

FUJIIair

CONNECTION DIAGRAM

1	1-Magnesium Anode Rod
2	2-Hot Water Outlet
3	3-Thermometer
4	4-Sensor Inlet
5	5-Backup Electric Heater Inlet
6	6-Recirculation Inlet
7	7-Coil Inlet/Outlet
8	8-Cold Water Inlets
9	9-Drainage

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Before installing the hot water heater, check whether the mains pressure is suitable for the boiler operating pressure (10 bar).

FUJIIair		TABLE 1. IMPORTANT INFORMATION ON YOUR PRODUCT'S WARRANTY CONDITIONS	
No	OPERATION	WARRANTY CONDITION	RESTRICTION
1	Expansion tank	This is not a warranty precondition.	For a long boiler life, use of an expansion tank sized according to TABLE 2 is recommended.
2	Diaphragm safety valve	This is a warranty precondition.	Use of a safety valve sized according to TABLE 3 is mandatory.
3	Adjustable safety valves other than diaphragm safety valves must not be used.	Safety valves with adjustable discharge pressure must not be used on boilers.	Use of an adjustable safety valve voids the warranty.
4	Use of a safety valve with a maximum nominal opening pressure of 8 bar on boilers and accumulation tanks	The safety valve used must under no circumstances allow the boiler pressure to rise above 10 bar.	Use of a safety valve with a full opening pressure above 10 bar voids the warranty.
		This is a warranty precondition.	
5	Use of a safety valve for each boiler	This is a warranty precondition.	Using a single safety valve for more than one boiler voids the warranty.
6	Use of a shut-off valve between the safety valve and the boiler	Must not be used.	Voids the warranty.
7	Use of a diaphragm temperature-pressure safety valve providing both pressure and temperature protection on electric boilers.	This is not a warranty precondition.	This is a recommendation.
			Its use is beneficial.
8	The water to be heated must comply with the Republic of Türkiye Ministry of Health Regulation on Water Intended for Human Consumption (Regulation dated 07/03/2013, No. 28580), and the existing water conditioning system must operate flawlessly (***)	This is a warranty precondition.	Using water with properties outside the limit values given in Table 4 voids the warranty.
9	Use of a magnesium anode on the boiler for cathodic protection	This is a warranty precondition.	Removal of the magnesium anode, or use of its connection socket for another purpose, voids the warranty. If the magnesium anode has lost more than 50% of its mass within the first year of the warranty period and has not been replaced, the warranty is void.
10	Drilling, welding or similar work on the enamelled body, cover or other parts of the boiler	Such work is not permitted on any of our enamel- or galvanised-coated tanks.	Carrying out such work voids the warranty.
11	Providing a clean, earthed electricity supply of sufficient capacity to boilers using electric heaters and equipment, together with boiler safety equipment and a residual current device in the user's distribution board	This is the user's responsibility.	Any malfunction, damage and resulting hazards and losses caused by all such electrical equipment are outside the scope and responsibility of RUSH Warm.
12	Any malfunctions occurring in the electrical panels, electric heating elements and all other electrical equipment of the boilers	This is the user's responsibility.	The electrical panels, electric heating elements and other electrical equipment of the boilers are not covered by the warranty.
13	Installation of electrical panels, electric heating elements and similar electrical equipment not manufactured by RUSH Warm or without the knowledge and approval of an authorised service	Electric heating equipment may not be installed or used without the approval and inspection of a RUSH Warm authorised service.	Such work voids the warranty for the boiler and tanks; in addition, any malfunction, damage and resulting hazards and losses caused by this and all similar electrical equipment are outside the scope and responsibility of RUSH Warm.
14	Taking measures, beyond normal earthing, against static electricity leakage in coil and plate heat exchanger-accumulation tank sets	This is a warranty precondition.	Products without protection against static electricity leakage are not covered by the warranty.
15	Measures required at the tank hot water outlets against scalding injuries due to the temperature of the supplied hot water and interruption of the cold water supply in the installation	This is the user's responsibility.	Scalding injuries and all other damage and indirect losses that may result from hot water use are outside the scope and responsibility of RUSH Warm.

FUJIIair		TABLE 2. EXPANSION TANK SELECTION			
Total boiler volume (lt)	Expansion tank volume (lt)	Expansion tank volumes apply to 10/60°C water temperatures, boilers and other installation components rated for 10 bar, a maximum cold water inlet pressure of 6 bar and use of a safety valve with a nominal opening pressure of 8 bar. The expansion tank pre-charge pressure must be set to 6.2 bar.	Total boiler volume (lt)	Expansion tank volume (lt)	
≤200	24		3001-5000	500	
201-500	50		5001-8000	750	
501-1000	80		8001-12000	1000	
1001-2000	150		12001-15000	1500	
2001-3000	300		15001-20000	2000	

TABLE 3. SAFETY VALVE SELECTION					
Tank volume (lt)	≤200	201 – 800	1000 – 5000	5001-10000	>10000
Boiler coil, electric heater or heat exchanger power (kW)	≤75 kW	≤150 kW	≤250 kW	≤300 kW	≤450 kW
Diaphragm safety valve size	½"	¾"	1"	1 ¼"	1 ½"

TABLE 4. WATER CONDITIONS REQUIRED FOR YOUR PRODUCT	
REPUBLIC OF TÜRKIYE MINISTRY OF HEALTH TABLE OF LIMIT VALUES FOR THE CHEMICAL PROPERTIES OF WATER IN ACCORDANCE WITH THE REGULATION ON WATER INTENDED FOR HUMAN CONSUMPTION DATED 27/03/2013, No. 28580	
Parameter	Limit values
pH	6.5 – 9.5
Conductivity at 20°C	200 - 2500 µS/cm
Total hardness	<20 °fH (11 °dH, 200 ppm)
Chloride (Cl ⁻)	<250 mg/l
Sulphate (SO ₄ ²⁻)	<250 mg/l
Hydrogen carbonate (HCO ₃ ⁻)	<70 mg/l
Free chlorine gas (Cl ₂)	<1 mg/l (within 5 hours)
1 French hardness (°fH) ► 0.56 German hardness (°dH) ► 10 CaCO ₃ (ppm)	