



# Medium and Heavy Oil Burners



ALF Series

67-1.968 kW

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## Medium and Heavy Oil Burners

The first national design liquid fuel burner producer Alarko's burners are used by thousands of boilers for many years and are exported to abroad. One of the leading burner producer in Turkey, Alarko Carrier, developed new ALF series burners as a result of continuous studies taken 3 years at its re-established Research, Development and Test Laboratory for 2000's.

- \* **Environment friendly**

- \* **Trouble-free**

- \* **Highly Efficient**

ALF series medium and heavy oil burners are developed as high efficient and less harmful for the environment due to the polluting disposals. Alarko medium and heavy oil burners provide trouble free, safe and full automatic operations with the equipments supplied from the most qualified component producers.

### **Full Delivery**

ALF series burners are prepared with the standard operating elements mounted, factory-adjusted and completely assembled to be delivered in full.

### **Wide Capacity Range**

ALF series burners provide the best and the most economic alternatives with the wide capacity range for households, small-medium commercial and industrial establishments, hot water boilers.

### **High Efficiency and Low Fuel Consumption**

The construction for air suction and fuel-air mixture preparation provides ideal and highly efficient mixture. By this means stable combustion with maximum fuel economy is maintained.

### **Low Emmision**

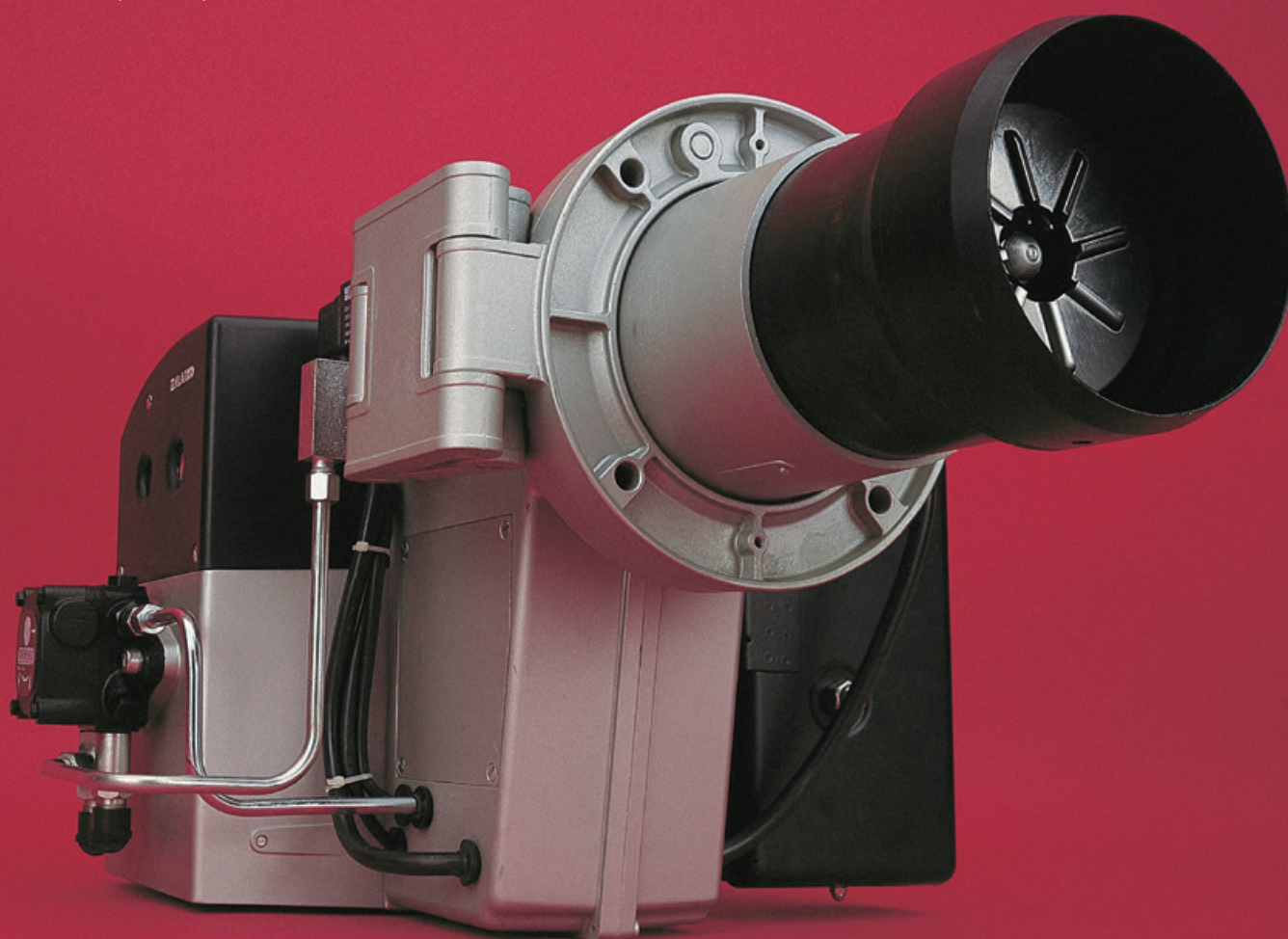
Low rates unburned oil in combustible products.

### **Reliable**

High technology product. Quality and durable material. 100% post-production tested. Reliable capacity.

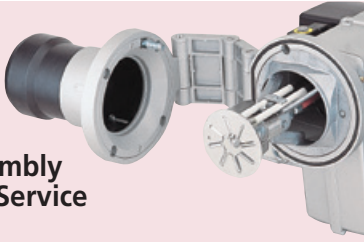
### **Light and Silent**

Reliable capacity is provided with particularly designed wing, lighter due to volute shaped aluminium injection body. Silent operation with acoustic isolation.



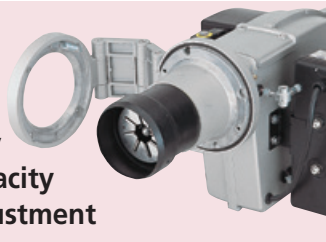
# New and High Technology

## Easy Assembly and Service



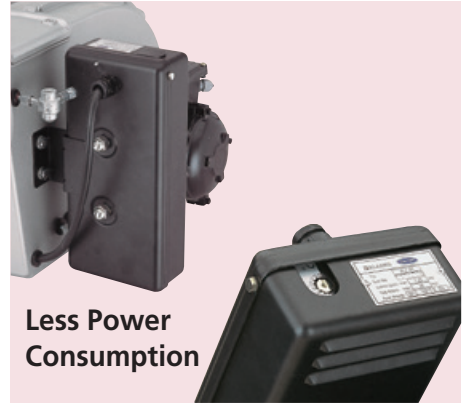
Easy connection to the boiler with hinged flange. Burner can be serviced by turning.

## Easy Capacity Adjustment



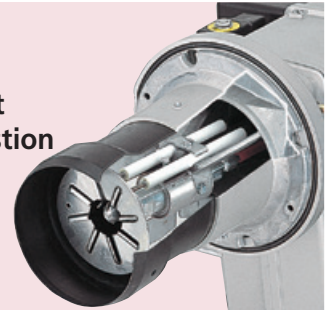
Easy capacity adjustment without opening boiler cover. Combustion head can be mounted to the air diffuser and this allows easy capacity adjustment and maintenance for any type of boiler.

## Less Power Consumption



Dry type heater provides preheating of fuel resulting less electrical power consumption. Smaller and compact heater with easy adjustable thermostat.

## Efficient Combustion



Special design stainless steel combustion head and air diffuser assembly provide ideal air-fuel mixture and efficient combustion at each adjustment point.

## Sensitive air Adjustment

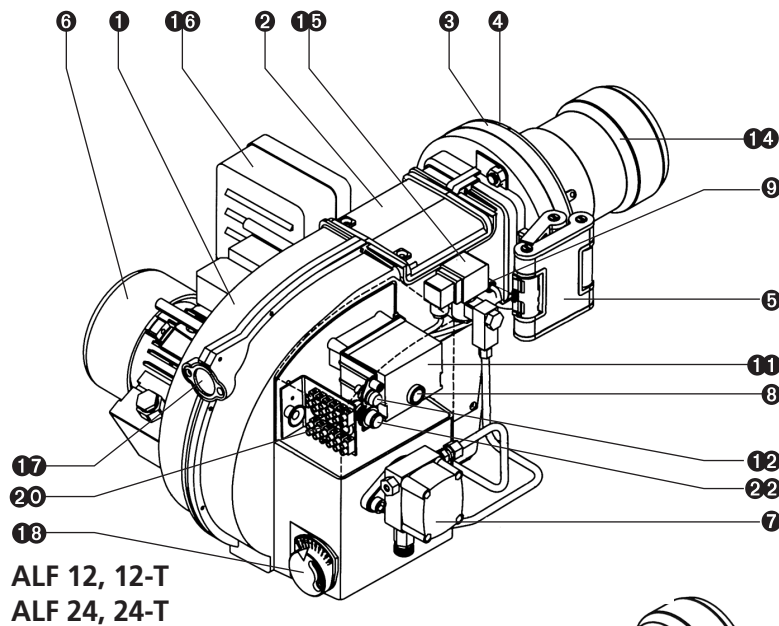


Sensitive combustion air adjustment with air flap adjustment key.

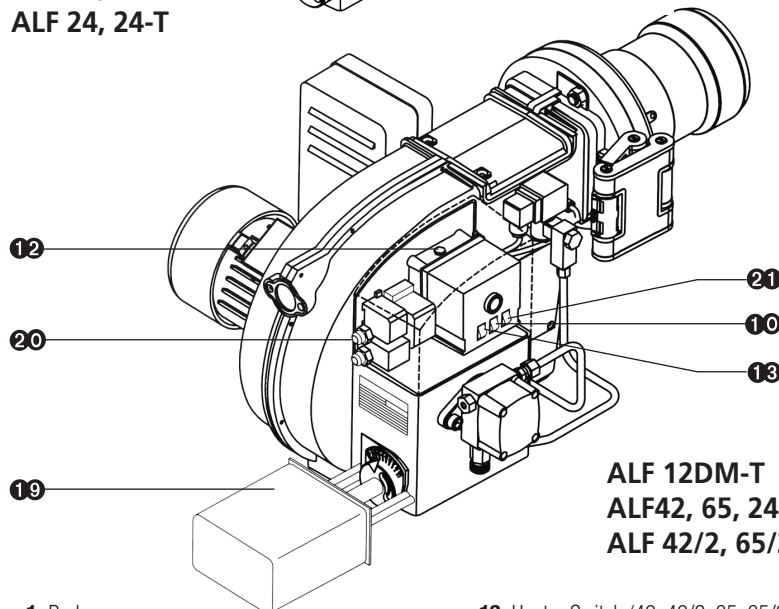
## Easy Electrical Connections



Easy electrical connections with sockets. With the electrical panel mounted on the air suction cell ease of assembly and maintenance.



**ALF 12, 12-T  
ALF 24, 24-T**



**ALF 12DM-T  
ALF42, 65, 24/2-T  
ALF 42/2, 65/2, 80/2**

- |  |  |
|--|--|
| 1. Body  | 13. Heater Switch (42, 42/2, 65, 65/2, 80/2)                 |
| 2. Top Cover   | 14. Combustion Nozzle  |
| 3. Boiler Connection Flange  | 15. 1 <sup>st</sup> Solenoid Valve                           |
| 4. Boiler Connection Gasket  | 16. Heater   |
| 5. Hinge   | 17. Observation Window                                       |
| 6. Burner Motor  | 18. Air Throttle Adjustment Knob                             |
| 7. Fuel Pump   | 19. Damper Motor   |
| 8. Reset*  | 20. Coupling (42, 42/2, 65, 65/2, 80/2)                      |
| 9. Photocell   | 21. Socket Clip (12-T, 12DM-T, 24-T, 24/2-T)                 |
| 10. 1 <sup>st</sup> Nipple Switch (24/2-T, 42, 42/2, 65, 65/2, 80/2) | 22. 2 <sup>nd</sup> Nipple Switch (24/2-T, 42/2, 65/2, 80/2) |
| 11. Electronic Control Unit  | ON/OFF Switch (12, 12-T, 12DM-T, 24, 24-T)                   |
| 12. Fuse   |  |

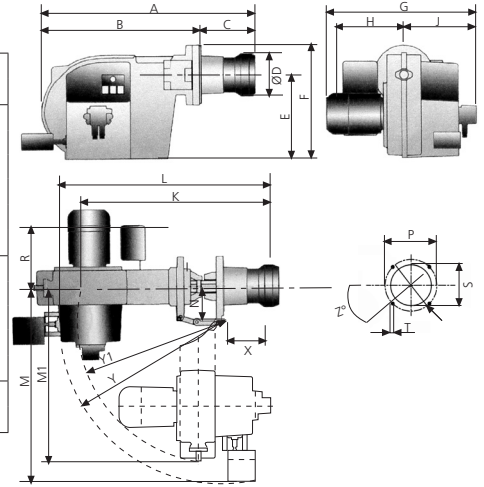
\* ALF 12, 12-T, 12DM-T, 24, 24-T, 42, 42/2, 65, 65/2, 80/2 models

# Technical Specifications

Alarko Carrier's ALF series burners are designed to burn medium and heavy oils which has maximum viscosity 37 cSt (50°C) within the range of 1-2 USgal/h, 80 cSt (50°C) within the range of 2-5 USgal/h and 450 cSt (50°C) over 5 USgal/h capacities and equipped with the required safety elements according to the international standards. Burners have automatic ignitions and operate silently.

## Dimensions (mm)

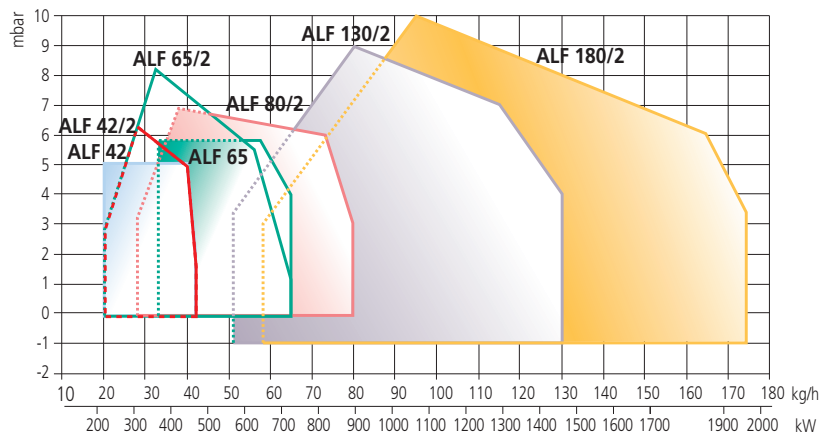
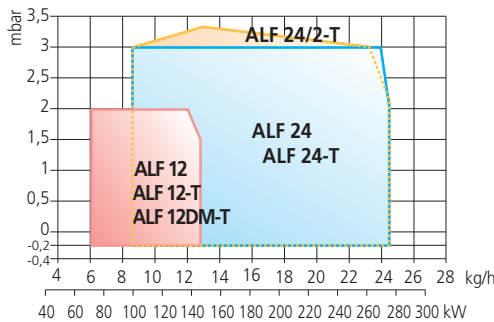
BURNER TYPE	A		B	C		ØD	E	F	G	H	J	K	L	M	M1	N	ØP	R	ØS	T	Y	Y1	X	Z		
	min.	maks.		min.	maks.																					
ALF 12	677	684	494	183	190	120	251	351	451	216	221	610	-	-	552	102	170	230	132	M8	R465	-	160	45°		
ALF 12-T									478	256																
ALF 12DM-T									451	216																
ALF 24									478	256																
ALF 24-T	676	690	494	182	196	130	251	351	451	216	221	610	-	-	552	102	170	230	132	M8	R465	-	160	45°		
ALF 24-T									478	256																
ALF 24/2-T									482	261																
ALF 42									797	202																
ALF 42	777	792	595	182	197	159	318	434	571	293	276	712	794	745	663	115	186	281	162	M10	R643	R561	164	45°		
ALF 42/2																									792	197
ALF 65/2																									801	205
ALF 65																									794	198
ALF 80/2	1.067,5	1.104,5	807,5	260	297	204	378,3	528,3	746	348	398	934	1.016	911	993	152	300	313	230	M10	190	173	230	45°		
ALF 130/2																									270	307
ALF 180/2																									270	307
ALF 180/2																									270	307



## Technical Data

BURNER TYPE	CAPACITY kg/saat		HEAT LOAD				MOTOR		HEATER kW	NET WEIGHT kg	POWER SUPPLY	PACKAGE DIMENSIONS
	min.	max.	kW		kcal/h		Speed (d/d)	Power (kW)				
ALF 12	6	12,5	67,7	141	58.200	121.250	2.860	0,25	1,04	27,5	1~220V - 50Hz	565 x 805 x 525
ALF 12-T							2.800	0,37		29	3~220/380V - 50Hz	575 x 885 x 525
ALF 12DM-T												
ALF 24	8,5	24,5	95,9	276,3	82.450	237.650	2.880	0,37	1,5			
ALF 24-T							2.800			29	575 x 865 x 525	
ALF 24-T/2												
ALF 42	20	42	225,6	473,7	194.000	407.400	2.780	0,75	4,5	44,7		3~220/380V - 50Hz
ALF 42/2	20	42	225,6	473,7	194.000	407.400				46,6		
ALF 65/2	20	65	225,6	733,1	194.000	630.500				46,6		
ALF 65	33	65	372,2	733,1	320.100	630.100	2.800	1,1		45,8		
ALF 80	28	80	315,8	902,3	271.600	776.000				47,1		
ALF 130/2	51	130	575	1.465	494.700	1.261.000				90		
ALF 180/2	58	174,5	654	1.968	562.600	1.692.650	2.850	2,2	8		850 x 1210 x 700	
							3	10,5	95			

## Capacity - Pressure Curves



Operating diagram shows the possible fuel consumption relative to the pressure in the combustion chamber.

Fuel consumption shows the maximum values according to the tests in the experiment tubes complying with the EN 267 standards.



The right to amend specifications under technologic developments is reserved

**ALARKO**



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