



Instruction and Operation Manual

OVAL series
Oil and gas fired
Hot water steel boilers

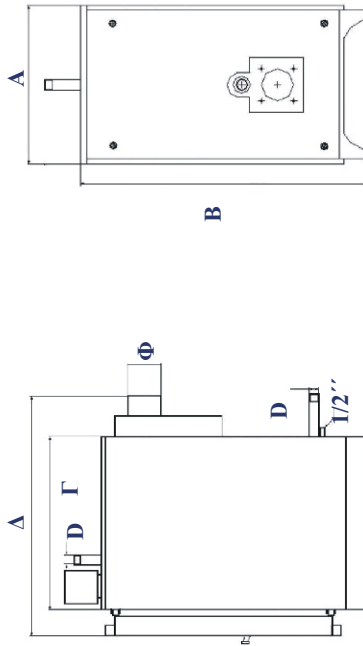


- Thank you for your trust to Thermolev products.
- For the effective use of this boiler it is necessary to read carefully the present guidance manual, before the operation of the boiler.
- Keep the guidance manual in a safe place with the guarantee of the boiler, for any possible use

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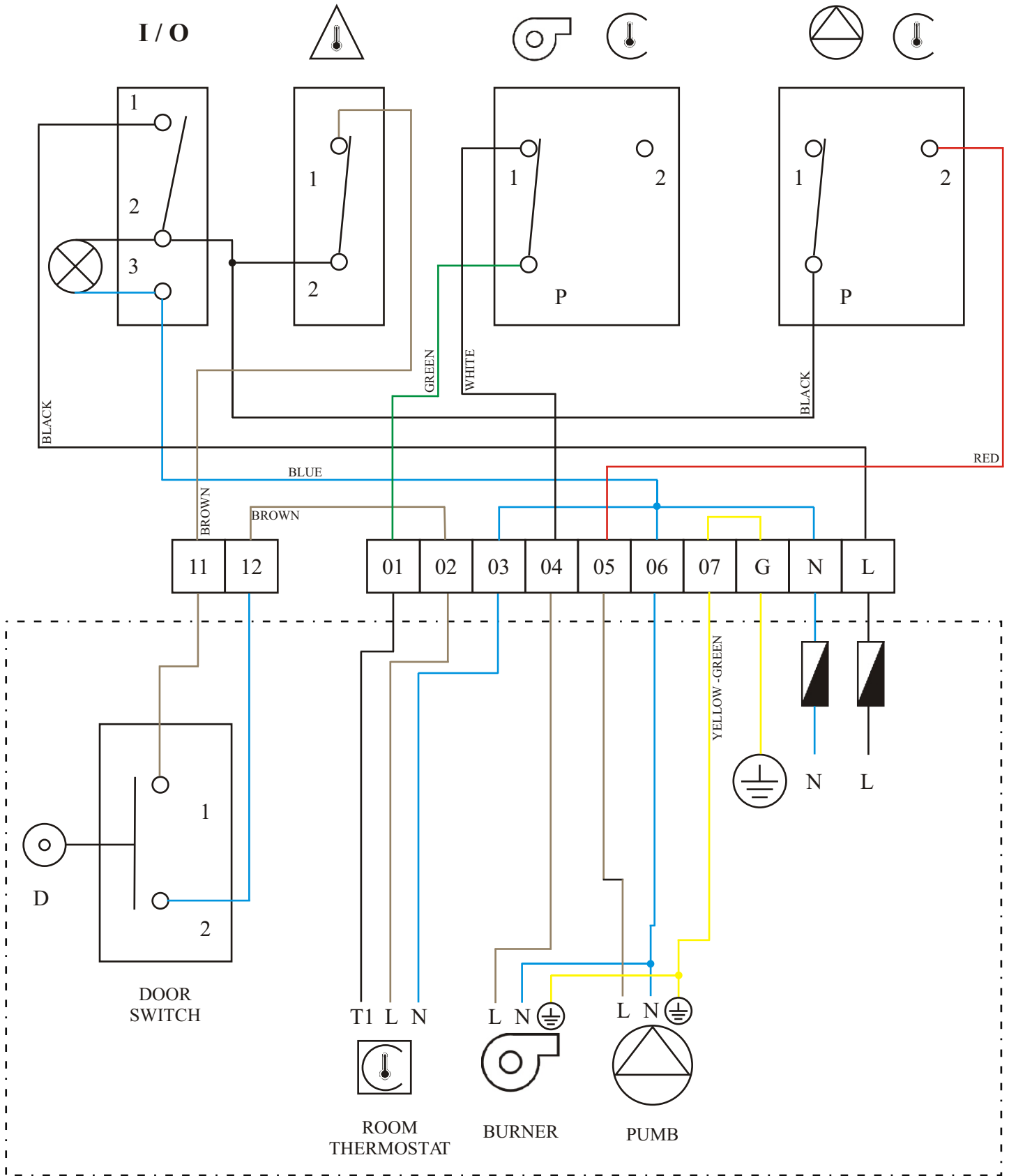
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BOILER OVAL TECHNICAL DATA - TABLE [A]



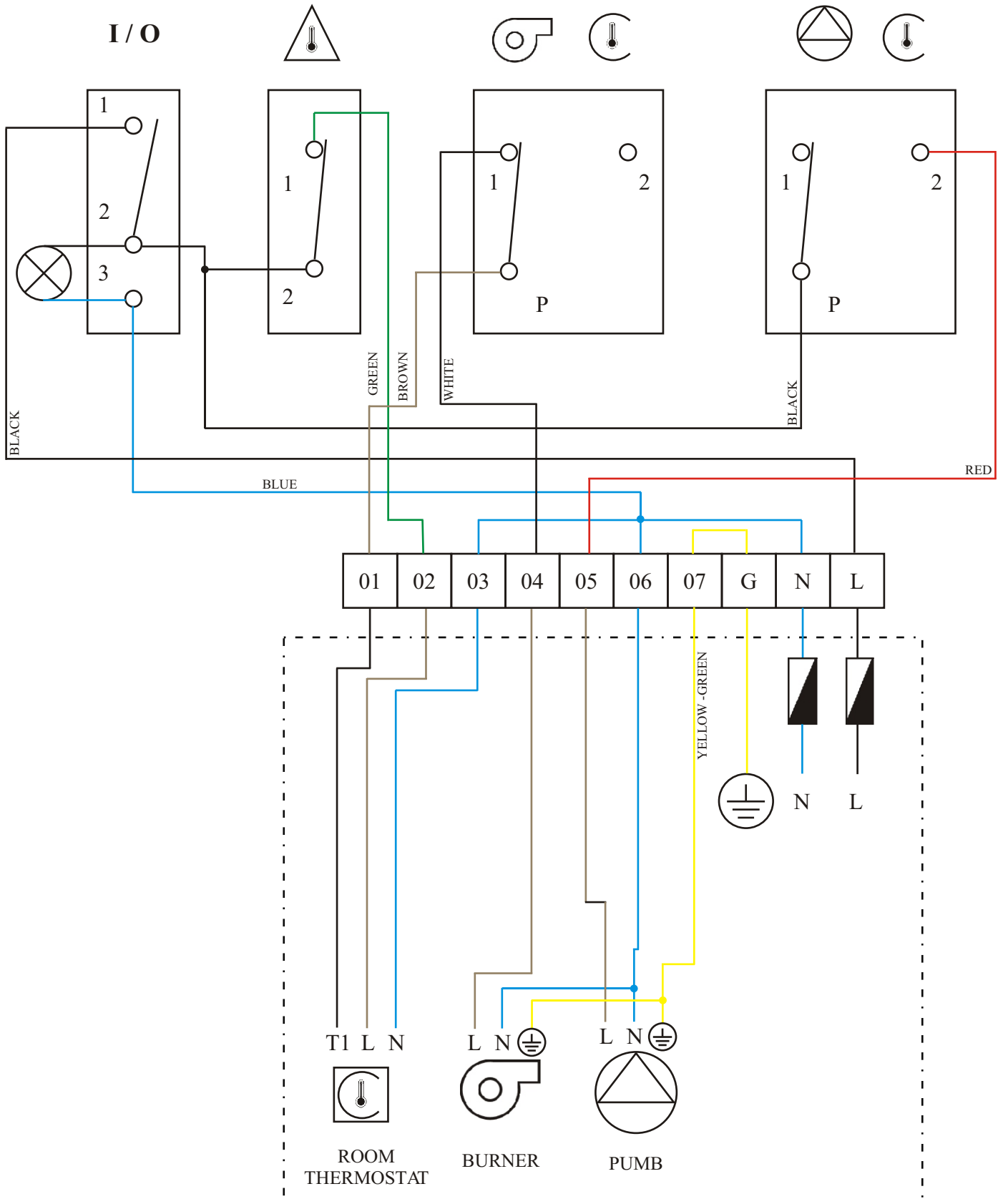
Type	Heat Output [Kcal/h]	Heat Output [kw]	Efficiency [%]	Max Heat Input [kw]	A [mm]	B [mm]	Γ [mm]	Δ [mm]	Φ [mm]	Φ1 [mm]	D [in]	Max work,pr [Bar]	W.Pr.Drop [mbar] (Δt 15°C)	Pressure Comb.Ch [Mbar]	Weight [kg]
OVAL 100	100000	115,7	89,99	38,7	575	993	880	1190	177	163	2''	5,0	13	0,80	305
OVAL 130	130000	150,5	90,13	51,6	575	993	990	1300	196	178	2 1/2''	5,0	18	1,20	410
OVAL 160	160000	185,2	90,27	64,5	575	993	1210	1520	196	178	2 1/2''	5,0	20	1,40	495
OVAL 200	200000	231,5	90,47	77,3	565	1218	1110	1420	196	222	2 1/2''	5,0	21	1,80	560
OVAL 250	250000	289,4	90,70	103,0	626	1223	1190	1500	215	222	2 1/2''	5,0	24	2,10	665
OVAL 300	300000	347,2	90,94	128,6	686	1223	1380	1760	245	Flange	3''	5,0	40	2,90	850
OVAL 350	350000	405,1	91,18	166,9	686	1223	1630	2010	245	Flange	3''	5,0	40	3,50	1040
OVAL 400	400000	463,0	91,42	205,1	686	1223	1850	2275	345	Flange	4''	5,0	27	3,90	1150
OVAL 500	500000	578,7	91,66	255,9	686	1223	2150	2575	345	Flange	4''	5,0	29	4,30	1410
OVAL 600	600000	694,4	92,05	319,0	760	1310	2150	2615	345	Flange	5''	5,0	29	4,80	1560
OVAL 700	700000	810,2	92,21	381,8	870	1500	1850	2315	345	Flange	5''	5,0	31	5,20	1730
OVAL 800	800000	925,9	92,36	444,3	870	1500	2090	2595	398	flange	5''	5,0	37	5,70	1800
OVAL 1000	1000000	1157,4	92,67	506,4	980	1680	2010	2515	398	flange	5''	5,0	38	5,90	2300

THERMOLEV 3.BOILER CONTROL PANEL - WIRING DIAGRAM FOR THE OVAL TYPE - GAS BURNING



- - - - TO BE WIRED BY THE INSTALLER

THERMOLEV
4. BOILER CONTROL PANEL - WIRING DIAGRAM
FOR THE OVAL TYPE - OIL BURNING



----- TO BE WIRED BY THE INSTALLER

4. Placement

Select the installation place.

- Select the right place for the placement of the boiler, where the water and the electricity supply are available.
- The existence of correct ventilation apertures is necessary in the boiler's room when the boiler operates with gas.
- The room must be spacious to make easy the installation and the annual services.
- No inflammable and any other kind of things must be stored in the boilers room.

5. Protection

➤ Before the use

1. The use of OVAL boiler series is the heat of water heating. Only approved oil or gas burners according the European standard EN 267, DIN 4787 and if they agree with the technical characteristics of the boiler can be used.
2. It is prohibit the use of any other fuel.

In case boiler series DG operates with oil

3. First check for any fume leak that may exist in the installation of the boiler. This is very important so it is good to be really careful.
4. Check boiler's door to be very well closed in case of fume leak.
5. Clean very well the oil that can be found outside the oil tank

➤ Checkpoints before the operation

1. Check if there is any leak at the pipe connections
2. Check the water amount in the heating installation.
 - 8a check the amount of water in the expansion tank, for open circuit installation
 - 8b check the water pressure (adjust the settle up valve), for close circuit installation
3. Turn on the circulator and take the air out from all the radiators.

➤ Remarks during the operation

1. Keep the boiler's room tidy and never store flammable materials!!
2. Check if the spark and the combustion are right (from the flame check point).
3. If the boiler is going to be for long time stopped, it is good to disconnect the power Supply.

6. Operation

1. Check the existence of water in the heating circuit by opening the clearing valve.
2. Be sure that the pipes are full of water.
3. Be sure that the burner is earthed.
4. Supply the burner with AC power 220V / 50Hz.
5. Settle the boiler thermostat in the desired temperature.
6. If the boiler doesn't start after 3-4 tries, call authorized technician.
7. In case that boiler series OVAL works with oil, fill the tank with oil before it will be completely empty. Otherwise air will exist in the circuit and there is a possibility of flaming weakness.

7. Security systems

➤ Water low level

If the level of the water or the pressure of the water faults down of the permissible level then:

- ✓Boiler must stop working.
- ✓Check for any leaks in the circuit.
- ✓When the quantity of the water comes again to normal levels then the boiler can start working.

➤Overheating

When the boiler's temperature overrun the maximum thermostat temperature, then the burner stop working for safety reasons.

If this happen again, call authorized technician.

➤Danger in case of oil leak

In case of oil leak call a licensed technician for reparation

➤Gas danger

If you smell gas you should fall the following steps

Close the gas valve and open a window immediately

Do not use doorbell, telephone appliance and do not activate any electric switch.

If you live in a flat inform your neighbours without using doorbell.

Do not smoke and do not use lighter.

Go outside your house to call a licensed technician and also inform the supply gas company.

8. Necessary check

Steel boiler series OVAL oil-gas

➤ Regular check

1. Take away the flammable materials from the boiler's room.
2. Keep the boiler and the parts around it, clean.
3. Often check for gas or oil leaking.
4. Check the connections of the chimney pipe and look if they are fixed correct and if there is any fume's leaking.
5. Check if there is any water leaking in the boiler or in the pipes.

OVAL boiler oil use

6. Check regularly for oil leaks in the oil tank or in the pipes
- 6.1 Often clearing out the water from the oil tank, this helps for the right operation of the boiler (avoiding unpleasant complications)

Cleaning of the oil filter

- 6.2 In case, the oil filter needs to get clear, you should close the oil supply from the provider valve.
- 6.3 Clean very good the oil filter and the inside part where the filter lay with light oil or oil.

Cleaning the oil tank

- 6.4 It is possible to gather some quantity of water in the oil tank or in the oil supply pipe, especially after a long time without clearing them. In this situation open the clear up valve of the tank and let the water to run out of it until oil start to run out.

➤ Check fume's exit

5. It is necessary to check the chimney pipe one time per year. If you find something faults, call authorized technician.

9. Service

Boiler needs service **once** a year. The service must check and clean:

- ✓ Flame pipes
- ✓ Fumes
- ✓ Flame chamber
- ✓ Chimney

All the parts of the boiler that are close to the flame must be cleaned in order to extend their long-life.

10. Part replacement

1. There isn't any part of the boiler which can be broken down in a small term time, but if it is necessary the replacement of any boiler's part, call our commercial representative.
2. For any intervention to the boiler, please call only authorized technician.
3. Intervention to the boiler from someone who isn't authorized technician may cause you more problems.

11. Locate and problem solve

a) For boiler series OVAL oil use

EVENT	POSSIBLE REASON	SOLVE WAY
Unable to ignite	<ul style="list-style-type: none"> ✓The oil valve is closed. ✓There is no oil in the tank ✓There is air in the oil supply pipes. ✓The oil filter needs to get clean. ✓Other reason. 	<ul style="list-style-type: none"> ✓Open the gas valve. ✓Fill the oil tank ✓Take the air out ✓Clean the oil filter and the burner. ✓Call authorized technician.
Burner is starting but stops again immediately.	<ul style="list-style-type: none"> ✓The oil in the tank is not enough. ✓The oil filter needs to get clean. ✓Bad quality of oil, or there are foreign objects in the oil. 	<ul style="list-style-type: none"> ✓Fill the oil tank. ✓Clean the oil filter. ✓Replace the dirty oil with new.
Irregular noise from the process of the combustion.	<ul style="list-style-type: none"> ✓Big quantity of air into the burner combustion. ✓Hyperbolic oil supplying. Other reason. 	<ul style="list-style-type: none"> ✓Call authorized technician.
Chimney smoke.	<ul style="list-style-type: none"> ✓Bad oil quality. ✓The quantity of incoming air is too small. ✓Other reason. 	<ul style="list-style-type: none"> ✓Replace the oil. ✓Call authorized technician.
Other reason	<ul style="list-style-type: none"> ✓Oil leaking from the oil's pipes. ✓Water leaking from the water's pipes. 	<ul style="list-style-type: none"> ✓Call authorized technician.

b) For boiler series OVAL gas use

If you notice a problem with your gas boiler call immediately authorized technician and gas company.

Read carefully page 8, protection for gas leak.

12. Audit card

B) For boiler series OVAL gas use

Date	Repair and Replacement parts	Technician

13. Guarantee

Heating Industry THERMOLEV gives guarantee for the good operation of the boilers, according the following rulers.

Guarantee rules

- 1.We undertake without any cost the restoration of any boiler's breakdown, if the breakdown is because of making fault or faulty material.
- 2.Breakdown caused from third person is not covered.
- 3.The guarantee is not cover boiler's low output, which is depending in faulty choice of expansion vessel, installation, connect, chimney, etc.
- 4.Installation and equipment of the boiler room must be according to the force law. Installation of the boiler need to be done from thermo-hydraulic or technician who are licensed.
- 5.It must take place, boiler's yearly service from authorize for this workshop.
- 6.The boiler's control panel guarantee is for one year.
- 7.We must have received the guarantee special clipping in 30 days after you have complete it , in order the guarantee to be valid.

Remarks

For the boiler's right operation, it is necessary the follows:

- ✓Select the right expand vessel.
 - ✓Placing of oil valve, oil filter and security valve.
- For gas use: Place the correct gas train according burner's type.
- ✓The ignition of the burner must be from authorized technician.

Note:

Avoiding the guarantee and faking manufactures register table gives company the possibility to get the guarantee invalid.

Thermolev heating industry gives you the present guarantee form. Guarantee is for the good operation, for the first eight [8] years of the boiler's life.

As the start date of the guarantee is the date of the boiler's purchase from our commercial cooperating market.

Contact details:

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