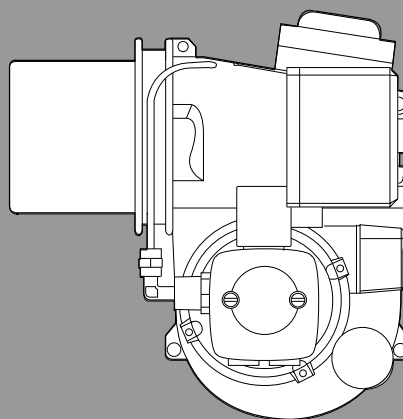


OIL BURNERS

Ecoflam



MINOR 1 Snorkel

240 Volt 50 Hz



420010675700

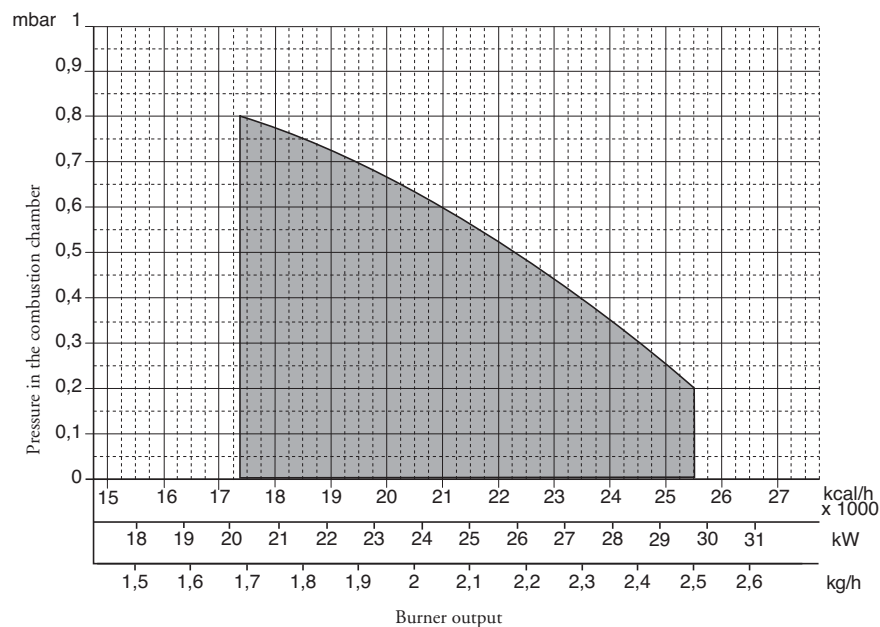
420010675700

04.06.2015

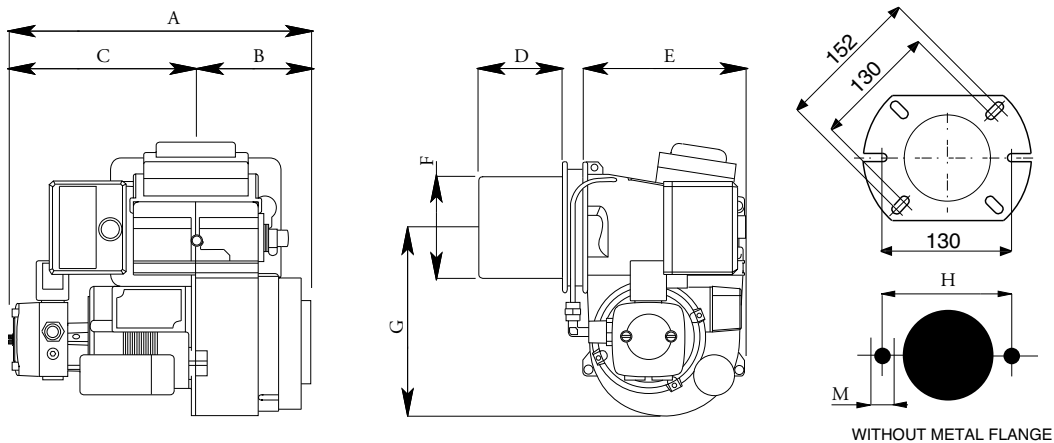
TECHNICAL DATA

MODEL		MINOR 1 SNORKEL	
Thermal power max	kcal/h	25500	
	kW	29,6	
Thermal power min	kcal/h	17300	
	kW	20	
Max capacity light oil	kg/h	2,5	
Min capacity light oil	kg/h	1,7	
Voltage single phase 50 Hz	Volt	240	
Motor	W	75	
Capacitor	μF	3,5	
Rpm	N°	2800	
Inition transformer	kV/mA	E8/20	
Control box SIEMENS	LOA 24		
Fuel : Light oil	kcal/Kg	10.200 Visc.max.1,5°E at 20°C	

WORKING FIELD



OVERALL DIMENSIONS

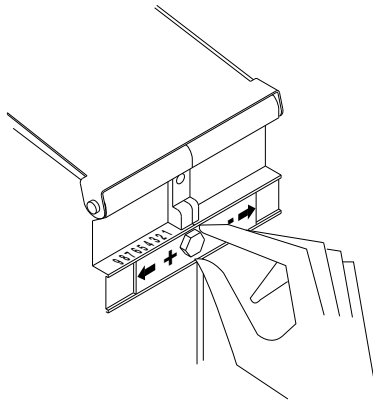


MODEL	A	B	C	D	E	F	G	H	M
Minor 1 Snorkel	270	110	160	65	165	89	160	125	M 8

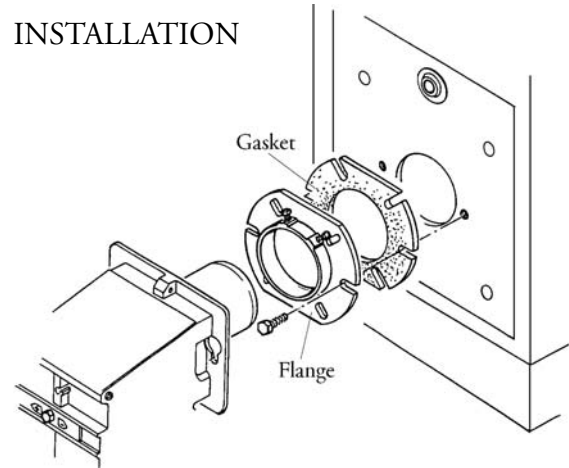
BURNER START - UP

Make sure there are no leaks on flexible oil line connections. Bleed air from the pump (see page 4). Install a suitable nozzle for the required output. Turn the thermostat to the required setting. The burner will purge for approximately 13 seconds. At this point the oil valve opens and oil is ignited. Regulate the pump pressure (see page 4). Regulate the air. In case of no ignition the burner goes to lock-out in 10 seconds.

AIR REGULATION



INSTALLATION

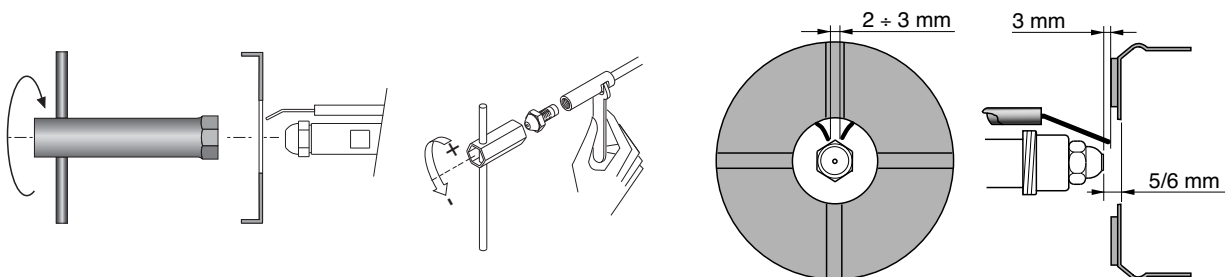


NOZZLE REPLACEMENT

Remove the nozzle carefully taking great care not to damage the electrodes.

Fit the new nozzle with the same care.

Notice : Always check the position of the electrodes after replacing the nozzle (see plan).

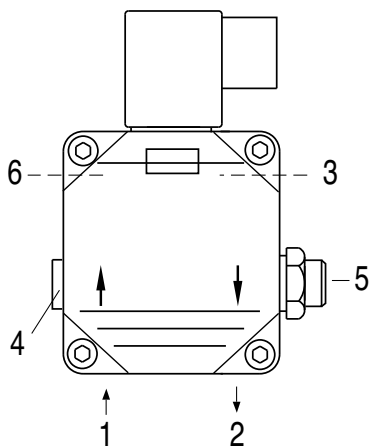


Ignition electrodes setting on firing head

NOZZLE GPH	SPRAY ANGLE	SPRAY PATTERN	PUMP PRESSURE	PUMP PRESSURE	PUMP PRESSURE	PUMP PRESSURE
			9 BAR	10 BAR	11 BAR	12 BAR
			Output kg/h ± 5%	Output kg/h ± 5%	Output kg/h ± 5%	Output kg/h ± 5%
0,50	60°/80°	DANFOSS H/S	1,8	1,9	2	2,1
0,60	60°/80°	DANFOSS H/S	2,16	2,3	2,4	2,5
0,65	60°/80°	DANFOSS H/S	2,34	2,45	2,59	2,71
0,75	60°/80°	DANFOSS H/S	2,7	2,85	-	-
0,85	60°/80°	DANFOSS H/S	3	3,25	-	-

PRIMING AND ADJUSTMENT OF THE PUMP

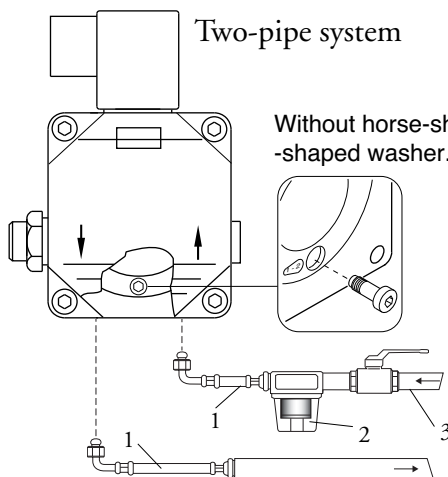
DANFOSS BFP 11 R3



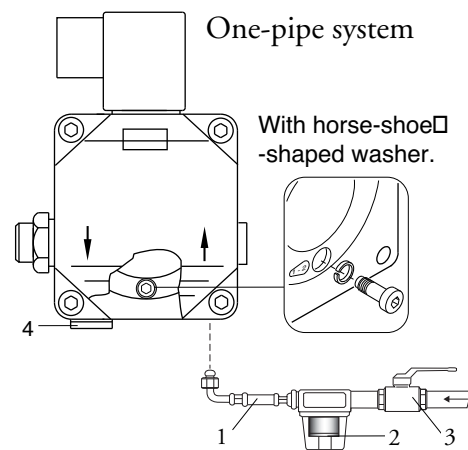
- 1 - INLET
- 2 - RETURN
- 3 - BLEED AND PRESSURE GAUGE PORT
- 4 - VACUUM GAUGE PORT
- 5 - PRESSURE ADJUSTMENT
- 6 - NOZZLE OUTLET

The pump setting indicated by client is carried out in the factory during testing. To prime the pump first of all start the burner and bleed air from the pump through the gauge port. If the burner goes to lock-out after the prepurging time due to lack of pressure in the oil pump, restart the burner.

NOTE : before starting up the burner, make sure that the return pipe is clear. Check that the pipes do not leak. It is advisable to use copper pipes. Do not exceed the depression limit of 4 mt.(0,45 bar) to keep low noise levels. The return pipe must reach the same level as the check valve at the bottom of the oil tank.



- 1 - HOSE
- 2 - OIL FILTER
- 3 - OIL COCK
- 4 - PLUG



FAULT FINDING

Burner does not start up

- Mains switch not on.
- Blown fuse.
- Boiler thermostats not made.
- Fault in control box.

Burner pre-purges and stops

- Fault in control box.

Burner does not ignite during cycle and stops

- Fault in control box.
- Fault in photo-resistor.

Burner does not ignite

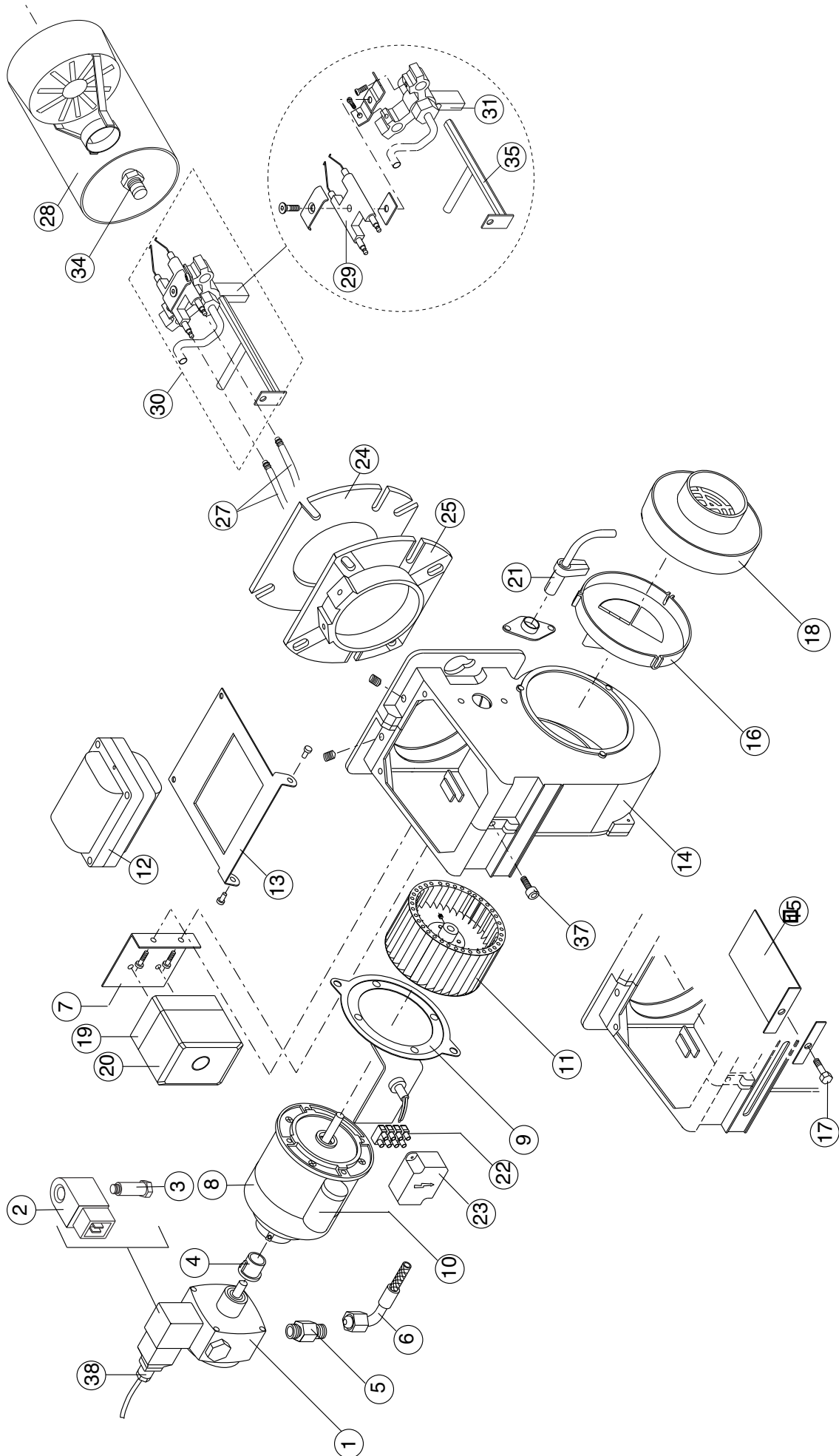
- Dirty ignition electrodes.
- Fault at electrodes.
- Electrodes installed wrongly.
- Faulty ignition transformer.
- Blocked nozzle.
- Nozzle needs replacing.
- Oil pressure too low.
- Blocked oil filter.
- Excessive combustion air for nozzle capacity.
- Fault in control box.

Burner ignites and then stops

- Faulty nozzle.
- Photo-resistor does not "see" flame.
- Excessive combustion air for nozzle capacity.
- Fault in control box.
- Oil pressure too low.
- Blocked oil filter.

00	01	02	03	04	05	06	07	08	09																												
<p>PROPRIETÀ RISERVATA DELLA DITTA ECOFLAM S.p.A. A TERMINE DI LEGGE È VIETATO RIPRODURRE O COMUNICARE A TERZI IL CONTENUTO DEL PRESENTE.</p>																																					
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MINOR 1 SNORKEL



			MINOR 1 Snorkel
N°	DESCRIPTION		code
1	OIL PUMP	DANFOSS BFP 11 R3	65322967
2	COIL	DANFOSS	65323773
3	OIL VALVE	DANFOSS	65323751
4	COUPLING		65322920
5	NIPPLE		65321179
6	HOSES		65323198
7	SUPPORT		65321276
8	MOTOR	75 W	65322784
9	SUPPORT		65320988
10	CAPACITOR	3,5 µF	65321856
11	FAN	99 x 43	65321761
12	IGNITION TRANSFORMER	E8/20	65323251
13	COVER		65320655
14	FAN HOUSING		65325491
15	AIR DAMPER		65321189
16	AIR CONVEYOR		65322337
17	AIR DAMPER SCREW		65321315
18	COVER AIR INLET		65320510
19	CONTROL BOX BASE	SIEMENS	65320092
20	CONTROL BOX	SIEMENS LOA 24	65320028
21	PHOTORESISTOR	SIEMENS	65320078
22	WIRING TERMINAL BOX		65322078
23	PROTECTION BOX		65320489
24	GASKET		65321089
25	FLANGE		65320960
26	ORING		-
27	CABLES	TC	0GRCAVO-01
28	BLAST TUBE	TC	65320257
29	ELECTRODES		65320921
30	FIRING HEAD	TC	
31	NOZZLE HOLDER	TC	65322283
32	DIFFUSER		-
33	REAR DISC		-
34	NOZZLE		65323309
35	ROD		65320150
36	INDEX		-
37	SCREW		
38	CABLE	DANFOSS	65322009

TC = SHORT HEAD TL = LONG HEAD

Ecoflam

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e-mail: export@ecoflam-burners.com

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