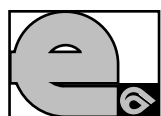


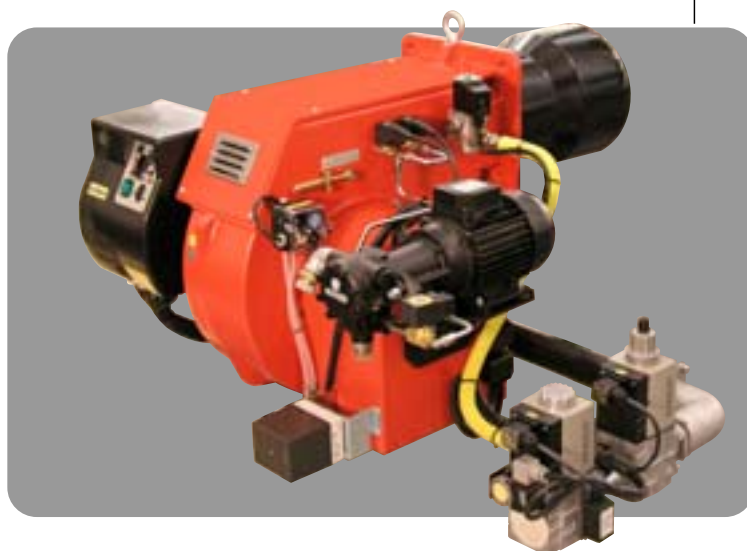


BRUCIATORI MISTI GAS + GASOLIO
GAS/LIGHT-OIL DUAL BURNERS



Ecoflam

MODELS



Multicalor 170.1

Multicalor 200.1

230/400 V 50 Hz



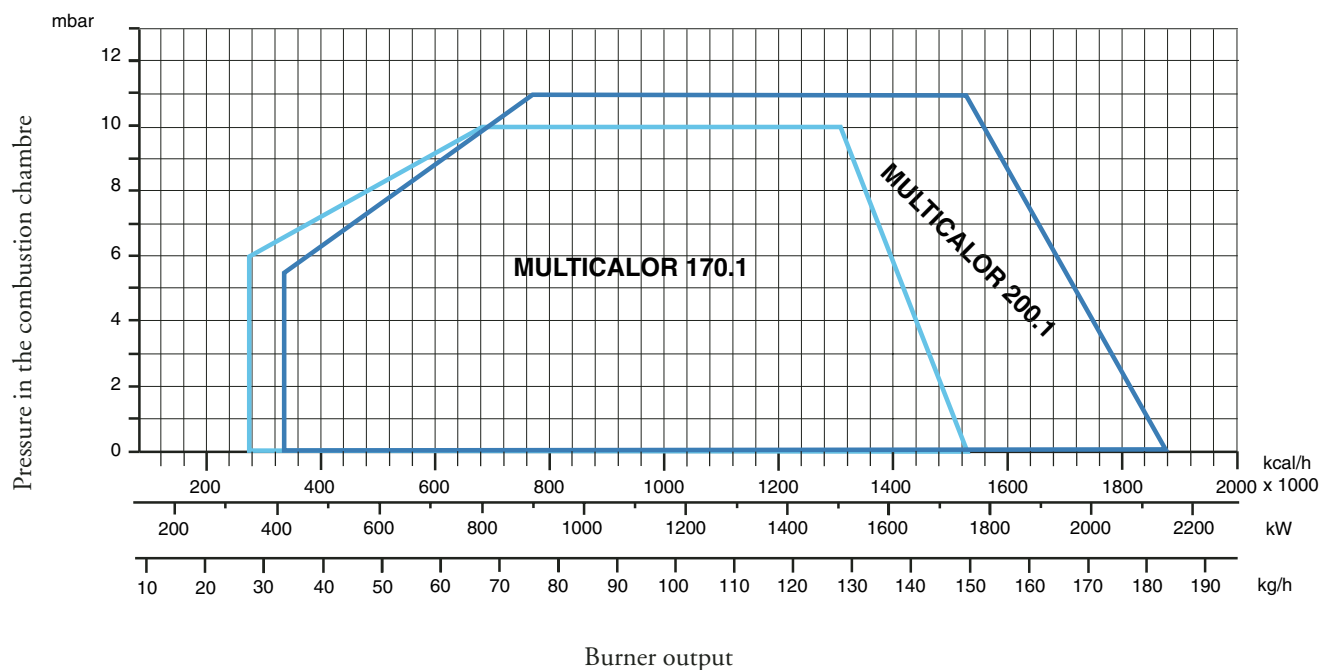
LB 525

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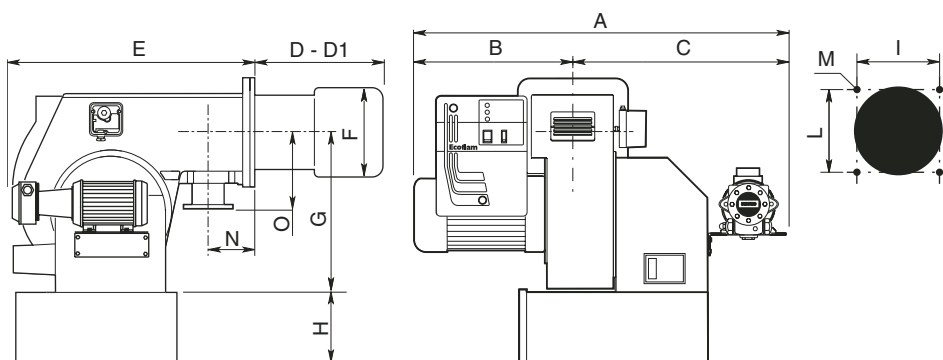
TECHNICAL DATA

Models : Multicalor		170.1	200.1
Thermal power max.	kW	1770	2150
	kcal/h	1.526.000	1.853.450
Thermal power min.	kW	342	414
	kcal/h	295.000	356.900
Max. capacity (Natural gas)	Nm ³ /h	178	216
Min. capacity (Natural gas)	Nm ³ /h	34	42
Gas pressure (LPG)	mbar	50	50
Max. capacity (light oil)	kg/h	150	182
Min. capacity (light oil)	kg/h	29	35
Voltage , 50 Hz	V	230/400	230/400
Motor	kW	3	4
Rpm	N°	2800	2800
Fuel : P.c.i. metano = 35,9 MJ/Nm ³ = 8.570 kcal/Nm ³ P.c.i. light oil = 10.200 kcal/kg max 1,5° E a 20° C			

WORKING FIELDS



OVERALL DIMENSIONS



MODELS	A	B	C	D	D1	E	F	G	H	I	L	M	N	O
Multicalor 170.1	930	385	545	340	540	680	250	398	283*	240	240	M14	125	250
Multicalor 200.1	950	405	545	345	545	680	270	398	283	240	240	M14	125	250

* Optional

D = Short head

D1 = Long head

ELECTRICAL CONNECTIONS

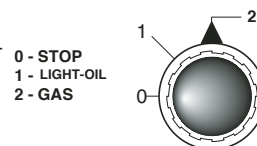
All burners are factory tested and set at 400 V 50 Hz three-phase for motors and 230 V 50 Hz monophase with neutral for auxiliaries. If it is necessary to supply the burner at 230 V 50 Hz without neutral, make the necessary alterations referring to the wiring diagram of the burner and check that the thermal relay is within the absorption range of the motor. Also check that the fan motor rotates in the correct direction.

CONNECTION TO THE GAS PIPELINE

Once connected the burner to the gas pipeline, it is necessary to control that this last is perfectly sealed. Also verify that the chimney is not obstructed. Open the gas cock and carefully bleed the piping through the pressure gauge connector, then check the pressure value through a suitable gauge. Power on the system and adjust the thermostats to the desired temperature. When thermostats close, the sealing control device runs a seal test of valves; at the end of the test the burner will be enabled to run the start-up sequence.

OPERATION OF BURNER WITH GAS

Dual fuel gas/light-oil fuel burners must always be adjusted for light-oil as first ignition. After having installed the burner, check the following points: - Burner's power and protection fuses. - Motors connections. - That pipe length is the suitable one and relevant sealing. - That the fuel type is suitable for the burner. - Thermostats connections and the safety devices. - The direction of motors rotation. - The correct adjustment of motors protections. - That the nozzles flow rates are the suitable ones related to boiler's output. Connect a manometer to the light-oil pump. When all the above conditions are met, it is possible to proceed with the first ignition of the burner. Switch on the burner. The control box powers the light-oil pump, as well as the fan, thus starting the prepurging phase of the combustion chamber with the max. air flow rate. At the end of prepurging, the air damper gear motor sets to the 1st light-oil stage (Low flame) whilst the control box powers the ignition transformer and opens the safety and the 1st stage solenoid valves. The burner ignites in Low flame. After a safety period of 3 seconds from the ignition, the transformer is switched off and after 10 seconds the air damper gear motor sets the burner to High flame (2nd stage). In case of a faulty ignition, the control box switches the burners to lockout safety condition within 3 seconds. In this case, the burner must be rearmed manually. In order to obtain the best combustion it is necessary to adjust the burner in both Low and High flame stages, according to the instructions supplied with (air damper gear motor and firing head adjustments). During this phase, it is possible to manually switch from Low flame to High flame and back through the High/Low manual selector switch. At the end of the adjustment operations, set the selector to High position. For a correct adjustment of the burner, it will be necessary to carry out some combustion analyses at the chimney.



ADJUSTING THE COMBUSTION PROCESS

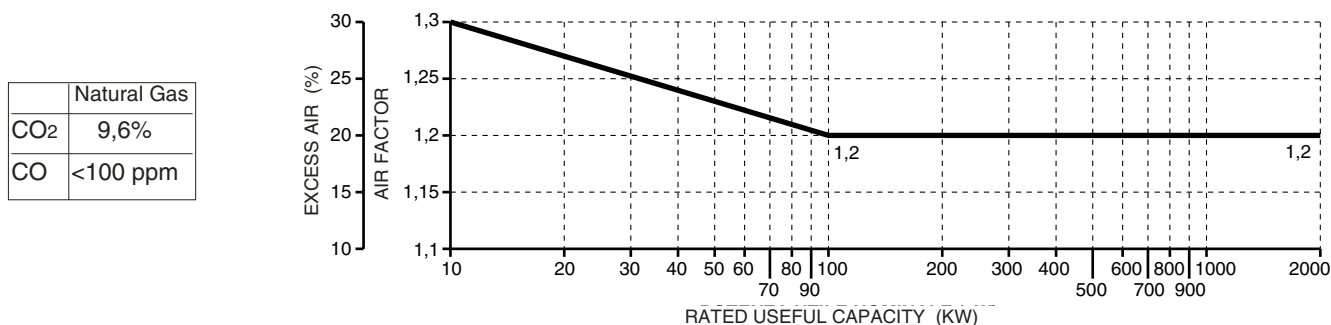
IMPORTANT: to obtain the right adjustment of the combustion and thermal capacity it is important to analyze the reducts of combustion with the aid of suitable instruments. The combustion and thermal capacity adjustment is done simultaneously, together with the analysis of the products of combustion, making sure that the measured values are suitable and that they comply with current safety standards. On this matter, please refer to the table and figure below.

THESE OPERATIONS MUST BE DONE BY PROFESSIONALLY-QUALIFIED TECHNICIANS.

NOTE:

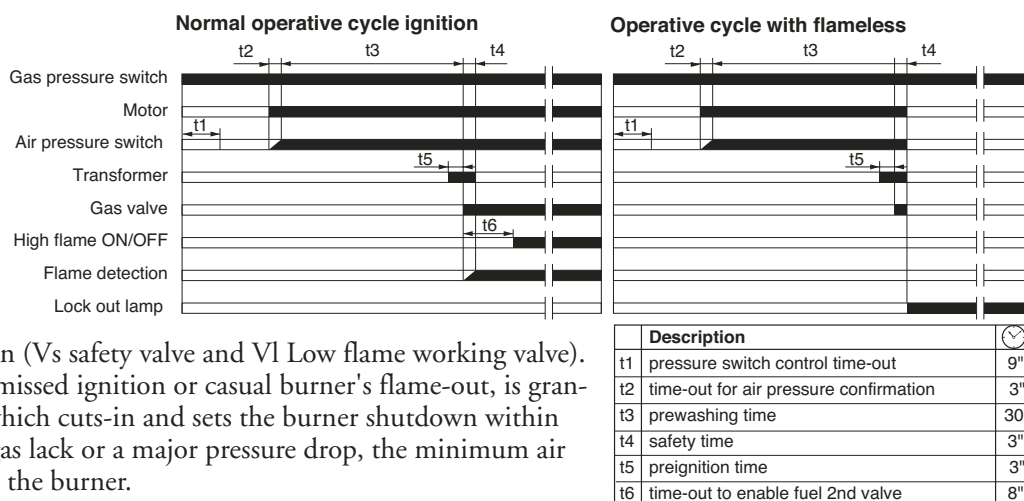
ALL SAFETY DEVICES (AIR PRESSURE SWITCH, MINIMUM GAS PRESSURE SWITCH, GAS SOLENOID VALVES AND GAS GOVERNOR) SHALL BE DULY SEALED AFTER CALIBRATION AND BURNER START UP BY ECOFLAM'S TECHNICIANS.

SUGGESTED REFERENCE VALUES



LANDIS LGB 22 UP-CYCLE

The control box starts the burner fan, to carry out the prepurging of the combustion chamber, and checks the vent air pressure through the air pressure switch. At the end of prepurging, the ignition transformer cuts-in and generates a spark between the electrodes. At the same time the two gas valves open (Vs safety valve and V1 Low flame working valve). The total safety, in case of missed ignition or casual burner's flame-out, is granted by a ionisation probe which cuts-in and sets the burner shutdown within the safety time. In case of gas lack or a major pressure drop, the minimum air pressure switch shuts down the burner.



CALCULATION OF WORKING OUTPUT OF THE BURNER

To calculate the burner's working output, in kW, proceed as follows:

- Check at the meter the quantity of supplied litres and the duration, in seconds, of the reading, then calculate the burner's output through the following formula:

$$\frac{e}{s} \times f = \text{kW}$$

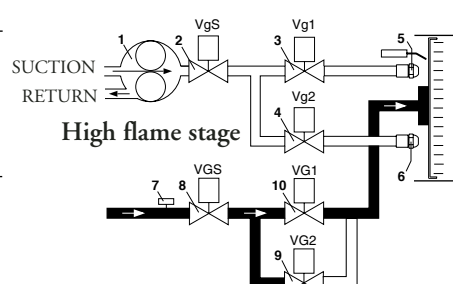
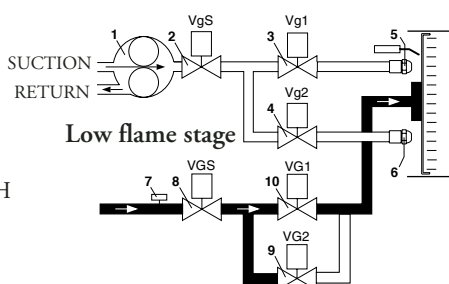
e = Litres of gas

s = Time in seconds

f	G20 = 34,02
	G25 = 29,25
	G30 = 116
	G31 = 88

GAS CIRCUIT

- 1 - PUMP
- 2 - SAFETY LIGHT-OIL VALVE
- 3 - LOW FLAME LIGHT-OIL VALVE
- 4 - HIGH FLAME LIGHT-OIL FLAME
- 5 - LOW FLAME NOZZLE
- 6 - HIGH FLAME NOZZLE
- 7 - MINIMUM GAS PRESSURE SWITCH
- 8 - SAFETY GAS VALVE
- 9 - LOW FLAME GAS VALVE
- 10 - HIGH FLAME GAS FLAME



ADJUSTMENT OF GAS MINIMUM PRESSURE SWITCH

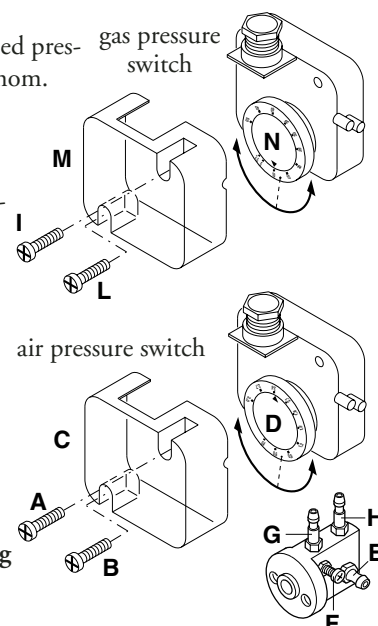
Unscrew off and remove cover M. - Set regulator N to a value equal to 60% of gas nominal feed pressure (i.e. for nat. gas nom. pressure = 20 mbar, set regulator to a value of 12 mbar; for L.P.G. nom. pressure of G30/G31- 30/37 mbar, set regulator to a value of 18 mbar).Screw up cover M

ADJUSTMENT OF THE AIR PRESSURE SWITCH

Unscrew screws A and B and remove cover C.- Set the pressure switch to the minimum by turning regulator D to position 1.

- Start the burner and keep in low flame running, while checking that combustion is correct. Through a small cardboard, progressively obstruct the air intake until to obtain a CO2 increase of 0,5÷0,8% or else, if a pressure gauge is available, connected to pressure port E, until reaching a pressure drop of 1 mbar (10 mm of W.G.). - Slowly increase the adjustment value of the air pressure switch until to have the burner lockout. Remove the obstruction from the air intake, screw on the cover C and start the burner by pressing the control box rearm button.

Note: The pressure measured at pressure port E must be within the limits of the pressure switch working range. If not, loose the locking nut of screw F and gradually turn the same: clockwise to reduce the pressure; counterclockwise to increase. At the end tighten the locking nut.





LANDIS & STAEFA SQN 30 151A2700 AIR DAMPER MOTOR

Remove cover to gain access to the adjusting cams. The cams are to be adjusted through the suitable key provided for. Description:

- I - Limit switch for air damper "High Flame" position adjustment (Max. power).
- II - Limit switch for the air damper position at burner's shut down
- III - Limit switch for air damper "Low Flame" position adjustment (Min. power).
- V - Limit switch for 2nd stage's solenoid valve opening release

NOTE :

Cam V (to allow the 2nd stage's solenoid valve opening) must be adjusted to an intermediate position between the Low and High Flame ones (to an angle approximately 5° greater than the low flame position).

"PAB" VERSION GAS BURNERS GAS TRAIN INSTALLATION AND SETTING INSTRUCTIONS

Fix the gas train to burner body by means of the screws of the flange, pay attention to set correctly the gasket. Connect electrically the gas train with the 6 pole plug.

Switch on the burner (it has already been tested in the factory, so it is pre set on average values) and verify the tightness of gas train connections made during installation. Act as follows to adapt the burner output to the boiler.

High flame

1. Bring the burner in high flame, air inlet must be set at 75 ° (maximum opening position).
To adjust air capacity operate on the combustion head position. Just in peculiar case it is necessary to reduce the air flow in high flame closing air intake damper.
2. The position of gas butterfly valve must be lower than 90° (typically 85°. It is important not get over 90° to obtain a perfect combustion during passage from high to low flame). Eventually adjust this position by shaft B after loosening the screw A.
3. Regulate gas capacity in high flame through the gas governor, or operate on the adjustable gas valve.

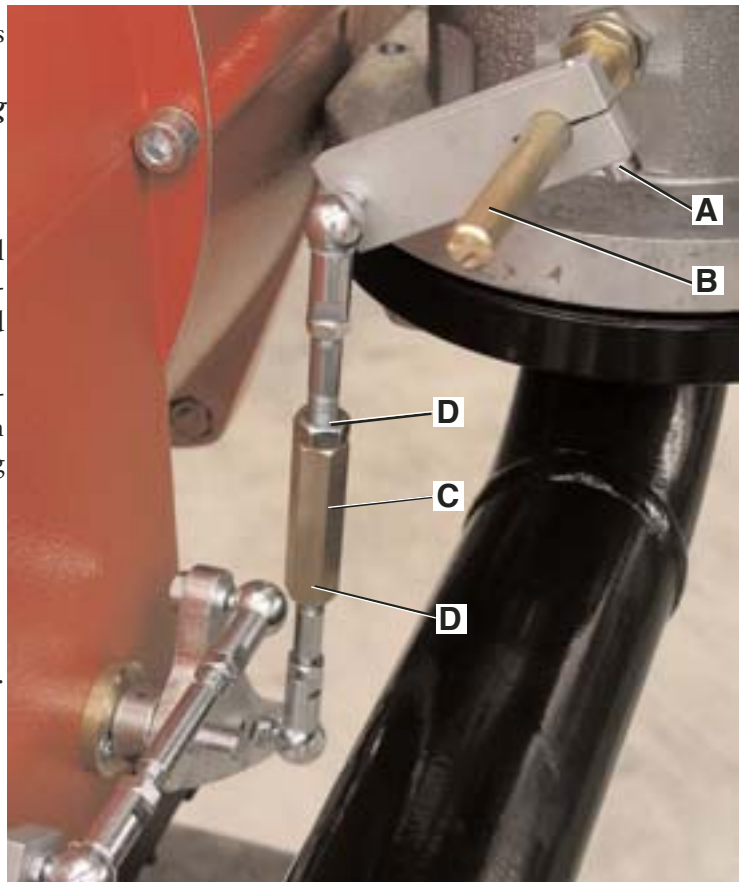
Attention: the instructions for gas valves setting are included in the gas train manual.

Low flame

4. Choose the first stage position on the servocontrol (normally between 10°-30°) on the basis of the reduced charge output required and switch the burner to low flame.
5. Regulate gas capacity, to obtain optimal combustion. To adjust the butterfly valve position act upon hexagonal bar C after loosening nuts D.

Final operations

6. Bring the burner in high flame again, if necessary adjust again gas flow (as shown in point n.2).
7. If necessary repeat operations described on point n. 5 and n. 6 until You obtain the exact position of the gas flow both in high and low flame.
8. Fix the nuts.



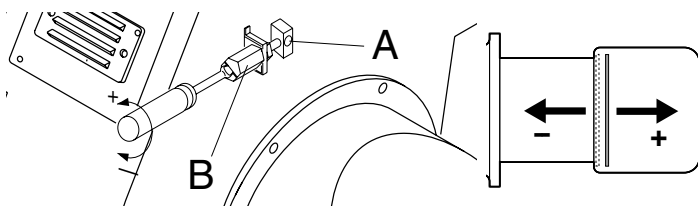
COMBUSTION ADJUSTMENT

WARNING: In order to have a correct combustion and thermal output adjustments, these must be carried out together with a combustion analysis, to be executed through suitable devices, taking care that the values are the correct ones and are in accordance with the local safety regulations. The adjustments must be carried out by qualified and skilled technicians authorised by Ecoflam S.p.A.

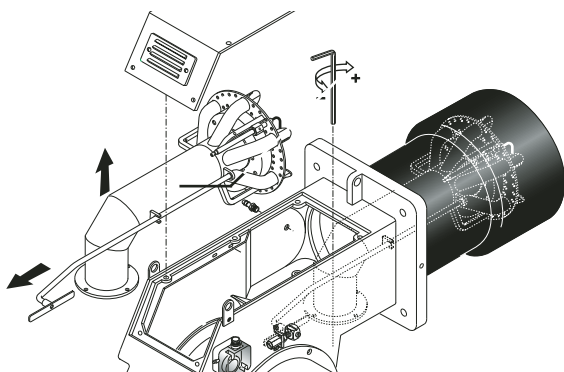
SETTING THE FIRING HEAD

The firing head position adjustment is made in order to obtain the best combustion efficiency. When used with minimum outputs the firing head is adjusted in rear position. With high output, the firing head is adjusted in forward position.

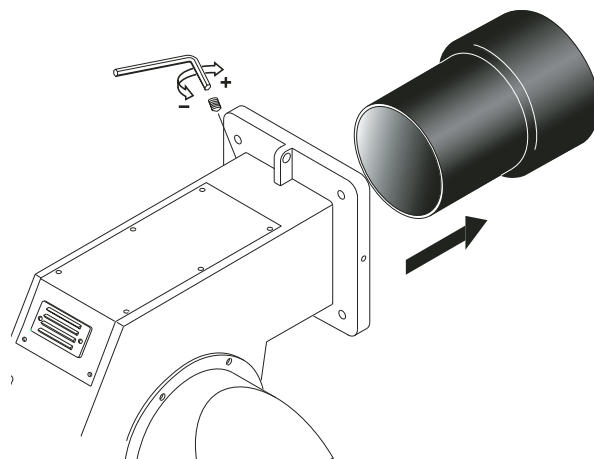
Adjustment: - Loosen screw A through a suitable Allen key.- By a screwdriver act on the hex. head screw B until is reached the desired position. - Tighten screw A



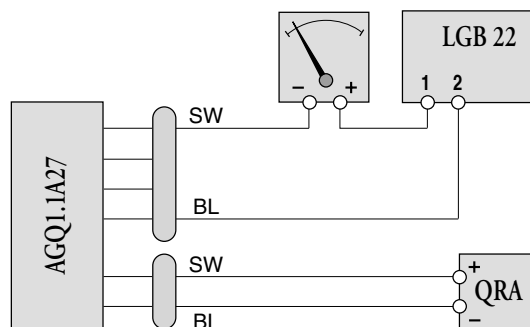
REMOVING THE FIRING HEAD



REMOVING THE BLAST TUBE



FLAME DETECTION SYSTEM CHECK



SW = BLACK
BL = BLUE

Minimum detection
current required 3 μ A.

Microammeter bottom scale 50 μ A

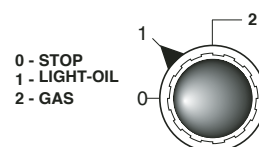
WORKING OF THE BURNER WITH LIGHT-OIL FUEL

Once having installed the burner, check the following items:

- The burner power feeding and the main line protection fuses
- The correct length of pipes and that the same are sealed.
- The type of fuel, which must be suitable for burner.
- The connection of boiler's thermostats and all the safeties.
- The motor rotation direction.
- The correct calibration of the motor's thermal protection.

When all the above mentioned conditions are checked and accomplished, it is possible to go on with burner's tests. Power the burner. The control box feeds the ignition transformer and the burner's motor at the same time, which will run a prepurging of the combustion chamber for about 20 sec.

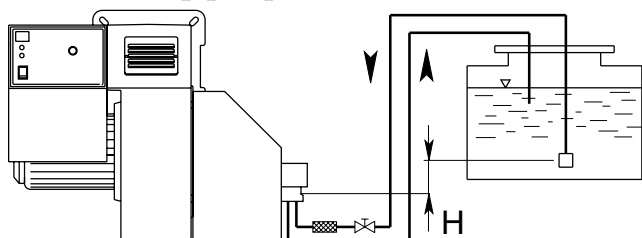
At the end of prepurging, the control box opens solenoid valves and the burner starts. After a safety interval of 5 seconds and a correct ignition, the control box turns off the ignition transformer and, 10 seconds later, sets the motorised air damper to its maximum opening (High flame). In case of faulty ignition, the control box switches the burner



into safety condition within 5 second. In such a case, the manual rearming of the burner shall not take place before 30 seconds have elapsed from the burner's safety shutdown. In order to obtain an optimal combustion, it is necessary adjust the LOW - HIGH flame air flow, according to the instruction given further on. During such a phase, it will be possible to manually switch between HIGH and LOW flame and viceversa, through the High/Low flame switch. At the end of the adjusting phase, leave the switch in position AUTO.

SUCTION LINE LENGTHS MAX. FOR TWO - PIPE SYSTEMS

Two-pipe siphon feed system

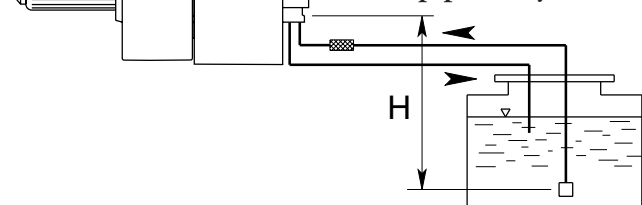


H (m)	Copper pipe	
	J 7	
	ø 14 mm	ø 16 mm
0	16	29
0,5	18	33
1	20	37
2	25	44
3	29	52
3,5	31	55

To calculate the length of the pipework all the straight parts, curves, up and down pipes must be taken into consideration. The static suction height is the distance between the standing valve and the axis of the burner pump.

Pressure must not exceed 0,45 bar; if pressure is greater pump operation may become faulty, leading to an increase in mechanical noise and perhaps even breakage.

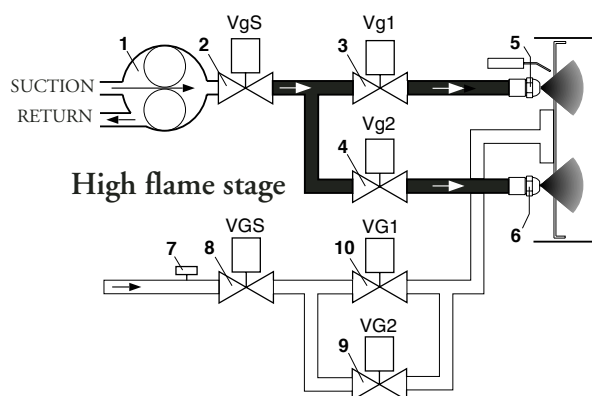
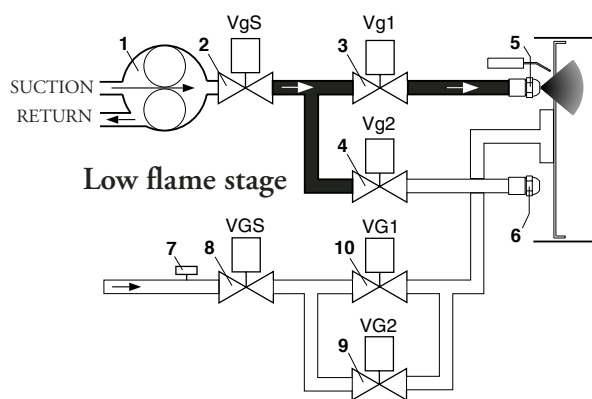
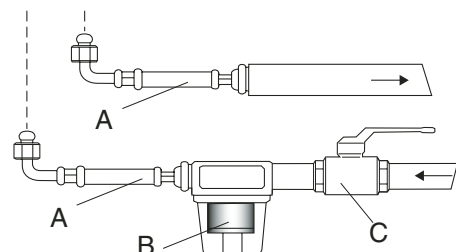
Two-pipe lift system



H (m)	Copper pipe	
	J 7	
	ø 14 mm	ø 16 mm
0	16	29
0,5	14	26
1	12	22
2	7	14
3	3	7
3,5	1	4

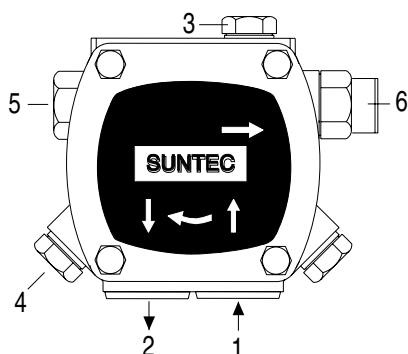
LIGHT-OIL CIRCUIT

- A - HOSE
- B - OIL FILTER
- C - OIL COCK
- 1 - PUMP
- 2 - SAFETY LIGHT-OIL VALVE
- 3 - LOW FLAME LIGHT-OIL VALVE
- 4 - HIGH FLAME LIGHT-OIL FLAME
- 5 - LOW FLAME NOZZLE
- 6 - HIGH FLAME NOZZLE
- 7 - MINIMUM GAS PRESSURE SWITCH
- 8 - SAFETY GAS VALVE
- 9 - LOW FLAME GAS VALVE
- 10 - HIGH FLAME GAS FLAME

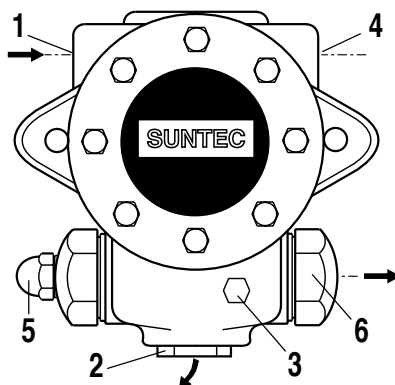


PRIMING AND ADJUSTMENT OF OIL PUMP

SUNTEC AJ 6 C-C



SUNTEC J7



- 1 - INLET
- 2 - RETURN
- 3 - BLEED AND PRESSURE GAUGE PORT
- 4 - VACUUM GAUGE PORT
- 5 - PRESSURE ADJUSTMENT
- 6 - TO NOZZLE

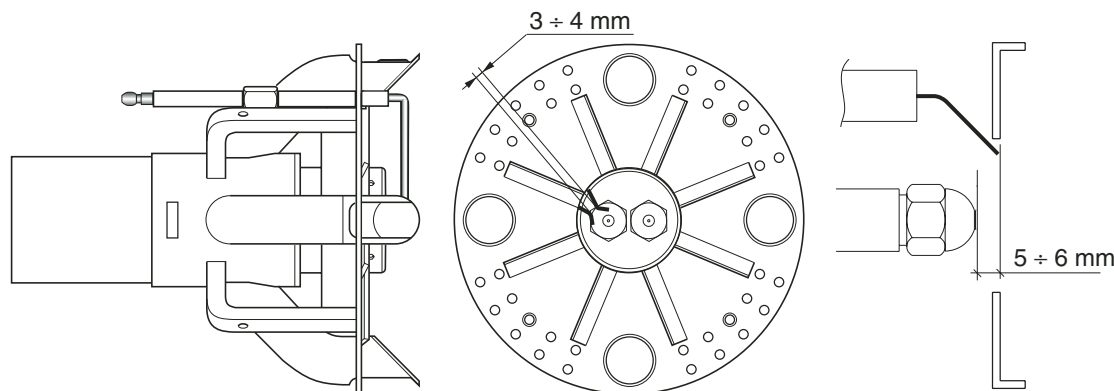
VERIFY:

- That piping system is perfectly sealed;
- That the use of hoses is avoided whenever is possible (use copper pipes preferably);
- That depression is not greater than 0,45 bar, to avoid pump's cavitation;

- That check valve is suitably designed for the duty;

The pump pressure is set at a value of 12 bar during the testing of burners. Before starting the burner, bleed the air in the pump through the gauge port. Fill the piping with light-oil to facilitate the pump priming. Start the burner and check the pump feeding pressure. In case the pump priming does not take place during the first prepurging, with a consequent, subsequent lock-out of the burner, rearm the burner's lock-out to restart, by pushing the button on the control box. If, after a successful pump priming, the burner locks-out after the prepurging, due to a fuel pressure drop in the pump, rearm the burner's lock-out to restart the burner. Do never allow the pump working without oil for more than three minutes. Note: before starting the burner, check that the return pipe is open. An eventual obstruction could damage the pump sealing device.

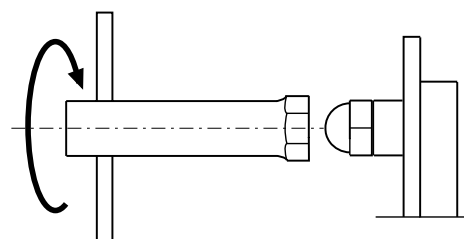
POSITION OF IGNITION ELECTRODES



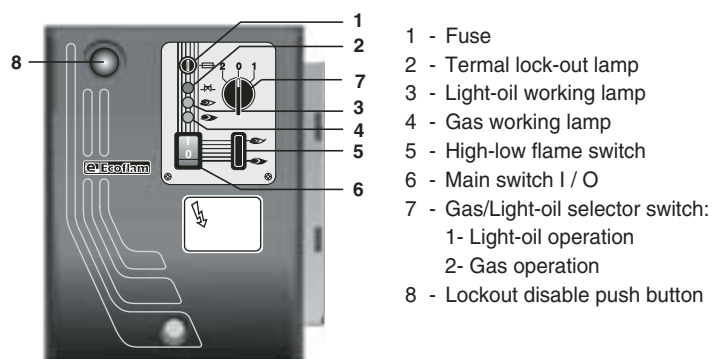
NOZZLE CLEANING AND REPLACEMENT

Use only the suitable box wrench provided for this operation to remove the nozzle, taking care to not damage the electrodes. Fit the new nozzle with the same care.

Note: Always check the position of electrodes after having replaced the nozzle (see illustration). A wrong position could cause ignition troubles.



DESCRIPTION OF CONTROL PANEL



MAINTENANCE

YEARLY CONTROLS

The periodical check of the burner (firing head, electrodes etc.) must be carried out one or two times a year, by authorised personnel only. Before proceeding with the controls for the maintenance, it should be advisable to check the general status of the burner as follows: - Disconnect the burner from the power supply - Turn off the gas cut-off cock - Remove the burner's cover and clean fan and the air intake - Clean the firing head and check the electrodes position - Reassemble the whole - Check the piping sealing - Check the chimney - Start the burner while verifying the combustion parameters.

FAULT FINDINGS BEFORE ANY INTERVENTION VERIFY WHAT FOLLOWS:

The burner must be duly connected to power supply - cut-off cock must be open and the gas pressure is the correct one. The control and safety devices must be duly connected - If the above conditions are met, start the burner by pushing the lockout disable button and check the burner's cycle.

THE BURNER DOES NOT START

Verify the ON/OFF switch, the thermostats, the motor and the gas pressure. The selector switch is set to 0 position. The fuses are blown. The control box is faulty.

THE BURNER PRE-PURGES THEN STOPS

Check the air pressure and the fan - Check the air pressure switch - Check control box (faulty) - The ignition transformer is faulty - Check the ignition cable - Check electrodes (dirty, faulty or in a wrong position) - Check nozzles (clogged or worn out) - Check filters (clogged) - Light-oil pressure too low - Air flow rate too high for nozzle's output.

THE BURNER PRE-PURGES BUT DOES NOT IGNITES

Check the correct position of the electrodes - Check the ignition cable - Check the ignition transformer - Check the control box.

THE BURNER IGNITES THEN STOPS AFTER THE SAFETY TIME

Check that phase and neutral are connected in the right way - Check gas solenoid valve - Check the position of ionisation probe and related connection - Check control box - Check nozzles (clogged or worn out) - The photoresistor does not "see" the flame - Check filters (clogged) - Light-oil pressure too low - Combustion air flow rate too high for the nozzle's output.

THE BURNER IGNITES THEN STOPS WITHIN FEW MINUTES OF WORKING

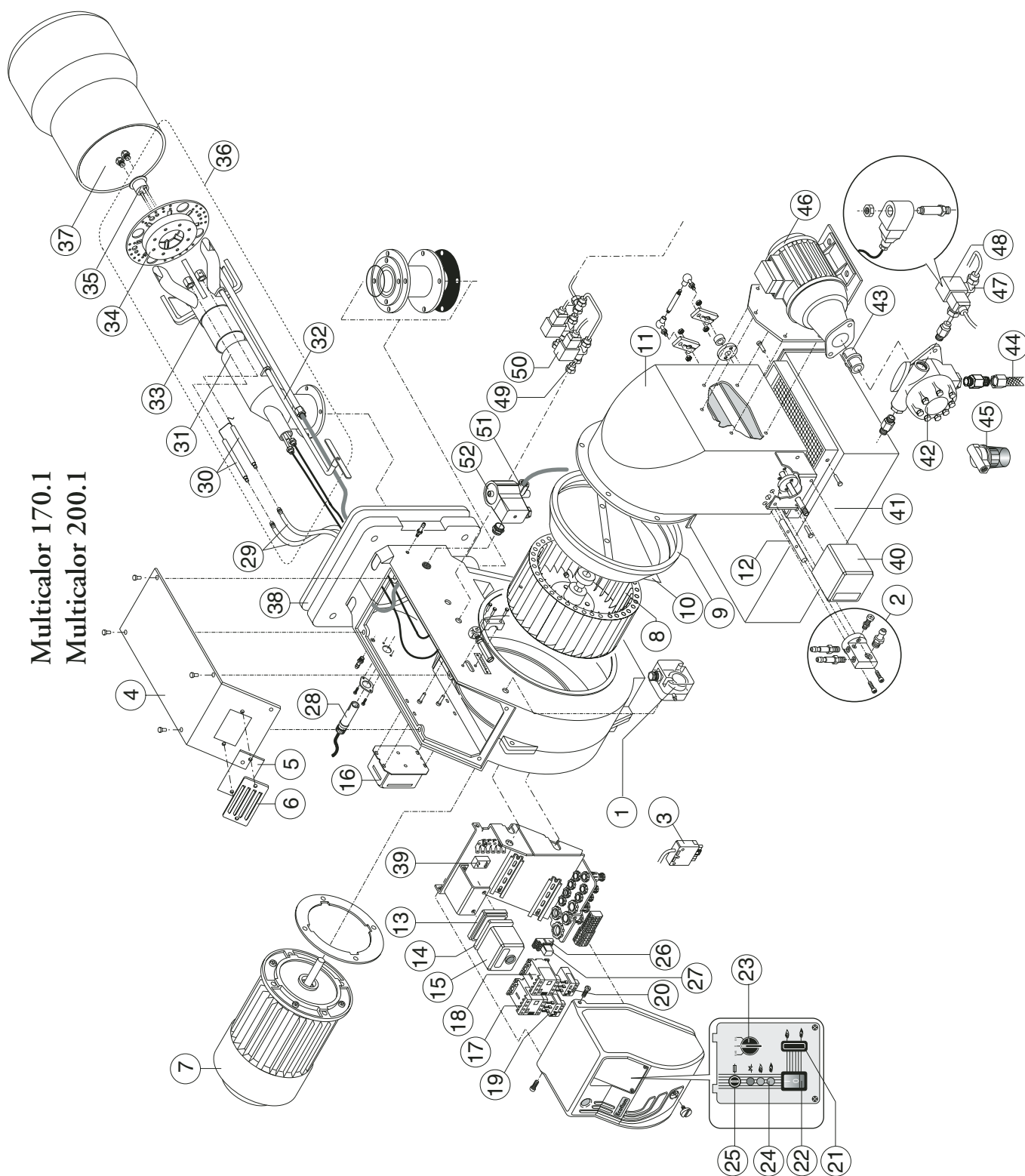
Check pressure governor and gas filter - Check gas pressure through a manometer - Check ionisation values (must be 3 μ A at least).

THE BURNER DOES NOT SWITCH TO HIGH FLAME

High/Low selector switch wrongly set - Check control box (faulty) - Oil valve's coil faulty - Light-oil pressure too low - Check filters (clogged) - Check nozzle (worn out or clogged) - Air damper motor jack faulty or wrongly adjusted.



Multicalor 170.1
Multicalor 200.1



N°	DESCRIPTION	Multicalor 170.1	Multicalor 200.1
		code	code
1	- AIR PRESSURE SWITCH DUNGS LGW10 A2P	Q120	Q120
2	- AIR INTAKE SET	GRPA100	GRPA100
3	- PLUG WIELAND 6 pin	E226	E226
4	- COVER	BFC09204/038	BFC09204/038
5	- GLASS	BFC02004	BFC02004
6	- PEED WINDOM FRAME	BFC02006	BFC02006
7	- MOTOR 3000 W	M146/017	-
	4000 W	-	M127/017
8	- FAN 280 x 140	BFV10301/001	BFV10301/001
9	- AIR CONVEYOR	BFC08252/201	BFC08252/201
10	- FAN SCOOP	-	BFC08056/001
11	- AIR INTAKE	BFC04154/038	BFC04154/038
12	- AIR INTAKE PIPE	BFS02208/201	BFS02208/201
13	- CONTROL BOX BASE LANDIS	A402	A402
14	- ADAPTER LANDIS AGQ1.1A27	E1202/11	E1202/11
15	- CONTROL BOX LANDIS LGB22	A130/1	A130/1
16	- IGNITION TRANSFORMER BRAHMA T8 13000/35	T101	T101
17	- REMOTE CONTROL SWITCH BF16.10	R617/1	R617/1
18	- REMOTE CONTROL SWITCH (PUMP) MC9.10	R603/1	R603/1
19	- MOTOR THERMAL RELAY Lovato RF25 6-10 A	R513/3	R513/3
20	- MOTOR THERMAL RELAY (PUMP) Lovato RF9 2-3,3 A	R510/1	R510/1
21	- HIGH-LOW FLAME SWITCH	R1020/1	R1020/1
22	- MAIN SWITCH cod.40100I1509	R1020	R1020
23	- GAS/LIGHT-OIL SELECTOR	R1020/5	R1020/5
24	- LAMP EL/N-SC4 Elettrospring	E1510	E1510
25	- FUSE SUPPORT FUSIT FH-B528	E802/2	E802/2
26	- RELAY BASE Finder 95.75	R910	R910
27	- RELAY Finder 40.52	R712/1	R712/1
28	- UV CELL LANDIS QRA	A205	A205
29	- IGNITION CABLE	BFE01403/1	BFE01403/1
		BFE01403/2	BFE01403/2
30	- IGNITION ELECTRODES SET	E612	E612
31	- PIPE TC	BFT14029/001	BFT14017/101
	TL	BFT14030/001	BFT14030/001
32	- ROD TC	BFA08022/101	BFA08022/101
	TL	BFA08022/201	BFA08022/201
33	- FIRING HEAD	BFT14034/001	BFT14034/001
34	- FRONT DISC	BFD07041	BFD07041
35	- NOZZLE HOLDER	BLT02058	BLT02058
36	- INNER ASSEMBLY TC		
	TL		
37	- BLAST TUBE TC	BFB07025/103	BFB07024/103
	TL	BFB07025/203	BFB07024/203
38	- GASKET ISOMART	BFG04011	BFG04011
39	- ANTIJAMMING FILTER	S132/4	S132/4
40	- AIR DAMPER MOTOR LANDIS SQN 30.151A2700	M212/3	M212/3
41	- SILENCER	-	GRSIL03
42	- OIL PUMP SUNTEC AJ6CC10002P	P103	-
	SUNTEC J7CCC10014P	-	P103/1
43	- COUPLING	MP501/4	MP501/4
44	- HOSES TN 14X1200	S903/2	S903/2
45	- OIL FILTER ATT. 3/4 70207	S104	S104
46	- PUMP MOTOR SIMEL 360 W	M108/11	M108/11
47	- OIL VALVE PARKER SCEM VE140.4AR	V175/1	V175/1
48	- COIL PARKER SCEM VE140.4AR	V516/6	V516/6
49	- OIL VALVE DELTA 1/8 F.F.F84	V420	V420
50	- COIL DELTA 1/8 F.F.F84	V502/2	V502/2
51	- GAS VALVE BRAHMA EG12SR	V142/1	V142/1
52	- COIL BRAHMA	V209	V209

TC = SHORT HEAD TL = LONG HEAD



Q		INTERUTTORE GENERALE CON FUSIBILE MAIN SWITCH WITH FUSE INTERRUPTEUR GENERAL AVEC FUSIBLE INTERRUPTOR GENERAL CON FUSIBLE		SAL		INTERUTTORE DI LINEA WORKING SWITCH INTERRUPTEUR DE LIGNE INTERRUPTOR DE LINEA		YVGP		ELETTRONVULVA GAS PILOTA PILOT FLAME SOLENOID GAS VALVE ELECTRONNNE GAZ PILOTE ELECTRONVULVA GAS PILOTO	
Z		FILTRO ANTIDISTURBO ANTI JAMMING FILTER FILTRE ANTIPARASITES FILTRO DE PROTECCION ANTIDISTURBO		SPA		PRESOSTATO ARIA AIR PRESSURE SWITCH PRESOSTAT AIR PRESOSTATO AIRE					
KA		RELÉ RELAY RELAIS RELÉ		STC		TERMOSTATO CALDAIA BOILER THERMOSTAT THERMOSTAT CHAUDIERE THERMOSTATO CALDERA					
FU		FUSIBILE FUSE FUSIBLE FUSIBLE		STS		TERMOSTATO DI SICUREZZA SAFETY THERMOSTAT THERMOSTAT DE SECURITE THERMOSTATO DE SEGURIDAD					
MP		MOTORE POMPA OIL PUMP MOTOR MOTEUR POMPE MOTOR BOMBA		S4gg		INTERUTTORE GAS/OIL-GAS SWITCH (OIL-GAS) INTERRUPTEUR MAZOUT-GAZ CONMUTADOR GAS/OIL-GAS					
MV		MOTORE VENTILATORE MOTOR FAN MOTEUR VENTILATEUR MOTOR VENTILADOR		STDB		TERMOSTATO DI ALTA/BASSA FIAMMA HIGH/LOW FLAME THERMOSTAT THERMOSTAT GRANDE/PETITE ALLURE THERMOSTATO DE ALTA-BAJA LLAMA					
TV		TRASFORMATORE IGNITION TRANSFORMER TRANSFORMATEUR D'ALLUMAGE TRANSFORMADOR		YVGI		ELETTRONVULVA GAS DI PRIMA FIAMMA FIRST STAGE GAS SOLENOID VALVE ELECTRONNNE GAZ PETITE ALLURE ELECTRONVULVA GAS DE 1ª LLAMA					
UV		FOTOCELLULA UV CELL CELLULE UV FOTOCELULA		K42		RELÉ RELAY RELAIS RELÉ					
FMP		RELÉ TERMICO MOTORE VENTILATORE MOTOR THERMAL RELAY (FAN MOTOR) RELAIS THERMIQUE MOTEUR VENTILATEUR RELÉ TERMICO MOTOR VENTILADOR		YVGS		ELETTRONVULVA GAS DI SICUREZZA EXTRA SAFETY GAS SOLENOID VALVE ELECTRONNNE GAZ DE SECURITE ELECTRONVULVA GAS DE SEGURIDAD					
HLB		LAMPA DA DI BLOCCO LOCK-OUT LAMP LAMPE DE SECURITE ESPIA DE BLOQUEO		YVg1		ELETTRONVULVA GASOLIO DI PRIMA FIAMMA FIRST STAGE OIL SOLENOID VALVE ELECTRONNNE MAZOUT PETITE ALLURE ELECTRONVULVA DE GASOLEO 1ª LLAMA					
HLG		LAMPA DA GAS GAS LAMPE LAMPE DE GAZ ESPIA GAS		YVg2		ELETTRONVULVA GASOLIO DI SECONDA FIAMMA SECOND STAGE OIL SOLENOID VALVE ELECTRONNNE MAZOUT GRANDE ALLURE ELECTRONVULVA DE GASOLEO 2ª LLAMA					
H4g		LAMPA DA GASOLIO OIL LAMP THERMIN MAZOUT ESPIA GASOLEO		YVGS		ELETTRONVULVA GASOLIO DI SICUREZZA EXTRA SAFETY OIL SOLENOID VALVE ELECTRONNNE MAZOUT DE SECURITE ELECTRONVULVA DE GASOLEO DE SEGURIDAD					
IMP		CONTATTORE MOTORE POMPA PUMP REMOTE CONTROL SWITCH CONTACTEUR MOTEUR POMPE EMPALME MOTOR BOMBA		FMP		RELÉ TERMICO MOTORE POMPA MOTOR PUMP THERMAL RELAY RELAIS THERMIQUE MOTEUR POMPE RELÉ TERMICO MOTOR BOMBA					
IMV		CONTATTORE MOTORE VENTILATORE FAN REMOTE CONTROL SWITCH CONTACTEUR MOTEUR VENTILATEUR TELEBRIUPTOR MOTOR VENTILATOR		SPGmh		PRESOSTATO GAS DI MINIMA GAS PRESSURE SWITCH MIN PRESOSTAT GAZ PRESSION MIN PRESOSTATO GAS DE MINIMA POT.					
S4B		CERCHIETTO ALTA/BASSA FIAMMA HIGH/LOW FLAME SWITCH INTERIEUR GRANDE/PETITE ALLURE CONMUTADOR DE ALTA-BAJA LLAMA		HLBT		LAMPA DA DI BLOCCO TERMICO THERMAL LOCK-OUT LAMP LAMPE DE THERMAL DE SECURITE ESPIA DE BLOQUEO RELÉ TERMICO					

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