

the **HAMWORTHY**

NEW **VARMAX** **mk2** **FLOOR STANDING BOILER**



SCAN
ME

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Varmax mk2

6 models
180 – 450 kW output

Our no minimum flow Varmax boiler has had an upgrade! The improved Varmax mk2 features touch screen controls for simple, intuitive set up as well as new easy to remove casing for better service and maintenance access.

Key features

- Improved efficiency on split temperature systems due to high and low temperature return connections.
- Non-dependent on system flow allowing wide differential temperatures.
- Easier installation with no requirement for dedicated primary circuit and no minimum flow rates.
- Quick and easy to disassemble with updated casing access and access for maintenance or service.
- Tolerant to a wide range of system water conditions with a corrosion resistant stainless steel heat exchanger.
- Long life backed up by a 5-year heat exchanger warranty.
- Well insulated for low standby losses.
- NOx emissions comply with ErP legislation lower than 56mg/kWh.
- Match heating system loads accurately with outputs up to 450kW from a single boiler and ability to cascade multiple boilers.
- Simplified flue system design as the flue gas non-return valve is built in to provide effective protection from re-circulation of flue gases through non-firing boilers.
- Built in boiler sequence controls capable of controlling up to 16 boiler modules, multiple heating circuits and a hot water circuit using the master/slave principle.
- BIM objects available to assist in design and management.



Varmax mk2

Technical information

| | Boiler model | Units | 180 | 225 | 275 | 320 | 390 | 450 |
|------------|---|--------------------|---------------|-------|-------|-------|-------|-------|
| Energy | Building regulations Part L seasonal efficiency | % gross | 96.3 | 96.3 | 96.2 | 96.2 | 96.2 | 96.2 |
| | Boiler output – maximum 80/60°C, NG & LPG* | kW | 175.9 | 219.8 | 269.5 | 313.6 | 382.3 | 441.9 |
| | Boiler output – maximum 50/30°C, NG & LPG* | kW | 191 | 238 | 290 | 338 | 415 | 478 |
| | Boiler output – minimum 80/60°C, Nat Gas | kW | 43 | 43 | 66 | 66 | 87 | 87 |
| | Boiler input (gross) - maximum, NG & LPG* | kW | 180 | 225 | 275 | 320 | 390 | 450 |
| | Boiler input (net) – maximum, NG & LPG* | kW | 162 | 203 | 248 | 288 | 351 | 405 |
| Water | Water content | litres | 151 | 151 | 239 | 239 | 287 | 287 |
| | System design flow rate @ 30°C ΔT rise | l/s | 1.4 | 1.7 | 2.1 | 2.5 | 3 | 3.5 |
| | Water side pressure loss @ 30°C ΔT rise | mbar | 25 | 36 | 36 | 53 | 34 | 43 |
| | System design flow rate @ 20°C ΔT rise | l/s | 2.1 | 2.6 | 3.2 | 3.7 | 4.6 | 5.3 |
| | Water side pressure loss @ 20°C ΔT rise | mbar | 49.5 | 73.5 | 110.6 | 127.3 | 85 | 107 |
| | System design flow rate @ 11°C ΔT rise | l/s | 3.8 | 4.7 | 5.8 | 6.8 | 8.3 | 9.5 |
| | Water side pressure loss @ 11°C ΔT rise | mbar | 188 | 268 | 271 | 393 | 255 | 321 |
| | Maximum water pressure | barg | 6 | 6 | 6 | 6 | 6 | 6 |
| Gas | Maximum flow temperature setting | °C | 85 | 85 | 85 | 85 | 85 | 85 |
| | Gas flow rate natural gas (G20) - maximum | m ³ /hr | 19.1 | 23.8 | 29.1 | 33.9 | 41.3 | 47.6 |
| | Maximum gas inlet pressure, Nat Gas | mbar | 25 | 25 | 25 | 25 | 25 | 25 |
| | Nominal inlet pressure, Nat Gas | mbar | 20 | 20 | 20 | 20 | 20 | 20 |
| Flue | Maximum flue gas temperature @ 80/60°C Nat Gas | °C | 61 | 62.3 | 61.7 | 63.4 | 62.5 | 64.8 |
| | Pressure at boiler flue spigot @ 80/60°C Nat Gas B23P | Pa | 115 | 165 | 122 | 176 | 180 | 193 |
| | Dry NOx emission** | mg/kWh | 27 | 27 | 36 | 36 | 32 | 35 |
| | NOx Class | | 6 | 6 | 6 | 6 | 6 | 6 |
| Electrical | Electrical supply | | 230V 1Ph 50Hz | | | | | |
| | Power consumption – maximum boiler modulation | W | 228 | 330 | 326 | 427 | 545 | 717 |
| | Approx shipping weight | kg | 393 | 393 | 502 | 502 | 592 | 592 |
| | Noise emission @1m: @max. modulation | dB (A) | 76 | 76 | 77 | 77 | 84 | 89 |

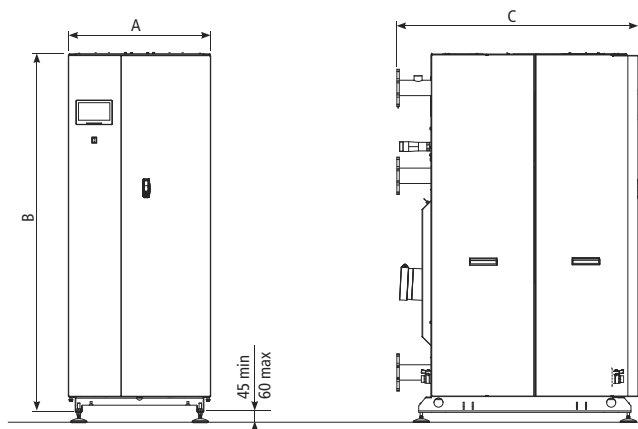
*390kW, 450kW, 525kW and 600kW models Nat Gas only

** (0% excess oxygen, mg/kWh dry air free); NG/LPG

Dimensions

| Dimensions | Units | 180 | 225 | 275 | 320 | 390 | 450 |
|-----------------|-------|------|------|------|------|------|------|
| A Width | mm | 706 | 706 | 800 | 800 | 900 | 900 |
| B Height | mm | 1780 | 1780 | 1877 | 1877 | 2023 | 2023 |
| C Depth | mm | 1194 | 1194 | 1320 | 1320 | 1369 | 1369 |
| Front clearance | mm | 500 | 500 | 600 | 600 | 700 | 700 |
| Back clearance | mm | 500 | 500 | 500 | 500 | 500 | 500 |
| Top Clearance | mm | 240 | 240 | 263 | 263 | 427 | 427 |
| Side Clearance | mm | 450 | 450 | 450 | 450 | 450 | 450 |

Note: All dimensions in mm unless otherwise stated.





**British engineering excellence from Hamworthy Heating;
the commercial heating and hot water specialists.**



**SUPPORT BRITISH
MANUFACTURING**



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Hamworthy Heating Accreditations

ISO 9001 Quality Management System
ISO 14001 Environmental Management System
ISO 45001 Health & Safety Management System

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