



MADE IN ITALY

Rodi Dual

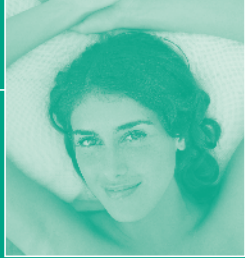
Steel pressurised boiler



Life-enhancing heat



Rodi Dual



The RODI DUAL is a steel pressurised boiler, compatible with blown air burners operating with liquid or gas fuels, with heat outputs ranging from 70 to 3500 KW.

The Rodi Dual has been designed as a high performance boiler, completely made of steel RST37.2 DIN17100 E in order to operate at variable capacities within specific ranges.

The Rodi Dual boiler has a flame reversing unit and three flue gas passes. It is extremely reliable and durable, with outputs exceeding 90%, together with a high precision structure and top quality materials.

The design has paid particular attention to the proportion of the thermal loads in relation to the volume of the combustion chamber and heat exchange surface. High output also allows for low flue gas temperatures and a reduction in pollutant emissions, such as CO and NOx.

The semi-finished steel components which make up the body of the boiler are cut by laser to guarantee maximum precision; welding is performed with robotic machines with high amperage for a perfect fusion. The front tube sheet is designed so as to absorb thermal and mechanical stresses.

The cylindrical combustion chamber has a blind end which is completely wet. This characteristic favours the exchange of thermal energy between the combustion gases and the water.

A welded reinforcement between the bottom and the back tube plate effectively supports the furnace.

The front door has an internal refractory lining, made with a specific geometry which favours entry of the combustion gases into the tubes as they pass at high speed and with turbulence through the tubes and reach the flue chamber back.

In order to obtain the best insulation of the boiler body an optional kit can be ordered for lining the front and back parts.

The front plate is connected to the furnace so as to reduce thermal and mechanical stresses.



To resolve the problem of lime incrustations which may occur in areas of high temperature, the Rodi Dual boiler has been designed so as to avoid points of excessive heating and uniformly distribute temperature, for instance, by means of a special junction of flue tubes and front plate.

Front door with two-way opening to facilitate cleaning and maintenance.



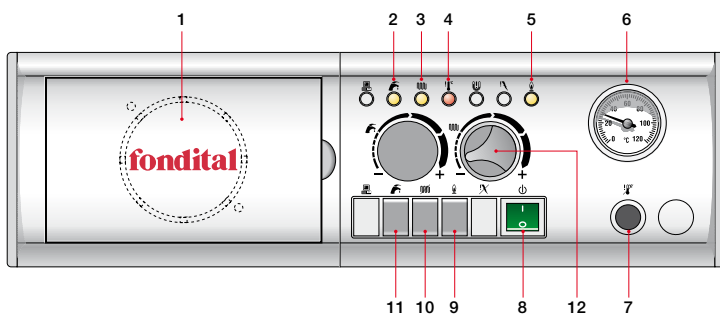
As a solution to the formation of condensate and to ensure the long life of the boiler, a special system for carrying hot water has been devised, in particular in the pipes and in the area of the back plate where the possibility of excessive flue cooling is the most likely.



Life-enhancing heat

A further significant feature of the RODI DUAL model is the control panel, positioned outside the boiler shell, and fitted with: two-stage water temperature regulator (53/88°C, with difference of 9°C between the first and second stage), safety limit thermostat (100°C), minimum thermostat (45°C), thermometer, burner switch, CH pump switch, DHW pump switch.

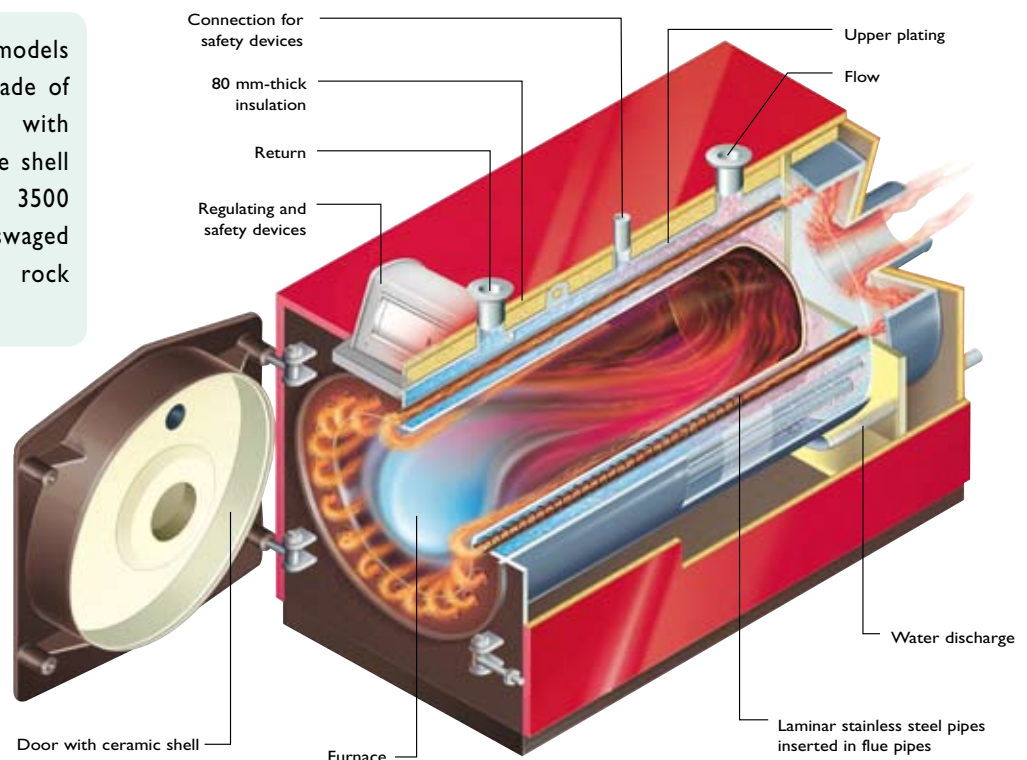
The standard control panel is designed for connection with a single-stage, two-stage or progressive two-stage burner, CH pump, DHW pump, external water heater priority thermostat, electronic thermoregulation unit and a board for managing three different heating zones in the building (by means of pumps or zone valves). The light indicators showing the boiler functions complete the control panel. The control panel can be supplied already equipped for the management of three heating zones.



- 1: Thermoregulation unit (optional) or timer (optional)
- 2: DHW mode indicator light (yellow)
- 3: CH mode indicator light (yellow)
- 4: Overheating shutdown light (red)
- 5: Burner on light (yellow)
- 6: Thermometer
- 7: Manual reset after overheating shutdown
- 8: Main switch with built-in light (green)
- 9: Burner switch
- 10: DHW pump switch
- 11: CH pump switch
- 12: Two-stage CH water temperature regulator

Model	Code	Type
CONTROL PANEL 70 ÷ 500 C 15	OQUADELE22	STANDARD
CONTROL PANEL 70 ÷ 500 PC 15	OQUADELE23	MULTI-ZONE
CONTROL PANEL 620 ÷ 3.500 C 30	OQUADELE24	STANDARD
CONTROL PANEL 620 ÷ 3.500 PC 30	OQUADELE25	MULTI-ZONE

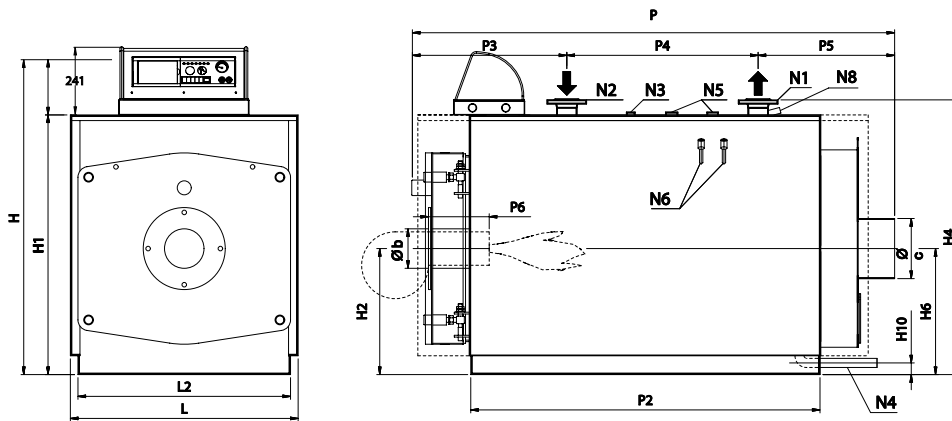
The shell of the Rodi Dual models from 70 to 1300 kW is made of painted panels, insulated with rock wool layers, while the shell of models from 1400 to 3500 kW is made with round swaged embossed aluminium and rock wool layer insulation.





Rodi Dual

DIMENSIONS RODI DUAL 70 ÷ 1300



Key

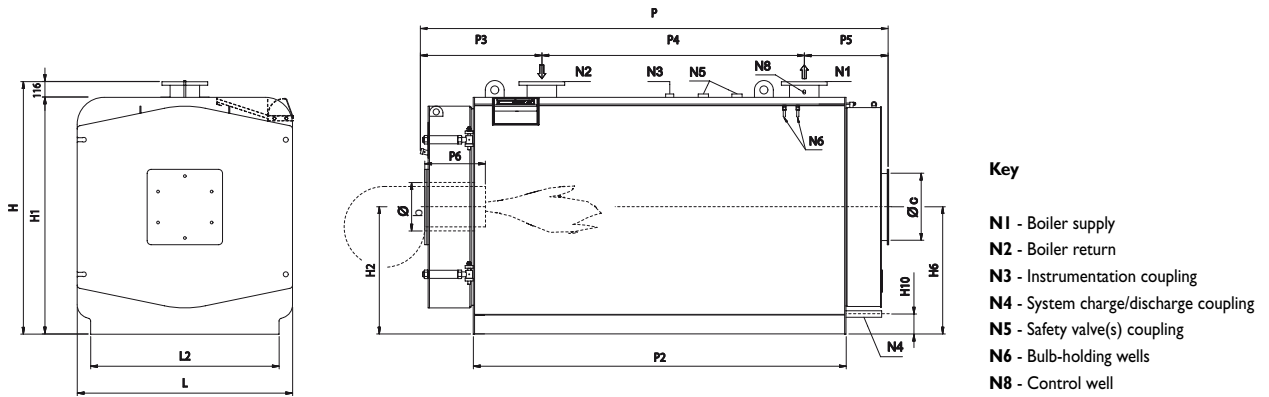
- N1** - Boiler supply
- N2** - Boiler return
- N3** - Instrumentation coupling
- N4** - System charge/discharge coupling
- N5** - Safety valve(s) coupling
- N6** - Bulb-holding wells
- N8** - Control well

MOD.	DIMENSIONS														COUPLINGS							
	H	H1	H2	H4	H6	H10	L	L2	P	P2	P3	P4	P5	P6	Øb	ØC	N1	N2	N3	N4	N5	N6
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	DN/in	DN/in	DN/in	in	in	in
70	1030	855	415	911	415	54.5	750	700	1055	630	413	240	402	200-250	130	200	50	50	1"	1"	-	1/2"
80	1030	855	415	911	415	54.5	750	700	1055	630	413	240	402	200-250	130	200	50	50	1"	1"	-	1/2"
90	1030	855	415	911	415	54.5	750	700	1195	755	513	265	417	200-250	130	200	50	50	1"	1"	-	1/2"
100	1030	855	415	911	415	54.5	750	700	1195	755	513	265	417	200-250	130	200	50	50	1"	1"	-	1/2"
120	1030	855	415	911	415	54.5	750	700	1195	755	513	265	417	200-250	130	200	50	50	1"	1"	-	1/2"
150	1080	905	440	961	440	54.5	800	750	1440	1000	513	475	452	200-250	160	250	50	50	1"	1"	-	1/2"
200	1080	905	440	961	440	54.5	800	750	1440	1000	513	475	452	200-250	160	250	50	50	1"	1"	-	1/2"
250	1180	1005	440	1061	440	54.5	800	750	1690	1250	513	725	452	200-250	160	250	50	50	1"	1"	-	1/2"
300	1180	1005	490	1061	490	54.5	900	850	1690	1295	523	700	467	200-250	180	250	65	65	1"	1"	-	1 1/2"
350	1180	1005	490	1061	490	54.5	900	850	1940	1500	523	980	437	200-250	180	250	65	65	1"	1"	-	1 1/2"
400	1190	1015	500	1095	500	50	940	890	1872	1502	600	850	422	230-280	225	250	80	80	1"	1"	1 1/4 ⁽¹⁾	1 1/2"
500	1380	1205	610	1285	610	60	1160	1110	1950	1502	663	850	437	270-320	225	300	80	80	1"	1 1/4"	1 1/4"	1 1/2"
620	1380	1205	610	1285	610	60	1160	1110	2240	1792	663	1150	427	270-320	225	300	80	80	1"	1 1/4"	1 1/4"	1 1/2"
750	1510	1335	675	1417	675	60	1290	1240	2255	1753	704	1100	451	270-320	280	350	100	100	1"	1 1/4"	1 1/2"	1 1/2"
850	1510	1335	675	1417	675	60	1290	1240	2255	1753	704	1100	451	270-320	280	350	100	100	1"	1 1/4"	1 1/2"	1 1/2"
950	1510	1335	675	1417	675	60	1290	1240	2500	2003	704	1200	596	270-320	280	350	100	100	1"	1 1/4"	1 1/2"	1 1/2"
1020	1660	1485	750	1568	750	60	1440	1390	2500	2003	704	1200	596	270-320	280	400	125	125	1"	1 1/4"	1 1/2"	1 1/2"
1200	1660	1485	750	1568	750	60	1440	1390	2500	2003	704	1200	596	270-320	280	400	125	125	1"	1 1/4"	1 1/2"	1 1/2"
1300	1660	1485	750	1568	750	60	1440	1390	2500	2003	704	1200	596	270-320	280	400	125	125	1"	1 1/4"	1 1/2"	1 1/2"

⁽¹⁾ Only one coupling

Life-enhancing heat

DIMENSIONS RODI DUAL 1400 ÷ 3500



MOD.	DIMENSIONS												COUPLINGS								
	H	HI	H2	H6	H10	L	L2	P	P2	P3	P4	P5	P6	Øb	ØC	N1	N2	N3	N4	N5	N6
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	DN/in	DN/in	DN/in	in	in	in
1400	1746	1630	880	880	150	1470	1270	2886	2300	831	1300	755	350-400	320	400	150	150	1"	1"1/4	1"1/2	1/2"
1600	1746	1630	880	880	150	1470	1270	2886	2300	831	1300	755	350-400	320	400	150	150	1"	1"1/4	1"1/2	1/2"
1800	1746	1630	880	880	150	1470	1270	3096	2510	771	1850	475	450-500	320	400	150	150	1"	1"1/4	1"1/2	1/2"
2000	1876	1760	945	945	150	1600	1400	3220	2510	903	1550	767	450-500	360	500	200	200	1"	1"1/4	2"	1/2"
2400	1876	1760	945	945	150	1600	1400	3480	2770	903	1950	627	450-500	360	500	200	200	1"	1"1/4	2"	1/2"
3000	2146	2030	1080	1080	150	1870	1670	3480	2770	903	2050	527	450-500	400	550	200	200	1"	1"1/4	2"	1/2"
3500	2146	2030	1080	1080	150	1870	1670	3935	3225	903	2050	982	450-500	400	550	200	200	1"	1"1/4	2"	1/2"






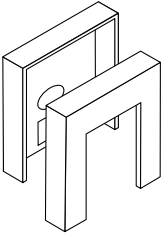
RODI DUAL

	Max. heat output		Min. heat output		Furnace thermal capacity		Output at 100% (Low Calorific Value)	Output at 30% (Low Calorific Value)	Load loss on flue side	Load loss on water side ($\Delta T=12^{\circ}\text{C}$)	Max, operating pressure*	Capacity	Tare weight
	kW	Kcal/h	kW	Kcal/h	kW	Kcal/h	%	%	mbar	mbsr	bar	l	Kg
70	70	60,000	35	30,000	76	65,360	92.11	90.18	0.8	9	6	105	200
80	80	69,000	40	34,500	87	74,820	91.95	90.23	1.0	9	6	105	200
90	90	77,000	45	38,500	98	84,280	91.84	90.30	0.8	10	6	123	240
100	100	86,000	50	43,000	109	93,740	91.74	90.40	1.0	12	6	123	240
120	120	103,000	60	51,500	131	112,660	91.60	90.45	1.1	13	6	123	240
150	150	129,000	75	64,500	163	140,180	92.02	91.15	1.2	14	6	172	320
200	200	172,000	100	86,000	218	187,480	91.74	91.36	1.9	15	6	172	320
250	250	215,000	125	107,500	272	233,920	91.91	90.40	2.0	15	6	220	400
300	300	258,000	150	129,000	325	279,500	92.31	90.62	2.0	16	6	300	440
350	350	301,000	175	150,500	380	326,800	92.11	90.50	2.9	18	6	356	500
400	400	344,000	200	172,000	434	373,240	92.17	90.78	4.1	20	6	360	540
500	500	430,000	250	215,000	542	466,120	92.25	90.71	4.2	22	6	540	800
620	620	533,000	310	266,500	672	577,920	92.26	90.68	6.4	27	6	645	900
750	750	645,000	375	322,500	813	699,180	92.25	90.60	5.2	25	6	855	1,140
850	850	731,000	425	365,500	921	792,060	92.29	90.73	7.2	27	6	855	1,140
950	950	817,000	475	408,500	1030	885,800	92.23	90.70	5.2	32	6	950	1,340
1020	1020	877,000	510	438,500	1106	951,160	92.22	90.65	4.0	26	6	1,200	1,760
1200	1200	1,032,000	600	516,000	1301	1,118,860	92.24	90.67	5.5	30	6	1,200	1,760
1300	1300	1,118,000	650	559,000	1409	1,211,740	92.26	90.61	6.5	32	6	1,200	1,760

	Max. heat output		Min. heat output		Furnace thermal capacity		Output at 100% (Low Calorific Value)	Output at 30% (Low Calorific Value)	Load loss on flue side	Load loss on water side ($\Delta T=12^{\circ}\text{C}$)	Max, operating pressure*	Capacity	Tare weight
	kW	Kcal/h	kW	Kcal/h	kW	Kcal/h	%	%	mbar	mbar	bar	l	Kg
1400	1400	1,204,000	700	602,000	1517	1,304,620	92.29	90.36	6.0	28	6	1,500	2,600
1600	1600	1,376,000	800	688,000	1733	1,490,380	92.33	90.41	6.5	32	6	1,500	2,600
1800	1800	1,548,000	900	774,000	1950	1,677,000	92.31	90.50	7.0	37	6	1,650	2,750
2000	2000	1,720,000	1000	860,000	2167	1,863,620	92.29	90.30	6.0	35	6	2,000	3,650
2400	2400	2,064,000	1200	1,032,000	2600	2,236,000	92.31	90.60	7.5	40	6	2,300	3,900
3000	3000	2,580,000	1500	1,209,000	3250	2,795,000	92.31	90.55	8.0	49	6	3,150	5,200
3500	3500	3,010,000	1750	1,505,000	3792	3,261,120	92.30	90.20	9.0	60	6	3,650	5,700

*For higher working pressure values, please contact the Export Dept.

ACCESSORIES

Item	Description	Code
	Thermoregulation unit kit for two-stage burner	OKITCELO4
	Remote control for thermoregulation unit (temperature regulation)	OCREMOT000
	Remote control for thermoregulation unit (all functions)	OCREMOT001
	Mod. 70 - 80 - 90 - 100 - 120	ORIVESUP00
	Mod. 150 - 200 - 250	ORIVESUP01
	Mod. 300 - 350	ORIVESUP02
	Mod. 400	ORIVESUP03
	Mod. 500 - 620	ORIVESUP04
	Mod. 750 - 850 - 950	ORIVESUP05
	Mod. 1020 - 1200 - 1300	ORIVESUP06

The manufacturer reserves the right to implement modifications without notice.

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COMPANY
 WITH QUALITY SYSTEM
 CERTIFIED BY DNV
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