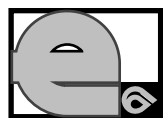
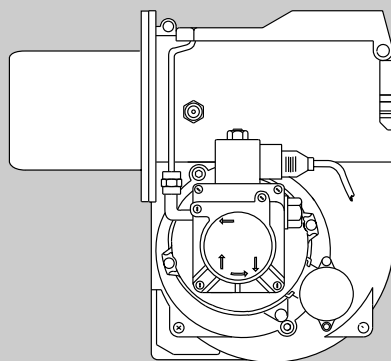


OIL BURNERS



Ecoflam
techniques for energy saving

MODEL



MINOR 8 AGGREKO

240 Volt 50 Hz



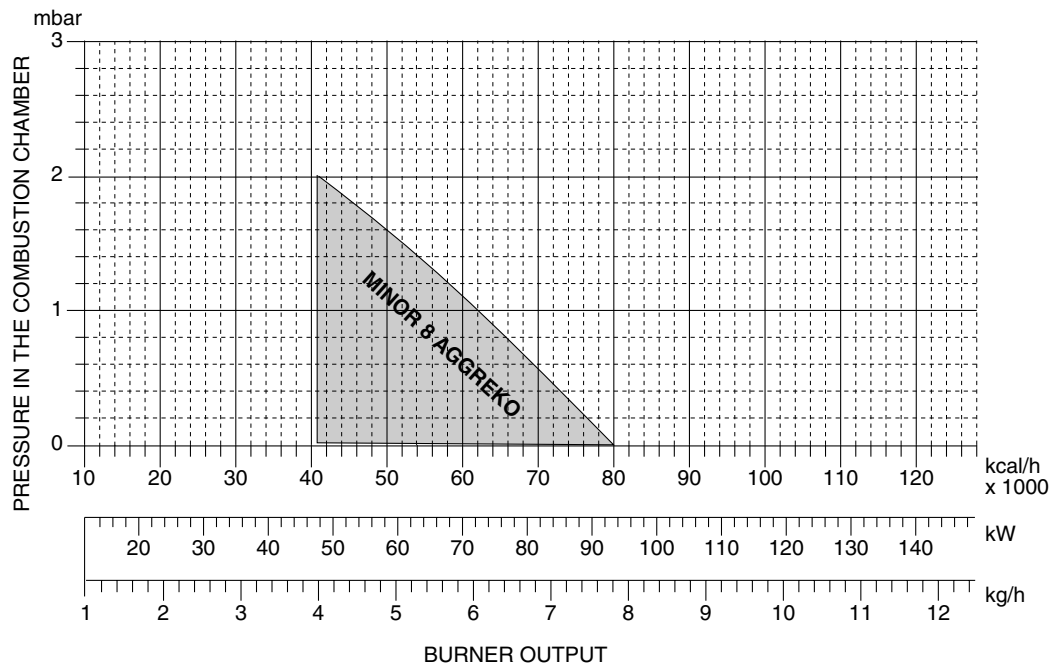
LB 984

23.10.2002

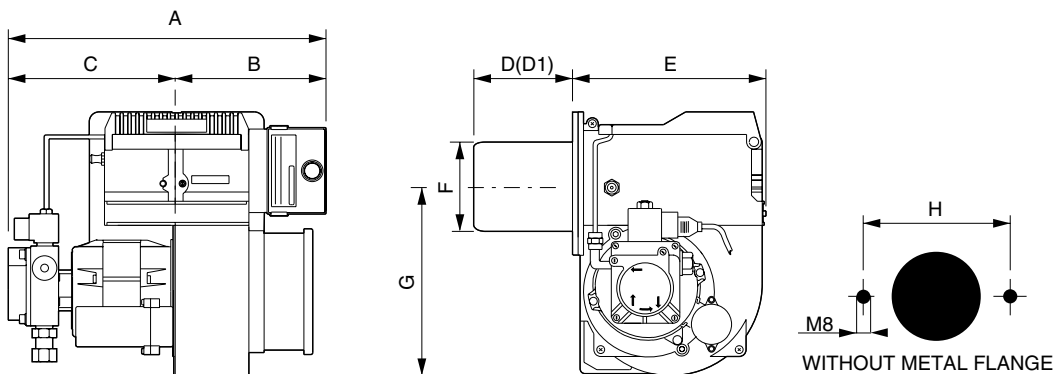
TECHNICAL DATA

MODEL		MINOR 8 AGGREKO
Thermal power max.	kcal/h	80.000
	kW	92,8
Thermal power min.	kcal/h	40.000
	kW	46,4
Max. capacity light oil	kg/h	7,8
Min. capacity light oil	kg/h	3,9
Voltage single phase 50 Hz	V	240
Motor	W	100
Rpm	Nº	2.800
Capacitor	µF	4
Ignition transformer	kV/mA	8/20
Control box	LANDIS	LOA 24
Fuel : light oil	kcal/kg	10.200 max. visc 1,5°E a 20°C
Kerosene	kcal/kg	10.300

WORKING FIELD



OVERALL DIMENSIONS

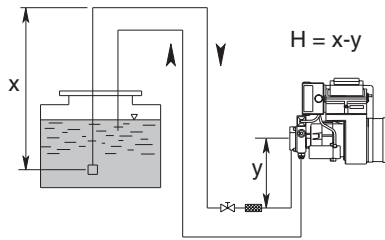


MODEL	A	B	C	D	D1	E	F	G	H	M
MINOR 8 Aggreko	320	145	175	86	-	205	89	195	153	M 8

D= Short head ; D1= Long head

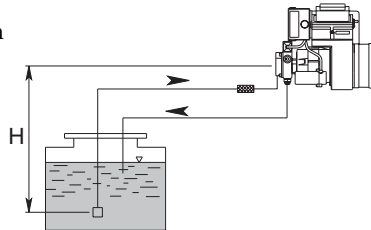
MAXIMUM LENGTHS OF SUCTION LINES FOR TWO-PIPE SYSTEM (Danfoss ...R3)

Two-pipe siphon feed system



H (m)	Length pipe (m)		
	ø 6 mm	ø 8 mm	ø 10 mm
0,5	19	60	100
1	21	66	100
1,5	23	72	100
2	25	79	100
2,5	27	85	100
3	29	91	100
3,5	31	98	100

Two-pipe lift system



H (m)	Length pipe (m)		
	ø 6 mm	ø 8 mm	ø 10 mm
0,5	15	47	100
1	13	41	99
1,5	11	34	84
2	9	28	68
2,5	7	22	53
3	5	15	37
3,5	-	9	22

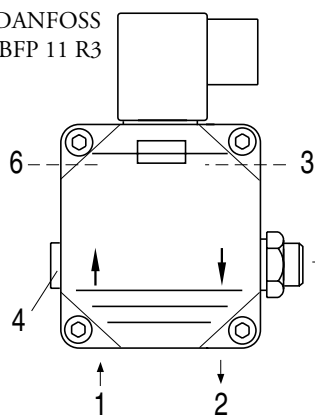
ADJUSTMENT DATA

NOZZLE GPH	SPRAY ANGLE	SPRAY PATTERN	PUMP PRESSURE 8 bar Output kg/h ± 5%	PUMP PRESSURE 9 bar Output kg/h ± 5%	PUMP PRESSURE 10 bar Output kg/h ± 5%	PUMP PRESSURE 11 bar Output kg/h ± 5%	PUMP PRESSURE 12 bar Output kg/h ± 5%
1,00	60°/80°	DANFOSS S/H	3,40	3,61	3,80	3,99	4,16
1,10	60°/80°	DANFOSS S/H	3,74	3,97	4,18	4,38	4,58
1,20	60°/80°	DANFOSS S/H	4,08	4,33	4,56	4,78	5,00
1,25	60°/80°	DANFOSS S/H	4,25	4,50	4,75	5,00	5,20
1,35	60°/80°	DANFOSS S/H	4,59	4,87	5,13	5,38	5,62
1,50	60°/80°	DANFOSS S/H	5,10	5,41	5,70	5,90	6,24
1,65	60°/80°	DANFOSS S/H	5,61	5,94	6,27	6,58	6,87
1,75	60°/80°	DANFOSS S/H	5,95	6,3	6,65	6,98	7,29

NOZZLE : DANFOSS H÷S 80°÷60°; DELAVAN W 60°; STEINEN S 60°

PRIMING AND ADJUSTMENT OF THE PUMP

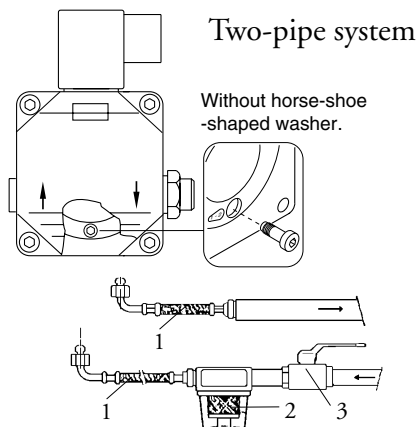
DANFOSS BFP 11 R3



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

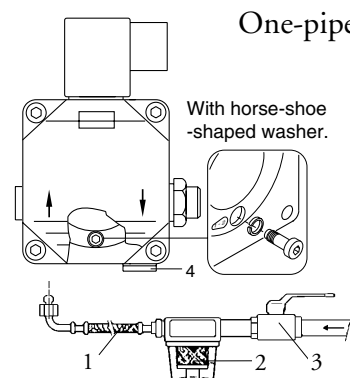
The pump setting indicated by client is carried out in the factory during testing. To prime the pump first of all start the burner and bleed air from the pump through the gauge port. If the burner goes to lock-out after the prepurging time due to lack of pressure in the oil pump, restart the burner.

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.



Two-pipe system

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

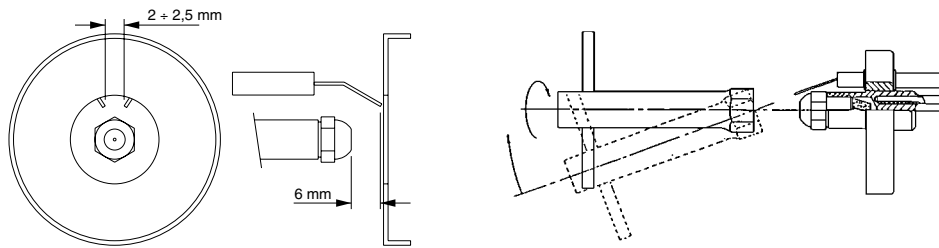


One-pipe system

NOZZLE REPLACEMENT

Use only the box wrench provided for this operation. Remove the nozzle carefully taking great care not to damage the electrodes. Fit the new nozzle with the same care.

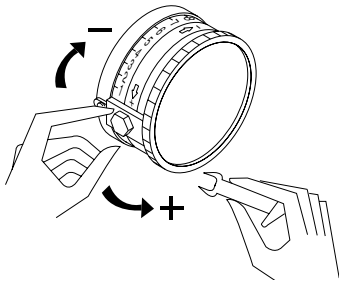
NOTICE : Always check the position of the electrodes after replacing the nozzle(see plan).



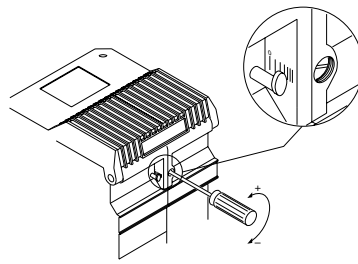
BURNER START-UP

Once connected the hoses to the oil pipes make sure that there are no leakages. Air bleed the pipe through the pump operating on the gauge connection (see fig.). Install the suitable nozzle for the needed capacity. Turn thermostat to the desired temperature. The burner will purge for about 13 sec.(LANDIS control box). At this point the oil valve opens and the transformer ignites. Control the pressure on the pump. (see fig.). Adjust the needed quantity of air, operating on the air regulator. In case of no ignition the burner goes to lock-out within 10 sec.

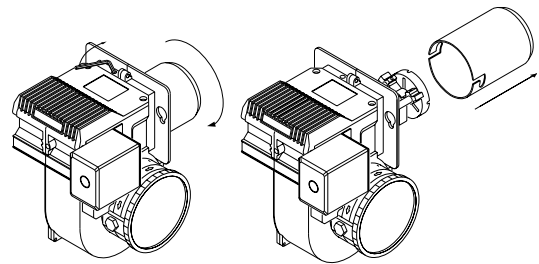
AIR DAMPER SETTING



FIRING HEAD SETTING



BLAST TUBE DISASSEMBLY



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

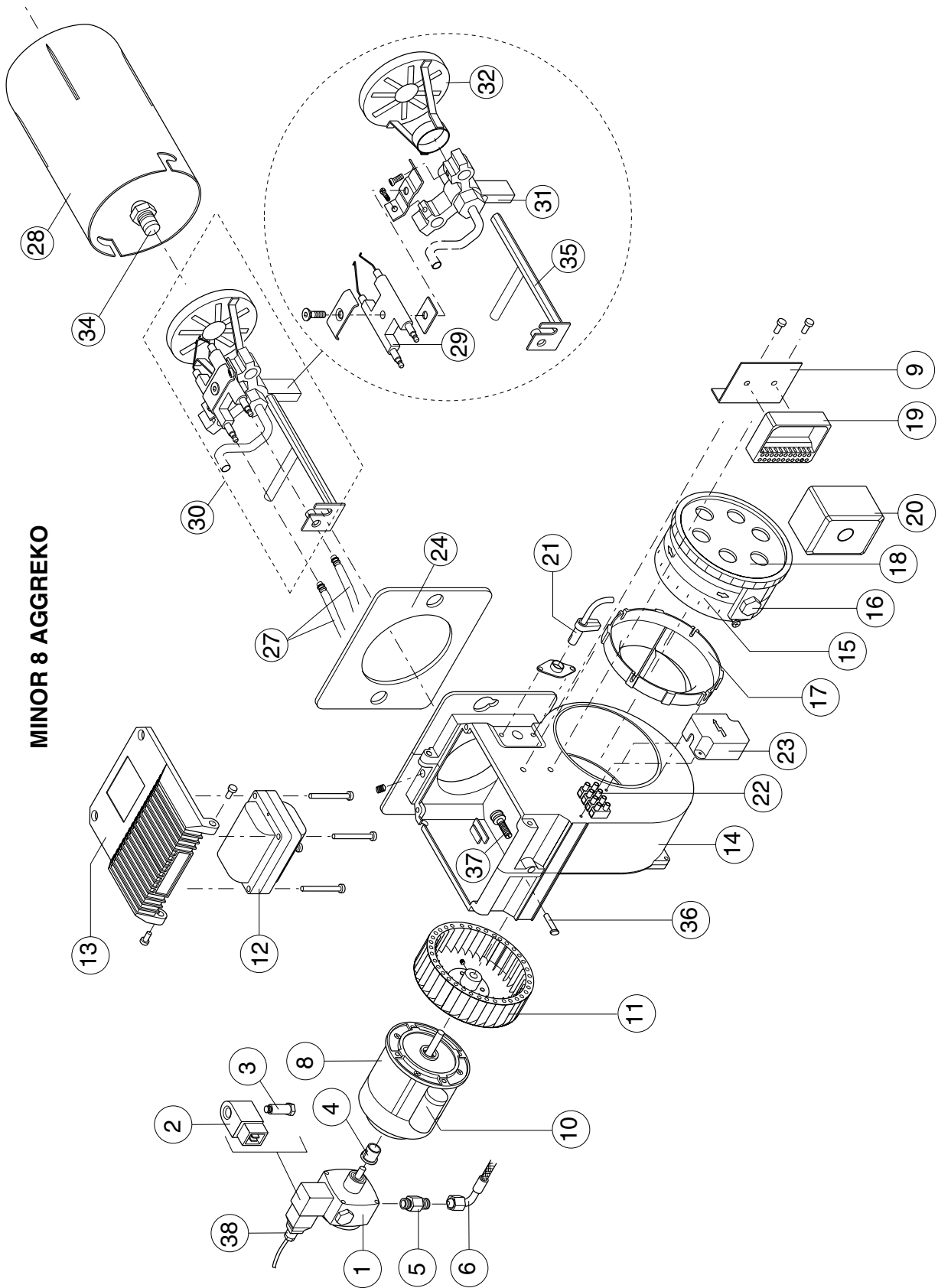
- Dirty ignition electrodes.
- Fault at electrodes.
- Electrodes installed wrongly.
- Faulty ignition transformer.
- Blocked nozzle.
- Nozzle needs replacing.
- Oil pressure too low.
- Blocked oil filter.
- Excessive combustion air for nozzle capacity.
- Fault in control box.

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.

A		09		08		07		06		05		04		03		02		01		00	
		Descrizione Description Description		Sigla Initial Ref. Codigo																	
		FOTORESISTENZA PHOTO-RESISTOR FOTORESISTANCE FOTORESISTENCIA		B																	
		INTERRUTTORE GENERALE CON FUSIBILE MAIN SWITCH WITH FUSE INTERRUPTEUR GENERAL AVEC FUSIBLE INTERRUPTOR GENERAL CON FUSIBLE		Q																	
		MOTORE VENTILATORE MOTOR FAN MUTEUR VENTILATEUR MOTOR VENTILADOR		MV																	
		TRASFORMATORE IGNITION TRANSFORMER TRANSFORMATEUR D'ALLUMAGE TRANSFORMADOR		TV																	
		LAMPADA DI BLOCCO LOCK-OUT LAMP LAMPE DE SECURITE ESPIA DE BLOQUEO		HLB																	
		TERMOSTATO CALDAIA BOILER THERMOSTAT THERMOSTAT CHAUDIERE THERMOSTATO CALDERA		STC																	
		TERMOSTATO DI SICUREZZA SAFETY THERMOSTAT THERMOSTAT DE SECURITE THERMOSTATO DE SEGURIDAD		STS																	
		ELETTROVALVOLA GASOLIO OIL SOLENOID VALVE ELECTROVANNE MAZOUT ELECTROVALVULA DE GASOLEO		YVg																	

MINOR 8 AGGREKO



N°	DESCRIPTION	MINOR 8 Aggreko code
1	- OIL PUMP DANFOSS BFP11 R3	P121/2
2	- COIL DANFOSS	V510/2
3	- OIL VALVE DANFOSS	V412/1
4	- COUPLING Simel	MP501/5
5	- NIPPLE	BFR01103/001
6	- HOSES	S931
7	-	-
8	- MOTOR Simel 100 W	M113/3
9	- SUPPORT	BFS04002/001
10	- CAPACITOR 4 μ F x 100W	C107/2
11	- FAN 124 x 60	BFV10055/001
12	- IGNITION TRANSFORMER COFI E820 CM	T123/2
13	- COVER	BFC09052
14	- FAN HOUSING	BFF05101/111
15	- AIR DAMPER	BFC04011/001
16	- AIR DAMPER SCREW	BFT01002/001
17	- AIR CONVEYOR	GRMP005/1
18	- COVER AIR INLET	BFC04017
19	- CONTROL BOX BASE LANDIS	A402
20	- CONTROL BOX LANDIS LOA 24	A117/1
21	- PHOTORESISTOR LANDIS	A207/2
22	- WIRING TERMINAL BOX	E229
23	- PROTECTION BOX	BFC02007
24	- GASKET EDPM	BFG02009/3
25	- FLANGE	-
26	- ORING	-
27	- CABLES	GRCAVO/02
28	- BLAST TUBE TC	BFB01211/102
29	- ELECTRODES (PAIR)	BFE01102
30	- FIRING HEAD	
31	- NOZZLE HOLDER	GRCR010/8
32	- DIFFUSER	BFD04010/001
33	- REAR DISC	-
34	- NOZZLE	U1135/60S
35	- ROD TC	BFA06105/001
36	- INDEX	BFT05103/001
37	- SCREW	BFT01003/101
38	- CABLE DANFOSS	E1103

TC = SHORT HEAD TL = LONG HEAD



 **Ecoflam**

DESIGN AND SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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