

Premix Full Condensing Combi Boiler

Super Fit





Lowest fuel consumption with premix condensing technology

In premix full condensing combi boilers, thanks to the heat exchanger with a very large heat transfer surface, the water vapor inside the flue gas condenses and it turns to liquid phase, while producing the flow water temperature of about 50°C or below. Heat energy inside the water vapor is also kept without escaping from the flue and transferred to the water inside the heat exchanger. Thus, much less gas is used. Condensed water is thrown out from the drain hose under the combi boiler drop by drop.

Condensate water is acidic. Therefore, the main heat exchangers of premix full condensing combi boilers must be stainless steel or aluminum alloy. Alarko Super Fit condensing combi boilers use **much longer-lasting stainless steel** main exchanger than aluminum heat exchangers. It has high

resistance to acidic condensate water, it is not affected by electro battery effects, it does not cause choking,

perforation or change of the heat exchanger in a short time by making aluminum sulphate deposits on the waste gas side.

With the premix system, the pre-mixture of gas and air is the ideal ratio (1:10) before burning, combustion always occurs ideally.

This is the modulating fan that adjusts its speed according to the capacity requirement, and the venturi that mixes the gas and air ideally with the traction of the fan through the modulating gas valve.



- → HIGHLY EFFICIENT, QUIET, ERP COMPLIANT, VARIABLE SPEED CIRCULATION PUMP
- STAINLESS STEEL
 PLATE EXCHANGER

The premix burner used in full condensing combi boilers combines the ideally mixed gas-air mixture as a very low flame height. Low flame height ensures both the sound level is low and minimizes the harmful flue gas emissions generated by combustion. It protects nature.



FEATURES MAKING A DIFFERENCE

- Continuous and full modulation for heating and domestic hot water
- Full safety with anti-freeze function, pump and 3-way valve anti-locking functions, automatic air venting program
- Suitable for underfloor heating
- → Can work with natural gas and propane LPG
- Utilization of solar system by practical connection for solar water heating
- Convenience of analog manometer

WITH EXCELLENT COMPONENTS

HIGHER EFFICIENCY

LESS CONSUMPTION

Lower, only 82 Watt* energy consumption.

Alarko Super Fit has very high performance with efficiency reaching 97.9%* and compliance with EN 15502 norm. It saves not only when buying, but also when you are using.

* Alarko Super Fit SUF 24 model Efficiency at 30% Partial Load (\eta_1) (50 - 30°C).

Full comfort with easy-to-read white LCD screen, super easy operation!

User controls are on a modern and functional control panel on the front of the boiler. Controls allow the central heating system temperature to be easily adjusted from 30°C to 85°C and the domestic hot water temperature from 35°C to 60°C. Alarko Super Fit combi boilers step forward with their usage with adjustment buttons and a reset button, as well as their aesthetic appearance.





Alarko Super Fit combi boilers use the latest components of advanced technology. Electronic motherboard is one of them. With these advanced features, it works in harmony with the gas valve and fan, and constantly inspects the sensors, ensuring that the device operates safely and efficiently. Remote controller communication network (opentherm protocol), outdoor sensor connection, flue sweeper function, parameter programming function, fault codes and fault notification and program update via USB; Just a few of the superior features of this electronic card...

| MODEL | UNIT | | SUPER FIT | | |
|---|------|---|-----------|--------|--|
| MODEL | | SUF 24 | SUF 28 | SUF 35 | |
| CE Certificate | | 1312DL6438 II2H/3P | | | |
| Device Category | | | | | |
| Central Heating Technical Specifications | | | | | |
| Seasonal Space Heating Energy Efficiency Class | | A | A | Α | |
| Seasonal Space Heating Energy Efficiency (η _s) | % | 92 | 92 | 91 | |
| Useful Efficiency at 30% of Nominal Heat Output (η ₁) (50-30°C) | % | 97.9 | 97.42 | 96.97 | |
| Useful Efficiency at Nominal Heat Output (η ₄) (80-60°C) | % | 87.65 | 88.32 | 87.61 | |
| Rated Heat Output (P _{rated}) (80-60°C) | kW | 22 | 26 | 32 | |
| Nominal Heat Output (P ₄) (80-60°C) | kW | 22.1 | 25.7 | 32.1 | |
| Minimum Heat Output (80-60°C) | kW | 4.9 | 6.2 | 7.7 | |
| Nominal Heat Output (50-30°C) | kW | 24.3 | 27.9 | 34.9 | |
| 30% of Nominal Heat Output (P ₁) (50-30°C) | kW | 7.404 | 8.503 | 10.66 | |
| Minimum Heat Output (50-30°C) | kW | 5.4 | 6.8 | 8.3 | |
| Auxiliary Electrical Consumption at Full Load (elmax) (80-60°C) | kW | 0.082 | 0.083 | 0.117 | |
| Auxiliary Electrical Consumption at Part Load (elmin) (80-60°C) | kW | 0.034 | 0.035 | 0.067 | |
| Annual Energy Consumption (Q _{HE}) | GJ | 42 | 50 | 63 | |
| Central Heating Temperature Setting Range (Min Max.) | °C | 30 - 85 (Radiator Heating) / 25 - 45 (Underfloor Heating) | | | |
| Central Heating Operating Pressure (Min Max.) | bar | | 0.5 - 3 | | |
| Domestic Hot Water Technical Specifications | | | | | |
| Water Heating Energy Efficiency Class | | Α | Α | Α | |
| Water Heating Energy Efficiency (ηwh) | % | 86 | 86 | 85 | |
| Water Heating Load Profile | | XL | XL | XL | |

| Domestic Hot Water Technical Specifications | | | | |
|--|-------------|-----------|-----------|-----------|
| Water Heating Energy Efficiency Class | | A | Α | Α |
| Water Heating Energy Efficiency (η _{WH}) | % | 86 | 86 | 85 |
| Water Heating Load Profile | | XL | XL | XL |
| DHW Flow Rate at ΔT:30K | lt/min | 13 | 14 | 16 |
| Maximum DHW Flow Rate | lt/min | 14 | 18 | 18 |
| Daily Electrical Power Consumption (Qelec) | kWh | 0.186 | 0.181 | 0.19 |
| Annual Electricity Consumption (AEC) | kWh | 41 | 40 | 42 |
| Daily Gas Consumption (Q _{fuel}) | kWh | 22.838 | 23 | 22.442 |
| Annual Fuel Consumption (AFC) | GJ | 18 | 18 | 18 |
| DHW Temperature Setting Range (Min Max.) | °C | 30 - 60 | | |
| DHW Operating Pressure (Min Max.) | bar | 0.5 - 10 | | |
| General Technical Specifications | | | | |
| NOx Class | | 6 | 6 | 6 |
| Emissions of Nitrogen Oxide (NO _x) | mg/kWh | 39.32 | 42.72 | 43.18 |
| Sound Power Level, Indoors (L _{WA}) | dB | 54 | 54 | 57 |
| Auxiliary Electrical Consumption in Standby Mode (PsB) | kW | 0.004 | 0.004 | 0.004 |
| Standby Heat Losses (Pstby) | kW | 0.073 | 0.062 | 0.059 |
| Ignition Burner Energy Consumption (Pign) | kW | 0 | 0 | 0 |
| Flue Gas Temperature (50-30°C, Min Max.) | °C | 45-52 | 46-53 | 45-61 |
| Flue Gas Temperature (80-30°C, Max.) | °C | 71.6 | 70.8 | 72.5 |
| Gas Consumption (Natural Gas - LPG) | m³/h - kg/h | 2.3 - 1.7 | 2.7 - 2.0 | 3.3 - 2.3 |
| | | | | |

| Physical Properties | | | | |
|--|-------|---|--------|----|
| Flue Connection Types | | B23 - B33 - C13 - C13(x) - C33 - C33(x) - C43 - C43(x) - C53 - C53(x) - C63 - C63(x) - C83 - C83(x) - C93 - C93(x) | | |
| Standard Horizontal Concentric Flue System - Max. Length | ø - m | 60/100 - 8 | | |
| Vertical Concentric Flue System - Max. Length | ø - m | 60/100 - 8 | | |
| Twin Flue System - Max. Length | ø - m | 80+80 - 50 | | |
| Dimensions (Width x Height x Depth) | mm | 437 x 640 x 256 | | |
| Weight (Net) | kg | 28.9 | 30.8 | 32 |
| Expansion Tank Capacity | lt | | 8 | |
| Central Heating Flow - Return Diameters | Ø | 3/4" | | |
| Cold Water Inlet - DHW Outlet Diameters | Ø | 1/2" | | |
| Gas Inlet Diameter | Ø | 3/4" | | |
| Gas Inlet Pressure (Natural Gas - LPG) | mbar | 20 - 30 | | |
| Power Supply | V/Hz | | 230/50 | |
| Protection Class | IP | | X4D | |

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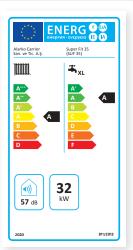
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Electrical Power Consumption







Standard Flue Set

It is supplied with the device as standard, it can be replaced with a different set if desired.



Smart Thermostat Set*

Using your smart thermostat, you can control your boiler from anywhere in the world with your smartphone or tablet. You can access and change instant temperature settings or timer programs.



You can get information about different automatic control accessories from our website.

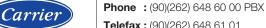






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