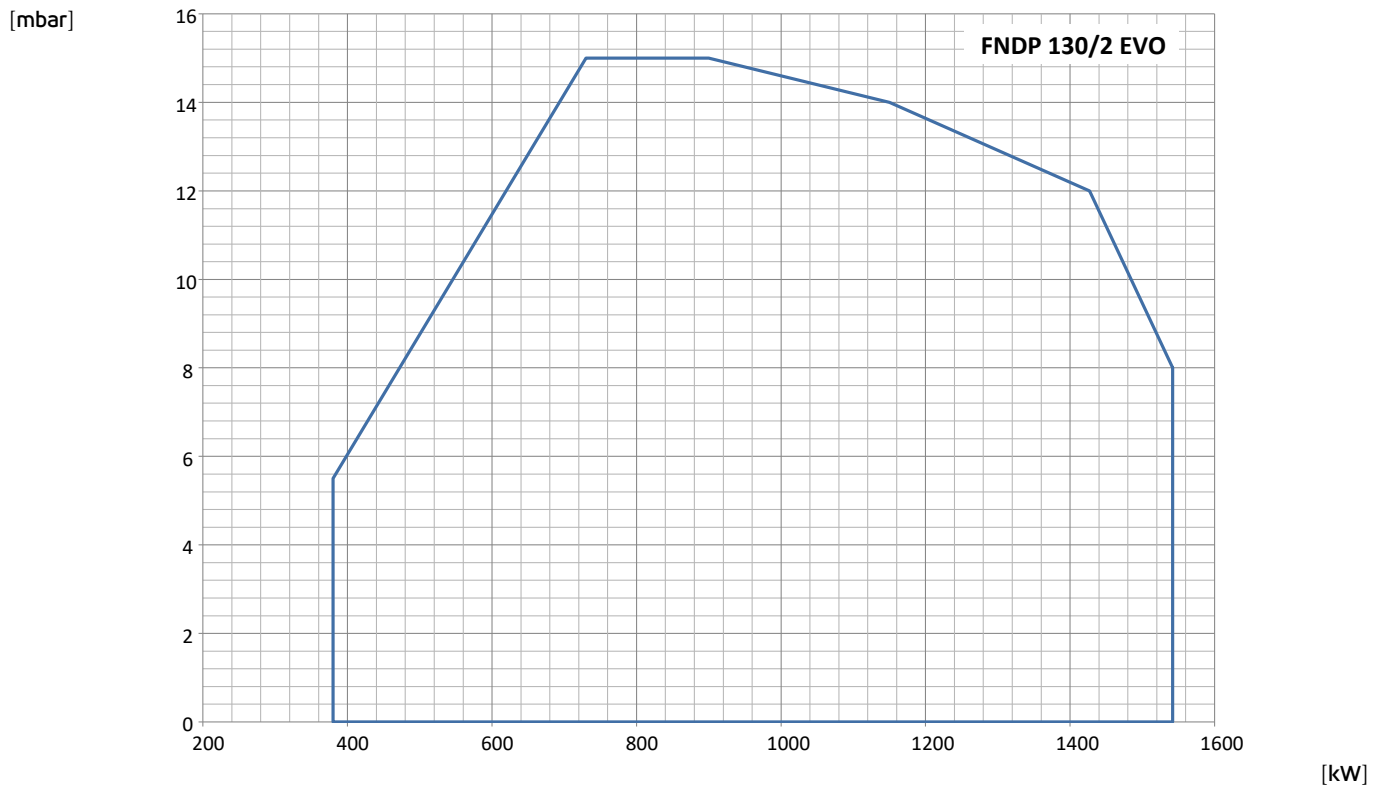


Fig. X = Thermal power Y = Pression in the combustion chamber

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.

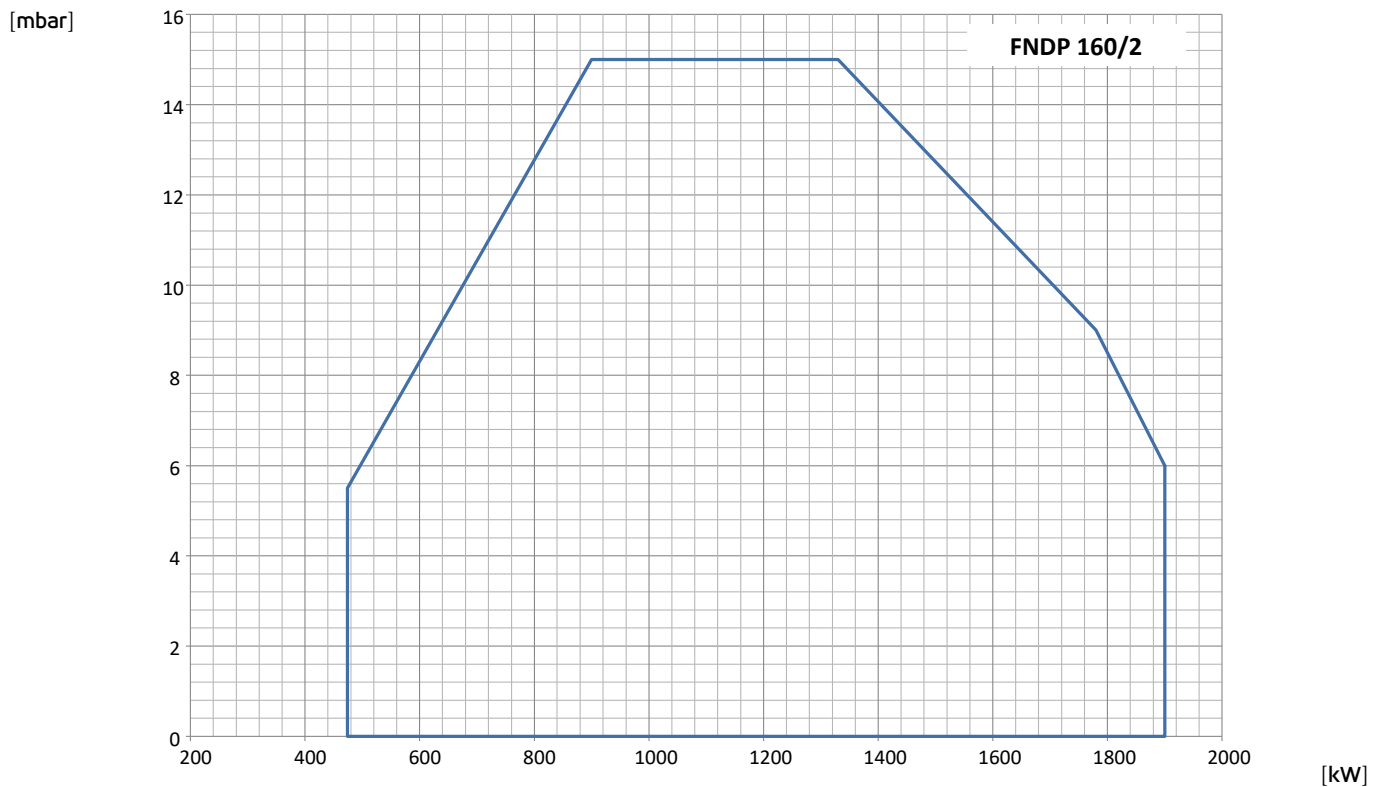


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DIMENSIONS [MM]

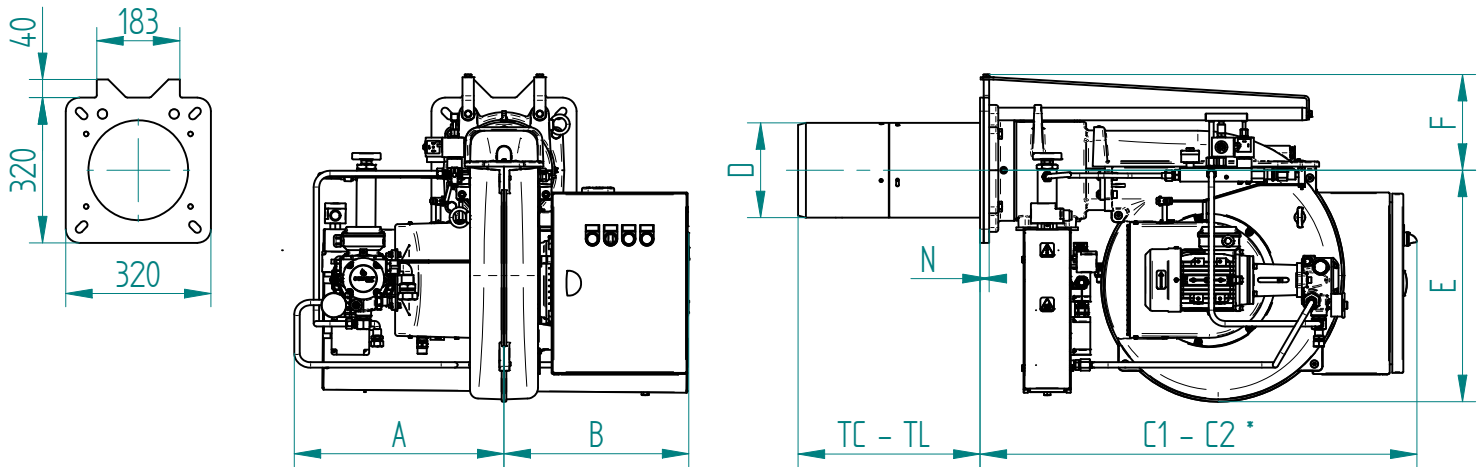
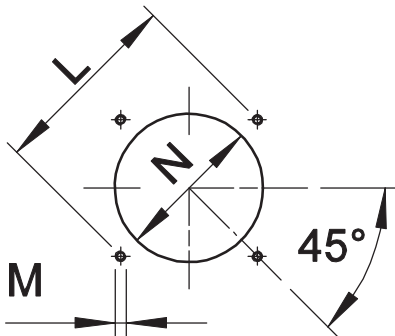


Fig. Dimensions

MODEL	A	B	C1	C2 *	D	E	F	N
FNDP 130/2 EVO	460	407	960	1545	209	510	211	20
FNDP 160/2	460	407	960	1545	209	510	211	20

* Overall dimension with the burner out in position of maintenance.

BOILER PLATE



** Suggested dimension of connection between burner and generator.

Fig. Boiler plate

MODEL		L min	L max	M	N min	N **	N max
FNDP 130/2 EVO	mm	340	368	M14	220	220	250
FNDP 160/2	mm	340	368	M14	220	220	250

FLAME TUBE LENGTH

Flame tube length must be selected based on the specifications supplied by boiler manufacturer and, in any case, it must be greater than the thickness of the boiler door included its insulation.

In case of boilers with flame inversion or front flue combustion chambers, it is necessary to insulate the area between the flame tube and front door with refractory material. This protection material must not impede flame tube extraction.

MODEL		TC	TL ***
FNDP 130/2 EVO	mm	210	400
FNDP 160/2	mm	210	400

*** For different flame lengths, please contact our Technical-Sales Department.

PRODUCT SPECIFICATION**PRODUCT SPECIFICATION**

Heavy-oil burners two stages.

DETAILED SPECIFICATION

Heavy-oil burners two stages, composed by:

- Die-cast aluminum body;
- Fan at high pressurisation, at reverse blades for FNDP 130/2 EVO;
- Combustion head with adjustment at high performance and elevated flame stability;
- Flange and insulating gasket for fixing at boiler;
- Three-phase power supply;
- Photodiode for flame detection;
- IP 40 electric protection level;
- Supports and tierods for burner extraction;
- Easy extraction of combustion head without get off the burners by bolier;
- Pump controlled by dedicated electric motor; available in 2-pole or 4-pole version;
- Safety air pressure switch to stop the burner in lock-out (by stopping the pump motor) in case of failed or anomalous fan operation;
- Thermostats for regulating: temperature of 1st resistance group, temperature of 2nd resistance group, minimum temperature.

CONFORMING TO:

- CE rules;
- 2014/30/UE Directive E.M.C.;
- 2014/35/UE Directive L.V.;
- 2006/42/CE - 2006/42/EG - 2006/42/EC Directive MAC;
- 2014/68/EU (art.4, par.3) Directive P.E.D.;
- Reference rules: EN267 (liquid fuel) - EN746-2 (industrial thermoprocessing equipment)

STANDARD EQUIPMENT

- Flexible hoses for connection;
- Line filter electrically heated and equipped with a thermostat;
- Isomart gasket;
- Nozzles;
- Flange with insulating gasket;
- Burner nameplate;
- Warranty;
- Instruction handbook for installation, use and maintenance.

OPTIONAL

- Noise protection.