



Floor standing
gas and oil
boilers

1R - 2R



 **sime**[®]



1 R-2 R

Sime: high quality in terms of heat

Sime boilers stand out for their safety, long life, energy saving and performance reliability. They are designed and built in conformance to EEC Directives 92/42, 89/336, 73/23 and 90/396. Each seal is subjected to stringent laboratory testing to guarantee the product's superior performance. **1R** and **2R** are a complete range of high efficiency, three-pass cast-iron boilers for heating only,

compatible with all the most common gas and light-oil forced-draught burners. The **1R** range comprises four models with outputs from 64.8 to 93.3 kW, while **2R** comprises ten models with outputs from 100.6 to 266.9 kW. The entire **1R** and **2R** range is compatible with **BA** series boilers and perfectly satisfies the need for abundant domestic hot water.

The long life of cast iron

Cast iron is an alloy whose properties remain unchanged over time. It is the synonym for reliability, wear resistance and ease of maintenance. The conformation of the elements permits excellent

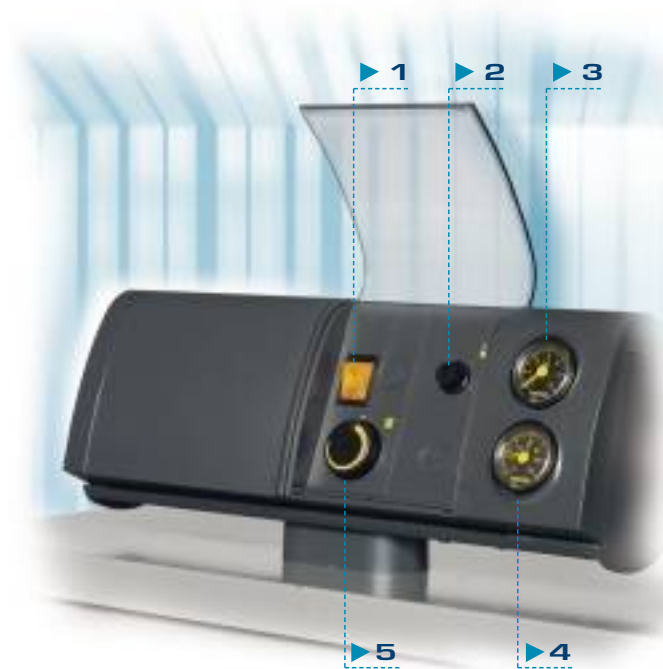
combustion, which reduces emission of harmful gases into the environment. This is the result of Sime's years of consolidated experience in designing cast iron heat exchangers.

Control panel simplicity

With a single button, the boiler manages all its operating phases automatically: just one touch of the switch is enough for the boiler to run automatically when heating is required.

Temperature is regulated by adjusting the heat control.

For maximum operational safety, controls are protected by a shield against accidental use.



List of operations/tools

- ▶ 1 On/off switch
- ▶ 2 Safety thermostat
- ▶ 3 Hidrometer
- ▶ 4 Thermometer
- ▶ 5 C.H. thermostat

Safe installation, prolonged efficiency

Each boiler has been constructed to enhance the life, efficiency and energy savings of the system in which it is installed. The combustion chamber's conformation enables full exploitation of the burner's radiant flame and convection of its combustion gases. Its excellent insulation reduces both radiation losses and operating noise. Suitable burner adjustment allows the chamber's heat

output to be varied, adapting it to the system's requirements and optimising overall efficiency. A saving is also seen with the ease of cleaning and maintenance operations, facilitated by the combustion chamber's reversible door hinge. The **1R** and **2R** boiler range is delivered in three pieces (cast iron body, casing and control panel) to further facilitate transport and installation.

A store of hot water

1R and **2R** boilers can be coupled with the **BA** range of D.H.W. storage tanks, able to satisfy the most demanding requirements for domestic hot water. The **BA** boilers are constructed in vitreous

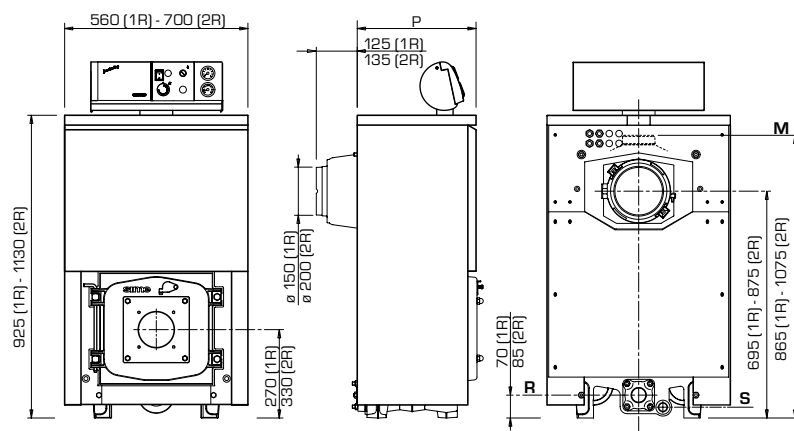
steel, guaranteeing absolute hygiene, and are available in three sizes: 100, 150 and 200 litres. The highly efficient insulation permit a notable saving in running costs.

Technical data

1R	1R6	1R7	1R8	1R9
Heat output kW (kcal/h)	64,8 (55.700)	74,0 (63.600)	84,0 (72.200)	93,3 (80.200)
Heat input kW (kcal/h)	73,4 (63.100)	83,1 (71.500)	93,8 (80.700)	103,4 (88.900)
Efficiency rating at nominal heat input %	88,4	89,0	89,6	90,2
Efficiency rating at 30% of nominal heat input %	89,6	90,0	90,5	90,9
Cast iron sections n°	6	7	8	9
Water contents litres	37,5	42,0	46,5	51,0
Max. operating pressure bar	4	4	4	4
Smokes head losses mbar	0,20	0,16	0,22	0,30
Water head losses (Δt 10°C) mbar	30,0	34,0	40,0	45,5
P (depth) mm	595	670	750	825
Weight kg	261	293	325	357

2R	2R6	2R7	2R8	2R9	2R10	2R11	2R12	2R13	2R14	2R15
Heat output kW	100,6	123,8	147,1	165,1	179,7	197,7	213,4	230,2	248,8	266,9
kcal/h	86.500	106.500	126.500	142.000	154.500	170.000	183.500	198.000	214.000	229.500
Heat input kW	113,5	139,1	164,7	184,1	199,7	219,7	237,1	255,8	276,4	296,7
kcal/h	97.600	119.600	141.600	158.300	171.700	188.900	203.900	220.000	237.700	255.200
Efficiency rating at nominal heat input %	88,6	89,0	89,3	89,7	90,0	90,0	90,0	90,0	90,0	89,9
Efficiency rating at 30 % of nominal heat input %	90,0	90,2	90,5	90,7	90,9	90,9	90,9	91,0	91,0	91,0
Cast iron sections n°	6	7	8	9	10	11	12	13	14	15
Water contents litres	92	107	122	136	151	165	180	194	209	223
Max. operating pressure bar	5	5	5	5	5	5	5	5	5	5
Smokes head losses mbar	0,10	0,15	0,22	0,29	0,24	0,37	0,39	0,42	0,49	0,50
Water head losses (Δt 10°C) mbar	61,0	76,0	85,0	92,0	100,0	112,0	118,0	121,0	125,0	130,0
P (depth) mm	735	835	935	1.035	1.135	1.235	1.335	1.435	1.535	1.635
Weight kg	462	520	578	636	676	734	792	850	908	966

Dimensional details - Hydraulic connections



Hydraulic connections

	1R	2R
M C.H. flow	1 1/2"	2"
R C.H. return	** 1 1/2"	2"
S Boiler discharge	3/4"	3/4"

Technical features and safety devices

	1R	2R
Main switch	▲	▲
Boiler thermostat	▲	▲
Thermometer	▲	▲
Hidrometer	▲	▲
Ready for fitting of the room stat	▲	▲
Reversible combustion chamber door	▲	▲
Safety thermostat	▲	▲

We pursue a policy of continuing improvement in design and performance of our products. The right is therefore reserved to vary specifications without notice.

