

**FGP 130/2 EVO - FGP 160/2**

Light-oil burners two stages.

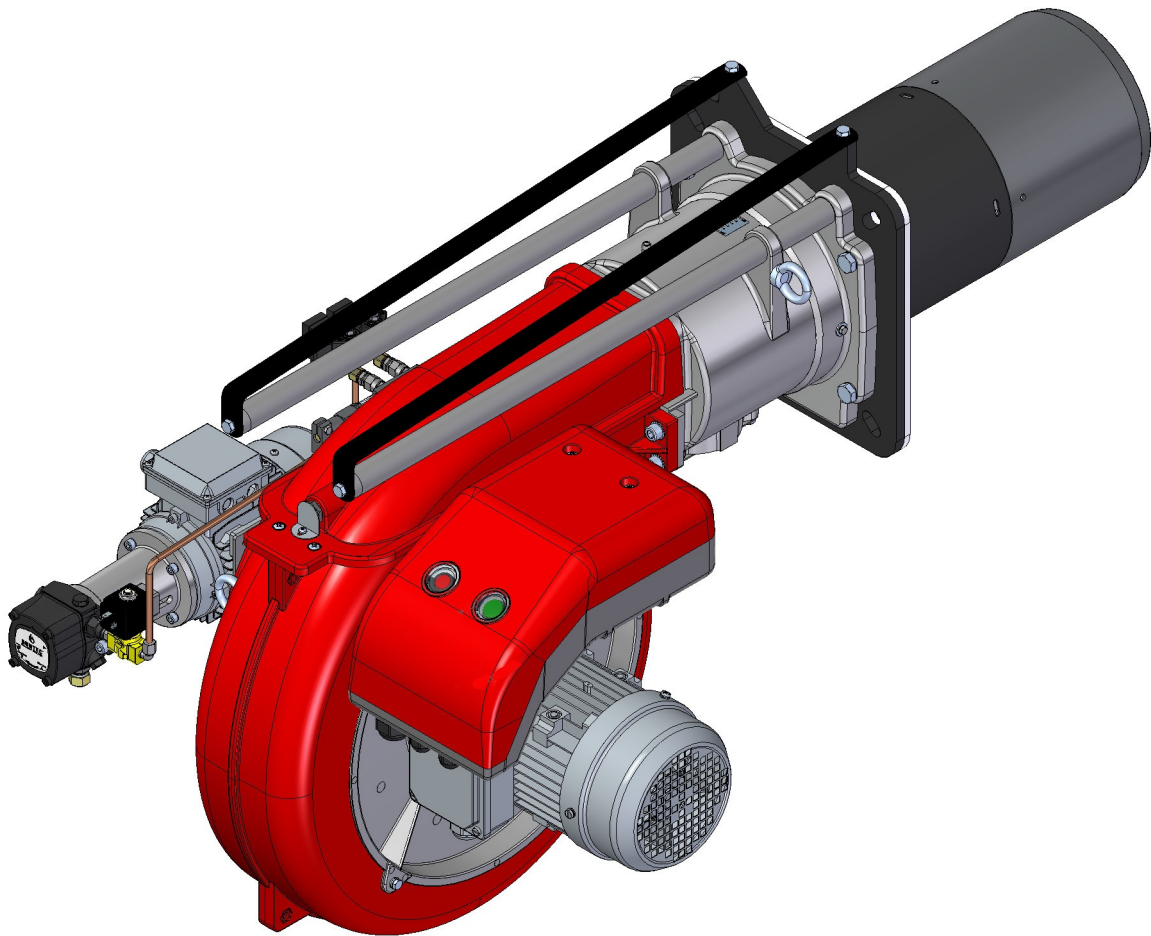
Composed by: fan at high pressurisation, combustion head with adjustment at high efficiency and high flame stability and hydraulic system of regulation combustive air on the two stages of flame.

The burners are equipped with two motors : air blower motor + pump motor.

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

Complete of 2 nozzles, 2 flexible hoses and line filter.

Complete of flange and gasket for installation on generator.



## TECHNICAL DATA FGP 130/2 EVO

MODEL		FGP 130/2 EVO
Flow min. 1°st. / min. 2°st. - max. 2°st. *	[kg/h]	28.3/60-130
Thermal power min. 1°st. / min. 2°st. - max. 2°st. *	[Mcal/h]	289/612-1326
Thermal power min. 1°st. / min. 2°st. - max. 2°st. *	[kW]	336/712-1542
Fuel: LIGHT-OIL 1.5°E at 20°C = 6.2 cSt = 35 sec Redwood N°1		
Intermittent 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]	3
Fan motor	[kW]	2.2
Pump motor	[kW]	0.37
Nominal fan motor current absorption	[A]	4.35
Nominal pump motor current absorption	[A]	1.2
Nominal auxiliary absorption	[A]	0.82
Power supply:		3~400V, 1N~230V - 50Hz
Electric protection degree:		IP 40
Noisiness ** min-max	[dBA]	83.8-84
Weight ***	[kg]	84

\* 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).

\*\*\* For burner with long head add 2 kg.

## OPERATING RANGE DIAGRAM FGP 130/2 EVO

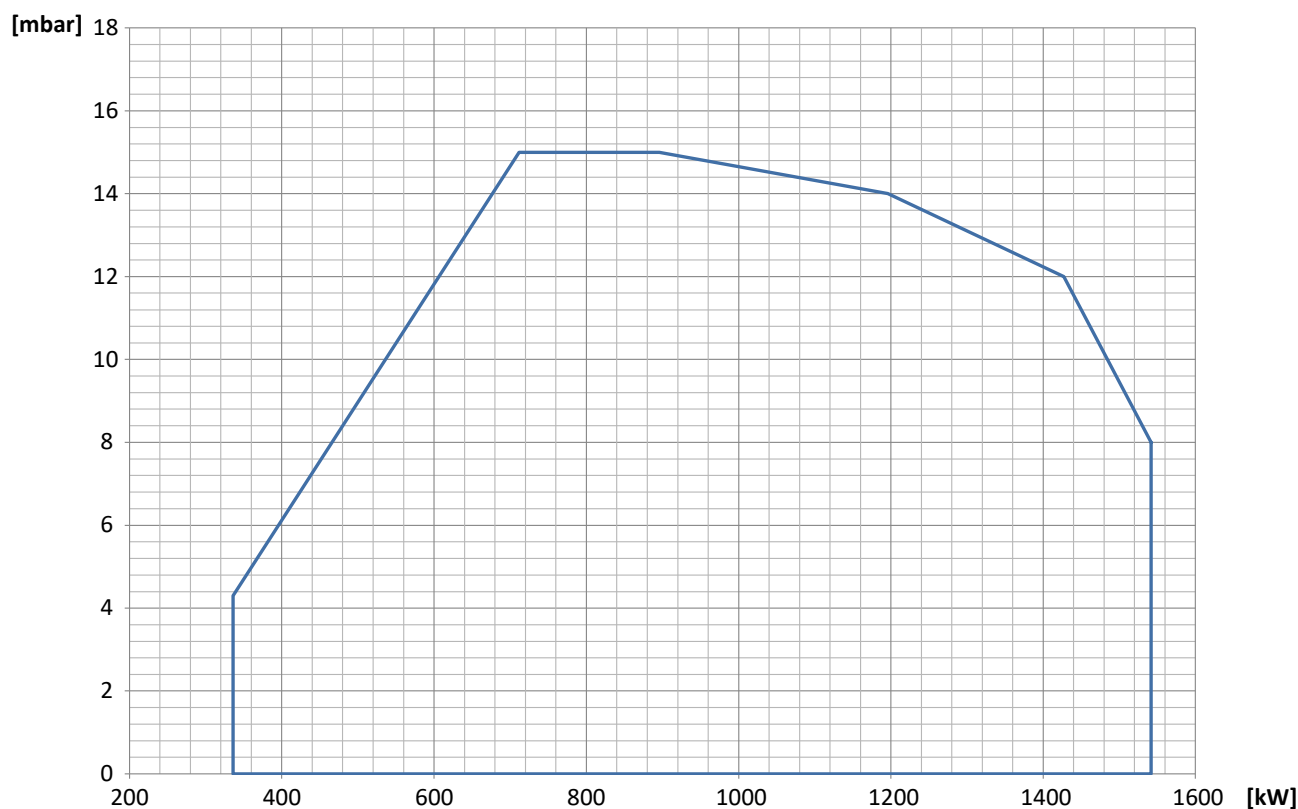


Fig. X = Thermal power Y = Pressure in the combustion chamber

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.

FGP 130/2 EVO - FGP 160/2

## TECHNICAL DATA FGP 160/2

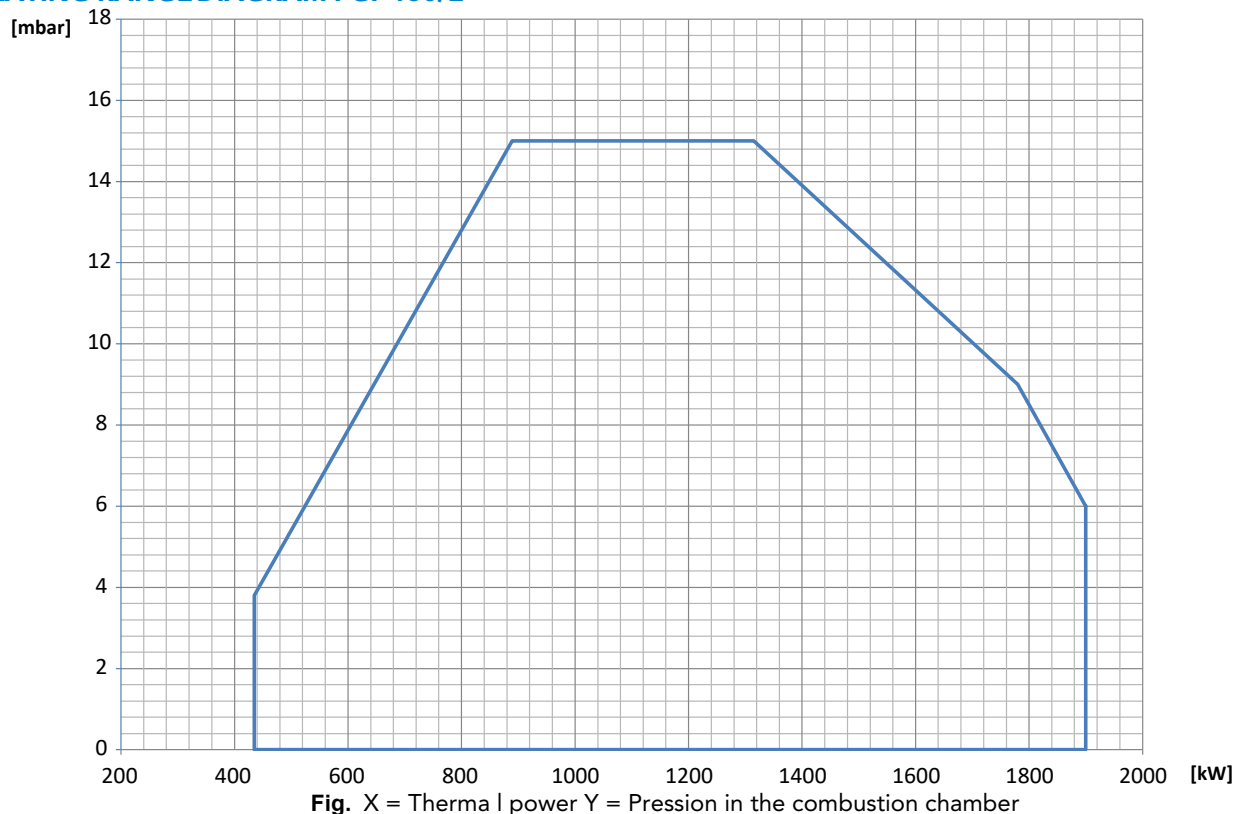
MODEL		FGP 160/2
Flow min. 1°st. / min. 2°st. - max. 2°st. *	[kg/h]	36.7/75-160
Thermal power min. 1°st. / min. 2°st. - max. 2°st. *	[Mcal/h]	374/765-1634
Thermal power min. 1°st. / min. 2°st. - max. 2°st. *	[kW]	435/889-1900
Fuel: LIGHT-OIL 1.5°E at 20°C = 6.2 cSt = 35 sec Redwood N°1		
Intermittent 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]	5
Fan motor	[kW]	4
Pump motor	[kW]	0.37
Nominal fan motor current absorption	[A]	7.45
Nominal pump motor current absorption	[A]	1.2
Nominal auxiliary absorption	[A]	0.82
Power supply:		3~400V, 1N~230V - 50Hz
Electric protection degree:		IP 40
Noisiness ** min-max	[dBA]	84.4-85.4
Weight ***	[kg]	95

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

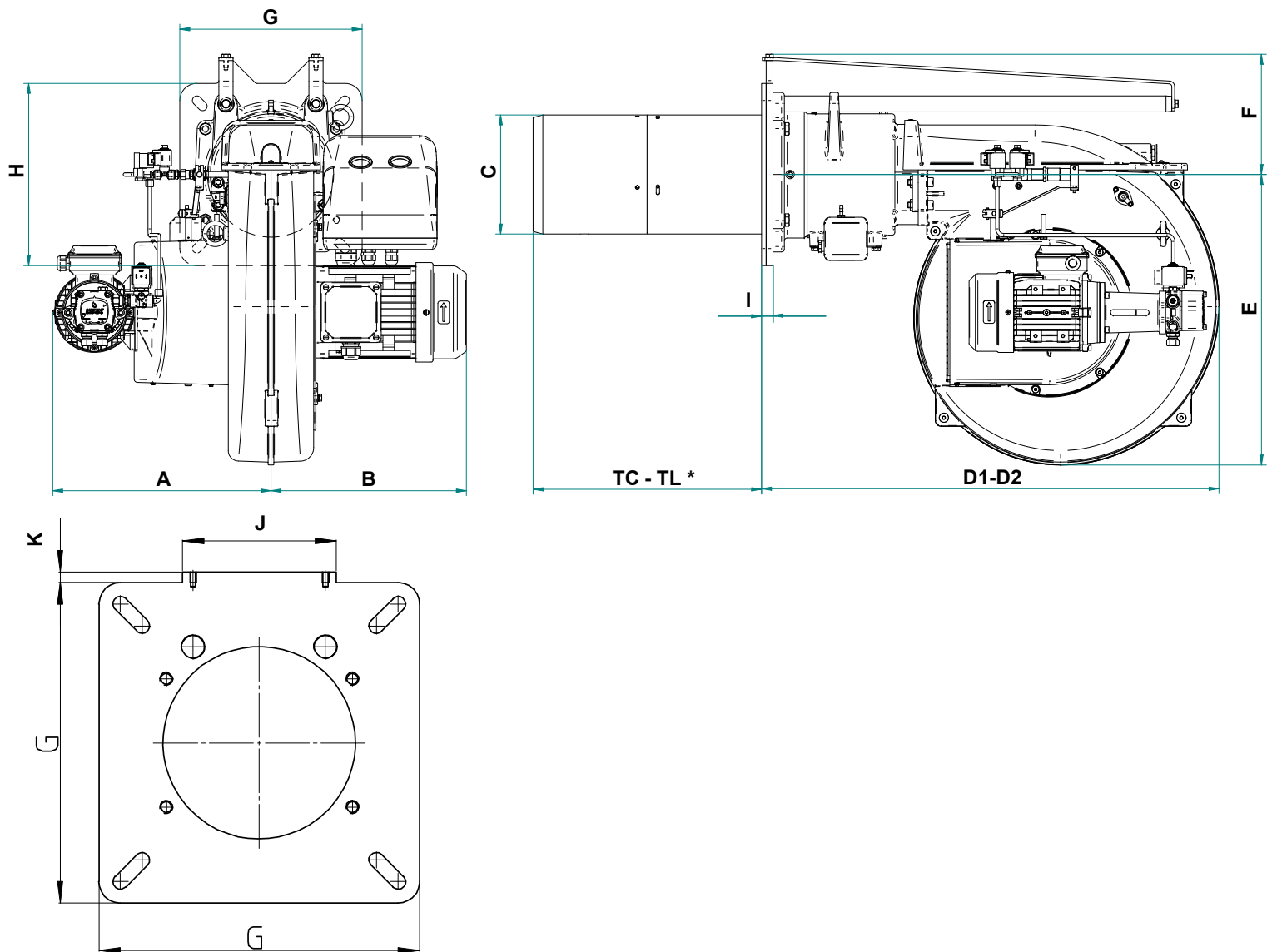
\*\* Measured sonorous pressure in the combustion lab, with functional burner on beta boiler in a distance of 1 m (UNI EN ISO 3746).

\*\*\* For burner with long head add 2 kg.

## OPERATING RANGE DIAGRAM FGP 160/2



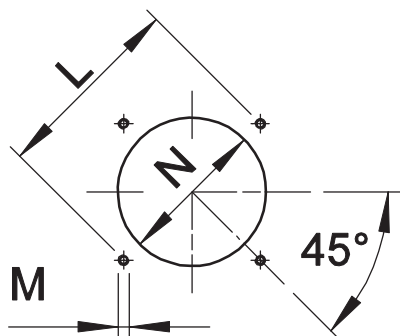
The firing rates has been obtained based on test boilers in accordance with EN267 standards and are indicative of matching the burner to the boiler. For the correct operation of the burner, combustion chamber dimensions must be in accordance with current regulation. In case of non-compliance, contact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

**FBR****DIMENSIONS [MM]****LIGHT-OIL BURNERS TWO STAGES****Fig.** Dimensions FGP 130/2 EVO - FGP 160/2

MODEL	A	B	C	D1	D2	E	F	G	H	I	J	K
FGP 130/2 EVO	383	343	209	803	1383	510	211	320	320	20	183	40
FGP 160/2	383	405	209	803	1383	510	211	320	320	20	183	40

\* see "flame tube length"

D2: Overall dimension with the burner out in position of maintenance.



\* Suggested dimension of connection between burner and generator.

**Fig.** Boiler plate

MODEL		L min	L max	M	N min	N *	N max
FGP 130/2 EVO	mm	340	368	M14	230	230	250
FGP 160/2	mm	340	368	M14	230	230	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.

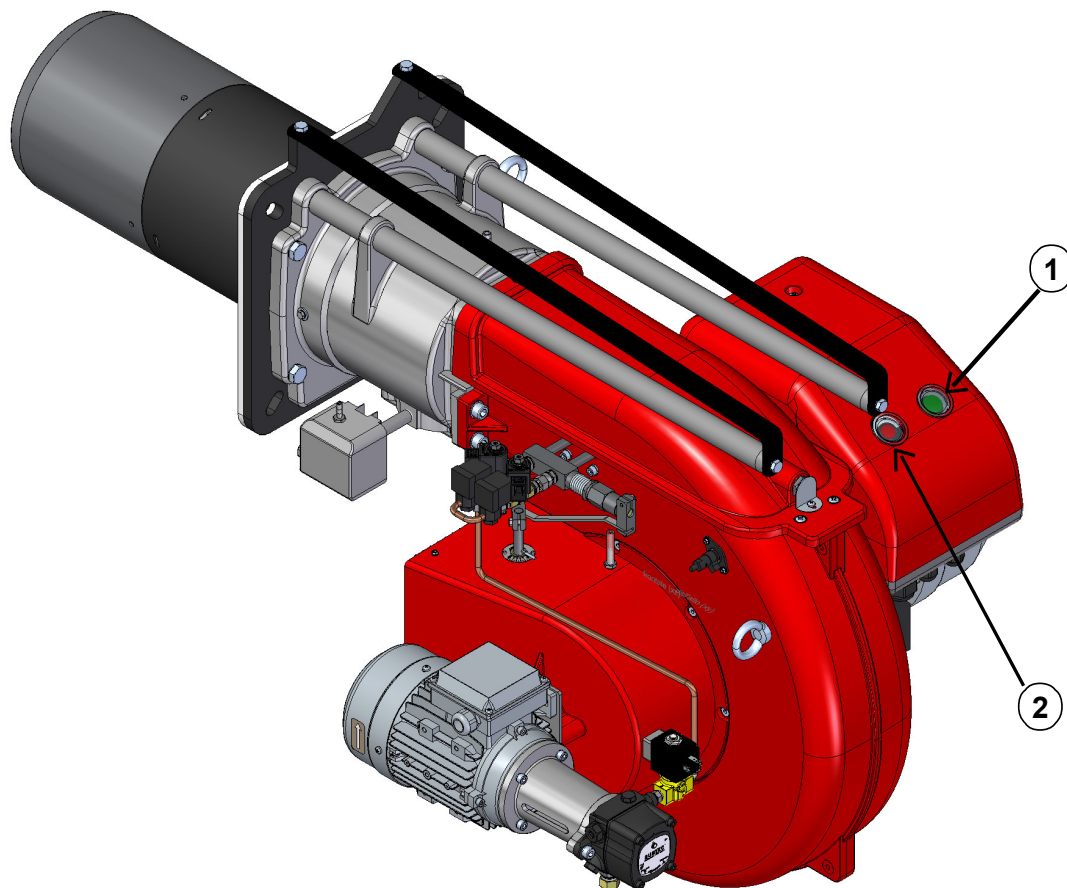
In case of boilers with flame inversion or front flue combustion chambers, it is necessary to insulate the area between the flame tube and front door with refractory material. This protection material must not impede flame tube extraction.

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

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

## BURNER SIGNAL DESCRIPTION

In the picture below there are indicated all the signalation present on the burner:



**Fig.** Burner signal description

### LEGEND

- 1) ON/OFF button
- 2) Reset from lockout button + status lamp

💡 The multicolor signal lamp in the lockout reset button (pos.2) is the key indicating element for visual diagnostics and interface diagnostics.

In normal operation, the different operating states are indicated in the form of color codes; please refer to electrical device handbook supplied with the present instructions.

💡 After a non-alterable lockout, the red signal lamp in the lockout reset button (pos.2) lights up. By pressing the lockout reset button (pos.2) for more than 3 seconds, the visual diagnostics of the cause of fault can be activated; please refer to electrical device handbook supplied with the present instructions.

For close the diagnostics mode and for switch on the burner again, it is necessary to reset the burner control. Press the lockout reset button (pos.2) for about 1 second (<3 seconds).

💡 After a non-alterable lockout, the red signal lamp in the lockout reset button (pos.2) lights up. For reset the control box press the lockout reset button (pos.2) for about 1 second (<3 seconds).



## LIGHT-OIL BURNERS TWO STAGES

### PRODUCT SPECIFICATION

#### SHORT DESCRIPTION

Light-oil burners two stages.

#### DETAILED SPECIFICATION

Light-oil burner two stages composed by:

- Fan at high pressurisation at reverse blades FGP130/2 EVO;
- Fan at high pressurisation FGP160/2;
- 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;
- Safety air pressure switch to stop the burner in lock-out (by stopping the pump motor) in case of failed or anomalous fan operation;
- Dedicated motor for the activation of the light-oil pump.

#### 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 M.D.;
- Directive PED 2014/68/UE (ART.4,PAR.3);
- Reference rules: EN267 (liquid fuel) - EN746-2 (industrial thermoprocessing equipment).

#### STANDARD EQUIPMENT

- Flexible hoses for connection;
- Line filter;
- Isomart gasket;
- Nozzle;
- Flange with insulating gasket;
- Burner nameplate;
- Warranty;
- Instruction handbook for installation, use and maintenance.

#### OPTIONAL

- Noise protection.