

**Premix Full Condensing Combi Boiler** 





Thanks to the heat exchanger with a very large heat transfer surface in premix full condensing combi boilers, the water vapor in the flue gas condenses, that is, it turns from vapor to liquid phase while the outlet water temperature is produced at about 50°C or below. The latent heat energy in the water vapor is also retained without escaping from the chimney and transferred to the water in the exchanger. Thus, much less gas is used. Condensed water is discharged drop by drop from the drain hose under the combi boiler.

Condensate is acidic. Therefore, the main heat exchangers of premix full condensing boilers should be stainless steel or aluminum alloy. Alarko Smart Fit condensing boilers use a stainless steel main heat exchanger with a much longer service life than aluminum heat exchangers. Resistance

to acidic condensation water is very high, it is not affected by electro battery,it doesn't clogging, puncture or

replacement of the exchanger in a short time by causing aluminum sulfate deposits on the waste gas side.

With a premix system, i.e. a premix of gas and air in the ideal ratio of 1:10 before bur-

ning, burning always takes place ideally. This is achieved by the modulating fan, which adjusts its speed according to the capacity requirement, and the venturi, which ideally mixes the gas and air coming from the modulating gas valve with the traction of the fan.



The premix burner used in full condensing boilers burns the gas-air mixture, which comes in an ideal mixture, at a very low flame length. The low flame length not only ensures a low noise level, but also minimizes harmful flue gas emissions as a result of combustion. It protects nature.

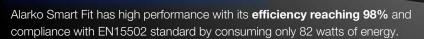


#### **DISTINCTIVE FEATURES**

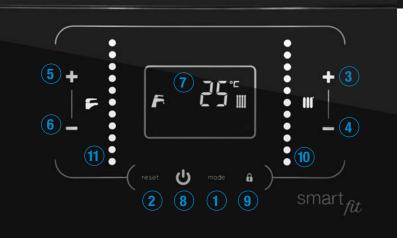
- → Stylish touch screen
- 7 Resistant-to-breakage tempered glass
- 7 Isıtma ve kullanım suyu için sürekli ve tam modülasyon
- Continuous and complete modulation for heating and domestic water
- Complete safety with frost protection, pump and 3-way valve anti-jamming safety features, automatic air purge system
- → Suitable for underfloor heating
- 7 Ability to work with natural gas and propane LPG
- Ability to benefit from the sun in hot water heating with practical connection to the solar energy system
- **→** Ease of analog manometer
- 7 Child lock
- Quick setting feature
- 7 Demo mode

### WITH PERFECT COMPONENTS

# COMBI BOILER BOTH STYLISH AND PROFITABLE







The boiler is controlled from the stylish touchscreen control panel on the front. With the illuminated indicators on the right and left sides of the screen, the heating system temperature is set gradually, quickly and easily between 30°C - 85°C, and the domestic water temperature is set between 35°C - 60°C.

- 1 Operating position setting button (summer / winter / heating only)
- 2 Reset button
- (3) (4) Heater water temperature increase/decrease buttons
- (5) (6) Domestic water temperature increase/decrease buttons
  - Temperature, error code, and operating status LCD display
  - 8 On/Off button 9 Child lock
  - (10) Heater water temperature gradual increase/decrease buttons
  - 11) Domestic water temperature gradual increase/decrease button



## Alarko Smart Fit combi boilers use the latest products of advanced technology such as control card and flexible video card.

With its advanced features, the Control Card works in harmony with the gas valve and fan, constantly monitors the sensors, and ensures the safe and efficient operation of the boiler. Remote controller communication network (opentherm protocol), outdoor sensor connection possibility, chimney sweeping function, parameter programming function, fault notification with error codes and software update with USB are just a few of the superior features of the electronic....

All commands given from the touch panel through the Flexible Display Card are simultaneously transferred to the control card for an easy operation.

| Technical Specifications  MODEL  | UNIT        | SMART FIT    |                           |                |
|--|-------------|--------------|---------------------------|----------------|
|  |             | SMF 25       | SMF 30                    | SMF 35         |
| CE Certificate   |             |              | 1312DL6438                |                |
| Device Category  |             | II2H/3P      |                           |                |
| Heating Technical Specifications   |             |              |                           |                |
| Seasonal Room Heating Energy Efficiency Class                                    |             | Α            | A                         | Α              |
| Seasonal Space Heating Energy Efficiency (η <sub>s</sub> )                       | %           | 91,13        | 92,21                     | 90,71          |
| Efficiency at 30% Partial Load (n¹) (50-30 °C)                                   | %           | 97,9         | 97,96                     | 96,35          |
| Efficiency at Maximum Capacity (η <sup>4</sup> ) (80-60 °C)                      | %           | 87,59        | 87,77                     | 87,70          |
| Rated Heat Power (P <sub>rated</sub> ) (80-60°C)                                 | kW          | 22           | 26                        | 32             |
| Maximum Heating Capacity (P <sub>4</sub> ) (80-60°C)                             | kW          | 22,1         | 25,6                      | 32,1           |
| Minimum Heating Capacity (80-60°C)   | kW          | 4,9          | 6,1                       | 7,7            |
| Maximum Heating Capacity (50-30°C)   | kW          | 24,3         | 28,1                      | 34,9           |
| leating Capacity at 30% Partial Load (P <sub>1</sub> ) (50-30°C)                 | kW          | 7,33         | 8,551                     | 10,59          |
| finimum Heating Capacity (50-30°C)   | kW          | 5,4          | 6,9                       | 8,3            |
| auxiliary Electricity Consumption at Full Load (elmay) (80-60°C)                 | kW          | 0,079        | 0,086                     | 0,114          |
| Auxiliary Electricity Consumption at Partial Load (el <sub>min</sub> ) (80-60°C) | kW          | 0,036        | 0,035                     | 0,053          |
| Annual Energy Consumption (Q <sub>HF</sub> )                                     | GJ          | 42           | 50                        | 63             |
| Heating Temperature Setting Range (Min Max.)                                     | °C          |              | or Heating) / 25 - 50 (Un |                |
| leating Operating Pressure (Min Max.)  | bar         |              | 0,5 - 3                   |                |
| lot Water Technical Specifications   |             |              | -,                        |                |
| Vater Heating Energy Efficiency Class  |             | Α            | Α                         | Α              |
| Vater heating energy efficiency ( $\eta_{WH}$ )                                  | %           | 86           | 86                        | 85             |
| Vater Heating Load Profile   | 70          | XL           | XL                        | XL             |
| Hot Water Flow Rate at ΔT:30K  | liter/min   | 13           | 14                        | 16             |
| Maks. Sicak Su Debisi  | liter/min   | 14           | 18                        | 18             |
| Daily Electricity Consumption (Q <sub>elec</sub> )                               | kWh         | 0,186        | 0,181                     | 0,19           |
| Annual Electricity Consumption (AEC)   | kWh         | 41           | 40                        | 42             |
| Daily Fuel Consumption (Q <sub>fiel</sub> )                                      | kWh         | 22,838       | 23                        | 22,442         |
| nnual Fuel Consumption (AFC)   | GJ          | 18           | 18                        | 18             |
| , , ,  | °C          | 10           | 30 - 60                   | 10             |
| Hot Water Temperature Setting Range (Min Max.)                                   | bar         |              |                           |                |
| Hot Water Operating Pressure (Min Max.)  General Technical Specifications        | Dai         |              | 0,5 - 10                  |                |
| IOx Class  |             | 6            | 6                         | 6              |
| Vitrogen Emission (NO <sub>x</sub> )   | mg/kWh      | 37,05        | 46,03                     | 43,18          |
| Sound Power Level, Indoor (L <sub>wa</sub> )                                     | dB          | 54           | 54                        | 57             |
| Auxiliary Electrical Consumption in Standby (Psp.)                               | kW          | 0,004        | 0,004                     | 0,004          |
| Heat Loss During Standby (P <sub>stby</sub> )                                    | kW          | 0,063        | 0,066                     | 0,073          |
| gnition Burner Energy Consumption (P <sub>ion</sub> )                            | kW          | 5,51         | 5,24                      | 7,33           |
| Flue Gas Temperature (50-30 °C, Min Max.)  | °C          | 45-52        | 46-53                     | 45-61          |
| lue Gas Temperature (Max. 80-60 °C)  | °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      |
| Electricity Consumption  | W           | 82           | 84                        | 117            |
| hysical Properties   |             | OE .         | 01                        |                |
| lue Type   |             |              | C13(x) - C33 - C33(x) -   |                |
| •  |             | C53(x) - C63 | - C63(x) - C83 - C83(x)   | - C93 - C93(x) |
| Standard Horizontal Concentric Flue System - Max. Length                         | ø - m       |              | 60/100 - 8                |                |
| /ertical Concentric Flue System - Max. Length                                    | ø - m       |              | 60/100 - 8                |                |
| win Flue System - Max. Length  | ø - m       |              | 80+80 - 50                |                |
| Size (Width x Height x Depth)  | mm          |              | 437 x 642 x 259           |                |
| Veight (Net)   | kg          | 28,9         | 30,8                      | 32             |
| Expansion Tank Capacity  | liters      |              | 8                         |                |
| Heater Outlet Inlet Diameter   |             |              | 2//"                      |                |

| ( ) E                               | NERG Y DA              |  |  |  |
|-------------------------------------|------------------------|--|--|--|
| Alarko Carrier<br>San. ve Tic. A.Ş. | Smart Fit<br>SMF 25    |  |  |  |
|                                     | <b>≒</b> <sub>XL</sub> |  |  |  |
| A' A B C D                          | A A B C D E F          |  |  |  |
| (4))<br>54 dB (22<br>kW             |                        |  |  |  |
| 2019                                | 811/2013               |  |  |  |

Heater Outlet - Inlet Diameter

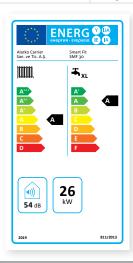
Gas Inlet Diameter

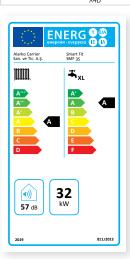
Power Source

Protection Class

Cold Water Inlet - Hot Water Outlet Diameter

Gas Inlet Pressure (Natural Gas-LPG)





3/4"

1/2" 3/4"

20 - 30

230/50



### Standard Flue Set

Aesthetic flue set compatible with the color of the boiler; supplied with the device as standard, and can be replaced with a different set during the order if desired.



Using your smart thermostat, you can control your combi boiler from anywhere in the world with your smartphone or tablet. You can access and change current temperature settings or time schedules.



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

\*Optional.







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V/Hz



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