



# Solid Fuel Room Heater CKK



20.000-75.000 kcal/hr  
23-87 kW Hot Water Boiler



High Performance

**SOLID FUEL ROOM HEATER**

ALARKO CKK



# We asked ourselves:

How can we achieve the comfort of combi boiler in room heater?

## Result: CKK Room Heater

### 01 FAST HEATING

The room heater should have heated to house in a very short time after being turned on. We made a design with high heat transfer surface and low water.

### 02 LARGE FUEL COMPARTMENT

It shouldn't have required frequent trips to the heater. We kept the furnace part large enough to load on day's worth of coal. Also, we produced a boiler that could use whatever is around as fuel. It became possible to use wood, nutshells, apricot kernel shells, turd as fuel as well as coal.

### 03 ENERGY SAVING

It should have been economical. We used electronic hardware that controlled the burning automatically. Thus, we prevented unnecessary fuel consumption.

### 04 EASE OF USE

It should have been easy to retrieve ashes. We ensured that the grill can be toppled easily from the outside and the ash to transfer to the vessel. The operation got much easier.

### 05 EASY MAINTENANCE

Maintenance need should have been low. With easy toppling, we also prevented the grill from accumulating slag. There is no more need to stab the grill openings.

### 06 EASY TO CLEAN

It should have been easy to clean. We ensured access to smoke tubes with an easy opening door. Since the boiler tubes were vertical, the soot was made to fall on the ash compartment below during cleaning.

*For more detailed information:  
You can view the user manual from  
[www.alarko-carrier.com.tr](http://www.alarko-carrier.com.tr)*





#### Modern Technology



Manufacturing, design techniques and all materials conform to European and national norms. State-of-the-art automatic techniques are used in boiler production.

#### High Efficiency



Full combustion is achieved with special design combustion chamber and heat transfer surfaces. The energy in the fuel is transferred to the water in maximum.

#### Fast Heating



Boiler has high heating surfaces and low water. Thus, the boiler goes into the regime fast.



# Alarko CKK

With Characteristics  
That Make a Difference

## Full Comfort



### Perfect Insulation

The 2,5 cm thick glass wool material in the outer body enables the generated heat to remain inside the device.

### High Safety

Operating temperature and overheating possibility are controlled by sensors and electronic panel with microprocessor. It is safe against freezing and increasing pressure.

### Full Quality Control

Every boiler is subjected to hydraulic test after production.



# With the Comfort of Combi Boiler

# Room Heater

You Are In Control With Electronic Control Panel!



- 1 On-Off Switch
- 2 Breaker
- 3 Fan speed changing buttons
- 4 Temperature changing buttons
- 5 Fan to manual control button
- 6 Digital screen
- 7 Pump operating light
- 8 Fan operating light

## DIGITAL SCREEN

Control panel with digital screen and multiple functions ensures the room heater to burn in desired temperature in safety.

## SENSOR

With the temperature sensors, the boiler water temperature is constantly measured and the fan, pump and boiler combustion are controlled. When the boiler water temperature falls below 50°C, pump thermostat automatically shuts down the circulation pump. Thus, unheated water is prevented from being circulated unnecessarily and tar creation due to precipitation is prevented; also power is saved.

## CHECK

Thanks to the panel, the coal room heater can be used easily like a natural gas combi boiler. "Linear speed controlled combustion control card" controls both the operating parameters and the safety hardware.

## AUTOMATIC FAN FUNCTION

The system adjusts the fan speed based on the difference between the temperature entered into the thermostat and the current boiler water temperature. For each 1°C in temperature difference, the increase in fan speed is 4%.

## AUTOMATIC STOP WHEN FUEL IS DEPLETED

If the boiler water temperature falls below 35°C, fan is turned off automatically. Fuel depleted warning is displayed on the screen.

## EMERGENCY FUNCTION

If the system cannot read a value from the temperature sensor or if the temperature rises above 95°C, the temperature value starts blinking on the screen and the fan is turned off automatically.

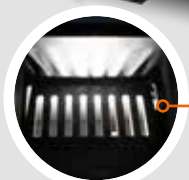
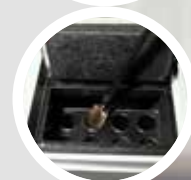
## FREEZING PREVENTION FUNCTION

When the boiler water temperature falls below 5°C, pump is automatically turned on even if the boiler is not operating. The other displays on the system are not activated.

## FAN BY-PASS FUNCTION

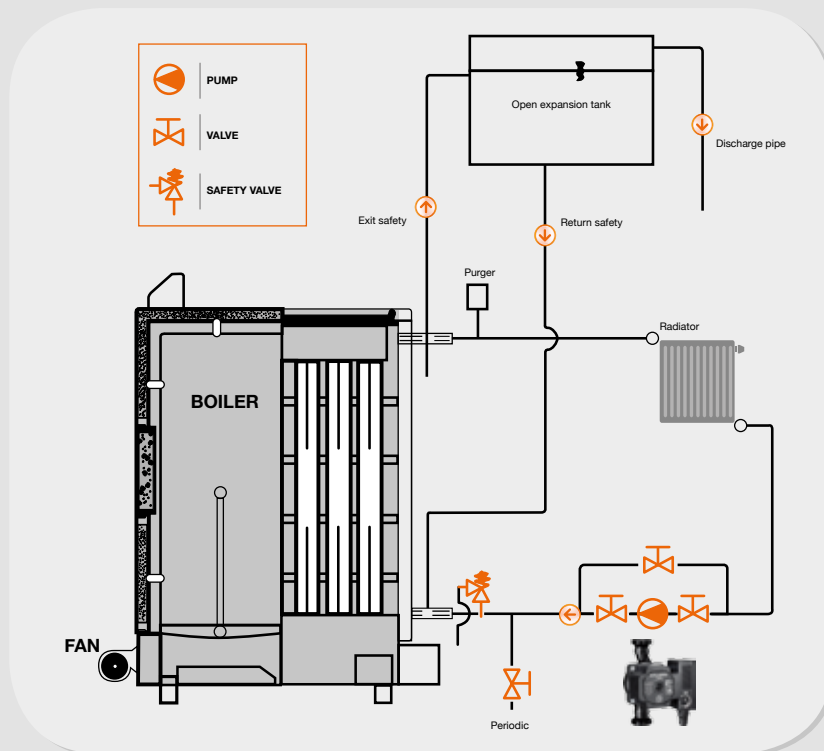
If desired, the fan can be taken out of panel control and be operated manually.

Perfect Design Is Hidden In The Details...



# Alarko CKK

## Installation Connection Schematic



### ALARKO TRONIC PM\* Synchronous Circulation Pump

- Variable Revolution
- Universal Product
- Energy Saving
- Ideal Performance
- Reliability
- Ease of Installation and Commissioning

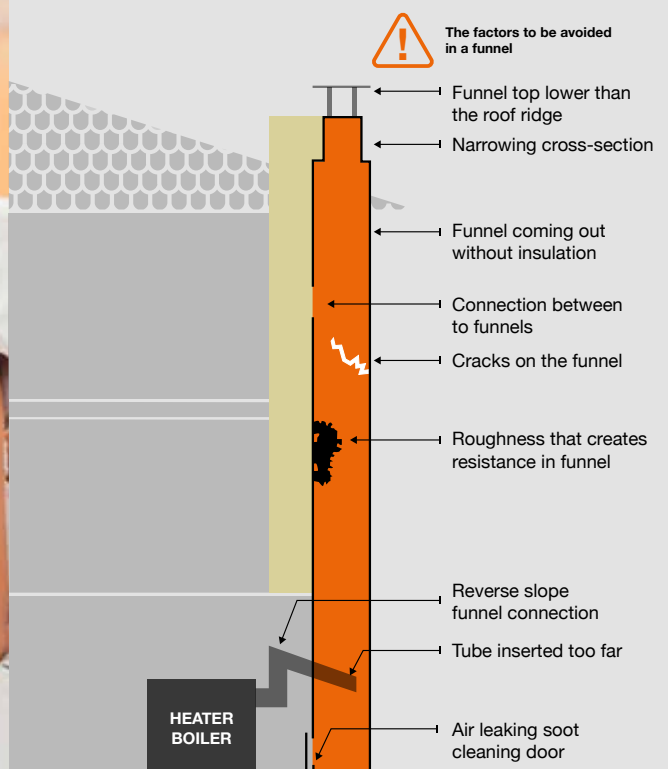
Alarko Tronic is a variable speed pump with high energy efficiency: In equivalent hydraulic performance, it consumes up to 80% less electricity than traditional three speed pumps and more advanced electronic circulators.

*\*Must be purchased separately.*



Open expansion tank should be used in heating system and there should not be any valves between the installation and the tank. Systems where enclosed expansion tanks are used and systems with valves on connection lines are not commissioned by our authorized services.

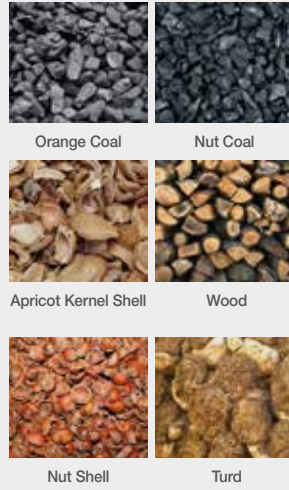
## Healthy Funnel Requirements



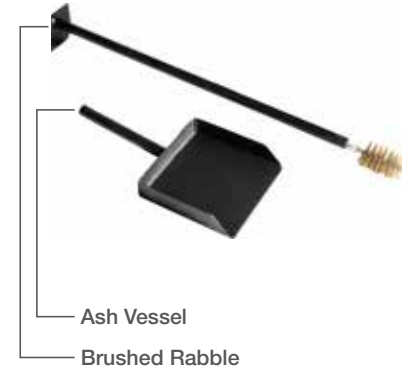
## Dimensions



## Usable Fuel Types



## What is Provided With The Boiler



		CKK 20	CKK 40	CKK 60	CKK 75
PERFORMANCE					
Rated thermal power	kcal/hr	20,000	40,000	60,000	75,000
	kW	23	47	70	87
Recommended flow rate	m³/hr	1	2	3	3.75
Recommended flow rate water side resistance	mbar	180	150	150	140
	mSS	1,8	1,5	1,5	1,4
Operating pressure max	bar	2			
FUNNEL DIAMETER					
Funnel diameter	mm	140	140	170	170
Funnel gas temperature - max	°C	185			
Horizontal funnel length - max	cm	50			
POWER					
Electricity	V/Hz	230 V/50Hz			
Power Consumption	W	226 (1,1A)	243 (1,1A)	312 (1,5A)	312 (1,5 A)
Protection Class		IP20			
WATER CONNECTIONS					
Heating water exit-return	inch	1"	1 ¼"	1 ½"	1 ½"
	DN	25	32	40	40
Safety Exit	inch	1/2"	1/2"	3/4"	3/4"
	DN	15	15	20	20
Safety Return	inch	1/2"	1/2"	3/4"	3/4"
	DN	15	15	20	20
DIMENSIONS					
Width (G)	cm	47	54	61	61
Depth (D)	cm	92	102	110	125
Height (Y)	cm	110	120	132	132
Water volume	lt	65	85	105	125
Recommended expansion tank volume	lt	100	200	300	375
Weight Without Water	kg	155	205	275	305
Coal Capacity	lt	20	35	50	55

The right to amend specifications under technologic developments is reserved

**ALARKO**



**ALARKO CARRIER  
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