

# FNDP 25/2 - FNDP 45/2 - FNDP 70/2

Burners for heavy-oil two stages.

Composed by: 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.

Compact overall dimensions and disposition rationalized of the components with accessibility facilitated for operations of setting and maintenance.

Complete of nozzles holder with integrated valves group and additional antigas valve, multistage preheating tank with flanged heating elements, cylindrical metal mesh filter, preheating thermostat, antismoke thermostat, gasket for installation on generator, nozzles, flexible hoses, line filter with heating resistance controlled by thermostat.



Fig. FNDP 70/2



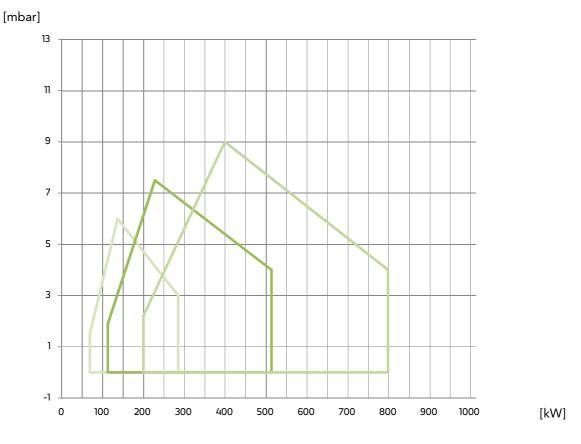
## TECHNICAL DATA FNDP 25/2 - FNDP 45/2 - FNDP 70/2

MODEL		FNDP 25/2	FNDP 45/2	FNDP 70/2			
Flow min max. *	[kg/h]	12-25	20-45	35-70			
Thermal power min max. *	[Mcal/h]	118-245	196-441	343-686			
Thermal power min max. *	[kW]	137-284	227-512	398-796			
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					
Fan motor	[kW]	0.73	1.1	1.5			
Resistances	[kW]	3	4	7.4			
Power supply:	3~400V, 1N~230V - 50Hz						
Electric protection degree:	IP 40						
Noisiness ** min-max	[dBA]	/	/	77-78			
Burner weight	[kg]	35	36	41			

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

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

## **OPERATING RANGE DIAGRAM**

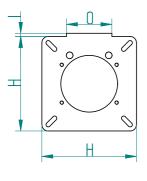


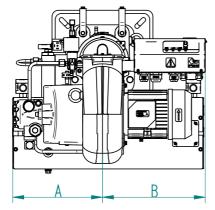
**Fig.** X = Thermal power Y = Pression in the combustion chamber

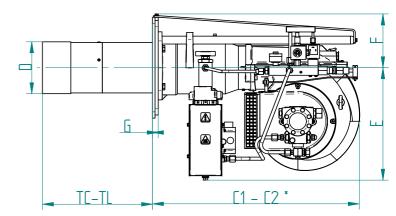
The firing rates has been obtained based on test boilers in accordance with EN267 standards and are indicative of matching the burner to the boiler. For the correct operation of the burner, combustion chamber dimensions must be in accordance with current regulation. In case of non-compliance, contact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



## **DIMENSIONS** [MM]





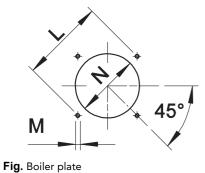


\* Overall dimension with the burner out in position of maintenance.

Fig. Dimensions FNDP 25/2 - FNDP 45/2 - FNDP 70/2

MODEL	Α	В	C1	C2 *	D	E	F	G	Н	I	н
FNDP 25/2	282	320	640	1150	133	325	155	18	280	/	/
FNDP 45/2	282	320	640	1150	150	325	155	18	280	/	/
FNDP 70/2	285	325	655	1165	164	357	170	18	300	10	144

## **BOILER PLATE**



\*\* Suggested dimension of connection between burner and generator.

MODEL		L min	L max	М	N * *
FNDP 25/2	mm	283	340	M12	145
FNDP 45/2	mm	283	340	M12	160
FNDP 70/2	mm	340	368	M12	180

## **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		тс	TL ***
FNDP 25/2	mm	170	350
FNDP 45/2	mm	170	350
FNDP 70/2	mm	250	350

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



## **PRODUCT SPECIFICATION**

## SHORT DESCRIPTION

Heavy-oil burners two stages.

## **DETAILED SPECIFICATION**

Heavy-oil burner two stages composed by:

- Die-cast aluminum body;
- Fan at high pressurisation;
- Combustion head with adjustment at high performance and elevated flame stability;
- Flange and insulating gasket for fixing at boiler;
- Three-phase with neutral 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.

## **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.